Does Health-Care Reform Support Self-Employment?

By Didem Tüzemen and Thealexa Becker

Health insurance access is an important factor in individuals' labor market decisions. A majority of workers in the United States receive health insurance through employers. This creates a strong relationship between paid-employment and access to health insurance. Some economists argue that employer-provided health insurance has been a barrier to entrepreneurship, as self-employed individuals might have had more difficulty obtaining health insurance on their own.

The Patient Protection and Affordable Care Act (PPACA) stipulates major changes to the health-care system with the goal of decreasing the nation's uninsured rate. These changes break the traditional link between employment and health insurance access by introducing additional options to purchase insurance outside of employer-provided coverage. By improving health insurance access, the PPACA might affect the self-employment rate in the United States.

This article examines the effects of improved health insurance access on the rate of self-employment using evidence from the health-care reform enacted in 2006 in Massachusetts. The Massachusetts Health Care Reform Act and the PPACA share many similarities, providing a case study. This article finds that the uninsured rate for working-age individuals in Massachusetts declined following the adoption of the

Didem Tüzemen is an economist at the Federal Reserve Bank of Kansas City. Thealexa Becker is a research associate at the bank. This article is on the bank's website at ***www.KansasCityFed.org.***

reform. The uninsured rate for the self-employed decreased as well. Additionally, while the share of the self-employed in total employment (and in the total working-age population) declined steadily after 2006 in the rest of the country and in other Northeastern states, it stayed flat in Massachusetts.

Section I describes the close link between health insurance access and self-employment. Section II presents the key components of the healthcare reform in Massachusetts. Sections III finds that the reform led to a substantial decrease in the uninsured rate for working-age individuals in general, and the self-employed in particular. Section IV demonstrates that the reform might have supported self-employment in Massachusetts. Section V uses these results to predict that after full implementation of the PPACA, the uninsured rate will drop in the nation, and more individuals may choose to become or remain self-employed.

I. HEALTH INSURANCE ACCESS AND SELF-EMPLOYMENT

Self-employed individuals are an important part of the labor force in the United States. About 7.5 million individuals were self-employed in the first half of 2014.[1] Self-employment is the main source of income for many individuals, and a basis for forming new businesses.

Despite this importance, the share of the self-employed in total employment has gradually declined over the past 30 years. Several factors might explain this decline. Taxes and regulations may have been more burdensome on small, unincorporated businesses than on big corporations, making self-employment less attractive. Recessions or adverse business conditions may have also forced individuals out of self-employment, or discouraged them from leaving paid-employment to start their own businesses. More importantly, self-employment may have been less appealing than paid-employment because the self-employed may have lacked access to affordable health insurance.

Health insurance access has always been an important consideration for entrepreneurs in forming new businesses as it provides a valuable safety net for the self-employed and their families, especially given the inherent risks in new ventures. Historically, health insurance options for the self-employed have been costly and limited. This has led

to a higher uninsured rate among the self-employed. In 2012, only 64 percent of the self-employed had either private or public insurance coverage.[2] In contrast, 85 percent of private sector employees worked at firms that offered health insurance options in 2012.[3]

The need for affordable health insurance has led many individuals who would otherwise prefer self-employment to work for an employer that offers group insurance (Holtz-Eakin and others). Employees with access to employer-provided health insurance were 25 percent less likely to leave their jobs than those without, largely due to the fear of losing insurance coverage upon leaving (Madrian). In fact, during 1983-89, among 25-54-year-old-males, 89 percent of those employed had some form of private insurance coverage, while only 49 percent of those who left their jobs remained insured with a private insurance plan (Gruber and Madrian).

Employer-provided health insurance has been even more valuable for those without alternative insurance options or in poor health (Currie and Madrian). Individuals with pre-existing medical conditions might have hesitated to start their own businesses because obtaining health insurance may have been more difficult. In contrast, individuals with health insurance available through their spouse's employer have been more likely to be self-employed (Wellington; Fairlie, Kapur, and Gates).

All in all, health insurance has been an important factor in an individual's decision to become or remain self-employed. Policy changes that add accessible alternatives to employer-provided coverage may affect this decision by removing a traditional barrier to self-employment. The Massachusetts Health Care Reform Act provides a case study to analyze the effects of improved health insurance access on self-employment.

II. HEALTH-CARE REFORM IN MASSACHUSETTS

The largest health-care reform in Massachusetts' history, the Massachusetts Health Care Reform Act, was signed into law in 2006. The reform's key components were forming a state health insurance marketplace, instating an individual insurance mandate, enforcing new requirements for employers, expanding public health insurance programs, and establishing new rules for insurers.

The first component formed the state health insurance exchange called "the Connector," which allowed individuals to shop for health insurance that met certain minimum requirements stipulated by the reform. The Connector was launched in May 2007 to offer options to all residents, particularly to those who previously had no access to health insurance or who could not afford insurance. All participants with incomes up to 300 percent of the 2007 Federal Poverty Level (FPL)—$10,210 for an individual, and $20,650 for a family of four—were offered premium subsidies.[4]

The second component of the reform was an individual mandate. The mandate, which took effect July 1, 2007, required all residents to obtain some form of health insurance.[5] Those with no coverage through an employer were offered coverage through the Connector with possible premium subsidies based on income level and family size.

The third component was the employer mandate, which required employers with more than 10 full-time equivalent workers to provide health insurance to their employees. Employers had two options: offer a group health insurance plan to employees while contributing to their premiums or pay an "Employer Fair Share Contribution" that amounted to an annual penalty of up to $295 per employee. The employer mandate took effect July 31, 2007, but was repealed in July 2013 to streamline the transition to the PPACA's employer mandate.[6] Additionally, all employers were required to allow employees to pay insurance premiums with pre-tax dollars. Noncompliance would result in a "Free Rider Surcharge" based on firm size.

The reform's fourth component expanded Medicaid and the Children's Health Insurance Program (CHIP) for families. Medicaid coverage expanded for children whose families had incomes up to 300 percent of the FPL, for parents with incomes up to 133 percent of the FPL, for pregnant women with incomes up to 200 percent of the FPL, and for the long-term unemployed with incomes up to 100 percent of the FPL. Additionally, enrollment caps were raised for certain Medicaid programs.[7]

Lastly, the reform changed the private insurance market. To ensure that all residents could receive coverage, the reform effectively prevented discrimination by insurance providers based on gender or pre-existing medical conditions.

III. EFFECTS OF THE REFORM ON THE UNINSURED RATE IN MASSACHUSETTS

This article finds health-care reform in Massachusetts led to substantial reductions in the state's uninsured rate in general and the uninsured rate among the self-employed in particular.[8] The analysis covers periods before (2000-05), during (2006-07), and after (2008-12) the reform's implementation. Results are based on comparisons of the uninsured rates and compositions of insurance types in Massachusetts in the pre- and post-reform periods, as well as comparisons with the rest of the nation and other Northeastern states.

Data

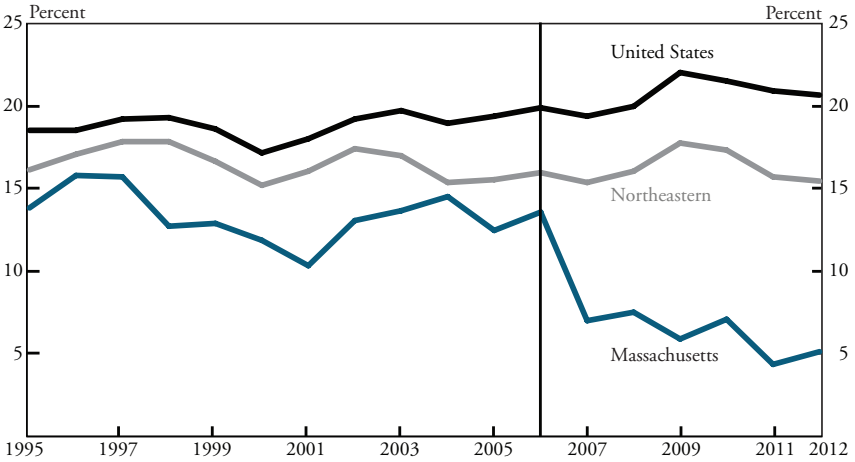
The Annual Social and Economic Supplement (ASEC) is this article's primary data source. The ASEC is an annual supplement of the Current Population Survey (CPS), commonly known as the household survey, which the Census Bureau administers monthly to about 60,000 households. The CPS gathers information about respondents' demographic characteristics and labor force status.

The Census Bureau asks a subset of the CPS households additional questions in the ASEC to collect information about health insurance coverage during the previous year. For example, in 2013, the ASEC asked respondents questions related to their "longest jobs" during 2012.[9] Annual data were gathered and examined from the ASEC for the reference period of 1995-2012.[10] The sample was limited to the working-age population—individuals ages 16 to 64 who were not employed in agriculture or in the military.[11]

Decreased uninsured rate

Historically, Massachusetts' uninsured rate has been lower than both the national average (excluding Massachusetts) and the average in other Northeastern states (Vermont, New Hampshire, Maine, Connecticut, Rhode Island, New York, New Jersey, and Pennsylvania). Specifically, Massachusetts' average uninsured rate was 13 percent during the pre-reform period of 2000-05—6 percentage points lower than the national average and 3 percentage points lower than the average in other Northeastern states.

Chart 1
UNINSURED RATES, 1995-2012



Notes: The comparison groups (Northeastern states and the United States) do not include Massachusetts. The sample is restricted to individuals ages 16 to 64 who do not work in agriculture or the military.
Sources: CPS Annual Social and Economic Supplement and authors' calculations.

Health-care reform led to increased enrollment in both private and public insurance in the post-reform period. Enrollment in private health insurance plans increased as the pool of firms that sponsored health insurance expanded and the Connector provided individuals with subsidized insurance options. Similarly, Medicaid expansion in the state led to increased enrollment in public insurance.

As a result of the reform, the share of working-age Massachusetts residents without insurance dropped notably, from 14 percent in 2006 to 5 percent in 2012 (Chart 1).[12] Over the same period, the share of uninsured individuals in the rest of the nation rose from 20 percent to 21 percent. The uninsured rate in other Northeastern states, none of which adopted any health-care reform, declined slightly from 16 percent in 2006 to 15 percent in 2012.

The reform also led to a reduction in the uninsured rate for the self-employed. Pre-reform (2000-05), the average uninsured rate for the self-employed in Massachusetts was 20 percent. During the reform's implementation, the uninsured rate dropped to 18 percent, then fell to 10 percent in the post-reform period (2008-12)—a net decrease of 10 percentage points (Table 1).

Table 1
SELF-EMPLOYED UNINSURED RATES

	Before reform (2000-05)	During reform (2006-07)	After reform (2008-12)
United States	31%	33%	36%
Northeastern states	26%	25%	28%
Massachusetts	20%	18%	10%

Notes: The comparison groups (Northeastern states and the United States) do not include Massachusetts.
The sample is restricted to self-employed individuals ages 16 to 64 who do not work in agriculture or the military.
Percentages are averages over the periods.
Sources: CPS Annual Social and Economic Supplement and authors' calculations.

During the same period, the average uninsured rate for the self-employed rose in the rest of the nation and in other Northeastern states. The average uninsured rate for the self-employed in other Northeastern states rose from 26 percent in the 2000-05 period to 28 percent in the 2008-12 period. The uninsured rate for the self-employed rose 5 percentage points nationally, from 31 percent in the 2000-05 period to 36 percent in the 2008-12 period. The sizeable increase in the national uninsured rate among the self-employed stands in stark contrast to the 10-percentage-point decrease in Massachusetts over the same period.

Shifts in the composition of health insurance types

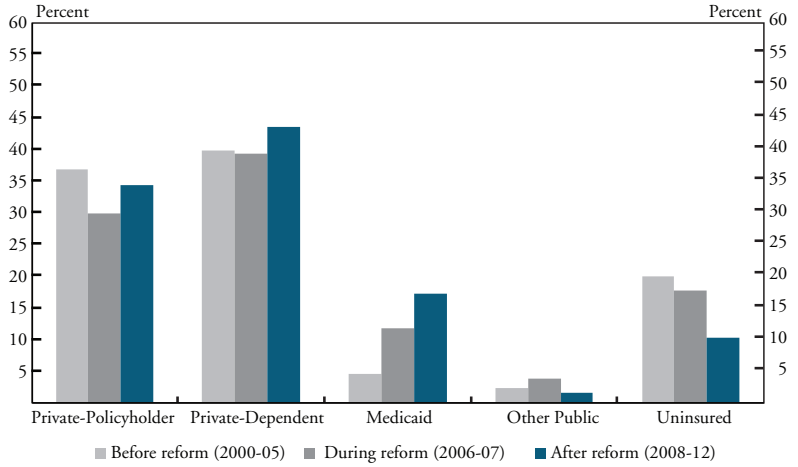
The self-employed in Massachusetts mostly relied on the private market for health insurance in the pre-reform period (2000-05). They obtained private insurance either by purchasing an insurance policy directly from the private insurance market or by becoming a dependent on a family member's health insurance policy. Pre-reform, 77 percent of the self-employed were privately insured—37 percent had a plan in their own name and 40 percent were dependents (Chart 2).[13]

Public insurance was less common among the self-employed, but some obtained insurance through programs such as Medicaid, Medicare, or the Civilian Health and Medical Program of the Department of Veterans Affairs (CHAMPVA). Medicaid insured 5 percent of the self-employed, and other public insurance covered 2 percent of the self-employed.

After health-care reform was implemented in Massachusetts, the share of self-employed individuals on private insurance plans as dependents and the share on public insurance programs rose. In the post-reform period (2008-12), private insurance still

Chart 2

SOURCES OF HEALTH INSURANCE FOR THE SELF-EMPLOYED IN MASSACHUSETTS



Notes: Shares are of self-employed individuals ages 16 to 64 who do not work in agriculture or the military. Some individuals may be double-counted in multiple categories due to the format of the CPS ASEC. Shares are averages over the periods. The category Private-Policyholder includes self-employed individuals who reported being policyholders on a directly purchased private plan or an employer-provided plan.
Sources: CPS Annual Social and Economic Supplement and authors' calculations.

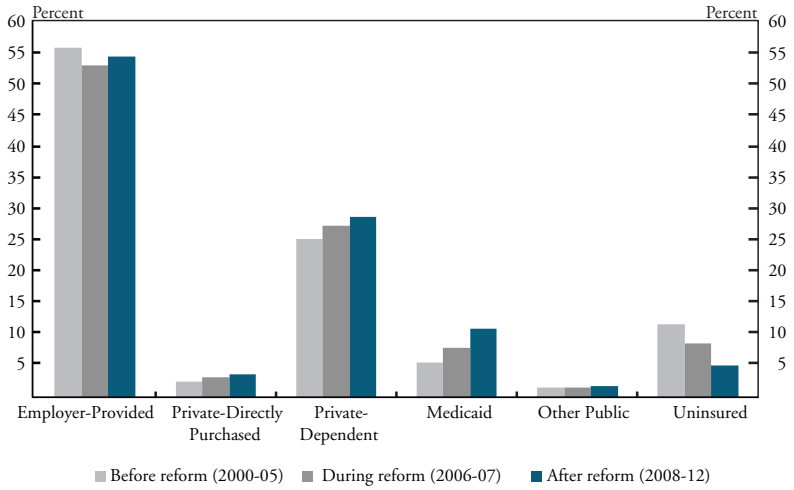
covered 77 percent of the self-employed, but the share corresponding to policyholders decreased 3 percentage points to 34 percent, and the share corresponding to dependents increased 3 percentage points to 43 percent. The share of the self-employed on Medicaid rose 12 percentage points to 17 percent.

The increase in Medicaid enrollment might be related to the reform's changes to eligibility rules. However, the increase was not unique to Massachusetts as Medicaid enrollment increased nationwide over the same period.

The uninsured rate for employees in Massachusetts also declined, decreasing from 12 percent in the 2000-05 period to 5 percent in the 2008-12 period, but the composition of their health insurance differed from that of the self-employed.[14] In the pre-reform period, 84 percent of employees had private insurance—56 percent of employees were on employer-provided insurance, 2 percent were on directly purchased private insurance and 26 percent were dependents on a family member's

Chart 3

SOURCES OF HEALTH INSURANCE FOR EMPLOYEES IN MASSACHUSETTS



Notes: Shares are of employees ages 16 to 64 who do not work in agriculture or the military and are not self-employed. Some individuals may be double-counted in multiple categories due to the format of the CPS ASEC. Shares are averages over the periods.
Sources: CPS Annual Social and Economic Supplement and authors' calculations.

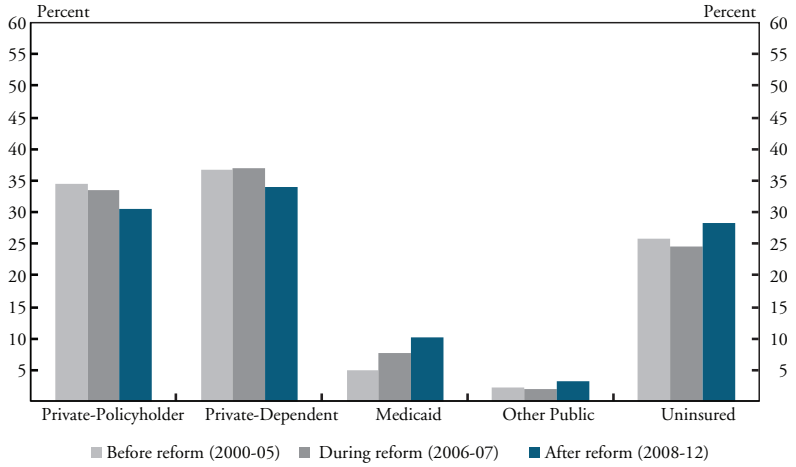
plan. Combined, Medicaid (6 percent) and other public insurance (1 percent) covered 7 percent of employees (Chart 3).

In the post-reform period, enrollment increased mostly for dependent private insurance and Medicaid. In total, the share of employees on private insurance plans increased by 3 percentage points, from 84 percent in the 2000-05 period to 87 percent in the 2008-12 period. The share of employees who were dependents on a family member's plan increased 3 percentage points, from 26 percent in the 2000-05 period to 29 percent in the 2008-12 period. Similarly, the share on Medicaid, which was 6 percent in the 2000-05 period, rose 5 percentage points to 11 percent in the 2008-12 period.

Unlike Massachusetts, the uninsured rate among the self-employed in other Northeastern states increased 2 percentage points from 26 percent in the 2000-05 period to 28 percent in the 2008-12 period. In these states, the share of the self-employed with private insurance was 72 percent during the 2000-05 period—35 percent were policyholders and 37 percent were dependents. This share declined 7 percentage points to 65 percent by the 2008-12 period, as the share of the self-employed

Chart 4

SOURCES OF HEALTH INSURANCE FOR THE SELF-EMPLOYED IN OTHER NORTHEASTERN STATES



Notes: Shares are of self-employed individuals ages 16 to 64 who do not work in agriculture or the military. The Northeastern states exclude Massachusetts. Some individuals may be double-counted in multiple categories due to the format of the CPS ASEC. Shares are averages over the periods. The category Private-Policyholder includes individuals who reported being policyholders on a directly purchased private plan or an employer-provided plan.
Sources: CPS Annual Social and Economic Supplement and authors' calculations.

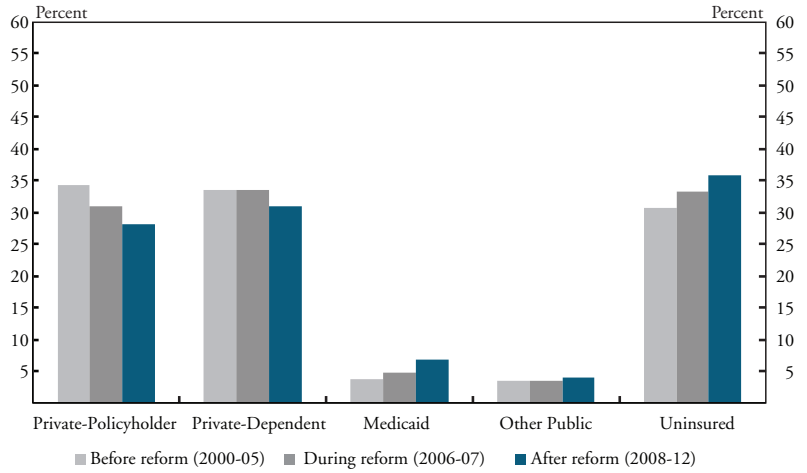
as policyholders and dependents on private plans each decreased to 31 percent and 34 percent, respectively (Chart 4). Medicaid enrollment among the self-employed increased 5 percentage points, rising from 5 percent to 10 percent over the same period.

Nationwide, more self-employed individuals became uninsured. The uninsured rate for the self-employed rose from 31 percent to 36 percent. The share of self-employed individuals with private insurance was 68 percent in the 2000-05 period—34 percent as policyholders and 34 percent as dependents. This share dropped 9 percentage points to 59 percent in the 2008-12 period: the share of self-employed policyholders decreased 6 percentage points to 28 percent and the share of self-employed dependents decreased 3 percentage points to 31 percent (Chart 5).

At the same time, the national share of the self-employed on Medicaid rose 3 percentage points from 4 percent in the 2000-05 period to 7 percent in the 2008-12 period. This shift toward public insurance was the result of both national economic conditions, such as the adverse

Chart 5

SOURCES OF HEALTH INSURANCE FOR THE SELF-EMPLOYED IN THE UNITED STATES



Notes: Shares are of self-employed individuals ages 16 to 64 who do not work in agriculture or the military. The sample excludes Massachusetts. Some individuals may be double-counted in multiple categories due to the format of the CPS ASEC. Shares are averages over the periods. The category Private-Policyholder includes self-employed individuals who reported being policyholders on a directly purchased private plan or an employer-provided plan.
Sources: CPS Annual Social and Economic Supplement and authors' calculations.

effects of the Great Recession, and independent state-level policy changes affecting the eligibility criteria for Medicaid.

IV. EFFECTS OF THE REFORM ON SELF-EMPLOYMENT

Provisions of the Massachusetts Health Care Reform Act—such as exchange subsidies and penalties—might have influenced the relative cost and attractiveness of self-employment compared to paid-employment in two opposing ways.

On one hand, the reform might have encouraged self-employment since it provided easier access to other insurance options as alternatives to employer-provided insurance. Historically, fewer individuals have subscribed to directly purchased private health insurance as it has been usually more costly than employer-provided group health insurance. This might have changed when insurance became highly subsidized on the exchange. Alternatively, individuals might have gained access to public insurance programs that were expanded during the

reform. If employer-provided health insurance had been a barrier to entrepreneurship and self-employment, then the reform's provisions might have removed this barrier, decreasing individuals' reliance on employers for access to health insurance and, therefore, spurring self-employment. An increase in the number of employees with employer-provided insurance might have also supported their dependents who became or remained self-employed.

On the other hand, penalties for uninsured individuals and for employers not offering insurance to their employees might have led to a decline in self-employment. The penalty for uninsured individuals might have increased business costs for self-employed individuals who were uninsured prior to the reform. At the same time, the penalty for employers not offering insurance might have led more employers to offer insurance, thus expanding the pool of jobs with employer-provided insurance. As insurance options for employees grew and the relative cost of self-employment increased, some individuals might have chosen paid-employment over self-employment.

Given the opposing theoretical effects of certain reform provisions on individuals' decisions to become or remain self-employed, the net effect of the reform on self-employment is an empirical question. To address this question, this section compares the average self-employment rates in Massachusetts, the rest of the country, and other Northeastern states during three time periods. The first period, 2004-06, represents the years prior to the reform's implementation. The second period, 2007-09, represents the years immediately after the reform's passage, and also corresponds to the Great Recession. The final period, 2010-12, marks the early stages of the recovery and the years before the PPACA took effect.

The share of the self-employed in total employment in the United States has trended downward since the 1990s (Hipple). Recently, the Great Recession contributed to this decline; both the share and the level of self-employment declined during the recent economic downturn.

In the 2004-06 period, the average share of the self-employed in total employment was 6 percent nationwide (Table 2, Panel A). This average share declined to 5.4 percent in the 2010-12 period. The Northeastern states (excluding Massachusetts) followed a similar pattern, as the average share of the self-employed declined from 5.4 percent in the 2004-06 period to 4.9 percent in the 2010-12 period.

Table 2
SELF-EMPLOYMENT RATES

Panel A: Share of the self-employed in total employment			
	United States	Northeastern states	Massachusetts
2004-06	6.0%	5.4%	5.9%
2007-09	5.7%	5.3%	5.8%
2010-12	5.4%	4.9%	5.8%
Panel B: Share of the self-employed in total working age population			
	United States	Northeastern states	Massachusetts
2004-06	4.6%	4.1%	4.5%
2007-09	4.3%	4.0%	4.5%
2010-12	3.9%	3.6%	4.4%

Notes: The comparison groups (Northeastern states and the United States) do not include Massachusetts. Percentages are averages over the periods. The sample is restricted to individuals ages 16 to 64 who do not work in agriculture or the military.
Sources: CPS Annual Social and Economic Supplement and authors' calculations.

Massachusetts' experience differed from the rest of the country and other Northeastern states. The average share of the self-employed in total employment remained flat at 5.8 percent throughout the post-reform period.

It is possible that changes in the self-employment share have been affected more by changes in the level of total employment than changes in the level of self-employment. An alternative measure is the average share of the self-employed in the total working-age population, which corresponds to individuals ages 16 to 64. This average share is likely to be more stable and less affected by the business cycle.

From 2004 to 2006, the average share of the self-employed in the total working-age population was 4.6 percent in the nation. The average share in other Northeastern states was 4.1 percent, lower than the average share of 4.5 percent in Massachusetts. In the post-reform period (2010-12), the average share of self-employed declined at the national level, dropping 0.7 percentage point to 3.9 percent (Table 2, Panel B). The average share of self-employed in other Northeastern states declined similarly from 4.1 to 3.6 percent. However, Massachusetts experienced a much smaller decline from 4.5 percent in the 2004-06 period to 4.4 percent in the 2010-12 period.

These results suggest improved access to health insurance might have supported self-employment in the state, preventing a sharp

decline in the self-employment rate that other states have experienced.[15] The decline in the uninsured rate for the self-employed implies that health-care reform improved access to insurance in Massachusetts. After the reform was implemented, more self-employed individuals obtained coverage in the forms of private health insurance, dependent private health insurance, and Medicaid. Easier access to both public and private health insurance might have been an underlying factor supporting self-employment in the state.

V. POSSIBLE EFFECTS OF THE PPACA ON THE SELF-EMPLOYMENT RATE IN THE UNITED STATES

Results from the previous section showed that self-employment has declined noticeably in the United States since 2006. In Massachusetts, however, the self-employment rate remained almost flat after health-care reform was implemented. Therefore, the reform might have supported self-employment in the state amid the downward trend in the nation.

Massachusetts' experience offers valuable insights into the PPACA's implications for self-employment and the national uninsured rate. The PPACA and the Massachusetts Health Care Reform Act share many core features.

Like the reform in Massachusetts, the PPACA established an individual mandate requiring all citizens to obtain some form of health insurance or face a financial penalty for noncompliance. To help individuals purchase insurance, the PPACA established state health insurance exchanges, which provide subsidized coverage for individuals with incomes up to 400 percent of the FPL.

Both reforms also included an employer mandate, requiring all employers with a certain number of employees to offer health insurance. In the PPACA, firms with 50 or more full-time equivalent employees will be required to provide affordable health insurance to their employees. If the employers do not comply, they will face a penalty of up to $2,000 per employee, excluding the first 30 employees. This mandate will take effect in 2015 for firms with 100 or more full-time equivalent employees, and will be in effect in 2016 for firms with 50-99 full-time equivalent employees. To incentivize small firms to offer health insurance, the PPACA creates a special marketplace for small employers to purchase insurance. Additionally, the PPACA provides tax credits to employers with 25 or fewer full-time employees that offer health insurance.

The PPACA also expands public insurance programs, most notably Medicaid. States were offered federal funding to expand Medicaid for individuals with incomes up to 133 percent of the FPL. Currently, 27 states and the District of Columbia accept the funding, and two states are debating adopting the expansion.[16]

Consistent with the evidence from Massachusetts, the uninsured rate in the United States was expected to decrease after the PPACA took effect. In fact, the national uninsured rate declined from 18 percent in the fourth quarter of 2013—the last quarter before the mandate took effect—to 13.4 percent in the second quarter of 2014.[17]

Going forward, the PPACA may help support the national self-employment level. As discussed earlier, Massachusetts' self-employment rate was not adversely affected by its reform. The PPACA could similarly encourage self-employment at the national level as the law expands health insurance options for the self-employed, potentially removing an important barrier to self-employment.

That being said, the PPACA and the Massachusetts Health Care Reform Act, while similar, are not identical. For example, the PPACA offered states federal funding to expand Medicaid more broadly than in Massachusetts—a difference that could lead to different effects on the nation's insurance types.

Additionally, difficulties in implementing the reform at the national level may also affect the uninsured rate and the insurance composition. Some components of the reform have been delayed, insurers are being accused of offering inadequate plans on the exchanges, and two Supreme Court cases have been heard regarding the constitutionality of aspects of the law. All of these factors, as well as the independent factors within each state and the evolving national guidelines, can also lead to different uninsured rates and compositional shifts.

VI. CONCLUSION

Based on data from the 1996-2013 CPS ASEC survey, the Massachusetts Health Care Reform Act led to a major decrease in the uninsured rate in Massachusetts. The uninsured rate among the self-employed also decreased after the reform was implemented. Enrollment in both private and public health insurance rose for the self-employed.

Additionally, Massachusetts' experience did not suggest any detrimental effects of the reform on the state's self-employment rate.

The reform could have had two theoretical opposing effects on the self-employment rate in Massachusetts: it might have encouraged self-employment by expanding access to all types of insurance but also might have discouraged self-employment due to penalties from employer and individual mandates.

Evidence suggests the reform might have been a source of underlying support for self-employment in Massachusetts. The share of the self-employed in total employment (and in the total working-age population) remained relatively flat in Massachusetts in the post-reform period. In contrast, during the same period, the self-employment share declined in the nation and in other Northeastern states. However, further research should include a comprehensive empirical analysis to better understand the full effect of the reform on self-employment.

Consistent with Massachusetts' experience, the uninsured rate in the United States was expected to decrease after the enactment of the PPACA. In fact, the national uninsured rate has declined from 18 percent in the fourth quarter of 2013 to 13.4 percent in the second quarter of 2014. If the United States follows a similar path to Massachusetts, the uninsured rate for the self-employed can be expected to decline as well.

The PPACA may encourage self-employment at the national level as the law expands health insurance options for the self-employed, and may remove a barrier to self-employment. A recent report by the Congressional Budget Office indicates that the discouraging influence of the reform on self-employment could be even weaker at the national level (CBO, 2014). According to the report, by 2016, 30 million people in the United States are expected to remain uninsured, but only 4 million will be required to pay the penalty from the individual mandate.[18] Although the threat of a financial penalty could be a disincentive to self-employment, this report's predictions weaken that argument.

While the full breadth of the PPACA will not be in effect until 2016, it appears as though the core components of the law—requiring individuals to obtain health insurance and employers to offer health insurance, and expanding public health insurance programs—will not deter individuals from becoming or remaining self-employed.

ENDNOTES

[1]Authors' calculations using monthly data from the U.S. Census Bureau's Current Population Survey (CPS). Data for the self-employed are restricted to individuals ages 16 to 64 who do not work in agriculture or the military.

[2]Authors' calculations using the CPS's Annual Social and Economic Supplement.

[3]Data come from the 2012 Medical Expenditure Panel Survey. Of these workers, 78 percent were eligible for insurance, and 76 percent of those eligible enrolled.

[4]These measures correspond to poverty thresholds calculated and updated annually by the Census Bureau. See *http://aspe.hhs.gov/poverty/index.cfm* for more details.

[5]Individuals who did not comply faced a penalty, though certain religious and cultural groups were exempted. The penalty was enforced through income tax returns. Individuals with incomes up to 150 percent of the FPL paid no penalty. Penalties for those with incomes at or above 150 percent of the FPL were indexed to their income. Individuals are now required to declare that they have health-insurance coverage and assess the appropriate penalty for not having coverage on their income tax returns.

[6]Because the data in this analysis reference the time period of 1995-2012, the repeal does not affect the findings.

[7]These included programs for low-income individuals, the long-term unemployed, and those on CommonHealth.

[8]The Bureau of Labor Statistics' standard definition of self-employment is individuals who own businesses that are sole proprietorships, partnerships, or LLCs. These individuals fall in the category of unincorporated self-employed. Individuals working at incorporated businesses are not considered self-employed, and are included in the category of wage and salary workers. This article uses the BLS definition of self-employment.

[9]A caveat: Due to the survey design of the ASEC, individuals may misreport employer-provided coverage as directly-purchased private plans, underreport public insurance coverage, or report two types of coverage in the same calendar year. The latter, in particular, allows for potential double-counting of individuals in multiple coverage categories if a respondent switched coverage within the reference year.

[10]The sample does not include 2013 because the relevant ASEC data had not been released at the time of this analysis.

[11]Individuals ages 65 and older were not considered in this article because they were eligible for Medicare and were not the main target of the health-care reform.

[12]This finding is in line with the findings in several previous studies. See Kolstad and Kowalski; Long and others; Niu; Antwi and others.

[13]The CPS ASEC asks individuals about all types of insurance that they had within the past year. It is possible for individuals to have multiple types of health insurance, either concurrently or throughout the year, so the shares will not sum

to 100 percent. A few individuals indicated they have private insurance but did not specify a type of plan. There were also individuals who indicated they were covered by a plan from someone outside the household. These individuals are counted when calculating the uninsured rate but are not counted in the subcategories (such as policyholders, dependents).

[14]"Employees" in this article refers to employed individuals who are not unincorporated self-employed.

[15]Using taxation data, Heim and Lurie (2010 and forthcoming) also study the effect of health-care reform in Massachusetts on self-employment. Self-employment did not decline for individuals eligible for subsidies and who filed taxes jointly. Self-employment did decline for individuals who did not receive subsidies and filed independently. Conversely, Niu concludes that Massachusetts' reforms did not have any statistically significant effect on self-employment.

[16]The states that have currently accepted the Medicaid expansion are Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Hawaii, Illinois, Iowa, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, Vermont, Washington, and West Virginia. Indiana and Utah are still debating.

[17]See the Gallup poll "In U.S., Uninsured Rate Sinks to 13.4% in Second Quarter," July 10, 2014.

[18]The report suggests those not paying the penalty will either qualify for an exemption or cite another outstanding circumstance for noncompliance.

REFERENCES

Antwi, Yaa A., Asako S. Moriya, and Kosali Simon. 2013. "Effects of Federal Policy to Insure Young Adults: Evidence from the 2010 Affordable Care Act's Dependent-Coverage Mandate," *American Economic Journal: Economic Policy,* vol. 5, no. 4, pp. 1-28.

Congressional Budget Office. 2014. "Payments of Penalties for Being Uninsured Under the Affordable Care Act: 2014 Update," available at *http://www.cbo.gov/publication/45397*.

Currie, Janet, and Brigitte C. Madrian. 1999. "Health, Health Insurance and the Labor Market," *Handbook of Labor Economics,* vol. 3, no. 3, pp. 3309-3416.

Fairlie, Robert W., Kanika Kapur, and Susan Gates. 2010. "Is Employer Based Health Insurance a Barrier to Entrepreneurship?" *Journal of Health Economics,* vol. 30, no. 1, pp. 146-162.

Gruber, Jonathan, and Brigitte Madrian. 1997. "Employment Separation and Health Insurance Coverage," *Journal of Public Economics,* vol. 66, no. 3, pp. 349-382.

Heim, Bradley T., and Ithai Z. Lurie. Forthcoming. "Did the 2006 Massachusetts Health Care Reform Affect the Decision to be Self-Employed? Evidence from Tax Data," *Small Business Economics.*

_____, and _____. 2010. "The Effect of Health Insurance Subsidies on Self Employment," *Journal of Public Economics,* vol. 94, pp. 995-1007.

Hipple, Steven F. 2010. "Self-Employment in the U.S.," *Bureau of Labor Statistics Monthly Labor Review,* vol. 133, no. 9, pp. 17-32.

Holtz-Eakin, Douglas, John R. Penrod, and Harvey S. Rosen. 1996. "Health Insurance and the Supply of Entrepreneurs," *Journal of Public Economics,* vol. 62, no. 1-2, pp. 209-235.

Kaiser Family Foundation. 2012. "Massachusetts Health Care Reform: Six Years Later."

Kolstad, Jonathan T., and Amanda E. Kowalski. 2012. "Mandate-Based Health Care Reform and the Labor Market: Evidence from the Massachusetts Reform," NBER working paper no. 17933.

Long, Sharon K., Karen Stockley, and Alshadye Yemane. 2009. "Another Look at the Impacts of Health Care Reform in Massachusetts: Evidence Using New Data and a Stronger Model," *American Economic Review,* vol. 99, no. 22, pp. 508-511.

Madrian, Brigitte C. 1994. "Employment-Based Health Insurance and Job Mobility: Is There Evidence of Job-Lock?" *The Quarterly Journal of Economics,* vol. 109, no. 1, pp. 27-54.

Niu, Xiaotong. 2012. "Essays in Applied Macroeconomics," Ph.D. dissertation, Princeton University.

Wellington, Alison J. 2001. "Health Insurance Coverage and Entrepreneurship," *Contemporary Economic Policy,* vol. 19, no. 4, pp. 465-478.