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Migration and imperfect labor markets: Theory and cross-country evidence from Denmark, Germany and the UK

Herbert Brücker [a,b,c,*], Andreas Hauptmann [b,e], Elke J. Jahn [b,d,f], Richard Upward [g]

[a] University of Bamberg, Germany
[b] IAB Nürnberg, Germany
[c] CReAM, London, United Kingdom
[d] IZA Bonn, Germany
[e] University of Mainz, Germany
[f] Århus University, Denmark
[g] University of Nottingham, United Kingdom

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ABSTRACT

We investigate the labor market effects of immigration in Denmark, Germany and the UK, three countries which are characterized by considerable differences in labor market institutions and welfare states. Institutions such as collective bargaining, minimum wages, employment protection and unemployment benefits affect the way in which wages respond to labor supply shocks, and, hence, the labor market effects of immigration. We employ a wage-setting approach which assumes that wages decline with the unemployment rate, albeit imperfectly. We find that the wage and employment effects of immigration depend on wage flexibility and the composition of the labor supply shock. In Germany immigration involves only moderate wage, but large unemployment effects, since immigrants are concentrated in labor market segments with low wage flexibility. The reverse is true for the UK and Denmark.

1. Introduction

Concerns that immigrants take jobs away from natives and reduce their wages are widespread in most European countries. The current financial and economic crisis has further fueled these fears and raised sentiments against immigration. The impacts of immigration on labor markets are also subject of long-standing controversies in the academic literature. While a substantial number of studies, mainly coming from the US and Europe, finds no discernible effects on natives' wages and employment opportunities (Card, 1990, 2001, 2005; Dustmann et al., 2005; Pischke and Velling, 1997),[1] Borjas et al. (1996, 1997), Borjas (2003) and Aydemir and Borjas (2007) provide evidence that the impact of immigration on wages and unemployment may be substantial and argue that large parts of the literature systematically tend to

* Corresponding author.
E-mail addresses: herbert.bruecker@iab.de (H. Brücker), andreas.hauptmann@iab.de (A. Hauptmann), elke.jahn@iab.de (E.J. Jahn), richard.upward@nottingham.ac.uk (R. Upward).

[1] See also the meta-studies by Longhi et al. (2005, 2006, 2008).

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underestimate the labor market effects of immigration. These controversial findings can be traced back to differences in the theoretical frameworks, the specification of empirical models and different identification strategies.

In this paper we contribute to this literature by taking a fresh look at the effects of immigration on employment and wages using a theoretical and empirical framework which considers imperfect labor markets. Such labor markets are characterized by the presence of labor market institutions, that is systems of laws, bargaining rules, unemployment benefits and labor market programs, that shape the behavior of workers and employers. These institutions differ considerably across countries. We therefore apply a cross-country approach to analyze whether, and to what extent, the labor market effects of immigration vary between countries depending on their institutional settings.

Based on a theoretical framework which assumes that wages adjust only imperfectly to labor supply shocks, we use micro data from Denmark, Germany and the UK to estimate the wage and employment effects of immigration in those countries. All three countries have seen a substantial influx of migrants during the last two decades. From 1990 to 2010, cumulative net migration amounted to 8.6% of the population in Germany, 4.3% in Denmark and 4.1% in the UK (World Bank, 2013). While migration to Germany surged following the fall of the Iron Curtain, net migration to Denmark and the UK has also accelerated substantially since the turn of the century, partly as a consequence of the European Union's Eastern enlargement. In the course of the financial and economic crisis, net migration figures have soared in Germany, but declined in Denmark and the UK relative to the 2008 level.

The institutions of the labor market and the welfare state of these three countries are different, as Table 1 illustrates. The so-called Danish ‘flexicurity’ system features relatively weak employment protection and a high rate of hirings and firings, but high transfers to unemployed households (Anderson and Svarer, 2007). Moreover, industrial relations are characterized by a high coverage of collective bargaining agreements and union membership density in Denmark. Competition in national product markets as well as exposure to international competition is high, suggesting that rents at the firm level are rather low. Finally, taxes are high and progressive in Denmark, which in turn affects wage-setting for different groups in the labor market in different ways (Lockwood et al., 2000).

Germany is the archetypal example of a “continental” European welfare state, where employment protection is strict and welfare benefits are relatively high. The level of employment protection is significantly higher than in Denmark and the UK, while unemployment benefits are below those in Denmark, but above those of the UK. Union density is relatively low, but Germany is still characterized by an intermediate coverage of collective bargaining agreements. Moreover, many employers not officially participating in collective bargaining informally apply the contents of collective agreements in their firms. National product market competition is more strongly regulated than in Denmark or the UK, but exposure to international competition is, for a country of this size, high.

Finally, the United Kingdom is characterized by weak employment protection and, relative to the other two countries, low unemployment benefits. The UK typically has a low coverage of collective bargaining agreements and an intermediate

Table 1
Institutional indicators for Denmark, Germany and the UK, 2010 or latest available year.

	Denmark	Germany	UK
Collective bargaining coverage in %[a]	82	63	35
Union membership density in %[b]	68.5	18.6	26.4
Legal minimum wage	No	No	Yes
Net income of unemployed household as % of average employed net income[c]			
Single, no children	83	59	55
Married, one earner, two children	88	80	77
Net personal marginal tax rate %[d]			
67% of average earnings	42.56	50.53	31.00
100% of average earnings	49.43	56.78	31.00
167% of average earnings	62.96	44.38	41.00
Strictness of employment protection (index)[e]	2.13	2.87	1.20
Product market regulation (index)[f]	0.99	1.27	0.79
Import penetration (in % of GDP)[g]	54	44	31
Export propensity (in % of GDP)[h]	50	46	29
Net migration 1990–2010 as % of population[i]	4.3	8.6	4.2

[a] Collective bargaining coverage corresponds to wage and salary earners covered by collective wage contracts divided by all wage and salary earners. Source: OECD (2011).

[b] Union density corresponds to the ratio of wage and salary earners that are trade union members divided by all wage and salary earners. Source: OECD (2013).

[c] Measured at 67% of average earnings level. The ratio of the net income of unemployed to employed households considers all types of benefits made available to non-wage earners compared to wage earners as well as all taxes for different household types. Source: OECD (2011).

[d] Principal earner, single household, no child, 2010. Source: OECD (2011).

[e] See Venn (2009) for the calculation of the employment protection indicator.

[f] Product market regulation index measures the level by which policies inhibit competition. Source: OECD (2013).

[g] The import penetration rate is measured as the ratio of imports to GDP. Source: OECD (2011).

[h] The export propensity rate is measured as the ratio of exports to GDP. Source: OECD (2011).

[i] Source: World Bank (2013).