

Country	Total inflow	Inflow rate	EU-15	Other Europe	North America	Central & South America	Africa	Asia	Other
Austria	91.8	0.011	26.6	47.0	2.0	1.6	3.8	18.4	0.6
Belgium	102.4	0.009	30.0	32.7	3.2	3.5	17.5	12.6	0.5
Denmark	30.8	0.006	24.1	40.5	3.1	2.2	4.0	23.3	2.8
Finland	18.1	0.003	11.8	27.4	1.9	2.0	10.9	43.7	2.3
France	126.0	0.002	0.3	7.2	2.4	6.4	61.8	21.5	0.5
Germany	599.1	0.007	15.1	50.8	3.4	2.9	4.2	22.8	0.8
Italy	267.4	0.004	9.9	20.4	2.9	10.7	28.0	28.0	0.0
Luxembourg	14.5	0.029	72.6	12.6	2.2	2.4	4.6	5.1	0.6
Netherlands	104.4	0.006	28.4	25.5	3.7	4.2	6.3	20.0	11.9
Portugal	31.0	0.003	20.8	38.6	1.5	9.5	20.8	8.9	0.0
Spain	469.3	0.010	14.9	18.9	1.1	32.5	21.2	11.3	0.1
Sweden	82.8	0.009	17.2	22.7	1.9	2.9	15.6	37.2	2.5
UK	329.0	0.005	16.7	12.8	5.2	0.0	6.1	54.1	5.2
Australia	222.9	0.010	18.7	2.1	2.2	1.4	9.2	50.2	16.2
Canada	251.9	0.007	10.0	4.7	3.9	10.6	12.0	58.0	0.8
US	1,129.7	0.004	3.9	4.6	1.4	40.8	11.2	37.3	0.6

The inflow rate corresponds to immigration inflow over the total population in the country.

Table 1: Immigration inflows by region of origin, selected OECD countries, 2009

Source: OECD International Database (<http://stats.oecd.org>). Flows for Italy and Denmark refer to 2008.

Figure 3 depicts how patterns of high- and low-skilled immigration have evolved during the period 1991-2001. The top panel of the figure represents the stocks of both immigrants with primary education (low-skilled) and those with tertiary education (high-skilled) in 1991.⁶

⁶ The dataset also provides information on immigrants with secondary education, which are not considered in the figure. Yet comparing primary and tertiary educated immigrants provides insight for understanding the patterns of high- and low-skilled immigration during 1991 to 2001.

different picture appears in Europe, where in all countries except Switzerland the percentage of highly educated immigrants was below 2 per cent. The lower panel of Figure 3 depicts changes in the relative stocks of immigrants between 1991 and 2001. During this period overall immigration increased substantially; however the patterns differed for the groups of immigrants with low and high education.

While it is possible to observe a strong association between the stock of immigrants with tertiary education and its decennial change (the correlation for the countries in the map is 0.61), there seems to be a major redistribution across countries of low-educated immigrants (the correlation between the 1991 stock and the 1991 to 2001 change is 0.10). Hence countries which had relative large stocks of low-educated immigrants in 1991 have actually experienced a less than proportional increase in the stock of immigrants with primary education.

There are many factors behind these different trends, including differences in how the composition of skills across sending countries has evolved, but also changes in both pull and push factors of immigration, such as welfare spending, macroeconomic conditions, and immigration policies in both sending and receiving countries.

An important question is whether welfare spending has acted as a magnet for immigration and potentially altered the skill distribution of immigrants. Indeed when examining the proportion of unskilled immigrants — defined as the share of those with primary education out of the total stock of immigrants — and welfare — measured as social expenditure as a percentage of GDP — Figure 4 shows a positive relationship. This might suggest a possible welfare magnet effect.

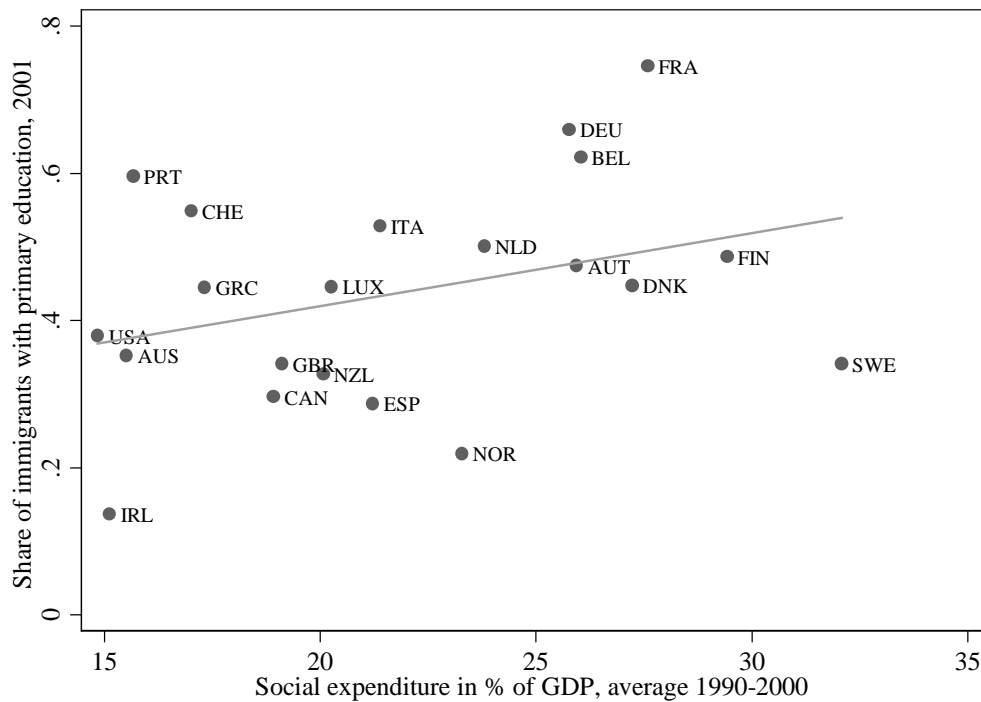


Figure 4: Low-skilled immigration and social expenditure

Source: own elaborations from the “Data Set 1990–2000 With Gender Breakdown (Rel 2.1)” (<http://perso.uclouvain.be/frederic.docquier/oxlight.htm>) and SOCX database (<http://stats.oecd.org>).

3. THEORIES ON WELFARE AND MIGRATION

3.1 THE WELFARE MAGNET HYPOTHESIS

The welfare magnet hypothesis was first coined in a seminal paper by Borjas (1999). This hypothesis refers to how welfare generosity acts as a pull factor for migration and how it influences the skill composition of immigrants. More specifically, it states that immigrants prefer to locate in countries with generous welfare provisions to insure themselves against labor market risks. This effect may not be necessarily limited to unskilled immigrants, since also high-skilled immigrants may prefer to live in countries with larger social benefit systems, e.g. because economic fluctuations might affect their employment perspectives irrespective of the skill level.

Borjas (1999) argues that welfare could influence immigration through several channels. First more generous welfare countries might attract immigrants who otherwise would have not immigrated. Second the existence of social safety nets might also retain immigrants who would have otherwise returned to their country of origin. To prove his

point, Borjas uses the example of the United States, claiming that substantial interstate dispersion in welfare benefits has affected the residential location choices of international immigrants. Immigrants to the United States are individuals who have already borne the cost of immigration. Hence the cost of choosing one state or the other is negligible. This implies that immigrants who receive welfare tend to choose, and thus be clustered in, states which offer the highest social benefits. On the other hand, welfare will not be a strong incentive to migrate across states for US natives because they still have to bear the costs of moving. As a consequence, native welfare recipients tend to be more dispersed across states.

While it efficiently explains the potential role of welfare in attracting immigrants, Borjas' model ignores the importance of the role other determinants of immigration play, such as social networks. Networks provide information about labor market opportunities and thus reduce the cost of migration (see Beine et al. 2011). On the other hand they can also be a source of information on welfare benefits for potential immigrants who are still in the source country.

Another important factor is immigration policy. In many instances, in particular when it comes to destination choices, immigrants are restricted in their choices: they are not free to move to the country with the most generous welfare system — even if they wished to. This may be because of certain barriers to migration — such as language and physical distance — but more importantly, as we discuss below, because of restrictive immigration policies.

3.2 MIGRATION REGIMES, WELFARE AND SELECTIVE IMMIGRATION

In a recent paper Razin and Wahba (2011) argue that the generosity of the welfare state may affect the skill composition of immigrants, depending on the type of immigration policy adopted. In a free-migration regime a typical welfare state with relatively abundant capital and high total factor productivity (implying relatively high wages for all skill levels) attracts both unskilled and skilled immigrants. On the other hand the generosity of the welfare state attracts unskilled immigrants, as they expect to gain more from welfare benefits than what they expect to pay in taxes for these benefits, i.e. they are net beneficiaries of the generous welfare state. In contrast, potential skilled

5. IS WELFARE A MAGNET FOR IMMIGRANTS?

Several papers examine the welfare magnet hypothesis by focusing on the locational choice of migrants. Southwick (1981) presents one of the earliest studies about welfare migration. He uses data drawn from a US study about the Aid to Families with Dependent Children (AFDC) program and presents several tests for the welfare migration hypothesis. He finds that migration flows between regions with large differentials in terms of benefits consist mostly of women who are AFDC recipients. Using information on the states of residence in 1975 and 1979 for a sample of welfare recipients from the Panel Study of Income Dynamics, Gramlich and Laren (1984) show that AFDC beneficiaries, although exhibiting very low interstate mobility, are more likely to move to a welfare generous state than to a low-benefit state.

More recent evidence about Europe is provided by De Giorgi and Pellizzari (2009), who combine data from the European Community Household Panel (ECHP) with information from the OECD Database on Unemployment Benefit Entitlements and Replacement Rates. Welfare generosity in their paper is measured using the net replacement rate (NRR), i.e. the ratio between the income received when not working (e.g. unemployment benefits) and the average wage. They test the welfare magnet hypothesis by considering immigration in the EU-15 and find that welfare generosity influences migration decisions, albeit the effect is small. In a study about the determinants of immigration flows to OECD countries Pedersen et al. (2008) find that while social networks are an important pull factor for immigrants, welfare — measured by social expenditure in per cent of GDP — does not exert a significant role in attracting immigrants. They argue that immigration policies might have prevented the potential adverse selection of immigrants.

Focusing on the skill composition of immigrants, Brücker et al. (2002) find that welfare-generous countries attract low-skilled workers, whilst countries with low social spending are more likely to be a magnet for high-skilled workers, since taxes are also low in these countries. As a consequence, welfare generosity may induce a negative sorting of immigrants.

One important issue that is seldom addressed in the empirical literature on the welfare magnet hypothesis is the endogeneity between welfare and immigration. A few studies have shown that actually immigration might affect welfare generosity. Using

OECD panel data for the period 1990 to 2001, Böheim and Mayr (2005) find that low-skilled immigration decreases public spending, while high-skilled immigration produces the opposite effect. The recent work by Giulietti et al. (2012) tackles the question directly of whether there exists reverse causality between welfare and immigration. The welfare magnet hypothesis is explored in the context of a particular program — unemployment insurance — and two potential sources of endogeneity are discussed. First, immigrants might affect spending by directly influencing the spending on unemployment benefits in per cent of the GDP (through participation in welfare programs, but also through taxes and consumption). Second, welfare policy could react to increasing immigration, and policymakers could encourage or discourage welfare participation of immigrants by intervening in aspects such as eligibility criteria or welfare duration. To address the endogeneity issue, the authors use the number of parties in the government coalition as an instrumental variable for unemployment benefits. The rationale is that public sectors are larger when coalitions are formed by a greater number of political parties. At the same time this instrument is thought to be uncorrelated with immigration. Using a sample of 19 European countries over the period 1993 to 2008, the ordinary least squares estimates show that unemployment benefit is positively correlated with immigration flows from non-EU countries, but not with inflows from EU origins. However, instrumental variables and generalized method of moments techniques yield an essentially zero causal impact of unemployment benefits on immigration inflows from both areas.

Another recent paper that also investigates the endogeneity of welfare generosity is Razin and Wahba (2011). They control for the endogeneity of total social spending per capita and find strong support for the magnet hypothesis under the free-migration regime (as represented by migration within the EU), and for the “fiscal burden hypothesis” under the restricted-migration regime (as represented by migration from outside the EU). Their results are robust to using total social spending as a percentage of GDP and for correcting for differences in educational quality as well as for returns to skills between the source and host countries.

To summarize, although empirical evidence on the welfare migration hypothesis is rather mixed, there are at least two potential important factors behind these unclear results. The first is that the majority of the studies above have ignored the endogeneity

of the welfare system and immigration. This might have produced biased results in the estimations. Immigration may affect directly or indirectly the level of social spending, depending on many factors, such as the skill level of immigrants, the composition of the immigrant households, their proclivity to be in welfare programs, and also the duration and eligibility conditions of the programs. Indeed several papers have modeled the potential influence of immigration on redistribution and welfare spending (Dolmas and Huffman 2004; Razin et al. 2011). The second reason behind the mixed empirical findings might be the result of ignoring the immigration regime (i.e. whether immigration is free or restricted), which tends to underestimate the implications of immigration selectivity within the context of the welfare magnet hypothesis.

6. CONCLUSION AND POLICY IMPLICATIONS

According to the studies reviewed in this chapter, it is plausible to conclude that fears about immigrant abuse of welfare systems are somewhat unfounded or at least exaggerated. Overall the empirical evidence on the welfare magnet hypothesis is mixed. However when evidence of a magnet effect is found, the impact tends to be rather exiguous.

We have explored two potential sources for the conflicting empirical results: the endogeneity of welfare and immigration and whether immigration in the country is free or restricted. Recent empirical evidence suggests that reverse causation between welfare and immigration potentially exists. Thus further exploring the issue of reverse causality between immigration and social spending constitutes a potential avenue for future theoretical and empirical work aiming to test the welfare magnet hypothesis. Further research will also need to consider explicitly the immigration policies and their implications.

It is also important to note that welfare is one of the many pull factors of immigration. Future research should attempt to accurately quantify the role of welfare generosity in relation to other factors, such as wage differentials, labor market conditions, tax systems and social networks.

Our review suggests that the number and characteristics of immigrants are potentially affected by not only immigration policies — which are meant to directly affect immigration flows — but also by other policies, such as welfare programs. Hence

policymakers should be aware of the interactions between immigration and welfare policies. One of the major findings of a recent study by Zimmermann et al. (2012) is that while raw statistics show that welfare receipt is higher among immigrants in most of the European Union, when controlling for socio-economic characteristics, such welfare dependency persists in only a few Member States. This suggests that characteristics of immigrants directly influenced by immigration policies — such as their skill level — are important determinants of immigrants welfare use. Hence policymakers should focus on the design of selective immigration policies and at the same time should intervene on welfare programs attributes (e.g. contributory nature and eligibility criteria) by taking into account a country's immigration pattern and the characteristics of immigrants.

How well the two types of policies are integrated will have consequences on the important issues which are at the core of current debate about immigration, such as the sustainability of the welfare systems versus the potential of immigration to alleviate labor shortages and counteract the effects of an aging population.

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