Recent research has challenged the consensus that sudden inflows of refugees have little or no impact on natives' wages and employment, claiming instead that there are uniformly large detrimental effects on natives without school qualifications. **Michael Clemens** and **Jennifer Hunt** demonstrate the flaws in this analysis: the labour market impact of immigration is small even on natives with low skill levels.

The labour market impact of refugee waves

There is no clear evidence of detrimental effects of large refugee waves into 1980s Miami, 1990s Israel or 1990s Europe

The recent surge in migration to Europe has brought renewed attention to research on the labour market effects of sudden major inflows of refugees and a reassessment of the findings of four particularly influential studies:

■ Card (1990), who finds that a large inflow of Cubans to Miami in 1980 did not affect natives' wages or unemployment.
■ Hunt (1992), who finds that a large flow of refugees from post-independence Algeria to France caused a small increase in native unemployment.
■ Friedberg (2001), who finds that a large inflow of post-Soviet Jews to Israel 1990-94 did not reduce natives' wages.
■ And Angrist and Kugler (2003), who find that a surge of Balkan refugees during the 1990s was associated with higher native unemployment across 18 European countries, but who do not interpret the association as causal because it is unstable and statistically insignificant.

Two recent studies have challenged these results by re-analysing all four of the refugee waves. The researchers claim that earlier work obscured uniformly large detrimental effects from all four waves, either by aggregating the affected workers with unaffected workers (Borjas, 2017), through inadequate identification of causality (Borjas and Monras, 2017) or both.

Our latest study reconsiders the published research on refugee inflows to reconcile the new results with the old ones. We show that for all four refugee waves,

the methods used in the recent re-analyses are subject to substantial bias.

Correcting these biases largely eliminates disagreement between the new and old findings. Corrected methods offer strong evidence of small detrimental effects in France in 1962 and no clear evidence of detrimental effects in 1980s Miami, 1990s Israel or 1990s Europe.

Blunt instruments

The new research on these refugee waves uses 'instrumental variables' to separate correlation from causation – and this is its biggest problem. The simple association between natives' labour market outcomes and migrant inflows across regions or occupations could arise not from migrants' effects but from their choice of where to go. Migrants are likely to choose high-wage areas or occupations, which could mask any negative causal effect they

The impact of immigration on average native-born workers is small

have on native wages. The new research tries to account for this by using prior migration flows as an instrumental variable. This tests the effects of migration that was determined by prior immigration patterns – the instrumental variable – rather than recent economic changes.

But there is a problem when the instrumental variable (in this case, past migration per population) and the variable affected by migrants' choice of location or occupation (current migration per population) have the same denominator (Bazzi and Clemens, 2013). The instrumental variable strategy only works when the two variables are strongly correlated, but any two variables will be strongly correlated if they share the same divisor.

Indeed, even random noise will be correlated with a variable of economic interest if both are divided by the same quantity. If such a random 'placebo' instrument gives similar results in any instrumental variables study, it implies that the original instrument was doing little work to separate correlation from causation.

We show that repeating the Borjas and Monras (2017) re-analysis of refugee waves with a placebo instrument – random noise divided by population – gives similar results to the original studies. In most cases, the results are actually stronger using this meaningless placebo: the estimates of detrimental effects on natives are a bit larger and more statistically significant.

Kronmal (1993) suggests a simple correction to address this problem: rather

than divide past migrant flows and current migration flows by population, use past migrant flows by itself as an instrument for current migrant flows by itself, while controlling for population. When we make this correction, none of the results in Borjas and Monras differs substantially from the original studies of Miami, France, Israel and Europe.

The impact of the Mariel boatlift

In re-analysis of one of the four episodes, the 1980 wave of Cubans into Miami known as the 'Mariel boatlift', a special problem arises. Although Borjas and Monras (2017) agree with Card (1990) that the boatlift did not affect native workers' unemployment, Borjas (2017) argues that Card's analysis missed large detrimental effects on wages.

Card's analysis aggregated all workers with high school education or less, finding no wage effects. Borjas separates out male non-Hispanic workers with less than high school education, and finds a very large and robust fall in average wages for that group in Miami relative to the same group in comparison cities after 1980.

Our study points out a previously unreported problem with the method used by Borjas (2017). His result is highly sensitive to selecting different subsets of workers to study (Peri and Yasenov, 2017), but the mechanism for this has been unclear.

Among the sub-samples of non-Hispanic men with less than high school education that Borjas studies, the fraction that were black is sharply higher after the boatlift than before it in Miami, but not in the comparison cities. This could not have been caused by the arrival in Miami of the Cubans themselves, since the sample excludes Hispanics. It is likely to reflect the large and simultaneous arrival

of low-income Haitians with less than high school education (who cannot be separated from US workers in the data), and contemporaneous efforts by the Census Bureau to improve its coverage of low-income black men.

Because Haitian blacks earned much less than US blacks, and US black men earned much less than non-black men at this education level, this compositional change would mechanically cause a large, spurious fall in the average wage in the sample. It is enough to explain the entire post-boatlift fall in wages observed by Borjas (2017).

When estimates of the impact of the boatlift are adjusted to account for the change in the racial composition of the sample, and when the effect of race on wages is allowed to differ by city, the effect that Borjas finds is attenuated by more than 50%, and its statistical significance becomes fragile to the choice of dataset and choice of control cities.

A further adjustment recognising that the effect of race on wages differs by education level reduces the effect further to statistical insignificance. The corrected analysis cannot rule out a wage effect of minus 2% to minus 8% relative to the Borjas control cities – much smaller than the minus 45% effect measured by Borjas in the corresponding regressions – but they cannot rule out a zero effect either.

Conclusion

The evidence from refugee waves shows detrimental short-term effects on native workers' labour market outcomes in some times and places but no effect in others. It supports the existing consensus that the impact of immigration on average native-born workers is small and does not support claims of large detrimental impacts on workers with less than high school education.

This article summarises 'The Labor Market Effects of Refugee Waves: Reconciling Conflicting Results' by Michael Clemens and Jennifer Hunt, CEP Discussion Paper No. 1491 (http://cep.lse.ac.uk/pubs/download/dp1491.pdf).

Michael Clemens is at the Center for Global Development. **Jennifer Hunt** of Rutgers University has been a visiting academic at CEP in 2017.

Further reading

Joshua Angrist and Adriana Kugler (2003) 'Protective or Counter-productive? Labour Market Institutions and the Effect of Immigration on EU Natives', *Economic Journal* 113(488): F302-31.

Samuel Bazzi and Michael Clemens (2013) 'Blunt Instruments: Avoiding Common Pitfalls in Identifying the Causes of Economic Growth', *American Economic Journal: Macroeconomics* 5(2): 152-86.

George Borjas (2017) 'The Wage Impact of the Marielitos: A Reappraisal', *Industrial and Labor Relations Review* 70(5): 1077-1110.

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Richard Kronmal (1993) 'Spurious Correlation and the Fallacy of the Ratio Standard Revisited', *Journal of the Royal Statistical Society Series A* 156(3): 379-92.

Giovanni Peri and Vasil Yasenov (2017) 'The Labor Market Effects of a Refugee Wave: Applying the Synthetic Control Method to the Mariel Boatlift', NBER Working Paper No. 21801.

Refugees have modest or no harmful effects on the wages and employment of native workers