

## Elder Care and Migrant Labor in Europe: A Demographic Outlook

ALESSIO CANGIANO

MAJOR EUROPEAN COUNTRIES of destination for international migrants are experiencing an unprecedented, and possibly irreversible, transformation characterized by rapid aging and population and workforce decline. It is often argued that these demographic trends act as a pull force for international migration. On the one hand, demand for migrant labor arises because of a contraction of the workforce and as an alternative to raising labor costs; on the other, population aging, specifically the contraction of the working-age population relative to the older dependent population, undermines the social contract between generations on which welfare systems are founded (Johnson and Zimmermann 1993; McDonald and Kippen 2001; Malmberg 2006; Martin 2009).

Ongoing age-structural shifts will affect the labor market in some occupations more than in others. The health and social care sectors will face demographic pressures on both labor supply (because of increasing competition with other industries in attracting smaller cohorts of workers) and labor demand (because of the increasing demand for older-adult care and the contraction of the intergenerational support base).<sup>1</sup> Another structural trend, the movement of middle-aged women into wage employment, has exacerbated the care shortage.

In several European countries the provision of older-adult care is highly dependent on migrant workers in professional and direct care roles. In particular, a growing number of female migrant workers from within and outside the European Union are employed in both institutional and home-based care settings. In Southern European countries, care for older people at home by female migrant caregivers has become the main response to changing family roles and the inadequacy of formal care (Sciortino 2004; Lamura et al. 2009). In various Western and Northern European countries an increasing reliance on migrant caregivers is emerging in the formal social care sector because of the inability to recruit sufficient native-born workers

under current employment conditions (Cangiano et al. 2009; Walsh and O'Shea 2009). An extensive literature on "global care chains" has described the global inequalities underpinning the migration of female domestic workers (home helpers) and care workers from low- to high-income countries, and has highlighted pathways to employment, exploitative conditions, and other issues (Anderson 2000; Yeates 2008). Other studies have revealed the impact of welfare restructuring, economic liberalization, and the emergence of a market for migrant care labor (Bettio and Plantenga 2004; Simonazzi 2009; Williams 2012). The increasing employment of migrant women within various care occupations has been one of the main drivers of the feminization of labor migration (Castles and Miller 2009).

Building on conceptual frameworks that analyze the connections between different forms of care work—formal and informal, paid and unpaid (Lyon and Glucksmann 2008)—this article examines the demand for migrant labor in older-adult care as one of the major determinants of labor migration in Europe. My analysis draws on extensive review of existing empirical evidence and projections as well as on original comparative estimates on the employment of migrants in care occupations. By focusing on the demographic determinants of the demand for migrant care labor, I also connect separate strands of the literature—in particular, research on the labor market implications of population aging and the shrinking labor force and the literature on the intersections between migration and care regimes.

I begin by comparing demographic trends that have shaped demand for and provision of older-adult care across Europe. I analyze the role of migrant workers in the care labor market, building on new comparative estimates from the EU Labour Force Survey of the care sector's reliance on migrant labor and the channels of entry into the European labor market. The subsequent section synthesizes the results of projections on demand for and supply of older-adult care, revealing a future gap in both formal and informal provision. I argue that, owing to several institutional, economic, and social constraints, the significant growth of the care workforce that will be required to meet the future needs of Europe's aging populations is unlikely to be achieved by relying exclusively on domestic labor supply. I conclude by outlining some lessons for future immigration policies.

### **The demographic context: Aging, migration, and care provision**

As background for the analysis, Table 1 provides a statistical snapshot of aging, migration, and labor force trends across Europe. Demographic aging is pervasive. Italy and Germany are the leading countries in this process with some 20 percent of residents aged 65 and over, but most other EU countries closely follow; Ireland is the main exception with only 12 percent of its population aged 65+. Over the last decade the proportion of older people in the population

TABLE 1 Demographic indicators and female labor force participation rates in selected EU countries

Country	Population (million) 2012	Population 15–64 (million) 2012	Population 65+ (%)		Old-age depen- dency ratio <sup>a</sup>		Net migration (% of total population change) 2002–11	Female labor force participation rates (%)					
			2012	Change 2002–11	2012	Change 2002–11		Total (15–64)		Low-educated <sup>b</sup>			
								2011	Change 2001–10	2011	Change 2001–10		
EU-27	503.9	335.6	17.8	+1.8	26.7	+2.9	75.0	64.8	+4.6	54.1	+11.2	44.8	+1.3
Austria	8.4	5.7	17.8	+2.3	26.2	+3.4	94.8	69.5	+7.2	50.9	+16.1	48.9	+4.3
Belgium	11.1	7.3	17.3	+0.4	26.4	+0.6	75.0	61.1	+6.6	46.1	+16.7	35.1	+1.7
Denmark	5.6	3.6	17.3	+2.5	26.7	+4.4	61.0	76.1	+1.1	67.0	+4.1	59.9	+4.1
Finland	5.4	3.5	18.1	+3.0	27.7	+5.1	54.1	72.7	–2.0	69.0	+4.2	44.4	–12.1
France	63.4	40.8	17.3	+1.1	26.9	+1.9	32.2	66.2	+3.9	55.2	+7.8	47.4	+0.5
Germany	81.8	54.1	20.6	+3.6	31.2	+6.0	100.0 <sup>c</sup>	71.8	+8.1	66.0	+19.6	52.8	+8.8
Greece	11.3	7.4	19.7	+2.5	29.9	+4.6	90.3	57.5	+7.8	39.6	+8.9	40.0	+3.1
Ireland	4.6	3.0	11.9	+0.8	17.9	+1.4	32.8	61.9	+5.9	53.2	+16.0	33.0	–1.5
Italy	60.8	39.7	20.6	+1.9	31.6	+3.7	100.0 <sup>c</sup>	51.5	+4.4	39.6	+13.8	32.9	+0.2
Netherlands	16.7	11.1	16.2	+2.6	24.4	+4.3	17.1	73.1	+6.2	58.2	+16.9	55.6	+4.4
Portugal	10.5	6.9	19.4	+2.9	29.6	+5.1	97.0	69.8	+5.2	55.8	+5.3	62.5	+0.6
Spain	46.2	31.1	17.4	+0.4	25.8	+1.0	82.3	67.0	+16.6	51.7	+21.8	55.4	+14.8
Sweden	9.5	6.1	18.8	+1.6	29.2	+2.6	74.9	77.3	+1.3	77.1	+3.8	52.1	–7.2
UK	63.3	41.5	16.9	+1.0	25.7	+1.4	53.9	69.7	+2.0	61.6	+6.4	51.8	–10.8
Bulgaria	7.3	5.0	18.8	+1.9	27.8	+3.0	0.0 <sup>d</sup>	61.9	+2.8	54.7	+14.6	31.9	–2.5
Poland	38.5	27.4	13.8	+1.2	19.4	+1.2	0.0 <sup>d</sup>	59.4	–1.2	43.8	+3.9	22.5	–9.4
Romania	21.4	14.9	15.0	+1.1	21.5	+1.1	0.0 <sup>d</sup>	56.0	–6.4	42.3	–9.7	37.9	–13.2

<sup>a</sup>(Population 65+ / population 15–64) × 100.

<sup>b</sup>International Standard Classification of Education levels 0, 1, and 2.

<sup>c</sup>Positive net migration and negative natural increase.

<sup>d</sup>Positive natural increase and negative net migration.

SOURCE: Eurostat online database.

and the old-age dependency ratio, already among the highest in the world, have been increasing throughout this region, although more rapidly in some countries (e.g., Germany, Portugal) than in others (e.g., Spain, Belgium).

In most EU-15 countries net international migration has exceeded natural increase over the last decade, representing the main contributor to population change. Further, in countries with persistently very low fertility, natural increase is close to zero (e.g., Italy) or negative (e.g., Germany), and net migration has been the only positive addition to population change. The contribution of recent migrants to the new entries into labor force has been particularly significant (OECD 2010).<sup>2</sup> However, natural increase remains the main driver of demographic trends in countries that have received little recent migration (e.g., the Netherlands) and in those with fertility close to replacement level (France, Ireland). On the other hand, net migration has been negative in the new EU member states, which have experienced large emigration particularly after their accession.

Women are the main providers of both paid and unpaid care. In particular, women are more likely than men to provide informal care to their older parents (Pickard 2011: 15), while paid care has traditionally been one of the limited employment options available to women with few recognized qualifications (Smith and Macintosh 2007). There is strong evidence of the relationships and tradeoffs between formal care, informal care support, and labor market participation (Bolin, Lindgren, and Lundborg 2008; Prieto 2011).<sup>3</sup> This is reflected in large variations in female activity rates across EU countries, as seen in Table 1. A long-standing North–South divide is exemplified by the higher female labor force participation rates observed in Northern Europe than among women in Italy and Greece. However, other Southern European countries no longer share a labor market characterized by low female participation: Portugal and Spain have female participation rates above the EU average, with Spanish women experiencing a 17-percentage-point increase in one decade. Low female labor force participation rates in Poland and Romania in part reflect elder care arrangements that rely largely on informal provision, while the decline observed over the last decade can be ascribed, at least in part, to the large numbers of economically active women who have left these countries.

The particularly low participation in formal employment of women aged 50–64 in Italy and Greece reflects the high reliance on family support for older-adult care. Almost without exception, however, participation rates of women aged 50–64 have increased more rapidly than total participation rates over the last decade (by 11.2 percentage points at the EU level, compared to an increase of 4.6 percentage points in total female participation). Rising opportunity costs of providing informal care were arguably one of the factors associated with declining provision of unpaid care (Bolin, Lindgren, and Lundborg 2008).

The highest levels of labor market participation of less-educated women are observed in countries with a large elder care labor market. However, with

few exceptions (Germany and Denmark), the increase in economic activity of less-educated women has not kept pace with the overall increases in female labor force participation. In a number of countries (e.g., Sweden, Finland, UK) this might have constrained the care sector's recruitment within low-skilled occupations.

In all European countries older-adult care needs<sup>4</sup> are met through a mix of formal and informal provision and with a combination of paid and unpaid labor<sup>5</sup> (Table 2). While older people are not the only group in need of care, in most EU countries approximately half of all care recipients are aged 80 and over, and an additional 30 percent are aged 65–79 (Colombo et al. 2011: 41).

**TABLE 2** Type of care provided to the elderly population (2005–09) and care sector workforce (2012) in selected EU countries

Country	Elderly beneficiaries of informal and formal care (%)			Care workforce (2012) <sup>d</sup>				
	Informal care <sup>a</sup>	Long-term care <sup>b</sup>		Total care workforce (thousand)	Percent of total workforce	Distribution by type of employer (%)		
		Institutional	Home care <sup>c</sup>			Care institutions	Home care providers	Households
<b>EU-27</b>	<b>50.8<sup>e</sup></b>	<b>4.1<sup>e</sup></b>	<b>8.7<sup>e</sup></b>	<b>11,794</b>	<b>5.6</b>	<b>37.8</b>	<b>40.6</b>	<b>21.6</b>
Austria	57.6	3.3	14.4	139	3.4	55.5	36.9	7.6
Belgium	27.5	6.6	7.4	362	8.1	47.8	47.5	4.7
Denmark	29.7	2.5	20.0	317	12.1	37.1	61.1	1.8
Finland	—	3.1	6.3	221	9.1	38.4	58.2	3.4
France	20.2	6.7	6.5	2,253	8.8	26.8	47.6	25.6
Germany	64.6	3.5	6.6	2,226	5.7	50.6	40.1	9.3
Greece	86.7	0.6	5.6	88	2.4	10.5	26.1	63.5
Ireland	54.5	3.9	6.5	94	5.2	25.2	66.5	8.3
Italy	72.1	3.0	4.9	1,185	5.3	21.0	19.0	60.0
Netherlands	25.9	6.3	21.0	752	9.1	52.8	47.2	—
Portugal	—	3.4	4.3	272	6.3	32.4	21.4	46.3
Spain	66.7	4.4	4.7	1,104	6.4	21.9	19.2	58.9
Sweden	53.2	5.8	9.4	395	8.8	55.7	44.3	—
UK	—	4.2	6.9	1,777	6.2	44.4	53.0	2.6
Bulgaria	—	—	—	48	1.7	32.0	56.0	12.0
Poland	100.0	≈1.0	≈1.7	248	1.6	39.9	48.9	11.2
Romania	—	0.5	0.3	125	1.4	31.9	27.1	41.0

<sup>a</sup>Percent of severely disabled older people (65+) who receive regular care only from family caregivers.

<sup>b</sup>Percent of population aged 65+ receiving long-term care.

<sup>c</sup>Home care data are not entirely comparable across countries because of differences in definitions. A number of countries separately report semi-residential services (i.e. community care facilities), namely Greece, Finland, Portugal, and Denmark. In other countries, notably Austria, home care is overestimated because beneficiaries of (extensive) cash-for-care schemes are included.

<sup>d</sup>The care sector workforce is here identified on the basis of the statistical classification of economic activities (NACE rev. 2). Workers directly employed by households are included to capture the extensive use of this type of care provision in some EU countries. However, the data do include households without elderly members.

<sup>e</sup>Unweighted average for available country data.

SOURCES: Bettio and Verashchagina (2010), Tab. A1 (based on national data sources) and A2 (based on SHARE 2006/2007 data); Eurostat online database.

Differences in the types of service provision, in the definitions of disability, and in the living arrangements of the older population make it difficult to produce fully consistent measures of care supply and use across EU countries (Bettio and Verashchagina 2010). Nevertheless, some general patterns and distinctive features of national care regimes are provided by statistical indicators. First, there is an inverse association between availability of formal care and reliance on informal care. At the opposite ends of this continuum, Northern European countries (particularly Denmark and the Netherlands) rely mostly on paid care, while Southern European countries (Greece, Italy, and Spain) largely depend on informal support. Germany also relies heavily on informal care to compensate for underdeveloped formal care, while Sweden traditionally shares the Nordic welfare model of high levels of formal, subsidized care but with a less developed home-care sector. Belgium and France are similar in combining high levels of residential care and the lowest reliance on family caregivers. As noted above, the association between high levels of formal care and high female labor force participation rates is consistent with the barriers to labor market participation experienced by informal caregivers and with the role of the care sector as one of the main employment sectors for less-educated women.

Table 2 also shows workforce data by type of employer<sup>6</sup> that largely reflect the different levels of reliance on formal care. Nordic countries, where older-adult care mostly relies on formal care, have a large workforce in the sector (e.g., close to 10 percent of total employment in the Netherlands, Finland, and Sweden; 12 percent in Denmark) that is almost entirely employed by providers of institutional and home care. In contrast, in Southern European countries the care workforce is much smaller (5–6 percent of total employment in Spain, Portugal, and Italy and only 2 percent or less in Greece and Romania) and private households are by far the largest employer. Central European countries (e.g., Austria, Germany, Poland) have a relatively small care workforce that is mostly employed by institutional and home care providers, although the household sector is also emerging as an employer of care workers. Over the last two decades, the share of care employment in the total workforce has rapidly increased in some countries (e.g., Spain, Germany) but not elsewhere (e.g., Netherlands) (Geerts 2011).

These differences are consistent with the typical European care regimes based on the division of roles between the state, the market, and the family (Bettio and Plantenga 2004; Simonazzi 2009). More recent studies (Bettio and Verashchagina 2010; Kraus et al. 2010) have also revealed the blurring of the familiar divide between social-democratic, liberal, and Mediterranean welfare models. Signs of convergence shared by several EU countries can be found in the shift from institutional to home-based care, in a greater diversification of care services in the Mediterranean countries, in the cost-cutting pressures on public service provision (e.g., in Sweden and the UK), and in the increasing “outsourcing” of provision to migrant caregivers.

## Migrant labor in care occupations: A cross-country comparison

Long-term care has traditionally been a low-skilled, marginalized sector of employment. Concerns about funding, regulatory structures, sector credibility, sex-specific social roles, caregiver training, and the quality of care are synonymous with older-adult care across Europe (European Commission 2009; Bettio and Verashchagina 2010). Despite the need for skilled caregivers, long-term care in most countries is characterized by low pay,<sup>7</sup> poor working conditions, little opportunity for career advancement, and high vacancy and turnover rates (Fujisawa and Colombo, 2009; Simonazzi 2009; Eurofound 2013). Marked workforce divisions exist across social class and by sex, with female caregivers often experiencing an additional pay gap. While some of these features (e.g., shift work and a high risk of occupational hazard) are intrinsic to the job, others are a function of the institutional structure of the sector and of the stereotypes associated with caring for dependent adults (Smith and Mackintosh 2007).

Given these unfavorable employment conditions, it is unsurprising that many European countries have resorted to migrant caregivers as an additional recruitment pool in a tight labor market. Estimates suggest that about 830,000 workers are employed by Italian households in care for older adults (and over 1.5 million if those employed in household tasks are also counted), 90 percent of them foreign nationals, and the majority without a regular employment contract (Pasquinelli and Rusmini 2013). Bettio, Simonazzi, and Villa (2006: 272) described the massive reliance on migrant care workers in Southern Europe as a transition from a “family” model of care to a “migrant in the family” model. However, the employment of live-in migrant caregivers by private households is not an exclusively Southern European phenomenon, as shown by the case of Austria where the short-term migration of Eastern European female caregivers has also occurred (Weicht 2010). Recurrent regularization procedures and ad-hoc issuing of work permits to live-in undocumented workers were carried out in a number of countries (e.g., Austria, Germany, Greece, Italy, Portugal, and Spain) to enable this underground sector of the labor market to emerge (Fujisawa and Colombo 2009).

In some Western and Northern European countries, especially the UK and Ireland, recruitment of migrant workers within various occupations in both institutional and home-based care (especially qualified nurses and direct care workers) has occurred as a response to employers’ inability to recruit sufficient workers from the domestic labor market. In particular, and as in other public services where provision is largely devolved to private providers, many of the care providers who rely on public funding to run their businesses have been operating under increasing cost-cutting pressures that make it difficult to raise wages and attract more local workers (Cangiano and Shutes 2010).

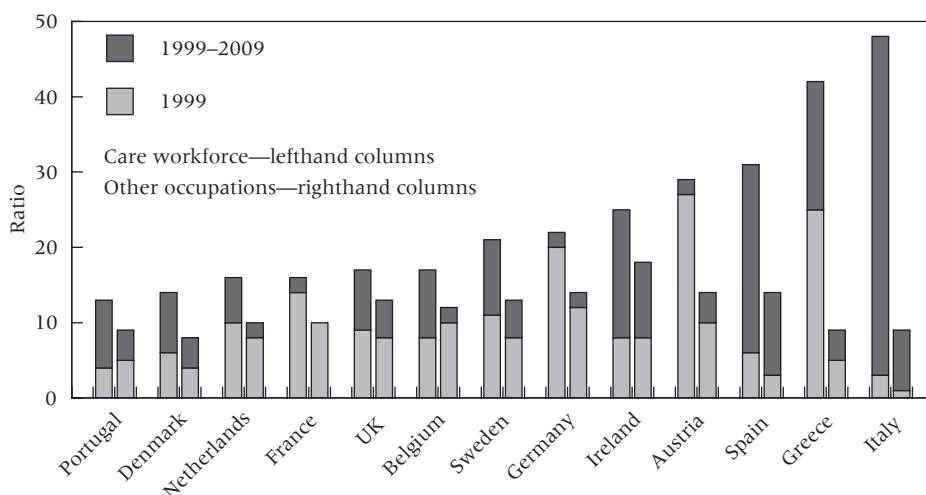


The marketization of the care sector is a key factor undermining employers' hiring capacity and favoring the recruitment of low-cost migrant labor (Williams 2012).

Despite some inconsistencies in the recording of the care workforce<sup>8</sup> and of migrant employment,<sup>9</sup> data from the EU Labour Force Survey (EU-LFS) provide a cross-national comparison of the reliance on migrant workers in care occupations. Figure 1 shows the foreign-born share of the care workforce in selected EU countries in 1999 and 2009. For comparison, the same indicator is shown for all other occupations combined.

The figure shows that in all European countries migrants account for a larger proportion of the care workforce than of the workforce in the rest of the economy. Over the last decade the migrant workforce has also grown more in the care sector than in all other occupations combined, Austria being the only exception. Large national differences exist, however, in the total levels of reliance on migrant care workers. At the top end of the range are the "new" immigration countries of Southern Europe (Italy, Greece, Spain), where recruitment of often irregular migrant caregivers has increased significantly over the last decade. In Italy and Greece the migrant share of the overall care workforce exceeds 40 percent and is 4–5 times higher than its share in the rest of the labor market. In Ireland, another new major EU destination country, the migrant share of the care workforce in 2009, at 25 percent, is three times higher than in 1999. At the other end of the spectrum, only about 15 percent of the care workforce in Portugal and Denmark is foreign born.

**FIGURE 1 Foreign-born share of the care workforce and of all other occupations in selected EU countries, 1999 and 2009 (percent)**



NOTE: Change in other occupations in France, 1999–2009, too small to be captured with this axis scale.

SOURCE: Own calculations based on the EU Labour Force Survey.



Estimates in Figure 1 also suggest that Germany and Austria are exceptional in that they were already relying substantially on migrant caregivers at the end of the 1990s but have seen little expansion of the migrant workforce in the subsequent decade.

Returning to the demographic context outlined above, the three countries with the highest and most rapidly increasing reliance on foreign-born caregivers (Italy, Spain, and Greece) had a stagnant or shrinking workforce and, as a result, their labor markets were highly receptive to migrant workers within low-skilled occupations. A high tolerance for undocumented migration (demonstrated by periodic regularizations) implied that the care sector, and especially private households, could access a readily available and self-sustaining recruitment pool. This might apply as well to the UK and Ireland, whose policies facilitated the circulation of EU accession country nationals and resulted in large numbers of EU migrants seeking employment. However, negative natural increase and migration-driven workforce dynamics do not appear to be inevitably associated with a rising demand for migrant caregivers, as shown by the case of Portugal where a greater diversification of care arrangements than in other Southern European countries has enhanced the attractiveness of care occupations for the native workforce (Wall and Nunes 2010).

An assessment of the care sectors shown in Table 2 also indicates a trade-off between reliance on migrant caregivers and the availability of domestic (paid or unpaid) caregivers. Italy has the highest foreign-born share of the care workforce and the lowest per capita levels of both informal and formal support. Most other countries in which migrants account for more than 20 percent of the care workforce (Greece, Austria, Germany, Sweden) have either low levels of informal provision or a low number of care workers per older adult. In contrast, reliance on migrant care is low in France and the Netherlands, where the availability of both informal and formal care is higher than the EU average. A negative association is even more evident between the recruitment of migrant caregivers and the relative size of the care labor market—that is, the demand for migrant caregivers is lower in countries where the care workforce accounts for a larger portion of total employment. This relationship is consistent with the notion that the demand for migrant care labor is highly dependent on the institutional structure of the care sector, with large public investments in service provision making paid care jobs more attractive for native workers and reducing the demand for private migrant caregivers (van Hooren 2012).

Data in Figure 1 largely reflect the situation prior to the economic downturn that has resulted in severe job losses for a number of industries and occupations. However, recent OECD estimates for Europe show that between 2007/08 and 2012 households as employers of domestic personnel experienced the largest growth of foreign-born employment of all economic

sectors (218,000 additional jobs, an increase of 21 percent). Second in rank for both native-born and foreign-born employment was residential caregiving, with the foreign-born workforce growing much faster (44.5 percent) than native employment (16.1 percent) (OECD 2013: 82). These figures show that employment in the care sector has been only marginally affected by the recession and point to the structural nature of the demand for care labor, whether provided by migrants or natives.

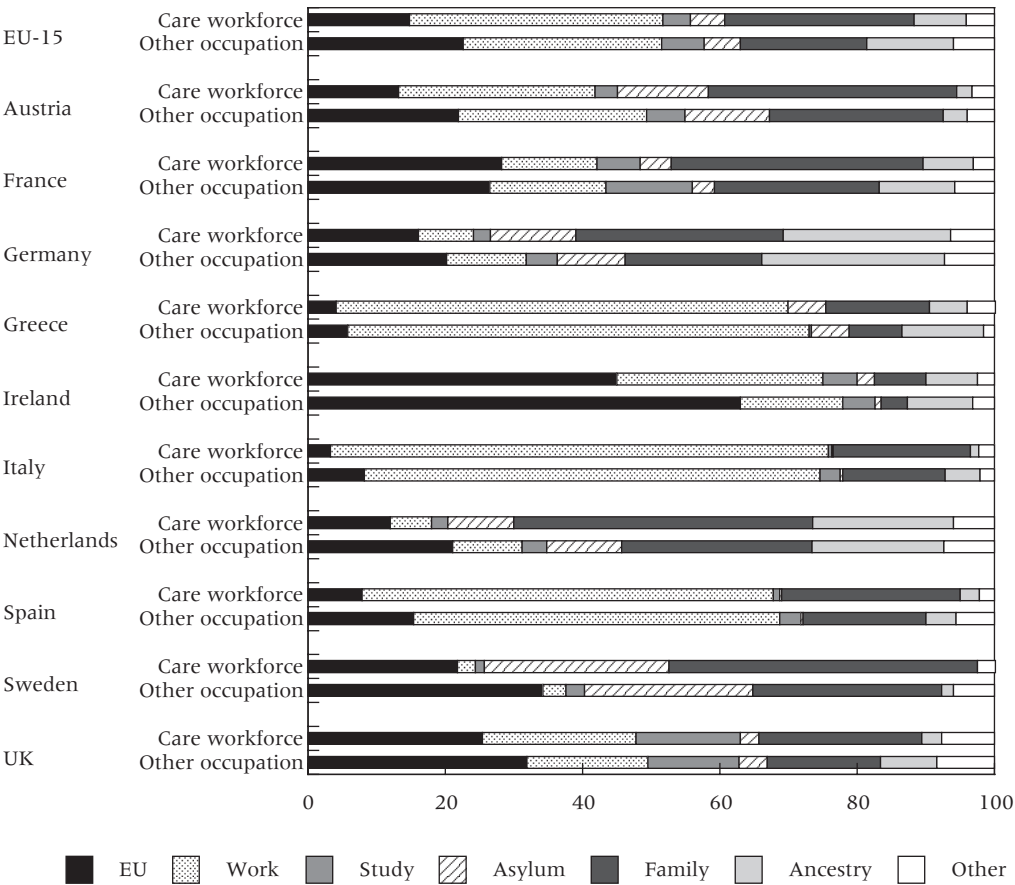
### **The role of migration policies: Entry channels for migrant care workers**

The care sector relies on various labor pools to recruit migrant workers. One option is recruitment from other EU countries. EU migration policies include the requirement to prioritize EEA (European Economic Area) nationals for available jobs before opening up recruitment from outside the EEA. In the context of the 2004 EU enlargement, the UK and Ireland chose not to restrict access to their labor markets by citizens from the eight accession states, in order to fill a high demand for low-skilled labor. A second recruitment pool is the migrant population already residing in the country, admitted via so-called non-economic immigration channels such as family reunification, asylum, and study. Even before gaining permanent settlement rights, these immigrants are generally allowed to work, although they may face some restrictions in access to the labor market. Finally, non-EEA workers can be recruited through labor admission routes. In countries that grant labor visas to care workers, entry is generally contingent on a job offer; based on a quota system; or subject to the inclusion on a list of occupations with labor shortages or to specific contractual requirements such as minimum wage levels (Fujisawa and Colombo, 2009). In Southern Europe ad-hoc regularization procedures for care workers were also used (Salis 2012).

Estimates based on the EU-LFS 2008 Ad-Hoc module<sup>10</sup> reveal wide variation in the composition of the migrant care workforce by category of entry across receiving countries (Figure 2). In the three Southern European countries where migrants make the largest contribution to the care sector, the migration patterns of foreign-born care workers are dominated by employment-related routes. This is unsurprising given the relatively recent establishment of these countries as new European destinations for international labor migrants. However, estimates for these countries do not permit the identification of migrants who entered irregularly.<sup>11</sup> Given the limited provision for obtaining a labor entry visa without a job offer, one can argue that most migrant caregivers in the employment category entered Italy, Spain, and Greece with no residence authorization or overstayed a temporary visa and subsequently regularized their status.

Ireland has also been a popular destination for non-EU labor migrants and for EU accession country nationals, who comprise almost half of foreign-

**FIGURE 2 Composition of the migrant workforce by category of entry: Care workers and all other occupations combined, EU-15 and selected countries, 2008**



NOTE: The category EU-15 includes nationals of EU-15 countries and post-enlargement EU-10 migrants (nationals of EU accession countries who moved to the selected destination countries in or after 2004). Migrants from Central and Eastern Europe who moved before 2004 are included in one of the other entry categories for non-EU nationals.  
SOURCE: Own calculations based on the EU Labour Force Survey, 2008 supplementary module on migrant workers.

born care workers. To a lesser extent, this is also true for the UK, which stands out for the relatively large share of care workers entering via the student route (15 percent, far higher than the EU-15 average of 4 percent).

The demand for migrant care workers recruited internationally via labor migration channels was considerably less significant in countries with greater self-sufficiency in staffing the care sector. For example, in France and the Netherlands domestically recruited migrants who had entered these countries via family reunification channels make up the largest share of the migrant workforce employed in care roles. While this is also true for Sweden, the Swedish care sector can also recruit from the large pool of refugees who settled in the country. Germany has relied on a large pool (24 percent

of the migrant care workforce) of ancestry-based migrants, namely, ethnic Germans from the former Soviet Union who entered the country in the late 1990s and early 2000s.

The composition of the migrant care workforce by category of entry is similar to that of the migrant workforce in other occupations, but with some differences. Migrant caregivers are more likely to have entered the country of destination as spouses and less likely to come from another EU country than foreign-born workers in other occupations. The first result can be explained by the large overrepresentation of women within both the care workforce and family reunification flows. The second is probably explained by the inadequacy of the EU-LFS in capturing recent migrants, which implies that 2008 data do not fully reflect the situation after the 2004 and 2007 EU enlargements.

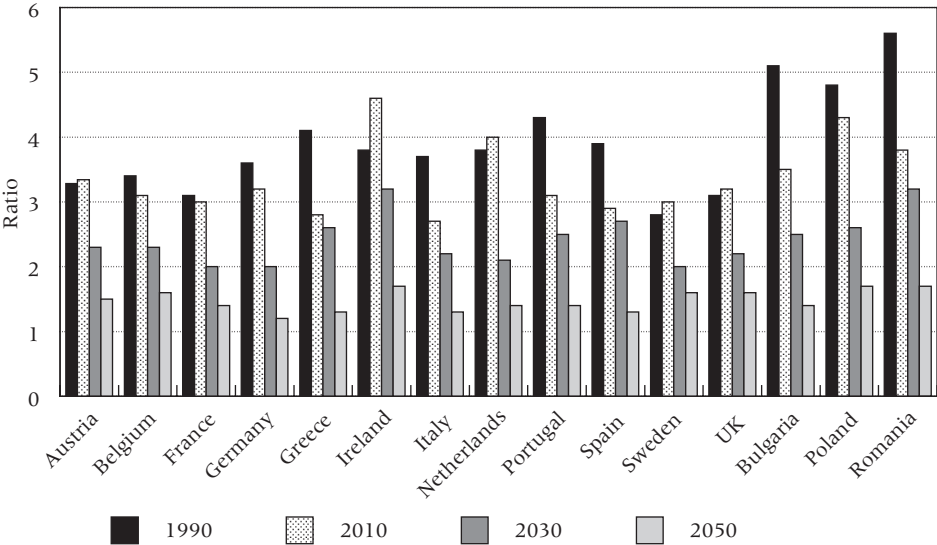
### Future demand and supply of care

Population aging will continue to reshape the demographic structure of Europe for at least the next three to four decades (e.g., Lanzieri 2011). Eurostat projections suggest that by 2050 the proportion of people aged 65 and over will exceed 30 percent in Germany, all of Southern Europe, and most of Eastern Europe. The magnitude and pace of population aging raise concerns for the sustainability of existing models of care. However, the extent to which aging will necessitate the expansion of the workforce employed in formal care, and result in an increasing demand for migrant labor, will depend on various factors discussed in this section.

The impact of aging on future demand for care will be mediated by changes in the prevalence of disabilities and long-term health conditions among the older population. Precise assumptions on future disability trends are hard to make, given mixed evidence on the various patterns observed across European countries—some experiencing declining disability rates and others showing increasing levels (Colombo et al. 2011: 63). Nevertheless, projections suggest that overall the growing number of older people will result in greater demand for care despite any declines in prevalence of disabilities and adverse health conditions (Comas-Herrera and Wittenberg 2003; Wanless 2006; European Commission 2009). Assuming no change in the probability of receiving residential or home care, by 2060 dependent older people aged 65+ receiving care in institutions would almost triple while those using home care services would more than double (European Commission 2009; Geertz, Willemé, and Comas-Herrera 2012). Significant reductions in the prevalence of disability, however, might alleviate some of the additional demand for care generated by demographic aging (Gaymu et al. 2007). According to all projections, women will still represent the majority of care recipients, but this male–female gap is likely to lessen in the future (European Commission 2009).

The question, then, is whether this projected increase in the demand for care might be met through the expansion of informal and/or formal support structures.<sup>12</sup> From a purely demographic perspective, the consequences of demographic trends for intergenerational care provision can be illustrated by an intergenerational care support ratio, here defined as the ratio of the population aged 45–64 to the population 75 and over. The rationale for this indicator is that informal care for older family members is largely provided by their adult children, who on average are about 30 years younger than their parents.<sup>13</sup> Figure 3 shows differential trends between 1990 and 2010 for Southern Europe and selected other EU countries. In Italy, Spain, Greece, and Portugal the intergenerational care support ratio has declined sharply (from about 4 to 3 children per older parent). Arguably, this drop in the relative size of cohorts potentially providing informal care has contributed to the progressive departure from a family model of care provision and the consequential widespread recruitment of foreign care workers within Italian, Greek, and Spanish households. In contrast, minimal variations have occurred in all Western and Northern European countries included in the figure, most of which already had intergenerational support rates in the range 3–3.5 in 1990. Some EU countries, notably Ireland, are even experiencing a more favorable intergenerational balance today than 20 years ago, largely due to the baby boom cohorts entering the 45–64 age group over this period.

**FIGURE 3** Intergenerational care support ratio,<sup>a</sup> estimates (1990, 2010) and projections<sup>b</sup> (2030, 2050), selected EU countries



<sup>a</sup>Population 45–64/population 75+.

<sup>b</sup>Eurostat base projection.

SOURCE: Eurostat online database.

Projections for 2030 and 2050 suggest more uniform trends, specifically a further decline in the availability of intergenerational support. By 2050, all EU countries will have intergenerational care support ratios between 1.3 and 1.7, half or less than half the current levels. The largest Eastern European countries that have recently joined the EU—and have so far been the major source of migrant care workers for Western and Southern Europe—will also experience unprecedented declines in their capacity to provide intergenerational care support. Their predominant reliance on informal care (with relatively underdeveloped formal care provision) implies that would-be migrant caregivers might face increasing tradeoffs between caring for their own older family members and accepting a paid care job in another EU country.

This crude analysis based on aggregate demographic data does not take into account the role of other social changes that might further reduce the availability of intergenerational care, such as additional increases in labor force participation rates of women aged 50–64, increasing long-range residential mobility, and changing cultural norms concerning care responsibilities within the family (Colombo et al. 2011). While the impact of these factors is hard to quantify, more refined projection scenarios (taking into account the varying propensity to provide informal care by sex, age, and marital status/cohabitation) foresee an absolute decline or a stagnation in the number of adult children providing older-adult care in most EU countries (Pickard and King 2012). Other projections, however, suggest that, at least in the medium term (to 2030), the widening of this informal intergenerational care gap could be mitigated by a less than proportional increase of older people with no surviving children (Gaymu et al. 2007).

The intergenerational care gap will also be partly offset by a foreseeable increase in the availability of informal care provided by spouses and partners. Expected improvements in old-age life expectancy will result in an increase in the share of older people living in couples, that is, fewer older women living alone (Colombo et al. 2011: 68). In other words, the role of male caregiving partners—currently accounting for 39 percent of family caregivers (Bettio and Verashchagina 2010: 6)—is likely to grow. As a result of the increase in the number of spouses providing informal care, the total number of family caregivers (including spouses and children) is projected to grow over the coming decades. However, demand for care in all EU countries is expected to substantially exceed the supply of informal caregivers (Pickard 2008; Colombo et al. 2011; Pickard and King 2012). Again, the role of other factors that might negatively affect the provision of informal care to spouses—for example, the postponement of female retirement; the decline in co-residence owing to increasing divorce rates; and the projected increase in the proportion of both-frail couples (Colombo et al. 2011: 69)—is also hard to predict.

I turn now to the question of whether the provision of formal care will be able to meet future needs, focusing in particular on workforce issues. Long-term

labor market projections for specific sectors are difficult to make with reasonable accuracy, particularly because certain factors, such as the introduction of new labor-saving technology, might affect labor demand. Supply-based projections using the conservative assumption of a constant share of care employment in the overall workforce over the projection period result in a declining elder care workforce, particularly in the long term (Wittwer and Goltz 2012).<sup>14</sup> In this scenario the gap between supply of and demand for formal care would widen, with the ratio of care workers to care users in 2050 decreasing to less than half the current levels in all EU countries (Pickard et al. 2012). Other projections aim to assess the number of caregivers that would be needed if the supply of formal care were to meet future demand, on the assumption that the ratio of care workers to care users will remain constant at its current level (Eborall, Fenton, and Woodrow 2010; Pickard et al. 2012). A simple example of this approach for two large EU countries, France and Italy, with different sizes of the care labor market and reliance on migrant caregivers is given in Table 3.

To maintain the current ratio of care workers to older people in France in 2050, the care workforce would have to increase by 74 percent (about 3 percent a year), accounting for about 15 percent of total employment at the end of the projection (up from 9 percent in 2012). In Italy, maintaining the currently low levels of formal provision per older adult beneficiary would require a similar increase (65 percent) in the care labor force but a considerably lower share of the total workforce employed in care (9.6 percent) at the end of the period. However, were Italy to depart from a system predominantly based on informal care support and achieve France’s levels of formal

**TABLE 3 Demand-based projections of the care workforce in France and Italy, 2050**

	France	Italy	
<b>2012</b>			
Care workforce (000)	2,253	1,185	
(per 100 population 65+)	20.5	9.4	
(% of total workforce)	8.8	5.3	
<b>2050</b>	<b>Constant care<sup>a</sup></b>	<b>Constant care<sup>a</sup></b>	<b>Increasing care<sup>b</sup></b>
Population 65+ (000) <sup>c</sup>	19,049	20,771	20,771
Total workforce (000) <sup>d</sup>	26,501	20,352	20,352
Care workforce needed (000)	3,913	1,961	4,266
(% of total workforce)	14.8	9.6	21.0
Change, 2012–50 (total, %)	73.7	65.4	260.0
Change, 2012–50 (annual, %)	3.1	2.8	7.1

<sup>a</sup>Constant ratio of care workers to older people 65+.  
<sup>b</sup>Italy achieves by 2050 the same ratio of care workers to older people 65+ as France in 2012.  
<sup>c</sup>Eurostat baseline projection.  
<sup>d</sup>Assuming 2012 age-specific employment rates.  
SOURCE: Own calculation based on Eurostat online database.



care coverage, its care workforce would have to increase by 260 percent, and one in five workers would have to be employed in the care sector by 2050. No matter how simple these calculations and assumptions, the results give a clear indication that, *ceteris paribus*, maintaining current levels of formal care coverage—or increasing them to make up for the foreseeable decline in informal support—will create significant additional demand for paid care and will require considerable expansion of elder care as a sector of employment.

## Alternatives to employing migrant care labor

The trends discussed in the previous section point to the need to significantly expand the care workforce to meet future demand for formal care. While investments in new technology might lessen labor demand by enhancing opportunities for independent living (Mayhew 2012), most direct care tasks are likely to remain labor-intensive and the sector is likely to continue experiencing low productivity growth (Baumol 1993).<sup>15</sup> In addition, solutions to labor shortages available to employers in other economic sectors, such as relocating to countries where labor costs are lower, are not feasible for employers in social care. Therefore, demand for migrant labor will depend substantially on the future capacity of the sector to attract workers from the domestic labor force, and particularly to mobilize inactive, unemployed, and underemployed workers (Fujisawa and Colombo 2009). However, evidence on the capacity of the care sector to attract the hardest-to-reach workers points to a disconnect between those offering employment opportunities and those seeking work (Eurofound 2006: 22).

Employers in long-term care, at least in principle, can respond to perceived labor shortages by increasing wages and improving working conditions to make jobs more attractive to the local workforce. Adjustments to training capacity are also possible to meet labor demand in skilled care occupations. The extent to which these are viable solutions for recruitment problems ultimately depends on their costs relative to the cost—understood in a wider sense—of hiring migrant workers. Employers in labor-intensive industries are reluctant to increase wages and non-wage labor costs (such as providing accommodations and meals, increasing leave time, and the like) because of concerns about their competitiveness, and, in the most extreme cases, for fear of being priced out of the market (Anderson and Ruhs 2010). Therefore, the availability of low-paid, flexible migrant labor can shape the preferences of employers by offering them a better option than increasing the costs of operating their business. This is especially true in a sector like social care, where labor costs make up around half the cost of providing home care and between half and two-thirds of the operating costs of care homes (Wanless 2006). The incentive to raise pay levels is further constrained by cost-cutting pressures on private care providers who largely operate with state-commissioned con-

tracts (Cangiano and Shutes 2010). Removing this barrier would ultimately require an increase in the funding of public care services or a reorganization of the structure and regulation of older-adult care.

The adjustment of labor demand to local labor supply might also be hindered by path dependencies in the employment of migrants (Anderson and Ruhs 2010). In other words, a high reliance on migrant labor may have the unintended consequence of maintaining the conditions that discourage the supply of domestic workers—not necessarily lower wages but, for instance, lack of investment in new technologies or in increasing the skill of the workforce and, most importantly, a continued characterization of caregiving as a low-status migrant job.

Whether the conditions for a shift from the dependence on migrant workers can be fostered in the care labor market also depends on the extent to which improvements in employment conditions would trigger an increase in labor supply among people who are currently unemployed, inactive, or employed in other sectors. In economic terms, the elasticity of labor supply with respect to wages differs across groups of individuals, sectors, and occupations and depends on such factors as the tradeoff between employment and public benefits and (for skilled jobs) on the time and cost of pursuing training. In relation to the main focus of this article—the implications of demographic trends—two observations are relevant. First, the widening gap between informal care needs and provision is likely to increase the opportunity costs for potential workers who have older relatives or children of their own in need of care. The material costs of paying someone else to look after one's own family, as well as the psychological cost of being away from family members, are unlikely to weight the tradeoff between paid and unpaid care in favor of the former. Second, the projected contraction of the overall low-skilled labor force in all EU countries (European Commission 2013)<sup>16</sup> might imply even greater constraints on the ability of the care sector to expand its low-skilled workforce.

## Conclusion

Demographic aging—in combination with socioeconomic, cultural, and institutional factors such as increasing education and labor force participation of women aged 45–60, changing perceptions of parental care responsibilities, and the disadvantaged and female-centered nature of elder care as a sector of employment—has led to a growing reliance on migrant workers in the provision of older-adult care in most European countries. With few exceptions, over the last decade the migrant share of the workforce in the EU has increased far more in care occupations than in the rest of the labor market. Convergence in the employment of migrant care workers can be observed at the intersection of different migration, employment, and elder care regimes (Williams 2012). However, significant variation in the migrant share of care

employment also suggests that the institutional context has potential to mitigate the impact of demographic aging on the care labor market. Relevant examples are provided by Portugal (the main exception in Southern Europe) and by Northern European countries where diversified employment and care models have generated only limited demand for migrant care workers (Wall and Nunes 2010; van Hooren 2012).

This article has focused on the demographic and labor market determinants of the gaps between supply of and demand for care, showing that the greatest levels of dependence on migrant care workers have emerged in some of the countries (Italy, Greece) that are aging more rapidly and where the relative size of the cohorts of adult children who are now providing unpaid help to their older parents has been declining at a greater pace. However, projections suggest that demographic trends throughout Europe will reduce the potential for intergenerational care support from adult children—particularly after 2020 when the baby boom generations will enter the 75+ age range—that will be only partly compensated by an increase in support provided by spouses and partners. As a result, the informal care gap is likely to widen.

If European care sectors continue to rely on large numbers of migrant workers to support the elderly dependent population, appropriate migration policies will be needed. Given the variation in national policies across European countries, it is difficult to identify a one-size-fits-all solution to manage migrant recruitment in care occupations. Some general lessons can, however, be learned from the experience to date. First, existing immigration policies have proved inadequate in regulating the admission of low-skilled care workers. Where demand for such workers is high (i.e., Southern Europe), substantial levels of undocumented migration and irregular employment have resulted. In other EU countries with more consolidated schemes for regulating labor migration, these policies have mostly catered to highly skilled workers and have only to a limited extent regulated the admission of less-qualified non-EU caregivers (Fujisawa and Colombo 2009). Without efficient regulatory structures to manage these flows, older adults' growing preferences for home care, the increasing number of older individuals and couples living alone, and the development of cash-for-care schemes might further the development of a "gray area" of live-in female migrant caregivers.

Second, the feasibility of recruiting migrant labor from the new EU member states should be questioned. Over the last decade, Romanians (in Italy and Spain), Bulgarians (in Greece), and Poles and Lithuanians (in the UK and Ireland) have massively contributed to the staffing of the older-adult care sector. The slowdown of post-enlargement intra-European migration flows, the convergence in wage levels, and, in the long term, the ubiquitous demographic contraction of the potential for intergenerational support might limit the ability of Western and Southern European countries to recruit care labor from the new EU member states.

Third, there appears to be considerable scope for policy interventions enhancing employment opportunities in the care sector for migrants who entered EU countries outside labor migration channels, as family members, asylum-seekers, students, and ancestry-based migrants. This is particularly the case in countries such as Sweden, Germany, and France where the vast majority of migrants are admitted on non-economic grounds. Policymakers should acknowledge the potential contribution to the labor market of these migrants, who are often considered a burden to the welfare states in narrowly framed migration debates. Specific measures should be enacted to alleviate the labor market disadvantage of some immigrant groups, such as refugees and female dependents, and enhance their training and career opportunities in the care sector.

Finally, demographic research on the impact of population aging and slowing demographic growth on the demand for migrant labor has mostly focused on the need for “replacement migration” to compensate for the contraction of local domestic workers. Evidence analyzed in this article suggests that demographic aging and the contraction of intergenerational care support have themselves been a powerful impetus to employment creation by generating additional labor demand within specific sectors of the economy. In many European countries this labor demand cannot be met without migrant care workers. Therefore, the findings of this article point to the limitations of analyses informed by a mere “workforce replacement” logic, and demonstrate the need for more comprehensive frameworks for understanding the demographic drivers of migration and the role of aging as a pull factor.

---

## Notes

Part of this article was developed in the context of the international project “LAB-MIG-GOV: Which Labour Migration Governance for a More Dynamic and Inclusive Europe?,” coordinated by the International and European Forum for Migration Research (FIERI) and benefiting from the support of Compagnia di San Paolo, Riksbankens Jubileumsfond, and VolkswagenStiftung ([www.labmig.gov.eu](http://www.labmig.gov.eu)).

1 Population aging will alter the occupational structure not only by increasing the need for a variety of caregivers, but also by shaping consumer demand for other services for healthy and wealthy older people, such as leisure and recreation activities, public transportation, and household maintenance. Most of these services will be labor intensive, with a limited scope for technology to replace labor (Martin 2009).

2 As an indicator of the scale of migration relative to the workforce, the OECD (2010) calculated the ratio of the annual inflow of permanent migrants to the average size of a single-year cohort in the 20–24 age group. Assuming equal labor force participation rates for migrants and natives, over the period 2004–07 permanent migrants accounted for about one-third of new entrants into the working-age population (OECD average), with significant variation across EU receiving countries (ranging from more than half in Spain and Ireland to less than one-fifth in Germany and France).

3 For example, Bolin, Lindgren, and Lundborg (2008) showed that, *ceteris paribus*, informal (unpaid) care providers are significantly less likely to be employed, particularly in Continental European countries. Prieto (2011) demonstrated that unmet needs for

formal care might exacerbate the incompatibilities between providing informal care to older family members and entering paid employment.

4 Long-term care is defined as care for people needing assistance with various activities of daily living (ADL) over a prolonged period of time. A broad definition includes not only personal care such as bathing, dressing, and eating, but also additional tasks in which older and disabled people might not be self-sufficient (e.g., shopping, preparing meals, housekeeping).

5 In this article informal care refers to unpaid care typically provided in the home by spouses/partners, children, and other relatives or friends. Formal care refers to remunerated personal services, including care provided in institutions like nursing homes as well as home care services, either by professional caregivers (e.g., nurses and qualified care assistants) or by less-skilled workers (e.g., live-in domestic helpers).

6 “Home care” refers to public, private, and voluntary organizations that provide care services to older people living in their homes. “Households” as employers refers to the care workforce directly employed by private households (either as live-in or as casual workers). Eurostat data in Table 2 refer to the workforce directly employed by all households, not only by households with at least one older adult member. This leads to an overestimate of the workforce caring for older people. However, this is partly compensated by the fact that some of these activities are under-recorded owing to the high prevalence of undocumented employment and the general inadequacy of the EU Labour Force Survey in identifying live-in domestic and care workers.

7 In most EU-15 countries the wage of care workers with basic formal skills is found to be 40–70 percent of the average salary (based on national data compiled by the OECD). The main exception is Denmark, where care workers’ wages are 20 percent higher than the average salary. Skilled care workers are generally better paid, but a pay gap relative to the national average salary is found in most Western and Southern European countries (Bettio and Verashchagina 2010: Tab. A5 pp. 162–164).

8 The main source of comparative labor market statistics across the EU—the Labour Force Survey—can be used to produce estimates of the long-term care workforce by selecting four occupational categories of the International Standard Classification of Occupations (Geerts 2011): personal care and related workers (ISCO 513), nursing professionals and nursing associate professionals (ISCO 223 and 323), and domestic and related helpers (ISCO 913). These categories encompass a wide range of skills and tasks, from highly specialized nursing to personal care and housekeeping. The combination of these categories results in an overestimation of the workforce employed in older-adult care because long-term care occupations are grouped together with professionals from outside this domain (e.g., child care workers and nurses working in the acute health care sector). This situation can be only partly addressed by excluding persons working in occupations that are clearly unrelated to the provision of services to the older population. However, it is essential to include all four ISCO categories to capture the distribution of care jobs across different care settings (nursing homes, residential care institutions, home care agencies, private households) and to reflect the significant variations in the structure of the care labor market across European countries (Geerts 2011).

9 EU-LFS estimates are likely to under-represent the migrant population for a number of reasons (Martí and Ródenas 2007). Some recent arrivals are likely to be excluded because the survey definition of a “usually resident” population typically requires a minimum duration of stay in the country (e.g., at least six months). Recent migrants are also more likely to refuse to answer the survey or provide incomplete information because of language barriers and mistrust of the interviewers—especially if their residence or work status is not entirely compliant with immigration regulations. They are also more mobile than the long-term resident population, and therefore are less likely to fulfill the requirement of continuous residence at the current address. Finally, migrants are more likely to live in communal establishments, which are excluded from the sampling strategy in most

EU countries. For all these reasons, estimates of the migrant population and migrant workforce provided by the EU-LFS are no doubt conservative.

10 In addition to the information on country of birth, nationality, and year of entry usually included in the core EU-LFS questionnaire, the 2008 supplementary module on migrant workers included questions on the reason for migration, parents' country of birth, and year of acquiring citizenship. These additional variables can be used to cross-classify the migrant workforce in proxy categories approximating immigration status on entry. The full methodology used to define each entry category is described elsewhere (Cangiano 2012).

11 In addition, my estimates for Italy and Spain seem to understate the presence of post-enlargement EU-12 migrants—Romanians are currently the largest immigrant group in both countries. This understatement is probably due to the aforementioned limitations of the Labour Force Survey in recording recent arrivals.

12 Research has shown that informal care and formal care are largely complementary. More precisely, Bonsang (2009) demonstrated that informal care is an effective substitute for formal home care when the needs of the elderly are low. However, he also found that this substitution effect disappears as the level of disability increases and concluded that informal care is a weak complement to institutional nursing care.

13 In 2010 the mean age at first child-birth across the EU ranged from 28.1 years in Poland to 31.1 years in Italy (Eurostat, online population database). For simplicity, 30 years was taken as the length of a generation in all countries. The intergenerational care support ratio remains a rough measure of the potential for informal care provided by children to older

generations—not all people over 75 need care, and not all people 45–64 provide care. It is, however, a more refined indicator of potential intergenerational care support than the old-age dependency ratio (population 65+/population 15–64), which refers to the full range of intergenerational transfers between the active and the older population.

14 Even with significant divergence of demographic trends across EU countries, this decline is basically the result of stagnating or declining workforce levels across the EU even assuming plausible increases in employment rates (Feld 2005; Coleman 2006; Bijak et al. 2007).

15 Baumol's "cost-disease" concept explains low productivity growth in personal services as a result of two main factors: first, the provision of care is unsuitable to standardization—patients' needs must be addressed on a case-by-case basis; second, the quality of care services is "inescapably correlated with the amount of human labor devoted to their production" (Baumol 1993: 20).

16 The combination of demographic trends and the increasing levels of education enrollment observed over the last few decades will result in further "upskilling" in the educational structure of the workforce, largely because highly educated cohorts will replace the less-educated cohorts of older workers who will retire. Even under optimistic scenarios assuming the attainment of the Europe 2020 employment targets (i.e., a significant increase in labor force participation rates), the less-skilled workforce is projected to decrease (European Commission 2013: 28).



## References

- Anderson, Bridget. 2000. *Doing the Dirty Work? The Global Politics of Domestic Labour*. London: Zed Books.
- Anderson, Bridget and Martin Ruhs. 2010. "Migrant workers: Who needs them? A framework for the analysis of staff shortages, immigration and public policy," in Martin Ruhs and Bridget Anderson (eds.), *Who Needs Migrant Workers? Labour Shortages, Immigration and Public Policy*. Oxford: Oxford University Press, pp. 15–52.
- Baumol, William. 1993. "Health care, education and the cost disease: A looming crisis for public choice," *Public Choice*, 77(1): 17–28.
- Bettio, Francesca and Janneke Plantenga. 2004. "Comparing care regimes in Europe," *Feminist Economics* 10(1): 85–113.
- Bettio, Francesca, Anna Maria Simonazzi, and P. Villa. 2006. "Change in care regimes and female migration: The 'care drain' in the Mediterranean," *Journal of European Social Policy* 16(3): 271–285.
- Bettio Francesca and Alina Verashchagina. 2010. *Long-Term Care for the elderly: Provisions and Providers in 33 European Countries*. Luxembourg: Publications Office of the European Union.
- Bijak, Jakub, Dorota Kupiszewska, Marek Kupiszewski, Katarzyna Saczuk, and Anna Kicingier. 2007. "Population and labour force projections for 27 European countries, 2002–2052: Impact of international migration on population ageing," *European Journal of Population* 23: 1–31.
- Bolin, Kristian, Björn Lindgren, and Petter Lundborg. 2008. "Your next of kin or your own career? Caring and working among the 50+ of Europe," *Journal of Health Economics* 27(3): 718–738.
- Bonsang, Eric. 2009. "Does informal care from children to their elderly parents substitute for formal care in Europe?" *Journal of Health Economics* 28(1): 143–154.
- Cangiano, Alessio. 2012. "Immigration policy and migrant labour market outcomes in the European Union: New evidence from the EU Labour Force Survey," LAB-MIG-GOV Working Paper, FIERI, Turin. <http://www.labmiggov.eu>
- Cangiano, Alessio and Isabel Shutes. 2010. "Ageing, demand for care and the role of migrant care workers in the UK," *Journal of Population Ageing* 3(1-2): 39–57.
- Cangiano, Alessio, Isabel Shutes, Sarah Spencer, and George Leeson. 2009. *Migrant Care Workers in Ageing Societies: Research Findings in the United Kingdom*. Oxford: Centre on Migration, Policy and Society. <http://www.compas.ox.ac.uk/research/labourmarket/migrantcareworkers/uk>
- Castles, Stephen and Mark J. Miller. 2009. *The Age of Migration: International Population Movements in the Modern World*. Basingstoke: Palgrave Macmillan.
- Coleman, David. 2006. "Europe's demographic future: Determinants, dimensions, and challenges," *Population and Development Review* 32: 52–95.
- Colombo, Francesca, Ana Llena-Nozal, Jérôme Mercier, and Frits Tjadens. 2011. *Help Wanted? Providing and Paying for Long-Term Care*. OECD Health Policy Studies, OECD Publishing. doi: 10.1787/9789264097759-en.
- Comas-Herrera, Adelina and Raphael Wittenberg (eds.). 2003. "European study of long-term care expenditure: Investigating the sensitivity of projections of future long-term care expenditure in Germany, Spain, Italy and the United Kingdom to changes in assumptions about demography, dependency, informal care, formal care and unit costs," Report to the European Commission, PSSRU Discussion Paper 1840.
- Eborall, Christine, Will Fenton, and Sarah Woodrow. 2010. "The state of the adult social care workforce in England, 2010," 4th report of Skills for Care's research and analysis units, Leeds.
- Eurofound (European Foundation for the Improvement of Living and Working Conditions). 2006. *Employment in Social Care in Europe*. Luxembourg: Publications Office of the European Union.



- . 2013. *More and Better Jobs in Home-Care Services*, Luxembourg: Publications Office of the European Union.
- European Commission. 2009. "2009 ageing report: Economic and budgetary projections for the EU-27 Member States (2008–2060)," *European Economy* no. 2. [http://ec.europa.eu/economy\\_finance/publications/publication14992\\_en.pdf](http://ec.europa.eu/economy_finance/publications/publication14992_en.pdf). Accessed 11 September 2013.
- . 2013. *EU Employment and Social Situation: Supplement on Demographic Trends*, Luxembourg: Publications Office of the European Union.
- Feld, Serge. 2005. "Labor force trends and immigration in Europe," *International Migration Review* 39(3): 637–662.
- Fujisawa, Rie and Francesca Colombo. 2009. "The long-term care workforce: Overview and strategies to adapt supply to a growing demand," *Health Working Papers* No. 44, OECD, Paris.
- Gaymu, Joëlle, Peter Ekamper, Gijs Beets, and Catriona Dutreuilh. 2007. "Who will be caring for Europe's dependent elders in 2030?" *Population* E-62(4): 675–706.
- Geerts, Joanna. 2011. "The long-term care workforce: Description and perspectives," ENEPRI Research Report No. 93, CEPS, Brussels.
- Geerts, Joanna, Peter Willemé, and Adelina Comas-Herrera. 2012. "Long-term care use in Europe: Projection model and results for Germany, the Netherlands, Spain and Poland," in Joanna Geerts, Peter Willemé, and Adelina Mot (eds.), *Projecting Long-Term Care Use and Supply in Europe*, ENEPRI Research Report No. 116, CEPS, Brussels, pp. 30–75.
- Johnson, Paul and Klaus F. Zimmermann (eds.). 1993. *Labour Markets in an Ageing Europe*. Cambridge: Cambridge University Press, pp. 30–75.
- Kraus, Markus, Monika Riedel, Esther Mot, Peter Willemé, Gerald Röhrling and Thomas Cypionka. 2010. "A typology of long-term care systems in Europe," ENEPRI Research Report No. 91, CEPS, Brussels.
- Lamura, Giovanni, Maria Gabriella Melchiorre, Andrea Principi, and Maria Lucchetti. 2009. "Migrant workers in the eldercare sector: The Italian experience," *Retraite et Société, Sélection 2008*. Paris: Caisse Nationale d'Assurance Vieillesse, pp. 125–152.
- Lanzieri, Giampaolo. 2011. "The greying of the baby boomers, a century-long view of ageing in European populations," *Statistics in Focus*, 23/2011. Luxembourg: Publications Office of the European Union.
- Lyon, Dawn and Miriam Glucksmann. 2008. "Comparative configurations of care work across Europe," *Sociology* 42(1): 101–118.
- Malmberg, Bo (ed.). 2006. *Global Population Ageing, Migration and European External Policies*. Stockholm: Institute for Futures Studies.
- Martí, Mónica and Carmen Ródenas. 2007. "Migration estimation based on the Labour Force Survey: An EU-15 perspective," *International Migration Review*, 41(1): 101–126.
- Martin, Philip. 2009. "Demographic and economic trends: Implications for international mobility," Human Development Research Paper 2009/17, UNDP.
- Mayhew, Leslie. 2012. *The UK Care Economy: Improving Outcomes for Carers*. London: Carers UK.
- McDonald, Peter and Rebecca Kippen. 2001. "Labor supply in 16 developed countries 2000–2050," *Population and Development Review* 27(1): 1–32.
- OECD. Various years. *International Migration Outlook*, Sopemi report, Paris: OECD.
- Pasquinelli, Sergio and Giselda Rusmini (eds.). 2013. *Badare non basta. Il lavoro di cura: attori, progetti, politiche* (Caring is not enough: Care work—actors, projects, policies). Rome: Ediesse.
- Pickard, Linda. 2008. "Informal care for older people provided by their adult children: Projections of supply and demand to 2041 in England," Report to the Strategy Unit (Cabinet Office) and the Department of Health, Personal Social Services Research Unit (PSSRU), Discussion Paper 2515, London.
- . 2011. "The supply of informal care in Europe," ENEPRI Research Report No. 94, CEPS, Brussels.
- Pickard, Linda and Derek King. 2012. "Modelling the future supply of informal care for older

- people in Europe," in Joanna Geerts, Peter Willemé, and Adelina Mot (eds.), *Projecting Long-Term Care Use and Supply in Europe*, ENEPRI Research Report No. 116, CEPS, Brussels, pp. 76–106.
- Pickard, Linda, Derek King, Joanna Geerts, and Peter Willemé. 2012. "Conclusions," in Joanna Geerts, Peter Willemé, and Adelina Mot (eds.), *Projecting Long-Term Care Use and Supply in Europe*, ENEPRI Research Report No. 116, CEPS, Brussels, pp. 114–129.
- Prieto, Cristina V. 2011. "Informal care, labour force participation and unmet needs for formal care in the EU-27, Croatia and Turkey," ENEPRI Research Report No. 97, CEPS, Brussels.
- Salis, Ester. 2012. "Labour migration governance in contemporary Europe—The case of Italy," Country Report for the LAB-MIG-GOV Project "Which labour migration governance for a more dynamic and inclusive Europe?" Turin: FIERI.
- Sciortino, Giuseppe. 2004. "Immigration in a Mediterranean welfare state: The Italian experience in comparative perspective," *Journal of Comparative Policy Analysis* 6(2): 111–129.
- Simonazzi, Anna Maria. 2009. "Care regimes and national employment models," *Cambridge Journal of Economics* 33: 211–232.
- Smith, Pam and M. Mackintosh. 2007. "Profession, market and class: Nurse migration and the remaking of division and disadvantage," *Journal of Clinical Nursing* 16: 2213–2220.
- van Hooren, Franca J. 2012. "Varieties of migrant care work: Comparing patterns of migrant labour in social care," *Journal of European Social Policy* 22(2): 133–147.
- Wall, Karin and Catia Nunes. 2010. "Immigration, welfare and care in Portugal: Mapping the new plurality of female migration trajectories," *Social Policy and Society* 9(3): 397–408.
- Walsh, Kieran and Eamon O'Shea. 2009. *The Role of Migrant Health and Social Care Workers in Ageing Societies: The Irish National Report*. Galway: Irish Centre for Social Gerontology.
- Wanless, Derek. 2006. *Securing Good Care for Older People: Taking a Long-Term View*. London: King's Fund.
- Weicht, Bernhard. 2010. "Embodying the ideal carer: The Austrian discourse on migrant carers," *International Journal of Ageing and Later Life* 5(2): 17–52.
- Williams, Fiona. 2012. "Converging variations in migrant care work in Europe," *Journal of European Social Policy* 22(4): 363–376.
- Wittwer, Jérôme and Andreas Goltz. 2012. "Projections of the future long-term care workforce," in Joanna Geerts, Peter Willemé, and Adelina Mot (eds.), *Projecting Long-Term Care Use and Supply in Europe*, ENEPRI Research Report No. 116, CEPS, Brussels.
- Yeates, Nicola. 2008. *Globalising Care Economies and Migrant Workers: Explorations in Global Care Chains*. Basingstoke: Palgrave Macmillan.