The 2010 healthcare law contains a tax on the health insurance policies that most small businesses purchase. Although the tax is formally structured as a fee on health insurers, recent analysis has determined that virtually all of the tax burden will be passed on to the purchasers of insurance: employers and employees. Estimates predict the tax will raise the cost of employer-sponsored insurance by 2% - 3%, imposing a cumulative cost of nearly $5,000 per family by 2020. The NFIB Research Foundation’s BSIM model suggests that such price increases will reduce private sector employment by 125,000 to 249,000 jobs in 2021, with 59 percent of those losses falling on small business.

Introduction
The Patient Protection and Affordable Care Act (PPACA) signed into law in 2010 included, as one of its revenue-raisers, a health insurance (HI) premium tax structured as an annual fee on insurers beginning in 2014. The tax applies to any U.S. health insurance provider and is intended to collect roughly $90 billion in revenue through 2020. A predetermined amount of revenue is to be collected each year: $8 billion in 2014, $11.3 billion in 2015 and 2016, $13.9 billion in 2017, and $14.3 billion or more annually in years 2018 and beyond.¹ Targeted at the fully-insured market, this tax will ultimately be passed on to consumers, many of whom are small businesses.

Recent analysis has determined that the cost of what is ostensibly an industry fee targeted at health insurers will ultimately be shifted to purchasers of health insurance from these entities. A study by former Congressional Budget Office Director Douglas Holtz-Eakin released in March found that the HI tax can be expected to raise premiums for employer-sponsored insurance by as much as 3 percent, a price increase that cumulatively amounts to nearly $5,000 per family over the current decade.² Additionally, the Joint Committee on Taxation (JCT) estimated in June that repealing the tax would reduce premiums of insurance plans offered by covered entities by 2.0 percent to 2.5 percent.³
If the HI premium tax takes effect, the vast majority of small businesses currently providing insurance will see their premiums increase. According to survey data from the Medical Expenditure Panel Survey (MEPS), among private sector establishments who offer health insurance, nearly 75 percent of those with between 100 and 499 employees do not self-insure, and more than 85 percent of those with fewer than 100 employees do not self-insure. For a small business owner who does not self-insure, this increase in premiums will be borne by both the employer and the employee, each of whom contributes toward financing the insurance.

Since small businesses play a vital role in the economy, accounting for half of private sector employment and two-thirds of the net new private sector jobs created in the United States, public policies which impose meaningful costs on small businesses can be expected to have tangible negative effects on employment and job creation. This brief report attempts to quantify the economic impact the HI premium tax will have on private sector employers and employees by modeling the expected premium cost increases and simulating their effects using the NFIB Business Size Impact Module (BSIM).

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

Depending on the assumed rate of inflation, the HI premium tax is forecast by the BSIM to reduce private sector employment by between 125,000 and 249,000 jobs in 2021. Approximately fifty-nine percent of the jobs lost are jobs that would have been at small firms.

**Modeling Assumptions and Methodology**

In order to generate forecasts of employment and output effects of new policies by size of firm, estimates of new costs borne by employers due to policy changes must be inputted into the model in the same format. In practice, this means that costs must be calculated separately for firms with different numbers of employees. The firm-size categories for which the BSIM accepts cost inputs and generates forecasts are the same categories as those presented in the Census Bureau’s Statistics of U.S. Businesses dataset: 1 to 4 employees, 5 to 9 employees, 10 to 19 employees, 20 to 99 employees, 100 to 499 employees, and 500 or more employees.

Policies can be highly complex and nuanced, and different components contained within the same policy can have offsetting effects on growth, production, and employment. In the case of the HI
premium tax, revenues collected from businesses can be recycled into the economy through new
government spending. The recipients of these government monies, private sector providers of goods and
services, will experience stimulative effects due to the increased demand for their products. In the
aggregate, this additional demand will help offset the new costs the tax will impose on employers. A
second consideration that should be accounted for are new costs incurred by the government that are
generated by tax collection and enforcement.

Thus, in addition to new employer costs, changes in government expenses as well as the demand
for goods and services of select industries must also be modeled and inputted into the BSIM. Details on
how these various inputs were constructed for this analysis are provided below.

Modeling Employer Costs
The process of obtaining estimates of new costs per firm due to an effective increase in HI premiums
can be broken down into five broad steps:

(1) Estimate the number of firms hit by the HI tax.
(2) Calculate the number of employees at these firms who would be affected by the tax.
(3) Estimate the average dollar amount of these workers’ HI premiums.
(4) Using the results of steps (2) and (3), compute an estimate of the average total cost of employee
HI premiums for firms of different sizes. The HI premium “tax” for different firm-size groups is
assumed to equal either 3 percent or 2.5 percent of these figures.
(5) Apply assumptions about employers’ share of new costs, deductibility of health insurance for
income tax purposes, the price elasticity of demand for health insurance (from the employer’s
perspective), and future rates of HI premium inflation to the results of step (4) to generate the
inputs to the BSIM model.

Information on how steps (1) through (5) were executed follows.

Step (1). The number of firms hit by the HI tax depends on the percentage of fully-insured firms
offering insurance to their employees. The full-insurance constraint is imposed on the modeling process
in the next step. As an intermediate step, the number of firms offering insurance in each firm-size
category was estimated using the equation:

\[
\text{# of Firms Offering Insurance} = \text{(# of firms) x (% of firms offering insurance)}
\]

Step (2). The BSIM model generates employment and output effects associated with policy changes
directed at employer firms. While the HI premium tax also affects millions of self-employed U.S.
workers, the tax’s impact on the self-employed sector is considered to be “outside the model” for this
analysis. To be hit by this tax in the model, an employee must be enrolled in (“take up”) a fully-insured
plan offered by an employer firm. Estimates of the number of employees who are hit by the HI tax for
each firm-size category were obtained using the equation:
# of Employees Hit by HI Tax = (# of firms offering insurance) x (avg. # of employees per firm) x (% of employees who “take up” insurance when offered it) x (% of enrollees not enrolled in self-insured plans)

Step (3). Consumers of health insurance have the option of purchasing individual coverage or plans covering both themselves and other members of their family. The premium attached to an insurance policy offering a defined set of benefits tends to differ substantially depending upon the number of individuals covered by the policy. One measure of the “typical” premium paid by a fully-insured employee is a weighted average of the premiums for the different plans available. For this analysis, such a “typical” premium was calculated using the equation:

\[
\text{Wtd. Avg. HI Premium} = (\text{share of employees with employer-sponsored insurance taking single coverage} \times \text{avg. single coverage premium}) + (\text{share of employees with employer-sponsored insurance taking family coverage} \times \text{avg. family coverage premium}) + (\text{share of employees with employer-sponsored insurance taking employee-plus-one coverage} \times \text{avg. employee-plus-one coverage premium})
\]

Step (4). Multiplying the results of steps (2) and (3) for individual firm-size blocks generates estimates of the total cost of health insurance premiums differentiated by size of firm. These figures represent the total cost of insurance premiums borne by both employers and employees (before accounting for the income tax treatment of healthcare expenditures) for individual firm-size categories. Dividing by the total number of firms in each category yields average per-firm costs of insurance premiums. Using the conclusions from both Holtz-Eakin’s and the JCT’s analyses, two different scenarios involving different assumed tax “rates” were modeled and simulated.

- In the first case, which relies on Holtz-Eakin’s analysis, the actual “tax” imposed on employer firms is assumed to equal 3 percent of existing premiums.

- In the second case, which relies on the JCT’s analysis, the tax is assumed to equal 2.5 percent of existing premiums.

Step (5). A few additional complexities to the modeling project must be addressed (and changes made to the results of step (4)) before the cost inputs are complete.

- **Cost sharing** at firms means that employers will shoulder a fraction of these costs. For this analysis, employers were assumed to shoulder 75 percent of the cost of their employees’ insurance premiums.9

- The **tax deductibility of healthcare expenditures** means that the full amount of an employer’s share of its employees’ insurance premiums will not impact its bottom line. Profitable firms can reduce their income tax burden by deducting healthcare expenditures from gross income. For this analysis, employers were assumed to pay a combined state and federal income tax rate of 30 percent.
Typically, when the price of a good or service goes up, the demand for that good or service falls. The degree to which demand rises or falls due to a particular change in price is referred to as the **price elasticity of demand**. Business owners may react to an increase in the cost of their health insurance premiums by reducing costs elsewhere, “eating” the cost and suffering reduced profits (or bigger losses), or dropping coverage for their employees. From a modeling perspective, having multiple possible outcomes creates challenges since different outcomes will result in different initial financial costs to business owners, which are what drive the cost inputs for the BSIM. The modeling choice taken in this analysis was to assume that business owners “eat” the cost, a choice justified by data indicating that business owners view providing health insurance as an important recruitment/retention tool, as well as “the right thing to do.”

**Inflation** is a phenomenon that can be difficult to predict accurately. PPACA was intended to moderate the relentless increase in healthcare costs and, prior to its passage, was advertised as a law that would do just that. However, recent pronouncements by the Congressional Budget Office and the Chief Actuary of Medicare and Medicaid assert that PPACA fails to contain costs in a meaningful way. Given the uncertainty surrounding healthcare costs in a post-PPACA world, the BSIM was run for a range of assumed nominal premium inflation rates ranging from 5 percent to 10 percent (annually). These rates were applied to the 2009 weighted average premium (the year with the most recent data available) to obtain estimates of premium costs in future years for which simulations were run.

**Modeling Government Costs and Private Sector Demand**

- The collection and enforcement of tax laws requires government financing to pay for collection activities. This analysis assumes that **new government costs** resulting from the HI premium tax equal 0.5 percent of every dollar collected from employer firms, the percentage share of each dollar collected by the IRS that currently goes to fund operational costs.

- Since the HI premium tax is intended to help pay for other provisions in a larger healthcare law that expands eligibility for insurance products and mandates their purchase, it is assumed in the model that the **increase in demand for private sector goods and services** occurs strictly among healthcare-related industries. Specifically, the difference between total employer costs and government costs (i.e., all the tax revenue not spent on collection and enforcement activities) was assumed to be redistributed to the healthcare sector according to existing patterns of spending.
Simulation Results: Employment and Output Forecasts

A ten-year forecast window starting from the current year was chosen for this analysis. Since the insurance fees are first imposed in 2014, forecast employment and output effects are only available from then onward. The results of BSIM simulations utilizing each of the assumed tax rates (3 percent and 2.5 percent) are presented below.

Results Based on a 3 Percent Premium Increase (Tax)
The results in this section are from the simulation utilizing the assumption that the HI premium tax equals 3 percent of existing premiums. Based on the additional assumptions outlined above and depending on the assumed rate of inflation, the BSIM forecasts that there will be between 150,000 and 249,000 fewer private sector jobs in 2021 as a result of the HI premium tax. Even in the best-case inflation scenario presented here, 150,000 jobs are forecast to be lost in the next decade due to the HI premium tax.

Fifty-nine percent, a sizeable majority, of the jobs lost by 2021 are jobs that would have been at small firms (firms with fewer than 500 employees, using the Small Business Administration’s definition). Job losses at the smallest firms, those with fewer than 20 employees, account for 25 percent of all lost jobs. Despite the fact that very few large firms fully-insure, large firms will also experience considerable job loss as a result of the tax. The losses at large firms are primarily the residual effect of initial cutbacks made at small firms. Small firm owners responding to the new tax will not only reduce employment, but will also take other cost-cutting measures like reducing investment. Lower demand from small firms, which collectively account for roughly half of both real private GDP and private sector employment, can have a large impact on the sales of large firms.

In addition to the employment difference forecasts, real GDP is forecast to be $22 billion to $36 billion lower in 2021 than it would otherwise be without the tax.

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Results Based on a 2.5 Percent Premium Increase (Tax)
The results in this section are from the simulation utilizing the assumption that the HI premium tax equals 2.5 percent of existing premiums. Based on the additional assumptions outlined above and depending on the assumed rate of inflation, the BSIM forecasts that there will be **between 125,000 and 208,000 fewer private sector jobs in 2021** as a result of the HI premium tax. Even in the best-case inflation scenario presented here, 125,000 jobs are forecast to be lost in the next decade due to the HI premium tax. Approximately fifty-nine percent, a sizeable majority, of the jobs lost by 2021 are jobs that would have been at small firms (<500 employees). Job losses at firms with fewer than 20 employees account for roughly 25 percent of all lost jobs. Real GDP is forecast to be $18 billion to $30 billion lower in 2021 than it would otherwise be without the tax.

**EMPLOYMENT DIFFERENCE FROM BASELINE (ALL FIRMS), UNITS = THOUSANDS OF JOBS**

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**REAL OUTPUT DIFFERENCE FROM BASELINE (ALL FIRMS), UNITS = $BILLIONS**

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NOTES

1 After 2018, the insurance fee in any particular year will equal the fee levied during the previous year increased by the rate of premium growth for the preceding calendar year.

2 Holtz-Eakin estimates the premium increase will range from between 2.4 percent to over 3 percent between 2014 and 2019. To simplify matters, an increase of 3 percent was assumed for all forecast years. See: Douglas Holtz-Eakin, “Higher Costs and the Affordable Care Act: The Case of the Premium Tax”, American Action Forum, March 9, 2011.

3 Thomas A. Barthold, letter to Senator Jon Kyl, Joint Committee on Taxation, Washington, DC, 3 June 2011.

4 Estimates of the number of establishments who provide employer-sponsored insurance but do not self-insure were taken from the Department of Health and Human Services’ 2009 Medical Expenditure Panel Survey (MEPS) (Table I.A.2.a). These estimates are likely high and suggest more firms self-insure than actually do, because the data are reported in establishments rather than enterprises. An establishment is a business location; an enterprise is a business.

5 Data for the number of firms were drawn from the Census Bureau’s 2008 Statistics of U.S. Businesses (SUSB) dataset. Estimates of offer rates for employer-sponsored insurance were taken from MEPS (Table II.A.2).

6 The HI premium tax will also raise premiums for insurance plans purchased by self-employed individuals. In the face of rising premium costs, some self-employed workers may elect to drop their insurance coverage (from a financial perspective, it will certainly be cheaper for many self-employed individuals to pay the penalty required by the individual mandate for health insurance than to actually buy health insurance). Since the aggregate insurance fee amount for a given year is preset, dropped coverage among the self-employed will simply shift costs to fully-insured workers at employer firms, further raising the premiums they pay.

7 Estimates of the number of employees per firm were calculated using SUSB data. Estimates of insurance “take up” rates were drawn from the Kaiser Family Foundation’s 2010 Employer Health Benefits Survey (Exhibit 3.2). Estimates of the percentage of fully-insured employees were taken from MEPS (Table I.B.2.b.(1)).

8 All data for this calculation was taken from MEPS. Using the most recent data available, a weighted average premium in 2009 would cost (0.500 x ($4,669) + (0.305 x ($9,053) + (0.195) x ($13,027) = $7,636.

9 MEPS data (Table II.C/D/E.3) indicate that the employer share of insurance premiums in 2009 was approximately 70 percent to 80 percent for both small and large firms. Data from the Kaiser Family Foundation indicate that covered workers contribute 19 percent toward single coverage and 30 percent toward family coverage (Exhibit 6.1 of the 2010 survey).

10 According to a NFIB National Small Business Poll on health insurance, 80.6 percent of small businesses say one reason they provide health insurance to their employees is because it helps with employee recruitment. Sixty-seven percent say a reason they provide insurance is because their employees expect or demand employer-sponsored insurance. Seventy-five percent say a reason they provide health insurance is because it decreases turnover. And 94.9 percent said a reason they provide health insurance is because doing so is the “right thing to do.” See: Michael A. Morrisey, “Health Insurance”, ed. William J. Dennis, Jr., NFIB National Small Business Poll, Vol. 3, Issue 4, 2003.

A brief word about the modeling choice taken (that employers “eat” the cost of higher health insurance premiums) is merited. By default, when simulating an increase in non-wage labor compensation, such as a tax on health insurance plans, the BSIM does not offset any of these higher costs with a reduction in the wages and salaries of employees. In other words, the model assumes that an increase in non-wage compensation costs will lead to higher costs of production for the business, making it less competitive and eventually leading to a decrease in market share. The BSIM’s default handling of non-wage labor compensation costs was used for this analysis to simulate the additional costs posed by the HI premium tax. Its use is justified by the relatively brief forecast window of five years. Although employers are likely to eventually pass on (cost shift) some of the burden of higher premiums to their employees in the form of lower wages and salaries, this shift is likely to be gradual. Initially, most if not all of the new costs are likely to be absorbed directly by the business.

Some analysts may argue that rather than absorbing the increase in premium costs, business owners would instead generally favor one of the other two options: making compensatory cost reductions elsewhere in the business or dropping coverage. It should be noted that cost reductions made out of necessity will have a growth-limiting impact on private enterprise and the economy, thereby also decreasing future employment levels from what they would otherwise be. The data argue against a spike in business owners dropping their employees’ insurance coverage, but if this were to occur, it would (a) present a major inconvenience to workers who must shop for new coverage and (b) violate promises made by policy makers that the healthcare law would allow insurance consumers to keep their coverage if they liked it. A recent analysis by the Joint Committee on Taxation also points out that while “consumers (or employers) may respond [to a de facto excise tax] by changing their health insurance coverage from more expensive plans to less expensive plans to offset any potential price increase, this behavior is properly characterized as the consumers bearing the burden of the excise tax by accepting lower quality . . . for the same price rather than paying a higher price for the same quality of insurance that they would prefer if there were no tax.” See: Thomas A. Barthold, letter to Senator Jon Kyl, 12 May 2011, Joint Committee on Taxation.
According to a presentation by CBO Director Douglas Elmendorf given after PPACA became law, “[r]ising health costs will put tremendous pressure on the federal budget during the next few decades and beyond. In CBO’s judgment, the health legislation enacted earlier this year does not substantially diminish that pressure.” See: Douglas W. Elmendorf, “Health Costs and the Federal Budget”, Presentation to the Institute of Medicine, Congressional Budget Office, May 26, 2010.


Since 2001, annual premium inflation has usually fallen within the 5 percent to 10 percent band for single, family, and employee-plus-one coverage. The 2009 weighted average premium of $7,636 would increase to $13,713 in 2021 if HI inflation were held constant at 5 percent. Assuming a 10 percent rate of inflation, the weighted average premium would rise to $23,965 in 2021.

According to the IRS’s Statistics of Income division, the cost of collecting $100 in 2010 was approximately 50 cents. On average then, 0.5 percent of each dollar collected helped fund operational costs. See Table 29 of the IRS Data Book, “Collections, Costs, Personnel, and U.S. Population.”

Thirty-four percent of total employer costs less government costs is assumed to go toward purchases of hospital-provided goods and services, 8.2 percent is assumed to go toward nurses, ambulatory healthcare services receive 31.9 percent, insurers receive 16.4 percent, and makers of prescription drugs receive 10.0 percent. This distribution of spending is based on 2009 patterns of U.S. healthcare spending presented in the Department for Health and Human Services’ National Health Expenditure Accounts.