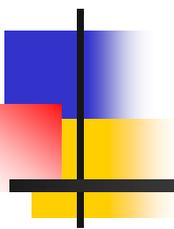


The Labor Market Impact of the *Marielitos*: a Reappraisal

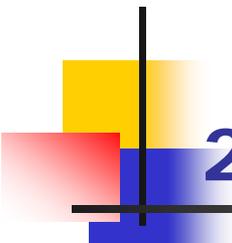
George J. Borjas
Harvard University

Milan, April 22nd, 2016
Conference on Immigration, Refugees and Asylum Policies

The Wage Impact of the *Marielitos*: A Reappraisal



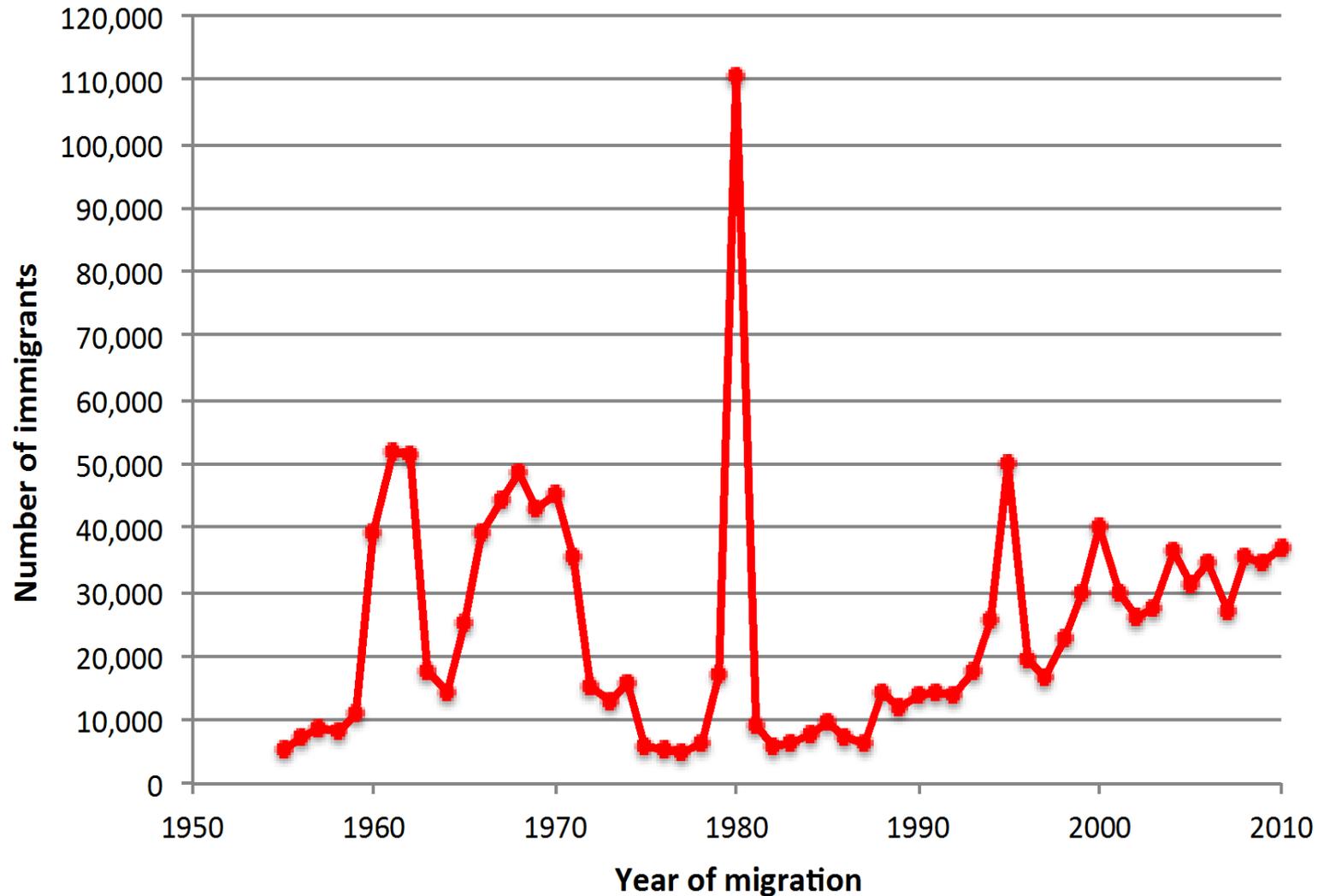
George J. Borjas
April 2016

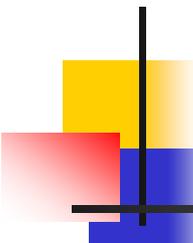


2. The Mariel supply shock

- On April 20, 1980, Fidel Castro declared that Cuban nationals wishing to move to the United States could leave freely from the port of Mariel. Cuban-Americans in the US organized a boatlift to bring their relatives.
- The first Marielitos arrived on April 23. By June 3, over 100,000 Cubans had migrated. By the end of the boatlift, 125,000 Cubans had moved and Miami's workforce had grown by around 8 percent.

3. Cuban immigration to the United States

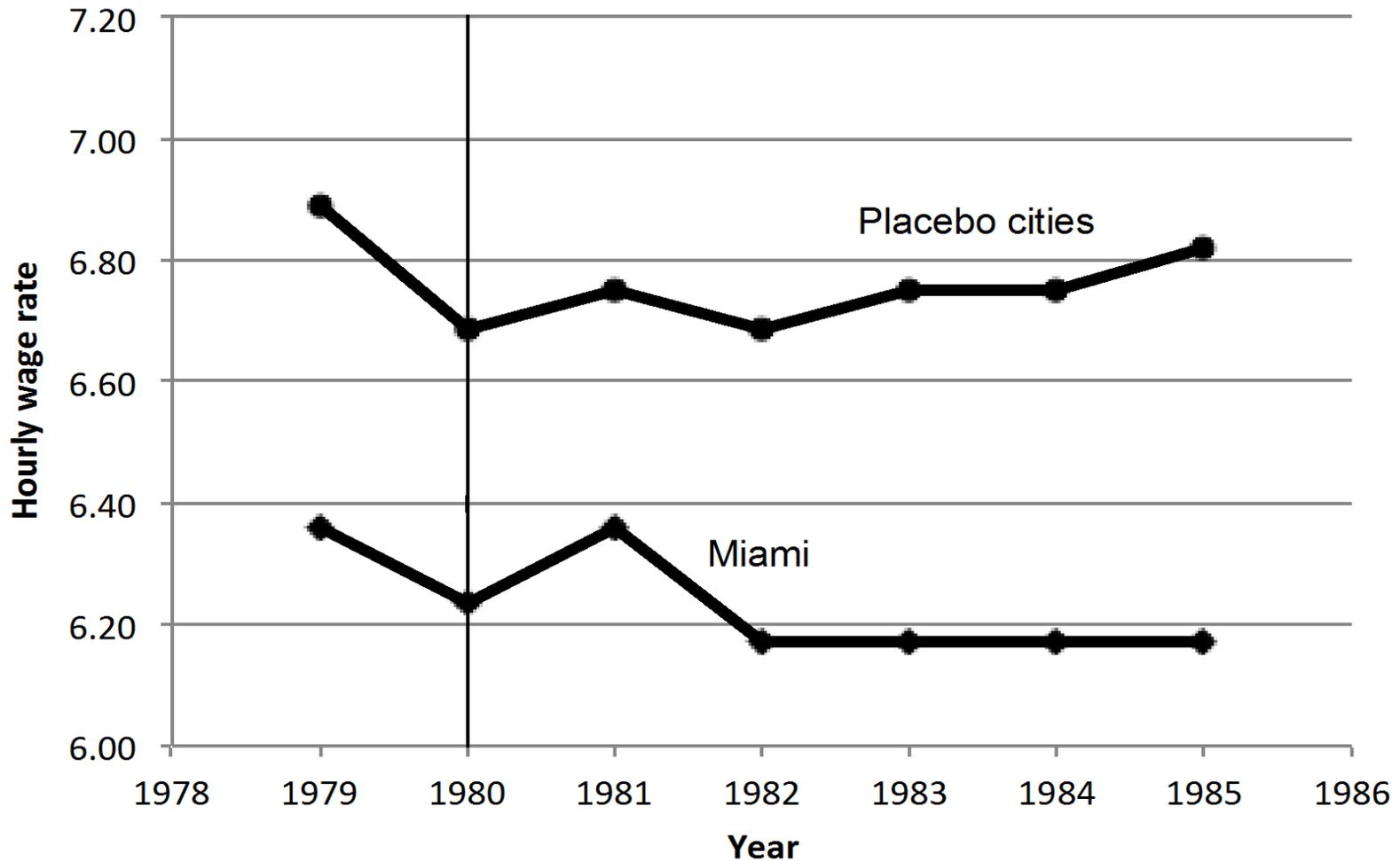


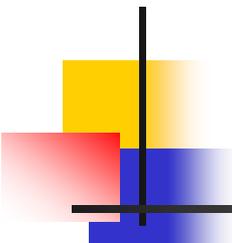


4. Card's (1990) Mariel paper

- David Card's (1990) study of the labor market impact of the Mariel supply shock is a landmark in the literature, both in terms of being an early analysis of a "natural experiment" and in terms of its policy implications.
- The Card placebo: "For comparative purposes, I have assembled similar data...in four other cities: Atlanta, Los Angeles, Houston, and Tampa-St. Petersburg. These four cities were selected both because they had relatively large populations of blacks and Hispanics **and *because they exhibited a pattern of economic growth similar to that in Miami over the late 1970s and early 1980s.*** A comparison of employment growth rates...suggests that economic conditions were **very similar in Miami and the average of the four comparison cities between 1976 and 1984.**"

5. Mariel and the weekly earnings of white workers (Card, 1990, p. 250)



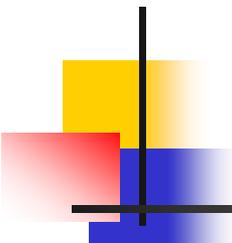


6. Despite Card's findings...

- Racial riots ravaged parts of the city within a month after the Mariel boatlift began, leaving 18 dead and 400 injured.
- Riots were the consequence of many accumulated grievances, particularly the acquittal of four white police officers charged with manslaughter when an African-American man died after a high-speed chase.
- But a history of those riots notes one grievance was: "the displacement of blacks by Cubans from jobs and other opportunities."

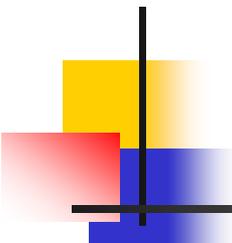
7. Education distribution of Marielitos

	Years of education				
<u>Sample:</u>	< 12	12	13 - 15	≥ 16	Sample size
<i>Marielitos:</i>					
April 1983 CPS	57.9	25.6	3.5	13.1	31
June 1986 CPS	55.2	28.0	6.4	9.6	31
June 1988 CPS	58.7	26.1	4.4	10.9	46
1990 Census	64.8	15.8	12.9	6.5	4,234
1994 CPS-ORG	61.4	20.5	9.8	8.3	143
2000 Census	59.9	20.0	12.7	7.4	3,301
<i>Miami's pre-existing labor force:</i>					
1980 Census	26.7	28.4	26.0	18.8	32,971



8. Size of the Mariel supply shock

<u>Education group:</u>	Size of Miami's labor force in 1980 (1000s)	Number of <i>Marielitos</i> in labor force (1000s)	Percent increase in supply
High school dropouts	176.3	32.5	18.4
High school graduates	187.5	10.1	5.4
Some college	171.5	8.8	5.1
College graduates	124.1	4.2	3.4
All workers	659.4	55.7	8.4

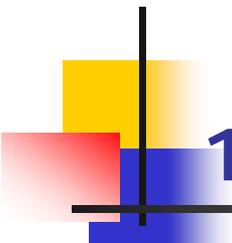


9. Data

- **March CPS:** Reports annual earnings in previous calendar year.
- **CPS-ORG:** Reports weekly earnings in prior week IF working that week. (Starts in 1979; May CPS prior to that).
 - The CPS does not provide any information on country of birth prior to 1994.
- **Sample:** Non-Hispanic men, aged 25-59. The 1980-90 censuses indicate that almost all immigrants in Miami (over 75%) were Hispanic, so non-Hispanic sample comes close to isolating the native population in Miami.
- The CPS consistently identifies 44 metro areas beginning in 1977. Before 1977, there are only 34 metro areas, and NYC is not consistently defined. Miami is not identified until 1973.

10. Rates of employment and wage growth, 1976-1979

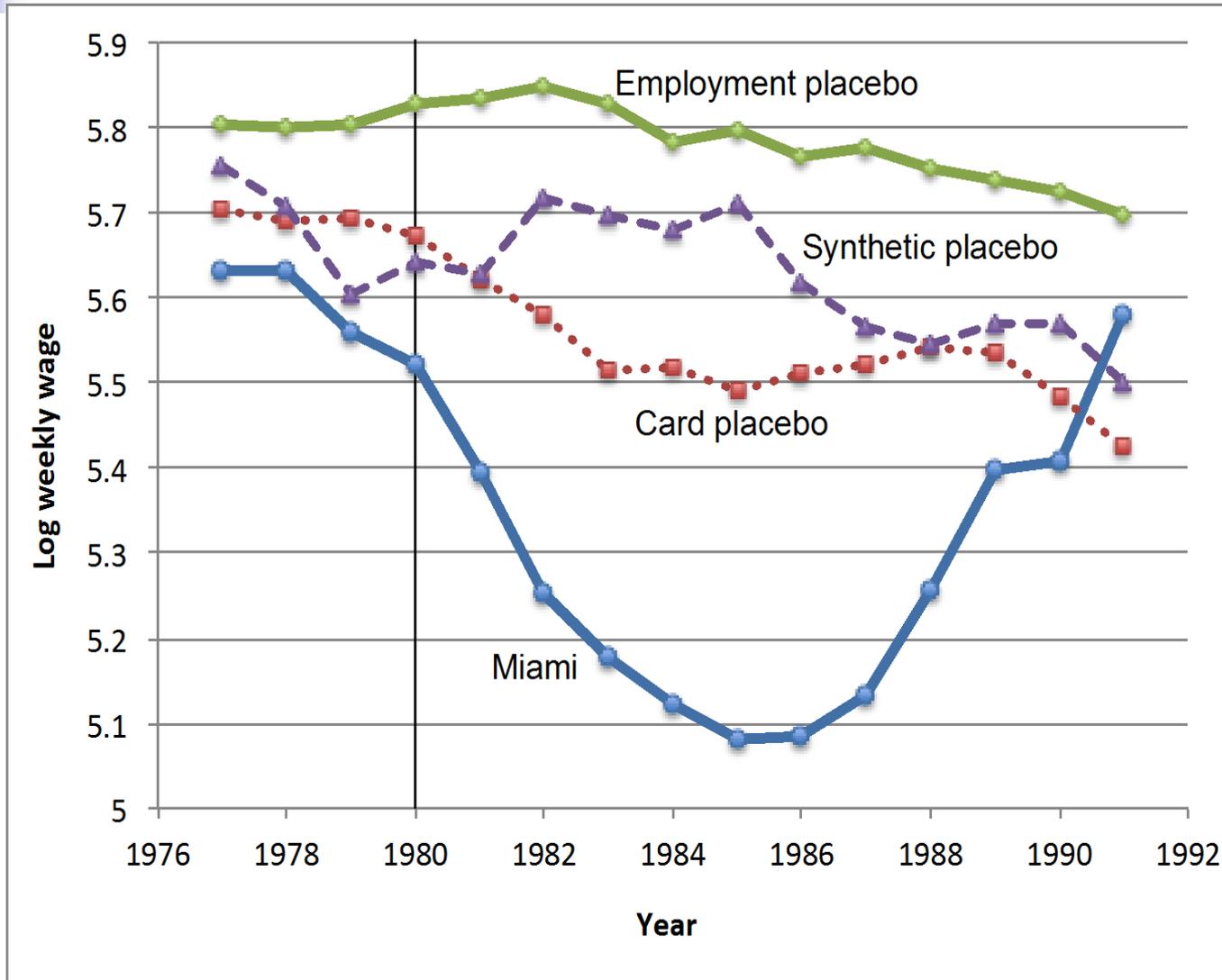
Rank	Metropolitan area	Employment growth: all workers	Employment growth: high school dropouts	Wage growth: high school dropouts
1	San Diego, CA	0.194	0.067	-0.093
2	Greensboro-Winston Salem, NC	0.182	-0.063	-0.307
3	Kansas City, MO/KS	0.179	0.052	-0.191
4	Anaheim-Santa Ana- Garden Grove, CA	0.162	0.257	0.067
5	Rochester, NY	0.153	-0.172	0.065
6	Miami-Hialeah, FL	0.153	0.086	0.014
7	Nassau-Suffolk, NY	0.151	0.056	-0.057
8	San Jose, CA	0.137	0.130	0.124
17	Tampa-St. Petersburg-Clearwater, FL	0.083	0.068	0.129
19	Houston-Brazoria, TX	0.078	0.090	0.004
24	Atlanta, GA	0.069	-0.087	-0.062
29	Los Angeles-Long Beach, CA	0.056	0.075	-0.112
44	Akron, OH	-0.110	-0.351	-0.004



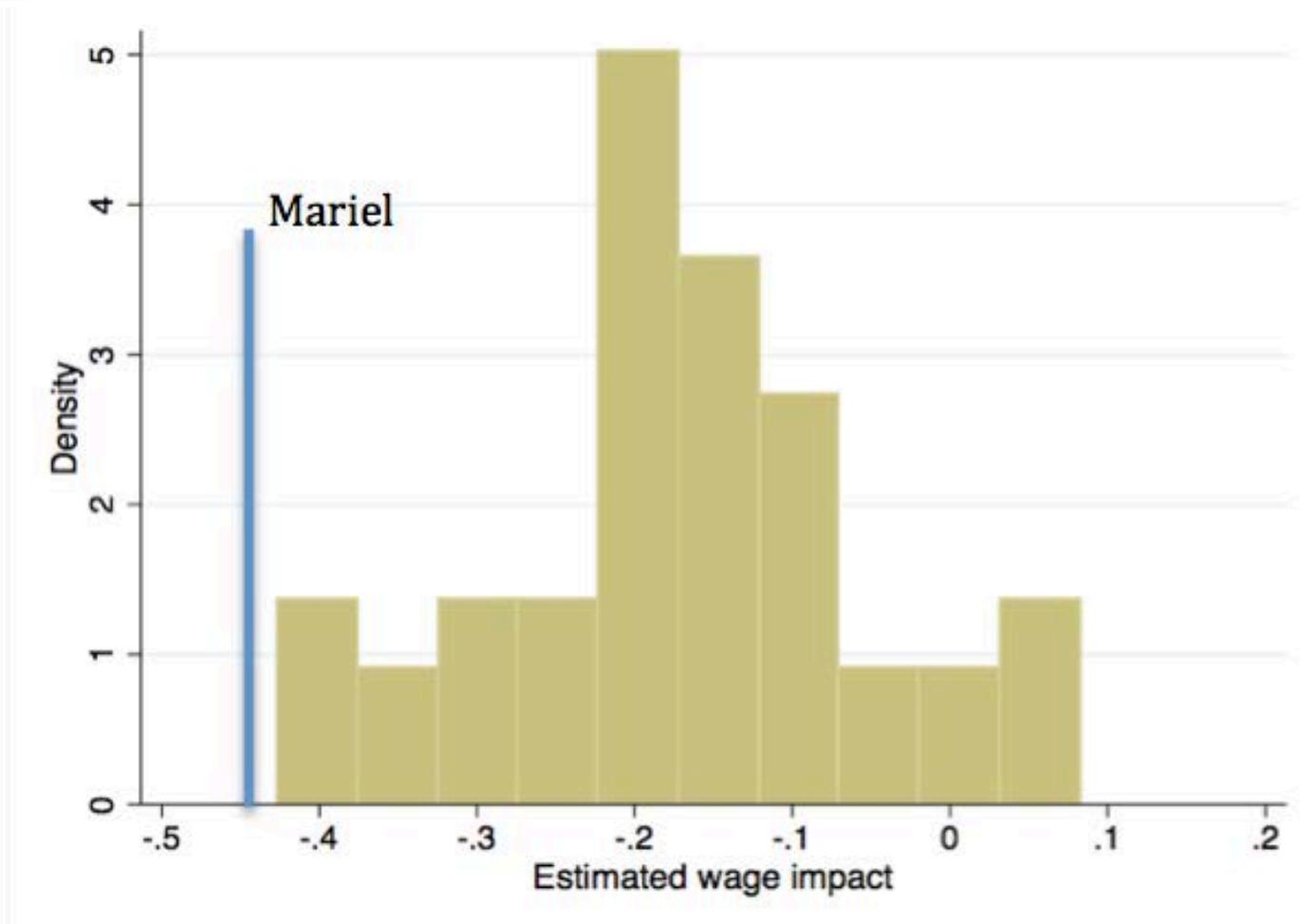
11. Alternative placebos

- The “employment placebo”: Choose cities that had pre-Mariel employment growth most similar to Miami. These cities are Anaheim, Nassau-Suffolk, Rochester (NY), and San Jose.
- A “synthetic placebo” (Abadie et al.). I match cities based on three pre-Mariel characteristics: the rate of employment growth in the 4-year period prior to Mariel; the concurrent rate of employment growth for high school dropouts; and the concurrent rate of wage growth for high school dropouts. The synthetic control consists mainly of: Anaheim, Kansas City, Rochester (NY), Sacramento, San Diego, and San Jose.

12. Trend in the wage of high school dropouts, 1976-1992 (3-year moving average)

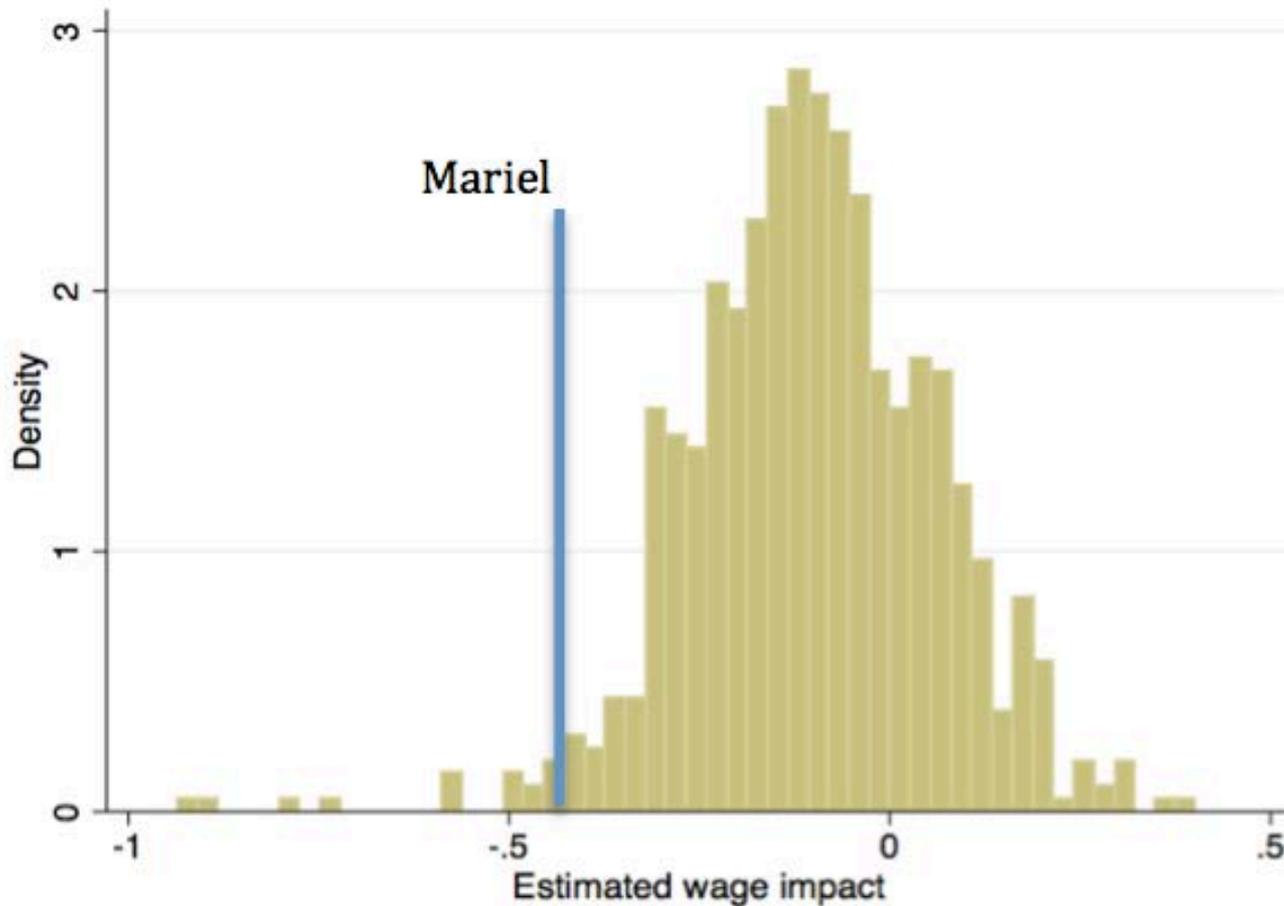


13. Distribution of pre-post wage changes of high school dropouts, in 1980 treatment year



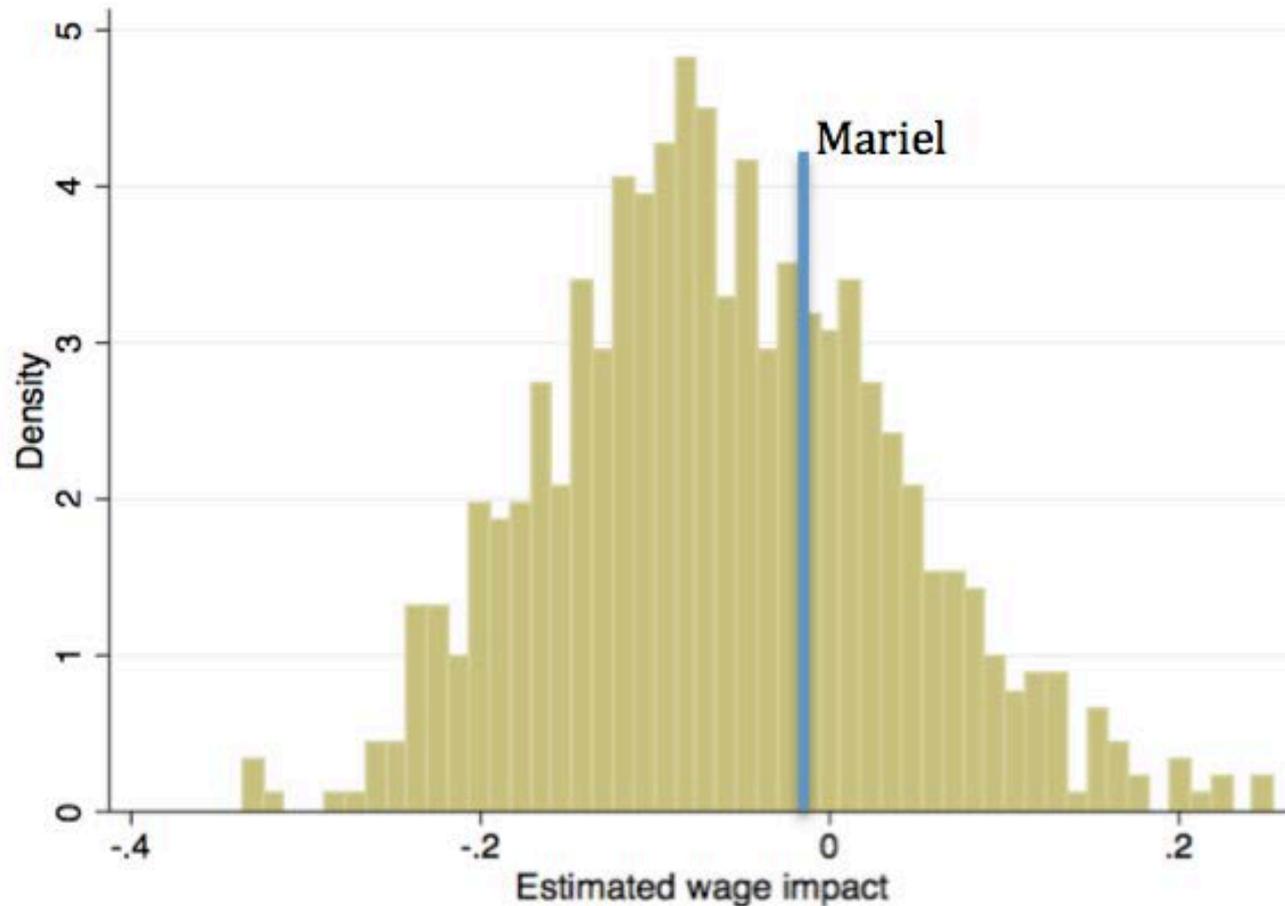
The pre-treatment period lasts 4 years; the post-treatment period lasts 6 years

14. Distribution of pre-post wage changes, across all city-year permutations, 1976-2003



The pre-treatment period lasts 4 years; the post-treatment period lasts 6 years; and the year of the treatment is excluded from the calculation.

15. Distribution of pre-post wage changes of high school graduates, across all city-year permutations

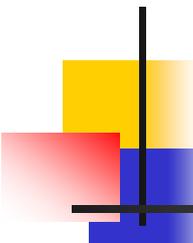


The pre-treatment period lasts 4 years; the post-treatment period lasts 6 years; and the year of the treatment is excluded from the calculation.

16. Difference-in-Differences impact of the *Marielitos*, March CPS

Dependent variable and treatment period	Card placebo	Employment placebo	Synthetic placebo	All cities
A. Log wage of high school dropouts				
1981-1983	-0.137 (0.093)	-0.289 (0.090)	-0.210 (0.086)	-0.135 (0.080)
1984-1986	-0.364 (0.080)	-0.495 (0.071)	-0.461 (0.077)	-0.378 (0.033)
1987-1989	-0.216 (0.085)	-0.251 (0.071)	-0.210 (0.068)	-0.192 (0.058)
1990-1992	0.188 (0.158)	0.096 (0.136)	0.021 (0.096)	0.188 (0.111)

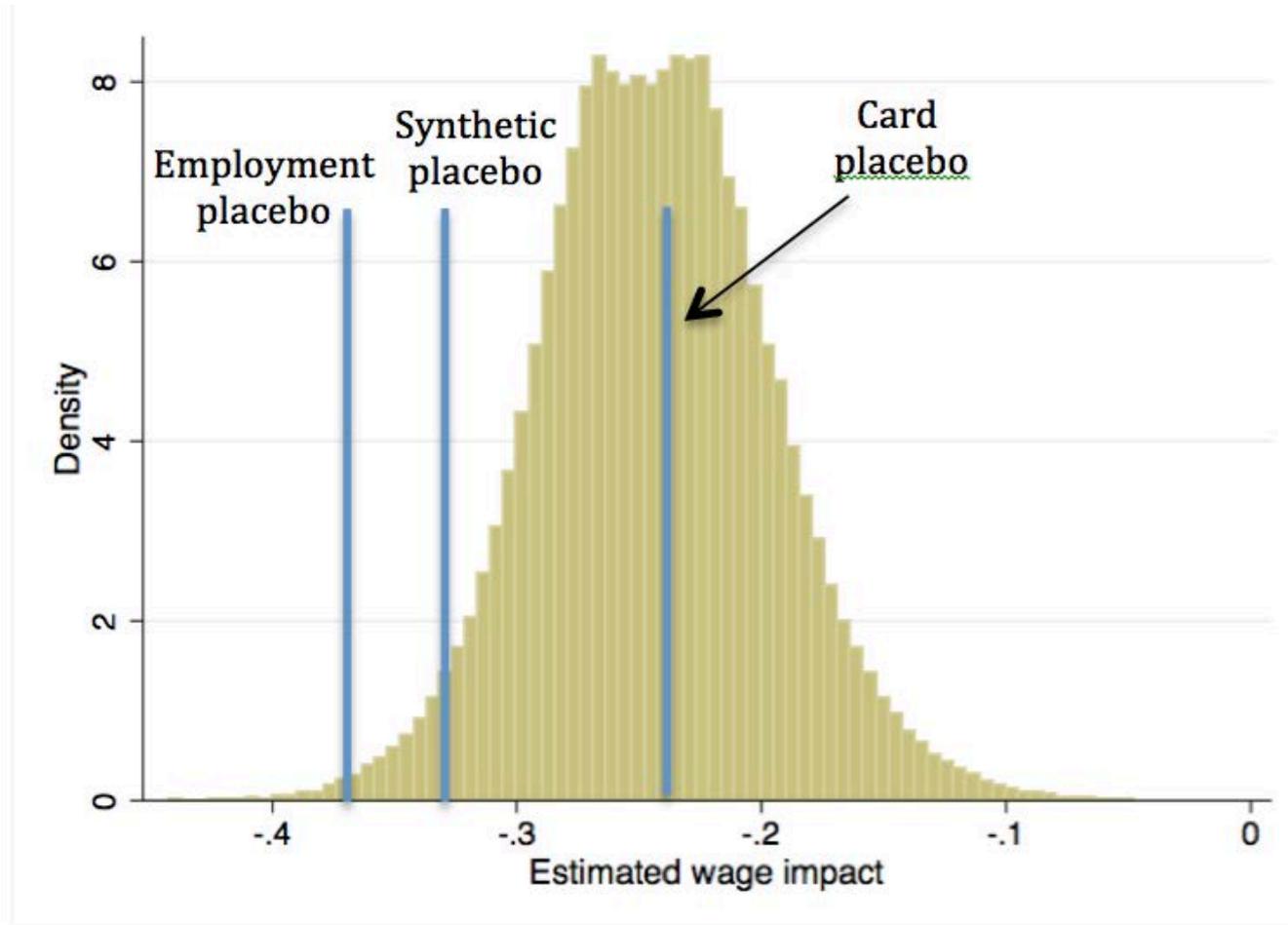
Notes: Robust standard errors are reported in parentheses. The data consist of annual observations for each city between 1976 and 1992 (1980 excluded). All regressions include vectors of city and year fixed effects. The regressions are weighted by the number of observations size used to calculate the dependent variable.



17. Two interesting conceptual issues

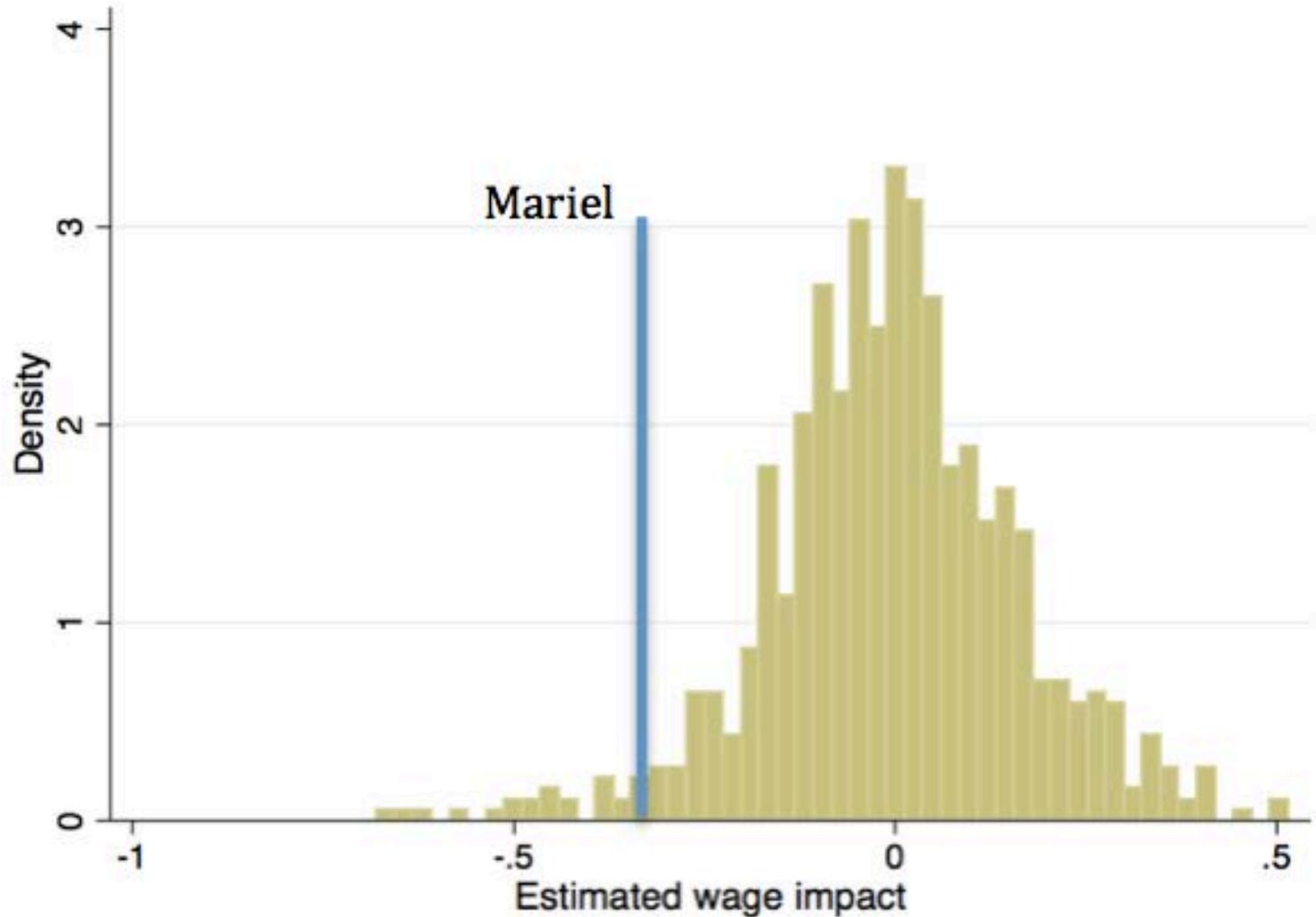
- The eventual disappearance of the wage effect of Mariel is puzzling. Theory predicts that the average wage in the labor market returns to pre-shock conditions if there are constant returns to scale. But there will still be distributional effects. Perhaps some supply response in the low-skill labor market.
- Theory also predicts wage impact should be largest right after shock, and then eventually attenuated. Wage impact was largest around 5 years after shock. The 1980s were a period of high inflation. If wages were sticky downwards, then perhaps this was how the labor market adjusted. Important need to start research on dynamics of supply shocks.

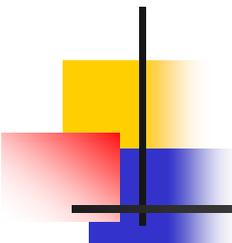
18. Distribution of short-run impact across all 123,410 potential four-city placebos, March CPS, 1977-1986



The pre-treatment period lasts 4 years; the post-treatment period lasts 6 years; and the year of the treatment is excluded from the calculation.

19. Distribution of hypothetical short-run impact relative to synthetic placebo, assume a supply shock hits each city-year permutation, March CPS





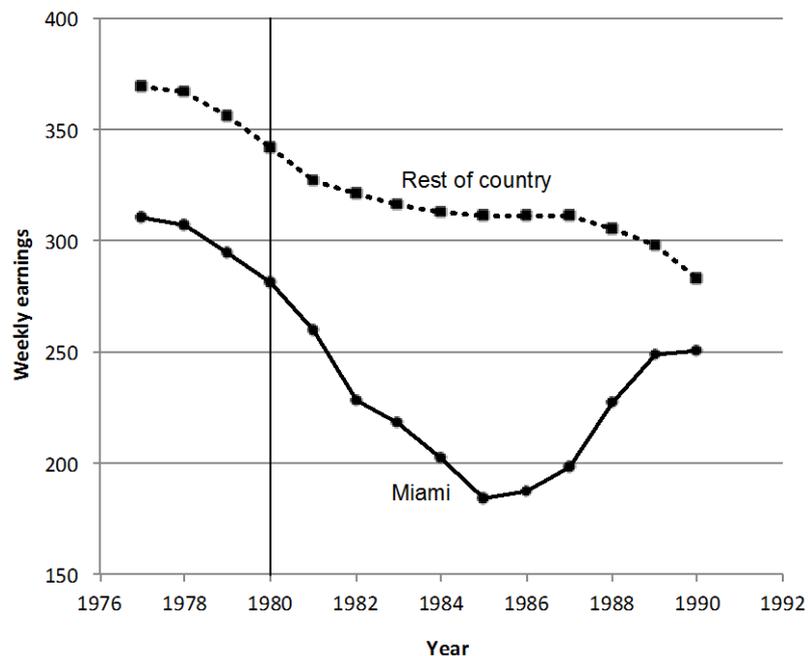
20. A disturbance in the force

- Within 3 months after release of my Mariel paper, two responses tried to restore order to the galaxy. Roodman (2015) and Peri and Yasernov (2015).
 - The wage impact did not show up immediately. True, but nobody really knows what the dynamics of the wage effect should look like.
 - Sample of non-Hispanic men, aged 25-59 in March CPS is small. Also true, but much of what I did effectively merged several years.
- Peri-Yasenov claim that a better analysis would enlarge the sample.

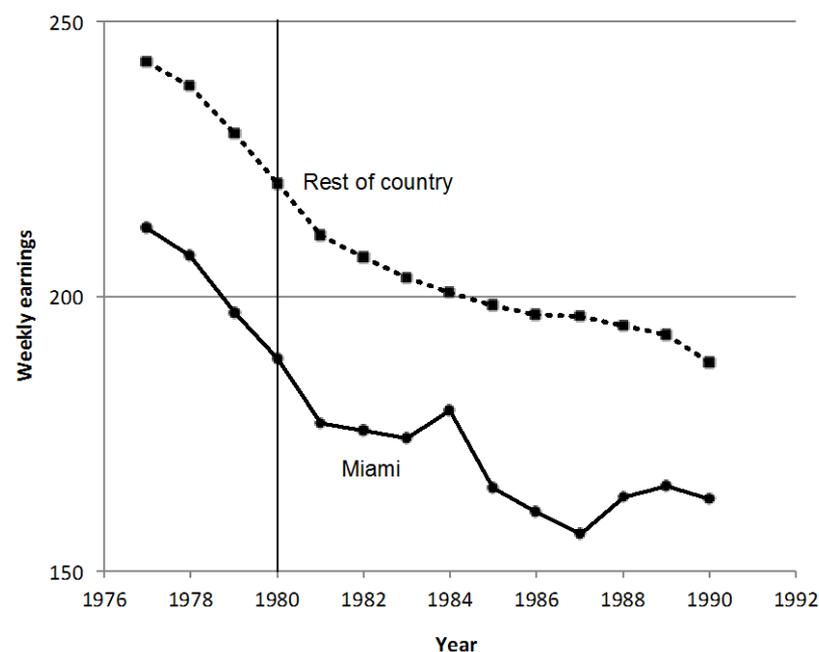
21. Whom to believe?

Did Mariel have an impact?

Curtain #1



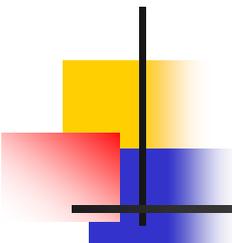
Curtain #2



Source: Author's calculations from the March Current Population Surveys, 1994-2015.

Curtain #1: Male non-Hispanic HS dropouts aged 25-59.

Curtain #2: All non-Cuban HS dropouts aged 16-61.



22. Conclusion

- Something happened in low-skill labor market in Miami after 1980. Wages fell until about 1985, and then recovered by 1990.
- Key lesson: It is crucial to **match the skill characteristics** of the immigrants with the skill characteristics of the natives most affected by the supply shock.
- It is also crucial **to select a “right” placebo** to get a better measure of the wage impact.
- Ironically, if the Mariel effect could be generalized to the 41 million immigrants, current estimates of **the gains from immigration are severely underestimated**.
- Maybe there is much to learn by revisiting old facts that have become “conventional wisdom” and take a new look through the lens of what we now know.