

# The Cost of Paid Sick Leave

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## THE COST OF PAID SICK LEAVE

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#### Abstract

How much would it cost employers to offer paid sick leave to their employees and how does this compare to typical industry expenses? The answer to this question is important because more cities and states are considering legally requiring employers to provide paid sick leave. Such mandates would help provide paid sick leave to the 32% of private industry workers who currently lack access. However, if the costs imposed on employers are too burdensome and they significantly raise prices or reduce staffing to adjust, workers and consumers may suffer. We find for the subsectors examined, the cost to extend paid sick leave coverage to all workers is relatively minimal. For the restaurant and fast food industries, the sick leave cost would increase prime cost as a share of sales—an industry measure viewed as sustainable between 60 and 65%, by only 0.3 percentage points. The cost increase would amount to only 15% of average annual changes in total expenses, meaning it is well within the range of cost fluctuations businesses regularly adapt to. In general, we find the cost increase is relatively small when compared to overall expenses; it is no more than 0.5% of total operating expenses. Even if the entire cost increase is passed onto consumers in the form of increased prices, overall prices in the fast food industry would rise at most by 0.3%, meaning the price of \$3.99 Big Mac goes up by one cent. Funds to cover the complete cost increase of paid sick leave could also come from shifting the allocation of resources among stakeholders within a firm. Publicly traded companies in the food and drinking industry, for example, could reduce the amount of share buybacks by 15% to completely cover the cost increase. Furthermore, a reasonable estimate of the benefits of reduced turnover indicates those costs savings alone could cover almost all of the paid sick leave cost increase.

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## Introduction

How much would it cost employers to offer paid sick leave to their employees and how does this compare to typical industry expenses? The answer to this question is important because more cities and states are considering legally requiring employers to provide paid sick leave. Paid sick leave is defined here as the ability to take leave from work due to illness and still receive wages for the day. Businesses that do offer paid sick leave do so in the form of a fixed number of days, on an as-needed basis, or through a consolidated plan – a plan where all types of leave are bundled together.<sup>2</sup> Such mandates would help provide paid sick leave to the 32% of private industry workers who currently lack access.<sup>3</sup> However, if the costs imposed on employers are too burdensome and they significantly raise prices or reduce staffing to adjust, workers and consumers may suffer. We estimate the increased costs of offering paid sick leave for industries that would have to make the largest adjustments in the event of a mandate. We then compare the estimated cost increase to common industry expenses to assess the relative burden. Finally, we present three ways businesses can adjust to the increase.

Opponents of mandated paid sick leave often argue the costs imposed on businesses would be burdensome. To cover higher labor costs, businesses would potentially lay off workers or raise revenues by increasing the prices of their products. A sampling of quotes from news articles demonstrates the spirit of their concerns:

"Mandatory paid sick leave hurts the bottom line. This is often the first concern raised: that adding unpaid hours of leave increases costs for business, mostly in terms of higher labor costs"<sup>4</sup>

"A state bill to guarantee paid days off for sick workers died Thursday amid opposition from business lobbyists and lawmaker concern that the benefit was too costly... Small businesses and their lobbyists who fought the sick-leave measure said they were relieved that it failed. They estimated that the bill would cost 370,000 jobs in California and would burden employers with \$4.6 billion in new costs over a five-year period"<sup>5</sup>

"Opponents argue many companies won't be able to afford it. The Maryland Retailers Association says paying for it may prove costly in other ways. 'That means that we will have to eliminate jobs, we'll have to cut hours, we'll have to cut benefits or increase consumer costs,' says Cailey Locklair Tolle, with the Maryland Retailers Association"<sup>6</sup>

Although it is reasonable to believe that a new expense will increase costs, several researchers have pointed out that employers may not take into account the benefits of offering paid sick leave. The *net* cost increase may be much smaller due to gains in productivity and reduced turnover – meaning workers that feel valued and are perhaps healthier may work harder and not want to leave. A series of Institute for Women's Policy Research (IWPR) reports calculate the costs and benefits for paid sick leave laws for a variety of municipalities and states, usually finding that paid sick leave policies would create net savings.<sup>7</sup>

Although we believe these benefits are real, we make a stronger assertion – looking at the cost increase associated with a paid sick leave mandate *without* such cost savings is not burdensome to the average business. Only a handful of studies investigate this. Hall and Gould estimate paid sick leave for the state

<sup>&</sup>lt;sup>2</sup> Barthold & Ford (2012)

<sup>&</sup>lt;sup>3</sup> Bureau of Labor Statistics (2017)

<sup>&</sup>lt;sup>4</sup> Flavelle (2015)

<sup>&</sup>lt;sup>5</sup> Lifsher (2008)

<sup>&</sup>lt;sup>6</sup> Solis (2017)

<sup>&</sup>lt;sup>7</sup> See Lovell (2008) for example

of Connecticut would cost between 0.4% and 0.19% of industry sales.<sup>8</sup> IWPR and IMPACTQ examine industry costs of various sick leave policies on a national scale finding paid sick leave would not cost more than 0.5% of total wages for any industry.<sup>9</sup>

The main contribution of this paper is to evaluate the burden a paid sick leave mandate would place on employers by computing and contextualizing the cost increase for industry subsectors that are likely to be most burdened. These analyses are not currently available.

The core data for this paper come from the Bureau of Labor Statistics (BLS). We use the BLS estimates on the typical expense of providing paid sick leave and paid sick leave access. We find that across industries the cost of offering paid sick leave is consistently around 1.24% of total average hourly compensation and never more than 1.53%. We use this fact to impute the potential cost increase of a paid sick leave mandate on industry subsectors that currently provide low levels of paid sick leave to their workers. We then use data from US Census industry surveys, IBISWorld, Compustat, and the Job Openings and Labor Turnover survey to put these costs in context.

We find for the restaurant and fast food industries, the sick leave cost would increase prime cost – a key industry sustainability benchmark with a flexibility range of 5% – by only 0.3%. The cost increase would amount to only 15% of average annual changes in total expenses, meaning it is well within the range of cost fluctuations businesses regularly adapt to. In general, we find the cost increase is relatively small when compared to overall expenses; it is no more than 0.5% of total operating expenses. Even if the entire cost increase is passed onto consumers in the form of increased prices, overall prices in the fast food industry would rise at most by 0.3%, meaning the price of \$3.99 Big Mac goes up by one cent. Funds to cover the complete cost increase of paid sick leave could also come from shifting the allocation of resources among stakeholders within a firm. Publicly traded companies in the food and drinking industry, for example, could reduce the amount of share buybacks by 15% to completely cover the cost increase.<sup>10</sup> Furthermore, a reasonable estimate of the benefits of reduced turnover indicates those costs savings alone could cover almost all of the paid sick leave cost increase.

The outline of the paper is as follows. Section 1 will identify the industries that would have to make the largest adjustments in the face of a mandated employer-sponsored paid sick leave law. Section 2 explains our main methodology and calculates the cost increase of paid leave for the accommodation and food services industry and its subsectors. We then scale that cost by comparing it to expenses businesses usually face. Section 3 carries out the same calculations for other selected industries. Section 4 briefly discusses limitations of the analysis and Section 5 concludes.

## 1. Which industries will be most affected?

The goal of this paper is to evaluate industry cost increases if employers were legally required to provide paid sick leave to all workers. Since this paper directly responds to the argument that paid sick leave will be burdensome, we identify industries that would be most affected by a sick leave mandate. If paid sick leave costs rise as a linear function of the coverage rate (which we demonstrate in our Methodology section), then in relative terms the most burdensome cost increases will be in the industries where workers have the lowest access rates. We turn now to identifying the industries where workers have the lowest rates of paid sick leave access.

<sup>&</sup>lt;sup>8</sup> Hall & Gould (2011)

<sup>&</sup>lt;sup>9</sup> IMPACTQ and IWPR (2017)

<sup>&</sup>lt;sup>10</sup> A share buyback (otherwise known as a "stock repurchase") is when a publicly traded company purchases its own stock from outstanding stock, reducing the number of outstanding stock, and increasing the stock price.

The BLS annually estimates paid sick leave access rates. However, these statistics are only given by broad industrial classification. Unpublished BLS estimates and National Health Interview Survey (NHIS) data allow us to observe sick leave access rates for subsectors of broad industries. Examining industries at the subsector level is important to more precisely identify the industries that will have the most additional employees to cover. Furthermore, in paid sick leave policy debates, subsector costs are much more meaningful than broad industry costs. For example, the expected cost increase to the entire other services industry would offer minimal insight into how personal care workers are specifically affected.

The National Health Interview Survey is the largest in-person household health survey and the primary source for data on national health. The survey asks a variety of questions on demographics, employment, and benefits. Using this data we can compute paid sick leave access rates for most industry subsectors. Out of 63 industry subsectors, the subsectors listed in Table 1 have the bottom fifth lowest rates of paid sick leave.<sup>11</sup>

Industry Subsector	Broad Industry	Access
		Rate
Restaurants and Other Eating Places*	Accommodation and Food Services	9%
Food Services and Drinking places	Accommodation and Food Services	17%
Private Households	Other Services	19%
Crop Production	Agriculture, Forestry, Fishing and Hunting	22%
Personal and Laundry Services	Other Services	24%
Gasoline Stations	Retail Trade	26%
Animal Production	Agriculture, Forestry, Fishing and Hunting	28%
Construction	Construction	32%
Administrative, Support, Waste	Administrative, Support, Waste,	38%
Management, Remediation	Remediation	
Miscellaneous Merchandise Stores	Retail Trade	40%
Amusement, Gambling, and Recreation	Arts, Entertainment, and Recreation	42%
Repair and Maintenance	Other Services	42%
Sports, Hobby, Music, Book Stores	Retail Trade	43%
Food and Beverage Stores	Retail Trade	43%

**TABLE 1: Industry Subsectors with Lowest Paid Sick Leave Access Rates** 

Source: author's calculation of IPLUMS-NHIS, 2004-2015; \*BLS, 2014

Table 1 shows the food related subsectors of accommodation and food services have the lowest access rates. Specifically, the BLS estimates only 9% of workers in the restaurants and other eating places industry have access to paid sick leave. For this reason, the paper will first focus on estimating the cost increase of paid sick leave for 1) the accommodation and food services industry as a whole 2) the food services and drinking places industry (subsector of accommodation and food services), the full service restaurant industry (subsector of restaurants and other eating places) and 4) the limited service restaurant industry (subsector of restaurants and other eating places).<sup>12</sup> It will then go on to examine cost increases for the additional non-food related subsectors that are listed in Table 1.

<sup>&</sup>lt;sup>11</sup> The full list can be found in appendix Table A1. A brief description of the methodology can also be found in the appendix. Thanks to Jeff Hayes of IWPR for comments on methodology.

<sup>&</sup>lt;sup>12</sup> For more details on how the accommodation and food services industry is categorized into subsectors, see appendix Table A2.

# 2: Paid sick leave cost increase for the accommodation and food services industry and its subsectors

Would businesses have difficulty absorbing cost increases caused by paid sick leave mandates? We begin our investigation of this question by examining the cost increase for the accommodation and food services industry and its subsectors because these industries are likely to be most burdened. To evaluate the impact of paid sick leave mandates on employers, we first develop and describe a method for estimating the paid sick leave cost increase. We then estimate the expected cost increase and compare our estimate to typical expenses businesses incur. Finally, we explore the potential ways businesses might adjust to this new expense.

#### 2.1 Methodology

The basic contours of the estimation procedure are as follows. First, we estimate the cost of providing paid sick leave to 100% of all industry workers. Then we subtract the paid sick leave cost industries are currently paying. This leaves the expected cost increase from extending paid sick leave coverage to everyone.

The cost that industries already incur for paid sick leave can be easily computed using the Bureau of Labor Statistics' Employer Costs for Employee Compensation (ECEC) survey. This survey provides the cost of paid sick leave as a percentage of average total hourly compensation by industry. For example, Table 2 shows employers in the leisure and hospitality industry (supersector of accommodation and food services industry) pay on average 0.4% of hourly compensation for paid sick leave benefits. We take 0.4% of average annual compensation to estimate how much the leisure and hospitality industry already incurs for sick leave. Total annual compensation is computed by multiplying average total hourly compensation, average annual number of hours worked, and total number of employees.

Compensation Component	Cost	Percentage of Total Compensation
Total Compensation	\$13.52	100%
Wages	\$10.56	78%
Benefits	\$2.96	22%
Sick Leave	\$0.05	0.4%
All other benefits	\$2.91	21.6%

 TABLE 2: Example of Employer Costs for Employee Compensation (ECEC) Breakdown for the

 Leisure and Hospitality Industry

Source: BLS, 2015b

The paid sick leave cost captured in the ECEC estimate is the actual cost incurred by industries.<sup>13</sup> Employers report the total cost of providing the benefit which is divided by all employee-worked hours (covered and uncovered). We suspect that industries with low paid sick leave access have lower levels of paid sick leave cost as a percentage of total compensation. When we examine the data in Table 3, this is in fact what we observe. The low paid sick leave cost for the leisure and hospitality and construction industries (column 3) reflects the low number of workers that have access to paid sick days (column 2).

<sup>&</sup>lt;sup>13</sup> Ideally, we would like to know more about how this cost is derived. For example, does this represent the wages paid to the absent worker? Does it represent a quantity of lost productivity or output for the day? After reviewing the survey methodology for the underlying ECEC estimates and corresponding with BLS ECEC staff experts, all we can accurately say about this cost is that it is the cost that employers reported paying for the benefit.

The relatively high cost for paid sick leave in industries like information and financial activities reflects the large share of workers covered.

We can use this relationship to compute the cost of paid sick leave if all workers were covered. Specifically, we answer the question, "If covering 28% of the workers in the leisure and hospitality industry is 0.375% of total hourly compensation, then what percentage of total hourly compensation would covering 100% of the workers be?" The last column of Table 3 reports the results.<sup>14</sup> Although the broad industries listed are different in several ways (size, wages, skills,) the computed costs for full coverage appear consistent across industries with an average of 1.24% of total hourly compensation and median of 1.27%. The education and health services industry would have to pay the largest amount to cover all workers at 1.53% of hourly compensation.

Broad Industry	Current Access to Paid Sick Leave	Current Employer Costs for Paid Sick Leave as a share of Total Hourly Compensation	Employer Costs for Paid Sick Leave, Adjusted for Full Coverage as a share of Total Hourly Compensation
Leisure and Hospitality	28%	0.375%	1.34%
Construction	41%	0.325%	0.79%
Other Services	57%	0.700%	1.23%
Trade, Transportation, and Utilities	61%	0.800%	1.31%
All Industries	61%	0.800%	1.31%
Manufacturing	65%	0.700%	1.08%
Professional and Business Services	65%	0.800%	1.23%
Education and Health Services	72%	1.100%	1.53%
Financial Activities	86%	1.175%	1.37%
Information	92%	1.075%	1.17%

TABLE 3: Paid S	Sick Leave	Access	and	Cost
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Source: BLS, 2015b for employer costs; BLS, 2015e for access rates; author's computations for adjusted cost

This method assumes that each additional 1% of workers that receive access will cost the same amount. In other words, we assume that the cost increases as a linear function of the access rate. Yet, this may not be the case. It is possible that newly covered workers use either more sick leave days than the previously covered workers or less, i.e., the relationship between access and cost may not be linear. For example, current uncovered workers might be in jobs with low pay and no benefits which may decrease their overall health and increase the likelihood they take more sick days than currently covered workers. However, Figure 1 confirms our assumption of linearity. Based on current BLS estimates on paid sick leave cost and access rates across industries, their relationship can reasonably be described as linear.

 $<sup>^{14}</sup>$  This is calculated by solving for x in this proportion: 28/0.38=100/x

FIGURE 1. Paid Sick Leave Access and Cost



Source: BLS, 2015b; BLS, 2015e

Based on this analysis, we estimate that it would cost employers in the leisure and hospitality industry 1.34% of average annual compensation to provide *all* employees with paid sick leave. We subtract the 0.4% of average annual compensation the industry currently pays to arrive at the expected cost increase.

Even though the evidence suggests the relationship between access and cost is linear in nature, we also examine the costs based on a high-end estimate to avoid understating the potential costs. This means our results should not be sensitive to a slight change in our preferred selection of 1.34%. We choose 1.53% of annual compensation as a high-end estimate because, as column 4 in Table 3 shows, that is the maximum industry cost when adjusted for full coverage.

#### 2.2 How costly is paid sick leave, really?

In this section, we contextualize the cost increase of paid sick leave in the accommodation and food services industry and its subsectors. When the data are available, we examine the accommodation and food services industry as a whole, the food and drinking places industry (subsector), the full and limited service restaurant industries (sub-subsectors). However, the data availability of some sources limit our analysis to only one or two of these industries.

First, we compare the expected cost increase from paid sick leave to common industry expenses. Then we assess businesses' ability to adjust to the paid sick leave cost increase by examining changes in industry expenses over time.

#### 2.2.1 Relative to Expenses

**Total Operating Expenses.** We first compare the paid sick leave cost increase to total operating expenses. Industrial expense data is collected by the US Census Bureau's annual retail trade survey. Total operating expenses includes payroll, benefits, equipment, advertising, materials, data, communication, utilities, rent, depreciation, and taxes. Using our preferred estimate, paid sick leave would increase costs

for the accommodation and food services industry by about 0.38% of total operating expenses. Using our high-end estimate, the cost increase of paid sick leave as a share of total operating expenses is only about 0.45%. Table 4 presents the cost increase as a share of total expenses for each subsector.

Industry	Paid Sick Leave Cost Increase as a share of Total Operating Expenses	Paid Sick Leave Cost Increase as a share of Total Operating Expenses High End Estimate
Accommodation and Food Services	0.38%	0.45%
Food Services and Drinking Places	0.37%	0.44%
Full Service Restaurants	0.37%	0.44%
Limited Service Restaurants	0.32%	0.38%

TABLE 4: Paid Sick Leave Cost Increase as a Share of Total Operating Expenses

Source: author's computations of BLS, 2015a, BLS, 2015b, and BLS, 2015c; U.S. Census Bureau, 2015a

**Individual Expenses.** We can also examine how the paid sick leave cost increase compares to each individual expense. IBISWorld reports individual expenses as a share of revenues for the restaurant (full service) and fast food (limited service) industries. For these industries, the paid sick leave cost increase is a fraction of a percent of industry revenues at 0.24% and 0.3% using the high-end estimate.





Source: Alvarez, 2017a,b; paid sick leave estimate - author's computations

**Prime Cost.** Prime cost is an important benchmark for restaurant profitability. Prime cost is the sum of the cost of goods sold and payroll expenses. As a rule of thumb, prime cost should not exceed between

60% and 65% of total sales for a sustainable restaurant.<sup>15</sup> The paid sick leave cost increase as a share of total sales is 0.3%. This means even in the absence of any cost savings from paid sick leave, the full cost increase would only increase prime cost - the key industry standard to business sustainability - by a fraction of a percentage point.

#### 2.2.2 Costs over Time

In this section we investigate how difficult it is for businesses to absorb the cost of paid sick leave by examining how their costs typically increase over time.

**Total Operating Expenses over Time**. First we examine total operating expenses over time using data from the US Census Bureau's annual retail trade survey. Table 5 shows across the subsectors, annual changes in total operating expenses between 2010 and 2014 ranged from 0.48% to 5.46% with an average of about 2.4%. The paid sick leave cost increase represents a 0.38% rise in total operating expenses, or no more than 0.45% as a high-end estimate. This appears to be at the low end of the typical cost increases these industries are used to experiencing every year.

Year	Accommodation and food services	Food services and drinking places	Full-service restaurants	Limited- service eating places
2010	1.81%	3.07%	3.34%	3.00%
2011	0.96%	1.04%	2.12%	0.48%
2012	1.53%	1.32%	1.50%	1.23%
2013	2.78%	2.75%	2.90%	3.47%
2014	3.55%	3.72%	5.46%	2.69%
Average	2.12%	2.38%	3.07%	2.17%

TABLE 5: Year-over-Year Percentage Change in Real Total Operating Expenses

Source: U.S. Census Bureau, 2015a

**Input Expenses over Time**. Businesses commonly are forced to adjust to phenomena outside of their control. For any type of food related industry, food costs are a large component of business expenses. IBISWorld estimates purchases of food and beverage inputs are nearly 40% of the fast food and restaurant industry's revenue.<sup>16</sup> This means whenever input prices (food prices in this case) increase, businesses must make necessary adjustments to cover their increased expense.

Taking a cursory look at agricultural, crop, and livestock prices – the prices of key inputs to food industries - we see that their fluctuations can be wide. Table 6 shows for example, in 2011, agricultural and crop prices changed 21% and 26% since the previous year. A 21% increase in food (input) prices would increase total operating expenses by 8%. By comparison, the paid sick leave cost increase at most represents an increase in total operating expenses of only 0.45%

<sup>&</sup>lt;sup>15</sup> Baker Tilly (2014)

<sup>&</sup>lt;sup>16</sup> Alvarez (2017a,b)

Year	Agricultural	Crop	Livestock
2009	-12.14%	-10.64%	-14.26%
2010	2.25%	-7.72%	16.85%
2011	21.32%	26.47%	15.92%
2012	4.57%	6.42%	2.36%
2013	1.39%	-1.91%	6.01%
2014	1.50%	-12.11%	18.66%
2015	-8.12%	-6.20%	-12.01%

**TABLE 6: Fast Food and Restaurant Industry Input Price Volatility** 

Source: U.S. Department of Agriculture, 2016

This is evidence that these businesses, small or large, must cope with volatile prices for their key inputs which can drive large changes in expenses. If these businesses are accustomed to adapting to food price changes in this manner, paid sick leave expenses appear to be well within these businesses' capacity to adjust.

#### 2.3 How can businesses adjust to paid sick leave cost?

In this section, we explore potential sources of industry funds that could offset much or all of the cost of adjustment. If the cost were completely passed onto customers in terms of increased prices, we find the burden negligible. Alternatively, decreasing the amount of stock repurchases (for public companies) would more than cover the bill. Lastly, paid sick leave could potentially reduce turnover expenses. Any funds saved from reduced turnover could be used to pay for sick leave.

#### 2.3.1 How much would prices have to rise?

One way to fund the paid sick leave cost increase is to pass the entire cost directly to customers in the form of increased prices. In fact, opponents of paid sick leave mandates argue this is exactly one of the things affected businesses will do. Here we ask, if the accommodation and food services industry and its subsectors raised prices to cover the cost of paid sick leave, would it be burdensome to consumers?

The paid leave cost increase as a share of industry revenue gives us the percentage that revenues would have to rise in order to absorb the total cost. That percentage is consistently around 0.24% and 0.30% for our high-end estimate.<sup>17</sup> For example, the price of a Big Mac would rise .about 0.3% which is equivalent to a change from \$3.99 to \$4.00. This price increase is unlikely to burden customers. It is also unlikely to decrease the quantity of Big Macs demanded.

#### 2.3.2 Buybacks

Reallocating resources across firm stakeholders is another potential source of funds. For public companies, stakeholders include workers, management, shareholders, customers, suppliers, and the community.

One way shareholders are allocated funds is through share repurchases or stock "buybacks" where the company purchases its own stock from the pool of outstanding shares, reducing the total number of

<sup>&</sup>lt;sup>17</sup> Sales figures come from the US Census Annual Retail Trade Survey 2015. Because the fast food industry's sales revenue exceeds operating expenses, the paid sick leave cost increases as a percent of sales revenue is slightly smaller than of operating expenses.

outstanding shares and increasing the price of each individual outstanding share. The benefits of stock buybacks, beyond increasing the value of shares for existing shareholders, are unclear.<sup>18</sup>

The funds utilized on this practice are more than enough to cover the cost of paid sick leave for the food services and drinking places industry. The average annual amount spent on buybacks in the food services and drinking places industry between 2010 and 2016 was around \$9.7 billion.<sup>19</sup> This is enough to cover our cost increase estimate of paid sick leave (\$1.5 billion) six and a half times over.<sup>20</sup> The complete cost increase of paid sick leave for the food services and drinking places industry could be covered by reducing funds spent on buybacks by 15%. A reduction in buybacks of this size will likely have no significant impact on the potential benefits, if any, from buybacks.

#### 2.3.3 Turnover

Turnover costs are the employer costs associated with replacing employees that have left the business through layoffs, firings, or quits. To our knowledge, there is no public data on industry turnover costs. However, we can develop a crude estimate using the BLS Job Openings and Labor Turnover Survey (JOLTS) and Center for American Progress (CAP) analysis of turnover cost per employee.

In a 2012 CAP report, Boushey and Glynn review the literature and find turnover costs across industries are remarkably stable. Replacing an employee cost about one-fifth of the employee's annual salary regardless of the industry.<sup>21</sup> From JOLTS we know how many employees turnover in the accommodation and food service industry both voluntarily (quits) and involuntarily (layoff/fires). We multiply the number of employees that need to be replaced annually times the cost of replacement (20% of average annual salary) to get the annual cost of turnover. We estimate the rise in cost from a paid sick leave mandate would be 8.5% of total industry turnover cost.<sup>22</sup>

#### TABLE 7: Paid Sick Leave Cost Increase as a Share of Turnover Cost for Accommodation and **Food Services Industry**

Industry	2015 Turnover	Average Annual Wages	Annual Turnover Cost	Paid Sick Leave Cost	PSL Cost as share of Turnover Cost
Accommodation and Food Services	9,339,000	\$13,221	\$24,694,772,157	\$2,096,194,585	8.5%

Source: BLS, 2015d

This estimate demonstrates paid sick leave mandates could potentially pay for themselves. If a paid sick leave mandate could reduce total separation turnover by 8.5%, annual turnover cost would decrease by \$2,096,194,585 – enough funds to pay for the cost of paid sick leave. Studies on the relationship between paid sick leave access and job separation suggest it is reasonable that a paid sick leave mandate could reduce total turnover by 8.5%. A 2013 Oxfam survey states 19% of low-wage working mothers reported

<sup>&</sup>lt;sup>18</sup> Lazonick (2014)

<sup>&</sup>lt;sup>19</sup> Compustat 2010-2016 author's computations

<sup>&</sup>lt;sup>20</sup> This figure (\$1.5 billion) is based on the calculation described on p. 6 (see Table 3). Specifically, we estimate the cost increase due to paid sick leave by taking 1.34% of total annual compensation (\$152.8 billion, as estimated by the BLS) for the food services and drinking places industry and netting out what the food services and drinking places industry already pays for paid sick leave (0.375% of total annual compensation). <sup>21</sup> Boushey & Glynn (2012)

<sup>&</sup>lt;sup>22</sup> Author's calculations

losing a job due to caring for themselves or an ill child.<sup>23</sup> Furthermore, Hill (2013) finds paid sick leave decreases the probability of job separation by 25%.<sup>24</sup> These two studies support the claim some turnover is caused by lack of access to paid sick leave. It then follows that granting all workers paid sick leave would reduce turnover costs and it is likely that the savings from reduced turnover would be more than enough to pay for sick leave.

## 3. Additional industries

It is clear from Table 1 that the food industries are not the only subsectors that have large shares of workers without access to paid sick leave. In this section we estimate the cost of paid leave for these other industries<sup>25</sup> and provide relative measures to more fully understand the impact of the cost.

#### 3.1. Total Expenses and Total Revenue

The paid sick leave cost increase for the industries that have the lowest levels of access is not more than 0.5% of total expenses, even among our high-end estimates. On average, the cost is 0.25% of total operating expenses. The cost of paid sick leave as a share of total sales ranges from 0.02% to 0.28%. This means at most, the amusement, gambling, and recreation industry would have to raise overall prices by 0.28% to completely absorb the cost of paid leave, leaving out any other net cost savings or alternative methods of adjustment.

Industry Subsector	Paid Sick Leave Cost Increase as a share of Total Expenses	Paid Sick Leave Cost Increase as a share of Total Sales
Amusement, Gambling, and Recreation	0.34%	0.28%
Personal Care Services	0.30%	0.25%
Food and Beverage Stores	0.26%	0.06%
Grocery Stores	0.26%	0.06%
Personal and Laundry Services	0.25%	0.21%
Miscellaneous Store Retailers	0.23%	0.08%
Administrative, Support, Waste, Remediation	0.23%	0.19%
Sporting goods, hobby, book, and music stores	0.20%	0.07%
Gasoline Stations	0.18%	0.02%
Repair and Maintenance	0.16%	0.12%

#### TABLE 8: Paid Sick Leave Cost Increase as a share of Total Expenses and Total Revenues

Source: BLS, 2015a,b,c for cost estimate; U.S. Census Bureau, 2015b,c

<sup>&</sup>lt;sup>23</sup> Oxfam (2013), pg. 7 <sup>24</sup> Hill (2013)

<sup>&</sup>lt;sup>25</sup> The industries presented here are a subset of the industries identified in Table 1. Private Households and Agriculture, Forestry, Fishing, and Hunting are dropped because those industries are not within the scope of the BLS National Compensation Survey and therefore the cost could not be estimated.

#### 3.2 Buybacks

If public companies could distribute resources across all stakeholders of the firm, in a number of cases, reducing the amount of buybacks could completely cover the cost of paid sick leave.<sup>26</sup> Relying completely on stock buyback reduction as a way to fund paid sick leave might be a good strategy for the food and beverage store industry and miscellaneous merchandise store industry, as they would only have to reduce buybacks by 11% and 12% respectively. However, the same cannot be said for the repair and maintenance industry which only spent an average \$654,000 per year on buybacks which cannot be a substantial source of funds.

#### 3.3 Turnover

For the accommodation and food services industry, we observed that the cost of paid sick leave could potentially pay for itself, depending on the extent to which workers are detached from their jobs because of lack of access to paid sick leave. The same may be true of other industries with relatively low access to paid sick leave.

The BLS Job Openings and Labor Turnover Survey (JOLTS) contains turnover data by broad industries. Although we cannot specially examine the subsectors listed in Table 1 using these data, we can examine turnover costs for the broad industries from which the subsectors come from – retail trade, other services, and construction.

Table 9 shows that the cost of providing paid sick leave is between 6% and 8.5% of current turnover expenses. If expanding paid sick leave access to all workers could reduce turnover by 8.5%, enough cost savings could be generated to cover the cost of the policy.

Industry	2015	Average	Annual	Paid Sick	PSL Cost as
	Turnover	Annual Wages	Turnover Cost	Leave Cost	share of
					<b>Turnover</b> Cost
Retail Trade	8,816,000	\$22,418	\$39,527,401,437	\$2,360,749,586	5.97%
Construction	3,631,000	\$51,638	\$37,499,564,255	\$2,236,760,377	5.96%
Other	2,414,000	\$31,186	\$15,056,659,943	\$1,284,522,947	8.53%
Services					

#### TABLE 9: Paid Sick Leave Cost Increase as a share of Turnover Cost for Low-Access Industries

Source: BLS, 2015d

The relative costs for these additional industries largely reflects the evidence presented in Part 2 for the accommodation and food services industry and its subsectors. The cost of paid sick leave is not burdensome when compared to typical industry expenses. Furthermore, these industries have several options for adjustment. One scenario being the cost is entirely passed onto consumers in the form of price increases. Even in this scenario overall prices would have to increase no more than 0.28% for any industry. For many low-access industries, public companies could reduce the amount of buybacks to completely cover the cost. Finally, the complete cost could potentially be covered by saving from reduced turnover.

<sup>&</sup>lt;sup>26</sup> Author's calculations of Compustat 2010-2016 data

## 4. Limitations

#### 4.1 Isn't the real problem small business?

Heterogeneity across businesses within each industry presents a limitation in our analysis. The restaurant and fast food industries are composed of large corporations but also small, independent businesses. The costs may be different for small businesses than say a company-owned McDonalds outlet. However, we argue our analysis can still offer meaningful contributions.

First, it is worthwhile to investigate the "average" case, since this provides a measure of the overall impact on an industry, if not for each individual business. Moreover, if we accept the burden is heavier on small businesses, that means the burden is that much lighter on large businesses and provides evidence that paid sick leave mandates are not costly for large employers.

Second, there is the moral argument that small sustainable businesses should be built on the grounds of a quality product or service and not cheap labor. A recent Harvard Business Review study finds if restaurants close in response to higher labor costs, they are more likely to have inferior products and services in terms of Yelp reviews.<sup>27</sup> This means the restaurants that closed were likely subsisting solely on cheap labor.

Finally, there have been several studies evaluating the cost to all businesses (small and large) after a paid sick leave mandate. In San Francisco, 70% of employers reported no effect on profitability with another 15% saying they were not sure.<sup>28</sup> In Connecticut, 46.8% of employers reported no change in costs due to the sick leave law, 30% said they increased 2% or less and 11.9% reported they were unsure.<sup>29</sup> Appelbaum and Milkman (2016) find similar results for New York City where 85% of employers reported that the paid sick leave law had no effect on their overall business costs.<sup>30</sup>

#### 4.2 What exactly does paid sick leave access mean?

Another limitation of the analysis is that we cannot be precise about what access to paid sick leave means. For example, does it mean workers have a fixed number of days off, as needed, sick days that carry over, or something else entirely?

Nonetheless, it is worthwhile to explore what it would cost to give workers the "standard" access to paid sick days. We could use current paid sick leave access provisions to extrapolate what paid sick day access might mean to newly covered workers. According to the BLS, among workers with access to paid sick leave, 68% had a fixed number of days, 10% received days on an as-needed basis, and 22% received days through a consolidated plan – a plan where all types of leave are bunched together.<sup>31</sup> Those with fixed day plans had an average of 8 sick days available after one year of service but workers in the leisure and hospitality industry (supersector of the accommodation and food services industry) that had access only used about 2 days of sick leave per year.

<sup>&</sup>lt;sup>27</sup> Luca & Luca (2017)

<sup>&</sup>lt;sup>28</sup> National Partnership for Women and Families (2017); Drago & Lovell (2011); Colla et al. (2014)

<sup>&</sup>lt;sup>29</sup> Appelbaum et al. (2014)

 $<sup>^{30}</sup>$  Appelbaum et al. (2016)

<sup>&</sup>lt;sup>31</sup> Barthold & Ford (2012)

## 5. Conclusion

An increasing number of cities and states are considering legally requiring businesses to provide paid sick leave to the 32% of private industry workers who currently do not have the benefit. A main concern in these debates is whether or not businesses will be able to cope with the increased costs. This paper has shown for the most affected industries potential cost increases are well within the realm of what businesses adjust to regularly. We also identified several sources of funds to help cover costs *without* accounting for paid sick leave cost savings such as increased productivity or increased public health. Taken together, this is strong evidence businesses would not struggle significantly to provide paid sick leave to all of their workers.

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## Appendix

Table A1 is the continuation of Table 1 found in Section 1 on page 4. It ranks all the subsectors within the NHIS data by paid sick leave access rates. The estimates for paid sick leave access rates were computed in the following manner. First, I created IPUMS data extract for pooled 2004-2015 samples. Then, I tabulated the frequencies of paid sick leave access by industry subsector including filters for:

- Sample proxy
- Employed
- Answered yes or no to paid sick day question
- Constraining industries to non-military
- Only private industry
- Use sample weight

From that list, I excluded industry subsectors with small sample sizes (less than 300 responses). Finally, I ranked the subsectors by paid sick leave access rates from lowest to highest and presented the bottom 20% of the ranked list.

Industry Subsector (3 Digit NAICS Classification)	Paid Sick
	Leave
	Access
	Rates (%)
Food services and drinking places	16.9
Private households	18.8
Crop production	21.9
Personal services (barber shops, beauty salons, nail salons, laundry, funeral homes and	23.5
cemeteries)	
Gasoline stations	26.3
Animal production	27.6
Construction Industries	31.8
Administrative and Support and Waste Management and Remediation Services	38.2
Industries	
Miscellaneous store retailers	39.6
Repair and maintenance	41.8
Amusement, gambling, and recreation industries	42
Sporting goods, camera, hobby, book and music stores	42.7
Food and beverage stores	43.1
Performing arts, spectator sports, and related industries	43.4
Motion picture and sound recording industries	43.5
Furniture and related product manufacturing	44.1
Apparel manufacturing	44.2
Clothing and clothing accessories stores	44.2
Wood product manufacturing	44.5
Furniture and home furnishings stores	45

 TABLE A1: Industry Subsectors with Lowest Paid Sick Leave Access Rates – Complete List

Accommodation	47.7
Motor vehicle and parts dealers	48.9
Fabricated metal product manufacturing	50.2
Real estate	50.9
Food manufacturing	51.3
Social assistance	52.7
Rental and leasing services	52.8
Plastics and rubber products manufacturing	53.2
Nonmetallic mineral product manufacturing	53.3
Printing and related support activities	53.8
Transportation (including support activities for transportation)	54.4
Warehousing and storage	55.9
Primary metal manufacturing	56.1
General merchandise stores	56.2
Non-store retailers and non-specified retail trade	56.4
Paper manufacturing	60.4
Health and personal care stores	61.5
Building material and garden equipment and supplies dealers	61.6
Ambulatory health care services	63.8
Mining (except oil and gas)	64.5
Nursing and residential care facilities	64.9
Electronics and appliance stores	65.1
Machinery manufacturing	65.9
Electrical equipment, appliance, and component manufacturing	66
Religious, grant-making, civic, labor, professional, and similar organization	66.2
Education Services Industries	67.9
Transportation equipment manufacturing	68.5
Postal service, couriers, and messengers	69.4
Support activities for mining	71.8
Beverage and tobacco product manufacturing	72
Merchant wholesalers, nondurable goods	72.1
Publishing industries (except internet)	72.3
Professional, Scientific, and Technical Services Industries	74.7
Public Administration Industries	77
Credit intermediation and related activities	77.3
Securities, commodity contracts, and other financial investments and related activities	78.7
Chemical manufacturing	79.4
Computer and electronic product manufacturing	81
Insurance carriers and related activities	82.8
Broadcasting and telecommunications	83.4
Hospitals	86.2
Utilities Industries	87.2
Monetary authorities central bank	91

Source: IPLUMS-NHIS, 2004-2015

Table A2 presents the North American Industrial Classification System (NAICS) for the Leisure and Hospitality supersector and its subsectors.

NAICS Industry Name
Leisure and Hospitality
Accommodation and Food Services
Food Services and Drinking Places
Restaurants and Other Eating Places
Full Service Restaurants
Limited Service Restaurants (fast food)

#### TABLE A2: North American Industry Classification System (NAICS), 2017 edition

Source: NAICS, 2017