

Employer mandates and health insurance reform

Health Economics
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Introduction

- Tax code encourages firms to provide health insurance to workers
- Therefore, employers are the primary source of health insurance for the non-elderly, non-indigent
- Also the primary reason for such a high uninsurance rate
- Reform proposals tend to be centered around expanding insurance through employers

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Tradeoffs

- The government sometimes mandates employers provide a particular benefit
- Sometimes the government taxes the firm and then provides the benefit to all
- When is one more preferred than another? Do we get less distortions from one program than another?

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Language

- Legislation tends to suggest that firms are the ones paying for the mandate
 - Firms need to pay their “fair share”
- Ex: MA enacted “pay or play” in 2006. that portion of act was called “Fair Share Contribution.”
- Important question is one of incidence – who pays for the mandate?

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Current context

- Should the government
 - Mandate firms provide health insurance
 - Tie the benefit to employment
 - only benefit those that work
 - Should it tax current workers and provide the benefit directly to all
- Similar but distinct distortions in both cases

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Examples

- Many examples of government mandates – firms required to provide some benefit to workers – a benefit tied to employment
- Three key examples
 - Unemployment insurance
 - Workers compensation
 - Social security

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Example: Unemployment insurance

- All states required to pay for unemployment insurance (UI) for workers
- Workers receive UI if they are fired/laid off
- Do not receive benefits if they quit
- Premium is a function of
 - Earnings
 - benefit level
 - firm's previous history of job turnover

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- Premiums are collected from firms
- Benefits are provided by state UI programs
- Program taxes firms, then provides workers with a benefit

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Raise taxes to pay for some Government-provided benefit

- Suppose that the govt. will provide some benefit TO ALL – not just to workers
- Benefit is not contingent on employment
- The funds for this program must come from somewhere

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- For simplicity, let's assume it will come from a payroll tax collected from firms
 - Fixed costs per hour of employment
 - Increase in the hourly costs of labor
- Example: Medicare primarily financed by payroll tax, available to all aged 65 and above

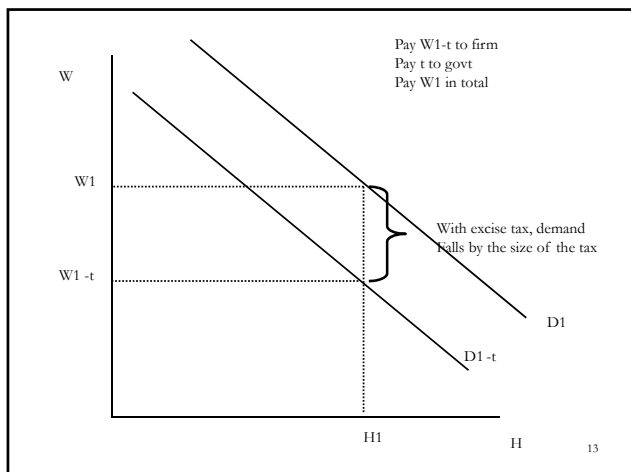
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- D1 is the original demand for labor before the payroll tax
 - At W_1 firms willing to hire H_1 hours
- Remember, Y axis is the wage transacted between firms and employees
- Impose a payroll tax of $\$t/\text{hour}$
- For every hour hired
 - Firms pays wage to worker
 - Additional $\$t$ to government

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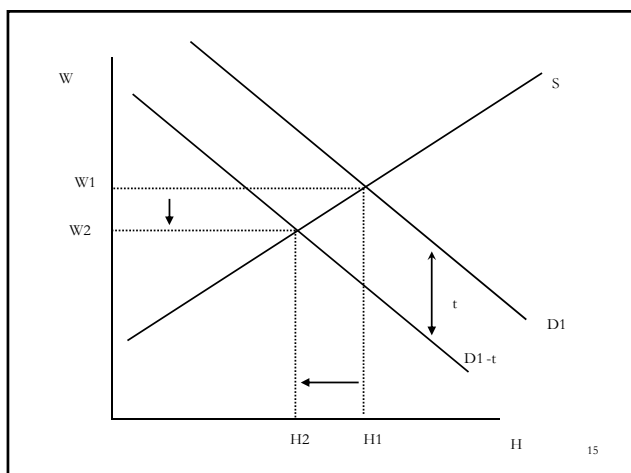
- Under the payroll tax, how much are firms willing to hire?
- To hire H_1 hours, wage must fall to $W_1 - t$
 - Firms is only willing to pay a total of W_1 per hour if it hires H_1 workers
 - Firms pays $W_1 - t$ to workers
 - Addition t to the govt.
 - Total of W_1
- Payroll tax shifts down the demand for labor by amount equal to the tax

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- Market equilibrium before tax
 - $W1, H1$
- Payroll tax shifts down the demand for labor by an amount equal to the tax
- Market clearing wage falls to $W2$, employment falls to $H2$
- The payroll tax to fund health insurance has distorted the labor market

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Tax incidence – who pays for the tax?

- Notice two things
 - Wage received by workers has fallen from $W1$ to $W2$. Workers are paying for the coverage in the form of lower wages
 - Wage paid by the firm has increased
 - Wage transacted between firm/worker fallen from $W1$ to $W2$
 - Total compensation is $W2 + t$, so, cost has increased from $W1$ to $W2+t$

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- Old friend dead weight loss has appeared again
- Because labor demand had declined, consumer's surplus has shrunk
 - Old CS = Area above line W_1d and below demand
 - New CS = Area above line W_2a and below demand

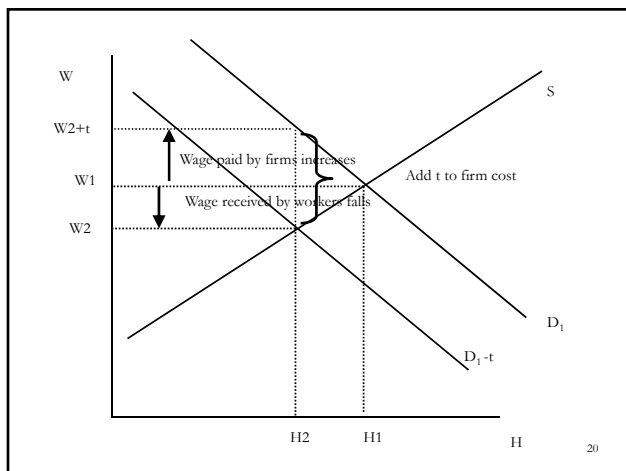
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- Because supply has fallen, there is a change in producers surplus
 - Old PS = area below line W_1d and above supply
 - New PS = area below W_2C and above supply
- Total surplus has fallen by
 - Area $facdg$

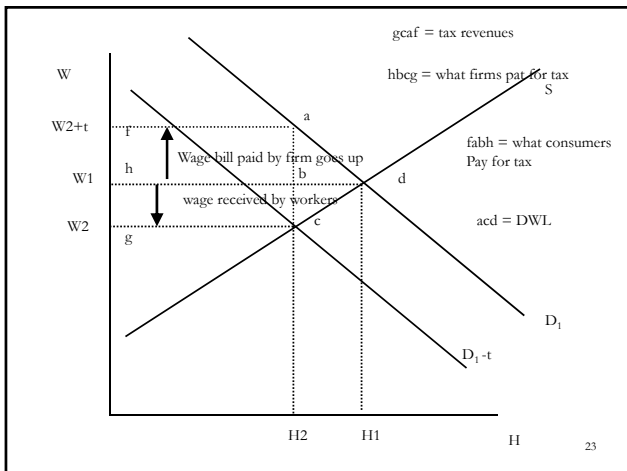
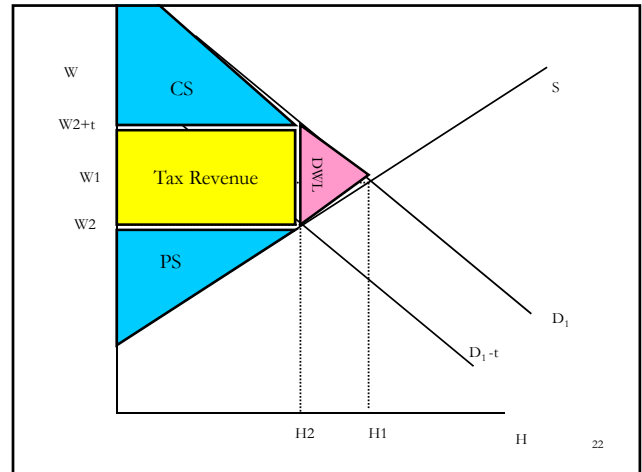
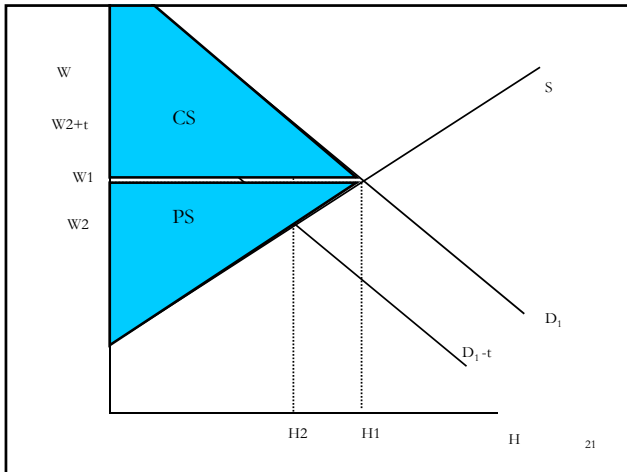
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- Some of that area is captured by the government in the form of taxes
- $H2(t) = \text{area } (facg)$
- Firms pay area $(fabh)$
- Workers pay area $(hbcg)$
- An area is lost (adg) -- dead weight loss of taxation

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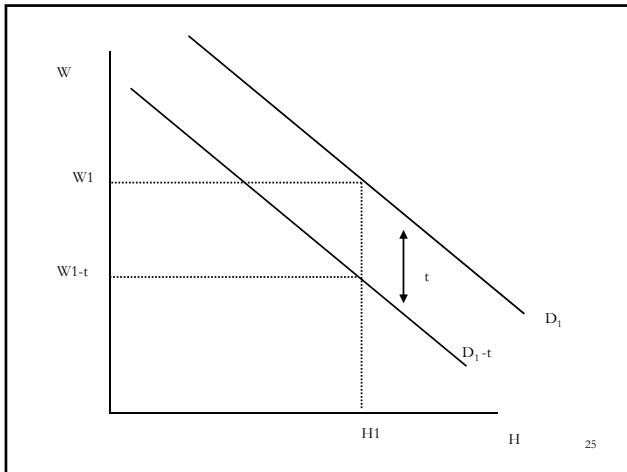


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Employer mandate

- Employers must provide health insurance to workers
- Suppose that the cost of the program is $\$t$ per hour to the firm
- The mandate has the same impact as a per unit payroll tax
 - To hire H_1 hours, firm is willing to pay W_1
 - With a tax, the only way they would hire H_1 is if wages fell to W_1-t



What might that tax be?

- Example: cost of health insurance
- Average workers works 2000 hours/year
 - 50 weeks, 40 hours/week
- Assume health insurance costs \$5000/person per year and people work 2000 hours/year
- Roughly \$2.5/hour of work

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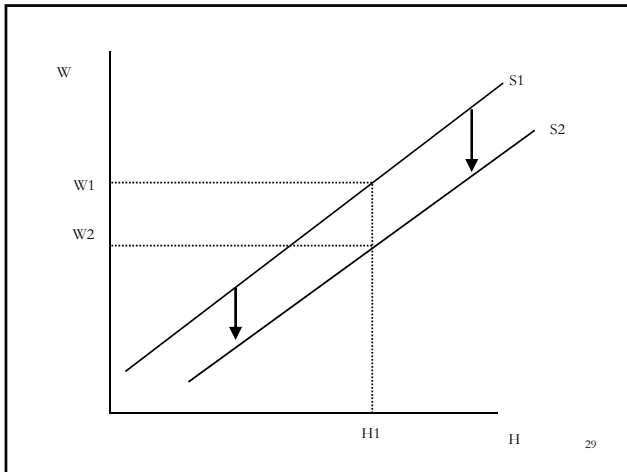
What about labor supply?

- Height of supply curve represents what people would supply to labor market at prevailing wage
- Position of labor supply curve is a function of job attributes
 - When the job ‘improves’, people willing to supply more at any prevailing wage
 - As quality of job declines, they supply less

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- Original supply curve is S_1
 - At wage W_1 , workers willing to supply H_1
- With employer mandate, firms now provide health insurance
- Workers value the insurance, so at any hours, they are willing to take less in wages for the same job
- supply curve shifts down by a distance equal to the benefit ($S_1 + V$)

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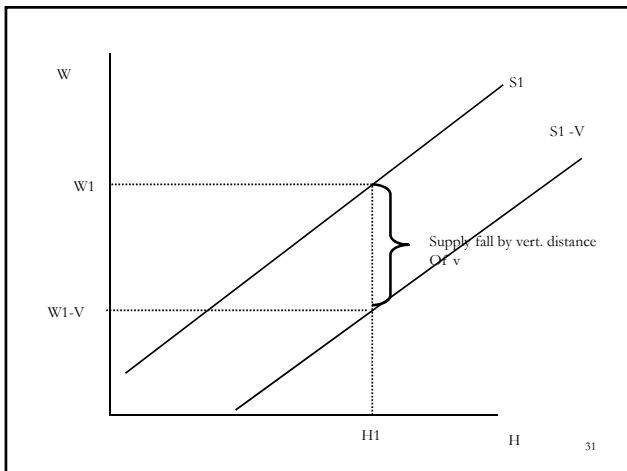


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Put some more structure

- Monetize the benefits that workers place on the new mandate
- Workers value at an amount equal to $\$V$ per hour
- Supply curve shifts down by an amount just equal to the value
 - Before mandate: willing to supply $H1$ at $W1$
 - After: willing to supply $H1$ at $W1-V$
 - Receive $W1-v$ from job
 - Receive V from new mandated benefit or $W1$ in total

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Three cases

- Case 1: $V=0$
 - workers do not value mandate at all
- Case 2: $V < T$
 - Workers value the mandate less than they pay in taxes
- Case 3: $V = T$
 - Workers value the mandate at what it costs them in taxes

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What we are going to do

- Consider what is more efficient: govt mandate firms provide or govt tax and then provide
- E1 is initial equilibrium
- E2 is equilibrium under govt tax/provision
- E3 is equilibrium under employer mandate

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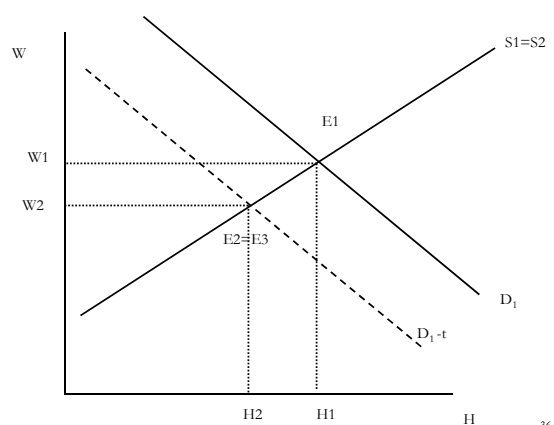
Case 1

- Labor demand
 - Under tax will shift down by the amount of the tax
 - Under mandate, will shift down by the amount of the implicit tax
- Labor supply:
 - Will not change in either situation because workers do not value E1 original equilibrium

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- What would be the equilibrium if the govt taxed firms and directly provided the benefit?
- Would be the same – firm has an increased cost of employment, labor supply stays the same
- In this case, govt mandate and govt provision is the same

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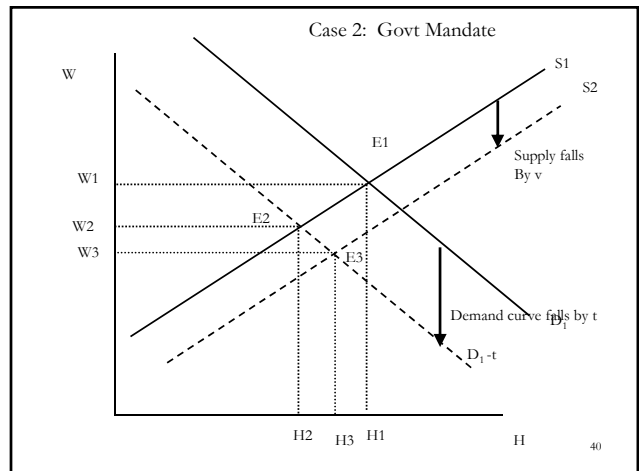
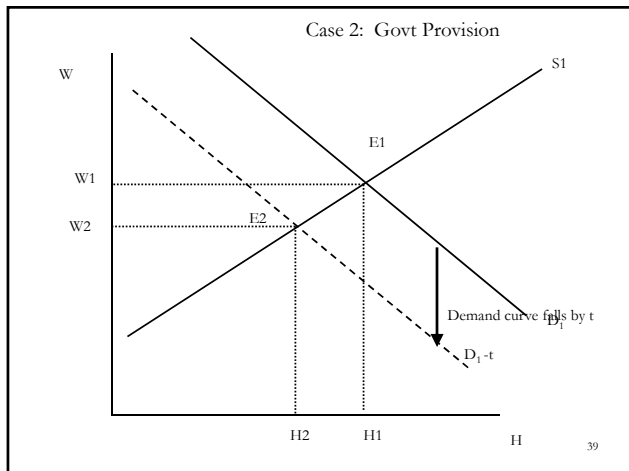
Case 2: $V < t$

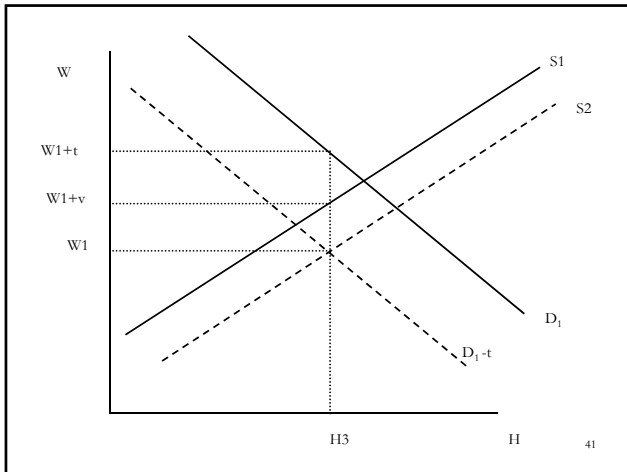
- Demand curve falls by t
- Supply curve falls by v

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- Without mandates, Equilibrium $E1$. $H1$ hours, workers required $W1$ in wage.
- With mandates, equilibrium $E3$. Quality of the job improves, so supply curve falls, new hours/wages are $H3/W3$
- What is the equilibrium if the govt taxes and provides the benefits directly? $E2$
- Govt mandates look superior in this case

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Case 2: Govt mandate

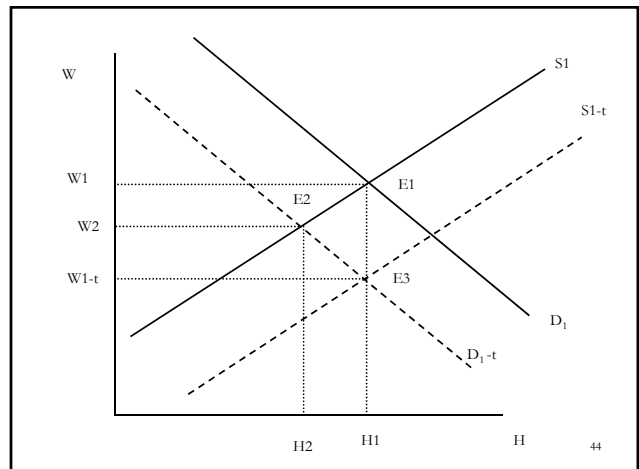
- **Workers**
 - Get hourly wage of W_1
 - Receive benefit of v
 - Get job worth $W_1 + v$ per hour
- **Firms**
 - Pay hourly wage of W_1
 - Pay tax of t per hour
 - Have hourly costs of $W_1 + t$

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Case 3: $V=t$

- Demand curve shifts down by t
- Supply curve shifts down by v

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- Workers
 - Receive $W_1 - t$ in an hourly wage
 - Receive t in benefits
 - Receive $W_1 - t + t = W_1$ in hourly benefits
- Firms
 - Pay $W_1 - t$ in hourly wage
 - Pay t in benefits
 - Pay W_1 in total compensation per hour

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When workers value the benefit

- Mandates are superior to govt tax/provision
- Why: when tie benefits to the job, the labor market distortions of govt tax/provision are reduced/eliminated because of a supply response
- Key result: if workers value benefits – they pay for the mandated benefits in the form of lower wages --

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Example

- Supply: $W_s = 40 + (1/3)L$
- Demand: $W_d = 190 - (2/3)L$
- W is daily wage, L is number of workers willing to work a full day
- Market equilibrium:
 - $W_s = W_d$
 - $40 + (1/3)L = 190 - (2/3)L$
 - $150 = L$
 - $W = 40 + (1/3)(150) = 90$

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- Case 1: Suppose a mandates increases costs by \$30/day. Workers do not value the benefit. What is the market outcome?
- Demand for workers will fall by a vertical distance of the tax or \$30
- Nothing will happen to supply
- $W_d - t = 190 - (2/3)L - 30 = 160 - (2/3)L$
- $W_d - t = W_s$

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- $160 - (2/3)L = 40 + (1/3)L$
- $L = 120$,
- $W_s = 40 + (1/3)L = 50 + (1/3)120 = 80$
- L has fallen by 30 units
- Wage received by workers has fallen by \$10 (from \$90 to \$80)

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- Cost per day for firms hiring workers has increased by \$20
 - Old wage is \$90
 - New cost is \$80 wage + \$30 = \$110 cost per day in benefits

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Case 3

- Suppose workers value the benefit at \$30/day ($V=30$)
- Labor supply curve will shift down by an amount equal to the benefit
- $W_d - t$ is still $160 - (2/3)L$
- Supply is now $W_s - v = 40 + (1/3)L - \30
- $W_s - V = 10 + (1/3)L$

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- New market equilibrium
- $W_d - t = W_s - v$
- $160 - (2/3)L = 10 + (1/3)L$
- $L = 150$
- $W_d = 60$

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- Workers receive a job that is valued at \$90/day
 - \$60 in wages
 - \$30 in benefits
- Firms are paying \$90 per day in employment
 - \$60 in wages
 - \$30 in benefits

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Gruber

- Prior to 78, few plans covered childbirth
- 1975-79, 23 states passed laws mandating coverage for childbirth
- 1978 Pregnancy Discrim Act, prohibited any differential treatment of pregnancy in employment relationship
- State/Fed law increased cost of health insurance by expanding benefits

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- Research question: who pays for the additional benefit?
- Readily-identifiable beneficiaries:
 - Families w/ worker/spouse in childbearing age
- Easily identifiable group who receive no benefit
 - Single men
 - Older couples past childbearing age

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- Efficiency of group mandates assumes cost shifting via wage
- Some limits
 - Anti-discrimination laws
 - Min wage
 - Work practices (unions) that make pay uniform
- If you cannot shift costs, may change incentive to hire the group receiving the benefit

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Experimental Design

- Difference-in-difference-in-difference
- 1st difference in difference
 - Treatment states before and after intervention
 - Sample includes people likely impacted by the law (married women)
- 2nd difference in difference
 - Treatment states before and after intervention
 - Samples include people not likely impacted (single males and older women)

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Two potential experiments

- Experiment 1
 - Treatment: states that adopted laws
 - Control: those that did nothing
- Experiment 2:
 - Treatment: Federal law
 - Control: states that had a statute in place

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- Data: May CPS – used to identify insurance status (Now is done in March)
- Problem: Prior to 1978, not all states identified
 - some in state groups
- Three large states with laws: IL, NJ, NY
- All other states from same region that can be identified prior to 1978 are in control

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- Controls:
 - IL (OH and IN)
 - NY and NJ (MA, CT and NC)

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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

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DDD, Mean Log Hourly Wage

		Before	After	Δ
Treatment: Mar.	Reform	1.547	1.513	-0.034
Women 20–40	No ref.	1.369	1,397	0.028
			$\Delta\Delta$	-0.062
Control: older	Reform	1.759	1.748	-0.011
women and single	No ref.	1.630	1.627	-0.003
males			$\Delta\Delta$	-0.008
			$\Delta\Delta\Delta$	-0.054

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- Previous two slides
 - Maternity benefits are 4-5% of weekly wages for married women < 40
 - Wages of this group fell by 5-6%
- What does this imply about efficiency of labor market?

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Burkhauser/Simon

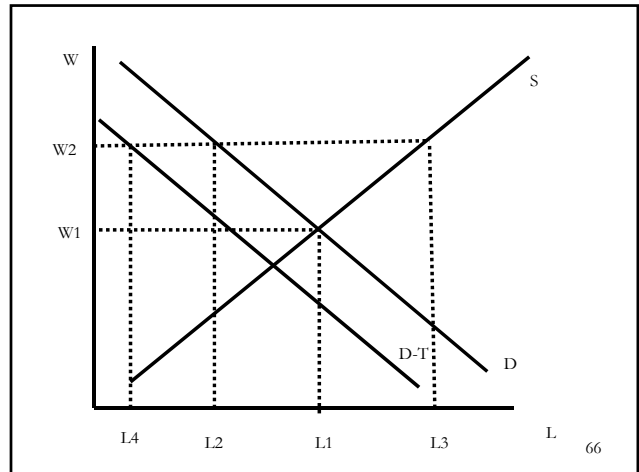
- Standard prediction: pay or play will reduce wages of newly insured
- Implicit tax on business of \$2-\$3/hour
- Problem: uninsured concentrated in low wage jobs and wages cannot fall below minimum level
- What will happen for these workers?

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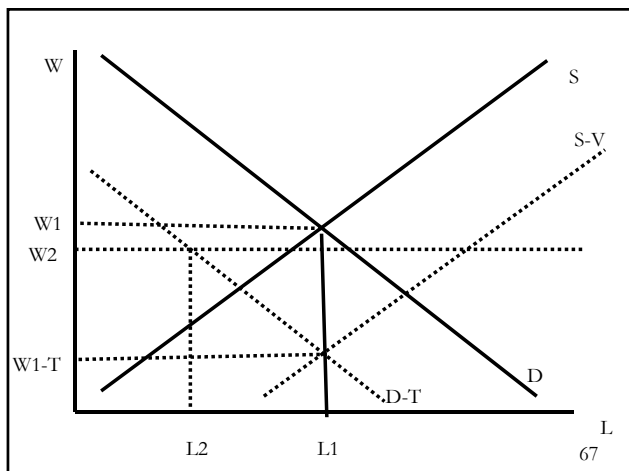
Current minimum wage

- Min wages set at the federal level
 - \$7.25 effective July 24, 2009
- States can raise but not lower
 - WA \$8.55
 - OR \$8.40
 - VT \$8.06
 - IL/DC \$8.25
 - CA \$8.00

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Wages	% of workers	% uninsured
\$0-\$4.99	1.86	4.15
\$5.0-\$7.24	8.58	19.62
\$7.25-\$10.24	19.61	36.49
\$10.25-\$14.99	25.50	24.04
\$15+	44.45	15.70
	100.00	100.00

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Firm size	% of workers	% uninsured
<25	24.9	43.19
25-99	14.94	16.16
100-499	15.36	11.84
500+	44.81	28.82
	100.00	100.00

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Two groups (25+ employee size)

- If wages are currently below \$7.25, pay-or-play, none of the mandate will be captured in the form of lower wages
- If wages are \$7.25 to \$10.25, some of the pay or play mandate cannot be captured in the form of lower wages (assume \$3.00/hour cost)

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Results

- 386K employees without insurance will lose their job as a result of pay or play initiative
- 363K workers employees with insurance from spouse but without EPHI will lose job
- 11 million will gain insurance, cost is roughly 750,000 greater unemployed (0.75 per pt rise in unemployment rate)
- What are the two key assumption?

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