Does immigration lower the wages of native workers? There is perhaps no event more often cited on this question than the “Mariel boatlift”. After Fidel Castro announced in 1980 that anyone wishing to leave Cuba could do so via the port of Mariel, 125,000 Cuban immigrants came to Miami between April and September of that year. The sudden influx of workers generated an intriguing test of how immigration affects wages in one city.

Economic theory predicts that wages will go down when the number of competing workers goes up, at least in the short run. For immigration advocates, however, this reasoning is simplistic. Their argument that an increase in the labor supply does not lower the wage — even in the short run — has rested in large part on a famous 1990 analysis of the Mariel boatlift by Berkeley economist David Card, who was unable to find any wage impacts.

The Card study is ubiquitous in immigration advocacy, garnering citations in seemingly every case for loosening the borders. It is “the single greatest bit of evidence” that immigration does not harm native wages, according to Adam Davidson in a recent piece for the New York Times Magazine. Davidson argues that, based on the Mariel experience, the United States can take in 11 million immigrants per year without negative effects. And why stop at 11 million? In making a recent argument for open borders, Vox's Dylan Matthews cited the boatlift as his first piece of evidence that immigration has a “neutral or positive” effect on native workers.

The policy stakes are high, which is probably why a new paper questioning Card’s classic study has generated so much attention. Harvard economist George Borjas reanalyzed the effects of the boatlift in September of last year, this time looking specifically at how the influx of low-skill workers affected native high school dropouts in Miami. He found a large drop in their wages after the boatlift, bottoming out in the mid-1980s at almost 40 percent below the wage trend in control cities.

It did not take long for Borjas’s critics to strike back. Economists Giovanni Peri and Vasil Yassenov posted a working paper three months later arguing that Borjas’s finding is just statistical noise generated by a tiny sample. In response, Borjas vigorously disputed that claim.

What the debate between Borjas and Peri-Yassenov boils down to is which kind of labor market data we should trust more — small samples of a stable workforce, or large samples of an unstable workforce. When Borjas selected his sample of American workers, he limited it to non-Hispanic men ages 25 to 59. These restrictions are common in the literature because they ensure a stable set of workers. Women, for example, are less attached to the labor force than men, and their wages and participation have increased as gender roles have changed over the years. If women's labor-force participation follows a different trend in Miami compared to the control cities, then the wage comparison could be capturing differential social change rather than the effect of the boatlift. Similarly, men outside the prime working years of 25 to 59 could be in school or preparing for retirement. And although Hispanics have strong labor-force attachment, the number of low-earning Mexican immigrants was growing rapidly in the Southwest in the early 1980s. Mexican immigration could bias wage trends outside of Miami downward, shrinking the observed impact of the boatlift.
The cost of Borjas's stable sample is the loss of a considerable number of workers from the original dataset. Some of the online chatter about Borjas's paper has suggested the resulting sample size is so small as to be completely uninterpretable, but that is not right. Based on statistical significance tests, which take sample size into account, the wage effect is almost certainly greater than zero in the sample Borjas chose.

Nevertheless, Peri and Y asenov argue the effect is believable only if it survives with a broader set of workers. Their preferred sample consists of men and women ages 16 to 61, and they exclude only ethnic Cubans rather than all Hispanics. With that broader sample, the wage decline in Miami relative to control cities disappears. Peri and Y asenov acknowledge that including women could be suboptimal, but argue that the gain in sample size is worth it. Less realistically, however, they believe that including both Hispanics and a wider age range is an unambiguous improvement over Borjas, even though the potential problems should be clear.

Peri and Y asenov even include high school kids with part-time jobs as “high school dropouts” in their sample. Not only is the nomenclature wrong — no one currently in school is a “dropout” — but such workers have tenuous labor force participation and do not necessarily have the kinds of jobs and earnings representative of real dropouts. Borjas points out that as many as one quarter of all people without a high school degree in the sample were 18 or under, meaning that high school kids exert a lot of influence on Peri and Y asenov’s set of “dropouts”. Counting students as dropouts is probably a coding error — and a significant one, too.

The debate over which workers to include is fundamentally about the trade-off between sample size and the sample quality discussed above. If the trends in labor-force participation of women, students, and older workers in control cities did not substantially differ from the same trends in Miami, and if further Hispanic immigration did not drag down average wages in the control cities, then the Peri-Y asenov sample is superior due to its larger size. However, if those burdensome conditions do not hold, then the smaller Borjas sample will probably give a clearer picture.

Frankly, it is difficult to believe that the Peri-Y asenov conditions hold. The nation's labor markets are too heterogeneous. Furthermore, the wage change in Borjas’s Miami sample was more negative than 99 percent of wage changes in other major cities over similar time intervals. Is this just a coincidence? There certainly appears to be a real effect here, even though the available data cannot identify it with nearly as much precision as we would like.

That said, a major takeaway from these papers is that the boatlift is not nearly as useful a case study as some people have made it out to be. In addition to the uncertainty from sample limitations, there is also the controversial matter of which cities to compare with Miami. A quasi-experiment like this one requires choosing a control city that is economically similar to Miami before 1980, so that wage differences between Miami and the control city can be ascribed to the boatlift and not to other economic factors. Both papers use wages from a “synthetic” control city — meaning a combination of real cities weighted so that their average economic characteristics most closely resemble Miami before the boatlift. The benefit of generating a synthetic city is that it prevents researchers from simply picking a group of control cities that happen to bolster their conclusions. However, as both papers acknowledge, researchers do have considerable leeway in choosing the economic characteristics that generate the synthetic city in the first place. In generating his synthetic city, Borjas focused on matching wage and employment growth to Miami prior to 1980. As a result, his synthetic city was mainly a combination of Anaheim, San Diego, Rochester, and San Jose — all places with labor markets roughly as robust as Miami’s in the late 1970s.

By contrast, Peri and Y asenov’s matching variables included worker characteristics, such as the percentage of Hispanics in the labor force. That choice yielded (in one of their specifications) a synthetic city that is a weighted combination of New York City, Los Angeles, and Dallas. Readers familiar with the economic situation in the late 1970s should be immediately skeptical. While Miami was a city on the rise, with the sixth-highest employment growth of any major city, New York’s economy was moribund. This was the era of the famous New York Daily News headline “Ford To City: Drop Dead”, which was published after President Ford had balked at the nearly-bankrupt city’s request for a federal bailout.

What probably happened is that matching the Hispanic population in Miami steered Peri and Y asenov’s synthetic city away from employment growth and toward cities with large numbers of Mexicans or Puerto Ricans. This suggests that one reason Peri and Y asenov found no wage effect of the boatlift is that they used a control group that had a weaker labor market than Miami at the time. Still, it is difficult to say whether either paper’s control group is objectively better. Despite the prima facie problems, Peri and Y asenov’s synthetic city seems to track Miami’s wage changes in the 1970s at least as well as Borjas’s. The uncertainty here is another reason that the boatlift is far from an ideal experiment.
Yet more uncertainty comes from the expected timing of the wage decline. Peri and Y asenov believe that the most dramatic wage impact in Miami should be observed immediately after the boatlift. Even if we accept Borjas’s sample restrictions and control cities, they argue, Borjas shows wages falling more in the mid-1980s. How could this be due to the boatlift? One answer is that wages are “sticky downward” — in other words, employers seldom cut their current workers’ nominal pay, but they are happy to keep pay increases below inflation, which causes real wages to drop over time. It should not be surprising, then, that any wage impact of the worker influx would take several years to materialize. Nevertheless, the expected timing of such a wage impact is unclear. Should we expect the biggest effect after one year? Three years? Five? It is difficult to test a prediction when there is no agreement on exactly what the prediction is in the first place.

It will be interesting to see how the debate between these new papers plays out in the refereed journals. In the end, the data may be too limited to reach a strong consensus about the wage impact of the boatlift. It is clear, however, that to continue claiming the effect was definitively nil — and to conclude that it is “naive” to expect supply and demand to function normally in response to immigration, as Peri and Y asenov do — is to go well beyond what the data can support.

As for the broader immigration picture, the fact that immigrants potentially reduce native wages (in Miami and elsewhere) does not settle the debate in favor of restriction, just as the attendant efficiency gains do not imply we should open the borders. Immigration has both benefits and costs — on multiple dimensions, including culture and national security — that must be carefully weighed when designing a selection system. For some advocates of expanded immigration, however, it has been all-too-tempting to downplay or deny the costs, citing shaky case studies like Mariel to portray immigration as a win-win. In order to have a productive debate on immigration, we cannot ignore the inherent trade-offs.

End Notes


4 Disclosure: Professor Borjas was the author’s graduate school adviser.


8 For an earlier critique of Borjas that anticipates some of Peri and Y asenov’s points, see David Roodman, “Why a New Study of the Mariel Boatlift Has Not Changed Our Views on the Benefits of Immigration”, The GiveWell Blog, October 21, 2015.

9 For example, see a December 14, 2015, tweet by Ben Casselman, a writer for the FiveThirtyEight website.

10 For a discussion of how low-skill immigration exacerbates the problem of class stagnation, see Jason Richwine, “Are Low-Skill Immigrants Upwardly Mobile?”, Real Clear Policy, July 28, 2015.

11 See, for example, “Muslim Assimilation Failed In France. Is It Failing Here, Too?”, Center for Immigration Studies, December 3, 2015.

12 A good example is the debate over the fiscal effect of President Obama’s “administrative amnesty”. See Jason Richwine, “The Amnesty Numbers Game”, National Review, March 30, 2015.