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**ABSTRACT**

Critics of pay or play mandates, borrowing from the large empirical minimum wage literature, provide evidence that they reduce employment. Borrowing from a smaller empirical minimum wage literature, we provide evidence that they also are a blunt instrument for funding health insurance for the working poor. The vast majority of those who benefit from pay or play mandates which require employers to either provide appropriate health insurance for their workers or pay a flat per hour tax to offset the cost of health care live in families with incomes twice the poverty line or more and, depending on how coverage is determined, the mandate will leave a significant share of the working poor ineligible for such benefits either because their hourly wage rate is too high or they work for smaller exempt firms.

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President Clinton spoke for the vast majority of Americans when he said “those who work hard and play by the rules should not live in poverty.” (Clinton, 1995) The same can be said with respect to access to health insurance. What is more controversial is whether socially motivated legislation to increase the minimum wage or to mandate employer provided health insurance coverage will achieve their stated goals of reducing poverty or increasing health insurance coverage and second, are there more effective means of doing so? These two fundamental policy questions were asked by Stigler (1946) in the first modern evaluation of minimum wage policies. After 60 years, the preponderance of evidence, confirms Stigler’s original responses of no and yes to these questions. The great majority of the empirical minimum wage literature has focused on how much minimum wage increases reduce employment. Until 1995, the consensus was that minimum wage increases significantly reduced the employment of teenagers and other low skilled workers. Brown, Gilroy, and Kohen (1982) and Brown (1988) summarize this literature and find that a 10 percent minimum wage increase led to a reduction in teenage employment in the range of 1 to 3 percent (a wage elasticity of -0.1 to -0.3). Card and Krueger (1995) in their iconoclastic book, *Myth and Measurement: The New Economics of the Minimum Wage*, demonstrate the weakness of this earlier empirical literature and present evidence that led them to conclude that minimum wage increases have no significant negative effect on the employment of teenagers and other low skilled workers and might even increase their employment.

As a result of these findings, a major new literature has attempted to estimate the wage elasticity of minimum wage increases. A decade after Card and Krueger (1995) the preponderance of this new evidence supports the consensus view held prior to 1995 that minimum wage increases have a small but significant negative (in the range of -0.1 to -0.3)

employment effect on teenagers and other low skilled workers. For examples see: Currie and Fallick (1996), Abowd et al. (2000), Burkhauser, Couch and Wittenburg (2000a, 2000b), Neumark and Wascher (2004), and Campolieti, Fang, and Gunderson (2005). For a recent review of this new literature see Neumark and Wascher (2007).

Based on this new minimum wage literature Baicker and Levy (2007) and Yelowitz (2004, 2006) argue that pay or play mandates, which require employers to either provide appropriate health insurance for their workers or pay a flat per hour tax to offset the cost of health care, effectively increase the minimum wage for those workers whose hourly wage rate is below the prevailing minimum wage plus the tax. Baicker and Levy (2007) assuming a wage elasticity of -0.1 and using multiple years of Current Population Survey (CPS) data, estimate the employment effect of a nationwide pay or play mandate with an average \$3.00 per hour tax on full time private sector workers (more than 20 hours per week), aged 22-65. They find that it would reduce the employment of those workers, whose hourly wage was below the size of the tax plus the prevailing state minimum wage by around 225,000.

Baicker and Levy (2007) provide an important first step in evaluating the relative merits of pay or play legislation and demonstrate that, like minimum wage increases, pay or play mandates will reduce the employment of the least skilled workers in the work force. But they do not focus on how the benefits of this legislation would be distributed across the income distribution or more specifically on how it would affect the working poor.

Stigler (1946) also argued that “the connection between hourly wages and the standard of living of a family is remote and fuzzy. Unless the minimum wage varies with the amount of employment, numbers of earners, non-wage income, family size, and many other factors, it will be an inept device for combating poverty even for those who succeed in retaining employment. (p. 363)”

A smaller empirical literature has focused on who gains from minimum wage increases as well as how effective minimum wage increases have been in reducing poverty. Here the evidence is overwhelming that, even assuming no negative employment effects of minimum wage increases, the vast majority of those who gain do not live in or even near officially measured poverty income levels. The reason for this finding, as suggested by Stigler, is that the majority of workers who gain from minimum wage increases are second or third earners in higher income households or single earners without families. Furthermore, the majority of the working poor are not helped by such minimum wage increases because their wages are already above the proposed minimum. They are poor because they work too few hours. For examples of this literature, see: Burkhauser and Finegan (1989), Burkhauser, Couch, Wittenburg (1996), Burkhauser, Couch, and Glenn (1996), and Neumark and Wascher (2001).

A more recent literature has shown that there is no relationship between state minimum wage increases and declines in state poverty rates. This empirical finding was first report by Card and Krueger (1995). Burkhauser and Sabia (2007) update and extend Card and Krueger (1995) and find that state minimum wage increases between 1998 and 2003 also had no significant affect on state poverty rates: overall; among the working poor; or even among single mothers. Neumark, Schweitzer, and Wascher (2004, 2005) provide an explanation for these findings by showing that reductions in the employment and hours worked of low-wage workers in families just above the poverty line or the near poverty line (150 percent of the poverty line) result in their falling into poverty, or near poverty just enough to offset movements out of poverty or near poverty by the employment and wage gains in families just below these lines.

Here we use methods developed in this smaller distributional literature on the minimum wage to show how pay or play mandates would increase employer health insurance coverage across the income distribution.

## **2. Background**

Over the last two decades, the extent of privately provided health insurance coverage in the United States has fallen from 70 to 63 percent of the non-aged population.<sup>2</sup> The latest numbers released by the Census Bureau shows among Americans of all ages, the percent with employment based coverage fell from 60.2 percent to 59.7 percent from 2005 to 2006 (Figure 7, DeNavas-Walt et al, 2007). Researchers advance several reasons for this decline, including the rising cost of health care and the increasing generosity of public coverage (e.g. Cutler and Gruber 1996, Cutler and Madrian 1998. Kronick and Gilmer 1999, Cutler 2003, Baicker and Chandra 2006). This decline in privately provided health insurance is one reason for the call for government to require employers to either *pay* a tax to reimburse government for providing their workers with health insurance or *play* by providing health insurance for their workers that offset their tax payments.

Another reason is the major success of grassroots efforts in increasing the minimum wage at the state level—in early 2007 before the passage of federal legislation to increase the minimum wage from \$5.15 to \$7.25 per hour by 2009, the majority of state minimum wage rates were higher than the federal minimum (Employment Services Administration, 2006)—which has encouraged social progressives and others to push for similar wage based mandates to increase employer provided health insurance for low wage workers.

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<sup>2</sup> Author calculations using data in Fronstin (1986, 2005)

Employer health insurance mandates have been or are currently being considered by 31 states.<sup>3</sup> Most of these laws are aimed at large firms (often over 10,000 employees) but some of the more comprehensive reform attempts considered or enacted by states such as Massachusetts, New York, Pennsylvania and California exempt only smaller firms. Legislation introduced in New York State (New York State Legislature, 2006) in 2006 would have mandated health insurance coverage by requiring firms to pay a tax of \$3.00 per hour for all covered workers which could be offset by expenditures on health insurance for these workers. But coverage was limited to workers with wage earnings of less than \$600 per week (\$15 per hour or less for those working 40 hours per week) in non-administrative or managerial jobs in firms with 100 or more employees, not involved in manufacturing or agriculture.

Like legislation passed in the State of New York in 2004 which raised its minimum wage from \$5.15 to \$7.25 per hour, this pay or play mandate is premised on the notion that low wage workers are low income workers and hence need the help of the state to both raise their wages and increase their access to employer provide health insurance. But as we have discussed above, this view is controversial. It ignores negative employment effects of this type of wage based regulation as well as the fact that the vast majority of those helped by the 2004 New York minimum wage legislation did not live in or even near poverty. (See Burkhauser and Sabia 2004.)

Rather than focus on the potential consequences of New York's specific pay or play mandate, we estimate the distributional and employment effects of more generic pay or play

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<sup>3</sup> These 31 states listed by the National Conference of State Legislatures are Alaska, Arizona, California, Colorado, Connecticut, Florida, Georgia, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Tennessee, Vermont, Virginia, Washington, West Virginia, and Wisconsin. See <http://www.ncsl.org/programs/health/payorplay2006.htm> for details of states and laws covering the period 2005-present.

mandates for the entire United States to demonstrate the mixed blessing such plans provide to the working poor and to show how critical coverage criteria—wage rate and firm size—are to the share of the working poor they will cover.

### **3. Data and Methods<sup>4</sup>**

The Current Population Survey (CPS) conducted by the Census Bureau and the Bureau of Labor Statistics consists of a series of monthly surveys that annually capture among other things the income, wage earnings, hours of work and health insurance coverage of a random sample of approximately 150,000 non-institutionalized civilians. It is the main source of official employment, income and health insurance coverage statistics in the United States. The CPS is a nationally representative sample of the United States population.

We use data from several months of the 2005 CPS. We use the February 2005 CPS data to obtain information about the source of health insurance for each person in our sample. We then use March 2005 CPS data to obtain information on their family income and firm size, which is reported for the previous year—2004.<sup>5</sup> For those who report working in the February 2005 CPS survey, we also obtain labor earnings data (to calculate hourly wages) from the March, April and May CPS surveys if they are part of the outgoing rotation in those months.<sup>6</sup>

Because pay or play mandates focus on the private sector, our sample consists of private sector, non-self employed workers. We include both part time workers (those working 20 hours or less per week) as well as full time workers. But we limit our sample to such workers aged 17-64 to avoid the complications associated with high school students at younger ages and Medicare

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<sup>4</sup> Replication programs are available upon request.

<sup>5</sup> Family income is reported relative to the federal poverty level applicable to family size, thus it does not need to be adjusted for inflation from 2004 to 2005. But it must still be kept in mind that it applies to the previous year (2004).

<sup>6</sup> Those in the February survey during their 4<sup>th</sup> or 8<sup>th</sup> rotation month are not asked the supplemental questions on health insurance. Those in February during their 3<sup>rd</sup> or 7<sup>th</sup> rotation month go on to answer March questions, and their earnings data will be asked in the March outgoing rotation group survey too. But those of the 2<sup>nd</sup> and 6<sup>th</sup> groups (in February) will not answer earnings questions until April, and those of the 1<sup>st</sup> and 5<sup>th</sup> groups in February answer earnings questions in May.



coverage at older ages. Because we want to focus on whether or not our population of workers has health insurance and if so where it comes from, we exclude workers who do not report this information. But we re-weight our remaining workers to account for these missing workers. (See electronic data appendix accompanying this paper). All dollar values are reported as of February 2005. The family income variables available in the March CPS are already converted into income-to-needs values that represent multiples of the applicable family size poverty level. The use of income-to-needs ratios is standard practice in the income distribution literature in general and especially with respect to the minimum wage literature, since it allows comparisons across the available family income of persons in different size families. See Burkhauser and Sabia (2007) for a recent example.

We describe the demographic characteristics of workers by insurance status in Appendix Table 1 and note that these statistics are similar to those in the literature (e.g. Fronstin, 2005). For a recent review of the literature on the uninsured, see Blumberg and Nichols (2002). We are not the first to match across multiple months of the CPS to assemble a data set for health insurance analysis (e.g. see Farber and Levy, 2000). But the details of this data set are sufficiently complex to relegate full explanation to the electronic data appendix accompanying this paper.

#### **4. Results**

Table 1 subdivides our sample of all currently working non-self-employed private sector workers aged 17-64 (column 1) by whether they are without health insurance (column 2) or have coverage via their employer (column 3), as a dependent of a family member's employer coverage (column 4), via purchase in the private market (column 5), or from government—Medicare or Medicaid—(column 6). As can be seen in row 1, the vast majority of private sector

workers have some form of health insurance. One's own employer is the major source of coverage (62.44 percent), followed by coverage as a dependent of a family member with employer insurance (16.43 percent). The rest of the covered population purchases insurance in the private market (2.36 percent) or receives it from government (1.24 percent). This leaves 17.54 percent of the population without health insurance.

But health insurance coverage is not randomly distributed across this working population. As can be seen across the 4<sup>th</sup> row of numbers, while only 24.90 percent of our entire sample works for small firms (firm size of 24 or fewer), these firms employ 43.19 percent of uninsured workers and only 16.60 percent of those workers with employer insurance. Those who receive health insurance from the other three sources are also more likely to work for small firms. When we add the 43.19 percent of uninsured workers employed by small firms to the 16.16 percent who work for firms of 25 to 99 (row 5) we see that about 60 percent of uninsured workers would not be covered by the proposed New York pay or play mandate discussed above simply because it exempted firms of less than 100 workers from its mandate.

Health insurance coverage is also not randomly distributed across income categories. As rows 9 and 10 show, while only 4.42 percent of our sample of workers live in and 9.88 percent (4.42 plus 5.46) live in or near poverty (up to 150 percent of the poverty line), 13.33 (27.97) percent of those without health insurance live in (in or near) poverty. In contrast, only 1.71 (5.20) percent of those with employer health insurance live in (in or near) poverty. Those with health insurance as dependants or via the private market are also very unlikely to live in or near poverty. Those who receive health insurance from government are the most likely to live in (36.54 percent) or in and near poverty (58.51 percent). While this distribution shows that

workers without any form of health insurance disproportionately live in poor or near poor families, pay or play mandates do not directly target the working poor for coverage.

Row 16 shows that health insurance is also correlated with hourly wage rate. While only 8.58 percent of our sample has hourly wage rates of \$5.00-\$7.24, that is, workers whose wages will rise as the federal minimum wage rate increases from \$5.15 in 2007 to \$7.25 in 2009, 19.62 percent of those without health insurance are in this hourly wage range. Only 3.19 percent of those with employer health insurance are in this range. Workers in the other three health insurance groups are also more likely to be in this hourly wage range than are the uninsured. As row 17 shows, those without health insurance are also more likely to be in the \$7.25-\$10.24 hour wage range than are those with employer health insurance, as are the other three groups. (Appendix Table 2 reports the population sizes for values found in Table 1.)

As we will discuss in more detail below, in a world where increases in wages have no negative effect on employment, the \$3.00 per hour tax mandated by the New York pay or play proposal would provide its greatest individual benefit to those workers earning the minimum wage since the employer would bear the full burden of the tax.<sup>7</sup> In our simulations we assume that workers in the \$5.00-\$7.24 per hour range receive both an increase in their hourly wages to the new federal minimum of \$7.25 and health insurance coverage costing \$3.00 per hour that they do not pay for in reduced wages. Individual workers who would next best benefit in a world without negative employment effects, are those earning between \$7.25-\$10.24 since they will also receive health insurance costing \$3.00 per hour but because the minimum wage is \$7.25, their wage can not fall below \$7.25, so their employer must pay the difference between the \$3.00 per hour cost of the insurance and the drop in their hourly wage rate. Those individuals earning

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<sup>7</sup> When the minimum wage increases to 7.25 in 2009, there will be fewer workers in this category (and more workers in higher wage categories) than implied in our simulations based on 2005 numbers because of wage growth between 2005 and 2009. We thank Linda Blumberg for pointing this out.

over \$10.25 per hour and covered by the mandate will gain health insurance but will also see their hourly wages fall by \$3.00 to pay for it, so at best they will be no better off. As can be seen in row 18, 24.04 percent of those without health insurance (wages of \$10.25-\$14.99) would fall into this category under the New York pay or play mandate. Since the New York mandate exempts workers who earn \$15.00 per hour or more from coverage, as row 19 shows, 15.70 percent of workers without health insurance would continue not to receive health insurance.

The correlations found in Table 1 show that those without health insurance are more likely to live in or near poverty, have lower hourly wages, and work for small firms than those with employer health insurance. But they also suggest that pay or play mandates may be a rather blunt way of ensuring that the working poor will gain health insurance. It is to this question that we now turn.

#### *4.1 Mandates without Employment Effects.*

While pay or play mandates will have some effect on the 17.54 percent of workers in our sample who are uninsured, it will also have an important effect on the 20.03 percent of workers in our sample who have health insurance coverage but not from their employer. Because these two sub-populations without their own employer health insurance are different, we talk about the impact of federal pay or play mandates on them in turn.

Our simulations below will not consider all proposed pay or play mandate designs which as discussed in footnote 3 vary substantially by state. Rather, we will focus on how the class of mandates which require employers to either provide appropriate health insurance for their workers or pay a flat per hour tax to offset the cost of health care impact on the employment and economic well being of workers in general and most especially on the working poor.

We first simulate the impact of a pay or play mandate which requires all large firms (those with 25 or more employees) to pay a \$3.00 per hour tax on all their workers earning \$15.00 per hour or less from which they can deduct the cost of providing their own health insurance.<sup>8,9</sup> In this simulation, we come close to the exclusion rules of the New York State pay or play mandate by including both a \$15.00 per hour maximum and a firm size minimum limitation on coverage. However, rather than choosing the 99 or fewer worker firm size exclusion in the New York State mandate we choose the less restrictive 24 or fewer worker firm size exclusion. Nonetheless we show that this exclusion will substantially reduce the share of uninsured workers who gain own employer provided health insurance under this mandate. This is especially so among the working poor and near poor since, as seen in Table 1, disproportional shares of them work for small firms.

We conduct our simulation using our sample of CPS workers in 2005. We assume here that this mandate will have no behavioral effect on the employment or hours worked of all workers in our sample (i.e. we assume no unemployment effects). We also assume that workers receiving employer health insurance from their firm are unaffected by this legislation. (That is, the cost of providing their health insurance to the firm exceeds the level mandated in this legislation.) We further assume that all firms not providing health care prior to the mandate will choose to “pay” rather than “play”, i.e. purchase coverage for their employees themselves. And

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<sup>8</sup> Because there is some positive correlation between a worker’s hourly wage rate and his or her family income, pay or play legislation that increased coverage to higher hourly wage workers (e.g. in the extreme, covering all workers regardless of their hourly wage rate), would of course on the margin increase the share of the working poor population that was covered but would disproportionately do so for the non-poor population. And, as we will discuss, it would do so in a way that effectively required all these higher wage workers to pay for this coverage via reductions in their hourly wage rates.

<sup>9</sup> At \$3 per hour, assuming a 40 hour work week of 50 weeks a year will yield \$6,000. In 2007, the average cost of a single policy is \$4,479 and the cost of a family policy is \$12,106 (KFF/HRET, 2007), thus \$6,000 is more than the cost of a single health insurance policy but less than half the cost of a family policy when a mandate is implemented. To the extent that some of the policies paid for by the \$3 tax will be family policies, we are not counting the additional dependents who might gain health insurance through this mandate. We thank Linda Blumberg for pointing this out.

that the government will use the resulting tax revenues from the mandate to provide health insurance to these same workers, resulting in a one to one correspondence between those who receive the coverage and those on behalf of whom the employer pays the fee.<sup>10</sup> We then assume that wages above the minimum wage are flexible and that the incidence of the pay or play tax on firms who do not provide health insurance will be borne entirely by the workers. Hence for workers whose hourly wage rate is \$3.00 above the prevailing minimum wage, the net effect of the mandate will be that employers will reduce their hourly wage by \$3.00. But we also assume that the government will provide these covered workers with access to a government provided health care plan costing \$3.00 per hour.<sup>11</sup>

Workers who earn hourly wages above the prevailing minimum wage but by less than \$3.00 per hour will have their wages reduced to the prevailing minimum wage but will also receive government provided health insurance costing \$3.00 per hour. Because in this example we are assuming no behavioral changes, each of these workers will be a beneficiary of this mandate since their total compensation—the prevailing minimum wage plus the value to them of their individual health insurance—is greater than their previous hourly wage.<sup>12</sup>

Finally, because our data is for 2005 it does not take into consideration the impact of the increase in the federal minimum wage from \$5.15 to \$7.25 per hour that was enacted in 2007 and that will be fully implement in 2009. Here we assume that all workers earning below \$5.00 per

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<sup>10</sup> Because firms must provide health insurance to all their workers if they provide it to some of their workers it is less costly for firms to pay the \$3.00 tax.

<sup>11</sup> We assume throughout that pay or play legislation is structured in a way that makes employers and workers indifferent between paying or playing. If this is not the case and employer payments to the government are used to provide health insurance to the general uninsured population instead of to the workers on whose behalf employers paid the taxes, employers are likely to ‘play’ than ‘pay’ even if it requires them to provide health care to all their workers since at least in this way they and their workers recover part of the tax.

<sup>12</sup> This will only hold if they value the health insurance provided them at least at its effective cost to them which will vary from zero to \$2.99 per hour. And as we will discuss below for those already covered by health insurance, if the value of the new insurance to them minus what they pay for it is at least as great as their value of their previous health insurance minus the cost of that insurance to them. We assume throughout that the employer does not have other means of requiring health insurance payments (such as co-premiums that are usually charged for health insurance, which would imply further out of pocket costs for the workers).

hour are not covered by the minimum wage—this assumption is common in the minimum wage literature and was made in Burkhauser and Sabia, 2007—and that they would not be covered under our federal pay or play mandate but that all other workers are covered by the federal minimum wage. Hence those earning \$5.00-\$7.24 per hour will have their wages increase to \$7.25 under the new minimum wage increase, and they and all other workers earning \$7.25-\$14.99 will also be covered by the \$3.00 per hour pay or play mandate. Thus the effective minimum wage for all workers in our population will be \$10.25, the sum of the new federal minimum wage plus the \$3.00 per hour pay or play mandated tax on low wage laborers.

**Workers without Health Insurance.** Table 2 contains the 17.54 percent of our sample who have no health insurance. The hourly wage of all these workers is shown across income-to-needs categories. The 2.10 percent of these workers who currently earn less than \$5.00 per hour (third column of numbers, second to last row) are assumed not to be covered by the minimum wage and would not be covered by our pay or play mandate even though they work in large firms. But all the workers in the next three wage categories who are in large firms will receive \$3.00 per hour worth of health insurance coverage. Workers in large firms earning between \$5.00 and \$7.24 (11.38 percent) will not only receive health insurance coverage but will see their hourly wages go up to \$7.25 based on increases in the federal minimum wage. Workers in large firms earning between \$7.25 and \$10.25 (22.13 percent) will see their wages fall to \$7.25 but will now receive \$3.00 per hour worth of health insurance coverage. If these workers value their health insurance costing \$3.00 per hour by more than the cost to them of a reduction in their hourly wage to \$7.25, they will be better off. Workers in large firms earning between \$10.25 and \$14.99 (12.71 percent), will receive health insurance but will also see their wages fall by \$3.00

per hour to pay for it. The 15.70 percent of workers earning \$15.00 per hour or more will not be affected by these mandates.

Hence, overall only a minority (46.22 percent) of uninsured workers will be receiving employer health insurance coverage under this mandate. While the working poor, those with income-to-needs values equal to 1 or less (row 1) are disproportionately represented in the hourly wage range where net compensation costs increase (\$5.00-\$10.25) as seen in column 14, they nevertheless make up a small share (18.74 percent) of all workers whose health insurance is subsidized by their employer. Only 35.36 percent of newly covered worker in this subsidized category are either living in poor or near poor families, while 45.35 percent live in families that are twice the poverty rate or more.

When we include workers in the \$10.25-\$14.99 who pay for their new health insurance coverage themselves, we find that the working poor make up 15.56 percent and the poor and near poor make up 31.12 percent of the total population of uninsured workers covered while those twice the poverty line or more make up 51.47 percent of this population (column 15). While the vast majority (53.95 percent, column 16) of the working poor without health insurance would now be covered under this mandate, 46.05 would not, primarily because they work in small firms. In addition, another 6.84 percent of the working poor would effectively be required to fully pay for this health insurance since they earn more than \$10.25 per hour.

**Other Insured Workers.** Table 3 contains the 20.03 percent of our sample whose health insurance comes from sources other than their employer. The vast majority of these workers (16.43 percent) are covered on the employer provided insurance of another family member.<sup>13</sup> As we saw in Table 1 this is a very different population than the population without health

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<sup>13</sup> Of those with dependent coverage, 75 percent are insured through a spouse and 25 percent through another family member (almost all of whom appear to be a parent because 94 percent of this population is under 25 years of age).



insurance. The overwhelming majority do not live in or even near poverty. This should not be surprising since, as we also saw in Table 1, the vast majority of workers who have employer provided health insurance are neither poor or near poor. And by definition these workers live in a family that includes a worker with employer health insurance in addition to this worker.

Another 2.36 percent of this population of workers with health insurance from another source purchases their health insurance in the private market and as we also saw in Table 1 an even smaller share of this population live in a poor or near poor family. It is only the remaining 1.24 percent of this population that receive their health insurance from Medicare or Medicaid that are much more likely to live in or near poverty.

Thus overall, only 5.04 percent of these workers whose health insurance comes from another source live in poor families and only 8.58 percent live in families in or near poverty. While a substantial share of these workers have hourly wage earnings of between \$5.00 and \$10.25 per hour very few of this low wage group are either poor or near poor. The weak relationship between the level of the hour wage rate and the level of the income-to-needs ratio in this population is the starkest example of Stigler's argument that hourly wage rates are a poor proxy for economic well being. Only 15.83 percent of the workers who will gain subsidized own employer coverage in this population live in poor or near poor families while 41.30 percent live in families four times or more the poverty line and 77.71 percent live in families two times or more the poverty line. The percentages are even starker for the entire population of workers who move into pay or play mandated health insurance plans—6.77 percent are poor and 5.38 percent are near poor while 47.74 percent have income four times the poverty line and 82.35 percent have income two times the poverty line.

But even among this broader group of workers it is far from clear how many will gain from this mandate. The vast majority were already covered by the employer provided health insurance of another family member. Because in this simulation we are assuming no disemployment effects, those earning \$5.00-\$7.24 will be no worse off since their wages will not fall. But unless the value to them of their new health insurance plus their family savings from no longer being a dependent on their other family member's employer provided health insurance plan is greater than the value of that plan, they will be no better off.<sup>14</sup> Those earning \$7.25-\$10.24 are even less likely to gain from this coverage since they will have to pay for part of it via the reduction of their hourly wage rate to \$7.25 per hour. And those earning \$10.25-\$14.99 are the least likely to gain from this coverage since they will have to pay \$3.00 per hour, the full cost of the coverage via reduced wages.

It is more likely that those newly covered workers who formerly purchased their health insurance in the private market will benefit assuming no behavioral effects since their private market insurance costs were relatively high. But once again, the value of the employer based health insurance coverage to the worker plus the cost of his/her private market health insurance would have to be greater than the value to him/her of the private market health insurance.

For the 1.24 percent of workers who were receiving their health insurance from Medicare or Medicaid and are now mandated to receive it from their employer, the share who will gain is likely to be very small, even when we assume they experience no loss of employment. The reason is that they already are receiving government provided health insurance. This will

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<sup>14</sup> As a general equilibrium analysis is beyond the scope of this paper, our study does not capture several second order effects that might occur as a result of pay or play mandates. For example, our partial equilibrium analysis does not take into account increased employment in other sectors that might result from a change in the relative prices of goods and services due to the change in the cost of labor in firms affected by the pay or play mandates. We also do not speculate on how pay or play legislation would mandate which firm would be responsible for covering children in the case of dual worker families, or the coverage of non-worker spouses. These all represent areas for future research.

especially be the case for the 16.94 percent who must now pay the full cost of their health insurance since they earn \$10.25-\$14.99 per hour.

#### *4.2 Mandates including Employment Effects.*

Based on the new minimum wage literature discussed above, Baicker and Levy (2007) and Yelowitz (2006) argue that pay or play mandates increase the minimum wage for workers whose hourly wage rate is below the prevailing minimum wage plus the tax. In this section we assume the elasticity of demand for covered workers with respect to an increase in their wages caused by, in the case of workers earning less than \$7.25 per hour, a combination of a federal minimum wage increase to \$7.25 per hour together with a pay or play mandate of an additional \$3.00 per hour for health insurance coverage, is -0.2.<sup>15</sup> For such workers the combined increase can vary from \$3.01 to \$5.25 per hour depending on their initial wage rate.

We assume the same elasticity of demand for all workers earning \$7.25-\$10.24 per hour. Since they are already at or above the new minimum wage per hour at the time of the simulation, this group will experience pay or play mandated increases of between \$0.01 and \$3.00 per hour. Because we assume that wages are flexible downward to the new federal minimum wage, there is no employment effect on workers who were earning \$10.25-\$14.99 at the time of the simulation. Those earning \$15.00 or more are not eligible for our simulated pay or play mandated benefits nor are those in firms of less than 25 workers.

Our simulate results below are consistent with all the assumptions discussed in Table 2 except that now we are accounting for the negative employment effects of a combined increase in the federal minimum wage to \$7.25 and a \$3.00 per hour pay or play mandate on our working population. This simulation like the one in Table 2 comes closest to the exclusion rules of the New York State pay or play mandate by including both a maximum hourly wage rate and a

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<sup>15</sup> We later show estimates that assume a range of elasticities from -0.1 to -0.3

minimum firm size limitation on coverage. But again rather than choosing the 99 or fewer worker firm size exclusion in the New York State mandate we choose the less restrictive 24 or fewer worker firm size exclusion.

The first panel of Table 4 focuses on workers without any form of health insurance who earn \$5.00-\$10.24 per hour in firms who employ 25 workers or more and provide no health insurance. We focus on this population, since those workers earning less than \$5.00 or more than \$15.00 per hour are not covered by the policy, and those earning \$10.25-\$14.99 do not experience a decrease in employment because of the policy since their hourly wages are flexible downward. As discussed above, this is the population who will receive employer subsidized health insurance under this pay or play mandate.

Within the \$5.00-\$10.24 per hour wage category, we distinguish between those who will be effected by both the increase in the federal minimum wage to \$7.25 (those earning \$5.00-\$7.24) and the pay or play mandate and those who will only be effected by the pay or play mandate (those earning \$7.25-\$10.25). The distribution of workers in these hourly wage categories are shown across income-to-needs categories. In each hourly wage earning/income-to-needs cell of Table 4 we individually show the number of workers in that cell who will lose their job and the number who will keep their job and gain subsidized health insurance coverage because of the policy.

We estimate the number of workers who will lose their jobs in each cell by summing the probability of each member of that cell losing their job (the difference between \$10.25 per hour and their current wage divided by their current wage multiplied by -0.2) using population weights to display results in terms of the U.S. labor force affected within our population—currently working non-self employed private sector workers aged 17-64. The number of workers

who will be covered by the policy is the difference between the total population subject to the policy and the number unemployed in that cell.

While the percent increase in wages can vary from 41 to 125 percent in the \$5.00-\$7.24 cells because of the joint impact of the federal minimum wage and the pay or play mandate, our conservative assumption about demand elasticity yields individual risks of unemployment from 8.2 to 25 percent and hence relatively modest disemployment effects in each of the income-to-needs cells in Table 4. The number of unemployed workers in the \$7.25-\$10.24 cells is more modest since the percentage change in hourly wage levels is smaller. Yet as can be seen in the last column of Table 4 the percentage of poor (9.01 percent) and near poor (7.45 percent) workers who lose their jobs because of the policy is not trivial and is greater than for other workers since they have lower initial wage rates. Overall 153,865 poor or near poor workers without health insurance coverage will lose their jobs because of this policy (column 5). The total number of workers without health insurance who will lose their jobs because of this policy is 386,734.

The second panel of Table 4 focuses on the rest of the population of effected workers—those workers with some form of health insurance who earn \$5.00-\$10.24 per hour in firms who employ 25 workers or more and provide no health insurance. The results for this population are similar to those above. As can be seen in the last column, the poor (8.71 percent) and near poor (8.50 percent) experience a greater negative employment effect than the rest of the covered population in this panel since they have lower initial hourly wage rates. Overall, 63,555 poor or near poor workers who are mandated to switch to their employer's health insurance plan from another source of health insurance will lose their jobs because of this policy. The total number of workers in this category who will lose their job is 363,443.

The third panel of Table 4 sums the employment and coverage effects of these policies across the combined populations of the top two panels. The bottom line is that this policy will increase the subsidized own employer coverage of 10,007,413 workers earning \$5.00 and \$10.25 who did not have this type of coverage before. However, it will do so at the expense of 750,178 workers who will lose their jobs because of this policy coming into effect along with an increase in the minimum wage to \$7.25 per hour. Furthermore, another 4,696,615 of these “newly ensured” workers would effectively be mandated to give up their previous health insurance coverage for this new own employer provided health insurance coverage.

#### *4.3 The Net Result of the Policy on Health Insurance Coverage and Its Sources*

In this section we show the sensitivity of our results to our demand elasticity assumptions. Table 5 shows the net effect of an increase of the federal minimum wage to \$7.25 together with a pay or play mandate of the type discussed in Table 4 on total health insurance coverage and the sources of that coverage assuming elasticities of demand of: -0.1, -0.2, and -0.3.

Our sample represents 96,940,624 non-self employed private sector workers aged 17-64 in 2005. As can be seen in row 1, the vast majority of these workers (60,528,322) have employer health insurance. The rest do not. But of those without employer health insurance coverage, the majority are covered in some other way—15,924,349 as a dependent on another family member’s employer health care plan, 2,283,490 purchase their health insurance in the private market, and 1,200,405 receive it from government. The remaining 17,004,056 workers have no health insurance.

Row 2 shows how the distribution of health insurance changes when we introduce the play or pay mandate discussed in Table 4 assuming a demand elasticity of -0.2. Such a mandate will

increase own employer health care coverage by 14,932,865 (to 75,461,187 in Row 3).<sup>16</sup> While part of the increase in own employer coverage comes from a decline in workers with no health insurance coverage, the majority comes from shifts of workers from other forms of health insurance coverage to mandated own employer health insurance coverage. This increase in health insurance coverage, as discussed in Table 4 comes at the cost of 750,178 lost jobs. Furthermore, as can be seen in row 3, while this policy will reduce the number of workers without any form of health insurance, 9,145,034 workers will continue not to be covered by any form of health insurance because of the wage maximum and firm size minimum exclusions in the policy.

Rows 4 and 5 repeat the simulation but assume elasticities of -0.1 and -0.3 respectively. As can be seen, the change in own employer provided health insurance and in those who lose their jobs due to the mandate are sensitive to the demand elasticity used in the simulation. Assuming a demand elasticity of -0.1 halves the number of workers who lose their jobs to 325,089. Assuming a demand elasticity of -0.3 doubles the number to 1,125,267.

To summarize the tradeoff posed by the mandate policy, we calculate two ratios. One is the number of workers who lose their jobs for every 100 workers made newly insured by this policy. For this calculation, we only consider those workers who switch from no insurance to employer insurance as those who switch between insurance categories are not part of the newly insured. We find that in this population 10.03 workers lose their jobs (at an elasticity of -0.2) for every 100 newly covered workers. But many of these newly covered workers fully pay for their health insurance via reductions in their hourly wage of \$3.00. Hence we repeat this exercise but focus only on these newly covered workers whose health insurance is subsidized under this mandate

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<sup>16</sup> Note that in our assumption this increase is actually in government provided health insurance that is purchased from the tax on these newly covered workers whose final incidence will depend on their initial hourly wage rate.

(those in the wage range \$5.00-\$10.25 per hour). We find that for every 100 workers newly eligible for subsidized health insurance, 14.12 workers lose their jobs.

The first 5 rows of data in Table 5 show the sensitivity of our results in our entire sample to different elasticity assumptions. In the remaining rows we focus on how this policy impacts the working poor. We do so assuming a demand elasticity of -0.2. The sixth to eighth row of numbers in Table 5 show respectively for the working poor: the initial number of workers in each of the health insurance categories before the policy; the net change in each of the health insurance categories after the policy; and the number of workers who remain in those categories after the policy. While a pay or play mandate will increase the number of the working poor with employer health care coverage by 1,627,551, approximately 493,260<sup>17</sup> of these newly covered workers were already receiving health insurance from some other source. So the total number of newly covered working poor amounts to 1,134,291. But providing these new covered workers with health insurance comes at the cost of 124,745 of the working poor losing their job---a ratio of 11 jobs lost by poor workers for every 100 newly covered poor workers. Furthermore, after the policy, 27.3 percent of the working poor (1,168,075) still do not have health insurance.<sup>18</sup>

## **5. Summary and Conclusion**

We provide evidence that pay or play mandates, which require employers to either provide appropriate health insurance for their workers or pay a flat per hour tax to offset the cost of health care, are a very blunt instrument for providing health insurance for the working poor. Like minimum wage increases meant to help the working poor, pay or play mandates attempt to identify the targeted low income group via their wage rate rather directly via their family's

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<sup>17</sup> This calculation takes into account those who are made uninsured and unemployed.

<sup>18</sup>  $((1,043,300+124,745)/4,281,308)$



income. But even more so, by limiting their coverage to larger firms, these pay or play mandates disproportionately exclude the working poor from this coverage.

Furthermore, like the minimum wage, these pay or play mandates force employers to provide compensation above the competitive market price for low skilled workers and hence will reduce the employment of precisely the group of low income workers least able to compete in the market that the program was intended to help. For this group of 124,745 poor workers identified in our simulation, pay or play mandates not only fail to bring them employer provided health insurance but also take away their job. Our results are of course sensitive to our assumptions. So for instance, to the extent that revenues from pay or play mandates on employers are not required to fully pay the cost of these mandated health insurance policies for their workers, the negative employment impacts of these mandates would be smaller. But doing so would require additional funding from someplace. And, it would not change the general conclusions about the distributional effects of these pay or play mandates.

Finally, pay or play mandates are blunt instruments for increasing the overall health insurance coverage of workers because they impact both those who have no health insurance and those whose health insurance comes from other sources. Thus a large share of the increase in own employer health insurance coverage produced by pay or play mandates comes at the expense of workers (including the working poor) who are already covered by other sources of health insurance and are not likely to be better off because of this shift. This is the case not only because some of these workers will lose their jobs but also because others will now be forced into a health insurance plan that is less advantageous to them than their previous situation.

An analysis of alternative policy options to increase employment based coverage is beyond the scope of our paper, but one possible tool to consider is a health insurance version of

the Earned Income Tax Credit (EITC). This may have distributional advantages relative to minimum wage increases as a mechanism for subsidizing the wage earnings of the working poor along many dimensions. (See: Burkhauser, Couch, and Andrew J. Glenn, 1996; Neumark and Wascher, 2001). For example, the minimum wage is likely to reduce employment because it raises the cost to firms of hiring low skilled laborers, but the EITC provides a government subsidy through the tax system to low income workers hence increasing their labor supply, increasing employment, and reducing their dependence on welfare (Hotz and Sholz, 2003; Hotz, Mullin, and Sholz, 2006). In addition, because it targets beneficiaries based on family income rather than an individual's hourly wage, a greater share of its benefits go to the working poor. Thus an earned health insurance tax credit that would cover the cost of a health insurance policy modeled on the EITC should be studied in greater detail to compare its merits relative to employer paid mandates.

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**Table 1. Firm size, Income and Wage Characteristics by Insurance Status**

		All	Uninsured	Own employer	Dependent	Non group	Publicly insured
		(1)	(2)	(3)	(4)	(5)	(6)
Weighted Percent		100.00	17.54	62.44	16.43	2.36	1.24
Number of observations		23,594	3,781	14,808	4,141	560	304
Population count (Millions)		96.94	17.00	60.53	15.92	2.28	1.20
<i>Column Percentages</i>							
Firm size	24 or fewer workers	24.90	43.19	16.60	32.94	49.01	31.82
	25 to 99 workers	14.94	16.16	14.46	14.95	15.88	19.43
	100 to 499 workers	15.36	11.84	17.09	13.80	7.74	12.90
	More than 500 workers	44.81	28.81	51.85	38.31	27.37	35.84
Total (all firm size)		100.00	100.00	100.00	100.00	100.00	100.00
Income-to-Needs Ratio	Less than 100	4.42	13.33	1.71	2.77	4.34	36.54
	100-149	5.46	14.65	3.49	1.88	5.43	21.97
	150-199	7.28	15.15	5.86	3.26	10.91	13.89
	200-299	16.97	23.62	16.37	12.63	16.32	11.75
	300-399	16.74	13.56	17.78	16.32	21.62	5.66
	400 or more	49.14	19.70	54.79	63.14	41.39	10.20
Total (all incomes)		100.00	100.00	100.00	100.00	100.00	100.00
Wage category	\$0-\$4.99	1.86	4.15	0.66	3.08	4.21	8.94
	\$5.00-\$7.24	8.58	19.62	3.19	15.79	6.01	32.86
	\$7.25-\$10.24	19.61	36.49	13.42	23.04	26.86	33.57
	\$10.25-\$14.99	25.50	24.04	26.61	23.78	23.69	16.94
	\$15.00 and above	44.45	15.70	56.12	34.30	39.23	7.70
Total (all wages)		100.00	100.00	100.00	100.00	100.00	100.00

Source: CPS data estimated by the authors.

**Table 2. Firm Size and Wage Distribution of Uninsured Workers by the Income-to-Needs Ratio of Their Family (2005)**

Small (less than 25) vs. Large (greater than or equal to 25) Firm, by Wage category																
Wage category	Share	\$0-\$4.99		\$5.00-\$7.24		\$7.25-\$10.24		\$10.25-\$14.99		\$15.00 and above		Total	All subsidized insured	All insured	Insured in income category	
		Small	Large	Small	Large	Small	Large	Small	Large	Small	Large					
Firm Size category	N															
<b>Less than 100</b>	2,265,837	13.33	4.03*	1.34*	14.38	21.46	14.60	25.65	6.87	6.84	2.72*	2.11*	100	18.7	15.56	53.95
<b>100-150</b>	2,490,723	14.65	2.24*	2.09*	12.16	12.63	17.96	25.39	10.37	11.07	3.15*	2.94*	100	16.6	15.56	49.09
<b>150-200</b>	2,575,926	15.15	2.47*	1.11*	7.68	10.16	15.67	32.51	9.68	10.50	4.55*	5.67	100	19.3	17.42	53.16
<b>200-300</b>	4,015,531	23.62	1.52*	3.31*	6.80	10.98	13.96	21.16	15.30	13.09	7.34	6.54	100	22.7	23.11	45.23
<b>300-400</b>	2,306,138	13.56	1.25*	2.89*	5.63	8.64	13.02	17.44	12.03	18.18	8.96	11.96	100	10.6	12.99	44.26
<b>400 or more</b>	3,349,902	19.70	1.43*	1.40*	5.12	6.93	11.95	13.72	11.05	15.39	13.96	19.04	100	12.1	15.37	36.05
<b>Whole Category</b>	17,004,057	100.00	2.05	2.10	8.24	11.38	14.37	22.13	11.32	12.71	7.21	8.49	100	100	100	46.22
<b>Share</b>																
<b>Median wage</b>		3.10	3.05	6.45	6.45	8.87	8.63	12.33	12.08	19.73	20.03					

Note: A star denotes a cell size of less than 25. Shading shows those who would be made insured by the policy.

Source: CPS data estimated by the authors.

**Table 3. Firm Size and Wage Distribution of Other Insured Workers by the Income-to-Needs Ratio of Their Family (2005)**

Small (less than 25) vs. Large (greater than or equal to 25) Firm, by Wage category														Total	All subsidized insured	All insured	Insured in income category
Wage category	Share	\$0-\$4.99		\$5.00-\$7.24		\$7.25-\$10.24		\$10.25-\$14.99		\$15.00 and above							
Firm Size category		Small	Large	Small	Large	Small	Large	Small	Large	Small	Large						
Income -to-Needs Ratio	N																
<b>Less than 100</b>	978,034	5.04	6.23*	5.11*	16.14	19.75	9.75	26.87	5.66*	7.55*	0.79*	2.15*	100	9.01	6.77	54.17	
<b>100-150</b>	686,881	3.54	1.77*	4.16*	10.00*	21.98	9.72	28.25	6.67*	11.00*	3.05*	3.41*	100	6.82	5.38	61.22	
<b>150-200</b>	934,860	4.82	1.59*	4.66*	6.48*	12.01	15.11	22.95	8.57	11.08	7.22	10.34	100	6.46	5.50	46.04	
<b>200-300</b>	2,524,975	13.01	1.77*	2.17	6.15	13.22	10.95	24.50	10.51	13.75	7.95	9.03	100	18.82	16.61	51.47	
<b>300-400</b>	3,160,630	16.28	1.03*	2.83*	5.63	11.13	9.61	17.04	11.46	16.39	10.04	14.84	100	17.59	18.00	44.56	
<b>400 or more</b>	11,122,865	57.31	0.85*	1.52	3.92	7.63	6.59	11.16	8.61	14.79	12.90	32.04	100	41.30	47.74	33.58	
<b>Whole Category Share</b>	19,408,246	100.00	1.34	2.24	5.44	10.26	8.33	15.81	9.10	14.24	10.56	22.68	100	100.00	100	40.31	
<b>Median wage</b>			3.27	2.85	6.41	6.41	8.87	8.87	12.40	12.81	20.78	22.35					

Note: A star denotes a cell size of less than 25. Shading shows those who would be made insured by the policy.

Source: CPS data estimated by the authors.



**Table 4, Panel A. Firm Size and Wage Distribution of Unemployment Effect for Uninsured Workers by the Income-to-Needs Ratio of Their Family (2005)**

Assuming -0.2 elasticity	\$5.00-\$7.24		\$7.25-\$10.24		Total Unemployed	Total covered	% unemployed
	Unemployed	Covered	Unemployed	Covered			
<b>In Large firms</b>							
<b>Income-to-Needs Ratio</b>							
<b>Less than 100</b>	-61,846	424,353	-26,369	554,914	-88,216	979,267	-9.01
<b>100-149</b>	-39,201	275,468	-26,448	605,933	-65,649	881,401	-7.45
<b>150-199</b>	-30,861	230,835	-32,715	804,605	-63,576	1,035,440	-6.14
<b>200-299</b>	-54,445	386,608	-33,110	816,491	-87,555	1,203,099	-7.28
<b>300-399</b>	-25,130	174,063	-12,880	389,312	-38,010	563,375	-6.75
<b>400 or more</b>	-27,093	205,161	-16,636	443,055	-43,729	648,216	-6.75
<b>Total</b>	-238,576	1,696,488	-148,158	3,614,310	-386,734	5,310,798	-7.28

**Panel B. Firm Size and Wage Distribution of Unemployment Effect for Workers with either dependent, individual or public coverage, by the Income-to-Needs Ratio of Their Family (2005)**

Assuming -0.2 elasticity	\$5.00-\$7.24		\$7.25-\$10.24		Total Unemployed	Total covered	% unemployed
	Unemployed	Covered	Unemployed	Covered			
<b>In Large firms</b>							
<b>Income-to-Needs Ratio</b>							
<b>Less than 100</b>	-25,879	167,234	-10,650	252,154	-36,529	419,388	-8.71
<b>100-149</b>	-18,751	132,240	-8,275	185,742	-27,026	317,982	-8.50
<b>150-199</b>	-15,045	97,253	-8,579	205,992	-23,624	303,245	-7.79
<b>200-299</b>	-41,959	291,789	-24,177	594,480	-66,135	886,269	-7.46
<b>300-399</b>	-44,147	307,552	-18,828	519,651	-62,976	827,203	-7.61
<b>400 or more</b>	-104,669	744,213	-42,484	1,198,315	-147,153	1,942,528	-7.58
<b>Total</b>	-250,450	1,740,281	-112,993	2,956,334	-363,443	4,696,615	-7.74

**Panel C. Firm Size and Wage Distribution of Unemployment Effect for Workers with either no insurance, dependent, individual or public coverage, by Income-to-Needs Ratio of Their Family (2005)**

Assuming -0.2 elasticity	\$5.00-\$7.24		\$7.25-\$10.24		Total Unemployed	Total covered	% unemployed
	Unemployed	Covered	Unemployed	Covered			
<b>In Large firms</b>							
<b>Income-to-Needs Ratio</b>							
<b>Less than 100</b>	-87,725	591,587	-37,020	807,068	-124,745	1,398,655	-8.92
<b>100-149</b>	-57,952	407,708	-34,722	791,675	-92,675	1,199,383	-7.73
<b>150-199</b>	-45,906	328,088	-41,294	1,010,596	-87,200	1,338,684	-6.51
<b>200-299</b>	-96,404	678,397	-57,287	1,410,971	-153,690	2,089,368	-7.36
<b>300-399</b>	-69,277	481,616	-31,709	908,963	-100,986	1,390,579	-7.26
<b>400 or more</b>	-131,762	949,374	-59,120	1,641,370	-190,882	2,590,744	-7.37
<b>Total</b>	-489,027	3,436,769	-261,151	6,570,644	-750,178	10,007,413	-7.50

Source: CPS data estimated by the authors.

**Table 5. Summary of Pay or Play Mandate Outcomes across Insurance Groups Results with Alternative Elasticities Overall and on the Working Poor (2005)**

	<b>Total</b>	<b>Own employer</b>	<b>Working Uninsured</b>	<b>Dependent</b>	<b>Nongro up</b>	<b>Publicly insured</b>	<b>Unemployed (and uninsured)</b>
Initial distribution	96,940,623	60,528,322	17,004,056	15,924,349	2,283,490	1,200,405	0
Change due to policy (elasticity -0.2)	0	14,932,865	-7,859,022	-6,450,671	-694,709	-678,641	750,178
Final distribution (elasticity -0.2)	96,940,623	75,461,187	9,145,034	9,473,678	1,588,782	521,764	750,178
Final distribution (elasticity -0.1)	96,940,623	75,836,276	9,145,034	9,473,678	1,588,782	521,764	375,089
Final distribution (elasticity -0.3)	96,940,623	75,086,098	9,145,034	9,473,678	1,588,782	521,764	1,125,267

***By Income-to-Needs Ratio***

*Less than 100% FPL*

Initial distribution	4,281,308	1,037,438	2,265,837	440,454	99,005	438,574	0
Change due to policy (elasticity -0.2)	0	1,627,551	-1,222,507	-224,429	-55,675	-249,685	124,745
Final distribution	4,281,308	2,664,989	1,043,330	216,025	43,330	188,890	124,745

For every worker made newly insured, 0.11 workers loose employment

Source: CPS data estimated by the authors.

**Appendix Table 1. Characteristics by Insurance Category**

	<b>All</b>	<b>Uninsured</b>	<b>Own employer</b>	<b>Dependent</b>	<b>Nongroup Public</b>
	(1)	(2)	(3)	(4)	(5)
Weighted Percent	100	17.54	62.44	16.43	2.36
Age (years)	39.13	34.91	41.02	36.66	39.86
Female	0.46	0.42	0.42	0.64	0.49
Number of kids in the family	0.88	0.94	0.81	1.07	0.73
Female head with children	0.06	0.09	0.06	0.01	0.06
Hours worked	39.51	37.06	42.03	33.21	36.52
Part time	0.07	0.10	0.01	0.24	0.18
Full time	0.93	0.90	0.99	0.76	0.82
Weeks worked last year	49.18	46.83	50.68	46.56	48.02
Whether employer offered	0.81	0.36	1.00	0.66	0.35
Whether was eligible	0.75	0.22	1.00	0.50	0.18
Race					
White	0.83	0.80	0.83	0.88	0.89
Black	0.10	0.13	0.10	0.06	0.06
Other	0.07	0.07	0.06	0.06	0.05
Education					
HSDO	0.11	0.27	0.06	0.12	0.05
HS	0.31	0.38	0.30	0.27	0.31
More than HS but less than college (4 yr)	0.31	0.26	0.31	0.37	0.32
College or more	0.27	0.09	0.33	0.24	0.31
Marital status					
Married	0.59	0.44	0.61	0.73	0.50
Widowed, divorced or separated	0.14	0.17	0.16	0.02	0.19
Never married	0.27	0.40	0.23	0.25	0.31

Source: CPS data estimated by the authors.

**Appendix Table 2. Firm size, Income and Wage Characteristics by Insurance Status**

		All	Uninsured	Own employer	Dependent	Nongroup	Publicly insured
		(1)	(2)	(3)	(4)	(5)	(6)
Totals		96,940,624	17,004,057	60,528,322	15,924,350	2,283,490	1,200,405
Firm size	24 or fewer workers	24,136,353	7,344,122	10,045,628	5,245,560	1,119,063	381,980
	25 to 99 workers	14,478,224	2,747,627	8,753,518	2,381,098	362,720	233,261
	100 to 499 workers	14,887,730	2,012,671	10,346,361	2,197,041	176,757	154,900
	More than 500 workers	43,438,317	4,899,636	31,382,816	6,100,651	624,950	430,264
Income-to-Needs Ratio		96,940,624	17,004,057	60,528,322	15,924,350	2,283,490	1,200,405
	Less than 100	4,281,308	2,265,837	1,037,438	440,454	99,005	438,574
	100-149	5,288,444	2,490,723	2,110,840	299,222	123,973	263,686
	150-199	7,055,895	2,575,926	3,545,108	518,936	249,176	166,748
	200-299	16,449,440	4,015,531	9,908,934	2,011,404	372,573	140,999
	300-399	16,228,544	2,306,138	10,761,775	2,599,071	493,624	67,935
	400 or more	47,636,994	3,349,902	33,164,227	10,055,262	945,139	122,464
Wage category	\$0-\$4.99	1,801,194	705,939	400,814	490,936	96,184	107,322
	\$5.00-\$7.24	8,312,821	3,336,110	1,930,206	2,514,862	137,245	394,398
	\$7.25-\$10.24	19,012,998	6,205,574	8,121,699	3,669,526	613,252	402,948
	\$10.25-\$14.99	24,722,320	4,087,051	16,104,758	3,786,229	540,969	203,313
	\$15.00 and above	43,091,291	2,669,383	33,970,846	5,462,797	895,840	92,424
		43,091,291	2,669,383	33,970,846	5,462,797	895,840	92,424

Notes: The population numbers are obtained by summing the supplemental weights in each category, after re-weighting to adjust for missing data.

The weights in the CPS are created to symbolize roughly the number of people represented by that observation

Source: CPS data estimated by the authors.