# LECTURE: HEALTH INSURANCE AND LABOR MARKETS

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OUTLINE OF LECTURE:

1. Introduction and background

2. Theory of health insurance and mobility

   Madrian Job Lock, QJE

3. Theory of health insurance and wages

4. Gruber: AER, Mandated Maternity Benefits

# Health Insurance and Labor Markets

*Introduction:*

- United States is distinctive in that most insurance is provided through employers
- Typically employer plans are "group" plans in nature
- 90% of private insurance is through employer (own or spouse)

*Implications for Labor Market:*

- Large fraction of total compensation consists of employee/employer premiums
- Up 300% over 30 years

*Concerns/Issues:*

Declining job growth
Declining international competitiveness
Labor market inefficiencies  Job-lock (mobility)
Declining wages for workers
    Premium increases passed through as lower wages

*Literature:* Focuses on impacts on mobility, earnings, employment, # hours worked

# Institutional Background of Health Insurance and Labor Markets

Facts about nonelderly health insurance

- Declining employer provided insurance
- Increasing Medicaid usage/coverage
- Increasing # of uninsured

Table 1: Sources of Health Insurance Coverage for Non-Elderly Population Over Time

| | 1988 | 1989 | 1990 | 1991 | 1992 | 1992 (revised) | 1993 | 1994 | 1995 |
|---|---|---|---|---|---|---|---|---|---|
| | Percentage of Non-Elderly Population | | | | | | | | |
| Population | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total Private | 74.9 | 74.8 | 73.1 | 72.1 | 70.9 | 70.3 | 70.1 | 70.8 | 70.7 |
| Employer | 69.5 | 69.0 | 67.4 | 66.7 | 65.0 | 64.5 | 63.4 | 63.6 | 63.8 |
| Own Name | 33.1 | 33.1 | 32.3 | 32.0 | 31.0 | 30.6 | 31.7 | 32.7 | 32.7 |
| Dependent | 36.4 | 36.0 | 35.1 | 34.7 | 34.0 | 33.9 | 31.8 | 30.9 | 31.1 |
| Other Private | 5.5 | 5.8 | 5.8 | 5.5 | 5.9 | 5.9 | 6.7 | 7.1 | 6.9 |
| Total Public | 13.2 | 13.0 | 14.3 | 15.3 | 15.8 | 16.0 | 16.7 | 16.9 | 16.6 |
| Uninsured | 15.2 | 15.3 | 15.8 | 16.0 | 16.7 | 17.0 | 17.3 | 17.1 | 17.4 |

Source: Gruber "Health Insurance and Labor Markets," *Handbook of Health Economics*.

## Role of Workplace

*Or: Why is so much insurance provided through workplace?*

*1. Pooling Economics*

- Share fixed (high) administrative costs
- Mitigate effects of adverse selection (although it is still a problem for small firms)

*2. Tax deductibility of premiums for employers*

Cause or effect? Employer often covers 100% of HI costs

*3. Anti-discrimination Regulations*

- Illegal to offer HI selectively to highly compensated employees
- Cannot offer only to some employees and not others
- This is important for theoretical significance

Table 2: Characteristics of Employer-Provided Health Insurance

| | All Employers | Fewer than 10 Employees | 10-24 Employees | 25-49 Employees | 50-99 Employees | 100-249 Employees | 250+ Employees |
|---|---|---|---|---|---|---|---|
| Offer Insurance | 0.725 | 0.366 | 0.686 | 0.817 | 0.886 | 0.918 | 0.961 |
| Family Cover Offered | 0.912 | 0.822 | 0.877 | 0.898 | 0.909 | 0.942 | 0.960 |
| Covered by Insurance | 0.569 | 0.274 | 0.492 | 0.585 | 0.683 | 0.727 | 0.828 |
| Takeup Rate | 0.785 | 0.749 | 0.717 | 0.716 | 0.771 | 0.792 | 0.862 |
| Why No Insurance? | | | | | | | |
| Ineligible | 0.411 | 0.333 | 0.398 | 0.410 | 0.434 | 0.415 | 0.469 |
| Other Coverage | 0.413 | 0.469 | 0.411 | 0.388 | 0.407 | 0.407 | 0.397 |
| Firm Offers Insurance | | | | | | | |
| Weekly Earnings | 526.9 | 470.8 | 471.4 | 474.2 | 513.1 | 511.3 | 604.8 |
| Firm Offers Pension | 0.755 | 0.502 | 0.588 | 0.686 | 0.781 | 0.834 | 0.918 |
| Firm Offers ST Disability | 0.711 | 0.555 | 0.629 | 0.675 | 0.713 | 0.736 | 0.819 |
| Firm Offers LT Disability | 0.490 | 0.380 | 0.383 | 0.420 | 0.481 | 0.515 | 0.606 |
| Firm Doesn't Offer Insurance | | | | | | | |
| Weekly Earnings | 262.9 | 265.2 | 252.6 | 249.5 | 278.5 | 248.9 | 309.9 |
| Firm Offers Pension | 0.089 | 0.046 | 0.080 | 0.141 | 0.241 | 0.290 | 0.405 |
| Firm Offers ST Disability | 0.106 | 0.128 | 0.128 | 0.118 | 0.184 | 0.142 | 0.238 |
| Firm Offers LT Disability | 0.062 | 0.048 | 0.048 | 0.077 | 0.081 | 0.077 | 0.141 |

Characteristics of EPHI [Gruber "Health Insurance and Labor Markets," *Handbook of Health Economics.*]

- Coverage decreases with firm size (no firm size takeup variation)
- Reasons cited for no insurance:
  - Large firms: **Ineligible** (Pre-existing condition, waiting period)
  - Small firms: **Covered elsewhere** (Family?)

*Note:* "Pre-existing" Condition—means plan will not cover costs of illnesses existing before enrollment during a waiting period (or never!)

**<u>Theory of Mobility:</u>**

*Simple Compensating wage differentials model*

*Assume:*

- HI is a 0/1 dummy for "covered" or "not covered"
- Homogeneous HI plan available everywhere
- Perfect experience rating → can perfectly price discriminate at worker level
- Utility of job j for individual i depends on wages and HI: $u_{ij} = u(w_{ij}, H_{ij})$
- Continuum of jobs, supplied/demanded under completive conditions
- HI costs for each person constant across firms: $C_{ij} = C_i$ for all j

*Workers:*

- Suppose the worker considers some reduction in wages ($\Delta w_{ij}$) in return for obtaining the homogeneous HI.
- They will desire HI if compensating wage differential is not "too big"
- Will choose lower wage and health insurance over higher wage and no HI if utility is higher: $u(w_{ij} - \Delta w_{ij}, 1) - u(w_{ij}, 0) > 0$
- Define this difference as $V_{ij}$

*Firms:*

- Firm j will offer HI to worker i if $\Delta w_{ij} > C_i$
- Competition will bid down wage until $\Delta w_{ij} = C_i$

This implies that $w_{ij} - \Delta w_{ij} = w_{ij} - C_i$

| |
|---|
| Therefore the wage falls by the full cost of the insurance. |

*Impact of HI on Labor Market in Simple Model:*

- Workers who value insurance at $\geq C_i$ will choose HI and get lower wages (incurring 100% of cost)
- If worker has $V_{ij} > 0$ (valuation of HI above cost) then the worker receives economics rents
- No allocative inefficiency as workers find best job match regardless of HI

*How does our economy differ from this simple model:*

1. Employers cannot set employee specific compensation packages
   Must offer HI to all workers or none at all
   Administrative costs absorb rents
2. Costs of insurance varies across firms → $C_{ij} \neq C_i \forall j$

*Implications:*

- Matching → workers who value HI will select into firms that offer HI
- Firms who can provide HI cheaply will do so
- Workers will work at firm if $V_{ij} > 0$
- Firms will offer HI if $C_j < \Delta w$

**<u>Job Lock</u>** *Does the model explain job lock?*

- Suppose a worker is at job 0 (with $w_{i0}$) and would be more productive at job 1 (where $w_{i1} > w_{i0}$)
- But further suppose that the HI costs are higher at firm 1 ($C_1 > C_0$)
  - Perhaps due to a worse experience rating
- *Result:* Firm 1 decides not to offer HI ($C_1$ too high). Firm 1 knows it could attract worker i to firm if it could offer HI, but it would have to offer HI to all workers (legally) and that would be too expensive.
- Therefore, the worker's choice to stay in the job:
  - IF $u(w_{i0} - \Delta w, 1) - u(w_{i1}, 0) > 0$ then the worker will stay in job 0.
- **Inefficiency** →they would be more productive if they move but they do not.

[Firm 0 could extract rent knowing that worker i "locked in." But can they discriminate in this way? (not likely) ]

This result is not unique to HI. It is generally true if:

- Workers have different valuations of employer benefits
- There are differential costs of provision across employers
- There is an inability to set worker-specific compensation packages

*Other examples in HI:*

- Non homogenous HI (range of quality in plans)
- Locked out of retirement. If $MU_{leisure} > MP_{labor}$ worker should retire but may be locked in due to reliance on EPHI

## Health Insurance and Mobility: Empirical Evidence

*Job to Job Mobility:*

- 20 million Americans change jobs each year
- 12 million leave jobs with EPHI
  These 12 million people have 7 million dependents
- Potentially millions more who don't leave for fear of losing health insurance or facing limitations on coverage at new jobs
  67% of EPHI plans have "pre-existing" condition clauses
  Waiting periods for these conditions can be from 6 months – 2 yrs)
- **What is the impact of health insurance on mobility decisions?**

*"Job Lock:" Anecdotal Evidence*

--Surveys suggest that 11-30% of individuals report that they or a family member remained in a job because they didn't want to lose health insurance

--20% of those who reported being "locked" attribute it to pre-existing conditions

*Goal:* Can survey evidence be confirmed in a real context for mobility decisions?

*Empirical Issues:*

1. Compare mobility from jobs with vs. without HI

We would expect lower mobility from jobs with HI
**Problem:** Selection issues on both worker and firm side

*Worker:* Less healthy workers choose firms with HI
Health may be correlated with mobility
May overestimate mobility effects
*Firm:* Firms with HI not comparable to those without

Fact: Workers in firms with HI have much higher earnings and much higher pension benefits.

*"Good Jobs vs. Bad Jobs"*
Difficult to disentangle other impacts on mobility that are correlated with HI (may be individual or family characteristics)

2. Group Comparison Approach (1990s literature)

--Find two groups for whom job lock should operate more strongly for one than the other
--Look at effects of EPHI on mobility across these 2 groups

*Difference in Difference:*

| | **EPHI?** | |
|---|---|---|
| | No | Yes |
| **Value of HI** | | |
| High | $M_{00}$ | $M_{01}$ |
| Low | $M_{10}$ | $M_{11}$ |

Expect $M_{11} - M_{01} > 0$: mobility of those with low valuation of HI should be higher than those with high valuation of HI

But, $M_{10} - M_{00}$ will capture the difference in mobility rates that exist for across those with high vs low valuation of HI.

*D in D:* $\left(M_{11} - M_{01}\right) - (M_{10} - M_{00})$

**Employment Based Health Insurance and Job Mobility: Is there Evidence of Job Lock? (Madrian, QJE)**

*Note:* Most prominent example of this approach

*Reasons for Job Lock:*

1. Pre-existing conditions (6 months – 2 years waiting list)
2. Length of service requirements for eligibility for benefit
3. Discrimination in hiring of those employees with high perceived costs particularly in small firms)

*Offsetting Factors:*

1. COBRA legislation
2. Employer must pay 100% of employee's premium for 18 months

*Approach:* Compare high/low risk groups

Compare those with/without employer provided HI

Difference in Difference

*Problem:* Risk not always observed

Data from labor market surveys has mobility info, but not HI info

Data from medical surveys has HI info, but not mobility

**Alternative Definition of Risk:**

With vs. without alternative HI (spouse)

Those w/ insurance **less** impacted

With vs. without high expected medical costs given family size

Small families **less** impacted

With vs. without high expected medical costs after pregnancy

Those expecting children **more** impacted

*Empirical Implementation:*

**Probit** specification:

$$\Pr(jobchange) = \Phi(\beta_0 + \beta_1 * HI + \beta_2 * HighRisk + \beta_3 * HI * HighRisk + z'\gamma)$$

with the accompanying test for job lock being $\hat{\beta}_3 > 0$

*Data:*

1987 NMES

- Observed at 2 points in time (7-15 months apart)
- Know if at same job from beginning to end
- 14,000 Households
- Sample: Married, employed men ages 20-55 (2978 individuals)
- Change = 1 if leave job voluntarily (whether employed or not)

*Results:*

1. With vs. without alternate HI (**Table 3**)

   *D in D:* Those with EPHI 30% less likely to move if they didn't have any other HI than those with other HI

2. Large vs. Small Families

   Similar Results

3. Pregnant vs. not pregnant

   Higher impact for pregnant women

*Problems:*

Identification assumption is that **treated** (with EPHI and with high expected costs) have a shock that makes them less likely to move

Having EPHI ~= good, high paying job

Having high expected costs ~= having a large family or
Not having other insurance (spouse with good job)
Pregnant Wife

So the results could be impacted with having a spouse with a good job has independent effects

Other Studies have used alternate data compared to Madrian and similar approaches with varying conclusions.

*Issue:* Job Lock vs. Job push

Job push refers to those workers who leave jobs without HI

*Criticisms:*

1. <u>Having a spouse working with HI and the propensity for having alternate forms of HI are **not** exogenously assigned</u>

   Labor supply of husband and wife is jointly determined
   Husbands with working wives and spousal HI may differ in other ways

   Other studies have used similar approach but adding more detail on other attributes (results not very different)

2. <u>Variation in availability of Government mandated continuation of coverage</u>

   COBRA
   Get to continue to have firm coverage once you leave firm for 18 months
   You have to pay the price (group rate) so not totally free
   Federal Law 1986
   Gruber (AER) uses same estimation strategy

## Theory: Health Insurance and Labor Market Equilibrium

We already discussed tax-benefit linkage and implications for impacts on wages and employment (*Summers, AER 1989)*

**Incidence of Mandated Benefits, Summers, *AER* 1989**

Examines impact of government mandate on wages and employment.

<u>Setup:</u>

Government decides that universal access to this good/service (e.g. health insurance, workers compensation) is desirable.

What are options:

- o government provision
- o employer mandate

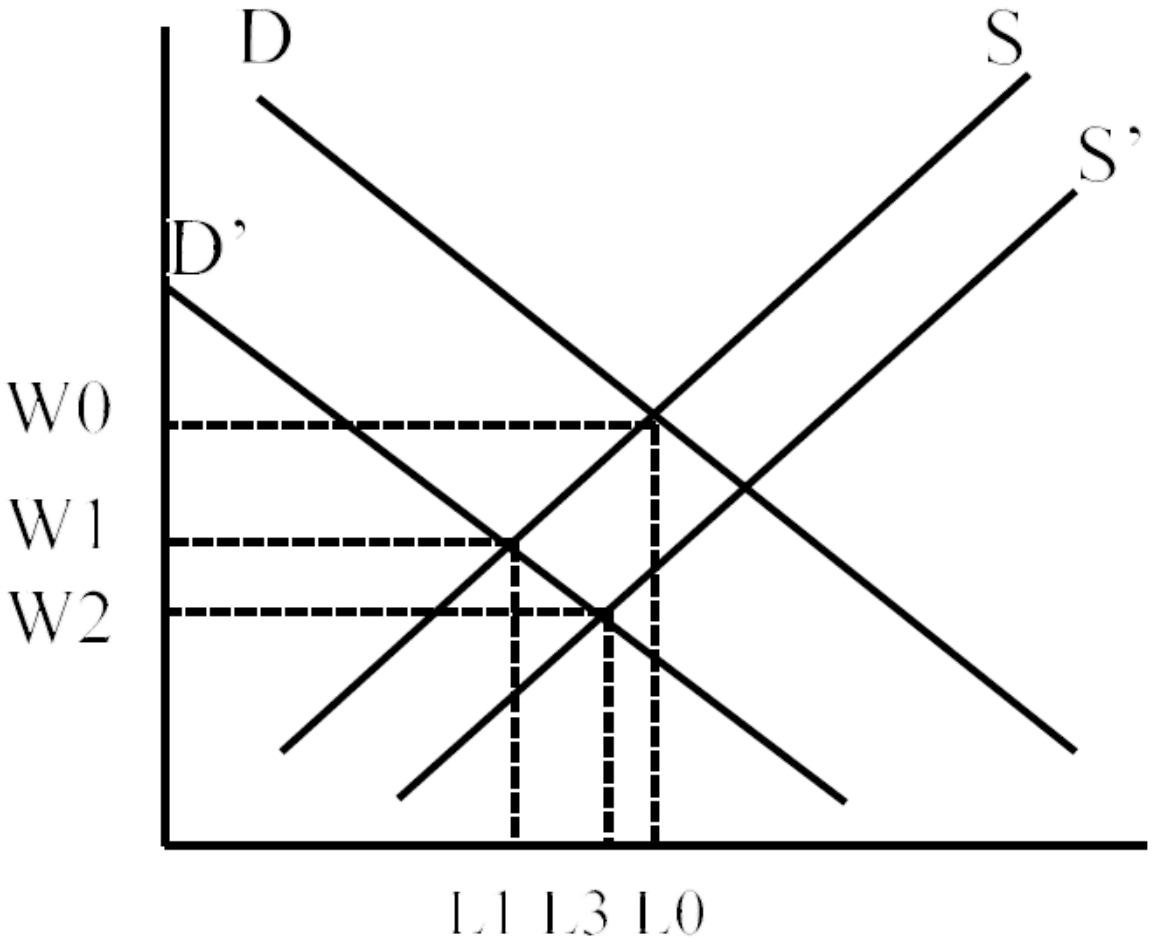
*Question posed by Summers:*

Are the efficiency reasons to prefer a mandate vs public provision? Are there distributional consequences?

*Conventional wisdom prior to this:*

Both are like taxes so for efficiency reasons the only thing that matters is efficiency in providing the service. (For government provision, revenue must be raised leading to a DWL from the tax.)

Suppose: Employer required to provide some benefit; statutory incidence on employer (tax or mandated insurance)




Before mandate: L0, W0

Introduce mandate:
Shift left in demand (D')
by the cost of benefit [C]
Result: lower wage and employment level
–> W1, L1

Summers' insight: IF workers value this benefit then a job at a given wage becomes more desirable. This leads to a shift out in supply by the worker valuation of the benefit = $\alpha C$ where $\alpha$ is the valuation by the worker.

Result: Further reduction in wages, some offset of the decrease in L.

<u>Case 1:</u> Employee values benefit at cost ($\alpha=1$)
W falls to bear the full cost
No change in employment
Full cost shifting

<u>Case 2:</u> Employee values benefit at less than cost ($\alpha<1$)
Wages fall but by less than the benefit
employment falls
Lower DWL compared to pure tax

<u>Tax-Benefit Linkage:</u>
Key is if they value the benefit then not a pure tax. And the shifting out of S can reduce the decrease in L. If workers value the insurance at greater than cost (i.e. they are risk averse) L may actually increase

Why is there no tax-benefit linkage for government provision?
-- people paying taxes and people getting benefits are different; no linkage
-- harder for government to tailor plans to meet diverse preferences

Overall predictions of employer mandate:
Increase in benefits lead to an unambiguous decrease in W, while the impact on L is ambiguous

Tax-Benefit Linkage:
Key is if they value the benefit then not a pure tax. And the shifting out of S can reduce the decrease in L.

# The Incidence of Mandated Maternity Benefits (Gruber AER 1994)

*Background:* Mandating benefits provided by employer

*Efficiency Argument*:

- Government provision requires raising tax revenue, and such taxes create a distortionary efficiency loss.
- With employer mandates, wages may adjust to the costs of the mandate, but if employees value the benefit the efficiency loss is somewhat mitigated

*Note:*

- Key to reducing DWL from the mandate is wage adjustment. Wage adjustment requires (1) full valuation of benefits, and (2) no wage rigidities.
- In Gruber's case we may have wage rigidities because the mandate is group-specific (women) and anti-discrimination laws may limit wage adjustment
- Illustrates more general point that mandates that are group specific may not have efficiency gains as advanced in Summers.
- Also, for women with wages near minimum there is no scope for adjustment

Contribution of paper: 1st empirical investigation of Summer's hypothesis.

***Policy Changes:***

- Pre-1975
  - Coverage for pregnancy was not universal (either not covered or limited)
  - 50-75% of women had pregnancy benefits that were less comprehensive than benefits for other conditions
- 1975-1979
  - 23 states passed laws outlawing treating pregnancy differently from other insured diseases/conditions
- October 1978 – "Pregnancy Discrimination Act"
  - Prohibited differential treatment of pregnancy in employer HI plans

*Goal:* Measure the effects of mandated benefits on wages for the group

*Outcomes:* Wages, hours worked, Labor force participation

*Advantages:*
Easily identified beneficiaries of law (women of childbearing age and their husbands)
Potentially large benefit (2-5% of weekly earnings)

*Research Design:*

1. Analyze 1975-1978 period with state law changes
   Compare states with and without mandated maternity benefit laws
   Difference in Difference
   Difference in Difference in Difference (Affected vs. unaffected workers)

[What does empirical model look like then?]

**2.** Reduced form model using predicted costs of benefits

*Use second data set to predict expected mandate cost as function of:*

Age specific cost of maternity coverage

Probability they have insurance

Type of insurance

3. Analyze 1978 Federal Law (*Caveat:* Federal law more comprehensive)
   **Treated States –** States without law yet
   **Control States –** States already having law
   DD and DDD as in (1)

[Like abortion literature: experiment and reverse experiment]

Estimating costs of providing benefits:
(Necessary to "measure" whether full adjustment)

-- obtained premium calculator from insurance company
-- input demographic characteristics
-- can observe impact of adding maternity coverage

TABLE 1—THE COST OF ADDING MATERNITY BENEFITS TO A HEALTH INSURANCE PACKAGE

| Coverage | Demographic group | Annual cost (1990 dollars) | Annual cost (1978 dollars) | Cost as percentage of 1978 weekly earnings |
|---|---|---|---|---|
| Family | 20–29-year-old females | $984 | $360 | 4.6 |
| Family | 30–39-year-old females | $756 | $277 | 3.5 |
| Individual | 20–29-year-old females | $324 | $119 | 1.5 |
| Individual | 30–39-year-old females | $252 | $92 | 0.9 |
| Family | 20–29-year-old males | $984 | $360 | 2.9 |
| Family | 30–39-year-old males | $756 | $277 | 1.7 |

Range of 1-5% of wages

*(Seems to be consistent with back of the envelope calculation of cost of childbirth * probability of giving birth in a given year.)*

*Data:*
CPS:1978, 1979 – Before Federal law
1981, 1982 – After Federal law

1974, 1975 – Before widespread state law adoption
1977, 1978 – After widespread state law adoption

*Treated:* Married women ages 20-40, married men 20-40, single women 20-40
*Control:* Men, Women > 40, single men 20-40

Key:
Are these a good control group?
Do these demographic groups have similar trends?
Identification comes from differential trends by demographic group within states.
[Look back at Table 1 to see premium costs for controls vs treatments]

Experimental States:

- 3 of the 23 states that passed mandates (IL, NJ, NY)
- Identifiable in CPS; passage enough before federal law to see impacts; passed in same time period

Control States:

Results:

*(1) Benefit implementation across states (DD and DDD)*

Pre federal mandate

Table 3:
Unconditional DDD, 5.4% fall in wages for married women

Table 4:
Conditional DDD (educ, exp, sex, marital stat, nonwhite. union, industry, occupation)

TABLE 3—DDD ESTIMATES OF THE IMPACT OF STATE MANDATES ON HOURLY WAGES

| Location/year | Before law change | After law change | Time difference for location |
|---|---|---|---|
| A. *Treatment Individuals: Married Women, 20–40 Years Old:* | | | |
| Experimental states | 1.547<br>(0.012)<br>[1,400] | 1.513<br>(0.012)<br>[1,496] | −0.034<br>(0.017) |
| Nonexperimental states | 1.369<br>(0.010)<br>[1,480] | 1.397<br>(0.010)<br>[1,640] | 0.028<br>(0.014) |
| Location difference at a point in time: | 0.178<br>(0.016) | 0.116<br>(0.015) | |
| Difference-in-difference: | −0.062<br>(0.022) | | |
| B. *Control Group: Over 40 and Single Males 20–40:* | | | |
| Experimental states | 1.759<br>(0.007)<br>[5,624] | 1.748<br>(0.007)<br>[5,407] | −0.011<br>(0.010) |
| Nonexperimental states | 1.630<br>(0.007)<br>[4,959] | 1.627<br>(0.007)<br>[4,928] | −0.003<br>(0.010) |
| Location difference at a point in time: | 0.129<br>(0.010) | 0.121<br>(0.010) | |
| Difference-in-difference: | −0.008:<br>(0.014) | | |
| **DDD:** | **−0.054**<br>**(0.026)** | | |

Treatment effect is 5.4% fall in relative wages of 20-40 yr old women. Seems large relative to results in Table 1 and taking into account that not all women have insurance.

DDD across treatment groups:

TABLE 4—TREATMENT-DUMMY RESULTS ACROSS DEMOGRAPHIC GROUPS

| Group | Log hourly wage | Log hours/week | Employment (probit) | Percentage changes in labor input |
|---|---|---|---|---|
| Married women, ages 20–40 | −0.043<br>(0.023) | 0.049<br>(0.022) | −0.047<br>(0.048)<br>[−0.016] | 1.40 |
| Single women, ages 20–40 | −0.042<br>(0.026) | −0.014<br>(0.024) | −0.095<br>(0.064)<br>[−0.030] | −5.95 |
| Married men, ages 20–40 | −0.009<br>(0.018) | 0.030<br>(0.015) | −0.139<br>(0.072)<br>[−0.038] | −1.08 |
| All treatments | −0.023<br>(0.015) | 0.027<br>(0.014) | −0.079<br>(0.039)<br>[−0.024] | −0.88 |

→ PT ↓, FT ↑

What does this imply?

- Full valuation says wages should fall by cost, with no accompanying change in labor supply
- Composition of labor input may change (fixed costs of work argument)

$$
\begin{aligned}
(1) \quad W_{ijt} = {} & \alpha + \beta_1 X_{ijt} + \beta_2 \tau_t + \beta_3 \delta_j \\
& + \beta_4 \mathrm{TREAT}_i + \beta_5 (\delta_j \times \tau_t) \\
& + \beta_6 (\tau_t \times \mathrm{TREAT}_i) \\
& + \beta_7 (\delta_j \times \mathrm{TREAT}_i) \\
& + \beta_8 (\delta_j \times \tau_t \times \mathrm{TREAT}_i).
\end{aligned}
$$

*(2) Reduced form model with predicted benefits*

Predicted Cost (expressed per week) =
Pr(Empl based insurance coverage)*Pr(Family Coverage)*Age-specific cost of law change

Data:
May CPS (benefits supplement)
NMCES (medical care survey)
Private insurance data

I am not really clear on the specification of the empirical model: controls, etc. I think that it replaces TREAT in original model with the predicted costs. Poorly written up.

Again, a $\beta = -1$ in the wage equation implies **full cost shifting**

Advantages: individual rather than group level variation
Disadvantages: parametric, valid model?

TABLE 5—WAGES AND LABOR INPUT RESULTS—PARAMETRIZED COST OF THE MANDATE

| Coefficient | Specification (i) Log wage | (ii) Log wage (no hours) | (iii) Log wage (full-time) | (iv) Log hours/week | (v) Employment (probit) |
|---|---|---|---|---|---|
| $\beta_8$ | −2.140 (0.759) | −0.028 (0.019) | −0.037 (0.019) | 0.0049 (0.0031) | −0.027 (0.011) [−0.022] |
| Shifting (percentage): | 214 | 109 | 156 | | |
| $N$: | 41,367 | 41,367 | 35,868 | 41,367 | 84,305 |

*Results:*
$\beta = -2.1$ *(210% cost shifting)*
Hours worked increases
Probability of being employed falls

*Problem:* When costs are not normalized by hours worked, the cost shifting falls. This implies that the wages of low hours workers were responding more—which is not likely since they have low rates of health insurance.

## *(3) DDD using Federal Experiment*

TABLE 6—FURTHER RESULTS—FEDERAL EXPERIMENT

| Demographic group/treatment | Specification (i) Log wage | (ii) Log wage (no hours) | (iii) Log wage (full-time) | (iv) Log hours/week | (v) Employment (probit) | (vi) Change in total labor input |
|---|---|---|---|---|---|---|
| Married women, ages 20–40 | −0.021<br>(0.012) | | | 0.0012<br>(0.0098) | −0.018<br>(0.028)<br>[−0.0055] | −0.0071 |
| Single women, ages 20–40 | −0.014<br>(0.014) | | | 0.0157<br>(0.0101) | 0.0184<br>(0.0374)<br>[0.0050] | 0.0219 |
| Married men, ages 20–40 | −0.008<br>(0.0012) | | | −0.0008<br>(0.0073) | 0.0020<br>(0.0046)<br>[0.0005] | −0.0003 |
| All treatments | −0.0014<br>(0.0009) | | | 0.0032<br>(0.0064) | 0.0001<br>(0.0233)<br>[0.00004] | 0.0033 |
| Individual parameterization | −0.587<br>(0.412) | −0.023<br>(0.010) | −0.017<br>(0.010) | −0.0002<br>(0.0015) | 0.0007<br>(0.0068)<br>[0.00005] | −0.0005 |
| Shifting (percentage): | 59 | 90 | 75 | | | |

Evidence of cost shifting to wages, but at levels only at 50% of earlier levels

Caveat:
-- federal law more expansive; control states are partially treated
→ expect smaller impacts

Overall: 100% cost shifting onto lower wages. Much smaller declines in labor input, consistent with cost shifting model.

Comments:

-- DD methods now easily handle treatments happening across states at different time (e.g. welfare reform). No need to limit to 3 states

-- Seems like they “hand picked” the control states which is a little suspect

-- Need to present graphs that illustrate DD findings

-- limit to FT workers since PT workers often do not have insurance?