BHI Policy Study
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The Economic Effects of Massachusetts Health Care Reform

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Executive Summary

In 2006, Massachusetts enacted landmark health care reform (HCR) legislation that promised to extend health care coverage to all citizens while significantly lowering costs. The law, known as Chapter 58 of the Acts of 2006, includes mandates requiring all residents with the financial means to obtain health insurance and all employers with 11 or more employees to contribute towards their employees’ health insurance. It also expands Medicaid to cover more individuals and establishes a health insurance subsidy program. Additionally, it creates, an exchange, the Massachusetts Health Insurance Connector to help individuals who do not qualify for Medicaid to purchase competitively priced health plans.

Now that the law has been in place for more than four years, we can assess its impact on the economy of Massachusetts. In a previous study, the Beacon Hill Institute estimated the effect of the Health Care Reform (HCR) on state and federal governments and the private health insurance markets, including employee contributions to their private insurance plans. The study found that, on average, HCR has driven total health insurance costs up by $4.3 billion.

Since HCR was passed, premiums for single plans have increased by $81.13 per year, while family plans have increased by $246.55 per year over the previous trend. Some of these costs are passed onto employees, in the form of higher premium contributions or lower wages. The rest of the costs are paid by companies, in the form of higher labor costs.

These growing costs have absorbed a larger portion of state resources. In the private sector, the same resources could have been used to fund investment, job creation and consumer spending, which would have yielded better economic performance. In the public sector, state local governments could have saved money through reduced health insurance premiums and reduced spending, thus also reducing the need for recent sales and property tax increases.

In this report, the Beacon Hill Institute (BHI) uses its “Computable General Equilibrium” (CGE) model to analyze the dynamic effects of Massachusetts HCR. The purpose of the BHI model, called STAMP (State Tax Analysis Modeling Program), is to identify the these economic effects of policy changes and understand how they operate

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through a state’s economy.² Using the STAMP model, we find that the Chapter 58 has hampered the state economy. Table 1 contains the results.

<table>
<thead>
<tr>
<th></th>
<th>Average</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Employment</td>
<td>-18,313</td>
<td>-15,551</td>
<td>-21,422</td>
</tr>
<tr>
<td>Investment ($m)</td>
<td>-25.06</td>
<td>-21.28</td>
<td>-29.33</td>
</tr>
<tr>
<td>Disposable Income ($b)</td>
<td>-2.48</td>
<td>-2.10</td>
<td>-2.90</td>
</tr>
<tr>
<td>Disposable Income per Capita ($)</td>
<td>-376</td>
<td>-319</td>
<td>-441</td>
</tr>
</tbody>
</table>

Table 1: Economic Effects

The state economy created 18,313 fewer jobs in 2010 than it would have had HCR not been in place. Keeping people employed under the health care reform law also hurt profit margins, causing firms to reduce investment in Massachusetts. We estimate that investment in Massachusetts was from $21.28 million and $29.32 million lower in 2010 as a result of HCR. The job losses have crimped income and wage growth in Massachusetts. Real (price-adjusted) disposable income is, on average, $2.48 billion or $376 dollars per person lower in 2010 than it would have been without HCR.

² For a description about the model see http://www.beaconhill.org/STAMP_Web_Brochure/STAMP_EconofSTAMP.html.
Introduction

On April 12, 2006 Governor Mitt Romney signed the Massachusetts health care reform law “An Act Providing Access to Affordable, Quality, Accountable Health Care.” At the time, proponents, including Governor Romney, claimed that the law would not only expand coverage to all Massachusetts residents but would also reduce health care costs.3

In March 2010, President Obama signed “The Patient Protection and Affordable Care Act” into law, which, according to at least one account, is "essentially identical" to the Massachusetts law.4 As the name suggests, the President and his supporters consistently claimed, at the time, that the law “will lower health care costs, guarantee more health care choices, and enhance the quality of health care.”5 The performance of the Massachusetts economy under the law has implications for the effects of the federal law on the national economy.

In this study, The Beacon Hill Institute builds upon the work of a previous study that estimated the aggregate cost of health care reform in Massachusetts as inputs to simulate the effects of HCR on the state economy. BHI utilized the Institute’s State Tax Analysis Modeling Program (STAMP) for Massachusetts (MA-STAMP). STAMP is a Computable General Equilibrium (CGE) model, which assesses the effects of changes in a wide variety of state public policies on key economic indicators. The model applies sound economic theory to the determination of the effects of tax changes on employment, investment and incomes.

Health Care Reform in Massachusetts

The Massachusetts Health Care Reform (HCR) law was a bold attempt to attain universal health insurance coverage and reduce health care costs. The law was the culmination of three decades of the state of Massachusetts intervening in the state health care markets.

4 Ibid.
In April 2006, Massachusetts Governor Mitt Romney signed into law “An Act Providing Access to Affordable, Quality, Accountable Health Care” designed to achieve universal access to health insurance for all Massachusetts residents.

Key components are:

- an individual mandate, requiring all residents with the financial means to obtain health insurance;
- an employer mandate requiring all employers with 11 or more employees to make a ‘fair and reasonable’ contribution towards their employees’ health insurance;
- an expansion of Medicaid and creation of a health insurance subsidy program for residents with income up to 300% of the federal poverty level; and
- the creation of a quasi-public authority – the Massachusetts Health Insurance Connector (Connector) – that would serve as an insurance “exchange” and would merge the individual and small-group health insurance markets, serve as a mechanism to allow individuals to purchase health insurance on a pre-tax basis, and provide a “seal-of-approval” to health insurance products that the Connector deemed to be of good value to consumers.
- an extension of the Medicaid Demonstration Waiver.

At the time, supporters of the Massachusetts reform plan argued that it would enable all residents to obtain high quality health insurance, ease the financial burden on hospitals for providing care to the uninsured, lower the cost of health insurance and eliminate “job-lock” by providing portability of insurance through the Connector. A key concept that proponents used to generate support was that of “shared responsibility.” To be effective, said supporters of the new law, any health care reform proposal requires individuals and families, employers and government to share the burden of expanding coverage. As this study will show, this view of “shared responsibility” has economic consequences.

The Economic Effects

Although some important generalizations may be drawn, it is important to keep in mind how the effects of state level and national level HCR policies might differ. One important difference is the ability to migrate or “to vote with one’s feet,” When states or the national government adopt policies that raise costs, local employers are put at a disadvantage and many opt to relocate to other jurisdictions. For firms with a global focus that might mean moving operations out of the country.
When policies adopted at the state level impose costly mandates, companies and workers can respond by moving across state lines.

The ability of firms and workers to migrate in response to such policies causes short-term jobs losses and long-term reductions in wages and living standards. With these cautionary notes in mind we examine how a state-based health reform measures have affected Massachusetts.

As we have shown in our previous study, the Massachusetts HCR law has imposed new health care costs on state and federal governments and on private firms and employees. Some of these cost increases do not directly affect the Massachusetts economy, for example most of the federal Medicaid and Medicare dollars spent in the state derive from the rest of the country. Therefore, we consider only the cost to the state government and private firms and employees and exclude increase costs of Medicare and the federal portion of Medicaid. As a result of the higher prices charged for health care the health care sector gains at the expense of other economic sectors, including business, households and government, that purchase health care.

We simulated the effects that the estimated price changes have on the Commonwealth’s economy using the Institute’s competitive general equilibrium model called Massachusetts-STAMP.
Table 2 presents the changes to the different economic indicators in levels and percentages caused by implementing HCR law.

<table>
<thead>
<tr>
<th>Economic Indicator</th>
<th>Average</th>
<th>Low</th>
<th>High</th>
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<tbody>
<tr>
<td>Total Employment</td>
<td>-18,310</td>
<td>-15,550</td>
<td>-21,420</td>
</tr>
<tr>
<td>percentage change</td>
<td>-0.58</td>
<td>-0.49</td>
<td>0.68</td>
</tr>
<tr>
<td>Investment ($m)</td>
<td>-25.06</td>
<td>21.28</td>
<td>-29.32</td>
</tr>
<tr>
<td>percentage change</td>
<td>-0.07</td>
<td>-0.06</td>
<td>-0.08</td>
</tr>
<tr>
<td>Disposable Income ($b)</td>
<td>-2.48</td>
<td>-2.10</td>
<td>-2.90</td>
</tr>
<tr>
<td>percentage change</td>
<td>-0.82</td>
<td>-0.67</td>
<td>-0.96</td>
</tr>
<tr>
<td>Disposable Income per Capita ($)</td>
<td>-376</td>
<td>-319</td>
<td>-441</td>
</tr>
<tr>
<td>percentage change</td>
<td>-0.83</td>
<td>-0.70</td>
<td>-0.97</td>
</tr>
</tbody>
</table>

HCR has diminished the ability of the Massachusetts economy to grow. Massachusetts is employing between 15,550 and 21,420 fewer people than it would have without HCR, for an average estimated loss of 18,310. In addition, disposable income f $2.10 billion to $2.90 billion lower and disposable income per capita is $319 to $441 lower than it otherwise would have been.

Predictably, some firms react first by cutting back on production and then by cutting payrolls. Others relocate to a lower cost (out-of-state) production sites. And yet others, no longer able to compete, simply shut their doors. The higher cost of employing people comes at the expense of profit margins and decreasing overall the competitiveness of Massachusetts businesses. We estimate that the amount investment in Massachusetts that did not take place as a result of HCR was between $21.28 million and $29.32 million in 2010.

**Conclusion**

In 2006, the Commonwealth of Massachusetts enacted a long-sought-after health care reform law. Advocates promised that the law would shrink the rolls of the uninsured and reduce health care costs. But the reform has failed to reduce health care costs. Instead it has pushed health care cost increases above the pre-reform growth trend and above the growth rate experienced in the rest of the country.

The added costs have consequences for the families and businesses that are forced to reallocate more scarce resources toward healthcare. This reallocation has consequences for the Massachusetts economy. Increased spending on healthcare does not make the
economy more productive, but rather drains resources away from the kind of investments that would make workers and the state economy more productive.

Methodology

BHI has created a number of Computable General Equilibrium (CGE) models that are useful in estimating the economic effects policies on state economies. The purpose of the BHI model, called STAMP (State Tax Analysis Modeling Program), is to identify the dynamic economic effects of a variety of state policy changes.6

STAMP is a five-year dynamic CGE model that has been programmed to simulate changes in taxes, costs (general and sector specific) and other economic inputs. As such, it provides a mathematical description of the economic relationships among producers, households, governments and the rest of the world. It is general in the sense that it takes into account all the important markets, such as the capital and labor markets. It is an equilibrium model because it assumes that demand equals supply in every market (goods and services, labor and capital). This equilibrium is achieved by allowing prices to adjust within the model. It is computable because STAMP can be used to generate numeric solutions to concrete policy and tax changes.

In calculating the cost of health care reform in Massachusetts, to be used as an input to STAMP, we identified two main costs. These costs were the total change in health insurance premiums and changes in state Medicaid and Health and Human services spending.7 Each of these cost estimates incorporated a high, low and expected cost change. The respective number for each were summed together, generating cost estimate ranges, as well as an expected cost, to be input to the MA-STAMP model.

To model the economic effects of Massachusetts health care reform, we must determine how best to estimate the responses of individuals and businesses to the policy changes. The majority of health insurance is bought through an employer, typically as a benefit in exchange for lower wages. To model this benefit in MA-STAMP we input the

6 Detailed information about the STAMP model can be found at http://www.beaconhill.org/STAMP_Web_Brochure/STAMP_HowSTAMPworks.html.
7 For more details about these cost calculations see The High Price of Health Care Reform: at www.beaconhill.org.
expected cost increases due to HCR as increases in the state personal income tax, representing the increased cost of hiring and employing labor.

The STAMP model solves an initial baseline scenario, with no policy changes. With the health insurance policy change input, the model then resolves while attempting to maximize households’ well-being, or ‘utility’. Part of this resolving process is firms determining how much capital to purchase, and how much labor to hire, while households and consumers determine how much labor to supply and how much to consume.

The amount of capital and labor hired will depend, to a degree, on the level and structure of costs faced by firms. Since HCR increases the cost of labor, by raising the cost of supplying the required benefit of health care, and decreased pay, as a share of this cost is passed on via higher premiums, the amount of labor employed in equilibrium will decrease. The STAMP model takes all this into account, by determining, at the margin, if a household will supply an extra hour of work, or if an employer will hire another worker.

Once the model resolves the differences, it supplies not only the baseline results to different economic indicators but also what these values would be with the new policy. These changes, a baseline scenario and one with the higher costs, give us insight to the dynamic effects that health care reform exerts on the Commonwealth of Massachusetts.
About the Authors

David G. Tuerck, PhD, is Executive Director of the Beacon Hill Institute for Public Policy Research at Suffolk University where he also serves as Chairman and Professor of Economics. He holds a Ph.D. in economics from the University of Virginia and has written extensively on issues of taxation and public economics.

Paul Bachman, MSEP, is Director of Research at BHI. He manages the Institute’s research projects, including its STAMP model and other projects. He has published studies on state and national tax policy and on state labor policy. He also produces the institute’s state revenue forecasts for the Massachusetts legislature. He holds a Master of Science in International Economics from Suffolk University.

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