Contents lists available at ScienceDirect

European Economic Review

journal homepage: www.elsevier.com/locate/euroecorev

The effect of mass influx on labor markets: Portuguese 1974 evidence revisited

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A R T I C L E   I N F O

A B S T R A C T

This paper provides a reappraisal of the evidence from the influx that has been unique in the recent European history, the flood of half a million returnees from Mozambique and Angola to Portugal in the mid-1970s. The objective of this paper is to study the impacts of a large supply shock on aggregate labor productivity, wages and unemployment. In contrast to the previous evidence, the synthetic control analyses find that the influx had a significant adverse effect on labor market outcomes. The results suggest that the Portuguese labor market responded precisely the same way as the standard textbook model predicts: an increase in the number of workers lowered average labor productivity and wages.

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1. Introduction

More than a million migrants and refugees came to Europe in 2015 sparking a crisis as countries struggled to cope with the influx. Refugee crises of this extent constitute some of the sharpest immigration shocks in recent history and it is crucial to understand to what extent such refugee influxes impact host countries (Akgunduz et al., 2015). The possible negative effects of the immigration on wages and employment outcomes for native workers are one of the core concerns in the public debate on immigration. On the other hand, the prospects of rapid population ageing in Europe have given rise to a discussion of whether the immigration of young adults from outside of Europe could improve the European social and economic structure and global competitiveness (Lutz et al., 2003).

The textbook model of a competitive labor market suggests that, at least in the short run, high levels of immigration should lower the wages of competing workers and increase the wages of complementary workers (Borjas, 2013). Despite the common sense intuition behind these theoretical predictions, empirical literature offers contradictory evidence (e.g., Borjas, 2003; Card, 2005; Ottaviano and Peri, 2012).

This paper provides a reappraisal of the evidence on how the Portuguese labor market responded to the immigration of about half a million returnees, so called retornados, mainly from Mozambique and Angola to Portugal in the mid-1970s. This immigration episode was driven by political events that were largely exogenous to the economy of the receiving country. In relative terms, this influx was unique in the recent European history. Carrington and De Lima (1996) estimate that the flood of the retornados and repatriated soldiers in the colonial wars led to a 15% increase in the size of the Portuguese civilian labor force over the 1974–1976 period. This large scale makes the Portuguese experience remarkable in understanding the effects of a large labor supply shock. This paper focuses on the labor market outcomes in aggregate level, which provides evidence for the equilibrium impacts of the influx.

The main finding of this paper is that the influx had a significant adverse effect on the Portuguese average labor productivity and wages. The analysis suggests that in the short run, the labor supply shock decreased labor productivity by 26%,

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the long run effect being even larger. In low-skilled professions (in agriculture and construction), the average wage impact of the retornados in the Portuguese regions was −12 to −30% during the 1974–1977 period. The short run effect on the Portuguese average wages seems to be smaller than in the group of low-skilled professions but it is still clearly negative.

Following the line of Carrington and De Lima (1996), this paper provides evidence from both international and intra-Portugal analyses. The international analysis studies the effects of the total labor supply shock facing Portugal (immigration and repatriated soldiers), whereas the regional analysis focuses on the effects of the immigration part of the shock. The estimation of the impact of the labor supply shock on the Portuguese labor market outcomes is based on the synthetic control method for comparative case studies (developed by Abadie and Gardeazabal, 2003) and extended in Abadie et al. (2010).

The synthetic control method has typically been applied in case studies with a dichotomous definition of the treatment and control groups. However, in many cases it is hard to find a control group that is unaffected and still informative. This paper presents a novel approach on how to utilize synthetic counterfactuals when all available units are somewhat treated but the intensity of the treatment varies across the units. This approach has been utilized in the regional comparison in order to construct counterfactual scenarios for all Portuguese regions and ascertain how wages would have developed in each region if the immigration shock had been different. In the international comparison, the synthetic control method creates a counterfactual outcome for Portugal based on the weighted average of the applicable control countries (i.e. from countries that did not experience a flow of immigrants but share similar economic characteristics and labor market developments).

The main advantage of the method is that it precludes the researcher from making arbitrary decisions about the choice of control countries and about the question whether the weights attached to potential donor countries can be based on several economic characteristics. Another reason why the synthetic control method is suitable for this kind of study is the fact that unlike the traditional panel models (fixed effects and difference-in-difference), the synthetic control method allows the effect of unobservable confounding factors to vary with time. In the regional comparisons, the synthetic control method helps to avoid the endogeneity problem that might arise from the fact that immigrants were more likely to settle in high-wage districts.

The seminal paper of Carrington and De Lima (1996) on the Portuguese influx concludes that the retornados had, at most, modest adverse effects on labor market outcomes. Surprisingly, by utilizing different estimation strategy and a more extensive dataset, my analysis suggests that the Portuguese labor market responded precisely the same way as the standard textbook model predicts: an increase in the number of workers lowered the average labor productivity and wages.

This paper contributes to the existing literature by offering new insights into understanding the effects of large labor supply shocks. Recently, Borjas (2015) suggests that there is much to gain from revisiting already known cases and events with a new perspective and improved econometric techniques. Reexamination of old data with new ideas can radically change what is thought to be known in the discipline.

The remainder of this paper is organized as follows: the next section reviews the existing literature, Section 3 presents the stylized facts of the immigration shock and Portuguese economic and institutional developments, Section 4 introduces the estimation strategy and results from both international and regional comparisons, and the last section provides the conclusions.

2. Related literature

The effects of immigration on wages and employment outcomes for native workers have been actively debated by labor economists. The standard static model would suggest that immigration increases supply and thus competition in the local labor market, leading to lower employment and wages for natives. Since the 1990s, numerous studies have tried to empirically assess the labor market effects of immigration in a number of countries using a variety of methodological approaches. Most of these studies find that immigration has little or no impact on the labor market position of natives (Dustmann et al., 2008; Longhi et al., 2010; Borjas, 2013).

The most common approach in the literature is the spatial correlation approach, in which a measure of the employment or wage rate of resident workers in a given area is regressed on the relative quantity of immigrants in that same area and appropriate controls (Glitz, 2012). The spatial correlations have been questioned for two reasons. First, immigrants are more likely to settle in high-wage cities, which might induce a spurious positive correlation between immigration and wages. Second, native workers and firms respond to supply shocks by resettling in areas that offer better opportunities, effectively diffusing the impact of immigration across the national labor market (Borjas, 2015).

Studies employing quasi-experimental designs or exogenous shocks for investigating labor market outcomes are relatively few. The classic study of Card (1990) on the labor market impact of the Mariel supply shock stands as a landmark in this literature. He exploits the sudden increase in Miami's labor supply caused by the 1980 influx of Cuban immigrants. By using the difference-in-differences method, Card (1990) concludes that this large immigration shock, which increased Miami's labor force by 7% almost overnight, had no significant impact on Miami's native labor market outcomes.

Studies that are clearly influenced by the Cardś analysis include for example the return of repatriates from Algeria to France (Hunt, 1992), returnees from Angola and Mozambique to Portugal, (Carrington and De Lima, 1996) the migration of Russian Jews to Israel (Friedberg, 2001) and the influx of immigrants into Western Europe from the former Yugoslavia (Angrist and Kugler, 2003). More recently, Glitz (2012) exploited quasi-experiment rooted in political turmoil and German migration regulations in 1989, in identifying the effects of Germans returning to Germany from Eastern Europe.