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High-Skilled Immigration Policy in Europe*

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Abstract

Whether Europe will be able to stand up to its internal and external challenges crucially depends on its ability to manage its internal mobility and inflows of international migrants. Using a unique expert opinion survey, we document that Europe needs skilled migrants, and skill mismatch is to be expected. A review of current immigration policies shows that despite a number of positive recent developments Europe lacks a consistent strategy to address this challenge effectively, paralyzed by the notion of “fortress” Europe, which we argue should be abandoned. Since significant political tensions can be expected between native actors that favor and disfavor further immigration, improving European immigration policies and procedures is a formidable challenge. This task involves the need to improve Europe’s image among potential migrants, especially the high-skilled ones.

JEL Codes: F22, J61

Keywords: High-skilled migration, mobility, immigration policy, Europe, European Union

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Europe has always been a crossroads of cultures and an intersection of countless immigration trajectories. In the postwar period, especially since the 1960s, immigration from Southern Europe, Africa, Asia, former colonies, and other parts of the world has been rising in Western Europe. The yoke of Communist regimes stanching immigration flows in Eastern Europe until the fall of the Berlin Wall, after which the difficulties of transformation drove many Eastern Europeans westward (see figures 1 and 2). In effect, noncitizen and foreign-born populations today constitute significant shares of the population in most of the old member states of the European Union (EU) and, with freedom and economic convergence, some immigration into the new member states from Central and Eastern Europe can be observed (see table 1).

Both high- and low-skilled workers can be found among these immigrants (see table 2). While in a number of member states (and also on aggregate in the EU25 and EU10) the evidence shows that the percentage of individuals with tertiary education is highest among immigrants, in several major destination countries—including France, Germany, and the Netherlands—immigrants are, on average, less educated than natives.¹ For the group of non-EU immigrants, the picture is similar: the share of high-skilled individuals in this group is somewhat lower than for immigrants in general, but it is still higher than among natives on aggregate in both the EU15 and EU25.²

The fact that Europe's labor markets need more skilled workers has been documented by a number of authors (see Zimmermann, Bonin, Fahr, and Hinte 2007; Bauer and Kunze 2004). Looming demographic developments, such as aging populations, stalled economic growth, cash-strapped social-security systems, and the dearth of innovation potential and of skilled workforces highlight the importance of the new dynamics skilled immigration can bring about (Zimmermann 2009). Indeed, empirical evidence suggests that the effects of economic immigration on European economies are rather more positive than negative, and the case is even stronger for skilled immigrants (Zimmermann 2005; Kahanec and Zimmermann 2009b; Kahanec, Zaiceva, and Zimmermann 2010). In particular, skilled immigrants seem, *inter alia*, to attenuate inequality, to increase growth potential and competitiveness, and, to the extent that high- and low-skilled labor are complementary, to boost productivity and employment of low-skilled workers, with all of the accompanying positive effects on social-security systems (Kahanec and Zimmermann 2008, 2009a; Bonin et al. 2008). Hence, with the ever-growing globalization of production processes and international mobility of production factors and the resulting global competition for human capital and skills, proper management of high-skilled immigration is of key importance for Europe.

And still, the European public discourse is unclear about whether immigrants are a blessing or a curse. This ambivalence is reflected in—and is probably itself a reflection of—the incoherent policy response to the challenges immigration brings. European countries differ in their traditions of handling immigration, but the lack of an effective immigration policy is widely shared. Thus, managing international immigration flows remains one of the most significant challenges in Europe. In particular, any policy to attract high-skilled immigrants is still in its infancy.

Therefore, we study high-skilled immigration policies in Europe in this paper. We start by reviewing what we know about the main postwar immigration trends. Next, we introduce and analyze unique data from the Institute for the Study of Labor (IZA) Expert Survey on High-Skilled Labor Immigration in the EU (ESHSLI).³ We gauge experts'

opinions about the demand for high- and low-skilled immigrants and contrast them with expected immigrant inflows and the perceptions of various native groups and institutions. Finally, we describe and evaluate the current immigration policies and propose prospective policy approaches.

European Migration and Immigration Policies in Historical Perspective

Modern European immigration, and immigration policy, can be divided into four distinct phases (Zimmermann 2005). The first dates back to the period shortly after World War II, during which large numbers of people displaced by the war returned to their homes or found new ones. Additional inflows of immigrants in this phase followed the process of decolonization. The initial period of postwar adjustment was followed by the second phase and characterized by the strong economic recovery in the 1960s and early 1970s, which created labor shortages in many European labor markets. The need for workers prompted several Western European countries to open their borders to immigration or even actively recruit migrant workers, generally targeting unskilled temporary immigrants from Southern Europe. Such “guest-worker” programs were halted circa 1973, however, when the oil shocks throttled the European economy and European governments feared additional immigrants would further strain social-security systems and increase unemployment. A third phase ensued, characterized by restrained immigration based primarily on family ties and humanitarian concerns.

The fourth phase of European immigration commenced with the fall of the Berlin wall, an event that triggered significant inflows of economic immigrants from Eastern to Western Europe. The conflicts in the Balkans and other parts of the world provided further impetus for European immigration; they funneled significant flows of refugees and asylum seekers from the affected regions mainly to Western Europe. While some countries, such as Germany, adopted more restrictive policies toward these immigrants, flows of humanitarian immigrants remained large.

The most recent developments include the EU’s eastern enlargements of 2004 and 2007, resulting in a gradual removal of the barriers to immigrants from the new member states as well as ongoing economic and financial turmoil that sparked protectionist rhetoric.⁴ Another development that deserves mentioning is that the convergence between the traditional European cores and peripheries has transformed several formerly emigrant countries, such as Ireland and Spain, into immigrant destinations over the past decade. In fact, even some of the new member states are attracting nonnegligible numbers of immigrants.

European Policy Challenges: Institute for the Study of Labor Expert Opinion Survey

Before turning to the analysis of current European policies regarding high-skilled immigration, it is useful to identify the main contemporary and upcoming policy issues in Europe. To this end, we employ unique data from the ESHSLI conducted in March 2009 among all IZA research fellows, policy fellows, and research affiliates based in Europe. The objective of ESHSLI was to measure experts’ perceptions about the EU’s economic need for immigrants and about the size of future immigrant inflows, as well as to

determine their opinions about European immigration policies with a special focus on high-skilled immigration.⁵ A total of 545 fellows were sent a personalized e-mail invitation asking them to take the survey and a reminder e-mail three days after receiving the initial invitation. This strategy resulted in the following turnout: 282 invitees clicked the personalized link to the questionnaire provided in the e-mail and 234 answered at least the first question (182 answered the last question). The highest numbers of respondents are from Germany and the United Kingdom; the largest numbers of fellows and affiliates are from these two countries as well (see figure 3). The response rates were between 30 and 60 percent of survey recipients for most countries (see figure 4).

The Need for Immigrant Labor. In the wake of the ongoing financial and economic turmoil, we first examined the perceptions of the experts surveyed regarding the effects these developments may have on the long-term demand for labor immigrants in the EU. Remarkably, 82.5 percent of respondents reported that their evaluation of the need for immigrant labor has not changed, which indicates that the crisis is not expected to systematically change conditions in European labor markets. In particular, 87.3 percent of respondents indicate that the EU needs, economically speaking, at least as many immigrants as it has now, and 56.6 percent claim that the EU needs more or many more immigrants. There is less conviction regarding whether the EU needs low-skilled immigration (the corresponding figures are 58.1 and 25.8 percent). However, a massive 96.1 percent of respondents claim that the EU needs at least as many high-skilled immigrants as it has now, and 81.2 percent of them believe that the EU needs more or many more high-skilled immigrants compared to the current situation.

It is also informative to compare the answers of those who responded that the crisis will affect the long-term demand for immigrant labor to the answers of those who predict no such effect. This comparison indirectly illuminates the effect of the crisis on the demand for low- and high-skilled labor. The results generally indicate that the crisis will have negative effects on the demand for immigrants. As the differences in the expected demand for high- and low-skilled labor between the respondents who expect the crisis to have some effect on the demand for immigrants and those who do not expect such effects is smaller for high-skilled immigration, the long-term demand for high-skilled labor seems to be somewhat more robust to the crisis (see table 3).

The Supply of Immigrant Labor. According to the surveyed experts, the EU has a clear economic need for immigrants, especially high-skilled immigrants. What are the experts' expectations about the supply of immigrant labor given current immigration policies? The survey data show that 78.6 percent of the respondents expect some or significant net inflows of low-skilled immigrants in the coming five to twenty years, but only 58.3 percent think the same about high-skilled immigration. Recalling that 25.8 (81.2) percent of the respondents indicated that the EU needs more or many more low-skilled (high-skilled) immigrants, these results indicate that the experts expect to see surplus of low-skilled and a shortage of high-skilled immigrant labor.

Will the ongoing crisis help to reduce this skill mismatch, or will it exacerbate it? According to the survey, 64.7 (15.2) percent of respondents believe the crisis will hinder or strongly hinder (promote or strongly promote) low-skilled immigration over the coming five years. In contrast, only 37.6 (19.5) percent believe the same about high-

skilled immigration. This finding indicates that the crisis may help to alleviate the skill mismatch in the market for immigrant labor over the short run.

Another interesting question concerns the nature of immigrant inflows: what is going to be the distribution of immigrant inflows regarding permanent, temporary, and circular immigration? This aspect determines whether immigrants settle in their host countries forever (permanent); return to their countries of origin or move to another country after some period of time (temporary); or migrate along circular immigration trajectories going back and forth between two or more countries, following employment and career opportunities (circular). This is also correlated with immigrants' behavior and adjustment in their host countries.

Permanent migrants are more likely to invest in country-specific human capital and to assimilate; temporary migrants are more likely to work in jobs below the level for which they are qualified and to work longer hours than comparable peers, and circular immigration constitutes specific immigrants who closely follow demand and supply conditions in their target labor markets. The experts surveyed expect that, over the coming five to twenty years, permanent immigration will dominate among low-skilled immigrants, followed by temporary and then circular immigration. However, the surveyed experts believe temporary and permanent migrants will constitute similarly large shares of the high-skilled immigrant population (see figure 5, a–c). This indicates that the share of temporary immigration will be higher among high-skilled than low-skilled immigrants. We find a similar result for circular immigration as well, although the difference here is less pronounced. These findings highlight the importance of properly designed absorption policies that would enable otherwise temporary and circular high-skilled immigrants to use their human capital in jobs corresponding to their skill levels. In addition, the shares of temporary and circular immigrants in the expected immigrant flows will be decisive for circulating human capital between source and destination countries. Whether the flows of temporary and circular immigrants projected by the experts will permit sufficient human-capital circulation remains to be seen.

Immigration Policy. A proper immigration policy has, at least in theory, the potential to alleviate the labor-market shortages and mismatches depicted above. Generally speaking, the survey indicates that current national immigration policies in the EU hinder rather than promote immigration and, therefore, aggravate shortages in the labor market. However, while 65.2 percent of the respondents believe that immigration policies hinder or strongly hinder inflows of low-skilled immigrants, the corresponding percentage of respondents who believe this is the case for high-skilled immigrants is significantly lower at 39.6 percent. This might indicate that the current immigration policies help to reduce the aforementioned mismatch between the supply and demand for high- and low-skilled labor in the EU. When asked at which level of implementation immigration policies could best address the labor-market requirements for immigrant labor, most of the respondents indicated that the EU and national levels are equally important; a smaller share of respondents indicated that policies should be addressed primarily at the EU level, and the fewest respondents indicated that policies should be addressed primarily at the national level. This general pattern is very similar for high- and low-skilled immigrants. Only a tiny fraction responded that no policy is necessary. Figure 6 shows the experts'

responses in regard to the level at which immigration policies should be governed for high-skilled immigrants.

Figure 7 indicates that respondents believe two policy approaches would address the economic needs of the EU most efficiently: job-dependent immigration (that is, allowing the labor market to select immigrants according to its needs) and positive selection based on skills or education (for example, through a points system giving preference to immigrants with a university degree or a professional qualification). Other responses given by more than 10 percent of experts surveyed include selection based on language, on immigrants' need (refugees and asylum seekers), and on the existence of family ties, as well as to simply open the borders.

Perceptions. The survey also asked the experts to indicate how they believed the following five native groups or institutions perceive high- and low-skilled immigration: (i) the general public; (ii) national governments; (iii) the European Commission; (iv) trade unions, works councils, and other employee associations; and (v) employers and employer associations. The results, presented in figure 8, a–e, show that the surveyed experts believe the general public and trade unions, works councils, and other employee associations are particularly skeptical about the need for further low-skilled immigration; they believe national governments and the European Commission are nearly as skeptical. The experts believe that only employers and employer associations favor inflows of low-skilled immigrants. Across the board, high-skilled immigrants are significantly more welcome than their low-skilled counterparts. In fact, the experts surveyed believe that all native groups and institutions—except trade unions, works councils, and other employee associations—lean toward favoring an increase in the number of high-skilled immigrants.

In this context, it is also crucial to look at what the survey reveals about what experts believe immigrants perceive about the attractiveness of a number of European countries, the EU as a whole, and Europe's main competitors in the global market for immigrants. The survey asked the experts to rate immigrants' perceptions of several destination countries; the experts rated the countries on a scale of one to ten, where a one indicates the least attractive destination for immigrants and ten represents the most attractive destination. The results, depicted in figure 9, show that, with the possible exception of the United Kingdom, both high- and low-skilled immigrants most likely see the considered European destinations as less attractive than the United States, Canada, or Australia. In the context of the aforementioned skill mismatch, this is a key issue the EU should address if it hopes to entice more immigrants in a competitive global market. A close look at the balance of country's attractiveness for high- and low-skilled immigrants, as depicted in figure 10, demonstrates that Spain and (to a lesser extent) France seem to be more attractive destinations for low-skilled immigrants than high-skilled immigrants. Again, only the United Kingdom is close to Europe's main global competitors in the attractiveness rating prescribed by the experts surveyed.

Current Approaches to High-Skilled Immigration in Europe

What has Europe done to address the labor-market mismatches revealed by the expert opinion survey analyzed above? Looking at the four phases of postwar European immigration explained earlier in this paper, Europe has not had a consistent policy for

managing high-skilled immigration. One reason for this has been the prevalent perception of a “fortress Europe” among not only the general public and policymakers but also potential immigrants. Immigration is not seen as an opportunity to increase Europe’s global competitiveness and alleviate its demographic problems; rather, it is perceived as a threat to the stability of Europe’s labor markets and welfare systems. At best, immigration is seen as a humanitarian issue or a way to resolve particular temporary shortages in the labor market.

Only recently has Europe started to realize the potential benefits properly managed immigration might have for its internal and external challenges. Europe is also now beginning to recognize that it is not in a position to play the role of an almighty gatekeeper tending flocks of high-skilled (or any) immigrants; instead, it needs to attract immigrants actively. Besides instituting policies to target native populations in particular EU member states, Europe addresses the issue of labor-market shortages with two broad approaches. The first approach involves free mobility of labor between EU member states, which can increase the allocative efficiency of European labor markets and channel emigrants to the countries for which their skills will be most productive. The second broad approach concerns inflows of emigrants from countries outside the EU.⁶

The policy of free internal mobility coupled with the recent EU enlargements has indeed increased the immigration potential in Europe, including the potential for high-skilled immigration. While this has been manifested in an increase in the flows of immigrants from Eastern to Western Europe and signs indicate that these flows have contributed to increased efficiency in European labor markets (European Commission 2009b; Kahanec, Zaiceva, and Zimmermann 2010), the effectiveness of this policy approach has several limitations. First, some member states’ transitional arrangements restricting free mobility from newer EU countries have distorted postenlargement immigration flows.⁷ A few countries that opened their borders early received unexpectedly high inflows (Ireland and the United Kingdom, for example), while countries that applied strict transitional measures (such as Germany and Austria) often pushed immigrants to seek innovative modes of entry and discouraged those who had competitive alternatives. For example, while receiving significant immigrant inflows, Germany attracted relatively older and lower-skilled immigrants than other old EU member states that had opened their borders to the new EU states earlier (Brenke, Yuksel, and Zimmermann 2010).

Second, in comparison with U.S. citizens’ propensity to move from state to state, Europeans generally exhibit a lower propensity to move from one European country to another, even when faced with economic opportunities for moving.⁸ Third, despite the policy of free internal mobility, immigrants—especially high-skilled immigrants, who are typically very mobile and often will live in one country and work in another—face burdensome administrative barriers to migrating. These include complicated and lengthy administrative procedures for transferring social-security benefits and health insurance.⁹ In addition, tax systems are often excessively complex, do not allow for or limit tax deductibles from other member states, and sometimes involve implicit double taxation.¹⁰ Not even the business world is free of frictions inhibiting the free movement of workers. For example, cross-border workers—those living in one member state and working in another—may not be able to access mortgage financing: banks in the country where they live may not recognize income from abroad or may discount it heavily, and banks in the

country where they work may not finance housing abroad. Access to credit may be further complicated by the typically temporary nature of the employment contracts of mobile workers. Fourth, language barriers and practical difficulties involving the recognition of professional qualifications often lead to the down-skilling of well-qualified immigrants.¹¹ Fifth, emigration has already generated a number of bottlenecks and skill shortages in new member states in the short run, thus increasing the need for non-EU nationals in the affected skill groups and occupations (Kaczmarczyk, Mioduszevska, and Żilicz 2010).

Although still applying some transitional arrangements, several countries have opened special channels for high-skilled immigrants from the new EU member states. In Germany, for example, federal legislators passed a new law regulating labor migration (*Arbeitsmigrationssteuerungsgesetz*), which became effective January 1, 2009. This law includes provisions for free mobility and labor-market access for high-skilled citizens of the new EU member states and their family members. In particular, workers who hold a university degree, or a comparable certificate, and their family members do not need the consent of Germany's Federal Employment Agency to obtain a work permit. Additionally, German immigrants from the new member states who have a qualification recognized in Germany do not need a work permit to begin an apprenticeship.

Although EU enlargement and the ensuing migration flows have, to some extent, been embraced as a remedy for sclerotic labor markets and skill shortages, this is much less true when it comes to the immigration of non-EU nationals. Yet, non-EU immigrants constitute the bulk of the immigrant population in most European countries (Kahanec, Zaiceva, and Zimmermann 2010). Non-EU immigrants generally need a residence or settlement permit as well as a work permit to gain access to the host labor market. For most non-EU immigrants, obtaining these permits involves a lengthy, costly, and difficult procedure with a highly uncertain outcome. Which immigration policies or special provisions do European countries implement vis-à-vis high-skilled non-EU immigrants? The following sections provide an overview of these policies in a cross-section of EU and European Economic Area (EEA) member states. In particular, we consider countries representing each of the four distinct migration patterns observed in contemporaneous Europe: Scandinavian welfare states, the Western European core, newly emerged European cores, and the new member states.

Scandinavian Welfare States

The cluster of Scandinavian welfare states includes Denmark, Finland, Iceland, Norway, and Sweden. This group of countries is characterized by steady inflows and outflows of migrants, economic prosperity, and a generous welfare state based on a social democratic tradition.

Denmark. Denmark grants residence and work permits if labor-market considerations warrant them.¹² In particular, Danish government agencies consider whether professionals already residing in Denmark are qualified for the job in question and the degree to which this job requires specialized training that warrants granting a work and residence permit for an immigrant. A written employment contract in accordance with

Danish employment and salary regulations must be presented for immigrants to receive the necessary permits.

Denmark issues work permits for three to four years. A number of policies facilitating easier access exist, for example, for professions on the “positive list,” that is, those for which Denmark lacks qualified workers.¹³ Other policies aim at foreigners who have been offered a salary above DKK 375,000 (where DKK is the abbreviation for the Danish krone, a salary equal to approximately €50,000); employees abroad who are to be temporarily stationed at a company’s Danish subsidiary; athletes; religious workers; the self-employed; and highly qualified workers, researchers, teachers, leading executives, and specialists.

Denmark uses a green-card scheme based on a points system. A green card allows a foreigner to stay in Denmark for three years and to seek and subsequently secure employment. To receive a residence permit under this scheme, immigrants must attain at least one hundred points in the points system. Points are awarded for educational attainment, language skills, work experience, adaptability, and age. For the effect of this system on high-skilled immigration to Denmark, the educational criterion is of key importance. Applicants obtain thirty points for holding a bachelor’s degree, fifty points for a bachelor’s degree followed by a one-year master’s degree, sixty points for a master’s degree, and eighty points for a doctorate. Graduating from a top university can yield five (top four hundred), ten (top two hundred), or fifteen (top one hundred) additional points. Ten additional points are granted if the applicant’s qualifications apply to a profession on the positive list. Depending on proficiency, five to twenty points are awarded for knowledge of any one of the Scandinavian languages, and additional points according to the same rules may be granted for the knowledge of either English or German. An applicant may receive a maximum of thirty points for language skills. Work experience is rewarded by fifteen (ten) points if the applicant has had three to five (one to two) years of work experience within the last five years as a researcher or in a field listed in the positive list. For three to five years of experience over the past five years in any other occupation, applicants are awarded five points. Adaptability is measured by the number of years of study or work in an EU or EEA country or Switzerland. Five additional points are awarded for knowledge of Danish. Young applicants up to thirty-four years of age earn fifteen points; those between thirty-five and forty years of age receive ten points.

A special tax regime applies to expatriates employed by Danish-resident employers. Under this regime, employees are allowed a flat rate of 25 percent, instead of the standard progressive taxation (39–59 percent), applied to salary income for a maximum of thirty-six months. The requirement to pay labor-market supplementary pension-fund contributions, labor-market contributions, and special pension savings are unaffected. To be eligible for this provision, foreign expatriates must earn more than DKK 57,300 per month (approximately €7,640) after deducting labor-market supplementary pension fund contributions, labor-market contributions, and special pension contributions, and must reside in Denmark. Deductions or personal allowances are excluded in this case.

Finland. Residence permits for employees, which are typically tied to a certain professional field but not to a specific employer, are required for non-EU nationals who

intend to work in Finland.¹⁴ The needs of the labor market are considered before a residence permit for employees is granted, and the adequacy of a foreigner's means of support needs to be guaranteed before a permit is issued.

A number of permits in Finland, other than the residence permit for employees, carry the right of employment.¹⁵ A non-EU national has an unlimited right to work based on a permanent- or continuous-residence permit based on grounds other than employment or a temporary-residence permit based on the need for temporary protection or other humanitarian grounds for immigration. High-skilled immigrants may qualify for a fixed-term Finnish-residence permit, which also carries an unlimited right to work on the grounds that the immigrant-applicant works as a professional athlete or trainer; works for a religious or nonprofit association; works professionally in either science, culture, or the arts; works as a company executive or in a mid-level management position; holds an expert position that requires special skills; or works as a professional in the field of mass communication.

A number of specific groups of foreigners may be granted a limited right to work in Finland. These include residence permits for study purposes; for various teaching, lecturing, and research assignments (maximum of one year); for work related to, for example, a contract of delivery of a machine that includes the installation of the machine or training in the use of it (maximum of six months); for work covered by interstate agreements or operated through educational institutions and students' associations supported by the EU, international work-camp operations, or other equivalent work; practical training that lasts for a maximum of one year; and for work as an au pair. Finally, several categories of non-EU citizens are permitted to work in Finland for up to three months without a residence permit (but with valid entry documents). These include interpreters, teachers, experts, referees, professional artists or athletes, artists' or athletes' assistants who work upon invitation or under contract, certain categories of sailors, pickers of berries or fruits, and permanent employees of a company operating in another EU or EEA country who perform temporary acquisition or subcontract work in Finland (provided that such aliens have appropriate and valid residence and work permits for the other country). Foreign students are allowed to stay in Finland for six months to look for a job after graduation.

In an attempt to address demographic challenges, the Finnish government started phasing in the Migration Policy Programme in 2007, which is intended to foster labor migration by, among other things, tying work rights to every residence permit and forecasting labor-market needs more precisely.

Finland applies several tax exemptions for high-skilled workers. If staying in Finland fewer than six months, foreign workers are considered nonresidents for tax purposes and are taxed at the source at a 35 percent flat tax rate after deducting €17 per day. Special provisions apply to students, artists, and athletes. Based on bilateral agreements, teachers and researchers from certain countries are fully tax exempt. This exemption may extend beyond the six-month period, provided they do not stay in Finland longer than the stipulated maximum (two years for most countries). Key foreign personnel staying in Finland longer than six months are eligible for a 35 percent flat tax rate if they work as researchers or teachers at a Finnish institution of higher education or if they possess special skills and their cash earnings exceed €5,800 per month, and they

have not resided in Finland at any time during the five-year period preceding the beginning of their respective employment.

Sweden. All foreign workers in Sweden are required to have work permits; any staying in Sweden for more than three months are required to have residence permits as well.¹⁶ Prior to the December 2008 passage of a new immigration law, the Swedish labor-market authority reviewed requests for work permits only after giving preference to Swedes; other EU, EEA, or Swiss citizens; and foreign people already living in Sweden. As part of this policy, jobs had to have been advertised for at least ten days in Sweden and other EU countries before an application for a work permit was made. The new law has adopted a philosophy of demand-driven immigration, which presumes individual employers can recognize the best employee for a given job opening better than anyone else. The Swedish Public Employment Service can no longer block the employment of a foreigner based on the argument that there is an alternative match in Sweden, another EU or EEA country, or Switzerland for the position. The agency's emphasis has shifted instead to ensuring that all terms of employment comply with Swedish standards, as established by collective agreements, including salary and insurance protection.

Work permits are issued for the duration of the employment to which they are tied for a maximum of two years. It is possible to extend work permits multiple times, but not for more than four years in total. After four years, a permanent-residence permit can be granted. A novel provision that facilitates the employment of high-skilled young workers in Sweden is that visiting students with at least thirty higher-education credits or who have completed one term of research education at an institution of higher education in Sweden are allowed to apply for a work and residence permit from within Sweden, meaning they do not have to leave Sweden before submitting their applications. Self-employed foreigners are required to have residence permits but not work permits.

Certain categories of non-EU nationals do not require work permits, including postsecondary (college or university) students with a residence permit and visiting researchers with a special residence permit to conduct research. In addition, a number of occupational categories are exempt from the requirement to have a work permit. These include certain high-skilled occupations, such as company representatives; visiting researchers or teachers in higher education (maximum duration of three months within a twelve-month period); performers, technicians, and other tour personnel; and specialists employed by a multinational corporation who will be working in Sweden for a total of less than one year.

High-skilled foreigners (experts and scientists) with an expertise scarce in Sweden may be entitled to a special tax regime under which no taxes are paid on the first 25 percent of their income for the first three years of their employment in Sweden.

The Western European Core

Austria, Belgium, France, Germany, Luxembourg, the Netherlands, and the United Kingdom constitute the Western European core. Like the Scandinavian welfare states, this cluster of countries is wealthy. These countries have traditionally been a main focal point for immigration heading into Europe.

Austria. To be legally employed in Austria, non-EU nationals are required to have either an employment or a preemployment permit and a permit to reside in Austria.¹⁷ Acquiring these permits is a considerable task with an uncertain outcome.¹⁸ Certain residence permits directly entitle their holders to work in Austria, however. According to the Austrian Aliens Employment Act (*Ausländerbeschäftigungsgesetz*), non-EU nationals can obtain such residence permits if they qualify as high-skilled key staff members (*Schlüsselkraft*). To qualify for this status, employees have to possess special skills or expertise in demand in the Austrian labor market, and earn at least 60 percent of the upper limit of the income base for social-security contributions from their prospective Austrian employer (at least €2,412 per month in 2009). In addition, their employment must be described by at least one of the following: (i) special importance for a region or a segment of the labor market; (ii) creation of new or safeguarding of existing jobs; (iii) significant influence on management and leadership (of the employing company); (iv) facilitating transfer of investment capital; or (v) university or polytechnic education or other stipulated qualification. Self-employed non-EU nationals can also qualify as key staff members if they demonstrate that the proposed self-employment involves a transfer of investment capital or the creation or safeguarding of jobs and affirm the objectives of the proposed self-employment in a business plan.

Quotas stipulated by the effective federal-settlement decree regulate the issuance of these residence permits. Key staff workers receive a special residence permit (*Niederlassungsbewilligung–Schlüsselkraft*), which is valid for a maximum of eighteen months and permits the holder to work for the employer stipulated in the permit without an additional work permit. Thereafter, a residence permit allowing unrestricted employment (*Niederlassungsbewilligung–unbeschränkt*) can be issued if the employee has worked at least twelve of the previous eighteen months as a key staff member. Such permits are usually issued for twelve months. Spouses and children of key staff members can receive residence permits within the same regulation, and the conditions under which they can stay and work in Austria are less strict than for other non-EU nationals. For example, key staff members and their dependants are exempt from the Integration Agreement (*Integrationsvereinbarung*), which requires non-EU nationals to learn or prove sufficient knowledge of German within five years of receiving their first or extended residence permit.

Researchers also constitute a special category. A researcher is defined as a person with whom a university or an equivalent institution concludes a hosting agreement. Private enterprises may also conclude hosting agreements if they demonstrate that the employment is dedicated to scientific research. It is, thus, the employer who decides who will be considered a researcher. For stays exceeding six months, three possible residence permits can be considered: the settlement permit for researchers; the settlement permit for special cases of paid employment (neither of which is subject to quotas); and the settlement permit for key staff members (subject to quotas). If the intended stay is fewer than six months, certified research institutions can provide letters of invitation for future employees, researchers, who can then obtain short-term visas (Visa C and D) permitting this employment. Austria is also currently considering implementing a red-white-red card intended to foster immigration of qualified workers with a good knowledge of German.

High-skilled workers often qualify for fiscal incentives to immigrate to Austria. Individuals who have temporary contracts not exceeding five years with Austrian

employers, who have not been Austrian residents in the past ten years, and who keep their foreign residence as their primary residence are entitled to a tax deduction of up to 35 percent of taxable income for expenses incurred keeping a household in Austria, educational expenses, and leave allowances.

Belgium. Non-EU nationals who wish to work in Belgium under an employment contract must hold one of three available types of work permit.¹⁹ Type A work permits offer non-EU nationals unlimited access to the Belgian labor market, both in terms of eligible duration and employer, and can be granted to foreign nationals who can prove four working years under a type B work permit, during a maximal and uninterrupted residence period of ten years.²⁰

Type B work permits are valid for one employer and are issued for one year. According to a June 1999 royal decree, the type B employment permit is granted only when it is not possible to find an available domestic worker eligible and capable of filling the vacant position in a satisfactory way and within a reasonable term, possibly even after receiving professional training. Certain categories of high-skilled workers are exempt from this requirement, however. These include:

- Highly qualified or managerial workers who pay social security in Belgium and possess a higher-education degree and have an annual gross salary greater than €35,638 or work in managerial positions with an annual gross salary greater than €59,460 (amounts valid as of January 1, 2009);
- Highly qualified or managerial workers posted in Belgium who continue to be employed by a foreign company and pay their social security abroad;²¹
- Researchers providing documentation of a detailed full-time research program, the amount of the salary or scholarship,²² an invitation letter from a university, institution for higher education, or acknowledged scientific institution; and proof of doctoral or other academic degrees;
- Visiting professors invited by a university, institution for higher education, or acknowledged scientific institution and proof of a salary (from either the professors' home or visiting institution) in accordance with applicable wage scales for teaching staff of universities or institutions of higher education;
- Specialized technicians who work for foreign employers and come to Belgium to install, initialize, or repair an installation produced or delivered by their employers (for a maximum of six months); such technicians must provide Belgian authorities with assignment letters specifying the terms of their assignments, contracts, and notes specifying the sector and field of activity of the foreign company posting its employee that confirm the purpose of the assignment.

A type C work permit is intended for workers whose stay in Belgium is temporary. It is valid for all salaried professions and all employers and has a maximum validity of one year, after which it can be renewed.

Fiscal provisions for high-skilled, temporary immigrants, such as executives, specialists, and researchers include a special tax regime that treats them as nonresidents by calculating their taxable income by adjusting their taxable earnings according to the number of days spent outside Belgium. Furthermore, reimbursement of employees' expenses incurred in connection with their stay in Belgium is exempt from personal income tax.

France. In France, work permits are issued by the local branch of the Departmental Directorate of Labor, Employment, and Education (*Direction Départementale du Travail, de l'Emploi et de la Formation Professionnelle*).²³ Before a work permit is granted in France, an employer must prove that no worker in France or the EU is able to do the job.

France issues two types of work permits: temporary secondments and full work permits. Temporary secondments serve foreign companies posting their employees onsite with their clients in France. The maximum duration of these permits is eighteen months, and they may be extended for an additional nine months thereafter. To receive temporary secondments, workers must earn a gross minimum of €3,835 per month. Full work permits are required for any company to employ non-EU or EEA workers in France. These permits do not have a time limit.

Full work permits are also a selection tool favoring high-skilled immigrants, as to obtain a full work permit, candidates must be cadres (that is, working in a managerial position or as another high-level professional), generally with high-level work experience and a university degree. Moreover, candidates must earn more than an equivalent French worker, at least €3,835 per month.

To obtain a permit as a self-employed foreigner, applicants must be able to demonstrate serious intent and the ability to generate revenue in the country.

France has adopted some fiscal incentives for foreign professionals. These include tax deductions for social security, health insurance, and pension payments expatriates make to countries other than France, as well as tax exemptions for bonuses that are directly related to their assignment in France. Foreign professionals may claim this tax exemption for up to five years.

Germany. Work permits in Germany are usually issued only in connection with a specific job position and only in cases when no German or other EU (or EEA) national is able to fill the position.²⁴ Furthermore, foreigners must obtain consent from the Federal Employment Agency to work in Germany, unless an exemption is granted by an international treaty. In foreign nationals' initial years of residence, work and residence permits are temporary and can be transferred into unlimited ones only after a minimum stay of five years. Immigrants can also be required to attend special integration courses if they lack sufficient knowledge of German language and culture.

Recently, Germany has made several steps toward more liberalized access for high-skilled, non-EU labor immigrants, including the aforementioned immigration legislation that came into effect January 2009. Non-EU immigrants with university degrees, and their family members, are allowed to work in Germany if they have a job and they receive the consent of the Federal Employment Agency. Highly qualified foreigners may be permitted to work in Germany without the consent of the Federal Employment Agency if they are integrated into German society and independent from the public social system. Highly qualified workers primarily include scientists with special professional knowledge, high-ranking teachers and researchers, and specialists or senior executives with specific professional experience and a salary at least equal to the contribution ceiling of the public-pension insurance (€63,600 in 2009). Residence permits for research purposes can be granted provided foreign nationals can provide documentation of a contract between the researcher and a legally recognized research

institution. In addition, the research institution must commit to assuming any expenses that public institutions might incur in connection with living expenses or deportation of the foreigner in the case of an illegal stay in the EU within six months of the termination of the contract.

Additional provisions apply to specific categories of high-skilled immigrants. Family members of researchers, scientific personnel, immigrants in leading positions, or immigrants with special qualifications can also obtain work permits without the otherwise obligatory assessment of the Federal Employment Agency. Immigrants who have lawfully resided in Germany for at least four years without interruption, as well as those beginning officially approved job training, are similarly exempt from this assessment. Immigrants who arrived in Germany before their eighteenth birthday and completed their education in Germany do not need to obtain work permits. Students are permitted to work full time for up to ninety days per year or part time for up to one hundred and eighty days. The self-employed are granted permits if their proposed businesses are expected to have a positive effect on the German economy, will meet specific local needs, and already have secured financing. The two former conditions are usually assumed to be fulfilled if a self-employment business is expected to generate at least €250,000 of investment and create a minimum of five jobs.

Germany had attempted to attract information technology (IT) and high-tech specialists through special policies. The German green card was introduced in 2000 with the objective of attracting much needed IT specialists. Within fixed quotas, it permitted holders of degrees in relevant fields already living in Germany and those who were able to provide proof of a job offer in Germany securing a minimum annual gross income of €51,000 to obtain residence permits. The maximum duration of stay was limited to five years, and the loss of the job tied to the green card resulted in the loss of the residence permit as well, unless a transitional job-search period was granted. The green card was discontinued in 2004, at which time Germany enacted a new immigration law. The German green-card program fell short of attracting the desired numbers of skilled immigrants.

The Netherlands. In the Netherlands, foreign nationals outside the EU, EEA, and Switzerland may seek work permits only after submitting a residence-permit application.²⁵ Applying employers must demonstrate that attempts have been made to fill the position from the Dutch, EU, or EEA labor markets, and the employment office initiates its own attempts to find a suitable employee through the European Employment Service (EURES) network. While the application process for new arrivals is considerably strict and the work permits are tied to a single employer, after living in the Netherlands for three years with a work permit, foreign nationals may obtain a residence permit allowing any lawful employment.

Since 2004, the Dutch Immigration and Naturalization Service has applied simplified procedures for high-skilled immigrants.²⁶ Well-paid workers with higher vocational or academic qualifications and those who play a catalyzing role in the innovation process are considered high skilled. In particular, high-skilled immigrants must earn at least €49,087 (or €35,997 if they are under thirty years old) per year, as of 2009. This income criterion does not apply if employment is in an educational or research institute or if it concerns a postgraduate student or university lecturer under the age of

thirty. Since December 2007, graduates who finished their studies in the Netherlands have also been able to obtain residence permits as high-skilled immigrants if their annual wage is at least €25,800. Furthermore, high-skilled immigrants with permanent contracts can be granted renewable residence permits, which have a maximum duration of five years, in contrast to regular residence permits, which are issued for a maximum duration of one year, and high-skilled immigrants' family members can be included in the same application process. Finally, high-skilled immigrants are not subjected to labor-market testing.

Under certain conditions, expatriates may be entitled to a special tax provision that allows employers to pay employees with an assignment in the Netherlands a tax-free allowance of up to 35 percent of regularly received earnings and a tax-free reimbursement of school fees for children attending international schools.

The United Kingdom. The United Kingdom overhauled its immigration system in 2008 by implementing a points-based system for immigrants from outside the EU, EEA, or Switzerland.²⁷ This system is based on five tiers. Tier one is intended for high-skilled immigrants, entrepreneurs, investors, and graduate students. Tier two regulates the immigration of qualified workers who have job offers. Tier three covers less-skilled workers who fill temporary shortages in the labor market. Tier four is intended for students and tier five for youth mobility and temporary workers. Applicants for immigration are required to score a sufficient number of points according to a tier-specific grading system to demonstrate that they comply with the immigration requirements for a particular tier. Sponsorship from a licensed sponsor (an employer or educational institution) is required under tiers two through five.

Tier one is the main policy tool to channel high-skilled immigrants to the United Kingdom. It replaces the Highly Skilled Migrant Programme and is based on a points system rather than any kind of employer sponsorship. Doctors, engineers, scientists, and other educated workers who have at least a first degree (bachelor's), can speak English, and earn a relatively high income in their country of origin qualify for tier one immigration. Tier one applicants must attain at least seventy-five points. Bachelor's degrees, master's degrees, and doctorates are rewarded with thirty, thirty-five, and fifty points, respectively. Earnings in the country of origin, which can yield five to forty-five points, are converted to pounds sterling and adjusted for the differences in price and income between the United Kingdom and the country of origin by so-called uplift ratios. Applicants under twenty-eight years of age are given twenty additional points, those between twenty-eight and twenty-nine years old receive ten points, and applicants between thirty and thirty-one years old receive five points. Prior work experience or a qualification obtained in the United Kingdom is rewarded with five points. Evidence of the successful completion of a standardized English proficiency test, a degree taught in English, or origination from an English-speaking country fulfills the requirement of language proficiency, for which applicants receive ten points. Finally, applicants who can provide proof that they will be able to support themselves and their dependants earn ten points.

Skilled workers may also enter the United Kingdom through other tiers, but the conditions may be less favorable. Within tier two, for example, applicants are required to have concrete job offers, and if they do not come as intracompany transfers, athletes (or

athletes' associates), or religious workers, their employment must also fill a gap that cannot be filled by a worker already settled in the United Kingdom. Within this tier, the shortage occupation list is compiled by the Migration Advisory Committee, which comprises occupations in which there are shortages and for which immigrants qualify without the need to prove their prospective earnings and qualifications. Within the tier system, international students who study in the United Kingdom receive preferential treatment upon graduation.

Expatriates who have an assignment in the United Kingdom and declare that their intentions in the United Kingdom are temporary may claim tax exemptions on their housing and traveling costs as well as for days worked outside of the United Kingdom.

Newly Emerged European Cores

Several countries in Europe have recently experienced a remarkable economic upgrading and undergone a radical change from providers of emigrants to receivers of immigrants. This distinct migration pattern is observed in Southern European countries such as Spain, Italy, and Greece, but also in Ireland. Together, these four countries form the cluster of newly emerged European cores.

Ireland. Ireland applies a work-permit scheme to applicants who are ineligible for an Irish green card and, as a rule, who earn a salary of €30,000 or more.²⁸ Applicants are also required to have adequate qualifications, skills, or experience for the intended employment to receive a work permit. Irish legislation requires firms to first post vacancies locally in Ireland and within the Irish National Training and Employment Authority and EURES employment networks before they are permitted to open the position to applications from non-EU, EEA, or Swiss nationals. Work permits are tied to specific occupations and can initially be issued for up to two years, after which time it is possible to extend the permit for up to three more years. An indefinite work permit can be issued after five years of residence in Ireland.

The Irish green card is a policy tool intended to fill shortages in the Irish labor market with suitably qualified foreign workers. After an initial validity period of two years, green cards can be extended indefinitely. A green card entitles its holder to apply for family reunification immediately. Eligible applicants for green cards are exempt from a prior labor-market assessment. The eligibility criteria are a gross annual salary of at least €60,000 a year, without bonuses, or between €30,000 and €59,999, without bonuses, if the green card is tied to a stipulated strategically important occupation. These occupations include IT professionals; health and associated professionals; professional engineers and technologists; construction professionals; researchers and natural scientists; business, financial, and associate professionals; and specialist managers (European Migration Network 2007).

Ireland facilitates further mobility through a policy permitting intracompany transfers, which entitles foreign senior managers, key personnel, and trainees to move between foreign and Irish branches of the same multinational company. To qualify for an intracompany transfer, an employee must earn a minimum annual salary of €40,000 and must have worked for the company for at least twelve months prior to the transfer. In addition, Ireland's policy toward so-called third-level graduates entitles graduates who

obtained a tertiary-level degree in Ireland to stay and seek employment in Ireland for six months after graduation. Upon finding appropriate employment, they are eligible to apply for either a work permit or a green card.

Greece. The Greek Ministry of Employment and Social Security (together with the Ministry of Interior and Ministry of Foreign Affairs) regulates the entry of non-EU workers into Greece.²⁹ The ministry stipulates labor-market needs for foreign (non-EU) nationals by occupation, prefecture, and employment type and duration based on regional reports from special committees and the current demographic and labor-market situation. The ministry then forwards the labor-market needs to Greek consulates, which subsequently post the stipulated job opportunities and administer the application process for foreign nationals. Based on the lists of applicants sent back to regional authorities in Greece, employers apply to hire new employees.³⁰ In coordination with the consulates, an appropriate visa is issued to foreign nationals selected for employment. They must have applied for a work visa from their country of origin and for a residence permit for work purposes after arrival. As it typically takes twelve to eighteen months to complete the process, it works best for seasonal immigrants, who are prioritized by the authorities and whose needs are relatively easy to predict.³¹

In addition to this general system, Greece applies several provisions for high-skilled workers. Foreign nationals who are scientists and researchers, university professors, artists, and intracorporate transfers may be issued special visas for employment. Further, Greece distinguishes three types of high-skilled workers. The first type includes board members, managers, and company staff; they are entitled to a residence permit with the right to work in Greece that is issued for a year and can be extended for an additional two years if they hold a work contract in Greece and document their occupational status. The second type includes foreign workers who serve the “public interest.” Employers of such workers must prove that the considered employee is qualified to promote public interest. Permits for this type of worker are issued for one year and can be renewed every year. The third type includes affiliates of archeological schools. Their employment must be connected to the school’s activity. Further provisions apply to foreign nationals employed in other EU member states and posted to Greece. All individuals in these categories of high-skilled immigrants are entitled to immigrate with their family members. Immigrants in all other categories can bring their family members only after two years of legal residence, provided that they provide evidence of a stable and regular income to support them (Kanellopoulos and Cholezas 2006).

Specific regulations apply to intellectual creators such as writers, authors, directors, painters, sculptors, actors, music artists, choreographers and scenographers, and specialized personnel of foreign companies employed in Greece within the framework of a service contract. The self-employed and sole proprietors who deposit €60,000 in a Greek bank and whose business plans pass the feasibility evaluation by the responsible Greek consulate and are accepted by a special committee in the destination region may also be permitted entry with a special visa. Greece does not grant high-skilled immigrants any special tax provisions.

Spain. To be permitted to work in Spain, non-EU nationals must obtain a work permit.³² In 2005, Spain offered a general amnesty for illegal immigrants, who were then able to

legitimize their presence in Spain. More generally, foreigners can obtain the first work permit for Spain in one of two ways. Foreign nationals who are direct employees of a Spanish company may be granted work permits for a maximum of twelve months (type B); this permit may be extended for up to two additional years. The application for a type B work permit must be made by the employer, whereas the extension can be demanded by the employee. Seconded workers—that is, foreign nationals who temporarily work on behalf of a host company but generally remain on the payroll of their original home employer, who is providing some service to the Spanish host company—can obtain a type A work permit for a maximum of nine months. With respect to qualification, applicants for type A permits must demonstrate sufficient experience to fill the position and must demonstrate that they have at least six to twelve months of experience with the company providing services to Spain. Preference is given to candidates who can provide evidence of a link with Spain, including a Spanish grandparent or having studied in Spain, and to Latin American citizens. In addition, each year the Spanish National Employment Institute (*Instituto Nacional de Empleo*) issues a list of occupations (and geographic areas) in which immigrants are especially needed and for which work-permit quotas (*contingente*) are assigned. Specific provisions apply to entrepreneurs, researchers, academics, and very high-skilled workers.

New Member States

The new member states that joined the EU in 2004 and 2007 have been experiencing migrant outflows. However, with a gradual strengthening of their economies, some of them are experiencing their first patterns of immigration.

Bulgaria. Non-EU workers are entitled to employment in Bulgaria provided they possess a work permit issued by the Bulgarian National Employment Agency.³³ Work permits are valid for a predetermined period of time and tied to a particular work placement; these can be granted to individuals who possess skills or specialized knowledge that is in demand but not available in the Bulgarian labor market.

While a maximum term of one year generally applies for Bulgarian work permits, executive personnel qualify for an extension of up to three years and managerial-level professionals can be granted extensions of more than three years. In addition, certain groups of high-skilled workers enjoy easier access to the Bulgarian labor market. These include:

- Internationally renowned scholars and intellectuals;
- High-level managerial personnel of companies established by foreign legal entities in Bulgarian territory;
- Foreign-company specialists engaged in the assembly, repair, and installation of imported equipment;
- Specialists in production quality assessment;
- Foreigners whose employment in Bulgaria originates from the implementation of international treaties.

Estonia. A work permit is required for non-EU nationals intending to work in Estonia, whether they are employees, sole proprietors, or in any activity that may result in gaining

profit or any other benefit.³⁴ Work permits are initially issued for a maximum of two years and can be extended for up to five years at a time. Work permits are not required for foreign nationals who have long-term residence permits, residence permits for employment, or residence permits for settling with a spouse or a close relative who permanently resides in Estonia, nor are they required for foreign nationals working in a number of other stipulated categories, such as on locomotive crews.

Foreign nationals may be issued residence permits tied to particular job postings only if the openings are not filled through the state employment mediation service within a three-week period of open competition. While Estonia does not explicitly categorize high- and low-skilled workers for immigration purposes, Estonian immigration policy entails elements that foster positive selection of immigrants. Specifically, applicants must have the qualifications, education, health, work experience, special skills, and knowledge required for the job. Furthermore, a residence permit is issued only if the agreed wage ensures subsistence in Estonia. Specifically, the wage must be at least 24 percent higher than the average yearly wage most recently published by Estonia's statistical office. Estonia also has specific immigration provisions for scientists and researchers.

Hungary. Foreign, non-EEA nationals and their family members coming to Hungary for work must have a work permit.³⁵ Employers apply for work permits, and Hungarian authorities grant the permits if no Hungarian or EEA national is available for the considered position. The Ministry of Employment Policy and Labor sets quotas that limit the numbers of foreigners in any occupation, regionally and nationally. The agreed remuneration must be at least 80 percent of the average wage in the given sector and occupation and above the minimum wage. Upon being granted a work permit, foreign nationals are required to obtain appropriate long-term visas and temporary residence permits (issued for up to three years and renewable). Seasonal workers can be issued special visas for up to three or six months of employment. Nonnationals are not eligible for employment or work in numerous positions in the public sector.

Certain groups of non-EEA workers do not need work permits to legally work in Hungary. Aside from top representatives of branch offices of foreign companies; those performing commissioning, warranty repair, or similar work under temporary service contracts; diplomats; and employees of international organizations, this exemption applies to certain groups of high-skilled workers. These include foreign nationals who are (i) recipients of appointments at the postdoctoral level or of research scholarships; (ii) enrolled in apprentice training programs organized by an international student organization; (iii) pursuing full-time studies at vocational schools, secondary school, basic art schools, or institutions of higher education; and (iv) to be employed in accredited programs at elementary, secondary, or higher educational institutions as foreign-language instructors or lecturers. Other occupational groups are exempt from having to consider the situation in the Hungarian labor market prior to granting work permits to foreign nationals. These include foreign nationals employed in key positions; those employed in a company with a foreign majority ownership, provided the number of foreign nationals employed in the company does not exceed 5 percent of the company's labor force; professional athletes; and internationally recognized foreign nationals in the fields of education, science, or art.

Policies Applied at the EU Level: The EU Blue Card

To date, immigration policy in the EU has been in the hands of national governments. However, the European Commission is one of the more active proponents of managed immigration with an emphasis on high-skilled immigration. In 2007, the commission proposed an EU work permit, the so-called blue card, to facilitate the entry—for residence and work—of high-skilled non-EU citizens into EU labor markets. The blue card was proposed with a validity period of two years with the possibility of renewal, and was intended to facilitate intra-EU mobility as well.

The blue card was endorsed by the European Parliament in November 2008, and the EU adopted plans for its implementation in May 2009 (European Commission 2009a). The twenty-four signatories of the scheme will have to transpose it into national law within a period of two years. Denmark, Ireland, and the United Kingdom opted out of this policy tool, so it does not facilitate entry for high-skilled immigrants into these three countries. The blue card is based on common criteria: a work contract, professional qualifications, and a minimum salary level equal to at least 150 percent of the annual average wage in the country, with a possible derogation to 120 percent of the annual average wage for individuals in professions in high demand. Applications can be made from within or outside the EU. However, member states reserve the right to regulate the national details according to their own standards.

Holders of the blue card and their family members may, after eighteen months of legal residence in an EU member state, move to another EU member state participating in the blue-card scheme for the purpose of high-skilled employment. The movers need to apply for an EU blue card to the authority responsible in this other member state within one month after entry. The EU blue card also ensures equal treatment of foreigners and nationals in terms of working conditions, including pay and dismissal, freedom of association, education, training, and recognition of qualifications. It further ensures that foreigners and nationals will have equal access to some social and welfare rights, freedom of movement within national boundaries, and the right of access to goods and services for themselves and their family members.

What Is Europe Doing to Attract High-Skilled Immigrants?

As the above review demonstrates, national and EU-level immigration policies aimed at high-skilled immigrants tend to have been implemented recently. This means their likely effects are difficult to evaluate at this point. In addition, these policies often involve many institutional and administrative barriers, even for intra-EU migrants, and in many cases, project reservations toward potential migrants. Given the temporary nature of most permits and the discretion involved in their renewal, immigrants often are not provided with a clear outlook concerning their future ability to stay and work in the country to which they have immigrated, including with respect to any future right to citizenship in the host country. While recent policy efforts targeting high-skilled immigrants are commendable (such as the EU blue card), they may have come too late, and it remains to be seen whether they will achieve their desired objectives. In particular, the current blue-card implementation plan is a watered-down version of the European Commission's original proposal, and national-specific regulations are still in place. Furthermore, the

blue card may instead lead to discrimination against workers from the new EU member states, who still face transitional arrangements in some of the old member states in regard to intra-EU labor mobility (while blue-card holders will not be governed by these arrangements).

Nonetheless, there have been some positive developments. A number of countries have realized the need for especially high-skilled immigrants and have enacted legal provisions to facilitate their selection and entry. Several countries have defined certain high-skilled categories of workers for whom simplified administrative procedures apply. Another group of countries set minimum salary levels or investment quotas for self-employed immigrants in order to distinguish high-skilled immigrants who are entitled to preferential treatment. Some countries apply an explicit points system to select and facilitate the entry of high-skilled foreign labor. For workers from the new EU member states, the initially imposed transitional arrangements are being phased out. A distinct pattern emerges in table 4, which summarizes the main policy approaches across Europe and prevailing migration patterns. Specifically, countries with no or only recent a history of immigration are significantly less likely to apply more elaborate policies to attract high-skilled immigrants. Another observation is that applied policies vary significantly across Europe. The recent shift away from kinship-based immigration policies and toward an emphasis on skills and labor-market related criteria in many EU countries suggests that the European policy debate on immigration is not driven by ethnic politics.

Conclusions and Policy Implications

Given Europe's position in a globalized economy, and in spite of the current financial and economic turmoil, Europe will most likely remain an important destination for international immigrants for the foreseeable future. Whether Europe can stand up to its internal and external challenges will depend on the quality of policies EU member states apply to manage internal mobility and flows of international immigrants. The required policies need to address two key areas: internal mobility to improve the allocative efficiency of EU labor markets and immigration from outside the EU to strengthen the EU's labor force.

Based on the analysis from the ESHLI, a unique expert opinion survey, we confirm the need for skilled immigrants in Europe. In fact, the survey results indicate that Europe is likely to experience a mismatch between the demand and supply of high- and low-skilled labor in the coming five to twenty years, characterized by a shortage of high-skilled labor and excess supply of low-skilled labor. Interestingly, the ongoing crisis may alleviate this mismatch to some extent. A promising finding from the survey is that, among the high-skilled immigrants, temporary and permanent immigrants are expected to constitute significant shares. Whether these will suffice to fulfill the objective of efficiently circulating human-capital between source and host countries remains to be seen, however.

Our research indicates that past and current immigration policies have not taken advantage of the potential of the international pool of immigrants. To the contrary, and with the exception of a few, recent, commendable initiatives, Europe still sees itself much as a fortress protecting its family silver from undeserving immigrants. Europe's internal and external projection has a repellant effect on international immigration flows and

results in the diversion of immigrants most valued by labor markets to countries like the United States, Canada, and Australia.

The surveyed experts confirmed this view and generally rated Europe's immigration policies as hostile to immigration, and therefore, not effective for preventing labor-market shortages. There is some indication, however, that European immigration policies discourage low-skilled immigration more than high-skilled immigration, which may help reduce the mismatch between the demand for high- and low-skilled labor.

Finally, our results indicate that while high-skilled immigrants are more welcome in EU member countries than their low-skilled counterparts, a general aversion toward immigrants persists in Europe. This aversion is strongest among trade unions, works councils, and other employee associations, and among the general public; it is less pronounced among national governments, the European Commission, and, especially, employers and employer associations. This indicates potential frictions between these native groups on this issue in the political arena. In particular, this finding highlights that while reaching an agreement on less-restrictive general-immigration policies may lead to political deadlock, policies encouraging high-skilled immigration may be considerably more viable. In light of our results on the meager attractiveness of European countries vis-à-vis their global competitors, immigration policies may need to address improving potential immigrants' perceptions of Europe as a destination. Continuing as "Fortress Europe" is no longer a viable option given labor-market conditions and the globalized economy.

References

- Bauer, T., and A. Kunze. 2004. The Demand for High-Skilled Workers and Immigration Policy. *Brussels Economic Review/Cahiers Economiques de Bruxelles* 47 (1): 57–75.
- Bauer, T., and K. F. Zimmermann. 1999. Overtime Work and Overtime Compensation in Germany. *Scottish Journal of Political Economy* 46 (4): 419–36.
- Bonin, H., W. Eichhorst, C. Florman, M. O. Hansen, L. Skiöld, J. Stuhler, K. Tatsiramos, H. Thomasen, and K. F. Zimmermann. 2008. *Geographic Mobility in the European Union: Optimising Its Economic and Social Benefits*. Institute for the Study of Labor (IZA) Research Report no. 19.
- Brenke, K., M. Yuksel, and K. F. Zimmermann. 2010. EU Enlargement under Continued Mobility Restrictions: Consequences for the German Labor Market. In *EU Labor Markets after Post-enlargement Migration*, ed. M. Kahanec and K. F. Zimmermann, 111–29. Berlin: Springer Verlag.
- Chiswick, B. R., and P. W. Miller. 2011 (forthcoming). Educational Mismatch: Are High-Skilled Immigrants Really Working High-Skilled Jobs and What Price Do They Pay if Not? In *High-Skilled Immigration in a Global Labor Market*, ed. B. R. Chiswick, ch. 4. Washington, DC: AEI Press.
- Cohen-Goldner, S., and M. D. Paserman. 2006. Mass Migration to Israel and Natives' Employment Transitions. *Industrial and Labor Relations Review* 59 (4): 630–52.
- Dustmann, C., T. Frattini, and I. Preston. 2007. *A Study of Migrant Workers and the National Minimum Wage and Enforcement Issues that Arise*, Center for Research and Analysis of Migration, London: University College London.
- ESHSLI. 2009. The Expert Survey on High-Skilled Labor Immigration, IZA, Bonn, Germany.
- European Commission. 2009a. Council Directive 2009/50/EC, of 25 May 2009, on the Conditions of Entry and Residence of Third-Country Nationals for the Purposes of Highly Qualified Employment. *Official Journal of the European Union* L155/17–29. Available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:155:0017:0029:EN:PDF>.
- . 2009b. Five years of an Enlarged EU: Economic Achievements and Challenges. *European Economy* 1/2009, European Commission, Brussels.
- European Migration Network. 2007. *Conditions of Entry and Residence of Third Country Highly-Skilled Workers in the EU*. Report financed by the European Commission.
- Eurostat. 2006. *Population Statistics*. Luxembourg: Office for Official Publications of the European Communities.
- Eurostat. 2008. *Europe in Figures: Eurostat Yearbook*. Luxembourg: Office for Official Publications of the European Communities.
- Kaczmarczyk, P., M. Mioduszewska, and A. Żilicz. 2010. Impact of the Post-accession Migration on the Polish Labor Market. In *EU Labor Markets after Post-enlargement Migration*, ed. M. Kahanec and K. F. Zimmermann, 219–54. Berlin: Springer Verlag.
- Kahanec, M., and A. Zaiceva. 2009. Labor Market Outcomes of Immigrants and Non-citizens in the EU: An East-West Comparison. *International Journal of Manpower* 30 (1–2): 97–115.
- Kahanec, M., and K. F. Zimmermann. 2008. Migration, the Quality of the Labour Force and Economic Inequality. IZA Discussion Paper no. 3560, Bonn, Germany.

- . 2009a. International Migration, Ethnicity, and Economic Inequality. In *The Oxford Handbook of Economic Inequality*, ed. W. Salverda, B. Nolan, and T. M. Smeeding, 455–90. Oxford: Oxford University Press.
- . 2009b. Migration in an Enlarged EU: A Challenging Solution? European Economy, Economic Paper 363, European Commission, Brussels.
- Kahanec, M., A. Zaiceva, and K. F. Zimmermann. 2010. Lessons from Migration after EU Enlargement. In *EU Labor Markets after Post-enlargement Migration*, ed. M. Kahanec and K. F. Zimmermann, 3–46. Berlin: Springer Verlag.
- Kanellopoulos, C. N., and I. Cholezas. 2006. *Conditions of Entry and Residence of Third Country Highly Skilled Workers in Greece*. Centre of Planning and Economic Research (KEPE), Athens, Greece.
- McDonald, J.T., C. Warman, and C. Worswick. 2011 (forthcoming). Earnings, Occupations, and Schooling Decisions of Immigrants with Medical Degrees: Evidence for Canada and the United States. In *High-Skilled Immigration in a Global Labor Market*, ed. B. R. Chiswick, ch. 5. Washington, DC: AEI Press.
- United National Educational, Scientific, and Cultural Organization (UNESCO). 1997. *International Standard Classification of Education*. Paris: UNESCO.
- Zaiceva, A., and K. F. Zimmermann. 2008. Scale, Diversity, and Determinants of Labour Migration in Europe. *Oxford Review of Economic Policy* 24 (3): 427–51.
- Zimmermann, K. F. 2005. *European Migration: What Do We Know?* Oxford/New York: Oxford University Press.
- . 2009. Labor Mobility and the Integration of European Labor Markets, IZA Discussion Paper no. 3999, Bonn, Germany.
- Zimmermann, K. F., H. Bonin, R. Fahr, and H. Hinte. 2007. *Immigration Policy and the Labor Market: The German Experience and Lessons for Europe*. Berlin: Springer Verlag.

Table 1. Proportion of Foreign-Born and Foreign Citizens in European Union (EU) Countries by Region of Origin

	Foreign-Born		Foreign Citizens	
	Other EU	Non-EU	Other EU	Non-EU
EU15:				
Austria	6.7	8.7	4.1	5.0
Belgium	6.8	6.7	6.4	2.6
Denmark	2.0	4.6	2.9 ²	2.4
Finland	1.4	1.8	0.7	1.0
France	3.4	7.8	2.3	3.3
Germany	n.a.	n.a.	3.1	2.8
Greece	1.7	5.9	1.3	4.8
Ireland	8.8 ¹	3.4 ¹	5.4 ¹	2.6 ¹
Italy ²	2.2	5.3	1.3	3.8
Luxembourg	37.9	8.6	41.2	5.6
Netherlands	2.8	9.1	1.7	1.9
Portugal	1.8	5.7	0.6	2.8
Spain	4.5	10.0	3.9	8.3
Sweden	5.5	10.0	2.5	2.7
United Kingdom	3.5	8.8	2.6	4.3
EU12:				
Bulgaria	n.a.	n.a.	(0.1) ⁴	(0.1)
Cyprus	8.1	11.0	8.1	6.5
Czech Republic	1.3	0.6	0.4	0.4
Estonia	0.6 ⁴	13.6	0.7	16.8
Hungary	1.3	0.4	0.5	0.2
Latvia	1.1 ⁴	9.6	n.a.	0.7 ³
Lithuania	(0.3) ⁴	3.8	n.a.	(0.6)
Malta	1.7 ⁵	3.0	1.2	1.8
Poland	0.2	0.3	(0.1)	0.1
Romania	n.a.	(0.1) ¹	0.1 ²	0.1
Slovakia	0.6 ⁴	(0.1)	(0.2)	(0.1) ¹
Slovenia	(0.7) ⁵	4.6	(0.2) ⁴	(0.2)

Source: H. W. Bonin et al., 2008, *Geographic Mobility in the European Union: Optimising Its Economic and Social Benefits*, Institute for the Study of Labor (IZA) Research Report no. 19, Bonn, Germany.

Notes: In percent of total population, by domicile, 2006. “Other EU” and “Non-EU” refer to the EU27 as region of reference; “n.a.” denotes not available. Share of active working-age residents is reported. Data in parentheses are as in Bonin and others (2008) and lack reliability due to small sample size.

1. Data are from 2005; 2. Data are from 2004; 3. The number for non-EU citizens is suspiciously low, and similarly low numbers are reported in the 2005 Labor Force Survey. This may arise because noncitizens were grouped together with nationals as in Eurostat (2006, 65); 4. Residents of EU10 and EU2 only; 5. Residents of EU15 only.

Table 2. Educational Attainment of Natives and Immigrants (Percentages) in EU Member States, 2005

	AT	BE	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE	IT
Natives													
High	13.18	25.95	20.72	9.49	26.75	22.16	26.32	19.53	20.18	13.28	11.11	20.85	8.43
Medium	27.82	39.68	43.02	20.60	28.63	27.79	33.53	42.81	25.14	54.95	38.87	45.73	60.44
Low	59.00	34.37	36.27	69.90	44.62	50.05	40.16	37.65	54.68	31.77	50.02	33.41	31.13
Immigrants													
High	14.18	22.94	32.54	12.39	33.86	33.04	21.80	18.06	17.36	13.72	22.09	39.79	11.72
Medium	39.46	49.46	35.67	34.14	27.89	16.74	33.74	57.47	41.73	47.74	29.38	26.58	49.80
Low	46.36	27.59	31.78	53.47	38.25	50.22	44.46	24.47	40.91	38.54	48.53	33.64	38.48
Non-EU immigrants													
High	9.82	22.28	27.13	22.60	30.41	32.71	18.18	19.64	.	11.71	20.69	.	.
Medium	48.87	49.76	39.45	26.37	33.76	16.59	41.99	55.00	.	52.39	29.58	.	.
Low	41.31	27.96	33.42	51.03	35.82	50.70	39.83	25.37	.	35.90	49.73	.	.
	LV	LT	LU	NL	PL	PT	SK	SI	ES	SE	UK	EU15	EU25
Natives													
High	16.35	17.86	15.44	26.13	11.93	7.72	10.62	15.69	20.58	24.73	26.30	19.06	17.33
Medium	30.45	30.53	32.92	33.18	30.11	80.83	26.92	27.30	62.33	21.78	13.97	42.86	41.03
Low	53.20	51.61	51.64	40.69	57.96	11.45	62.46	57.00	17.09	53.49	59.73	38.09	41.64
Immigrants													
High	24.13	24.94	27.51	23.28	11.86	18.83	19.31	13.68	21.33	28.50	27.70	22.44	21.94
Medium	19.50	19.82	39.93	31.69	51.62	54.72	24.14	32.23	46.76	23.86	18.45	38.45	38.32
Low	56.36	55.23	32.56	45.03	36.52	26.45	56.55	54.09	31.92	47.64	53.85	39.11	39.74
Non-EU immigrants													
High	24.40	25.00	31.31	21.65	12.30	17.34	17.65	13.21	18.73	26.66	28.22	21.53	20.65
Medium	17.06	18.87	28.84	35.62	52.58	56.55	31.37	33.37	49.02	27.89	19.72	39.80	39.76
Low	58.53	56.13	39.85	42.73	35.12	26.11	50.98	53.42	32.25	45.46	52.06	38.68	39.58

Source: Authors' calculations based on data from the EU labor-force survey for civilians over fourteen years of age.

Notes: Percentages of individuals over fourteen years of age with high, medium, and low educational attainment. The values for the EU cover all twenty-five member states of the EU in 2005, except for Malta, for which no data are available. *Immigrants* denotes people who were not born in the country in which they live. *Non-EU immigrants* are those immigrants who were born in a non-EU country. *Natives* are those born to mothers residing in the respective country.

Country codes are as follows: BE – Belgium, BG – Bulgaria, CZ – Czech Republic, DK – Denmark, DE – Germany, EE – Estonia, IE – Ireland, EL – Greece, ES – Spain, FR – France, IT – Italy, CY – Cyprus, LV – Latvia, LT – Lithuania, LU – Luxembourg, HU – Hungary, MT – Malta, NL – Netherlands, AT – Austria, PL – Poland, PT – Portugal, RO – Romania, SI – Slovenia, SK – Slovakia, FI – Finland, SE – Sweden, UK – United Kingdom.

High level of education includes International Standard Classification of Education (ISCED) 5 and 6 levels. ISCED 5 denotes first-stage tertiary programs with an educational content more advanced than those offered by secondary levels. They do not lead to the award of an advanced research qualification and must have a cumulative duration of at least two years. ISCED 6 denotes second-stage tertiary education leading to an advanced research qualification and requiring an original research contribution in the form of a thesis or dissertation. Medium level of education includes ISCED 3 and 4 levels, which denote education that typically begins at the end of full-time compulsory education and involves higher qualification and specialization than the ISCED 2 level. ISCED 3–level education is often designed to provide direct access to ISCED 5. ISCED 4 serves to broaden the knowledge achieved in ISCED 3 but is not regarded as tertiary. Low level of education includes ISCED 0, 1, and 2 levels. These include preprimary, primary, and lower secondary or second-stage of primary education. The end of ISCED 2 often coincides with the end of compulsory schooling, where it exists. For further details, see UNESCO (1997).

Table 3. Surveyed Experts’ Responses Regarding Expected Effects of the Ongoing Crisis on the Need for High- and Low-Skilled Immigration in the EU, 2009

			“Has the current economic and financial crisis changed your evaluation of the long-term demand for labor migrants in the EU?”		Difference
			Of those who responded “yes”	Of those who responded “no”	
“Please indicate whether the EU, economically speaking, needs more or fewer immigrants of the following categories of labor migrants in the long-term.”	“About the same number,” “more,” or “many more” ¹	High-skilled immigrants	85.37	98.40	13.03
		Low-skilled immigrants	43.90	61.17	17.27
	“More” or “many more” ²	High-skilled immigrants	70.73	83.51	12.78
		Low-skilled immigrants	14.63	28.19	13.56

Source: Authors’ calculations from the IZA Expert Survey on High-Skilled Labor Immigration in the EU (ESHSLI 2009).

Notes: 84.5 percent of respondents reported that their evaluation of the long-term demand for immigrant labor had not changed in connection to the current economic and financial crisis; 15.5% reported the opposite. Numbers given correspond to the percentage of experts offering each response.

1. The remainder up to 100% in the first two columns with results corresponds to those experts responding “fewer” or “far fewer or none”.
2. The remainder up to 100% in the first two columns with results corresponds to those experts responding “about the same number,” “fewer” or “far fewer or none”.

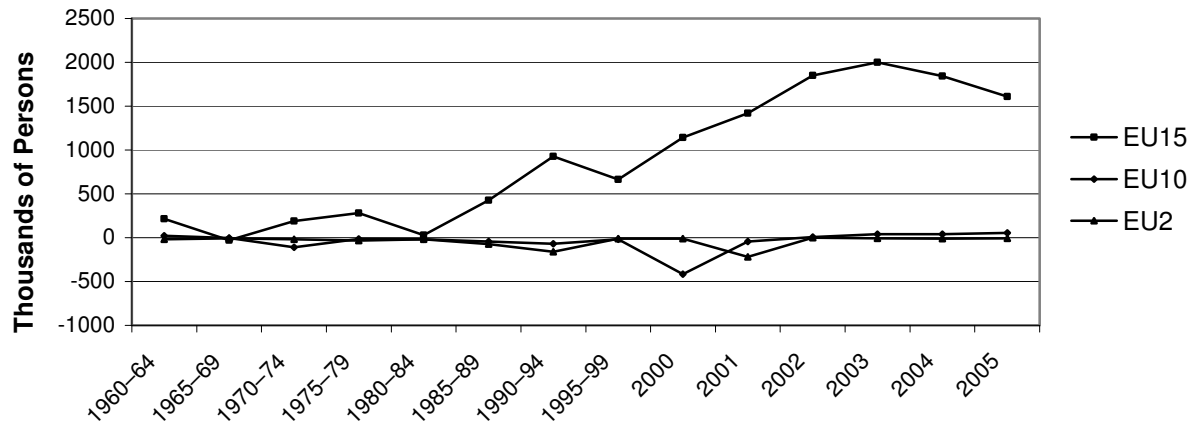
Table 4. European Countries' Immigration Policies by Region of Origin, EU and Non-EU/EEA/Switzerland

		Policies in Place for Immigration by Immigrant Origin								
		EU Nationals	Nationals Outside EU, European Economic Area, and Switzerland							
		New member-state nationals	Educational or skill threshold to qualify as high skilled	Salary or investment threshold to qualify as high skilled	Market-assessment exemption	Positive list of occupations or sectors	Points system	Provisions for researchers and academics	Provisions for staying students (transition to work)	Tax exemptions
Policies by Destination Region	Scandinavian welfare states	Free access	DK, FI, SE ¹	DK	DK, SE	DK	DK	DK, FI, SE	FI, SE	DK, FI, SE
	Western European core	Mixed (some restrictions for EU2 and EU10)	AT ² , BE, FR, DE ³ , NL, UK	AT, BE, FR, DE, NL, UK	AT, BE, DE, UK	UK ⁷	UK	AT, BE, DE, NL, UK	DE, NL, UK	AT, BE, FR, NL, UK
	Newly emerged European cores	Mostly free access (some restrictions for EU2)	IE, GR, ES	IE	IE	ES ⁴ , GR ⁴		IE, GR, ES	ES ⁵	ES ⁶
	New member states	Free access	BG, EE, HU ²	EE	HU	HU ⁴		BG, EE, HU		

Source: Authors' compilation based on the sources cited in the section of this paper titled "Current Approaches to High-Skilled Immigration in Europe."

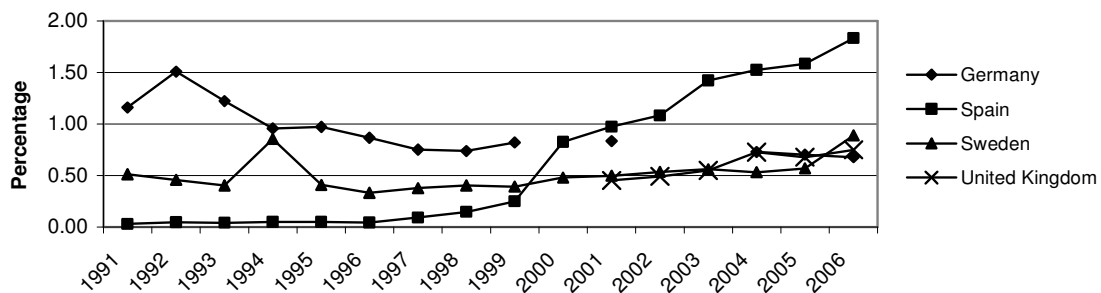
Notes: 1. Sweden applies a demand-driven policy. 2. With quotas. 3. For those who are self-employed (in the past, also for high skilled). 4. A list of desired occupations with regional (in Hungary also national and sectoral) quotas applied. 5. Having studied in Spain makes it easier to obtain a work permit. 6. Only applies to exceptionally-skilled individuals, such as star football players or very high-level executives. 7. Within tier two. Refer to table 2 for country codes.

Figure 1. Net Immigration (Thousands of Persons) to EU15, EU10, and EU2 Countries, 1960–2005



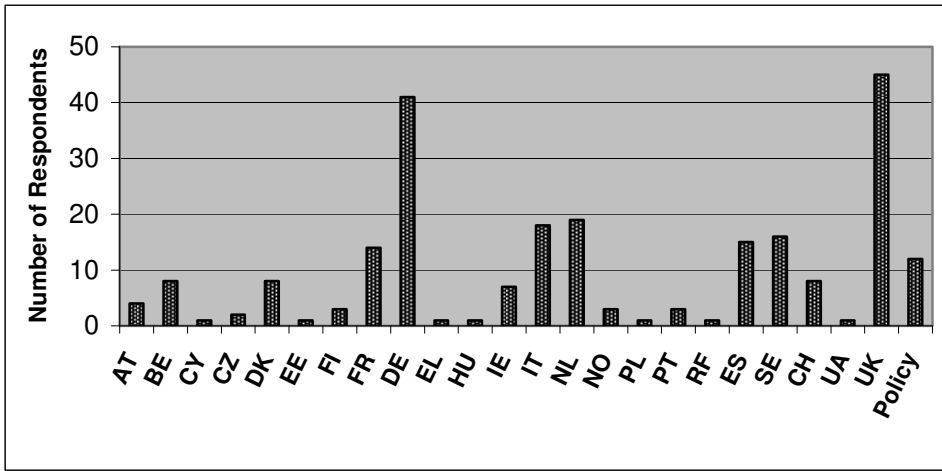
Source: Eurostat, *Population Statistics* (Luxembourg: Office for Official Publications of the European Communities, 2006); and Eurostat, *Europe in Figures: Eurostat Yearbook* (Luxembourg: Office for Official Publications of the European Communities, 2008).
 Notes: Net migration is estimated as the difference between total population growth and natural increase and includes adjustments and corrections. For the periods 1960–64, 1965–69, and so forth through 1995–99, annual averages are reported. For Cyprus, starting from 1975 the numbers account for only the government-controlled area. Corrections due to the census are present for 2000–2001.

Figure 2. Net Immigration Rates in Selected EU15 Countries, 1991–2006



Source: Eurostat, Online Database for Population and Social Conditions, Population, International Migration and Asylum, International Migration Flows, last updated July 4, 2010, available through <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home>.
 Notes: Net immigration rates are calculated as a percentage of the receiving country's population.

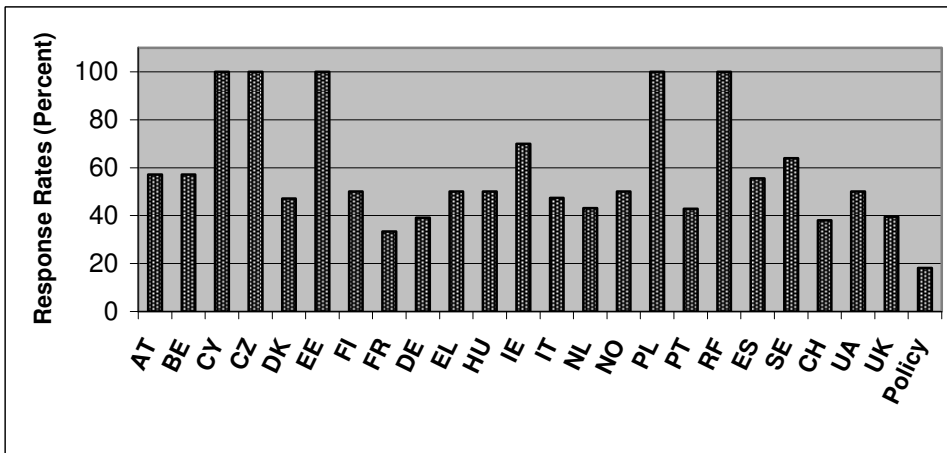
Figure 3. Number of Respondents to the Institute for the Study of Labor (IZA) Expert Survey on High-Skilled Labor Immigration in the EU by Country, 2009



Source: Authors' calculations based on the IZA Expert Survey on High-Skilled Labor Immigration in the EU (ESHSLI 2009).

Notes: Number of respondents measures IZA research and policy fellows and research affiliates who responded to the survey by country. See table 2 for country abbreviations.

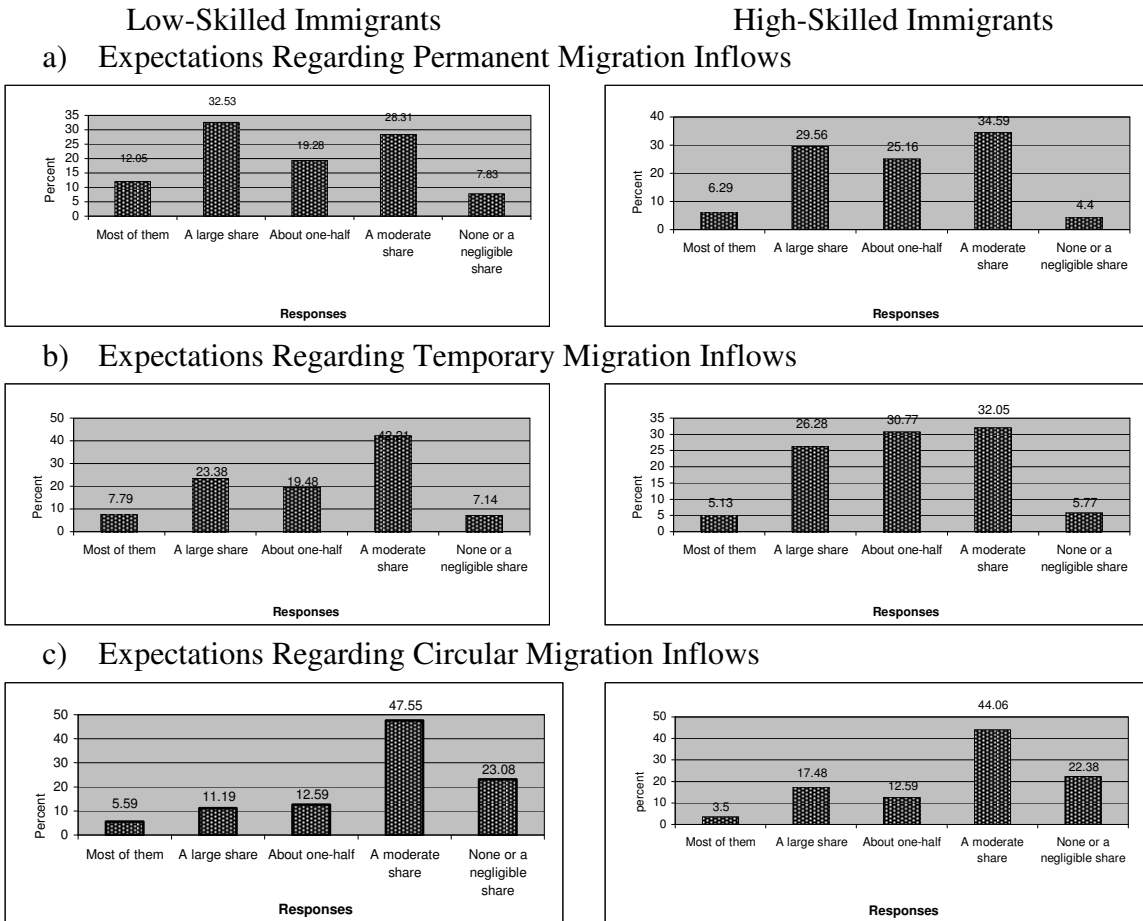
Figure 4. Response Rates to the IZA Expert Survey on High-Skilled Labor Immigration in the EU by Country, 2009



Source: Authors' calculations based on the IZA Expert Survey on High-Skilled Labor Immigration in the EU (ESHSLI 2009).

Note: Response rates calculated from the populations of all IZA research and policy fellows and research affiliates from a given country. See table 2 for country abbreviations.

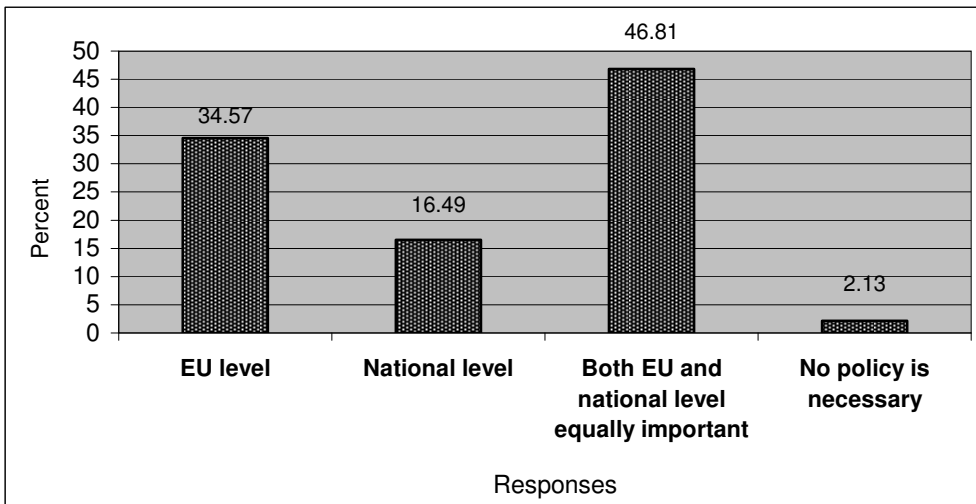
Figure 5. Surveyed Experts' Responses Regarding the Nature of Immigrant Inflows in the EU, 2009



Source: Authors' calculations based on the IZA Expert Survey on High-Skilled Labor Immigration in the EU (ESHSLI 2009).

Note: Responses are to the following: "For these categories of labor migrants (high- and low-skilled), please indicate the expected distribution of migration inflows into the EU among the listed types (permanent, temporary, circular) in the coming 5 to 20 years, given the current immigration policies." Percentage offering each response.

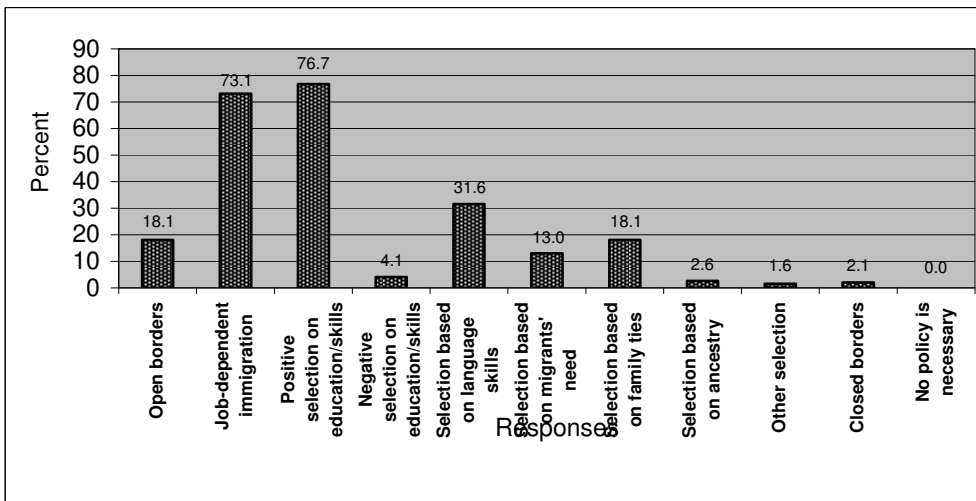
Figure 6. Surveyed Experts' Responses Regarding the Level at Which Immigration Policies Should Be Implemented in the EU, 2009



Source: Authors' calculations based on the IZA Expert Survey on High-Skilled Labor Immigration in the EU (ESHSLI 2009).

Note: Responses are to the following: "Please indicate the level of implementation at which you believe immigration policies would most efficiently address the economic needs of the EU; for high-skilled immigrants." Percentage offering each response.

Figure 7. Surveyed Experts' Responses Regarding the Types of Policy Approaches That Should Be Implemented in the EU, 2009



Source: Authors' calculations based on the IZA Expert Survey on High-Skilled Labor Immigration in the EU (ESHSLI 2009).

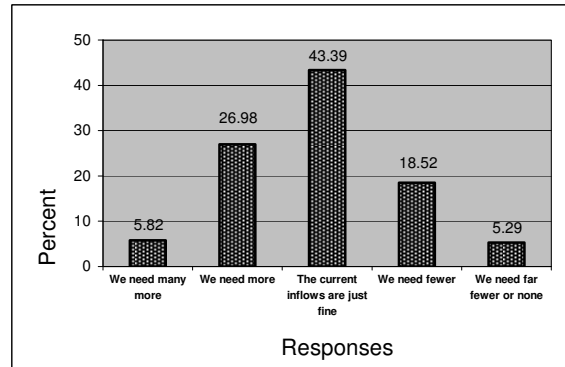
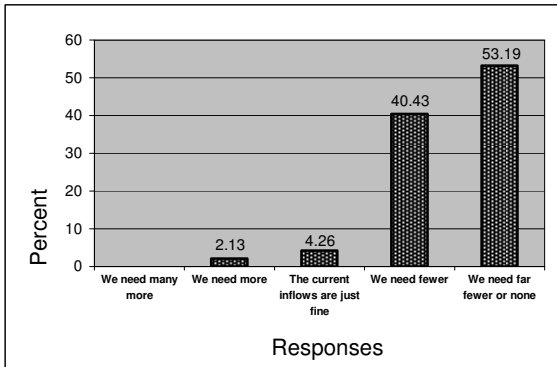
Note: Responses are to the following: "From the following list, please select up to three types of immigration policies you believe would most efficiently address the economic needs of the EU." Percentage offering each response.

Figure 8. Surveyed Experts' Responses Regarding Perceived Attitudes of Native Groups toward Immigration, by Skill Level, 2009

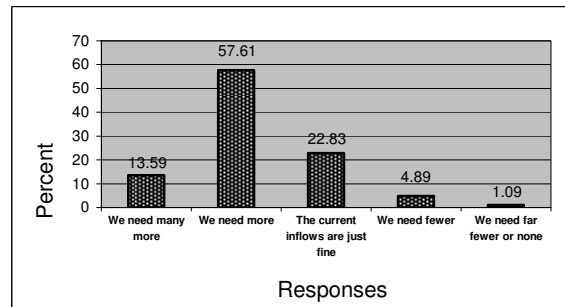
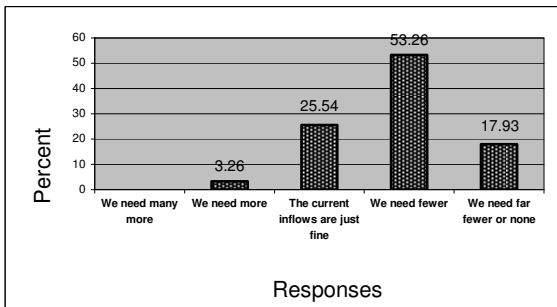
Low-Skilled Immigration

High-Skilled Immigration

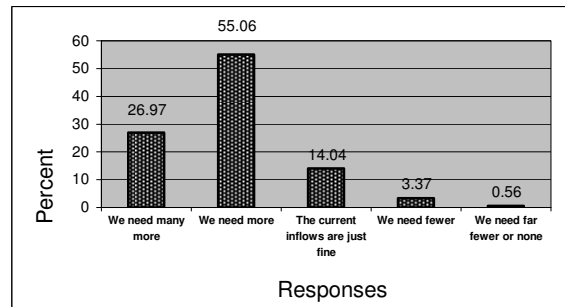
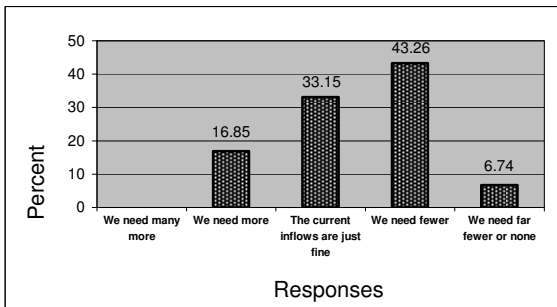
a) The General Public



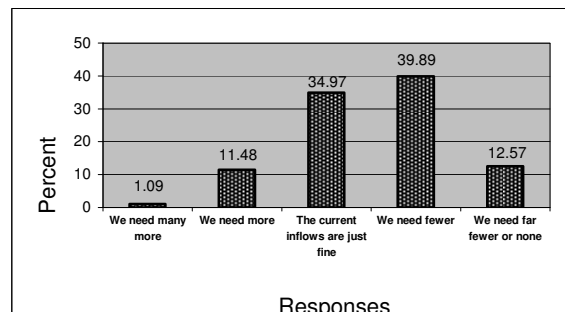
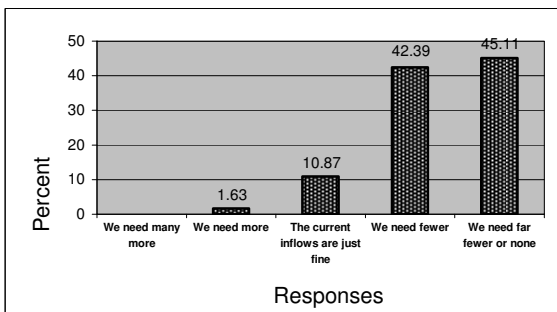
b) National Governments



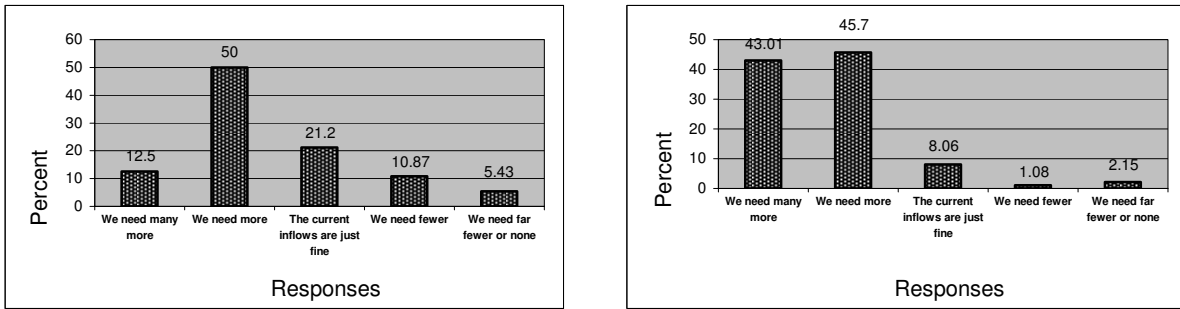
c) The European Commission



d) Trade Unions, Works Councils, and Other Employee Associations



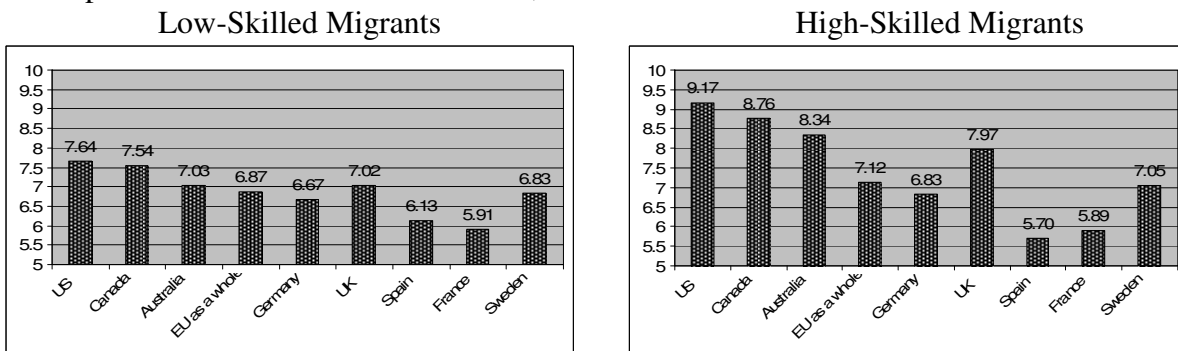
e) Employers and Employer Associations



Source: Authors' calculations based on the IZA Expert Survey on High-Skilled Labor Immigration in the EU (ESHSLI 2009).

Note: Responses are to the following: "Please indicate which of the following you believe best describes the general perception the following native groups and institutions (the general public; national governments; the European Commission; trade unions, work councils, and other employee associations; and employers and employer associations) have about the immigration of these categories of labor migrants." Percentage offering each response.

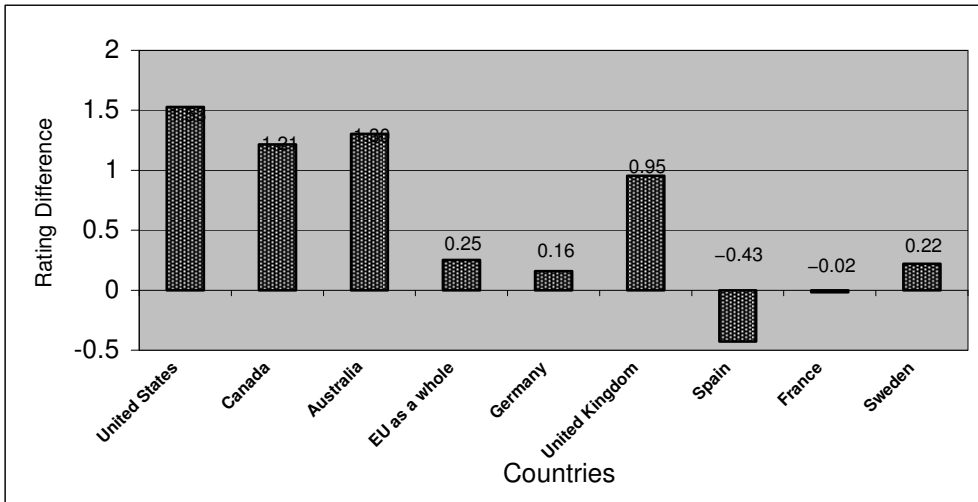
Figure 9. Surveyed Experts' Responses Regarding Low- and High-Skilled Migrants' Perceptions about Destination Countries, 2009



Source: Authors' calculations based on the IZA Expert Survey on High-Skilled Labor Immigration in the EU (ESHSLI 2009).

Note: Responses are to the following: "Please rate the perception of the following categories of labor migrants (low and high skilled) about the destination countries listed below (1: least attractive, 10: most attractive)." Average rating for each country.

Figure 10. Balance of Low- and High-Skilled Migrants' Perceptions Based on Surveyed Experts' Responses



Source: Authors' calculations based on the IZA Expert Survey on High-Skilled Labor Immigration in the EU (ESHSLI 2009).

Note: The balance in perceptions is calculated as the difference between the high- and low-skilled migrants' perception ratings. Refer to figure 9 for high- and low-skilled migrants' perceptions.

¹ The so-called old member states of the European Union (EU) prior to the 2004 EU enlargement (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom) may be referred to as the EU15. EU10 denotes the “new” member states that joined the EU in 2004 (the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, and Slovenia, from Central and Eastern Europe, as well as Malta and Cyprus from Southern Europe). The EU15 and EU10 together are referred to as the EU25. Currently, the EU has twenty-seven members (EU27), including Romania and Bulgaria, which joined in 2007; these are referred to as the EU2.

² Different distributions of immigrant skill groups across countries may be due to differences in institutional and historical contexts. For example, transitional arrangements applied vis-à-vis natives of new member states seem to have diverted flows of most skilled migrants away from Germany and to the United Kingdom and Ireland (see Kahanec, Zaiceva, and Zimmermann 2010; Zimmermann 2005; Kahanec and Zaiceva 2009; and Zaiceva and Zimmermann 2008). Contrasting the findings of Cohen-Goldner and Paserman (2006) with those of Bauer and Zimmermann (1999), it seems that the educational attainment of immigrants from the former Soviet Union was higher in Israel than in Germany.

³ The Expert Survey on High-Skilled Labor Immigration (ESHSLI) was conducted for the purpose of this study by the authors in 2009 at the Institute for the Study of Labor (IZA), Bonn, Germany (ESHSLI, 2009).

⁴ Whereas all of the other old member states have since removed the barriers to immigrants from the member states that joined the EU in 2004, Germany and Austria stick to the so-called transitional arrangements preventing these immigrants from labor-market access; however, many member states still apply such measures to immigrants from Bulgaria and Romania, both of which joined the EU in 2007.

⁵ IZA research fellows are generally leading economists, but the group of IZA research fellows also includes a number of sociologists and other social scientists, contributing to the broader field of labor. Research fellows are appointed by IZA’s internal committee of directors on the recommendation of incumbent research fellows or research staff for a period of three years with the possibility of renewal. IZA’s network of policy fellows includes influential representatives from business, politics, society, and the media, thus complementing the academic network of IZA research fellows. IZA research affiliates are junior labor economists and Ph.D. students, who are appointed initially for a period of two years. After receiving their Ph.D.s and demonstrating an adequate publications record, they may be promoted to research fellows.

⁶ In most contexts, non-EU nationals of the European Economic Area (EEA) (that is, natives of Iceland, Liechtenstein, and Norway), as well as Swiss nationals, are treated as EU nationals.

⁷ Ireland, Sweden, and the United Kingdom granted access to their labor markets to workers from the new member states immediately following the 2004 EU enlargement. Finland, Greece, Italy, Portugal, and Spain decided to lift restrictions in 2006; Luxembourg and the Netherlands lifted them in 2007; France in 2008; and Belgium and Denmark in 2009. Germany and Austria have simplified their procedures or have relaxed

restrictions in some sectors and for some occupations. Ten EU25 member states (Cyprus, the Czech Republic, Estonia, Latvia, Lithuania, Poland, Slovenia, Slovakia, Finland, and Sweden) opened their labor markets to Bulgarian and Romanian workers within two years after the 2007 enlargement. Denmark, Greece, Hungary, Portugal, and Spain granted free access to EU2 workers in 2009. Restrictions and procedures have been reduced in some sectors and for some professions in most of the remaining EU25 member states.

⁸ Bonin and others (2008) argue that language differences, culture, and labor legislation, as well as the fact that the United States is a federal country and that free movement within the EU is only a recent phenomenon, are behind the difference in mobility rates. The observed gap diminishes if internal mobility rates in the United States are compared to regional mobility rates in the EU, that is, when mobility rates are calculated for geographical units comparable in size to U.S. states.

⁹ Further practical difficulties arise, such as in the case of waiting lists for specialized medical treatment: positions in these lists are not transferable between countries.

¹⁰ In Germany, for example, if one spouse works in another member state, that spouse's earnings may increase the marginal tax rate for the spouse who works in Germany, despite the fact that his or her income has already been properly taxed in the other member state.

¹¹ Although significant efforts have been made in Europe to facilitate recognition of foreign professional qualifications, the procedures developed may still involve significant costs in terms of time and fees, and, thus, still lead to the down-skilling of immigrants. Dustmann, Frattini, and Preston (2007) document this problem in the European context; see also Bonin and others (2008), Chiswick and Miller (2011) and McDonald, Warman, and Worswick (2011).

¹² Information in this section provided by the Ministry of Refugee, Immigration and Integration Affairs, "Ny I Danmark.dk" [New to Denmark.dk], available at www.nyidanmark.dk; and the Ministry of Taxation, "SKAT," available at www.skat.dk.

¹³ In 2009, the "positive list" included professions in the following fields: academic work; construction; information technology and telecommunications; management; educational, social, and religious work; sales, purchases, and marketing; health, health care, and personal care; freight forwarding, postal services, storage, and engine operation; and education and tuition.

¹⁴ Information provided by the Finnish Immigration Service, "Maahanmuuttovirasto: Muut Kuin EU-Kansalaiset Ja Heihin Rinnastettavat; Työntekijän Oleskelulupa" [Finnish Immigration Service: Residence Permit for a Non-EU Employee], available at www.migri.fi/netcomm/content.asp?path=8,2473,2707,2500; and the Finnish Tax Administration, "Taxation of Employees from Other Countries: Bulletin for Taxpayers," publication 277e. 10, January 1, 2010, available at www.vero.fi/nc/doc/download.asp?id=2873;67467.

¹⁵ Residence permits are issued for a maximum of one year or for the duration of the employment or study to be conducted. A residence permit is initially issued for a fixed period. A permanent-residence permit can be acquired after four years of continuous residence in Finland. Separate residence permits are reserved for entrepreneurs and own-account professionals (self-employed professionals without paid employees).

¹⁶ Information provided by Sweden’s Migration Board, “Migrationsverket” [Migration Board], available at www.migrationsverket.se.

¹⁷ Information provided by the Federal Ministry of Economic Affairs and Labor, “Help.gv.at: Ihr offizieller Amtshelfer für Österreich” [Help.gv.at: Your aid for official channels in Austria], available at www.help.gv.at/Content.Node/93/Seite.930201.html.

¹⁸ Special temporary work permits for up to six months (only six weeks for harvesters) are available for seasonal workers. Students can obtain work permits if their earnings from employment in Austria are not their main means of support (that is, less than €357.74 per month in 2009), education remains the main purpose of their stay in the country, and the job opening cannot be filled by eligible Austrian workers.

¹⁹ Information provided by the Belgium Federal Public Service Employment, Labour and Social Dialogue, available at www.employment.belgium.be/home.aspx; and Region de Bruxelles-Capitale, “Working in Belgium as a Foreign National,” available at www.bruxelles.irisnet.be/en/citoyens/home/travailler.shtml.

²⁰ Shorter periods apply for nationals of countries that have signed bilateral treaties with Belgium and for those legally residing in Belgium with a spouse or children.

²¹ If the posting involves a service contract with another (Belgian) company, this contract must be provided to the authorities.

²² Salary or scholarship must equal at least the applicable wage scales for research assistants at universities or institutions of higher education.

²³ Information provided by Ministère de l’immigration, de l’intégration, de l’identité nationale et du développement solidaire [Ministry of Labor, Social Relations, Family and Solidarity], available at www.immigration.gouv.fr.

²⁴ Information provided by the Bundesministerium für Arbeit, Soziales und Konsumentenschutz [Federal Ministry of Labor, Social Affairs, and Consumer Protection], available at www.bmsk.gv.at; Bundesamt für Migration und Flüchtlinge [Federal Office for Migration and Refugees], available at www.bamf.de/DE/Startseite/home-node.html?_nnn=true; and Bundesministerium der Justiz [Federal Ministry of Justice], available at <http://bundesrecht.juris.de/index.html>.

²⁵ Information provided by Immigartie- en Naturalisatiedienst [Immigration and Naturalization Service], available at www.ind.nl.

²⁶ In practice, Dutch immigration policy favors Western immigrants over immigrants from less-developed countries because immigrants are required to present birth certificates and, if married, marriage certificates. These certificates are not regularly issued in many less-developed countries.

²⁷ Information provided by the UK Border Agency, “Working in the UK,” available at www.ukba.homeoffice.gov.uk/workingintheuk.

²⁸ Information provided by European Migration Network (2007); and Department of Enterprise, Trade and Innovation, available at www.deti.ie.

²⁹ Information provided by Kanellopoulos and Cholezas (2006); and Ελληνική Δημοκρατία: Υπουργείο Εργασίας & Κοινωνικής Ασφάλισης [Greek Democracy: Ministry of Employment and Social Security], available at www.ypakp.gr.

³⁰ Employers who wish to hire workers from outside the EU have to apply in their municipality by September 30 of the respective year, specifying the number,

specialization (profession), and nationality of workers needed, as well as the intended duration of their employment.

³¹ We thank Anna Triandafyllidou for this insight.

³² Information provided by Ministerio de Trabajo e Inmigración [Ministry of Labor and Immigration], available at www.mtin.es/en/index.htm.

³³ Information provided by the Ministry of Labour and Social Policy: National Employment Agency, available at www.az.government.bg/eng.

³⁴ Information provided by Politsei- ja Piirivalveamet [Police and Border Guard], available at www.politsei.ee/en.

³⁵ Information provided by the Magyar Köztársaság Külügyminisztériuma [Hungarian Ministry of Foreign Affairs], available at www.mfa.gov.hu/kum/en/bal; and Országinfó: Kormányzati Portál [Country Info: Government Portal], “Magyarország” [International Projects], available at www.magyarorszag.hu.