

Name: Nabib Ahmed

Email: nahmed@college.harvard.edu

ECON1016 Midterm

1. The Mariel boatlift brought in many Cuban immigrants to Miami in 1980s which increased the labor force. The three papers we looked at were:
 - a) Card (1990): he found no evidence that Mariel Boatlift adversely affected any group in Miami in terms of wages and employment.
 - b) Borjas (2017): he found a clear drop in wages for high school drops (thus an adverse effect from immigration) (in contrast with Card)
 - c) Peri and Yasenov (2017): they found no adverse effect similar to Card, and argued that Borjas' results were due to random sampling variability

The reason for the three papers getting different results is because of the research design and data used. Card used a difference in differences research design with May CPS 1979-1985 data, ages 16-61 with Atlanta, LA, Houston, Tampa, and St. Petersburg as controls. Whereas Borjas used several controls and synthetic control and restricted his sample to male high school dropouts, aged 25-59, who were non-Hispanic from March CPS 1977-1992. Lastly Peri and Yasenov also used synthetic controls, but expanded the data to included May CPS 1973-1992, male and female high school dropouts aged 19-65 who were non-Cuban.

Thus, the research design and data chosen accounts for the differences between the papers' findings.

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ECON1016 Midterm

2.

- a) The graph plots the coefficients of the interaction terms for time before and after the policy change from the non-parametric regression.
- b) The parallel trends assumption is that the control and treatment groups would have changed similarly over time if the event or policy in question didn't occur (i.e. they were both trending and changing in a similar fashion over time)
- c) The coefficients plotted are "placebo" difference in differences. If the parallel trends assumption is met, then we should expect the coefficients of the interaction terms to have zero effect. In this case, we see it bounce around the zero line before the event in 1992, so the parallel trends assumption is met in this case.
- d) The advantage of type of graph over plotting raw averages is that we can assess the parallel trends assumption even after adding more controls. We can keep adding controls (like demographics) and this graph would still help us in determining if the assumption is met.

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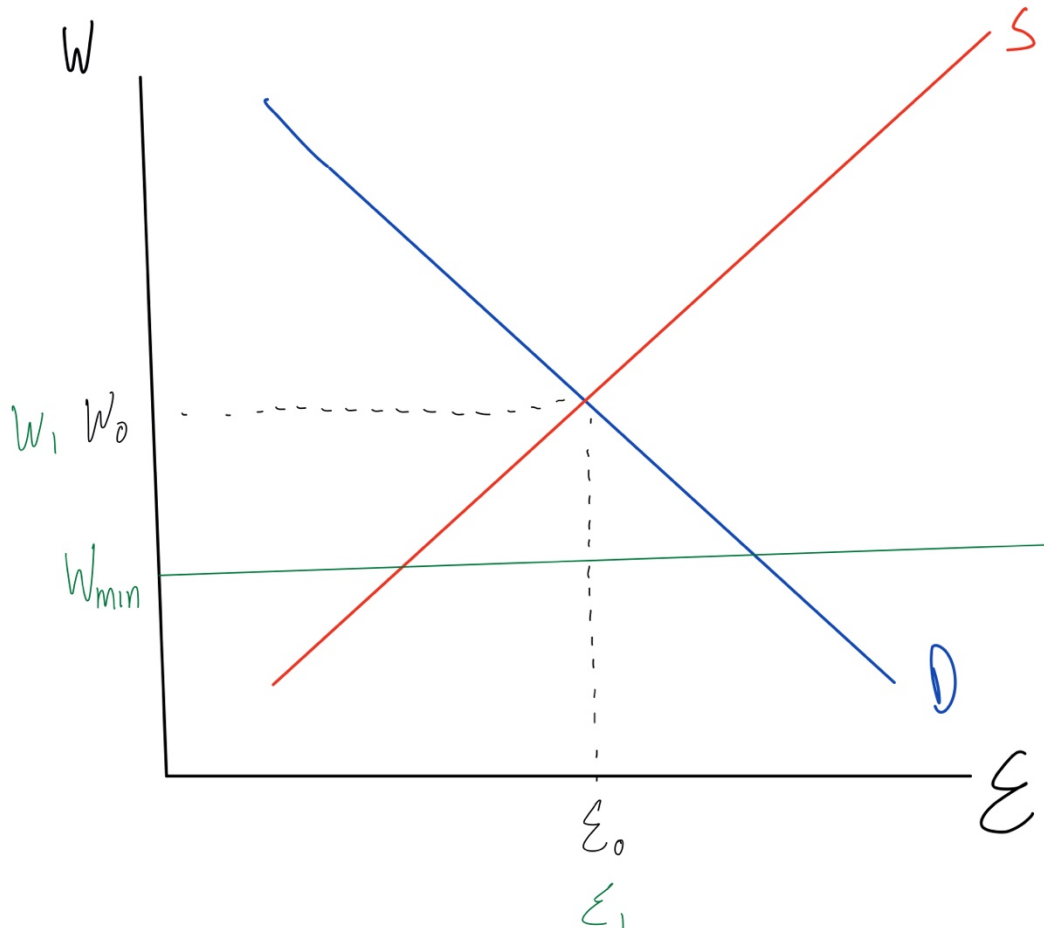
ECON1016 Midterm

3.

a) A monopsony could be a good model of the labor market because in a nominally competitive labor market, employers can have monopsony power over the workforce when the workers have to bear the cost of job changes (whether it be in terms of money/finances or other external factors). Signs of monopsony are usually inability to fill job vacancies or workers complaining about shortage of staff. Hence, we can model the interaction between firms and labor supply with monopsony.

b)

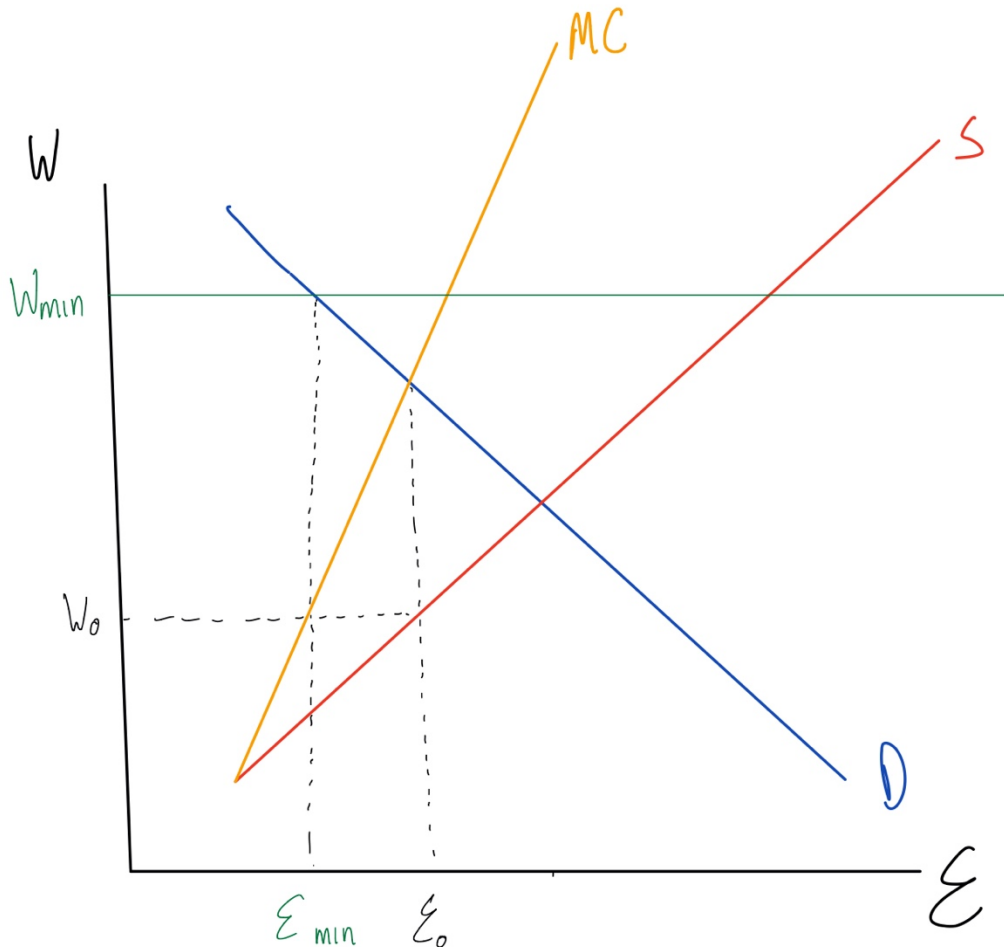
i. This statement is false. Consider a minimum wage that is under the equilibrium wage. The minimum wage will have no effect on employment as firms already met the minimum wage requirement.



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- ii. This statement is false. Consider the case where the minimum wage is extremely high, such that it is higher marginal cost for firms (such as below). In this case, the firms will hire less employees, which reduce employment.



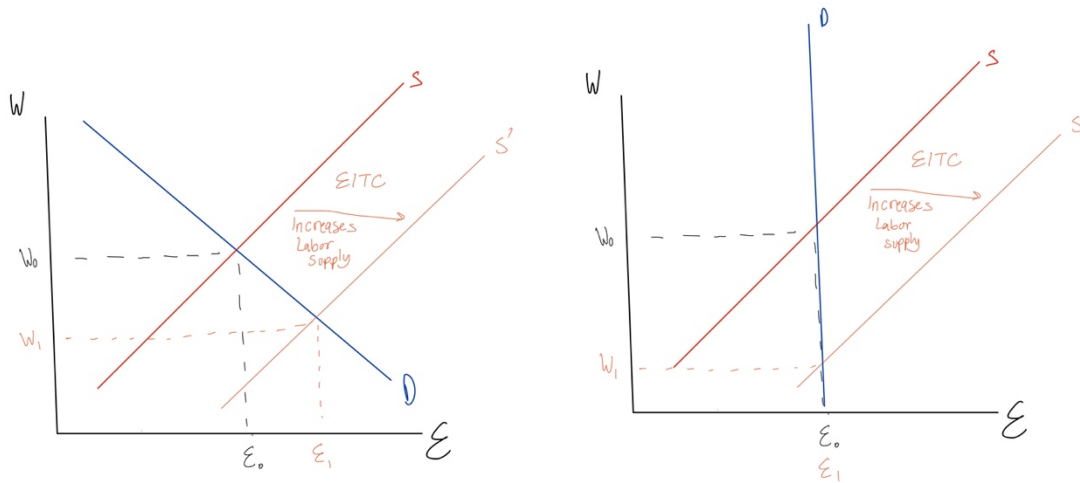
- c) The Reich, Allegretto, and Godoe (2017) paper and the Jardim et al. (2017) paper both use a synthetic control research design, however the data and focus of analysis differed.
- 1) Reich, Allegretto, and Godoe (2017) use synthetic control using weighted averages of different counties national while Jardim et al. (2017) only used data from the state of Washington to construct his control group.
 - 2) Secondly, Jardim et al. (2017) only focused on single site business while the Reich, Allegretto, and Godoe (2017) looked at all restaurants.
- As a result, Reich, Allegretto, and Godoe (2017) found negligible effect on employment but positive effect on wages while Jardim et al. (2017) found a negative effect.

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- d) Expanding EITC results in more labor supply, as people are incentivized to work as the value of every dollar earned increases. In the left figure, this results in more employees with smaller wages which may be worse for low wage workers as they are making less (and that may dwarf the positive benefit of increase number of workers). In the right figure, the demand is perfectly inelastic, which results in less wages, making it worse for low wage employees.

Factors Gov. Baker should consider are the elasticities. For example, if the elastic of demand is perfectly elastic, then the increase of supply from EITC would only increase the number of employees in the economy while keeping the wage the same (thus having a positive impact for low wage workers).



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ECON1016 Midterm

4. To estimate the effect of a \$15 minimum wage, I would use the monopsony model. Evidence to support using this model would come from signs in the economy such as job vacancies (can use job listing data) and shortage of labor complains from workers (can use survey data). Then I'd use the data to construct the supply and demand (which can be observed/calculated from labor data, what wages do employees take, what wages and how much do firms hire) to create the supply and demand curves, and find the profit maximizing amount of labor for firms (i.e. marginal cost curve). After this, I can see where the \$15 minimum wage changes wages and employment.

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ECON1016 Midterm

5. In the Doran, Gelber, and Isen (2016) study, the 95% confidence interval for total firm employment change did not contain the value 1. We can think of values inside the 95% CI as values that are reasonable with the data and values outside as not reasonable. Thus, we can reject that winning the H1-B visa lottery does not increase a firm's employment by 1 (which is the no crowd out estimate because we'd expect if there is no crowd out, getting the additional H1-B visa employee would increase the firm employees by 1; since this is not the case, the firm would therefore be replacing or reducing their existing American workforce). As a result, the study provides evidence that the H1-B visa does in fact crowd out employment of American workers.

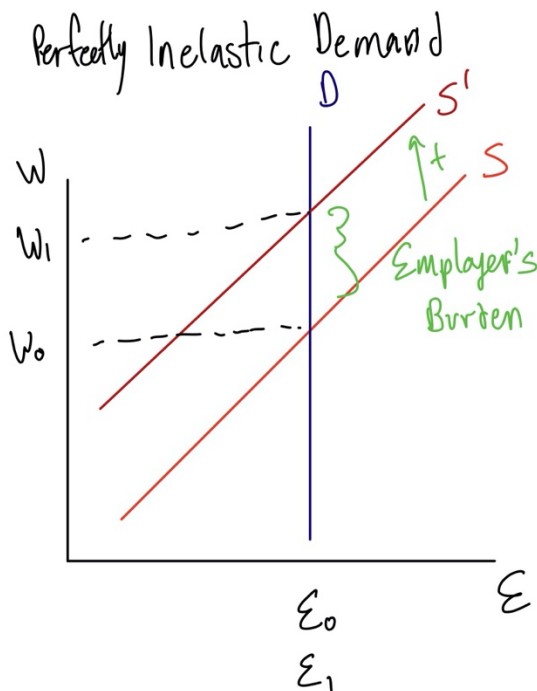
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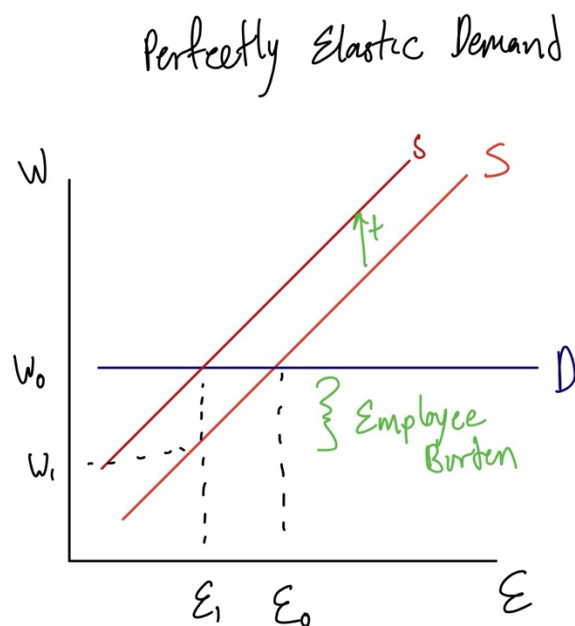
ECON1016 Midterm

6. Uncertain. According to the rules of tax incidence, the statutory burden of a tax does not describe who really bears the tax and the side of the market the tax is imposed to is irrelevant to the distribution of tax burdens. What matters is the elasticities of the demand and supply; the party that is inelastic bears the burden of the tax, so therefore the party that will gain more from the tax cut will be the inelastic party (so employees or employers)

For example, if the demand is perfectly inelastic, employers' bore all the burden, and would gain more than employees from the tax cut (left figure). If the demand was perfectly elastic, employees' bore all the burden, and would gain more than employers from the tax cut (right figure). Thus, it depends on elasticities.



Employers gain more



Employees gain more

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ECON1016 Midterm

7. The mandated for health insurance drives the demand curve down by the cost of health care since firms have to pay that for every employee. Since workers value health care as much as it costs, it also shifts down the supply curve as employees are willing to work for less (and shift downward is by the amount of the health care cost since that's what employees value it at). The downward shifts in both demand and supply results in the wage going down. However, since employees and employers value the health care at the same cost, the number of employees will stay the same as the two shifts balance each other in terms of employee quantity. Thus, the end result is the same number of employees are employed at a lower wage.
- a) Hence, requiring employers to purchase health care for all their workers will have no effect on wages is False.
 - b) Hence, requiring employers to purchase health care for all their workers will have no effect on the number of people firms employ is True.

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ECON1016 Midterm

8.

- a) Since LeBron is infinitely elastic, and Team B with no tax is paying him \$150M, in order for LeBron to sign with Team B, he needs to be paid the same amount post tax. If we let α be the payment Team A provides to LeBron, it needs to satisfy the following equation: $\alpha(1 - \tau_A) = \$150M$. Solving this equation, we get that Team A has to pay LeBron \$200M.
- b) The smallest value for LeBron's contract is \$135M while the largest is \$200M (considering the extreme of zero and infinite elasticity) (assuming Team A's demand curve would be the same as Team B's demand curve). From class, we looked at partial equilibrium tax incidence formulas which basically stated that more inelastic party bears more of the tax incidence. At the very low elastic side, LeBron takes a huge chunk of the tax burden whereas at the very elastic side, it's the team that takes the tax burden.

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ECON1016 Midterm

9.

- a) I expect that ε_s to be higher in Texas than Kansas. The elasticity of labor supply captures how sensitivity people are to changes in income. It makes sense that when there's a kink like this (where people get back extra money from the government and see a spike in their income), people with higher elasticity would clump at the kink point (to take advantage and maximize their utility with this new kinked budget constraint). Since Texas has more clumping at the kink point, it therefore makes sense it has a higher ε_s .
- b) Chetty, Friedman, and Saez (2013 AER) distinguish between the hypothesis that information is imperfect and the hypothesis that the elasticity ε_s differs across areas by looking at clumping for self-employed individuals at the EITC maximization point across different geographies. They showed that different zip codes have different clumping when looking at this group of self-employed. They argued that clumping occurred because of information as opposed to differing elasticity because of the geographic spread of the clumping. They saw that high clumping areas were next to other high clumping areas, and that the adjacent areas to areas with high clumping became high clumping over time. Thus, supporting the information hypothesis.

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ECON1016 Midterm

10. The theory of immigration lets us view immigration as an increase in the supply of workers. The immigrants could be substitutes for low-wage workers, and the native labor supply for low-wage workers could be very elastic. Thus, the introduction of immigrants would not change employment levels significantly but would displace many native low-wage workers. As for high wage workers, the immigrants would be more like complements, and help them be more productive by providing cheaper access to services.
- a) EITC uptake fell: could be explained by the decrease in low-wage native workers in the economy. The immigrants that displaced the low-wage native workers (who stopped working, and thus can't claim EITC) may not be eligible for EITC or may not be knowledgeable about EITC (lacks information thus not trying to actively claim or use it). Another explanation is that because wages dropped more, it is harder for people to reach the EITC threshold.
 - b) Food stamp uptake increase: could be explained by the decrease of low-wage native workers in the economy. Since low-wage native workers were displaced by immigrants and no longer work due to the lower wages, they need government assistance in the food stamps to survive.
 - c) Average income of locals increased sharply: although low-wage native workers and immigrants were substitutes (which result in them losing jobs and getting lower wages, which explains why less EITC claims and need for more food stamps), high-wage native workers and immigrants may be complements. The immigrants perhaps took jobs that help high-wage earners be more productive (perhaps as construction workers building offices, or service jobs like cleaning and transportation) and make more money. The money these high earning workers make dwarfs the wages lost by low-wage workers, thus causes the average local to be higher.
 - d) A huge surge of new hi-tech firms in the city: following a similar argument from above, the influx of immigrants might have provided cheaper and more labor for building and servicing offices, thus encouraging new hi-tech firms to come. Also, by taking care of certain services for cheaper, people had more capital to invest for hi-tech firms.