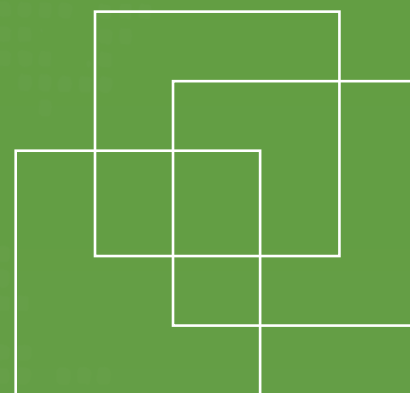




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LABOUR MIGRATION FROM CHINA TO EUROPE: SCOPE AND POTENTIAL



Piotr Plewa

Marko Stermšek



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Preface

The opening-up of the Chinese economy and the growing international trade between China and Europe have contributed significantly to migration flows from China to Europe in recent decades. By the end of 2015 there were 260,000 migrant workers from China legally residing in the 28 European Union (EU) Member States. In response to an increasingly mobile population, and in order to promote regular migration and protect migrant workers' rights, there is a growing need from both EU and China to promote dialogue, share experience, and strengthen cooperation around labour migration issues and related systems so as to maximize both the benefit for migrant workers as well as the overall contribution of migration to the growth strategies of China and Europe.

The research presented in this report was conducted under the “EU-China Dialogue on Migration and Mobility Support Project”, funded by the EU and jointly carried out by the International Labour Organization (ILO) and the International Organization for Migration (IOM).

The report aims to enhance the understanding of the scope, opportunities, and challenges of labour migration from China to the EU; promote sound policies and practices; reduce the vulnerability of migrants; and increase their benefits from an international labour migration perspective. The report provides policy-makers with the key data necessary to develop sustainable labour migration programmes that would balance the interests of China, EU Member States, employers, and migrant workers. The research maps out legislation and schemes concerning the admission of migrants; analyzes the latest trends in Chinese labour migration to the top six destinations over the past five years (namely the United Kingdom, France, Germany, Spain, Italy, and the Netherlands); and examines skills demand and shortage occupations in the EU labour market as well as potential opportunities for Chinese migrant workers. Based on comprehensive data analysis, the study puts forward concrete recommendations to expand the regular channels for the employment of Chinese migrant workers in EU Member States and to better protect the rights of these workers.

The 2030 Agenda for Sustainable Development recognizes the “positive contribution of migrants for inclusive growth and sustainable development”. Target 8.8 of the Sustainable Development Goals calls on States to: “Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.”

Employment and decent work issues, such as the expansion of legal avenues for migrant workers to migrate safely and legally to other countries; skills recognition and the need for accurate and reliable data; and the need to institute fair recruitment processes as a means to reduce the costs of labour migration for migrant workers and ensure improved protection for these workers, are likely to feature prominently in the related negotiations of a new Global Compact on Safe, Orderly, and Regular Migration.

I hope that this research will contribute to bridging the information gap and provide China as well as the EU and its Member States with a common frame of reference for improved dialogue on these important issues within the framework of the EU-China 2020 Strategic Agenda for Cooperation and the on-going global discussions on labour migration.

A handwritten signature in black ink, appearing to read 'Tim De Meyer', written over a horizontal line.

Tim De Meyer

Director

ILO Country Office for China and Mongolia

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This study was implemented under the EU–China Dialogue on Migration and Mobility Support Project, a collaboration of International Labour Organization (ILO) and the International Organization for Migration (IOM) funded by the European Union. Based on comprehensive data analysis, the study aims to enhance the understanding of the scope, opportunities, and challenges of labour migration from China to the EU; promote sound policies and practices; reduce the vulnerability of migrants; and increase their benefits from an international labour migration perspective.

This report was prepared under the guidance of Mr Tim De Meyer, Director, ILO Country Office for China and Mongolia; Mr Nilim Baruah, Senior Migration Specialist, ILO Regional Office for Asia and the Pacific; and Ms Hongye Pei, National Project Coordinator for the EU–China Dialogue on Migration and Mobility Support Project.

The content and conclusions of this report were written by Piotr Plewa. Marko Stermsek contributed the analysis contained within Chapter 3.

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Acronyms and Abbreviations

BA	Federal Employment Agency (<i>Bundesagentur für Arbeit</i>) [Germany]
BMBF	Federal Ministry of Education and Research (<i>Bundesministerium für Bildung und Forschung</i>) [Germany]
BMWi	Federal Ministry for Economic Affairs and Energy (<i>Bundesministerium für Wirtschaft und Energie</i>) [Germany]
Cedefop	European Centre for the Development of Vocational Training
CHINCA	China International Contractors Association
CNY	Chinese yuan [currency]
CoS	Certificate of Sponsorship [United Kingdom]
DIRECCTE	Regional Directorates for Enterprises, Competition Policy, Consumer Affairs, Labour and Employment (<i>Direction régionale des entreprises, de la concurrence, de la consommation, du travail et de l'emploi</i>) [France]
ECRAN	Europe China Research and Advice Network
EFTA	European Free Trade Association
EMN	European Migration Network
EU	European Union
EURES	European Job Mobility Portal
GBP	British pound [currency]
ICT	information and communication technology
ILO	International Labour Organization
IOM	International Organization for Migration
iMOVE	International Marketing of Vocational Education [Germany]
IRIS	International Recruitment Integrity System
IT	information technology
LINET	Independent Network of Labour Migration and Integration Experts
MIPEX	Migrant Integration Policy Index
MOST	Ministry of Science and Technology [China]
MOU	memorandum of understanding
NEET	neither in employment, education, or training
NESO	Netherlands Education Support Office

OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
R&D	research and development
RISE	Research and Innovation Staff Exchange
STEM	science, technology, engineering, and mathematics

Executive Summary

By the end of 2015 there were 260,000 migrant workers from China legally residing in the 28 European Union (EU) Member States. Of these, 70 per cent were found in Italy and a further 23 per cent in France, Germany, the Netherlands, Spain, and the United Kingdom. This report discusses the opportunities and challenges revealed by Chinese labour migration to these six countries. It aims to provide policy-makers with the key data necessary to develop sustainable labour migration programmes that will balance between the interests of China, European host States, employers, and migrants.

The report consists of three technical chapters followed by policy recommendations. Chapter 1 maps out regulations concerning the admissions of migrant workers to the six case study countries. Chapter 2 analyses the latest trends in the admission of Chinese workers' to the six case study countries. Chapter 3 examines potential labour and skills shortages within the EU as a whole, and considers how these might be filled by Chinese migrant workers. Finally, chapter 4 concludes with a series of policy recommendations.

Chapter 1 identifies similarities and differences in regulations concerning migrant workers' admissions to the six case study countries. Special focus is placed on Germany, which of the six case study countries has perhaps the highest potential for a sustainable labour migration programme with China. After outlining major admission procedures, including exceptions allowing for admissions outside the labour market test, the chapter analyses the effects of specific policies aimed to ensure effective integration of international migrants into the labour market. This analysis allows Chinese policy-makers to evaluate the case study countries' admission policies and procedures. It also suggests which EU Member States might integrate Chinese migrants most effectively. The criteria analysed include workers' rights, access to the labour market, recognition of qualifications, freedom to join unions, housing conditions, training and retraining, and access to public employment services and social protections.

Chapter 1 reveals great variation between migrant workers' legislations and their effectiveness across the six countries, especially in terms of labour market integration. Consequently, whichever European countries China prioritizes to foster labour migration ties, there will likely be trade-offs. The same European countries that facilitate admission of migrant workers may lag behind in worker integration, or they may favour the admission or integration of select profiles of migrant workers. Chinese policy-makers should consider which countries present trade-offs that would be most acceptable to the principal stakeholders, especially migrant workers. The labour migration option that would benefit Chinese workers the most is that which is least costly and provides workers with the most extensive employment and residency rights. The

study suggests that among the six countries, Germany may be currently offering the best balance between the admission of migrant workers and labour market integration regulations.

Chapter 2 identifies similarities and differences in Chinese workers' migration to the six case study countries since the early 2000s. By demonstrating the long-term trends, the analysis aims to provide the best available evidence to reveal how migration could evolve in the six case study countries within the near future. The data included in this part summarize a comprehensive overview of the most up-to-date records on the admission of Chinese migrant workers to the EU held by the Organisation for Economic Co-operation and Development (OECD) and Eurostat, which are presented in a separate appendix.

According to the available Eurostat data, all of the case study countries, except for the United Kingdom, have reduced the number of new work permits issued to Chinese nationals over the past couple of years. The key reason was the onset of the global economic crisis and the resulting decline of demand for labour. Chinese migrant workers in Italy – clustered primarily in textile industry – experienced the earliest and sharpest admission curbs. Germany did not curb admissions of Chinese workers until 2015, when employment of refugees became a priority.

Financial, refugee and undocumented migration crises precipitated curbs on the admission of foreign workers to the EU. As the main doors to European labour markets began to close in 2008, the principal “side door” – recruitment of workers from among graduating international students – has remained open. The number of Chinese migrant workers admitted to Europe as students and later adjusting their status to workers has been rising. In this time of crises, student migration has become an increasingly important labour market incorporation channel, and Chinese students have a comparative advantage in exploiting this pathway due to their high university admission rate and general interest in studying subjects for which there is growing demand in the European labour market. Entering Europe as students benefits both Chinese jobseekers and their future employers. By graduating from European institutions, Chinese workers gain readily recognized hard and soft qualifications and make initial contacts with employers through internships and traineeships. This is important because the key European criteria for the admission of third-country workers include recognized skills, sound knowledge of the host country's language, and a potential for labour market and social integration.

Despite their latecomer status, Chinese migrant workers could become an important part of the European workforce if they can bring the types of skills that European employers demand and that nationals or other migrant workers cannot provide as effectively, including in the areas of science, technology, and engineering. In the case of Germany, the demand for such workers was

expressly acknowledged in the China 2015–2020 strategy.

Chapter 3 identifies labour shortages across the EU. Shortage occupation lists point to a current demand in jobs across all skill levels. However, forecasts for the future suggest the transformation of demand from low- and medium-skilled to highly skilled workers. This emerging demand corresponds with the highly educated profile of Chinese workers. Apart from readily trained researchers or engineers, China could provide EU Member States with students in those fields corresponding with EU demand for increasingly high-skilled labour. If Chinese investments in Europe continue to increase, additional demand for Chinese workers may be created by Chinese companies themselves, thereby spurring flows of intra-company transferees, or the hiring of Chinese graduates from EU universities who may act as a bridge between Chinese employers and EU countries of investment.

The report closes by outlining conditions under which sustainable Sino-European labour migration programmes could be created. Chapter 4 opens with broad recommendations for the potentially important yet recondite Sino-German pilot nurse programme. It recommends a practical review of the programme so that any challenges faced in the pilot phase could be identified and addressed before the programme is expanded.

The key recommendation for all Sino-European programmes is that labour migration agreements should be designed and monitored bilaterally and on the basis of feedback from the major stakeholders affected. It is essential that such programmes aim to reduce migration costs and expand migrant workers' rights. China and the host countries can lower migration costs in a number of ways that could be agreed upon bilaterally. For instance, employers and workers could be asked to share transportation costs; recruitment chains could be shortened; and competition among licensed recruiters could be encouraged.

Programmes featuring highly skilled or skilled workers are more likely to achieve low migration costs and ample workers' rights. This is because employers are more willing to assume workers' migration costs for workers in roles that generate higher profits and require less need for strict monitoring and oversight. These jobs also tend to be better shielded from economic fluctuations, such as those that precipitated the decline in employment of Chinese workers in Italy.

The International Labour Organization (ILO) could provide technical assistance in structuring and monitoring rights agreements that would provide adequate protection to workers at a low cost, including ensuring the rights of the lower skilled international migrant workers the ILO has been working to protect since its inception.

1. The policy context: How have non-EU workers been admitted and integrated into EU labour markets?

1.1 Admission and residence criteria

1.1.1 EU vs national legislations

This report considers the migration of Chinese migrant workers to Member States of the European Union (EU), specifically migration to six case study countries within the EU: France, Germany, Italy, the Netherlands, Spain, and the United Kingdom. By the end of 2015 there were approximately 260,000 regular migrant workers from China residing in the 28 EU Member States, 93 per cent of whom were living in the six case study countries (Italy alone accounts for 70% of the total). This report discusses the opportunities and challenges revealed by Chinese labour migration to these six countries.

The first part of the study provides a general overview of labour migration legislation in the six case study countries and a more detailed examination of labour migration legislation in Germany. Of the six case study countries, Germany appears to be the country where opportunities for the admission of skilled workers from outside the EU appear most promising due to a combination of labour market demand, the Government's welcoming policy, and clarity of regulations.

EU labour migration policy is composed of the policies of individual Member States. There are two EU directives harmonizing the admission of foreign workers from outside the EU. The first concerns EU Blue Card holders.¹ The second concerns seasonal workers.² According to Eurostat (2016d) data relevant to the six case study countries, Chinese workers have made only limited use of the EU Blue Card Directive and virtually no use of Seasonal Directive.

Blue Card admissions concern highly skilled, highly paid workers. In a number of EU countries, policy-makers have favoured workers specializing in science, technology, and engineering and with at least intermediate proficiency in the host State's language. Blue Card holders enjoy ample rights, including freedom of labour mobility and family reunification. Blue Cards pave the way for settlement, since it is with higher-skilled migrant workers that EU Member States aim to fill their demographic imbalances. That said, Blue Card admissions have not yet attracted as many applicants as had been hoped, and Denmark, Ireland, and the United Kingdom have

¹ The 2009 EU Blue Card policy directive is available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32009L0050>.

² The 2014 EU season worker directive is available at: <http://eur-lex.europa.eu/legal-content/en/ALL/?uri=celex%3A32014L0036>.

not adopted Blue Card scheme. Chinese workers who have applied for Blue Card holder status have predominantly done so to work in Germany. See table 1 for EU Blue Card duration, salary minimums, and application fees for each of the case study countries.

Table 1 EU Blue Cards at a glance

	Validity (months)	Salary threshold (€)	Fee (€)
Germany	48	49 600	110
Netherlands	48	64 385	881
France	36	53 331	260
Spain	12	33 908	418
Italy	24	24 789	274
Source: EU, 2016a			

Seasonal admissions concern workers willing to undertake jobs of a genuinely seasonal nature, i.e., lasting no longer than nine months in any 12-month period. Seasonal jobs tend to be low-paid and limit labour and social rights to ensure that seasonal admissions stay true to their purpose – filling seasonal labour market shortages rather than facilitating long-term stay. While fostering transcontinental seasonal migration is theoretically possible, it requires a great deal of planning and monitoring to prevent unanticipated outcomes.³ Regardless, seasonal admissions generally do not concern Chinese migrant workers, except in Spain where on average 1 per cent of all first-time seasonal permits in 2008–15 were granted to Chinese workers.

Current legislation in the six case study countries do not make large-scale provisions specifically facilitating labour migration from China.⁴ In general, a Chinese worker, like any other third-country national, could be admitted after an employer has been unable to fill a role with a domestic national, a citizen of another EU Member State, or a third-country national already legally residing in country. Exceptions are possible, notably for jobs placed on shortage lists. However, shortage lists present logistical challenges that make it difficult to use them as the

³ For an example of the unanticipated outcomes that can come from such programmes, see Vanaspong, 2012, on Sweden’s seasonal worker programme for Thai nationals.

⁴ Pilot micro-programmes could exist, similar to the one run by the China International Contractors Association (CHINCA) and the German Employers’ Association of Private Care Providers. However, these programmes are not sufficiently well publicized to be identified and analysed through desk research.

basis for designing organized worker admission policies. These challenges include the very specific hard and soft competencies the lists call for; variability in the volume and the length of demand; and the fact that not all such lists aim to attract workers from abroad.

Recognizing the weaknesses of shortage lists, some EU Member States (notably the United Kingdom) have adopted point systems-based admissions. Point systems generally aim to pave the way for long-term admissions and as such favour qualified and highly qualified workers. In October 2016, Germany authorized Europe's most recent points-based admission programme (see below).

1.1.2 Germany

The Residence Act, 2004 (*Aufenthaltsgesetz*) and the Employment Regulation, 2004, (*Beschäftigungsverordnung*) constitute the legal basis for the admission of third-country nationals to Germany. Even though a 1973 ban on the recruitment of foreign workers continues to be in effect, exemptions have been granted to prevent labour shortages that would have a negative impact on the local economy.

Citizens of the EU, Iceland, Norway, and Switzerland enjoy freedom of labour mobility across the EU. Most non-EU migrants (including Chinese migrants) must apply for a visa before coming to Germany. If they intend to work, they need to apply for work permits. Highly qualified workers, especially scientists, academics, engineers, and the self-employed find it easier to secure permits than low-skilled migrants. However, under certain conditions, persons without university training but holding certain vocational skills can also work in Germany.

The Federal Employment Agency (BA) must approve most foreign workers' admissions (BA, 2016a). When determining the need for a foreign worker, the BA checks whether the vacancy cannot be filled by any preferential worker – that is, a German; EU/European Economic Area (EEA)/Swiss; or legally resident foreign worker. To prevent businesses from replacing preferential workers with foreign workers, conditions of employment for a third-country worker must be equal to these of German workers.

There are no large scale legal provisions facilitating the admission of workers specifically from China, such as (bilateral) labour agreements. But if Chinese workers have the required skills, they will find it easier to migrate to Germany on an employment-related visa. A few dozen occupations are exempt from BA approval and/or a labour market test (OECD, 2013). Exemptions are made for occupations that are stipulated by the Employment Regulation, and if the occupation could be justified by public interest (OECD, 2013). For instance, executives and intracompany transferees require only BA approval, and do not have to clear a labour market test.

The occupations placed on Germany's shortage list (or "Whitelist") tend to require a high level of knowledge and skill. Apart from information and communications technology (ICT) specialists, these professions require at least four years of higher education. There has been a significant increase in the recruitment of migrants with foreign tertiary degrees for shortage list occupations (e.g., physicians, engineers, software developers). A foreign worker who has found their occupation to be on the shortage list must check whether their training is recognized in Germany. The shortage list is updated twice a year. Hence, some occupations are added while others are removed. As of the second half of 2016, the list included openings across skilled (at least two years of vocational training) and specialist (training as a master craftsman or technician) qualification levels. It signalled shortages among skilled and specialist nurses (BA, 2016b).

In 2013, the China International Contractors Association (CHINCA) and German Association of Private Care Providers launched a pilot programme aiming to send about 150 qualified nurses to Germany. According to CHINCA, it is one of only two pilot labour migration schemes linking China with one of the six European countries analysed here.

Asians, especially Indians, make up a large share of labour migrants from non-EU/non-European Free Trade Association (EFTA) countries, even relative to other European OECD countries. The proportion of workers coming from Asia, including China, is especially high in the information technology (IT) and ICT sectors (OECD, 2013).

Table 2 Overview of key features of selected German residence permits

	Employment of the principal applicant	Employment of family member	Max. duration of initial permit	Extension	Settlement
EU Blue Card	Y	Y	4 years	Y	33 months (w/o language skills) 21 Months (with B1 German competency)
Skilled employment	Y	Y	Contract duration	Y	5 years
Self-employment	Y as self-employed only	Y	3 years	Y	5 years (general requirements) 3 years (specific requirements)
Jobseeker's visa	N	n.a.	6 months	N	Time taken into account
Research	Y In research and teaching	Y	1 year or Research duration	Y	5 years
University degree	120 days/year (part-time while working towards degree)	Y	1-2 years	Up to 10 yrs. 18 months to seek employment following graduation	5 years (half fulfilled by period of study) 2 years for graduate of German universities under certain conditions
Vocational training visa	Y	N	Same as training	1 yr.	Time taken into account
Settlement permit for highly qualified	Y	Y	No limit	n.a.	n.a.
Settlement permit	Y	Y	No limit	n.a.	n.a.

Source: Authors, based on BMWi et al., 2016b.

A prospective Chinese migrant with Internet access and knowledge of German, English, or other European languages can – without the assistance of paid intermediaries – understand how to migrate for work to Germany. The Federal Ministry of Labour and Social Affairs, the Federal Ministry of Economic Affairs and Energy, and the BA have developed the “Make it in Germany” portal.⁵ The portal facilitates access to most of the information prospective migrant workers would need. The portal walks migrants through key regulations and connects them with key resources, including specific persons in charge they may contact. Depending on the issue, prospective migrants can call, e-mail, or chat online with government migration or labour advisers. The very practical and migrant-friendly character of the portal helps to protect migrants against fee-charging intermediaries and to anticipate mistakes migrants would likely commit due to inadequate access to or transparency of information.

A Chinese migrant who has accessed “Make it in Germany” or the BA website can use a self-guided Migration Check tool to determine what type of residence permits will they need to apply for in order to work, train, conduct research, study, or seek employment in Germany.⁶

1.1.2.1 Working in Germany

Resident permit procedures available to Chinese depend on whether they have a university or a vocational training degree, and whether these degrees have been obtained in Germany or in China. Table 2 above showcases a number of the relevant residence permits and their associated application criteria.

Germany has in recent years facilitated the status change from student to worker. With the extension of the post-study job search period, Germany provides one of the most generous post-graduate schemes in among OECD countries. Other countries grant shorter job-search periods, although their criteria for changing status to an employment permit may be less strict in terms of what jobs qualify (OECD, 2013).

University graduates

Those who have completed university in Germany have 18 months to find a job corresponding to their qualification. In the meantime, they are free to work in any job they can find to sustain themselves. If they have secured a job paying an annual gross salary of €50,800 a year, they qualify for an EU Blue Card. If they are going to work as doctors or in a MINT (mathematics,

⁵ The “Make it in Germany” portal can be accessed at <http://www.make-it-in-germany.com/>.

⁶ The Migration Check tool can be accessed at <https://www3.arbeitsagentur.de/web/content/EN/WorkingandJobSeeking/WorkinginGermany/Detail/index.htm?dfContentId=L6019022DSTBAI522288>.

IT, natural sciences, technology/engineering) profession, they could qualify for the Blue Card if their prospective salary is just €39,624 a year. EU Blue Card holders are not subject to a labour market test (BMW i et al., 2016a).

Vocational school graduates

Those who have completed at least two years of vocational training in Germany can stay in Germany for 12 months in order to find a job. During this period, they can take any employment to maintain themselves in Germany. Once they find a job that corresponds with their qualifications and is of the same conditions as those offered to German workers, they can apply for a residence permit for qualified professionals.

Those who have completed at least two years of vocational training outside Germany may seek employment in Germany so long as they:

- seek employment in an occupation on the occupation shortlist;
- have secured a binding offer;
- have their qualification to work in this occupation recognized as equivalent to a German qualification;

If the authority in charge of assessing the application decides that a candidate requires practical experience in order to obtain full qualification recognition, the applicant can apply for a limited residence permit for this purpose (BMW i et al., 2016a).

The World Health Organization has listed 57 countries with a shortage of health-care staff. Germany prohibits organized recruitment from those countries. As of 2016, China was not among the 57 countries listed.

Those graduates of German universities who left Germany or those who have obtained a higher education diploma recognized in Germany, may enter Germany to seek employment on a special visa created for this purpose. This visa to seek employment does not authorize work, hence it requires proof of sufficient funds to maintain oneself in Germany for up to six months. But it allows third-country nationals to seek a vacancy corresponding with their skills. If an employer contracts them within six months of their admission to Germany, they do not have to depart Germany to adjust their status.

The nationality of job-search permit recipients roughly parallels the composition of the international student body in Germany, and the nationalities of those who receive employment permits (OECD, 2013). Germany draws many international students from Central and Eastern

Europe, former USSR countries, as well as Turkey due to long-standing migration from those countries. However, as in most other OECD countries, Chinese nationals have begun to dominate among international students. According to Eurostat data, in the period of 2008–15, Chinese students obtained an average of 18 per cent of all first permits issued for educational reasons.

Information on the post-graduation careers of Chinese graduates in Germany is limited. The only data source that tracks the employment of international graduates after the end of their studies is a survey conducted by Higher Education Information System (OECD, 2013).

Germany has fostered a number of initiatives to promote the internationalization of its vocational training sector. For over 10 years, the Federal Ministry of Education and Research has run an initiative called “iMOVE” (International Marketing of Vocational Education), which promotes German initial and continuing vocational training.⁷ For example, in September 2016, Kronos Machinery was awarded for having developed an apprenticeship programme offering majors in mechatronics and cutting (AHK China, 2016). The Ministry has signed memoranda of understanding (MOUs) with regard to international cooperation in this vocational training, notably with China. Germany promotes the build-up of elements of vocational training in those countries with which it has signed MOUs (OECD, 2013).

1.1.2.2 Starting a business

Chinese nationals seeking to start their own business in Germany can do so under the same conditions as other third-country nationals. The requirements depend on whether they seek self-employment in what the Federal Ministry for Economic Affairs and Energy (BMWi) calls “liberal” or “non-liberal” professions.

Third-country national seeking to work in a liberal profession (such as doctors, lawyers, engineers, IT specialists) have to prove that they (1) are qualified to exercise that profession, and (2) can finance their business and themselves.

Residence permit requirements for those seeking self-employment in an activity that cannot be classified as liberal will depend on whether the candidate has a residence permit for research purposes and whether they have completed studies in Germany (BMWi et al., 2016a). The candidates may need to demonstrate that they:

- have sufficient means to support themselves (including pension insurance, if over 45);
- have capital to finance their business; and
- are going to produce a good or service that will benefit regional economy.

⁷ More information can be found at the iMOVE website: <https://www.imove-germany.de>.

Two categories of applicants are exempt from the last two requirements above: (1) those who have a residence permit for research purposes related to their scientific study; (2) those who completed their studies in Germany and plan to start a business related to the skills acquired through those studies.

Freelancers in science and engineering, arts, professional writing, teaching, or professional services (medical or legal) can also apply for a residence permit for self-employment. Those applicants need to provide evidence of the need for their services in Germany, as well as proof of their qualifications and how they will finance their business.

1.1.2.3 Training

Third-country nationals may undergo vocational training in Germany if:

- they have found a certified company that will provide them with vocational training; or
- the BA has approved the worker's vocational training after having confirmed that there are no German, EU/EEA, or legally resident foreign candidates for this position (BMW et al., 2016a).⁸

Vocational training is expected to last no more than three years.

1.1.2.4 Research

Prospective researchers with a university diploma may apply for a research visa as soon as they have been accepted for research work in Germany.

1.1.2.5 Pilot project for international professionals

In October 2016 the state of Baden-Württemberg launched a three-year-long pilot project allowing for the annual admission of up to 3,000 non-EU citizens with a recognized vocational qualification in a job that is not on the BA's "Whitelist". The project is open to skilled workers in any trade, but favours applications of those with training in technical industry (engineering, metalworking, toolmaking, warehousing, and logistics); hotels and catering; as well as school teaching. Applicants must score 100 points in a defined criterion to prove their ability to integrate. Qualified professionals may have direct access to the German labour market if they can prove relatively advanced (B2) German-language proficiency (BMW et al., 2016c). Candidates with German-language proficiency that is one level lower can seek additional points by demonstrating their potential to integrate into German society in other ways, e.g. previous

⁸ Candidates holding a school-leaving certificate from a German school abroad are exempt from this requirement.

residence in Germany (50 points) or in another EU State for education or professional reasons (25 points); family ties in Baden-Württemberg (50 points); or advanced knowledge of English or French (25 points) (BA, 2016d).

The pilot programme emphasizes practical (rather than theoretical) training. Thus, to have their vocational skills recognized, the candidates should have acquired some work experience. It is possible to obtain a partial recognition of vocational training to qualify for admission so long as the worker will complete the training upon arrival (BA, 2016d).

Before this pilot programme was launched, non-EU citizens had only two possibilities to migrate to Germany: (1) if they worked in a profession featured on the shortage list, or (2) if they were highly qualified candidates eligible for an EU Blue Card. The points-based pilot programme tests the possibility of widening admissions to all professions for those who have completed vocational training (BA, 2016c). The pilot is limited to Baden-Württemberg only and it is open to all nationalities, although citizens of the so-called Western Balkans⁹ may be preferred in line with the German policy of prioritizing labour migration from the region (BA, 2016e).

1.1.2.6 Recognition of qualifications

Certain professions in Germany are regulated. This means that prospective workers must have their skills recognized in order to work in them. Regulated professions include doctors, lawyers, teachers, and many manual trades. Foreigners willing to undertake a non-regulated profession are encouraged to have their skills recognized to increase the chances of securing a contract (BMW et al., 2016a).

To help foreigners learn about the procedure involved in the recognition of their skills in Germany, the Federal Ministry of Education and Research has created a multi-language web portal that is useful for both prospective workers overseas and those already in Germany. The website is clearly written, easy to navigate, and practical, offering a Chinese worker (or any other foreign national) transparent and free information on where to apply for qualification recognition. For more information, applicants already within Germany may refer to their nearest authorities responsible for skill recognition. Within certain professions, the most detailed information can be provided by the relevant chambers of trade and industry or trade corporations in charge. Applicants located outside Germany, may obtain remote (phone, e-mail, chat) advice from the specific officer in charge.

⁹ The Western Balkans include Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, and Kosovo* (*As defined in United Nations Security Council Resolution No. 1244 of 1999).

Workers applying for skills recognition in Germany must have all of their supporting documents officially translated. In most cases applications can be submitted electronically. However, evidence should be delivered via hard copies.

The competent authorities will recognize a foreign qualification if there are no substantial differences between that qualification and the German equivalent. If significant differences are detected, the applicant may participate in an “adaptation period”. This may be the case where language proficiency is required.

In the event that an applicant’s qualification is not recognized, the assessment notification informs the candidate of the appeal procedure. Unsuccessful applicants are encouraged to discuss the decision with the authority issuing the assessment notification. If the authorities cannot resolve the issue, an applicant may appeal through legal channels.

The skill recognition authorities inform applicants of the estimated cost of applying for recognition before they proceed with the process. In general, costs are estimated to range between €200 and €600 (BMW_i et al., 2016a). Additionally, migrants will need to prepare for covering individual ancillary costs, e.g. translations, notarizations, participation in training measures. Under certain conditions, employment agencies or job centres may grant applicants financial assistance. Financial assistance is most notably available to the unemployed and those whose chances of employment would be greatly enhanced through continuous training (BMW_i, 2016).

Based on the EU Directive on the Recognition of Professional Qualifications adopted in 2005, skills recognition is generally not required of those workers who are residents of an EU Member State and only wish to provide services in Germany on a temporary or occasional basis. Such persons must notify German authorities of their expected temporary work.

Skill recognition is easier for Chinese workers holding professional qualifications from an EU Member State, a country within the EEA, or Switzerland. Workers who hold a qualification from one of these countries should contact the National Point for Professional Qualifications. The National Point will proceed in line with European Directive 2005/36/EC, which in conjunction with Directive 2006/100/EC regulates recognition of regulated professions.

1.1.2.7 Broad framework for Sino-German collaboration affecting migration

China and Germany have been fostering economic and scientific collaboration, particularly in the fields of environmental protection, sustainability, urbanization, and life sciences. The China Strategy of the Federal Ministry of Education and Research (BMBF) created a framework

for 2015–20 cooperation in education, research, and innovation, opening possibilities for the migration of researchers and scientists, and thereby creating opportunities for highly skilled Chinese jobseekers in Germany.¹⁰ The two countries have been holding policy discussions to advance education cooperation, particularly in higher education, mobility of students and researchers, and vocational education and training. The number of joint study courses, joint double degrees, and joint university institutes have been rising. The Sino-German University at Tongji University in Shanghai, for example, involves a consortium of 26 German universities of applied sciences (BMI, 2016; BMBF, 2016).

The strategy spells out both the opportunities and the challenges associated with bilateral collaboration, from the German perspective. On the opportunity side, research expenditure in China is expected to increase; China's universities produce excellent hard science (engineering, material science, nanotechnology, ICT, and chemistry) researchers; and increasingly more have worked in English. China is seen as an important partner in scientific collaboration, as well as a gateway to other Asian markets. Due to the growing demand for well-trained workers (also by German companies established in China), there are opportunities for German providers of education and training advisory services (BMBF, 2016).

With regard to challenges, traditionally the Chinese education system does not emphasize innovation and practical experience. Chinese regulations are not considered favourable to encouraging greater German investment due to over-involvement of the state in the economy. Language and cultural barriers may delay investment, and thus labour mobility, further (BMBF, 2016). These challenges are important from a migration point of view, because as long as investment in China will be thwarted, China will find it more difficult to promote stay-at-home development or provide incentives for European-educated Chinese migrants to return home.

The BMBF has expressed an interest in cooperation in research and innovation as well as in higher education and vocational education and training. As in the United Kingdom, collaboration at the higher education level is likely to result in increasing numbers of Chinese students and researchers being admitted into Germany, and also of German students and researchers being admitted into China. After a maximum of five years of residence in Germany, Chinese graduates who undertook their studies in Germany would qualify for long-term stay. Whether they stay permanently or not will depend on the China's ability to lure them back. The longer they will stay in Germany, the less likely they will return to China, particularly if they have established a family in Germany or had their family members join them from China.

¹⁰ For more on the BMBF's China Strategy, see <https://www.bmbf.de/en/the-china-strategy-2015-2020-2345.html>.

1.1.3 The United Kingdom ¹¹

Chinese workers looking for a job in the United Kingdom are admitted based on the points-based system applicable to all non-EU migrants. Whether resident in China or in the United Kingdom, Chinese job candidates must:

- obtain a work offer, the so-called Certificate of Sponsorship (CoS); and
- pass a points-based assessment that rates the candidate based on the criteria specific to an admission channel (expected earnings and/or savings, English-language skills, age, etc.).

Migrants can be admitted as high value (Tier 1), skilled (Tier 2), or temporary (Tier 5) workers. Since 2008, most Chinese migrants have been able to secure admission as skilled workers, followed by the high-value and temporary channels. Within the skilled workers' channel most have come through general admissions. Fewer have been admitted as intracompany transferees. Since April 2011, CoSs for Tier 2 general admissions have been either “restricted” or “unrestricted”. A restricted CoS is required for migrants coming to the United Kingdom to start work paying less than 150,000 British pounds (GBP) per annum. The restricted CoS has been subject to an annual quota of 20,700 apportioned each month. Foreigners seeking employment in highest-paid occupations, those requiring a PhD, or those featured on shortage occupation lists have priority of admission.

Unrestricted CoSs are not limited. They are assigned to new employees earning over GBP152,100; intracompany transfers; and Chinese workers already in the United Kingdom who are applying for an extension, changing their employment, or switching to another immigration category.

The duration of the permit granted depends on the scheme through which the worker is admitted. Tier 2 (general, sportsperson, or religious) may stay for up to three years. These permits could be extended for up to two additional years. Tier 2 intracompany transferees may stay for up to three years, depending on whether they are short- or long-term staff.

Tier 2 workers (except for intracompany transfers) may apply for permanent residence, if they have:

- legally resided in the United Kingdom for five consecutive years;
- secured a job offer (or self-employment);
- met the minimum wage threshold; and
- demonstrated English-language competencies.

¹¹ This section draws on the legislation specified in the online EU Immigration Portal. For more details, see http://ec.europa.eu/immigration/what-do-i-need-before-leaving_en.

As noted above, the United Kingdom has never adopted the EU Blue Card.

1.1.4 The Netherlands ¹²

To work in the Netherlands, non-EU workers must first obtain a three-month provisional residence permit followed by a three-year combined residence and work permit. Certain nationalities – but not Chinese nationals applying from abroad – may apply directly for the latter.

The residence permit specifies conditions of work, including employers for which foreigners are authorized to work. Change of status is allowed, but should not extend the duration of the original work authorization. Foreigners who lose employment should leave the country, unless they have managed to secure another job.

Those who have lived in the Netherlands for an uninterrupted five years and have a valid residence permit for a non-temporary stay can apply for a permanent residence permit.

Chinese nationals wishing to migrate to the Netherlands as highly qualified workers have three options. They can do so: (1) as participants in the Orientation Year for Highly Educated Persons programme; (2) as highly skilled workers; or (3) as EU Blue Card workers.

The Orientation Year programme is applicable to those who have obtained their master's degree or PhD from a Dutch university or a university that is included in the top-200 of any of the three university rankings of world universities (Times Higher Education, QS, or ShanghaiRankings). The residence permit is issued for a maximum of one year and entitles the worker to seek suitable employment in the Netherlands and to change status upon finding such employment.

The highly skilled worker option is mostly geared towards guest lecturers, scientific researchers, and medical trainee specialists. Highly skilled workers can stay in the Netherlands for the duration of their contract, for up to five years.

The EU Blue Card is meant for employees who perform highly qualified labour within the EU, as long as the national conditions for the EU Blue Card are met. In order to qualify, recognized employers must satisfy the wage and training requirements. EU Blue Cards are granted for the same duration as the employment contract plus three months, for a period of up to four years.

¹² Ibid.

1.1.5 France¹³

In France, like in all other EU countries, priority of employment is given to French nations, citizens of other EU countries, or legally residing non-EU foreigners. Employers wishing to hire a worker from outside the EU must pass a labour market test. The Regional Directorates for Enterprises, Competition Policy, Consumer Affairs, Labour and Employment (DIRECCTE) also verifies foreign applicants' professional qualifications and experience for the specific job.

Shortage occupations lists aim to address occupational and geographical shortages that cannot be filled with locally available workers. Hence, migrants willing and able to take those jobs could be exempted from a labour market test. Certain countries – but not China – have signed bilateral labour agreements with France. These agreements reserve certain shortage occupations for their citizens.

Chinese workers likely to contribute significantly to the economic, intellectual, scientific, cultural, humanitarian, or athletic development of France may apply for a Skills and Talents Permit (Carte Compétences and Talents). This permit allows the migrant to work in any professional activity relevant to their project. The procedure to obtain a Skills and Talents Permit differs from the procedure to obtain work permit. The project should generate an income equal to at least 1.5 times the minimum monthly wage.

The validity of work permits in France can range from three months to over a year. Temporary workers are always admitted for less than a year and cannot bring family members with them. The skills and talents workers are granted three-year, renewable permits.

Highly qualified workers may be admitted to France as EU Blue Card or Employee on Assignment workers. Because of the higher skill levels, these EU Blue Card or Employee on Assignment candidates are not subject to a labour market test.

To work in France as an EU Blue Card worker, a non-EU applicant must hold:

- a degree resulting from at least three years of higher education study (or five years of equivalent-level professional experience);
- an employment contract valid for at least one year; and
- a position whose salary is at least 1.5 times the minimum wage.

Chinese nationals may apply for EU Blue Cards in China and in France. They can apply within France if they hold another type of French residence permit, or if they hold an EU Blue Card

¹³ Ibid.

issued by another EU State where they lived for at least eighteen months. An EU Blue Card is valid for one to three years, and can be renewed as long as the employment contract remains valid.

Involuntarily unemployed EU Blue Card workers have three months to find a new job, or they will need to leave the country.

EU Blue Card holders can apply for an EU long-term residence permit after five years of uninterrupted stay in the EU, provided they have resided continuously in the EU country where they applied (France) for the last two years.

Highly skilled workers can also be admitted into France as Employees on Assignment. This category concerns non-EU citizens employed by a foreign company who have been seconded for a temporary role in France.

Employees on Assignment must:

- earn a gross salary equivalent to or higher than 1.5 the minimum French wage; and
- bring a specific expertise or attend training.

The Employees on Assignment permit is valid for three years and is renewable as long as the employment contract remains valid.

1.1.6 Spain ¹⁴

Unless a non-EU worker can identify a desired vacancy on a shortage list, their employer must clear a labour market test to contract the worker directly from abroad. Certain, very specific professions, such as teachers or managers of prestigious cultural institutions, are exempt from the need to obtain a work visa.

Work permits are initially issued for up to one year but are renewable. During the first year they may be tied to a specific sector and/or geographical area. After 5 years of continuous legal residence, foreigners may apply for an EU long-term residence permit.

Spain has signed bilateral labour agreements with six countries, but not China. Employers are encouraged to prioritize contracting the citizens of those countries that have signed bilateral labour agreements with Spain. All of these bilateral agreements, except the one with the Ukraine, were signed prior to the onset of the economic crisis, which prompted the Spanish

¹⁴ Ibid.

Government to declare a “Zero Migration Policy”. Foreign worker admission curbs continue to be in effect today, even though they have been relaxed to a degree. Spain has also permitted the continuous employment of non-EU workers who had worked in Spain prior to the introduction of the “Zero Migration Policy”.

1.1.7 Italy¹⁵

As with elsewhere in the EU, in order to contract a non-EU worker, Italian employers must obtain work authorization and pass a labour market test. The number of work authorizations issued is limited by annual quotas. Certain third-country nationalities – but not Chinese nationals – are exempt from quotas. Quotas are also waived for highly skilled workers. Residence and work permits tend to be granted for up to two years.

Having met certain conditions, as elsewhere in the EU, workers may apply to change their status, particularly to self-employment. The unemployed may be put on the employment placement lists for the remaining period of the validity of their residence permit (maximum 12 months).

After five years of continuous legal residence, foreigners may apply for settlement. The conditions are similar as those in other EU countries.

1.2 Labour market integration

The Migrant Integration Policy Index (MIPEX) measures policies to integrate migrants in the EU, and also in a few non-EU member States.¹⁶ According to the most recent data, 2014 labour market integration policies aimed at fostering equality between migrant and national workers were only “halfway favourable” in ten out of 28 EU countries.¹⁷

Labour market integration depends on a number of factors, including the host and home countries’ policies and the profile of the migrant population. Looking at the integration of migrants from the perspective of host countries, MIPEX concluded that countries with longer migrant worker admission experiences (like in much of Western and Northern Europe) have developed more effective labour market integration measures than those with shorter experiences (more typical of Eastern and Southern Europe). The onset of the refugee and irregular migration crises have favoured election of right-wing governments whose political agendas promised to

¹⁵ Ibid.

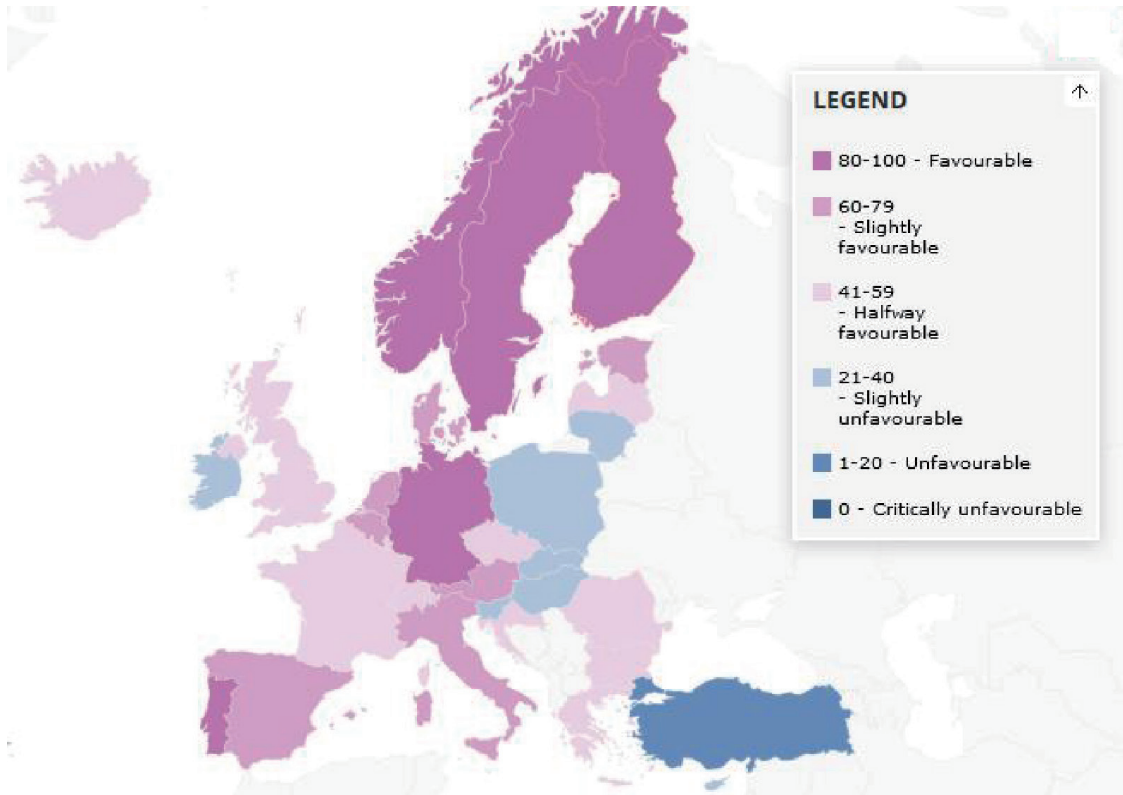
¹⁶ Australia, Canada, Iceland, Japan, the Republic of Korea, New Zealand, Norway, Turkey, and the United States.

¹⁷ Four countries had their policies ranked as “favourable”, seven countries as “slightly favourable”, ten countries as “halfway favourable”, and seven countries as “slightly unfavourable”.

tighten migration policies. Consequently, in the near future political may matter more than any given country’s immigration traditions.

Grading on a 100-point scale, the 2015 MIPEx identified Sweden (98), Portugal (91), Norway (90), Germany (86), and Finland (80) as having best developed policies to foster equality between national and migrant workers. By contrast, Slovakia (21), Cyprus (34), Slovenia (38), Ireland (38), and Poland (38) were at the bottom end with regard to migrant worker integration. With Denmark (79) ranking closely after Finland, the Nordic countries appear to have developed the most favourable labour migration integration policies, even when compared with traditional countries of immigration: Canada (81), the United States (67), New Zealand (67), and Australia (58). See figure 1 for an overview of migrant integration ratings across Europe.

Figure 1 Labour market integration in Europe, MIPEx 2015



Source: MIPEx, 2016.

The MIPEx survey of migrant workers’ labour integration policies focuses on four broad components: (1) access to the labour market; (2) access to general support; (3) access to targeted support; and (4) workers’ rights.

1.2.1 Access to the labour market

Under the MIPEX survey, access to the labour market is denoted by: (1) immediate access to the labour market; (2) access to private sector occupations; (3) access to public sector occupations; and (4) immediate access to self-employment.

If access to the labour market as defined by these four criteria was the only benchmark for fostering labour migration to Europe, Chinese workers would most benefit from migration to Finland, Spain, or Portugal (100), and benefit least from migration to France (20).

Among the six EU Member States selected for analysis in this report, Spain (100) scored highest for labour market access. It was followed by Italy and the Netherlands (90), the United Kingdom (80), Germany (70), and France (20). France's policies do not favour immediate access to the labour market or to self-employment, and migrants have only limited authorization to work in public and certain private sector occupations.

1.2.2 Access to general support

Under the MIPEX survey, access to general support is denoted by: (1) access to public employment services; (2) access to education and vocational training; (3) access to study grants; (4) recognition of academic qualifications; (5) recognition of professional qualifications; and (6) validation of skills.

If access to general support as defined by these six criteria was the only benchmark to foster labour migration to Europe, Chinese workers would most benefit from migration to Sweden (100), and least benefit from migration to Ireland (8).

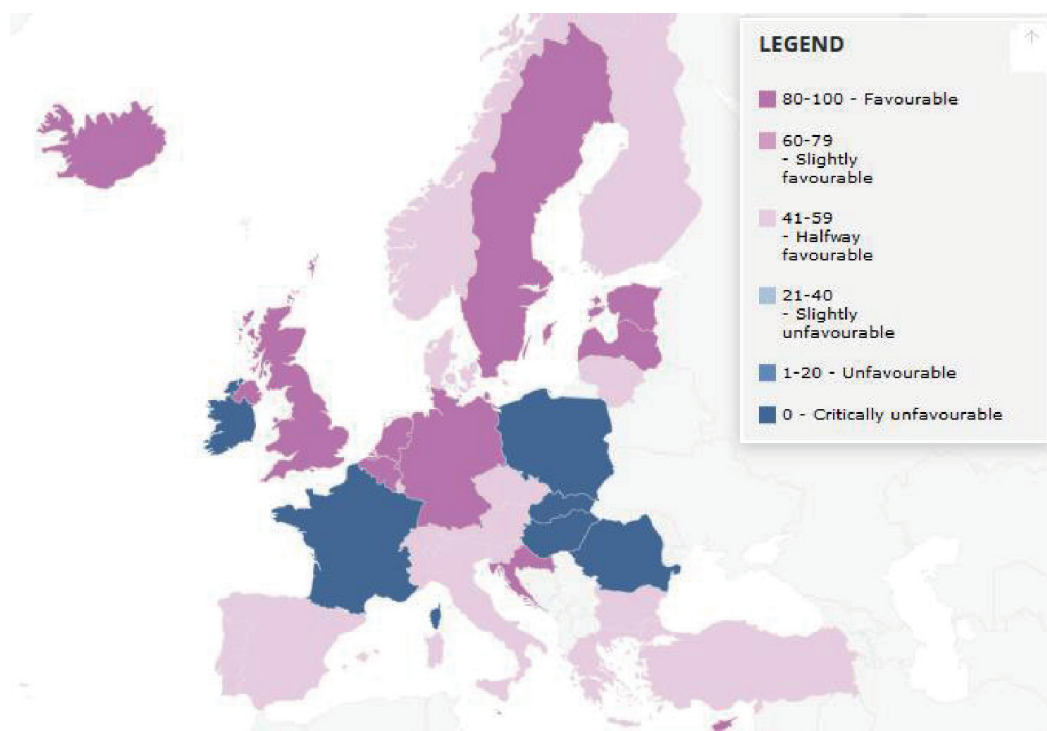
Among the six case studies, Germany, the Netherlands, and Spain (83 each) provided the best general support. Less favourable conditions were created by the United Kingdom (75), Italy (67), and France (58). All six countries grant migrants the support of public employment services. The differences among the countries occur in the five remaining general support categories.

EU countries are more likely to recognize professional rather than academic qualifications acquired abroad. However, the six case study countries have created policies that equally recognize academic and professional qualifications. According to MIPEX, these national policies were considered “favourable” to migrants in Germany, the Netherlands, and the United Kingdom; “somewhat favourable” in Spain and Italy; and “unfavourable” in France. Only Italy was viewed as having unfavourable skill validation procedures.

Beyond the six case study countries, Belgium, Estonia, and Sweden were considered to have favourable academic and professional recognition mechanisms; while Hungary, Ireland, Poland, and Slovakia's systems are considered to be unfavourable. In a similar fashion, most Western European countries have tended to facilitate skills recognition, while Eastern European countries generally have not. See figures 2 and 3 below for an overall picture of the recognition of migrants' professional and academic qualifications in Europe. Figure 4 provides a picture along the same lines for skill validation.

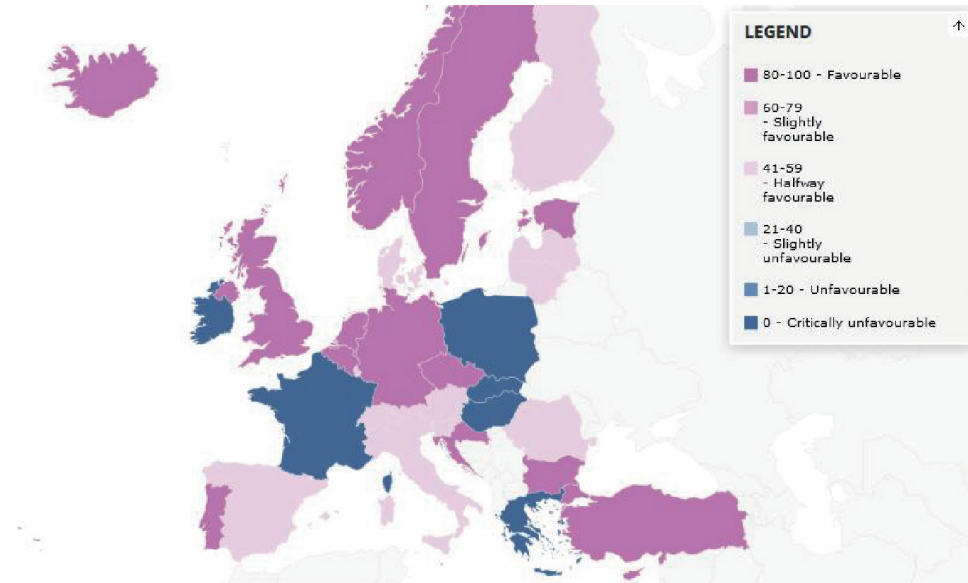
Chinese migrants intending to work in those EU Member States which erect de jure or de facto barriers to qualification recognition may need to start from the type of migration that would allow them to obtain qualifications directly from the host State. Migration for education or training facilitates better job matching, because it allows personal contact between the prospective jobseeker and the employer.

Figure 2 Recognition of migrants' professional qualifications (regulated professions) in Europe, 2014



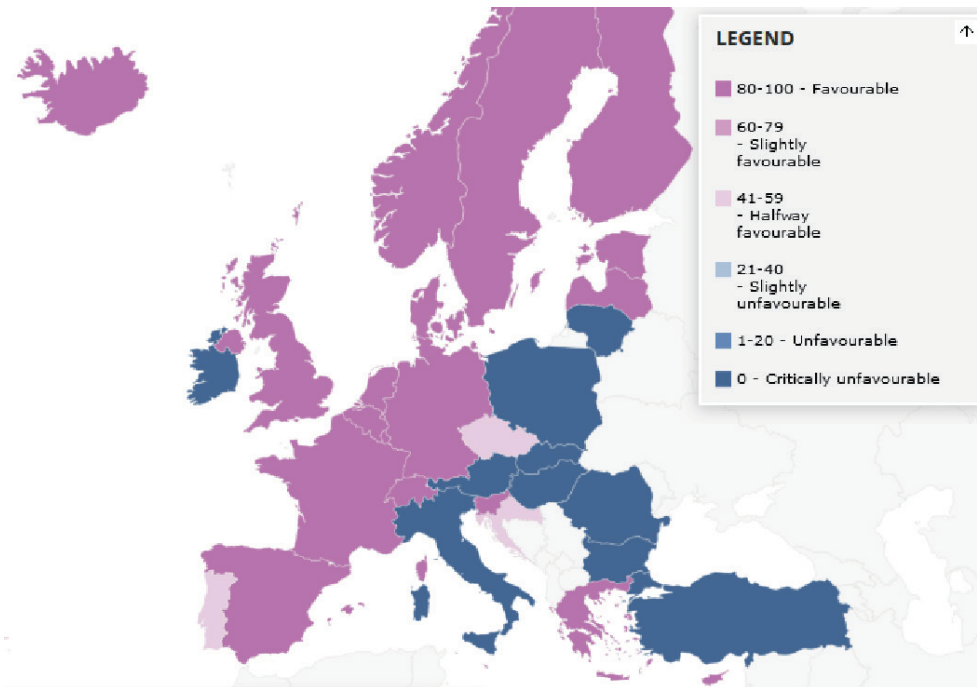
Source: MIPEx, 2016.

Figure 3 Recognition of migrants' academic qualifications in Europe, 2014



Source: MIPEX, 2016.

Figure 4 Validation of migrant skills (single procedure) in Europe, 2014

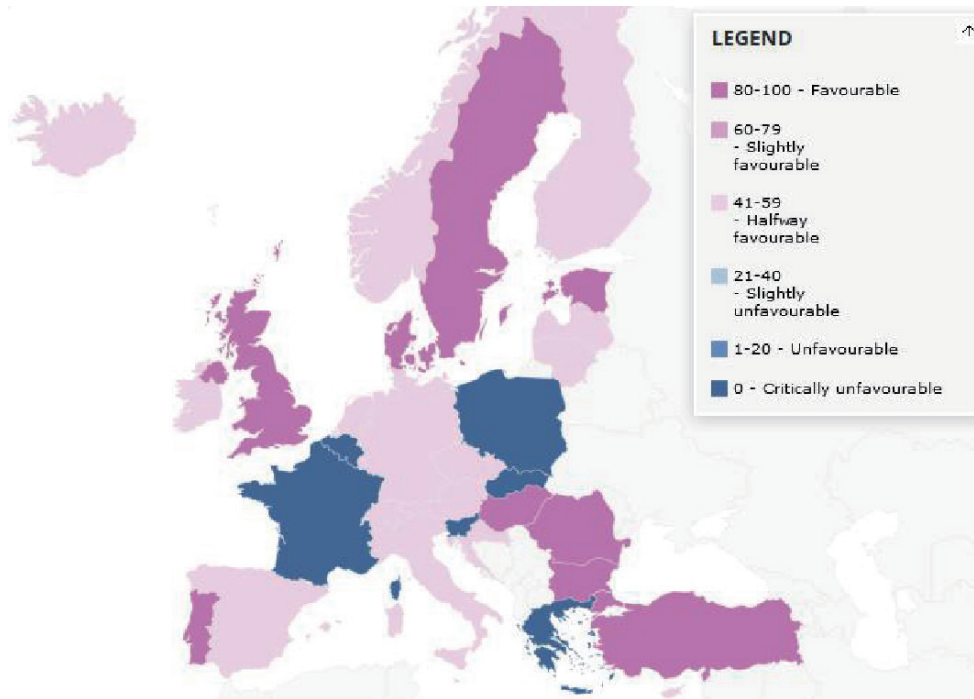


Source: MIPEX, 2016.

States could facilitate recognition of qualifications through the development of one-stop shops, as well as through the development of national guidelines on fair procedures and fees. Among the six case study countries, the United Kingdom is considered to provide very sufficient

support; Germany, Italy, the Netherlands, and Spain provide sufficient support; and France's support has been deemed insufficient.

Figure 5 State facilitation of recognition of qualifications, 2014



Source: MIPEx, 2016.

1.2.3 Access to targeted support

Under the MIPEx survey, access to targeted support is denoted by: (1) state facilitation of recognition of qualifications; (2) economic integration of non-EU citizens; (3) economic integration of youths and women; (4) support to access public employment services; and (5) an active information policy.

If access to targeted support as defined through these five criteria was the only benchmark to foster labour migration to Europe, Chinese workers would benefit most from migration to Sweden (100), and least from migration to Greece, Poland, or Slovakia (0).

Among the six case study countries, Germany (90) provided best targeted support. It was followed by France (50) and Spain (30), with Italy, the Netherlands, and the United Kingdom all rated at 20. Only France scored unfavourably for state facilitation of qualification recognition. Only the United Kingdom scored unfavourably with regard to information policy. The extent of targeted support policies across the EU turned out to be generally weak, with many States

providing language and limited professional training at best. Scandinavia and Germany have developed bridging work placement programmes, and along with Austria, Belgium, France and Portugal, they also offered employment mentoring. Most EU countries failed to provide specific integration measures for non-EU citizens, youths, and women, and also failed to provide support to access employment services.

As a result of lingering de jure or de facto barriers to competencies' recognition, high-skilled migrants suffer brain-waste, while low-skilled migrants face problems with underpayment.

Most labour market policies focus on helping migrants find jobs. European States tend to provide basic information and access to most types of jobs, self-employment, and training. But even after five to ten years, high-skilled migrants continue to work below their qualifications and low-skilled migrants remain stuck below the poverty line. Traditional countries of immigration and most Western European countries have been investing in more effective general and targeted programmes, but these new policies have not yet been able to reach those who need them the most.

Among the six case study countries, the over-qualification gap between foreign and native-born workers was the smallest in the United Kingdom, followed by France, Spain, the Netherlands, Germany, and then Italy. The in-work poverty gap between foreign and native-born workers was the smallest in Germany, followed by Italy, Spain, the Netherlands, the United Kingdom, and France.

The employment gap between highly educated foreign and native-born workers (ISCED 5–6) was minimal. The employment gap between low-educated foreign and native-born workers (ISCED 0–2) was lowest for the Netherlands, followed by the United Kingdom, France, Germany, Spain, and Italy (with the gap in Italy being nearly twice as large as in the United Kingdom).¹⁸

Since the onset of the financial crisis, employment rates of non-EU citizens residing in the EU dropped to 56.5 per cent in 2014, while their risk of poverty rose to 49 per cent, twice the level for EU citizens.

1.2.4 Workers' rights

Under the MIPEX survey, workers' rights are denoted as being comprised of four rights: (1) membership in labour unions; (2) social security; (3) housing; and (4) working conditions.

¹⁸ Over-qualification, in-work poverty, and employment gaps data are based on MIPEX 2012 surveys.

If workers' rights as defined through these four criteria was the only benchmark to foster labour migration to Europe, Chinese workers would benefit most from migration to Estonia, Germany, the Netherlands, Norway, Portugal, or Sweden (100), whereas they would benefit least by migrating to Cyprus (38).

Once migrants find jobs, they generally enjoy the same working conditions and access to unions as nationals. Among all EU States, only France lagged behind in fostering migrants' participation in labour unions. The main differences among EU Member States concerned access to social security and housing.

Those admitted to Western Europe (including Italy and Portugal but excluding the United Kingdom and Belgium) tended to enjoy favourable workers' rights, including membership in labour unions, access to social security and housing, and equal treatment in case of termination. In Eastern Europe only Estonia and Romania guaranteed favourable workers' rights overall.

Among the six case study countries, only Germany and the Netherlands (100) ranked favourably across all four criteria. They were followed by France and Italy (88), Spain (75), and the United Kingdom (50). While Spain provided unfavourable access to housing, the United Kingdom provided unfavourable access to both housing and social security.

At the height of the financial crisis in 2011–12, one third of working age non-EU citizens were of so-called NEET (neither in employment, education, or training) status, especially women and the low-educated. Among the six case study countries, France (45 per cent) had the highest percentage of non-EU NEET migrants. They were followed by Spain (38 per cent), Italy (33 per cent), Germany (32 per cent), the Netherlands (29 per cent), and the United Kingdom (24 per cent). Across the entire EU, Croatia (57 per cent) had the highest proportion of NEET migrants, while the Czech Republic (18 per cent) had the lowest.

Among the six case study countries, France (53 per cent) had the highest proportion of non-EU NEET migrants who received out-of-work income maintenance. They were followed by Spain (39 per cent), the Netherlands (31 per cent), Italy (28 per cent), the United Kingdom (16 per cent), and Germany (12 per cent). Across the entire EU, Finland (98 per cent) had the highest proportion of out-of-work migrants receiving income support, while Croatia (2 per cent) had the lowest.

1.2.5 Current economic and political situation in Europe in the context of recent refugee and migrant flows

The current economic and political contexts marked by financial and refugee crises and followed

by a rise in populist, anti-migrant sentiments have further rendered the admission of migrant workers into the EU dependent on their employers' ability to pass labour market tests. This means that employers seeking to hire non-EU workers must prove that they have not been able to hire national, EU citizen, or legally resident third-country national candidates.

European governments have been cautious about authorizing their employers' to hire outside of EU, because of the rising inflows of refugees and undocumented migrants. For instance, having largely avoided the financial crisis, Germany continued to increase the numbers of first work permits issued to Chinese nationals until 2014, but – as Eurostat data shows – Germany cut the distribution of such permits by more than half in 2015 to accommodate labour market incorporation of refugees. The curbs in the issuance of new work permits has been followed by the German Chancellor's announcement that Germany is looking to generate 100,000 new work opportunities for refugees (Oltermann, 2016). Many EU Member States – notably Germany and Sweden – have granted refugees the right to work (Poptcheva and Stuchlik, 2015), and many – notably Belgium, France, Greece, Italy, Poland, and Spain – have regularized undocumented migrants, either through overt or covert legalizations.¹⁹ However, these refugees and regularized migrants have largely been admitted to low-skilled jobs, with only a relative few taking up skilled positions.

There is a general consensus that untapped labour reserves exist within the EU due to, among other reasons, inadequate information on job opportunities and lingering practical obstacles to recognition of qualifications (Cedefop, 2014). A proportion of Europe's labour shortages are therefore the result of mismatches that could be overcome through better adjustment of educational programmes to be in line with labour market needs; retraining; amelioration of the working conditions and image of certain occupations; and greater labour market transparency (European Parliament, 2015; OECD, 2016b). Furthermore, labour shortages could be reduced if production of certain goods and services is rationalized, automated, or offshored.

However, correcting of labour mismatches and reducing labour demand is time and resource consuming compared to admitting migrant workers. Thus, European policy-makers acknowledge that the admission of non-EU workers is needed, particularly where they can help Europe to overcome demographic shortages and secure talent to sustain the transition from labour-intensive to knowledge-intensive economies. The higher the skills of the migrants, the more likely they will be admitted on stable contracts, thereby helping Europe to overcome its long-term needs and better protecting admitted migrants.

¹⁹ Regularization encompasses any state procedures by which non-nationals who have breached national immigration rules in their current country of residence are granted legal status. European regularizations have encompassed both large-scale ad hoc amnesties for migrant workers, and also discretionary renewal of a residence permit or granting of various humanitarian statuses to protect migrants against removal, including in the form of "toleration" of presence (Costello, 2016, p. 72). Depending on the type and size of the regularization activity, the host country may be unwilling to expand admissions from abroad to ensure that those who have been regularized are adequately integrated into the labour market.

2. China–Europe labour migration trends and characteristics

2.1 How did the inflows and outflows of Chinese migrants evolve during 2000–13?

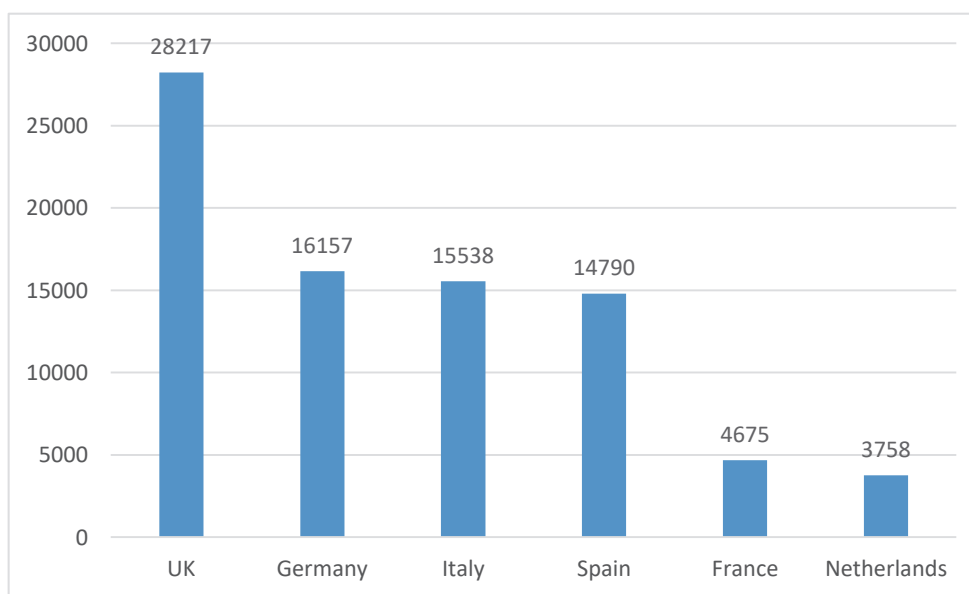
The OECD provides the longest-available comparable data on the inflows of Chinese migrants to France, Germany, Italy, the Netherlands, Spain, and the United Kingdom.

Over 1 million Chinese entries were registered in the six case study countries in 2000–13. The inflow patterns fluctuated across time and countries, but grew over the entire period.

Between 2000 and 2013, the six case study countries registered 1,100,416 entries of Chinese nationals. These admissions do not denote the number of Chinese entrants, but rather the number of entries, since one person could have entered more than once.

Registering an average of 28,217 entries a year, the United Kingdom admitted more Chinese nationals than France, Germany, and the Netherlands combined (figure 6).

Figure 6 Average annual inflows of Chinese nationals by country, 2000–13¹



¹ Data on 2000 inflows to Italy were unavailable, so Italian average is based on 2001–13 data.

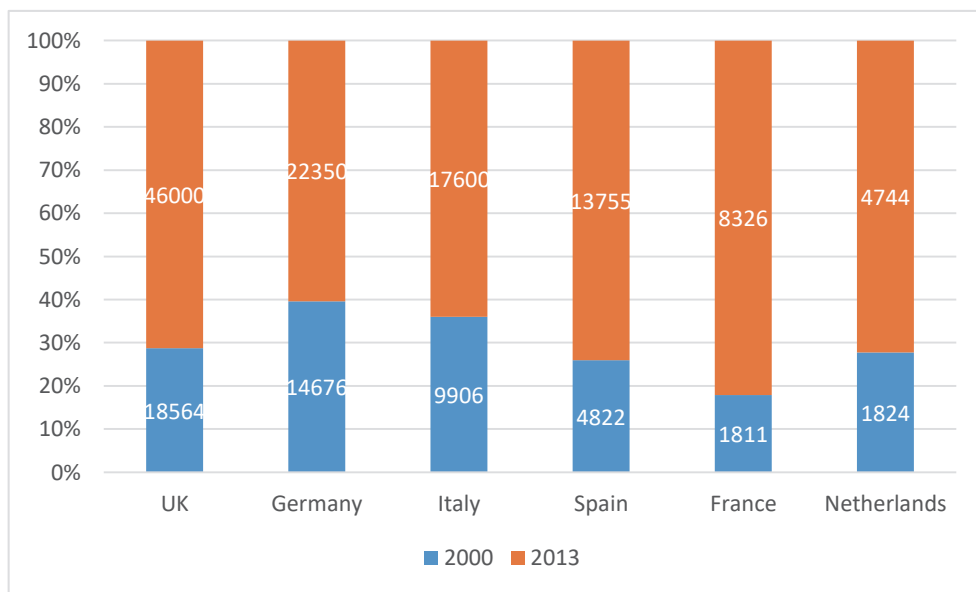
Source: Authors, based on data from OECD, 2016a.

The inflows fluctuated from year to year depending on a number of factors, including the host countries' and China's policies affecting international migration and migrants' responses to those policies. One likely factor during the 2000–13 period was the post-2008 global economic crisis. The crisis affected each country differently; thus each country responded with a different

set of policies. Furthermore, each country modified its migration regulations over time, albeit to a different degree. Hence, the aggregate inflows to each country and the proportions of various categories of Chinese migrants rose and fell from year to year.

Bracketing those fluctuations by comparing solely the figures for 2000 and 2013, the inflows of Chinese migrants to the six case study countries rose by as “little” as 150 per cent in Germany and by as much as 460 per cent in France. The inflows to Italy (170 per cent), the Netherlands (260 per cent), Spain (285 per cent), and United Kingdom (240 per cent) roughly doubled (figure 7).

Figure 7 Inflow of Chinese nationals by country, 2000 vs. 2013¹



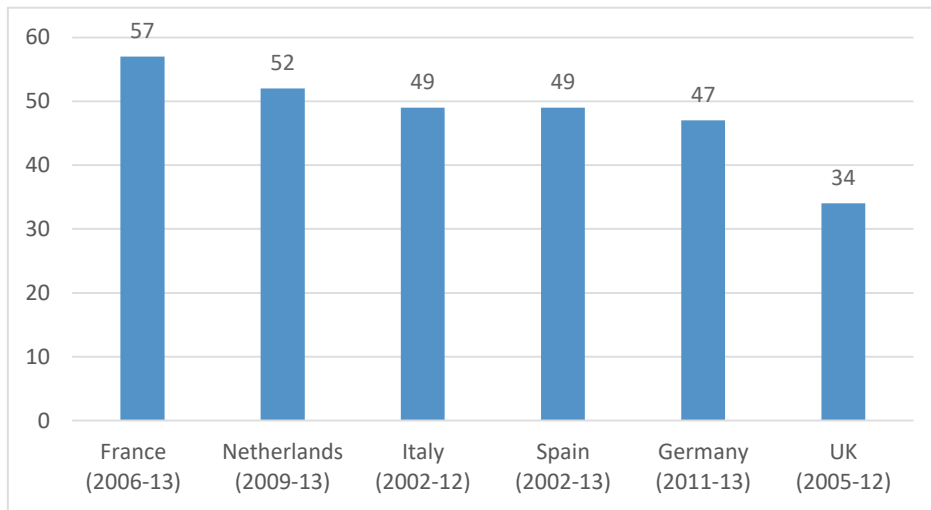
¹ Data on 2000 inflows to Italy were unavailable, so 2001 data are used.

Source: Authors, based on data from OECD, 2016a.

France attracted the largest, while the United Kingdom attracted the smallest proportion of migrant women

Different countries began to collect gender-specific inflow data in different years. Comparing Chinese migrant inflow figures for those years when data were disaggregated by gender, France had the highest (57 per cent) and the United Kingdom the lowest (34 per cent) proportion of Chinese women entering the country (figure 8).

Figure 8 Average proportion of women in the inflows of Chinese migrants, by country

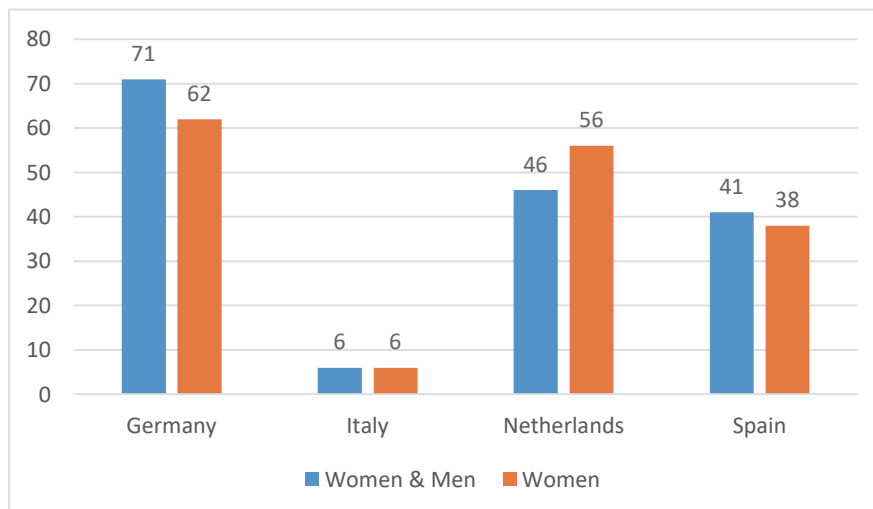


Source: Authors, based on data from OECD, 2016a.

Return rates ranged from 6 per cent in Italy to 71 per cent in Germany

Different countries began to collect outflow data in different years. As of August 2016 no outflow data were available for France and the United Kingdom. Comparing inflow and outflow data for the same years suggests that Germany had the highest outflow rates of Chinese women. Italy’s outflow rates were ten times lower than those of Germany (figure 9).

Figure 9 Chinese outflow as a proportion of inflows, by country and gender¹



¹ The proportions in the figure reflect only those years when both outflow and inflow data were available: Germany (All: 2000–13; Women: 2011–13); Italy (All: 2001–13; Women: 2002–12); Spain (All: 2002–13; Women: 2002–13); Netherlands (All: 2000–13; Women: 2009–13). Outflow data was not available for France or the United Kingdom.

Source: Authors, based on data from OECD, 2016a.

With regard to Chinese migration, Spain experienced the longest periods of sustained inflow decline, while France experience the shortest periods of decline.

Prior to 2013, Spain experienced the longest periods of sustained decline in the inflow of Chinese migrants. The flows to Spain dropped in 2004–6 and again in 2008–13. By contrast, decreases in the inflow of Chinese migrants to France during the same period would never last more than a year (2002, 2005, and 2007), thus giving Chinese migrants to France a more secure sense of what to expect when planning to migrate. Work permit data discussed in Section 2.2 below will corroborate the argument that Chinese migrant workers to France have enjoyed the most inflow stability among the six case study countries. The data would also suggest that the reasons for fluctuations in Chinese admissions to Europe could not be solely ascribed to the 2008 economic crisis. While in some countries the crisis did result in admissions declines, in other countries the inflow of Chinese nationals continued to grow.

The fluctuations in Chinese inflows into Europe could have been affected by other factors than the 2008 economic crisis.

Fluctuations in the inflows and outflows of Chinese migrants occurred both before and during the crisis. In some cases, policies were not modified or effective until a few years into the crisis. In other cases, policies did not have an effect on aggregate Chinese migration dynamics, e.g., when migrant worker admissions were curbed, but family reunification or student admissions were facilitated. In Section 2.2 below, the study will present data that will enable researchers to better judge the effects of the crisis on Chinese inflows by tracing fluctuations in the issuing of work permits.

Prior to 2013, Spain experienced both the sharpest year-on-year rise and year-on-year fall in Chinese migrant inflows. In 2003–04 Chinese inflows to Spain almost tripled, while in 2008–09 they dropped by one third. As the work permit data will show, those fluctuations were sharper among Chinese workers rather than they were among migrants in general, since workers are more vulnerable to fluctuations in the economic or political context than other categories of migrants, including students.

By 2013, the most recent year for which OECD data is available, Chinese migrant inflows were rising in France, Germany, and the United Kingdom, but falling in Italy, the Netherlands, and Spain.

See Appendix I for more information on inflow and outflow figures by country.

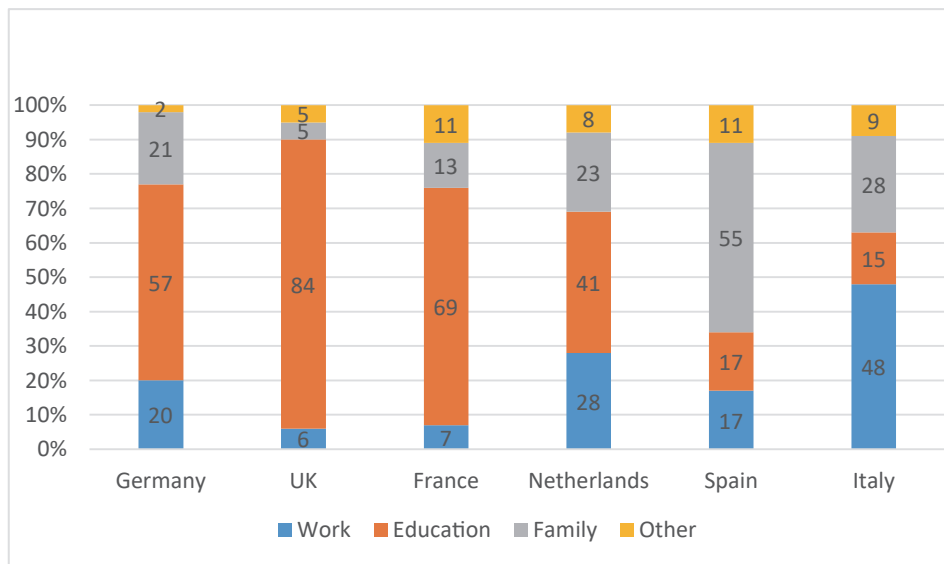
2.2 How significant were admissions for work compared to admissions for other reasons?

While Italy favoured admission of Chinese national to work, the United Kingdom prioritized studies and Spain family reunification.

The average figures for admission of Chinese migrants in the period of 2008–15 showed the highest proportion of first work permits being issued in Italy (48 per cent of all admissions) and the lowest in the United Kingdom (6 per cent). Between these two extremes fell the Netherlands (28 per cent), Germany (20 per cent), Spain (17 per cent), and France (7 per cent) (figure 10).

Having prioritized Chinese student admissions, the United Kingdom granted the smallest proportions of first work, family, or other permits to Chinese migrants. By contrast, the Netherlands had the most balanced distribution of work, study, family, and other migration permits issued to Chinese migrants.

Figure 10 The proportion of first time permits issued to Chinese migrants, by permit category and country, 2008–15¹ (per cent)

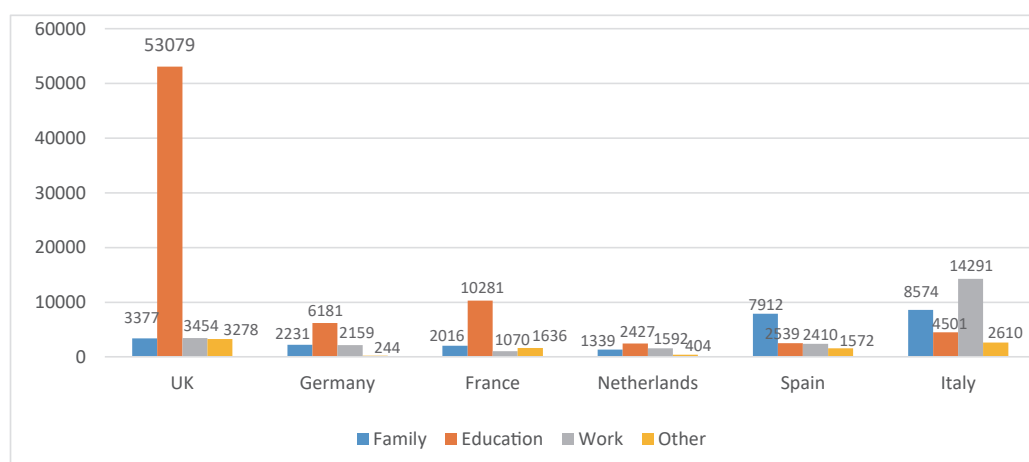


¹ Netherlands figures cover 2008–14 only due to the lack of data on first work permits issued in 2015.

Source: Authors, based on data from Eurostat, 2016b.

The average annual numbers of first permits issued for work ranged from 1,100 in France to 14,300 in Italy. However, Italy is an outlier in this regard, as the average annual number of first work permits issued in other four countries were more like those for France: 1,600 in the Netherlands; 2,150 in Germany; 2,410 in Spain; and 3,500 in the United Kingdom (figure 11).

Figure 11 Average admissions across four categories of permits, by country, 2008–15¹



¹ Netherlands figures cover 2008–14 only due to the lack of data on first work permits issued in 2015.

Source: Authors, based on data from Eurostat, 2016b.

First work admissions to Italy were characterized by the greatest fluctuations, while first work admissions to France were relatively stable.

Until 2014, Italy opened its doors the widest for Chinese labour migration among the six case study countries. By 2015 those doors were shut tighter than anywhere. By contrast, French were barely holding their doors ajar, considering how few Chinese workers have been admitted. However, admissions to France have been stable, with the smallest fluctuations in the numbers of work permits issued to Chinese workers each year.

In 2008–15, work admission numbers fluctuated the most from year to year in Italy and the least in France. In Italy, admissions peaked at 130 per cent above the annual average in 2009 only to fall to 94 per cent below the annual average in 2015. In France, the peak year for admission of Chinese workers was only 10 per cent above the annual average for the period, and the trough was only 13 per cent below the annual average.

In other words, Chinese migrants planning to work in Italy experienced most uncertainty around their admission, while those planning to work in France could assume that admissions rules would stay constant.

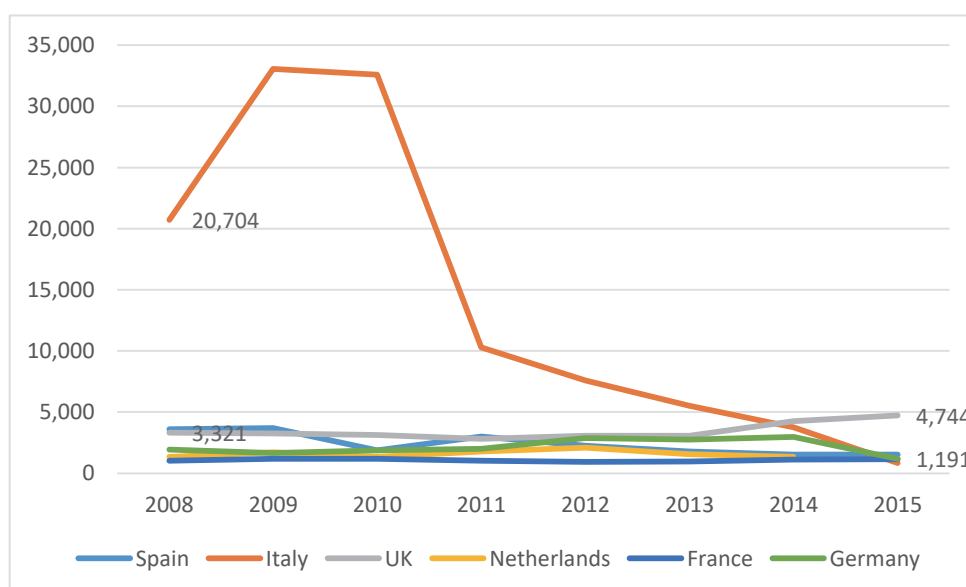
Based on 2008–15 trends Chinese migrants may expect smallest number of admissions in Italy and largest number in the United Kingdom.

Average admission figures for a given period cannot predict future trends because those averages may be skewed by large numbers of admissions for work in previous years that no longer reflect

the policies of the destination country.

In 2008–15 fewer than 5,000 first work permits were issued annually to Chinese workers by all of the case study countries except Italy. In Italy, first work admissions of Chinese migrants exceeded 32,000 a year in 2009–10, but by 2015 admission of Chinese workers had plunged down to become the lowest among the six case study countries. The United Kingdom was the only case study country that increased the number of first work permits issued to Chinese migrants over this period. In 2008, the United Kingdom issued 10 per cent of all such permits issued by the six countries combined, ranking the United Kingdom third after Italy and Spain. In 2014, the United Kingdom issued 50 per cent of all first work permits issued by the six countries – more than France, Germany, Italy, and Spain combined (figure 12).²⁰

Figure 12 Number of first work permits issued to Chinese migrants by country, 2008–15



Source: Authors, based on data in Eurostat, 2016b.

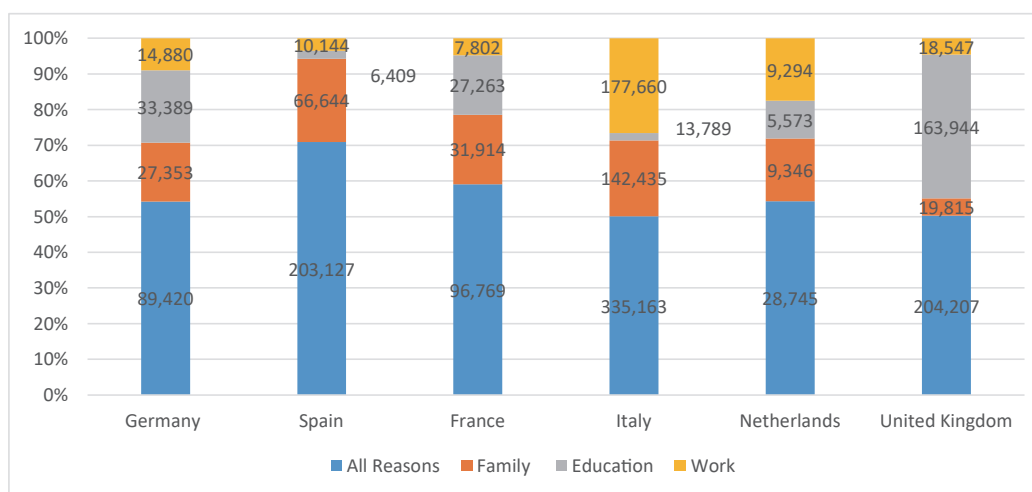
As of the end of 2015 Italy had the largest stocks of Chinese workers; Spain, France, and the Netherlands of family members; and the United Kingdom and Germany of students.

The data on the permits held by Chinese migrants as of the end of December 2015 demonstrate that only Italy harboured more Chinese admitted for employment than for education or family reunification. France, Spain, and the Netherlands harboured the largest numbers of Chinese migrants admitted on family reunification grounds, while the United Kingdom and Germany had the largest numbers of Chinese migrants admitted as students (figure 13). Different

²⁰ No data was available for the Netherlands in 2014.

profiles of Chinese migrants will have different labour market integration needs. Students are typically young, highly skilled, and well integrated. They may or may not stay. By contrast, family members coming to Europe to join relatives already in country represent a greater age, education, qualification, and linguistic preparation gamut. They are also most likely to stay in the country for a long time.

Figure 13 Residence permits issued as of 31 Dec. 2015 to Chinese nationals, by reason



Source: Authors, based on data from Eurostat, 2016f.

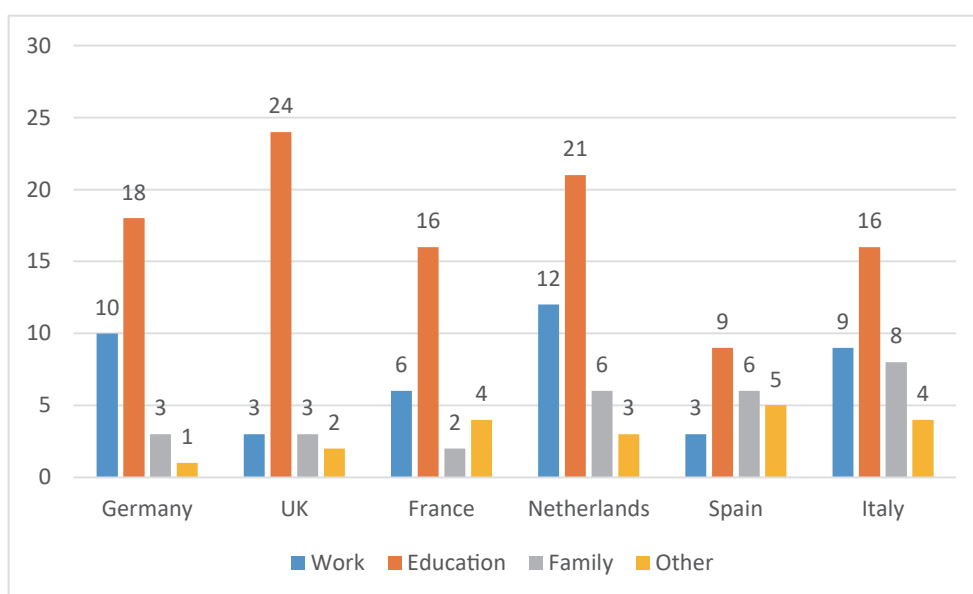
Chinese migrants have played a more significant role in student rather than worker admissions.

In all six case study countries, Chinese migrants featured prominently among recipients of first education permits. In the United Kingdom a quarter of all first education permits issued in 2008–15 were granted to Chinese nationals. However, even though Chinese nationals’ weight among migrant workers in the case study countries was smaller, it was still considerable. The proportion of Chinese migrants among first work permit recipients was highest in the Netherlands, where 12 per cent of all new work permits issued in 2008–15 were granted to Chinese. In Italy, Chinese nationals received 8 per cent of all family reunification permits.

The proportion of permits issued to any one nationality depended on a number of factors, one of them being competition from pre-established labour migration networks by other groups. In the United Kingdom, where Chinese migrants accounted for only 3 per cent of all work permits issued, Chinese workers had to compete with the citizens of Commonwealth of Nations countries, nations with long histories of labour migration to the United Kingdom. Thus, it is not the proportion of Chinese workers that should be looked at to hypothesize about the future of Chinese labour migration to the United Kingdom, rather it is the rate of change that should be examined.

For instance, in the first quarter of 2005 Chinese nationals received only 1.6 per cent of all work clearances in the United Kingdom and ranked 14th among all foreigners granted work authorization. By 2007 Chinese migrants made it to the top 10 visa recipient nationalities, where they have remained ever since. But despite the remarkable increase in the proportion of work clearances issued to Chinese migrants, as of mid-2016, Chinese nationals still found it difficult to compete with migrants from Anglophone countries. Chinese migrants have nonetheless established a firm position among non-Anglophone visa recipients. Since 2005, Chinese nationals have received more UK visas than other non-Anglophones. By the first quarter of 2008 Chinese migrants ranked fifth, after citizens of India, Australia, South Africa, and the United States.

Figure 14 Average percentage of Chinese migrants among all foreigners issued first permits for work, study, family reunification, and other reasons, 2008–15



Source: Authors, based on data in Eurostat, 2016b.

More Chinese student migration can be expected in the near future. Chinese students will provide a locally available supply of well-integrated, highly skilled workers.

France, Germany, the Netherlands, and the United Kingdom appear to have prioritized the admission of Chinese students. Heightened numbers of student admissions could be attributed to the fact that the admission of students is economically and socially uncontroversial. Hence, student admissions can be maintained even within the context of the global economic crisis. When all other channels of admission taper, migrant households may decide to send their children abroad to study, assuming that having learned the language, completed an internship, and obtained a recognized diploma, their children would be able to make the most of the

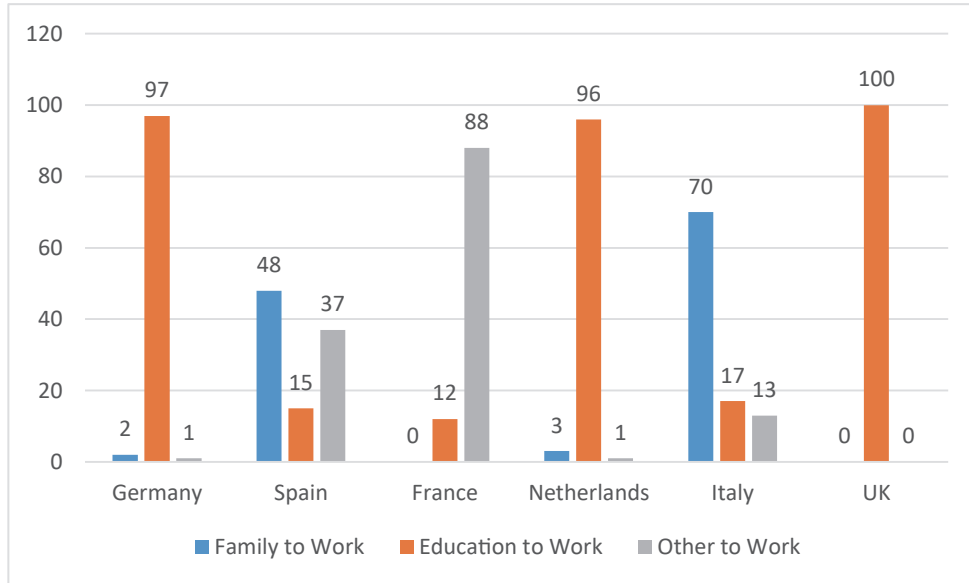
school–work transition visas that all six case study countries offer. When the front door to labour migration (work admission) closes, the side door (students' admission) remains open or even opens up more widely.

It remains to be seen what effects the increased availability of Chinese graduates in each case study country will have on direct recruitment from China. Will the availability of Chinese graduates translate into more restrictive admissions for workers coming directly from China?

Student migration serves the goals of employers, educational institutions, and migrant households. Students constitute a flexible supply of well-integrated workers whose skills are readily recognized and who have often already worked in the destination country in a part-time capacity. All six case study countries facilitate transition from a student to a worker status, even though rules vary in each State. Not only do students tend to be better integrated into the host States' labour market and society, but they also bring funds to fee-charging educational institutions. Countries without the benefit of a widely spoken language or a history of international student migration, such as Germany or the Netherlands, have begun to recruit in China, created English language programmes, and facilitated diploma recognition.

The development of international student-friendly infrastructure in non-traditional student destination countries takes time, but even Italy and Spain have begun to lure Chinese students through lower education costs, perceptions of a good quality of life, and (especially in Italy) strong Chinese networks. At least in theory, the international recognition of EU diplomas and the freedom of labour mobility within the EU may attract Chinese students to non-traditional countries of student migration with the assumption that having secured their first job in Italy, for example, they would be able to eventually secure one in Germany. The EU Blue Card has made such a process possible. As data shows, Germany has been receiving the largest proportion of Chinese EU Blue Card applicants among the six case study countries.

Figure 15 Change of original admission status to worker status among Chinese migrants, 2010–15¹ (per cent)

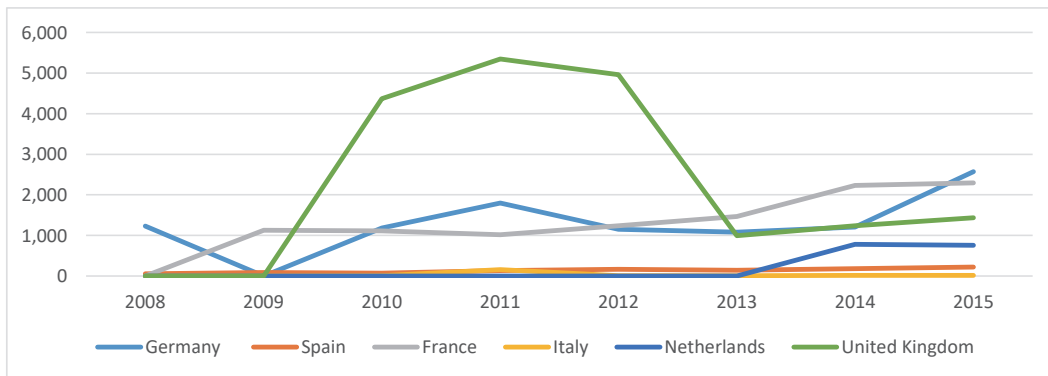


¹ Data for the Netherlands was only available for 2014 and 2015.

Source: Eurostat, 2106e.

As figure 15 demonstrates, in Germany, the Netherlands, and the United Kingdom the principal former migration status prior to labour was education. In the United Kingdom education was the sole status change path as 100 per cent of status changes changed from being students to being workers. In Italy and Spain, the legislation favoured labour transition from family status. In France Chinese migrants generally changed their status to work from categories other than education, and changes from family member status to worker status were essentially non-existent.

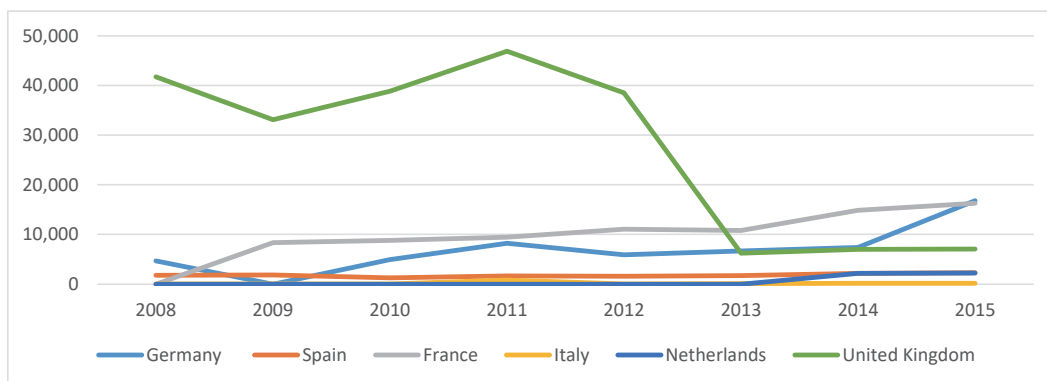
Figure 16 Education–employment status changes among Chinese migrants by host country, 2008–15



Source: Eurostat, 2106e.

While the percentages above may suggest large numbers of student-to-worker status changes in the United Kingdom (100 per cent), Germany (97), and the Netherlands (96), the absolute numbers of student-work status changes present a more variable picture of how case study countries compare (figure 16). Indeed, the United Kingdom shows substantial numbers of student-to-worker status changes during the period 2010–2012, which suggests the effect of UK legislation at the time or spontaneous interest among Chinese students to change their status. But both prior to and following this spike in numbers in the United Kingdom, France and Germany have generally had larger absolute numbers of Chinese students adjusting their status to workers. The conditions in Spain and Italy have apparently not favoured student–worker transition. In all other countries, notably Germany and Netherlands, student–worker transitions have been on the rise in recent years. It is notable that student–worker status change trends among Chinese migrants have been similar to the trends for migrants of all nationalities in the six case study country, making it possible to assume that host country legislation is the factor that is driving these trends (figure 17).

Figure 17 Education–employment status changes among migrants of all nationalities by host country, 2008–15



Source: Eurostat, 2106e.

See appendix II for more information on admissions for work versus other reasons for entry for each case study country.

2.3 To what types of work were Chinese admitted and how long were they authorized to stay?

The most comparable occupational data on the first permits issued by the case study countries to Chinese migrant workers groups their work into five broad categories: (1) highly skilled; (2) EU Blue Card; (3) seasonal; (4) research; and (5) other. ²¹

All case study countries favoured Chinese admissions to “other” work...

All six case study countries issued the largest proportion of first permits for employment other than highly skilled work, research, seasonal work, or through an EU Blue Card. However, the degree to which Chinese workers were concentrated in “other work” varied considerably from country to country, from 99 per cent in Italy to 43 per cent in France. In between these two extremes were Germany (94 per cent), Spain (92 per cent), the United Kingdom (78 per cent), and the Netherlands (47 per cent).

...followed by highly skilled work,

The second most frequently granted type of first permits to Chinese migrants was for highly skilled work. Issuing almost a quarter (24 per cent) of all permits in this category, the Netherlands granted the largest proportion to Chinese migrants, while Germany granted none. France (23 per cent), the United Kingdom (21 per cent), Spain (5), and Italy (1 per cent) also received Chinese migrants applying for highly skilled work.

...research,

The third most frequently granted type of first work permits to Chinese migrants concerned researchers. France welcomed the largest proportion of Chinese researchers, with researchers accounting for one third (33 per cent) of Chinese migrants who received work permits, while at the opposite end of the spectrum was Italy, which did not offer any researcher work permits to Chinese nationals. Similar proportions of Chinese researchers pursued research in the Netherlands (29 per cent) as in France (33 per cent). Very small proportions of Chinese pursued research in Germany (2 per cent) or Spain and the United Kingdom (1 per cent each).

²¹ Due to the complexity and comparability issues of work permit data concerning non-EU nationals, even Eurostat has not disaggregated the “other” work category into its components. Further insight into occupations in which Chinese migrants work could be deduced from a combination of labour force surveys (where the Chinese migrant sample size is large enough), census data, and administrative records. Due to complexity of this data and comparability issues, disaggregation of Chinese nationals by economic activity and occupation requires an in-depth study, which is not the aim of this overview.

...and to a much lesser extent employment authorized under EU Blue Card

One reason why Germany may have not issued any first permits for highly skilled work could have been partial overlap between those type of workers and EU Blue Card workers, the latter of whom accounted for 4 per cent of Chinese migrant work permits granted by Germany. EU Blue Card workers are essentially skilled or highly skilled workers who meet a minimum earnings requirement. France and Spain issued 1 per cent of all first work permits to Chinese migrants in the form of EU Blue Cards, while the Italy, the Netherlands, and the United Kingdom issued none. EU Blue Cards were only adopted in 2009 and have thus far not attracted many Chinese applicants across the EU, possibly due to the salary requirement. If rules were to be relaxed and crisis recovery was to be successful, perhaps more Chinese would apply for those permits, except in Britain due to Brexit.

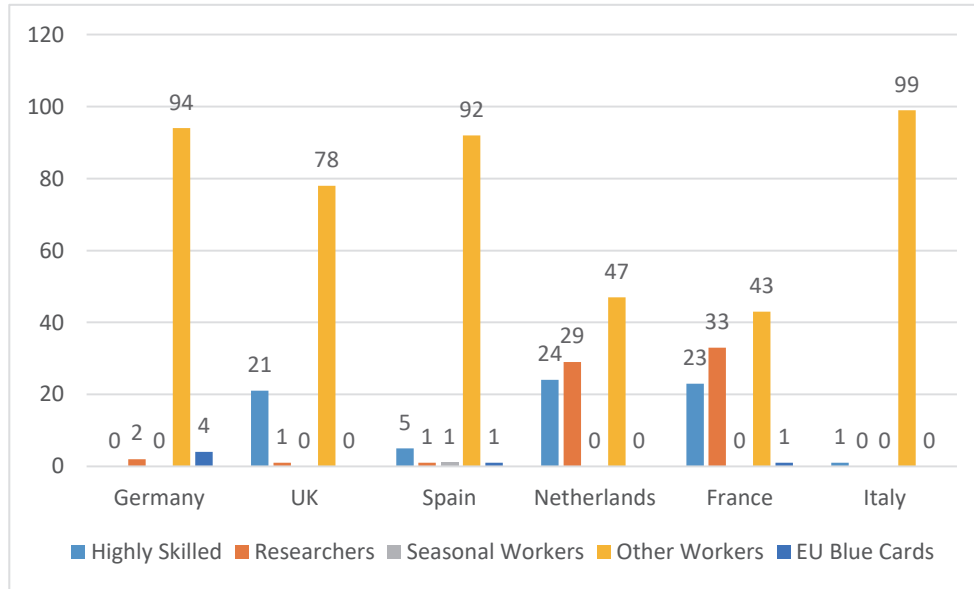
For instance, those who have completed university studies in Germany have 18 months to find a job corresponding with their qualification. In the meantime, they are free to work in any job they can find to help them sustain themselves. If they have secured a job paying an annual gross salary of €50,800 a year, they qualify for an EU Blue Card. If they are going to work as doctors or in one of the MINT (mathematics, IT, natural sciences, technology/engineering) professions, they could qualify for the Blue Card even if their prospective salary is €39,624 a year. EU Blue Card holders are not subject to labour market test.

Except in Spain, Chinese migrants were not recruited to perform seasonal work

The only case study country that granted Chinese migrants at least 1 per cent of first work permits for seasonal work was Spain, where Chinese construction projects took place. It is unlikely that any of the case study countries will increase admissions of Chinese nationals for seasonal work. Seasonal work tends to be low-skilled and low-paid, so European governments assume that candidates could be found locally or in Eastern Europe, where wages are lower and seasonal workers have been recruited based on bilateral labour agreements since as early as 1990. By issuing seasonal permits that cover longest period of time (nine months) among case study countries, Spain has managed to attract a few Chinese workers to construction-related jobs, but those admissions were modest and have been falling. On the demand side, Chinese migrants themselves have not been seeking seasonal work in Europe. The cost of transportation would be too high compared to earnings, which could in turn spur irregular work and overstay.

Figure 18 below summarizes the first work permit data discussed above.

Figure 18 Average proportions of first work permits by category, by country, 2008–15¹ (per cent)



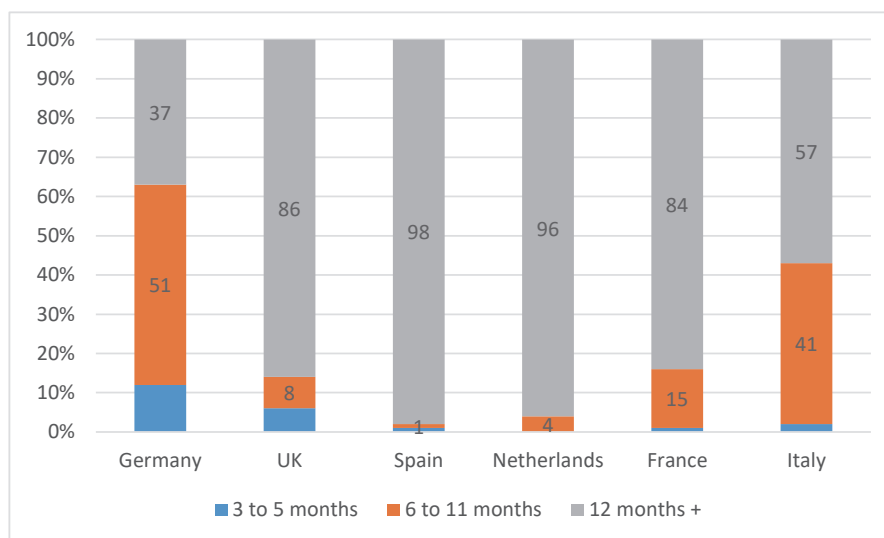
¹ Data for the Netherlands covers 2008–14 only.

Source: Authors, based on data in Eurostat, 2016d.

Spain admitted the largest proportion of Chinese workers on long-term permits; the Netherlands on mid-term permits; and Germany on short-term permits.

The type of job contracts that Chinese migrants were able to obtain in Spain (98 per cent), United Kingdom (86 per cent), France (84 per cent), and Italy (57 per cent) favoured admissions for over 12 months. Whether due to a preponderance of shorter work contracts or regulation-related limitations, in the Netherlands (96 per cent) and in Germany (51 per cent) larger proportions of Chinese migrants were able to obtain authorizations for six to 11 months. None of the case study countries favoured admission of Chinese nationals for “other work” for less than six months. However, Germany had the largest proportion (12 per cent) of short-term (less than six months) admissions from China, followed by the United Kingdom (6 per cent), Italy (2 per cent), and France and Spain (1 per cent each) (see figure 19).

Figure 19 Proportion of short-, medium-, and long-term permits among first permits issued for “other work” to Chinese migrants, by country, 2008–15¹



¹ Data for the Netherlands covers 2008–14 only.

Source: Authors, based on data in Eurostat, 2016d.

With regard to Chinese workers, the Netherlands and Germany will likely increase the proportion of long-term admissions. Italy, Spain, and the United Kingdom will likely decrease their proportion. France will likely maintain long-term admissions at their current level.

The Netherlands is likely to grant more long-term admissions. Until 2014 no first time long-term or short-term “other work” permits were issued to Chinese migrants by the Netherlands. The introduction of long- and short-term permits has been coupled with the phase-out of mid-term permits. Chinese migrants may expect more admissions for 12 months or longer in the Netherlands in the near future.

Germany is likely to grant more long-term admissions. Since 2009 mid-term permits have predominated among the first permits issued for “other work” to Chinese migrants. But with long-term permits being issued more frequently, the proportion of admissions on mid-term permits has been declining. Chinese workers in Germany will likely see more long-term admissions in the near future.

Chinese workers in Italy have experienced the most dramatic drops in long-term (and mid-term) admission since 2011. As a result of the sharp decrease of long- and mid-term permits in 2015, 65 per cent of first work permits issued to Chinese migrants in Italy were for just three to five months, even though the absolute number of work permits have not changed over time. If the 2015 proportions end up being locked in, most new Chinese workers to Italy are likely to be admitted on short-term permits.

Having previously accounted for nearly 100 per cent of “other work” permits, the proportion of long-term permits issued to Chinese workers by Spain dropped to about 88 per cent in 2015. Chinese workers looking to enter Spain may expect to be increasingly admitted on short-term permits in the near future.

Permits for other work issued by the United Kingdom had previously been exclusively for 12 months or longer, but this practice changed in 2012. Following this change, the absolute number of long-term permits issued has continued to rise, but so have the numbers of work permits issued for stays of 6–11 months and 3–5 months. As of 2015, long-term “other work” permits constituted 86 per cent of all first-time permits issued to Chinese workers by the United Kingdom. Chinese workers migrating to the United Kingdom will likely be admitted predominantly on long-term permits in the near future.

About 80–90 per cent of first Chinese migrant admissions for “other work” in France have been for stays of 12 months or longer. This trend is likely to continue.

See appendix III for more information on work permits by type of work for each case study country.

2.4 What was the demographic profile of Chinese workers?

The gender and age profile of those issued first work permits is not immediately discernible. As of August 2016, Eurostat did not provide gender and age breakdowns of Chinese workers in the United Kingdom and Germany; the Dutch data concerned 2011 only; and the French data was only available from 2012. A fuller picture is available for Italy and Spain, as both countries both have provided gender and age data since 2010. The OECD International Migration Database collected gender data on foreign workers in earlier periods, but due to methodological differences, the OECD and Eurostat data sets are not easily comparable. These limitations need to be taken into account when considering the data presented in this section.

In all four case study countries for which data is available, Chinese migrant workers tended to be men, with the ratio of men migrants to women migrants being nearly 3:1 in one instance.

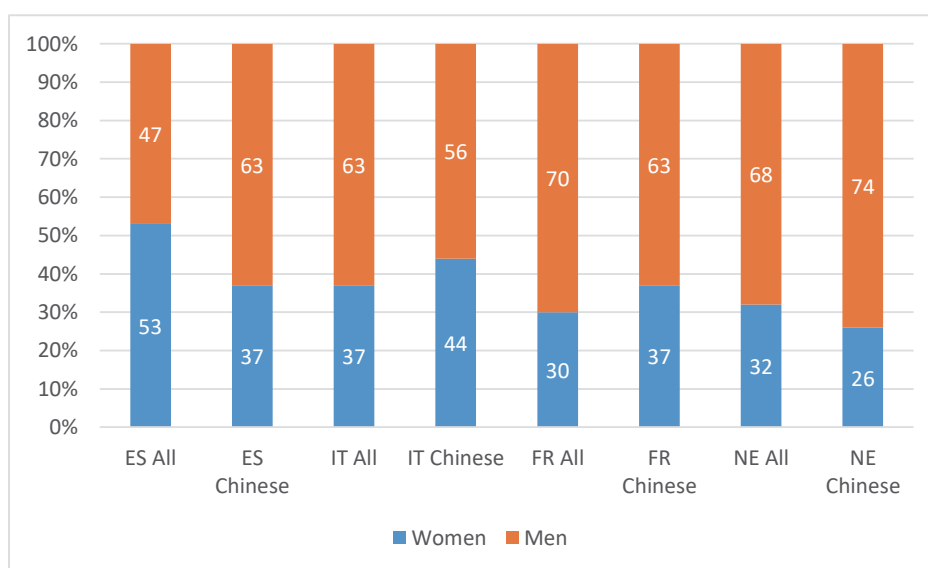
Based on the available data, men made up the majority of Chinese migrant workers admitted to the case study countries for which there is Eurostat data – France, Italy, the Netherlands, and Spain. The proportion of work permits issued to Chinese women was highest in Italy (44 per cent), and lowest in the Netherlands (26 per cent). In France and Italy Chinese women made up a larger proportion of work permit recipients than women migrants in general. As noted above, 44 per cent of work permits issued by Italy to Chinese migrants were given to women, whereas that figure is just 37 per cent across all migrant workers awarded an Italian work permit. In

France the figures were 37 per cent for Chinese women migrants versus 30 per cent for women migrants in general. In the Netherlands and Spain, the proportion of first work permits issued to Chinese women was lower than that issued to foreign women migrants in general. However, among all foreign migrants, women actually received the highest proportion of permits in Spain and the lowest proportion in France.

The difference between the gender distribution among all workers and among Chinese workers was most pronounced in Spain, where the proportion of work permits issued to Chinese women was 16 percentage points lower than for all women. The disparity was least pronounced in the Netherlands, where Chinese women received 6 percentage points fewer. Spain was the only country where, across all migrants, women obtained more first work permits than men (see figure 20 below).

OECD data on the inflows of Chinese workers provides a longer-term perspective, but is also difficult to compare to Eurostat data, since it does not provide gender breakdowns for the Netherlands and the United Kingdom. Even so, in none of the four remaining case study countries does the proportion of Chinese women workers outnumbered that of men. The proportion of Chinese women workers was the highest in France (45 per cent), followed by Spain (42 per cent), Italy (41 per cent), and Germany (29 per cent).²²

Figure 20 Average proportions of first work permits granted to Chinese and all foreigners, by gender and country



Source: Authors, based on data in Eurostat, 2016c.

²² OECD inflow data provides gender breakdown for 2006–12 in Germany and Spain, and for 2010–12 in France and Italy.

Roughly one quarter of first work permits recipients were 25 to 29 years old. Except in France, almost all admitted migrant were under the age of 50.

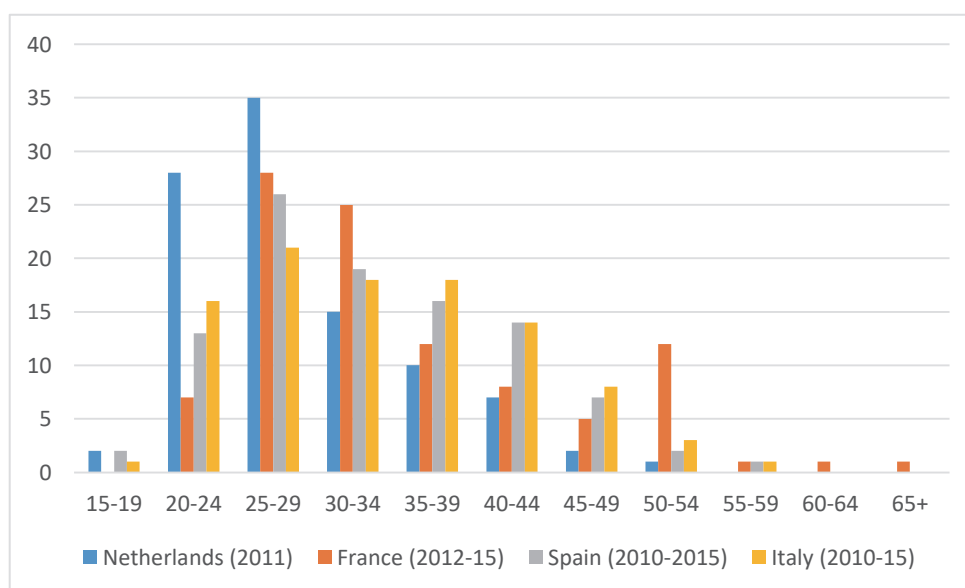
Roughly one quarter of first work permit recipients were 25 to 29 years old in the four countries which provided data – France, Italy, the Netherlands, and Spain.

Among the four countries, the Netherlands had the largest proportion of permits issued to Chinese migrants in their 20s. France had the largest proportion of permits issued to migrants in their 30s and 50s, while Spain had the highest proportion in their 40s (figure 21).

The older the permit applicant, the less likely they were to be admitted to any of the four countries. That said, in France, Chinese workers in their 50s were equally as likely to obtain first permits as those in their 40s (13 per cent each). This was due to the relatively high admission rate of Chinese workers in their early 50s. In 2012–15, France admitted more workers in their early 50s than they did workers in their late 40s, early 40s, early twenties, and teens, and they admitted almost as many as those in their late 30s.

At the extremes of the age spectrum, the Netherlands and Spain issued the largest proportions of first work permits to those between 15 and 19 years old – 2 per cent in each country. Whereas France had 1 per cent of Chinese immigrants older than 65 years (figure 21).

Figure 21 Proportion of work permits granted to Chinese migrants by age group and country



Source: Authors, based on data in Eurostat, 2016c.

Chinese women were predominantly admitted in their upper 20s.

In France, Italy, the Netherlands, and Spain most first work permits granted to Chinese women were issued to those in their upper 20s. If one is to rely on the single year data from the Netherlands (2011), 43 per cent of first permits granted by the Netherlands to Chinese women were issued to those in their upper 20s.

All countries – except Italy – issued the largest proportion of first work permits to Chinese women in their 20s. Italy issued the greatest proportion of their first work permits to Chinese women in their 30s. A Chinese woman in her 50s had greatest chances of obtaining her first work permit in France. France also issued more permits to Chinese teenage or 60-plus women.

Chinese men were also most likely to be admitted in their upper 20s.

In France, Italy, the Netherlands, and Spain most first work permits granted to Chinese men were issued to those between 25 and 29 years old. If one is to rely on the single year data from the Netherlands (2011), 32 per cent of first permits granted by the Netherlands to Chinese men were issued to those in their upper 20s.

All countries – except France – issued the greatest proportion of first permits to Chinese men in their 20s. France issued the greatest proportion of first work permits to Chinese men in their 30s. Also, a Chinese man in his 50s had greatest chances of obtaining his first work permit in France. France also issued more permits to Chinese teenage or 60-plus men.

See appendix IV for more Chinese worker demographic information by destination country.

3. EU labour and skills gaps and opportunities for Chinese migrant workers

3.1 Overview of EU labour and skills gaps

The EU offers vast opportunities for international migrants across the skills spectrum. The region's most advanced economies support high living standards and offer a vibrant range of opportunities to workers, entrepreneurs, and business leaders alike. The EU's most dynamic and innovative economies also offer significant prospects for workers to develop their skills through access to some of the world's leading technologies, business practices, and networks of experts.

The EU attracts international migrant workers partly in light of the vast scope and scale of its common labour market. At the beginning of 2016, the EU Member States had a total population of 510.1 million residents, of which 243.7 million were in the labour force and 221.4 million were in employment (Eurostat, 2016g; 2016h). With unemployment and youth unemployment rates gradually coming down since the peak of the global economic crisis, the EU's labour markets are supplying fresh opportunities for decent work across a variety of economic sectors (European Commission, 2016b).

Despite such positive trends, however, there remain some important concerns about the overall sustainability of the EU's labour market in terms of current demographic trends. As other parts of the world have also witnessed, when more workers exit the labour force through retirement than new ones enter it, there becomes a heavier burden on those in employment to maintain economic output and ensure public goods provision. In order to avoid recession, the policy challenge then becomes either to raise labour productivity rapidly enough to sustain economic output or otherwise to increase the labour supply within the short term.²³

EU labour markets are already facing demographic pressures through ageing populations.²⁴ According to UN estimates, the EU currently has about 29 people of a pensionable age (65 years or more) for every 100 who are of working age (15–64) (UNDESA, 2015). Based on current projections, this figure will rise to 45 for every 100 by 2035, and 53 by 2050 (UNDESA, 2015).

Moreover, several Member States' populations are shrinking in absolute terms. Bulgaria, Croatia, Estonia, Germany, Greece, Hungary, Latvia, Lithuania, Portugal, and Romania all had a smaller

²³ Raising labour productivity on a large enough scale is technically very difficult to achieve except through rapid advances in technology or human capital. Increasing the labour supply, however, can be done through a number of policies – by attracting marginalized groups into the labour force, for example, or raising the retirement age – though it is perhaps most commonly, straightforwardly, and lastingly achieved through international labour migration.

²⁴ The median age is around 40–45 in the majority of EU Member States, and as high as 46 in Germany (UNDESA, 2015). By 2050, the median age is forecast to increase by an average of six years across the Member States and by as much as a decade or more in Cyprus, Poland, and Slovakia (UN-DESA, 2015).

population in 2015 than they did a decade earlier (UNDESA, 2015). Other Member States, while not shrinking outright, are only sustaining population growth through positive net migration.

In order to manage EU Member States' future labour needs, a consensus is growing that international migration policies will have to play a bigger role (European Commission, 2010; OECD and European Commission, 2014; *The Economist*, 2015). The EU's "Global approach to migration and mobility", adopted in 2012, explicitly recognizes that: "European countries are facing labour market shortages and vacancies that cannot be filled by the domestic workforce in specific sectors, e.g. in health, science and technology" (European Commission, 2011, p. 2). The EU Commissioner for Home Affairs at the time, Ms Cecilia Malmström, commented more broadly in 2014: "It is a reality today that many EU countries cannot meet their labour needs with a purely home-grown workforce. The question is not whether we need migrants but how to make the most of migration" (European Commission, 2014c).

Beyond the demographic realities alone, there are important issues of skills shortages and mismatches across the EU. According to the latest European Company Survey, 39 per cent of EU enterprises find it difficult to find employees with the required skills (Eurofound, 2015). The ILO (2014) discusses skills mismatches as a "major constraint" for EU Member States that has increased since the economic crisis of 2008 and hampered economic recovery.

The European Commission's "European Dialogue on Skills and Migration" recently recognized a key role for international migration to play in addressing skills shortages in key sectors:

The further development of knowledge-intensive services, high-tech manufacturing, or the "green jobs" that underpin Europe's future competitiveness requires Europe as a whole to "up its game" in terms of skills development. Shortages have already been seen in key sectors such as science, technology, engineering and healthcare. The shortages should be addressed both by training and development of the existing (and underused or unemployed) work force (both native and of migrant origin), but also by attracting skills from abroad (European Commission, 2016a).²⁵

China is rapidly becoming a key sending country for international migrant workers to the EU. Workers from China can potentially help close some of the EU's labour and skills shortages within the coming decades and alleviate some of the deficits described. Indeed, China is very well positioned to do this as the country with the world's largest population; with a diverse and fast-developing economy; and with one of the strongest education systems in the world.

²⁵ The Independent Network of Labour Migration and Integration Experts (LINET) – organized by the International Organization for Migration (IOM) to advise the European Commission – likewise summed up this central point coherently: "Migration is an important instrument for filling labour and skill shortages in the labour markets and alleviating demographic tendencies of ageing and, in some countries, decreasing population, while also contributing to entrepreneurship, diversity and innovation in host economies" (LINET, 2012).

This chapter looks into some of the specific labour and skills needs facing the EU in the coming years and identifies key opportunities for Chinese international migrant workers to fulfil. In this, we analyse both existing and future employment opportunities for international migrant workers coming to the EU, as well as specific opportunities for migrant workers from China.

3.2 Existing employment opportunities: Shortage occupations and hard-to-fill vacancies

Shortage occupations refer to specific jobs (or types of jobs) that are hard to fill within a given labour market. The reason may be a shortage of workers interested in the position; a lack of workers with the appropriate skills to fulfil the job; or simply a lack of workers on aggregate. Such occupations – sometimes also referred to as “bottleneck” occupations – thus always imply an excess demand within the labour market for a particular kind of skill or work-interest.

Many countries compile official lists of shortage occupations to help guide their employment and skills policies and planning activities. The majority of EU Member States explicitly use such lists to determine migration policy and define the particular skills or qualifications with which a migrant worker might access their labour market (EMN, 2015). Most such lists are compiled with inputs from numerous economic stakeholders and social partners and most are updated periodically. Some such lists also take into consideration potential future skills needs, anticipating or forecasting these through a variety of methodological approaches.

The European Migration Network (EMN) recently carried out a comprehensive survey of the similarities, differences, and contents of EU Member States’ lists of shortage occupations (EMN, 2015). The top-12 jobs identified under 18 such lists are presented in the table below.

Table 3 Top-12 shortage occupations identified in selected EU Member States, latest available year

#	Austria (2015)*	Belgium, Wallonia (2013)	Belgium, Flanders (2014)	Belgium, Brussels (2013)	Croatia (2015)*	Czech Republic (2014)*
1.	Metal working machine tool setters and operators (metal turners)	Electrician installers	Cleaners	Teachers (secondary education)	Livestock farm labourers	Crop farm labourers
2.	Roofers (asphalt)	Automobile mechanics	Sales representatives	Administrative clerks (reception and communication)	Field crop and vegetable growers	Heavy truck and lorry drivers
3.	Metal working machine tool setters and operators – milling machinists	Nurses (general care)	Teachers (secondary education)	Teachers (primary education)	Fitness and recreation instructors and programme leaders	Security guards
4.	Agricultural and machinery mechanics	ICT developers, analysts, web-developers	Commercial back office co-workers	Sales persons and business managers	Travel consultants and clerks	Metal working machine tool setters and operators
5.	Plumbers	Maintenance mechanics	Nurses	IT professionals	Chefs	Commercial sales representatives
6.	Mechanical engineering technicians	Sales representatives (professional equipment)	Co-workers (call-centres)	Sales representatives	Beauticians and related workers	Sweepers and related labourers
7.	Electrical engineering technicians (high-voltage)	Cooks	Analyst developers (ICT)	Engineers and technical engineers	Musicians, singers and composers	Welders and flame cutters
8.	Welders and flame cutters	Sales persons	Maintenance mechanics	Care personnel	Dancers and choreographers	Building construction labourers
9.	Toolmakers and related workers (tool, die and punch makers)	Sales representatives (business services)	Cleaners (of spaces and rooms)	Secretaries	Specialist medical practitioners	Sewing, embroidery and related workers
10.	Sheet metal workers (other)	Technicians (metal machining systems)	Teachers (pre-school and primary education)	Technicians (natural and applied sciences)	Generalist medical practitioners	Cooks
11.	Electrical mechanics (other)	Site managers	Site managers	Room waiters and servers	Teachers (university and higher education)	Bricklayers and related workers
12.	Nursing professionals	Slaters	Co-workers (kitchen)	Accountants and assistant accountants	Heavy truck and lorry drivers	Toolmakers and related workers

Table 3 (Continued...)

#	Austria (2015)*	Belgium, Wallonia (2013)	Belgium, Flanders (2014)	Belgium, Brussels (2013)	Croatia (2015)*	Czech Republic (2014)*
1.	Drivers and mobile plant operators	Contact centre salespersons	Fishermen	Mining and quarrying labourers	Software developers	Child care workers
2.	Business and administration associate professionals	Specialist medical practitioners	Animators	Assemblers	ICT operations technicians	Cleaners and helpers (offices, hotels and other establishments)
3.	Production and specialized services managers	Dentists	Masseurs (Ayurveda)	Mechanical machinery assemblers	Film, stage and related directors and producers	Waiters
4.	Science and engineering associate professionals	Generalist medical practitioners	Therapists (Ayurveda)	Crop farm labourers	Packers (manual work)	Shop sales assistants
5.	Sales workers	Commercial sales representatives	Tattooists	Heavy truck and lorry drivers	Business services agents (not elsewhere classified)	Security guards
6.	Metal, machinery and related trades workers	Audiologists and speech therapists	Mosaic craftsmen	Shop sales assistants	Engineering professionals (not elsewhere classified)	Teaching professionals (not elsewhere classified)
7.	Teaching professionals	Nursing associate professionals	Office clerks (Russian/Ukrainian language)	Forestry and related workers	Construction managers	Messengers, package deliverers and luggage porters
8.	Building and related trades workers, excluding electricians	Social work and counselling professionals	Assistant diving instructors	Elementary workers	Waiters	Health-care assistants
9.	Personal service workers	Teachers (special needs)	Skilled confectioners	Hand packers	Agricultural and industrial machinery mechanics and repairers	Sales demonstrators
10.	Business and administration professionals	Nursing professionals	Livestock workers	Paper-pulp plant operators	Shop sales assistants	Accounting and book-keeping clerks
11.	Refuse workers and other elementary workers	Psychologists	Domestic housekeepers	Freight handlers	Teachers (primary education)	Chefs
12.	Stationary plant and machine operators	Dental assistants and therapists	Expert therapists (Lulur method)	Rubber products machine operators	Geologists and geophysicists	Product graders and testers (excluding foods and beverages)

Table 3 (Continued...)

#	Austria (2015)*	Belgium, Wallonia (2013)	Belgium, Flanders (2014)	Belgium, Brussels (2013)	Croatia (2015)*	Czech Republic (2014)*
1.	Mechanic/Service Technicians	Building caretakers	Sewing machine operators	Drivers of heavy lorries and tractor units	Athletes and sport players	Mining and metallurgical technicians
2.	Specialized welders	Office technicians	Waiters	Welders	Sport coaches	Doctors
3.	Process control engineers	Sales representatives	Commercial sales representatives	Tool-makers	Ship engineers	Nurses (psychiatric care)
4.	CNC operators	Disabilities services officers	Shop sales assistants	Wood turners	Ship pilots	Engineers (building and construction)
5.	Auto body repair technicians	Unlicensed protective services workers	Kitchen helpers	Electricians	Ship cooks	Mining engineers, metallurgists and related professionals
6.	Pipe fitters for industrial installation	Heavy truck drivers	Manufacturing labourers (not elsewhere classified)	Cooks	Ship deck crew	IT architects
7.	Inspectors of technical installations	Contact centre salespersons	Helpers and cleaners (offices and other establishments)	Masons	n/a	Nurses (operating room)
8.	Draughtsmen/planning engineers (mechanical and electrical engineering)	Contact centre information clerks	Cooks	Waiters	n/a	Nurses (geriatric)
9.	Draughtsmen/structural engineers (mechanical and electrical engineering)	Customer advisers	Bricklayers and related workers	Butchers	n/a	Cooks, chefs
10.	Calculator mechanical engineers, electrical engineers	Welders	General office clerks	Carpenters	n/a	IT testers, test analysts
11.	Technical commercial personnel (buyers / salesmen of technical products)	Stock clerks	Mixed crop and animal producers	Bakers	n/a	Teachers (pre-school)
12.	Opticians, hearing care professionals	Tractor unit drivers	Structural method preparers	Mechanical engineering technicians	n/a	Nurses (emergency care)

Notes: *Definitions are based on ISCO-08 (otherwise based on each country's own occupational groupings). 'n/a' indicates the field is not applicable.

Source: EMN, 2015.

The United Kingdom published its latest shortage list in November 2015, containing 36 occupations. Those listed primarily included engineering and civil engineering professions; scientific research professions; specialized ICT positions; several health-care professions; arts and entertainment occupations; and a range of high-skilled services occupations (including graphic designers, chefs, and social workers) and industrial trades (including welders and aircraft maintenance staff) (Gov.UK, 2015).

Lithuania developed a shortage list in 2014 containing only five occupations: cooks, international freight vehicle drivers, ship hull assemblers, tailors, and welders (EMN, 2015).

The shortage occupations listed by the Member States highlight a variety of commonalities. Some reoccurring occupations include: health-care and mental health professionals (nurses, in particular); teaching professionals (for various levels of education); and building and engineering professionals and trades-people (including welders, in particular). While a majority of the listed occupations require considerable training and qualifications, there are a variety of low-skill jobs among them (including farm labourers, security guards, contact centre workers, and kitchen helpers, among others).

Beyond specific shortage occupations, EU Member States also track job vacancies that are difficult to fill or those that remain unfilled for long periods of time based on data from the European Job Mobility Portal (EURES). A recent overview study by the European Commission (2014a) gathered data from stakeholder interviews and a literature review to identify 550 such vacancies across the EU, grouped at the 4-digit level of the current International Standard Classification of Occupations (ISCO-08). The overall top-20 occupations identified in 2014 were the following (European Commission, 2014a):²⁶

1. Cooks	11. Commercial sales representatives
2. Metal working machine tool operators	12. Electrical engineers
3. Shop sales assistants	13. Waiters
4. Nursing professionals	14. Civil engineers
5. Heavy truck and lorry drivers	15. Systems analysts
6. Welders and flame-cutters	16. Primary school teachers
7. Mechanical engineers	17. Plumbers and pipe fitters
8. Software developers	18. Accountants
9. Specialist medical practitioners	19. Building and related electricians
10. Carpenters and joiners	20. Health-care assistants

²⁶ Aggregating the bottleneck vacancies identified at the 2-digit level of ISCO-08 reveals the following top-10 groups of occupations: 1) metal, machinery, and related trades workers; 2) science and engineering professionals; 3) ICT professionals; 4) health professionals; 5) building and related trades workers (excluding electricians); 6) personal service workers; 7) science and engineering associate professionals; 8) sales workers; 9) drivers and mobile plant operators; and 10) food processing, wood working, garment, and other occupations (European Commission, 2014a).

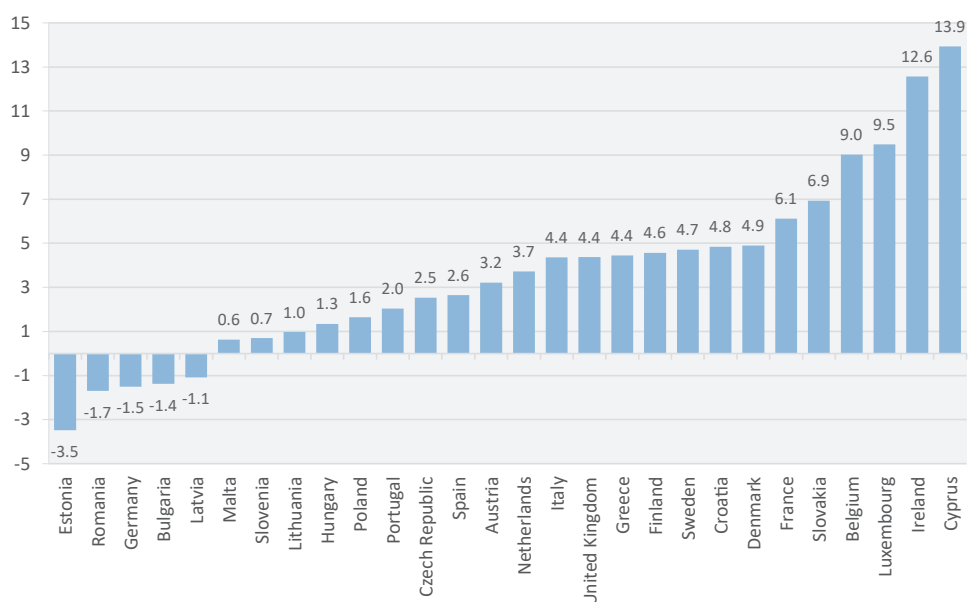
Many of the most commonly occurring vacancies listed are the same as those identified above under the Member States’ lists of shortage occupations. Likewise, while a majority of these occupations require considerable training at the entry level, others may be considered relatively lower-skill (including shop sales assistants, commercial sales representatives, and waiters, among others).

3.3 Future employment opportunities: Labour force and skills forecasts

The European Centre for the Development of Vocational Training (known as “Cedefop”) produces detailed forecasts on aspects of the labour force, employment, and job opportunities in the EU up to the year 2025.²⁷ Using a harmonized dataset of labour market indicators, Cedefop produces forecasts of both the demand and supply of skills within EU Member States. In compiling these figures, Cedefop takes into account a wide range of existing labour market trends from Member States’ labour force survey data as well as modelled expectations on their economic performance, labour force participation, skills development, demographics, and other factors.

Figure 22 shows Cedefop’s current projections on total employment growth between 2016 and 2025. The trends shown among individual Member States are quite divergent. On the one hand, total employment will shrink by about 1–4 per cent by 2025 in Bulgaria, Estonia, Germany, Latvia, and Romania. On the other hand, total employment will increase by about 9 per cent or more by that time in Belgium, Cyprus, Ireland, and Luxembourg, according to the Cedefop data.

Figure 22 Projected growth of total employment by EU Member State, 2016–25 (per cent)



Source: Cedefop, 2016.

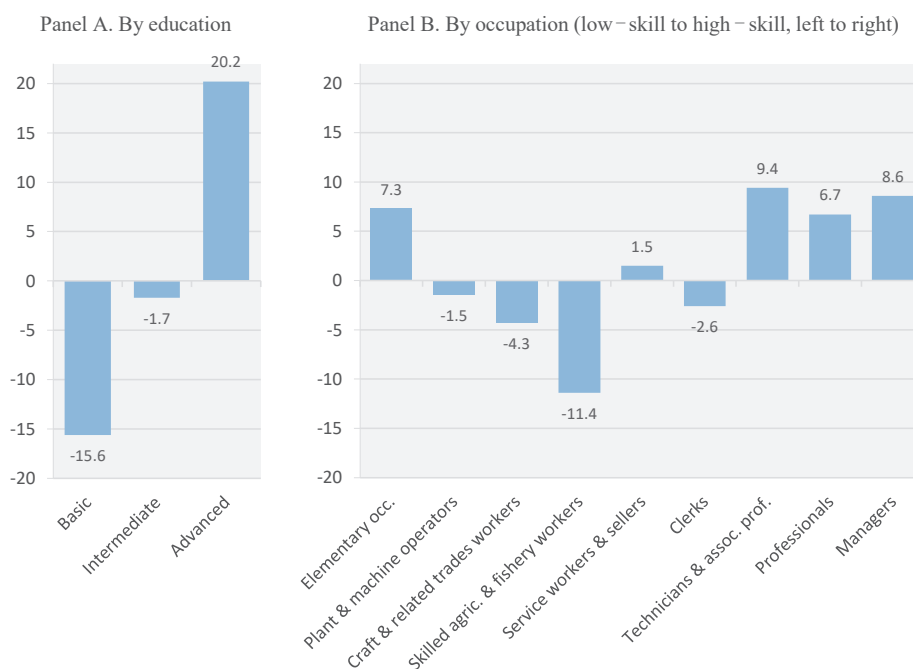
²⁷ See: www.cedefop.europa.eu/en/events-and-projects/projects/forecasting-skill-demand-and-supply.

Figure 23 shows the same employment growth projections up to 2025 but disaggregated by workers’ skill-level: according to their educational attainment and their occupation. Based on both of these measures, the data predict a forthcoming rise in high-skill employment across the region.

According to the Cedefop predictions, employment in the EU will encompass more workers with tertiary education by 2025 and fewer of those with lower qualifications. The total number of workers with basic education (less than completed secondary level) and intermediate education (completed secondary only) are predicted to contract by 15.6 per cent and 1.7 per cent, respectively, while those with advanced qualifications (tertiary or higher) will increase their number by 20.2 per cent (figure 23, panel A).

The Cedefop data also predict employment in the EU will gain more workers in low-skill and high-skill occupations by 2025 but greatly reduce in terms of medium-skill workers. The number of workers in low-skill jobs (“elementary occupations”) is predicted to rise by 7.3 per cent, across the EU, by 2025. The number of those in the highest-skill occupations (“managers”, “professionals”, and “technicians and associate professionals”) will also increase between 6.7 per cent and 9.4 per cent. Meanwhile, employment in almost every category of medium-skill occupation across the EU is projected to decrease, in absolute terms, compared to today (figure 23, panel B).

Figure 23 Projected growth of total employment by skill-level (education and occupation), EU total, 2016–25 (per cent)



Notes: Educational attainment is based on ISCED 2011. Occupations are based on ISCO-08, at the 1-digit level.

Source: Cedefop, 2016.

Looking in more detail at the individual kinds of jobs that will be created in EU labour markets up to 2025, Cedefop also provides broad-brush estimates of the total number of openings expected to be created for a variety of occupations in the period between 2015 and 2025.

Figure 24 shows the current projections up to 2025 for each occupation at the 2-digit level of ISCO-08. The information shows the additional number of positions expected to open up in each occupation based on Cedefop’s projected changes in total employment and ordinary replacement demands.

As above, the biggest demand across Europe will be for very high-skill occupations, including 7.6 million new job openings for business and administration associate professionals; 4.6 million for other business professionals; and 4.4 million for teaching professionals. Parallel to this, Cedefop projects an increasing demand for several categories of low-skill and manual medium-skill occupations including 5.5 million new job openings for cleaners and helpers; 5.2 million for skilled agricultural workers; and 2.9 million for labourers in the mining, construction, manufacturing, and transport sectors.

Figure 24 Projected total job openings by occupation, EU total, 2015–25 (millions)



Notes: Occupations are based on ISCO-08, at the 2-digit level.

Source: Cedefop, 2016.

3.4 Specific employment opportunities for Chinese migrant workers

Beyond the broad categories of demand for labour and skills within the EU already discussed, there are a number of additional opportunities specific to Chinese migrant workers. The remainder of this chapter focuses on three particular categories of these: opportunities arising from Chinese investments into Europe; opportunities for researchers in science, technology, and industry; and potential opportunities for Chinese students in higher education.

3.4.1 Opportunities through Chinese investments into Europe

In 2015, Chinese investments into the EU Member States plus Norway and Switzerland totalled a record US\$23 billion (Financial Times, 2016). Chinese investors from both the private and state-owned sectors are reportedly drawn to Europe for the legal security of its business environment and the opportunity to access some of the world's foremost consumer brands, technologies and experts (Le Corre and Sepulchre, 2016).

The Europe China Research and Advice Network (ECRAN) also reports rapid recent increases in Chinese investments to the EU, especially since 2000 (Clegg and Voss, 2012). The bulk of these investments are to Germany and the United Kingdom and jointly to Denmark, France, and the Netherlands.²⁸

The types of sectors investors are attracted to are becoming more diverse. Chinese investments to the EU are no longer concentrated predominantly in manufacturing, mining and other heavy industries but increasingly expanding into telecommunications as well as modern services sectors such as health care, finance, media and retail (Clegg and Voss, 2012).

According to official data, China currently has some 2,000 firms established in the EU, employing a cumulative workforce of about 47,000 staff (Casaburi, 2015). Seven key sectors accounted for some 95 per cent of these firms' work during 2010–14: energy (31.2 per cent); real estate (22.9 per cent); manufacturing (13.5 per cent); agri-business (8.4 per cent); financial services (7.3 per cent); logistics, transportation, and infrastructure (7.0 per cent); and telecommunications and software (4.5 per cent) (Casaburi, 2015).

Large bilateral investments on the scale seen here can often result in lasting business links and synergies, presenting opportunities for skilled workers and business-people to migrate (either within a single multi-national company or across two partnering businesses). If the current volume of China–EU investment continues its rising trend, there will be more such opportunities in the future.

²⁸ Other data sources place the United Kingdom, France, Germany, Portugal, Italy, and Hungary as the topmost EU recipients of Chinese foreign direct investment (Casaburi, 2015). Fresher studies also note further rapid increases in Chinese investments in 2014 and 2015 to the Benelux countries and Southern Europe (Hanemann and Huotari, 2016).

One positive sign came in 2013 with the Chinese Government's initiative to build up its land-based trade corridor to Europe under the "Silk Road Economic Belt" initiative (also known as the "New Silk Road" or discussed under the Chinese Government's broader "One Road, One Belt" policy) and to increase trade and investment across this divide. Increasing investment between China and the EU will involve new opportunities for productive migration to workers on both sides.

3.4.2 Opportunities for researchers in science, technology, and industry

Chinese research professionals and experts have increasing opportunities to participate in the EU's research and development (R&D) sector. Such opportunities enable Chinese researchers to access a variety of research funding options and grants on offer. They also help researchers to broaden their networks internationally and build links to cutting-edge knowledge, data, ideas, and tools in their field.

China, indeed, provides an excellent country of origin for such workers. China currently ranks first in the world for the total number of R&D staff, with around 5.4 million researchers, technicians, and supporting staff working in R&D (UIS, 2016). China's tertiary education system produces some 1.6 million bachelor's, master's, and doctorate graduates per year in STEM subjects (science, technology, engineering, and mathematics) plus an additional 270,900 in medicine and medical sciences (NBSC, 2015). Total expenditure on R&D in China currently exceeds 2 per cent of GDP, with Government plans to increase it to 2.5 per cent by the year 2020 (European Commission, 2015).

The expanding skills China is therefore developing represent strong complementarities for European researchers in a variety of scientific, technology, and industrial fields.

Under the EU's 7th *Framework Programme* (between 2007 and 2013), Chinese research organizations took part in 274 collaborative research projects with European partners (European Commission, 2015). Under the EU's current programme, Horizon 2020, Chinese research organizations have projects planned or underway in areas of food, agriculture, and biotechnology; sustainable urbanization (including energy, environment, and transport dimensions); ICT; peaceful uses of nuclear energy; aviation engineering; and thermo-nuclear energy (European Commission, 2015).

While the strength of such initiatives already presents extensive opportunities for cooperation and exchange, a number of recent schemes have strengthened the possibility of skilled labour migration between the EU and China for the furtherance of research and innovation goals:

- One such initiative is a “co-funding mechanism” set up between the Horizon 2020 programme and the Chinese Ministry of Science and Technology (MOST) that provides up to CNY 200 million per year in funding for joint research.
- Another such initiative was agreed in June 2015 between the European Research Council and the Natural Science Foundation of China to promote the mobility of researchers between the two regions. Targeting some of the most experienced researchers and technicians in particular fields, the initiative aims to stimulate excellence-based, bottom-up collaboration in R&D. The initiative has already been successful in incorporating selected Chinese researchers into European research teams supported through EU research funding.
- The European Commission’s Research and Innovation Staff Exchange (RISE) programme provides funding to researchers from outside the EU to participate in a secondment of one to 12 months. The initiative seeks to enable international researchers to expand their networks within the EU, building stronger links to European research organizations and centres of excellence in R&D. It also aims to foster the sharing of knowledge and expertise within particular fields, developing the skills of host and visiting researchers alike.
- One more such initiative comes through the promotional work of the EU–China Science and Technology Cooperation Promotion Office, operating since 1998, to host a variety of useful materials and information resources to embolden and assist bilateral cooperation in scientific research between the EU and China.

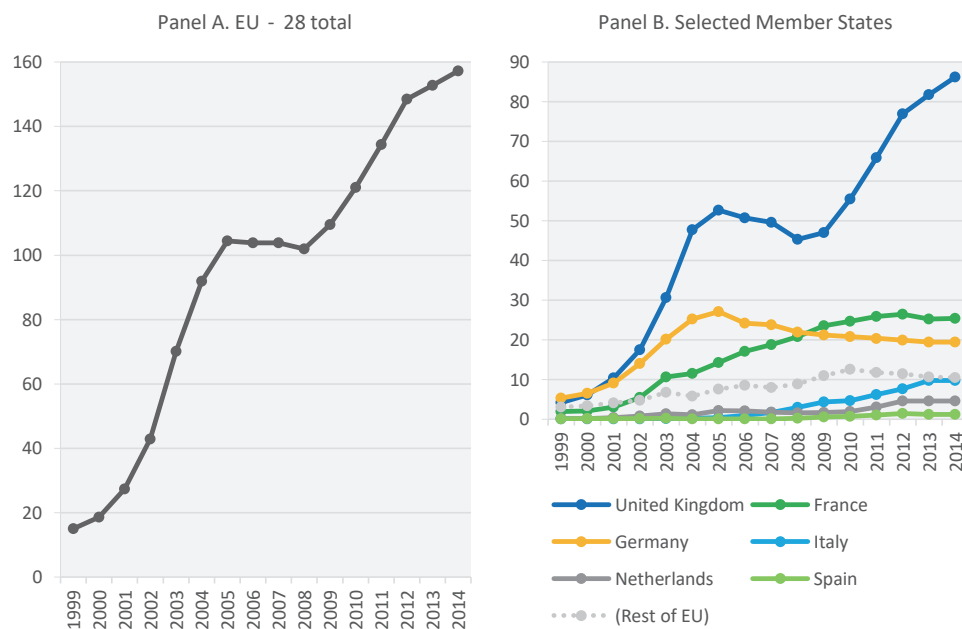
3.4.3 Opportunities for Chinese students in higher education

EU Member States admitted some 157,200 new Chinese students at the tertiary level in 2014 (UIS, 2016). This represents a remarkable ten-fold increase since 1999, when the figure was only 15,000 students. Apart from a slow-down and a very slight decline in these numbers during 2006–08, the number of Chinese international students arriving in the EU has continued to grow at a remarkable pace over the past decade-and-a-half (figure 25, panel A).²⁹

Of the tertiary-level international students arriving in the EU from China in 2014, 83.4 per cent went to the EU’s three biggest Member States: France, Germany, and the United Kingdom. The United Kingdom encompassed by far the biggest number, with some 86,200 new tertiary students arriving from China in 2014. France encompassed 25,400 such students in the same year, and Germany took in 19,400 in 2014. While other Member States accounted for significantly less of the total, virtually all of them have seen significant increases in the number of arrivals over the period shown (figure 25, panel B).

²⁹ The slight decline visible in 2006–08 is partially explained by changes introduced to higher education funding and fees in the United Kingdom around this period.

Figure 25 Flow of international students from China to the EU and to selected EU Member States, 1999–2014 (thousands)



Notes: Data include all 28 current EU Member States over the entire period shown. Missing observations among individual Member States for 2014 were estimated as equal to the recorded value in 2013. A limited number of other missing values among individual Member States between two observations were filled in as the linear averages of those observations.

Source: UIS, 2016, “Inbound internationally mobile students by country of origin”.

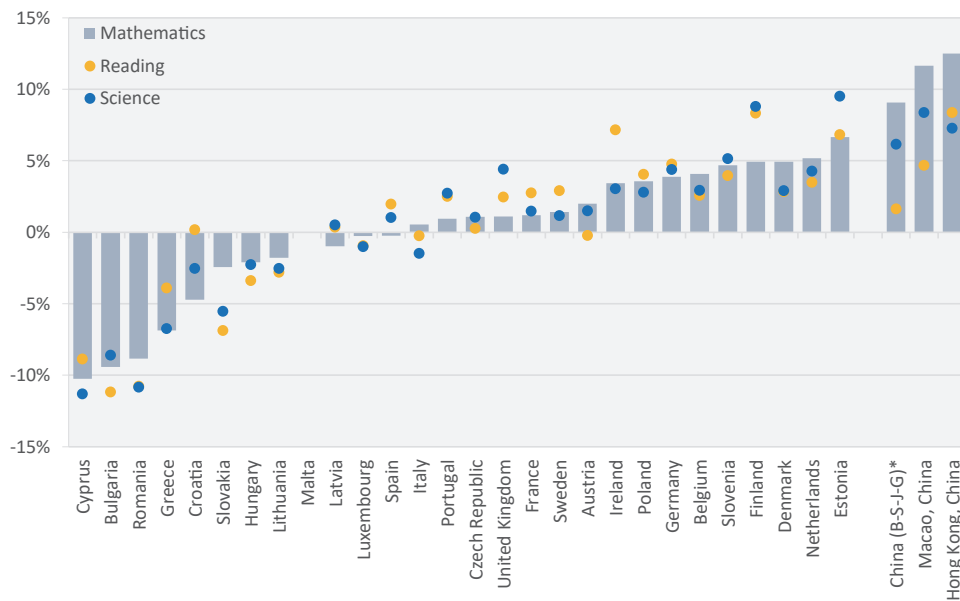
For many of the most capable international students among these, three or more years of education in an EU Member State can open up attractive employment opportunities. Integrating into a foreign culture, gaining proficiency in its language, and developing a close local network are all conducive factors to becoming a migrant worker after the end of an education programme. With the rapidly rising trends in Chinese international migrants arriving to study in the EU, there would appear to be more such opportunities now for Chinese youth than ever before.

Indeed, there are good reasons to believe Chinese students may be highly competitive in EU labour markets as international migrant workers at an entry level. The OECD’s triennial Programme for International Student Assessment (PISA) benchmarks countries and territories around the world in terms of secondary-level students’ performance on a common exam in mathematics, reading, and science. During the latest round of examinations, Chinese pupils from four provinces/ province-level municipalities (Beijing, Shanghai, Jiangsu and Guangdong) and those from Hong Kong, China, and Macau, China, have emerged among the topmost in the world, outperforming virtually all of their peers in other countries.

Figure 26 shows the average PISA scores from 2015 among the EU Member States and three Chinese territories as a share of the EU-28 average scores in each of the three subject areas tested. South European countries tended to perform the worst, scoring some 6–12 per cent lower than the EU averages in all three subjects. On the other hand, Belgium, Denmark, Estonia, Finland, Germany, the Netherlands, and Slovenia did much better, scoring around 3–10 per cent above the EU averages in all three subjects.

Benchmarking this against the three Chinese territories measured in the PISA study, however, reveals a much better performance from Chinese pupils who scored, on the whole, between 9.1 per cent and 12.5 per cent higher than the EU average in mathematics and significantly higher also in reading and science in 2015.

Figure 26 Mean score in PISA 2015 per subject, China and EU Member States (percentage points away from EU average)



Notes: * 'B-S-J-G' refers to the scores obtained in four provinces/ province-level municipalities: Beijing, Shanghai, Jiangsu and Guangdong. EU average calculated as the unweighted mean of EU Member States' individual average scores per subject area.

Source: OECD, 2016, "Table I. A Snapshot of performance in mathematics, reading and science".

While individual students' scores may differ widely from these averages, China's consistently strong performance in the PISA study is a testament to the strength of its modern education system. With more and more such students studying abroad in Europe there might be ample opportunities for some to remain and perform an active and productive role within the EU's labour markets.

4. Conclusions and ways forward

Opportunities for expanded admissions from China exist. To maximize sustainability of Chinese workers' admissions to Europe, those admissions should aim to achieve low migration costs and a high degree of worker protection.

Four years into the operation of the Sino-German Nurse Programme and one year before its expiry, the pilot is ripe for review. If the current demand for qualified and specialist nurses in Germany holds in the near future, the programme could prove useful for German society and Chinese workers alike. However, like any pilot programme, it should be assessed, assisted in overcoming any challenges, and fine-tuned to be in line with the current economic, legal, and social context.

Three types of assessments are necessary to help the pilot programme undergo successful transition from a trial to a regular programme; these include:

- Assessment of the scope and duration of labour demand in German health-care sector, including any processes that could modify it, such as parallel recruitment from other sources or rationalization of work in the sector.
- Assessment of the pilot's achievements and challenges throughout the entire process, from the initial announcement of labour shortages by German employers through to the return and reintegration of Chinese workers back home.
- Direct consultation with those involved in current and future programme implementation, including employers and nurses.

Ideally Chinese migrant workers who have participated in the programme could be asked to share their feedback. Feedback from employers with regard to the comparative advantages and disadvantages of the scheme should be taken into consideration. Once the expanded programme blueprint is developed through a combination of desk research and expert interviews, the implementing parties should institutionalize it in technical agreements to ensure proper monitoring and updating. Programme implementing parties should agree on the indicators of programme progress. The basic objective of the programme should be to ensure a triple win to workers, employers, and the two countries concerned.

Apart from the Sino-German Nurse Pilot Programme, the Netherlands has been admitting Chinese cooks. However, little information has been published in English on those admissions. Beyond these modest efforts, none of the six EU case study countries appears to have a large-scale government-to-government bilateral agreement on labour migration with China. More research is needed to uncover any programmes that may have been signed at a regional level or exist in little publicized pilot form.

The role of shortage occupation lists in demonstrating Europe's labour demand and facilitating admissions is limited. Not all occupations featured on the lists are available to non-EU citizens and not all jobs absent from the lists are closed to them. China should consider engaging in dialogue with the principal labour migration stakeholders to identify larger and long-term labour shortages, better enabling the creation of programmes that would last into the future.

In theory shortage occupation lists can both inform and facilitate admissions to the EU. Nine EU Member States use shortage lists as explicit instruments to determine the admission of third-country nationals. Belgium and Finland develop shortage occupation lists for purposes other than labour migration, but make use of them in order to develop aspects of their labour migration policy. Other EU Member States do not link their shortage occupation lists to labour migration policy. For instance, in Hungary shortage lists are used to determine scholarships in an effort to encourage the obtaining of specific qualifications pertaining to shortage occupations (EMN, 2015). In Sweden, shortage lists are used only for in-country changes of migrant status (OECD, 2011). In France and Ireland shortage lists are used to indicate the occupations to which non-EU workers should not be admitted (Chaloff, 2014).

Shortage occupations lists are more suitable for use by individuals, rather than to develop organized migration programmes meant to last for a few years. Shortage lists contain a limited number of openings that come and go as lists are updated. In addition, the reasons that make it difficult to attract nationals, EU citizens, or legally resident migrant workers to these vacancies can often be just as unattractive to most prospective Chinese migrants (e.g., low-pay, difficult working conditions, temporary character of the role, geographic isolation, or unique qualifications requirements).

According to Chaloff, most non-EU labour migration to Europe occurs within professions outside of the shortage lists. In Denmark only 2 per cent of labour migration in 2010–12 arrived to take up shortage list roles. In the United Kingdom, most skilled migration occurs either through labour market test or through other channels where shortage lists do not apply, e.g., intra-company transfers (Chaloff, 2014).

China's ability to brand itself as a niche labour migration source as well as its increasing role in overseas investment are conducive to facilitated labour admissions to Europe.

Any new labour migration programmes between China and Europe would be most sustainable if they addressed a long-term niche demand that already existing admissions policies have not yet addressed successfully. To compete with other, more established sources of labour to Europe, Chinese should offer Europe what other sources of labour do not.

Certain citizens of countries subject to the European Neighbourhood Policy enjoy facilitated access to European labour market based on their collaboration on the readmission of unauthorized migrants. The citizens of former European colonies enjoy facilitated admission to the labour market based on European ancestry or family reunification. The citizens of India and the Philippines have appealed to European employers as reliable IT workers and providers of service.

Just like India or the Philippines, China also should focus on a niche area for which Europe has a strong and long-term demand and which other sources cannot provide as effectively. It may be hard for China to compete with the countries subject to the European Neighbourhood Policy in sending low-skilled and semi-skilled workers. By contrast, skilled and highly skilled workers, including researchers and workers in STEM areas, appear to constitute a niche where China could develop a comparative advantage. As European countries are transforming from labour-intensive to knowledge-intensive economies, the demand for the higher-skilled workers is projected to increase. As noted in chapter 3 above, China currently ranks first in the world for the total number of R&D staff, and Chinese research professionals and experts have increasing opportunities to participate in the EU's R&D sector. Existing initiatives that already present extensive opportunities for cooperation and exchange should be further strengthened, and potential areas should be explored to enhance skilled labour migration between the EU and China for the furtherance of research and innovation goals. Germany's China Strategy 2015–2020 strategy, for example, favours collaboration in research, science, and education, because Germany's demand for those skills is larger and more sustainable, and Chinese workers' skills are competitive in relation to migrant workers from other countries.

Meanwhile, Chinese Government programmes such as “Made in China 2025” aiming to turn China into a high-tech superpower by the country's 100th birthday in 2049 rely on the transfer of know-how and skills from abroad. It is not a coincidence that China has endorsed Chinese youth training abroad and its companies' investments in Europe. As shown in chapter 3, Chinese investors from both the private and state-owned sectors are reportedly being drawn to Europe for the legal security of its business environment and the opportunity to access some of the world's foremost consumer brands, technologies, and experts. According to Ernst and Young, during the first six months of 2016, Chinese businesses made more investments in Germany than in the previous five years combined (cited in Delcker, 2016). Large bilateral investments can often result in lasting business links and synergies, presenting opportunities for skilled workers and business people to migrate (either within a single multi-national company or across two partnering businesses). Increasing investment between China and the EU will involve new opportunities for productive migration to workers on both sides.

Student admissions offer a side door to the European labour market in a context wherein front doors have been closing. Chinese students could help China develop a niche in STEM occupations.

Among the major barriers preventing Chinese nationals from achieving a comparative advantage as a source of STEM workers and researchers are language proficiency, lack of working experience in Europe, and de jure and de facto barriers to recognition of qualifications. One way to overcome those barriers would be for Chinese nationals to enrol in European university STEM programmes in order to gain the same qualifications and early training experience as European jobseekers.

Even though economic and political circumstances have limited the admission of non-EU foreign nationals through the EU labour market's main doors (e.g., direct recruitment from abroad), they have not limited admissions through the labour market's side doors (e.g., graduating from a university in an EU host country). Unlike direct admissions, student admissions do not place Chinese migrants directly in the labour market. But, the graduates of the host countries' educational institutions find it easier to secure jobs than Chinese workers applying from abroad. While legislation concerning direct recruitment of third-country national workers to Europe generally remains restrictive, legislation concerning student admissions and student-to-worker status transitions generally remain liberal (OECD, 2013), notably in high-paying STEM countries such as Germany. Having discovered the financial benefits of admitting foreign students, European universities have been increasingly recruiting abroad and creating English-language degree programmes to accommodate a global student pool.

No pre-departure or post-arrival training can integrate migrants within the host State's labour market and society as effectively as studies or traineeships. Student-to-worker status adjustments tend to have low recruitment costs, because students are less dependent on the services of intermediaries to find and apply for a job. The internships or part-time work students take on allow host country employers to test graduating students' hard and soft skills more effectively than through foreign-based intermediaries or qualification recognition centres. Completion of the host country's educational programmes is particularly useful for foreigners wishing to benefit from Europe's demand for researchers, since qualifications and contacts obtained in European universities are recognized immediately. Where language mastery is necessary, student migration may be the most effective method to learn it, thus broadening foreign candidates' options beyond the countries whose languages could be easily learned in China. For instance, Scandinavian countries offer very favourable working and living conditions, which many migrants stop short of harnessing due to language barriers.

If students' admissions are to be fostered, they need to be planned carefully to ensure that they benefit both Europe and China.

Chinese students are a potential supply of highly skilled and well-integrated labour for EU countries. Student admissions can help China develop migrant workers who fit the skills profile that Europe is missing and willing to accept, regardless of the economic and political context. Ideally, expanded student flows of skilled Chinese nationals to the EU should not precipitate a brain drain, nor should they deprive migration opportunities to those Chinese who cannot migrate to Europe as students. Thus forging student admissions as a strategy to enhance labour flows requires planning. The following questions need to be taken into consideration:

- What policies should be put in place to maximize Chinese students' labour market and social integration over the course of their studies in the EU (e.g., professional student recruitment profiling, internships, parallel work authorization, counting of studies towards permanent residence, education in local language versus English)?
- How could countries that provided Chinese students with a university education maximize the potential for these students to use their knowledge locally, e.g., that Chinese students educated in Italy would indeed be able to find a job in Italy, rather than in Germany? For instance, if Italy provides education in Italian only, it will not be able to attract sufficient number of Chinese students, but if it provides education in English, it may lose graduates to other countries if they fail to find a job in the Italian labour market.
- What effects would increase Chinese student admissions have on direct recruitment from China? Would student admissions shrink labour migration opportunities for Chinese who cannot migrate to Europe as students? If so, how could both recruitment streams be balanced?
- Should European countries attract more Chinese students to Europe or provide more training in China, thereby ensuring European (and Chinese) companies in China a wider pool of highly skilled labour there and preventing brain-drain?
- What skills recognition, knowledge-transfer, and investment policies should European countries and China put in place to allow European-educated/trained Chinese to apply their skills in China?

Initial evidence to judge the effects of Chinese student admissions already exists. As this report showed, among the six case study countries, the France, Germany, the Netherlands, and the United Kingdom have issued a larger proportion of first permits to Chinese nationals for the purpose of study than for work, family reunification, or any other reason. And now in Germany, the Netherlands, and the United Kingdom the principal migration status held by Chinese nationals prior to securing a work permit was education. This indicates Chinese students' ability

and will to use student admissions as a precursor to labour migration.

Overcoming the migration information gap could reduce migration costs and enhance protection of migrants.

Admission regulations can be difficult to understand even by seasoned migration researchers. With a few notable exceptions (Germany, the Netherlands, and the United Kingdom) a Chinese national planning to migrate to most European countries (especially in Southern and Eastern Europe) would be unable to understand the host country's basic migration regulations due to a lack of electronically accessible information, language barriers, and the highly confusing presentation of any information that is accessible. Intermediaries exploit information gaps to charge migrants for the information and thus increase migration costs considerably.

Regardless of the skill level of workers involved, China and Europe should ensure maximum transparency regarding admission to Europe. For instance, Germany developed the “Make it in Germany”³⁰ and “Recognition in Germany”³¹ portals.³² These portals gather the most relevant migration regulations information on one site, present it clearly, are updated regularly, and provide migrants with instant personalized support in case of any questions. The more complete, up to date, comprehensible, and accessible the information about migration is, the less need there is for migrants to rely on fee-charging intermediaries. Chinese authorities can help protect its citizens by collaborating with the authorities of countries of destination on the development of similar portals, translating the information to Chinese, and promoting the portals to the would-be and current migrants.

Effective regulation of labour recruiters, including through positive incentives, could reduce migration costs.

The ILO (2016a; 2016b) has spelled out general principles and operational guidelines for fair recruitment that can and should be applied with regard to the migration of Chinese nationals to the EU. Among others, ILO general principles recommend that:

1. Recruitment should respect internationally recognized human rights as expressed in international labour standards, as well as national laws, regulations, employment contracts, and collective agreements in countries of origin, transit, and destination. It is particularly important that workers obtain clearly written comprehensive contracts prior to departure abroad.

³⁰ The “Make it in Germany” portal can be accessed at: <http://www.make-it-in-germany.com/>.

³¹ The “Recognition in Germany” portal can be accessed at: <https://www.anerkennung-in-deutschland.de/html/en/>.

³² Less comprehensive integrated and user-friendly tools have also been developed by the Netherlands and the United Kingdom.

2. Recruitment should not lead to displacement of existing workers or lowering of labour standards, wages, or working conditions.
3. Recruitment should be based on effective recognition of workers' qualifications.
4. Recruitment should be transparent and effectively enforced.
5. Recruitment should not result in any recruitment fees charged to the worker.
6. Workers should not depend on employers or recruiters to change employer or return home.
7. Workers should have access to free or affordable grievance and other dispute resolution mechanisms (2016a, p. 8–9).

The ILO guidelines, as well as the Global Forum on Migration and Development (2016), highlight the importance of ensuring that migration costs are as low as possible, and ways how this can be done. Private sector engagement and self-regulation is part of the solution, and in this context the International Organization for Migration (IOM, 2016a) is promoting the International Recruitment Integrity System (IRIS), which focuses on developing an accreditation framework for recruitment agencies.

Further, workers who have met all preselection requirements but who have not been selected, should be registered in electronic work-ready pools accessible to employers in Europe. Work-ready pools have facilitated selection processes in a number of countries, an example being New Zealand's seasonal worker programme.

Orientation and trainings should be cost-effective.

Orientation (to the country of destination and the worksite) and trainings (such as language and skills) are an important part of successful labour migration because they maximize the likelihood of the prospective worker's successful integration into the destination country's labour market and society. However, orientation and training programmes should not constitute too high of a real or opportunity cost for either workers or employers. For this reason, their contents and organization should be pragmatic, streamlined, and professional.

Recruitment agencies should not be involved in trainings to ensure that training costs charged to workers are not simply camouflaged recruitment fees. Orientation programmes should not impose high commuting costs. Where possible, pre-departure orientation should be digitalized.

Unless a training is meant to condition a migrants' readiness to start work, it can also be conducted in the country of destination with the support of the employer or the State. Post-arrival orientation should be held for the worker.

While fostering new labour migration channels, China and Europe should continue to provide migrant workers with return and reintegration opportunities.

China is turning from a net labour exporter to a net labour importer.

Return and reintegration policies should address the needs of both voluntary and involuntary returnees. Policies addressing the needs of voluntary returnees should cater to those who return to China having successfully met their migration goals (e.g., retirees or students who did not intend to work in Europe), and to those who return to China without having met their migration goals (e.g., those who have lost a job or could not find one upon graduating).

Even successful returnees are vulnerable if their post-return reintegration projects do not produce the desired effects, or if their qualifications earned abroad are not recognized in China. China's labour market reintegration policies could support and be supported by European investments in China. European companies may be looking for Chinese nationals who have obtained education or training in Europe, including language skills.

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Country appendices

Appendix I. How did the inflows and outflows of Chinese migrants evolve in 2000–13?

Germany

Chinese inflows to Germany appear to be uncorrelated with the 2008 global economic crisis, falling since as early as 2001 and rising steadily and continuously since 2005. Germany featured the highest proportion of returning Chinese migrants.

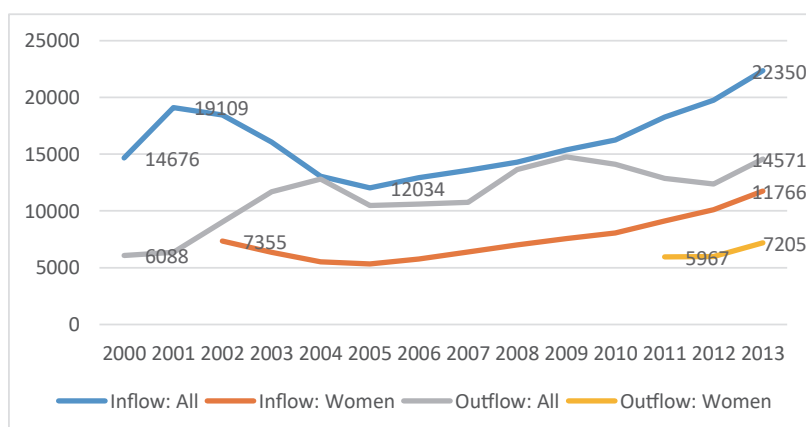
The inflows of Chinese migrants to Germany have fluctuated, but were on the rise by 2013, when about half as many were admitted as in 2000 (figure 1). Chinese migrant admissions to Germany plunged below their 2000 level during five years of declining figures, which reaching their rock-bottom level in 2005, prior to the onset of the economic crisis.

The sharpest year-on-year increase of Chinese admissions to Germany occurred in 2000–01, while the sharpest year-on-year decrease took place in 2003–04.

Since 2002, the proportion of women among Chinese migrant inflows to Germany averaged about 47 per cent.

On average, 71 per cent of Chinese migrants who came to Germany eventually left the country during the years that data were available. In 2004 and 2008–09 higher proportions Chinese left Germany than is typical.

Figure 1 Inflows and outflows of Chinese migrants in Germany, 2000–13



Source: Authors, based on OECD, 2016.

United Kingdom

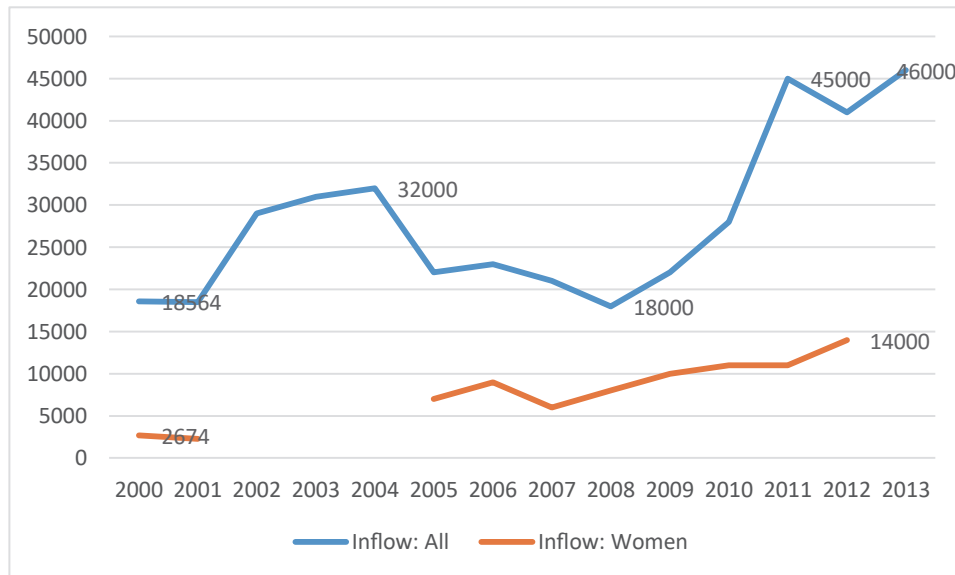
Chinese inflows to the United Kingdom also appeared to be uncorrelated with the 2008 global economic crisis, with numbers falling since as early as 2004 and rising since the onset of the crisis. The United Kingdom had the lowest proportion of Chinese women migrants.

Like Germany, the inflows of Chinese migrants to the United Kingdom have fluctuated over time. Inflow numbers were on the rise in 2013, when twice as many Chinese migrants were admitted as in 2000. And unlike Germany, inflows to the United Kingdom have never plunged much below their 2000 level. Having reached their rock bottom in 2008, Chinese flows to the United Kingdom were growing throughout the crisis (figure 2).

The sharpest year-on-year fall occurred in 2004–05 paving the way to the admissions’ nadir in 18,000 in 2008. The sharpest year-on-year rise occurred in 2010-11.

On average, about one third (34 per cent) of Chinese migrants to the United Kingdom were women. This was the lowest proportion of women among Chinese inflows in the six case study countries. As of August 2016, the OECD did not hold data on the outflows of Chinese migrants from the United Kingdom.

Figure 2 Inflows of Chinese migrants in United Kingdom, 2000–13



Source: Authors, based on OECD, 2016.

Spain

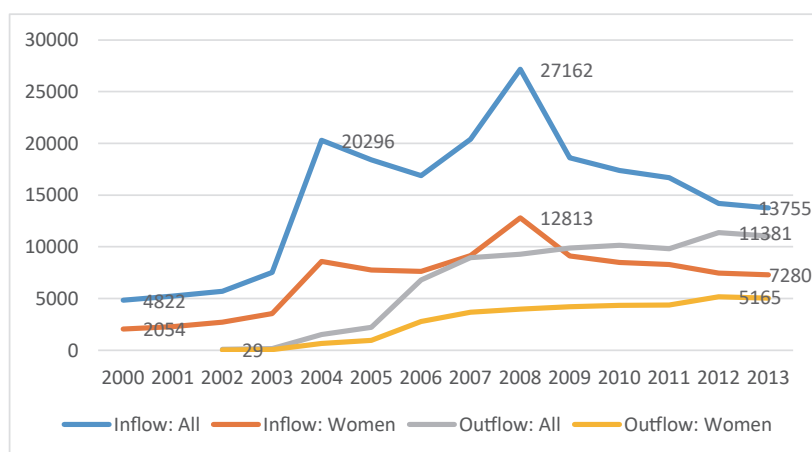
Chinese migrant inflows to Spain experienced the largest fluctuations among the six case study countries, possibly in response to changes in migration policies and the economic context. As in the Netherlands, Chinese migrants to Spain had average proportions of women and returnees compared to other case study countries.

The inflows of Chinese migrants to Spain almost tripled between 2000 and 2013 (figure 3). It would have more than quintupled if the inflows remained at their 2008 level, but the Spanish Government's swift announcement of a "zero migration" policy when the economic crisis broke out resulted in their decline since 2008. Prior to the implementation of the zero migration policy, Chinese inflows to Spain may have been shaped by the Spanish Government's authorization of a 2005 regularization of irregular migrants, one of the largest such amnesties in Europe. Regularizations may attract more migrants if there is the expectation of them being implemented. They may also, however, spur the outflow of migrants who came forward but are unable to legalize their status.

Spain was host to the sharpest single-year rise and single-year fall of Chinese migrant admissions among the six case study countries. The sharpest rise occurred in 2003–04 and the sharpest fall in 2008–09. The 2008–09 fall initiated a decline of Chinese inflows that continued through 2013.

On average, women constituted roughly half (47 per cent) of Chinese migrant inflows to Spain. Outflows of Chinese nationals from Spain were equivalent to over 40 per cent of the inflows. Any non-EU national wishing to leave Spain since the onset of the economic crisis could have done so through one of many assisted voluntary return programmes, which provided a free one-way ticket home and additional financial support depending on the applicant's circumstances. However, fewer migrants availed themselves of voluntary returns than expected.

Figure 3 Inflows and outflows of Chinese migrants in Spain, 2000–13



Source: Authors, based on OECD, 2016.

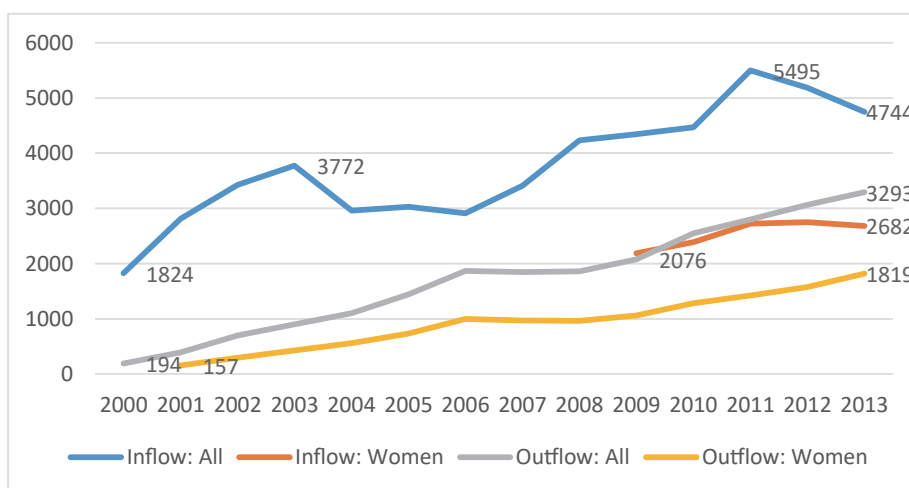
Netherlands

Chinese inflows to the Netherlands appear to be uncorrelated with the global economic crisis, having fallen in 2004–06, but then sustained a period of growth from 2007 to 2011. As with Spain, Chinese migrants in the Netherlands had average proportions of women and returners compared to the other case study countries.

The inflows of Chinese migrants to the Netherlands more than doubled between 2000 and 2013 (figure 4). When they declined in 2004–06, they still managed to stay well above the 2000 level. Following growth in numbers in 2007–11, numbers began to fall in 2012.

Based on the limited (2009–13) data on the total inflows of Chinese women migrants, women constituted about half (52 per cent) of all Chinese migrant inflows to the Netherlands. Outflow figures for Chinese migrants were equivalent to slightly less than half (45 per cent) of inflows.

Figure 4 Inflows and outflows of Chinese migrants in the Netherlands, 2000–13



Source: Authors, based on OECD, 2016.

France

Chinese migrant inflows to France also appear to be uncorrelated with the global economic crisis, having continued to rise throughout the crisis period. France featured the highest average proportion of Chinese women coming in.

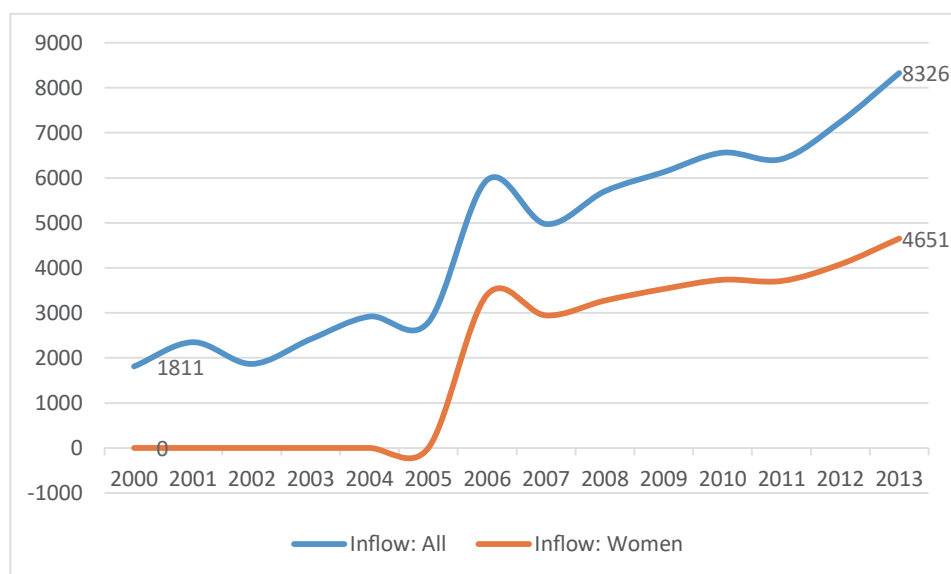
The inflows of Chinese migrants to France increased over four-fold between 2000 and 2013, making France the destination with the sharpest increase of Chinese inflows during the sample period. Unlike in the five other case study countries, France did not experience any multi-year

periods of declining Chinese migrant intakes, experiencing instead four separate single-year instances of falling intake numbers, all of which were mild. By contrast, the other case study countries had fewer instances of decline – one or two across the period – but they were always for multiple years and were of greater magnitude.

The sharpest year-on-year rise in Chinese migrant inflows to France occurred in 2005–06, and the sharpest year-on-year fall a year later. After a mild decline in 2011, inflows of Chinese migrants to France rose through 2013.

The proportion of women among incoming Chinese migrants averaged about 57 per cent across the period, which is the highest proportion among the six case study countries. The OECD did not hold data on Chinese migrant outflows from France.

Figure 5 Inflows of Chinese migrants to France, 2000–13



Source: Authors, based on OECD, 2016.

Italy

The global economic crisis most likely affected the inflows of Chinese migrants to Italy, but the impact was not seen until 2010. Chinese migrants in Italy had the lowest return rate among the six case study destination countries.

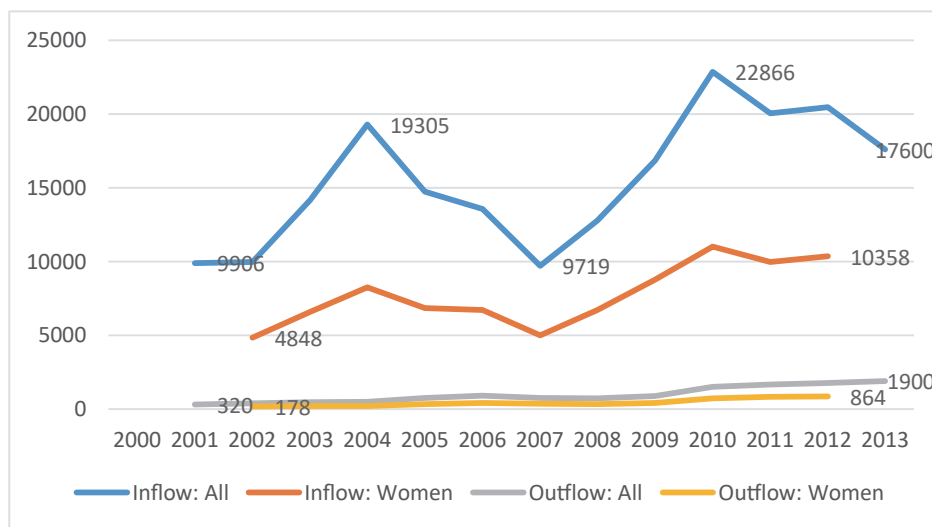
The inflows of Chinese migrants to Italy almost doubled from 2000 to 2013 (figure 6). Admissions to Italy were characterized by strong fluctuations. However, even when numbers declined, they managed to avoid plunging below the 2001 level. Intake figures rose through the

beginning of crisis, but may have ultimately been affected by it, since they began to fall in the years since.

Admissions to Italy experienced their sharpest single-year decline in 2006–07 and their sharpest single-year rise in 2009–10.

About half (49 per cent) of Chinese migrants to Italy were women. Chinese migrant outflows from Italy were equivalent to only 6 per cent of inflows. Small return rates, coupled with likely job losses among Chinese workers employed in Italy, raises questions about migrants’ ability to re-integrate themselves with the job market and about their working and living conditions.

Figure 6 Inflows and outflows of Chinese migrants in Italy, 2000–13



Source: Authors, based on OECD, 2016.

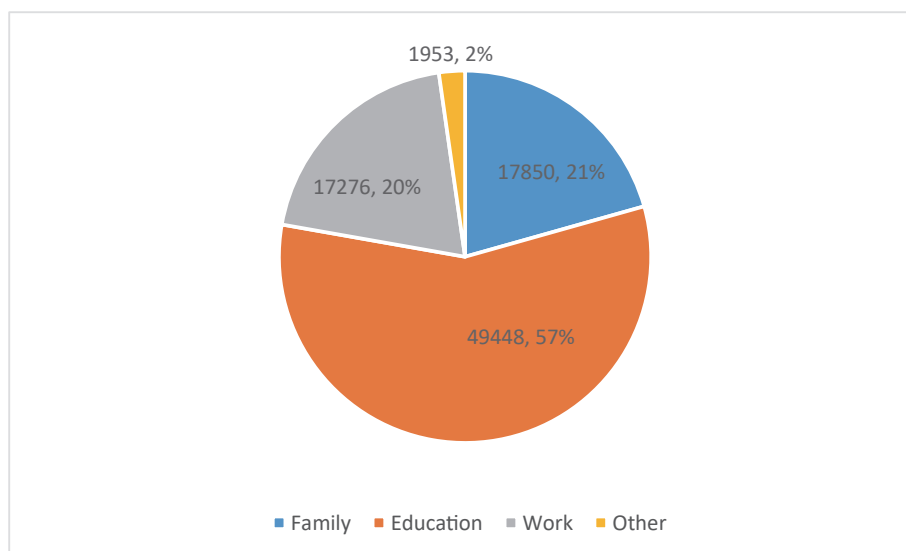
Appendix II. How significant were admissions for work compared to admissions for other reasons?

Germany

For every Chinese worker, Germany admitted three Chinese students.

Work permits constituted 20 per cent of all permits issued to Chinese migrants in Germany in 2008–15. However, nearly three times as many permits were issued to Chinese students (figure 7). Germany ranked third among the six case study countries as far as the proportion of both Chinese workers and of Chinese students is concerned.

Figure 7 The proportion of first permits issued to Chinese migrants in Germany by permit type, 2008–15



Source: Authors, based on data in Eurostat, 2016b.

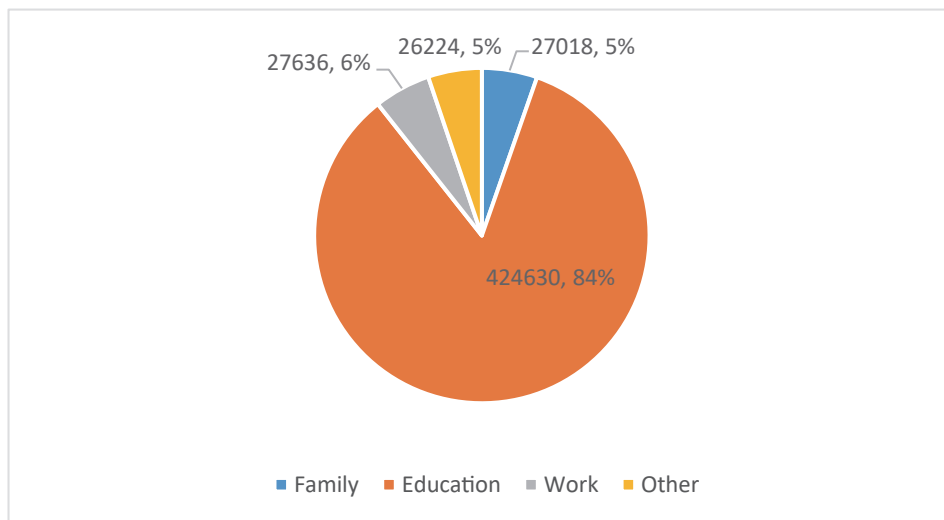
United Kingdom

For every Chinese worker admitted, the United Kingdom admitted 14 Chinese students.

The United Kingdom has greatly favoured Chinese student in-migration and disfavoured work migration, which can be seen in the great disparity between first permits for work (6 per cent) and education (84 per cent) (figure 8). No major policy-related obstacles have prevented work migration to the United Kingdom, but China has traditionally had comparatively weak migration networks in the United Kingdom, particularly when compared to citizens of Commonwealth of Nations countries, India in particular. The exceptionally high proportion of Chinese students

in the United Kingdom and regulations that facilitate part-time work and the student-to-worker transition have translated to an expanding supply of highly skilled, locally based Chinese job candidates.

Figure 8 The proportion of first permits issued to Chinese migrants in the United Kingdom by permit type, 2008–15



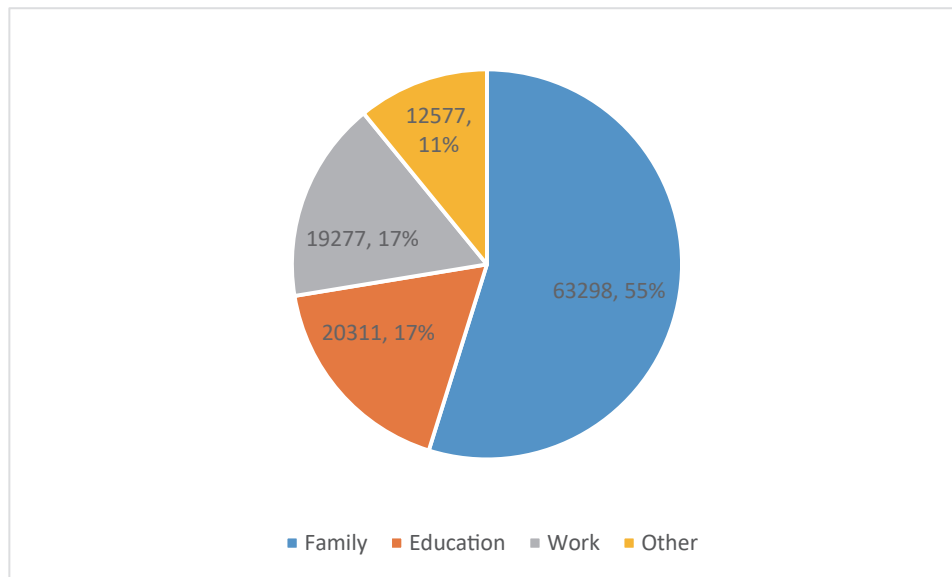
Source: Authors, based on data in Eurostat, 2016b.

Spain

For every Chinese worker, Spain admitted one Chinese student and three family members.

In line with the Spanish Government’s post-crisis announcement of a “zero migration policy”, the admission of new workers from outside the EU has been curbed. However, migrants already legally present in Spain have been allowed to bring their family members into the country. Hence, over half of all first permits issued to Chinese migrants between 2008 and 2015 were granted for family reunion purposes. Permits to work constituted about one-fifth, the same proportion as permits to study (figure 9).

Figure 9 The proportion of first permits issued to Chinese migrants in Spain by permit type, 2008–15



Source: Authors, based on data in Eurostat, 2016b.

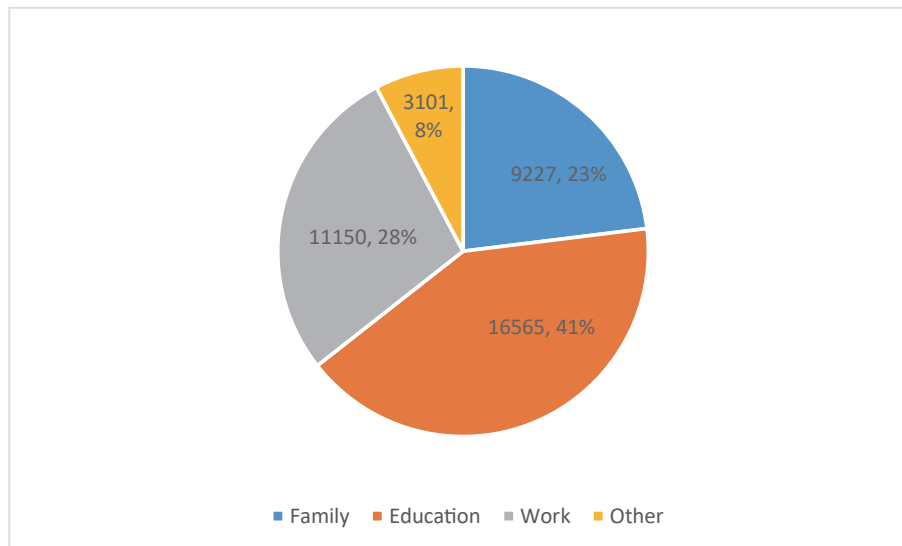
Netherlands

For every two Chinese workers, the Netherlands admitted three Chinese students. The proportions of various admission channels in the Netherlands were the most balanced among the six case study countries.

Over one quarter of first permits issued to Chinese migrants by the Netherlands in 2008–15 were granted for work (figure 10). Even though the Netherlands had a lower proportion of Chinese students than France, Germany and the United Kingdom, admission for education was the main channel of entry for Chinese migrants and numbers are likely to increase. With support from the Dutch Ministry of Education, Culture and Science, the non-profit organization EP-Nuffic has set up Netherlands Education Support Offices (NESOs) in countries considered strategic for the Dutch higher education sector, including China.³³ The main task of the NESOs is to promote Dutch higher education in order to increase student and staff mobility.

³³ For more on the NESO for China, see <https://www.nesochina.org/>.

Figure 10 The proportion of first permits issued to Chinese migrants in the Netherlands by permit type, 2008–15



Source: Authors, based on data in Eurostat, 2016b.

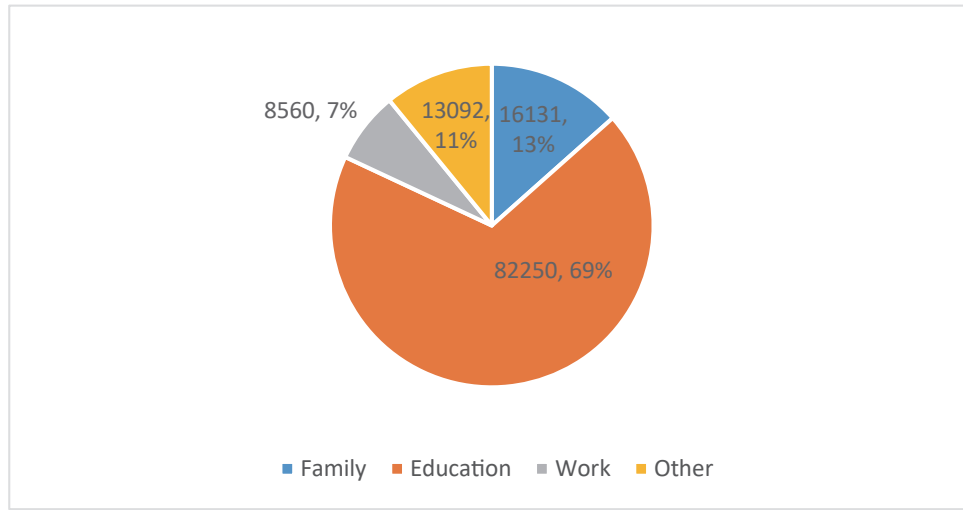
France

For every Chinese worker, France admitted ten Chinese students. Among the six case study countries, France admitted the fewest Chinese migrants, and French admissions were the most stable over time.

Issuing an average 1,070 first permits for work per year, France registered the fewest Chinese worker entries among the six countries in 2008–15. Reaching an annual high of 1,178 and an annual low of 926, the number of work permits issued did not fluctuate from year to year as much as those issued for other purposes.

France issued the second smallest average proportion of work permits to Chinese migrants, after the United Kingdom. France also issued the second largest average proportion of education permits to Chinese, also after the United Kingdom. For every ten new education permits France issued, scarcely one work permit was issued to Chinese migrant in 2008–15 (figure 11).

Figure 11 The proportion of first permits issued to Chinese migrants in France by permit type, 2008–15



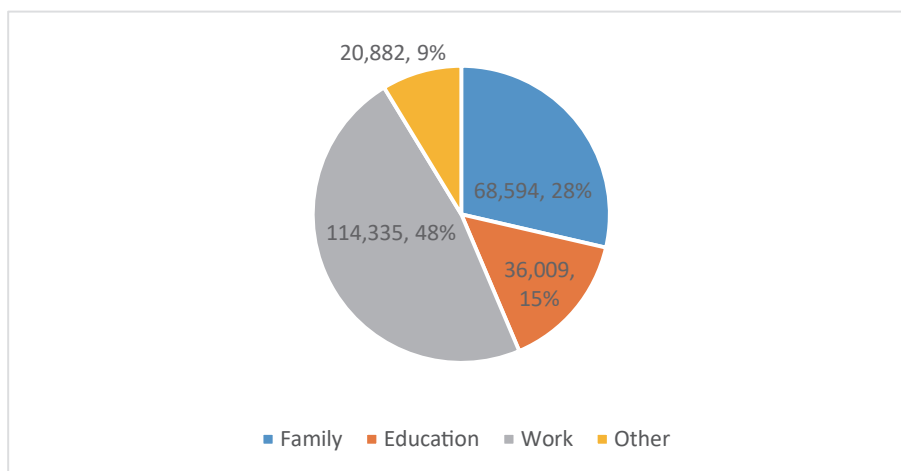
Source: Authors, based on data in Eurostat, 2016b.

Italy

Italy was the only case study country where the proportions of work and education admissions favoured workers. For every Chinese student admitted by Italy, three workers were provided entry.

Almost half of first permits issued to Chinese migrants in 2008–15 were granted for work. No other country among the six case study countries admitted such a large absolute number and proportion of Chinese workers. The large Chinese worker admissions to Italy may be due to the strong networks that have formed between the two countries, particularly in relation to the Chinese garment industry powerhouse in Prato, outside of Florence. This strong specialization in a sector that was vulnerable to the effects of the economic crisis likely contributed to the sharp fall in Chinese worker admissions to Italy since 2010. This being the case, the 3:1 worker–student ratio figure has been heavily influenced by the exceptionally large worker admissions figures up until 2010. In 2010, the Chinese worker–student ratio in Italy was as large as 10:1 (32,580 first work permits versus 3,243 first study permits).

Figure 12 The proportion of first permits issued to Chinese migrants in Italy by permit type, 2008–15



Source: Authors, based on data in Eurostat, 2016b.

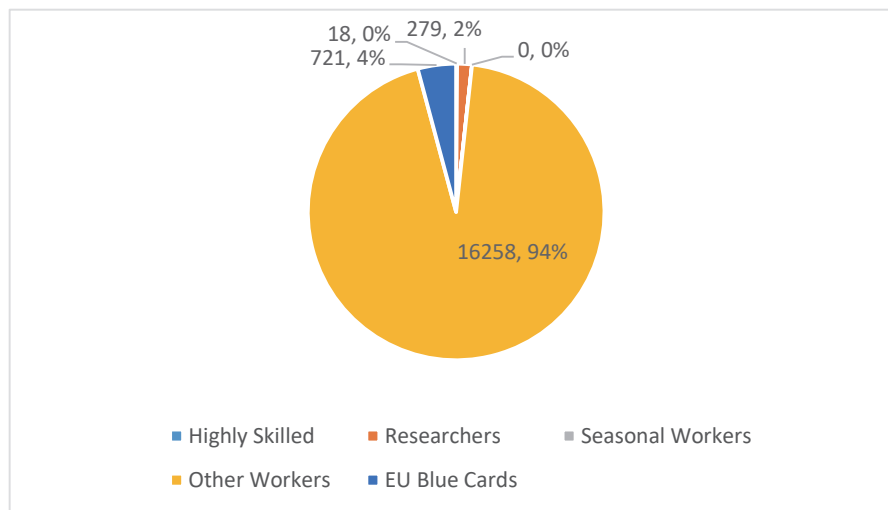
Appendix III. To what types of work were Chinese workers admitted, and how long were they authorized to stay?

Germany

The largest proportion of first work permits issued by Germany to Chinese migrants concerned “other work” – that is, work that is not highly skilled (including research) or seasonal. Compared to the other case study countries, Germany also issued the largest proportion of EU Blue Cards.

The vast majority (94 per cent) of first work permits issued by Germany to Chinese migrants in 2008–15 were granted for “other work”, which to say, work that is not highly skilled, seasonal, research, or under an EU Blue Card. Nonetheless, with 4 per cent of first work permits issued as EU Blue Cards, Germany granted the highest proportion of EU Blue Cards among the case study countries (figure 13).

Figure 13 Total numbers and average proportions of first work permits issued by Germany to Chinese migrants, by category, 2008–15



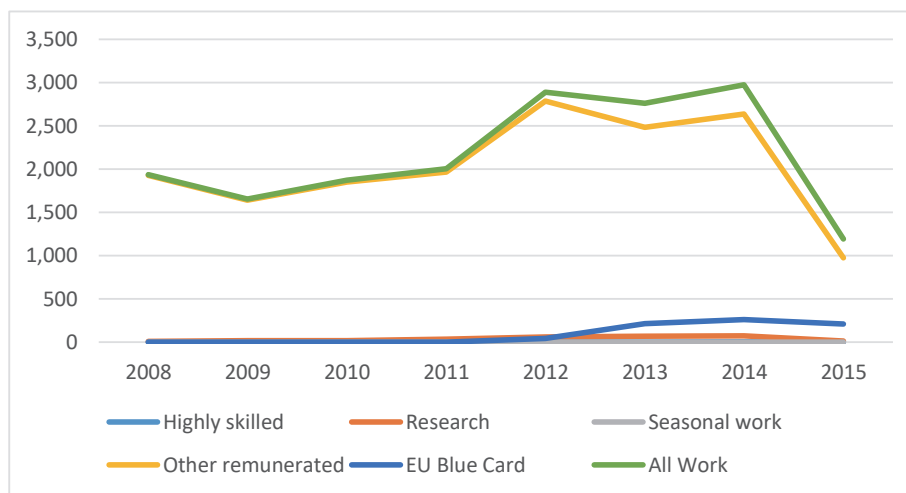
Source: Authors, based on data in Eurostat, 2016d.

The number of permits issued by Germany to Chinese workers plummeted in 2015.

On average, in 2008–15 Germany issued 2,160 first work permits a year: 2,032 to “other” categories of workers; 90 to EU Blue Card holders; 35 to researchers; two to highly skilled workers; and none to seasonal workers. No seasonal permits were granted to Chinese, despite the relative importance of seasonal admissions to Germany, likely because Germany has since the 1990s relied on seasonal admissions from Eastern Europe.

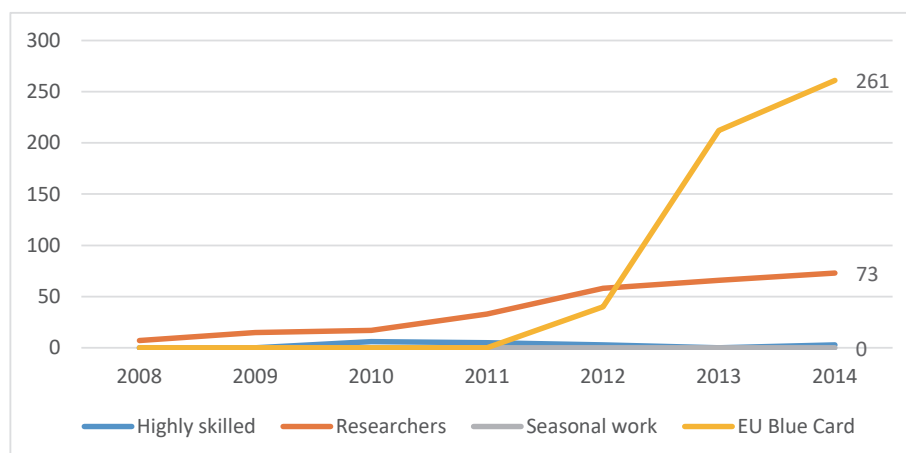
The number of permits granted to Chinese workers in Germany had been generally growing up through 2014. However, in 2015 the permit numbers plunged below their lowest level in the 2008–15 period. As a result of this sharp decline, in 2015 Germany issued only a little over half the number of permits it had issued in 2008 (figure 14). Chinese workers who had well paid, high-skilled job offers qualifying for an EU Blue Card were not affected by this decline; nor were researchers. Highly skilled and seasonal workers were not affected either, but largely due to the small numbers of permits issued each year (figure 15).

Figure 14 First work permits issued by Germany to Chinese migrants, by category, 2008–15



Source: Authors, based on data in Eurostat, 2016d.

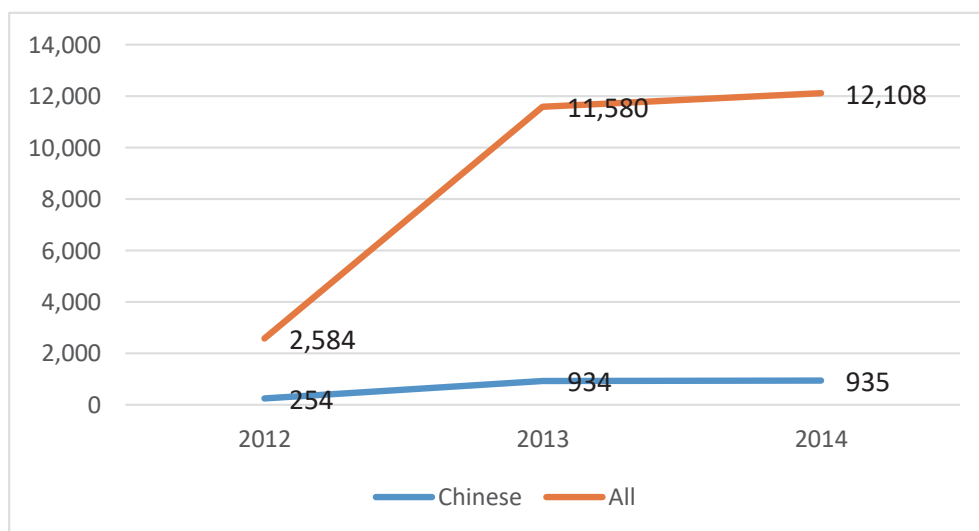
Figure 15 First work permits issued by Germany to Chinese migrants, for all categories except “other work”, 2008–15



Source: Authors, based on data in Eurostat, 2016d.

The number of Blue Cards issued by Germany each year has resisted the overall decline in work permits provided to Chinese migrants (figure 16). Since Germany authorized the issuing of EU Blue Cards in 2012, Chinese workers have obtained 8 per cent of all Blue Cards granted or renewed in Germany.³⁴

Figure 16 EU Blue Cards granted or renewed by Germany to Chinese migrant workers and to all foreign workers, 2012–14



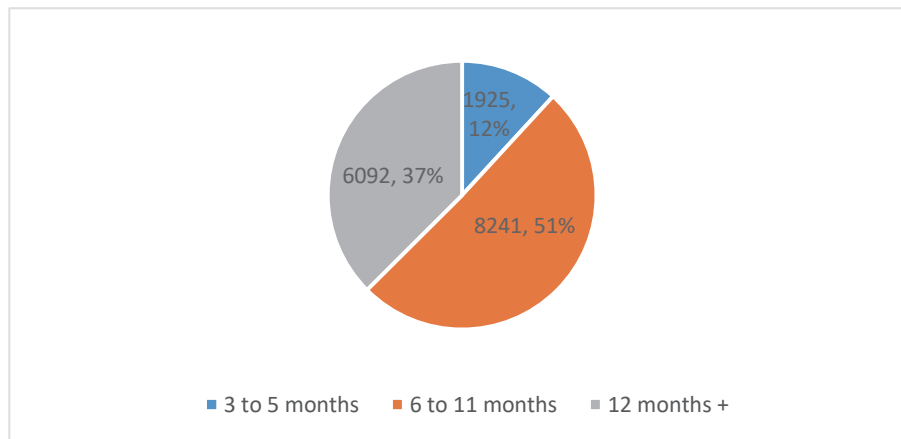
Source: Authors, based on data in Eurostat, 2016d.

The proportion of long-term “other work” permits issued to Chinese migrants has increased, but the overall number of “other work” permits issued has decreased significantly.

The absolute number of long-term permits (12 months or more) and medium-term permits (six to 11 months) issued by Germany to Chinese migrants for “other work” has fluctuated over time. Since its lowest level in 2009, the number of long-term permits has expanded to account for more than 50 per cent of “other work” permits issued in 2015 (figure 18). It may take some time before numbers rebound to the 2008 proportion, wherein some 85 per cent of all “other work” permits were long-term. In the meantime, many Chinese workers heading to Germany may need to content themselves with the possibility that they will obtain medium-term permits (figure 17).

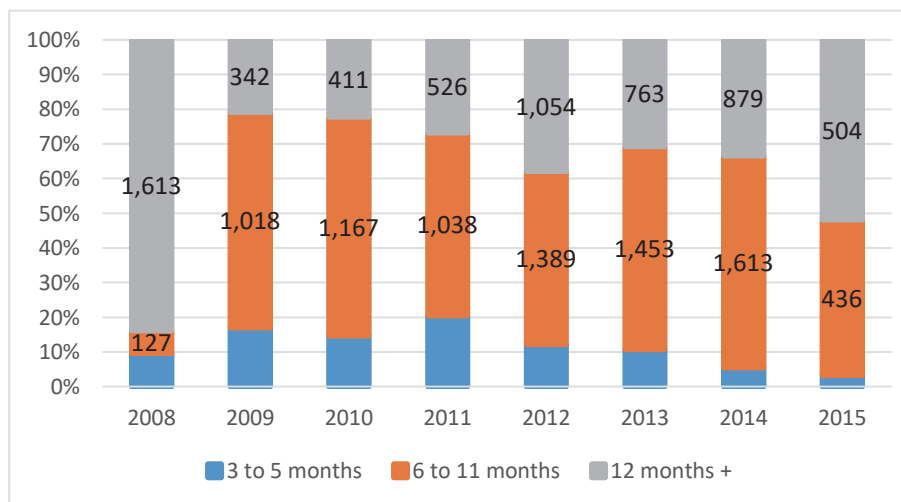
³⁴ Eurostat distinguishes between first and other permits. “First permits” are those issued to a person for the first time (or for a consecutive time, but only after at least a six-month-long break).

Figure 17 Duration of permits issued for “other work” issued by Germany to Chinese migrants, 2008–15



Source: Authors, based on data in Eurostat, 2016d.

Figure 18 Number of permits for “other work” issued by Germany to Chinese migrants by year and duration, 2008–15



Source: Authors, based on data in Eurostat, 2016d.

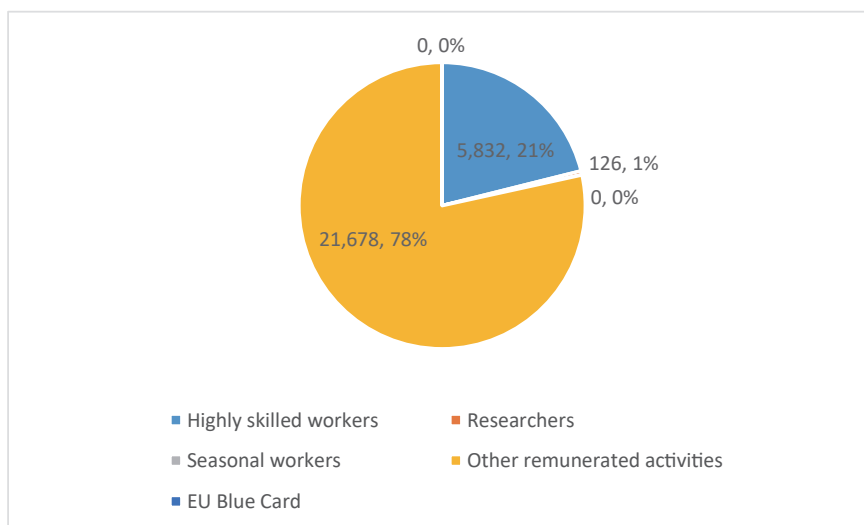
United Kingdom

As with Germany, the largest proportion of first work permits issued by the United Kingdom to Chinese migrants were for “other work” – that is, work that is not highly skilled or seasonal. Permits issued to highly skilled workers were second most common.

Over three-fourths (78 per cent) of first permits issued to Chinese workers in the United Kingdom in 2008–15 were granted for “other work”, while less than a quarter (21 per cent) were

issued for highly skilled work (figure 19). Chinese researchers in the United Kingdom accounted only 1 per cent of all first work permits issued to Chinese workers.

Figure 19 Total numbers and average proportions of first work permits issued by the United Kingdom to Chinese migrants, by category, 2008–15

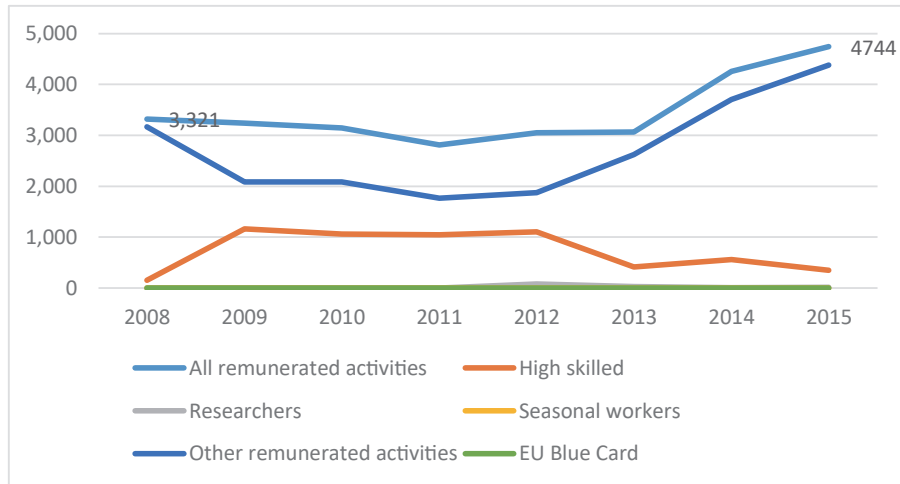


Source: Authors, based on data in Eurostat, 2016d.

The overall number of permits issued to Chinese workers appeared resistant to fluctuations, even within the context of economic crisis. The number of permits being issued to Chinese workers has been increasing since 2013.

In 2008–15 the United Kingdom issued, on average, 3,455 first work permits a year to Chinese workers: 2,710 for so-called “other work”; 729 to highly skilled workers; 16 to researchers; and none to seasonal workers. No EU Blue Cards were issued in the United Kingdom, because the United Kingdom has opted out of the scheme. No seasonal permits were issued to Chinese workers, because the United Kingdom relies on extant sources of seasonal workers from Europe. The overall number of first permits issued to Chinese workers in the United Kingdom did not fluctuate much between 2008 and 2013, but has seen a sharp increase since 2013 (figure 20). This substantial rise in numbers was largely due to increases in the issuance of permits for “other work”. This increase of permits for “other work” was strong enough to offset a decline of permits issued to highly skilled Chinese workers. Permits issued to highly skilled Chinese workers have declined since 2012 (figure 21). The introduction of a points-based system by the United Kingdom has allowed authorities to dynamically adjust foreign worker admissions to economic and political imperatives.

Figure 20 First work permits issued by the United Kingdom to Chinese migrants, by category, 2008–15



Source: Authors, based on data in Eurostat, 2016d.

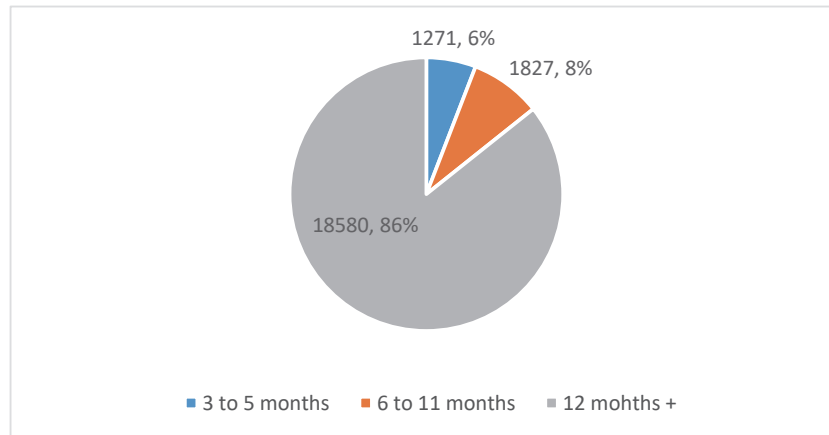
Figure 21 First work permits issued by the United Kingdom to Chinese migrants, for all categories except “other work”, 2008–15



Source: Authors, based on data in Eurostat, 2016d.

In the predominant category of first work permits – that is, for “other work” – most permits issued to Chinese workers were long-term permits of 12 months or more (figure 22).

Figure 22 Duration of permits issued for “other work” issued by the United Kingdom to Chinese migrants, 2008–15

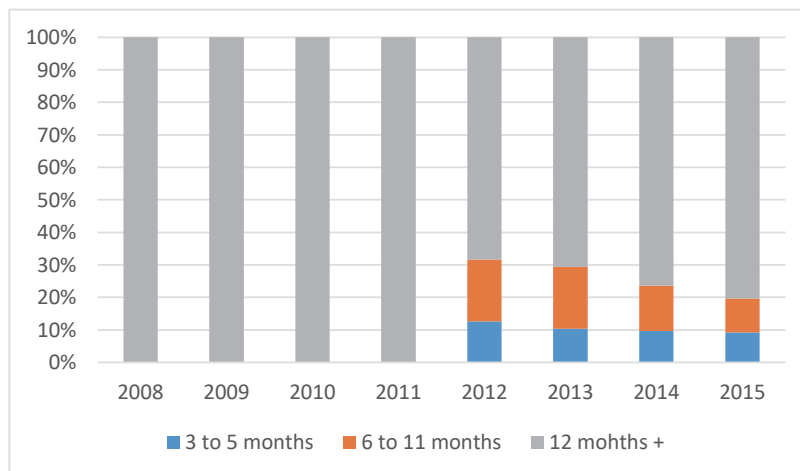


Source: Authors, based on data in Eurostat, 2016d.

The introduction of short- and mid-term permits has decreased the proportion of long-term permits issued to Chinese migrants by the United Kingdom, but the overall number of “other work” permits across all durations has increased.

The absolute number of long-term permits issued to Chinese workers engaged in “other work” has been increasing after reaching its lowest point in 2012. That was the same year that medium- and short-term permits were first issued by the United Kingdom. Though these new permits quickly cut into the proportion of long-term work permits issued to Chinese workers, the trend has moved back toward long-term permits, which accounted for some 80 per cent of all permits issued for “other work” in 2015.

Figure 23 Number of permits for “other work” issued by the United Kingdom to Chinese migrants by year and duration, 2008–15



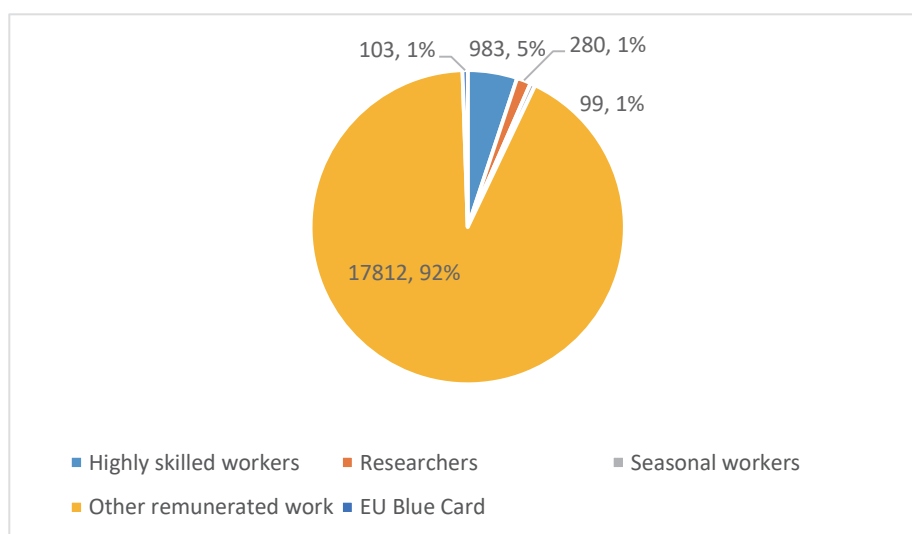
Source: Authors, based on data in Eurostat, 2016d.

Spain

The largest proportion of first work permits issued by Spain to Chinese workers concerned “other work” – that is, work that is not highly skilled or seasonal.

As in Germany and the United Kingdom, the vast majority (92 per cent) of first work permits issued to Chinese workers in Spain in 2008–15 were granted for “other” work. Permits for highly skilled work accounted for 5 per cent of the total, and research, seasonal, and Blue Card permits accounted for just 1 per cent each (figure 24).

Figure 24 Total numbers and average proportions of first work permits issued by Spain to Chinese migrants, by category, 2008–15

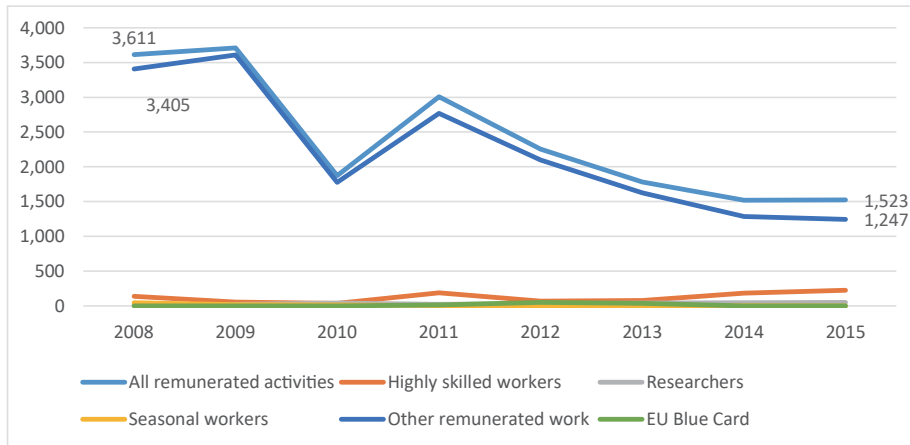


Source: Authors, based on data in Eurostat, 2016d.

While permits issued for “other work” fell across 2008–15, those for research and highly skilled work generally rose.

All first work permits issued to Chinese workers in Spain plummeted in 2010, recuperated in 2011, and then continued to decline slowly until stabilizing at about 1,500 per year since 2014 – less than half of the annual total for 2008 (figure 25).

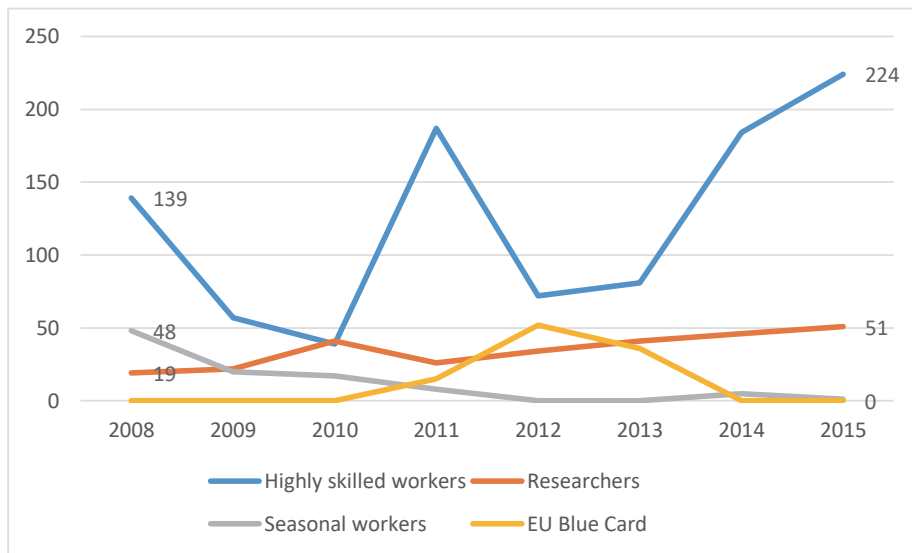
Figure 25 First work permits issued by Spain to Chinese migrants, by category, 2008–15



Source: Authors, based on data in Eurostat, 2016d.

This overall decline was almost entirely reflective of the number of permits issued for “other work”, as the admission of Chinese researchers and highly skilled workers increased across this period (figure 26).

Figure 26 First work permits issued by Spain to Chinese migrants, for all categories except “other work”, 2008–15



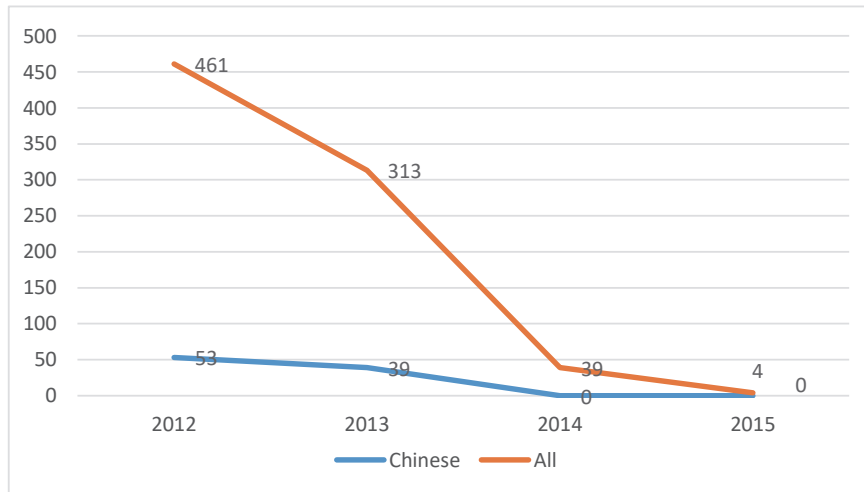
Source: Authors, based on data in Eurostat, 2016d.

Chinese workers’ interest in seeking entry to Spain on an EU Blue Card has basically evaporated since 2014

EU Blue Cards – both first-time issues and renewals – were only granted to Chinese workers in

the period 2011–13. In 2014 and 2015 no Blue Cards were issued to Chinese workers in Spain. In 2015, Blue Cards had lost so much significance among migrants that Spain only issued four in total to any nationality (figure 27).

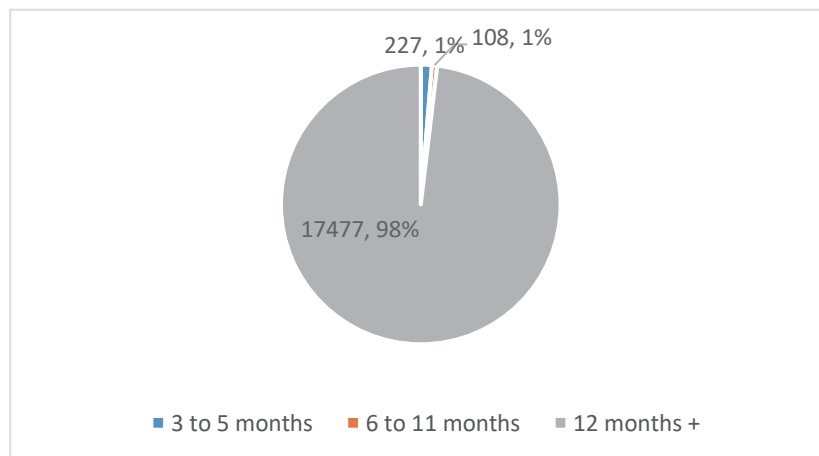
Figure 27 EU Blue Cards granted or renewed by Spain to Chinese migrant workers and to all foreign workers, 2012–14



Source: Authors, based on data in Eurostat, 2016d.

Among the first work permits issued for “other work”, almost all were long-term permits (12 months or more) (figure 28). But as the absolute number of long-term permits has decreased, in 2015 Spain started to issue more short-term permits.

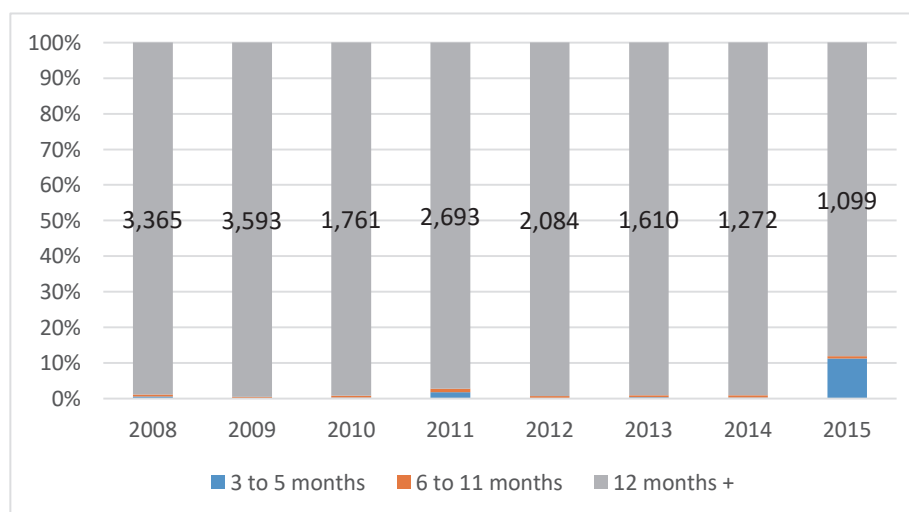
Figure 28 Duration of permits issued for “other work” issued by Spain to Chinese migrants, 2008–15



Source: Authors, based on data in Eurostat, 2016d.

The absolute number of long-term permits issued to Chinese has been decreasing in Spain since 2009. This trend has led to the issuance of more short-term permits. Still by 2015, some 90 per cent of first work permits granted to Chinese migrants were for more than 12 months (figure 29).

Figure 29 Number of permits for “other work” issued by Spain to Chinese migrants by year and duration, 2008–15



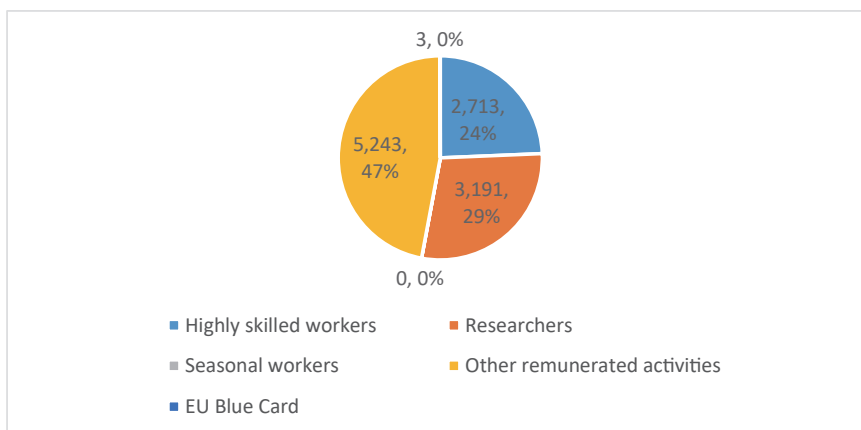
Source: Authors, based on data in Eurostat, 2016d.

Netherlands

The largest proportion of first work permits issued to Chinese migrants by the Netherlands concerned “other work” – that is, work that is not highly skilled or seasonal.

The admissions of Chinese migrants as seasonal and EU Blue Card workers were irrelevant in the Netherlands. Nearly half of first work permits issued to Chinese migrants concerned “other work”, while researchers (29 per cent) and highly skilled workers (24 per cent) accounted for the rest (figure 30). With just 47 per cent of permits issued for the “other work”, the Netherlands granted the second smallest proportion of those permits after France.

Figure 30 Total numbers and average proportions of first work permits issued by the Netherlands to Chinese migrants, by category, 2008–15

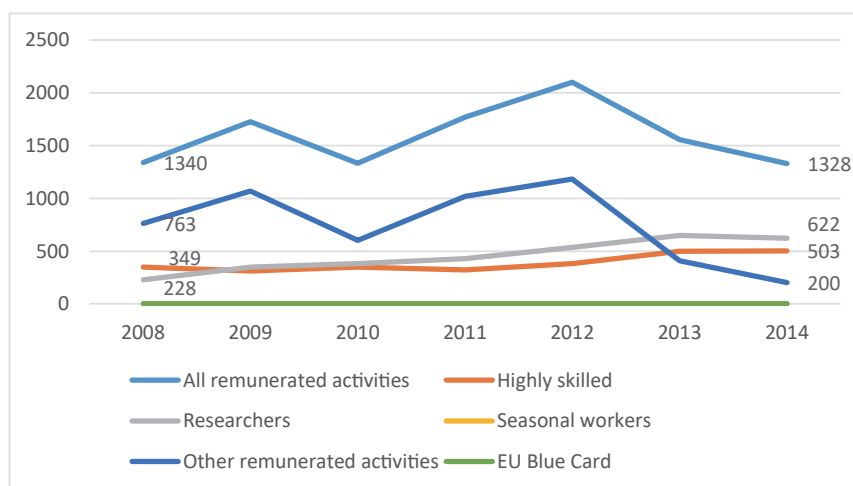


Source: Authors, based on data in Eurostat, 2016d.

While the numbers of researchers and highly skilled workers were modest and rose slowly, the two categories combined accounted for the bulk of Chinese worker admissions in 2013–14.

The number of first work permits issued by the Netherlands to Chinese citizens rose and fell between 2008 and 2015, with an average of 1,593 a year. The rise and fall of total work permits issued was due primarily to fluctuations of permits for “other work”, which have averaged 749 a year, but have declined since 2012. The average numbers of first permits issued to researchers (456 a year) and highly skilled workers (388 a year), however, rose slowly (figure 31). The admission of Chinese researchers and the highly skilled were insensitive to whatever factor caused fluctuations in the admissions for “other work”.

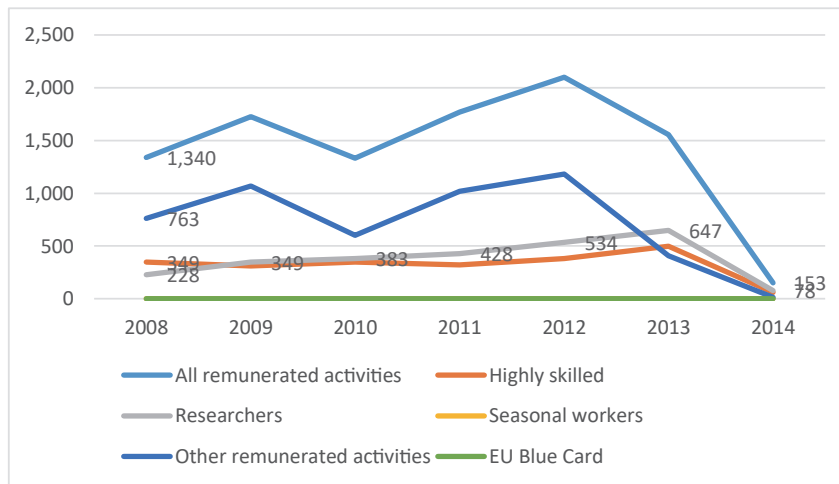
Figure 31 First work permits issued by the Netherlands to Chinese migrants, by category, 2008–14



Source: Authors, based on data in Eurostat, 2016d.

No short- or long-term first work permits were issued to Chinese nationals in the Netherlands before 2014. On average 1,425 medium-length (six to 11 month) permits were issued per year: 325 for highly skilled workers 378 for researchers; and 722 for other remunerated activities. However, in 2014, the numbers of medium-length permits dwindled, especially those concerning “other work” (figure 32).

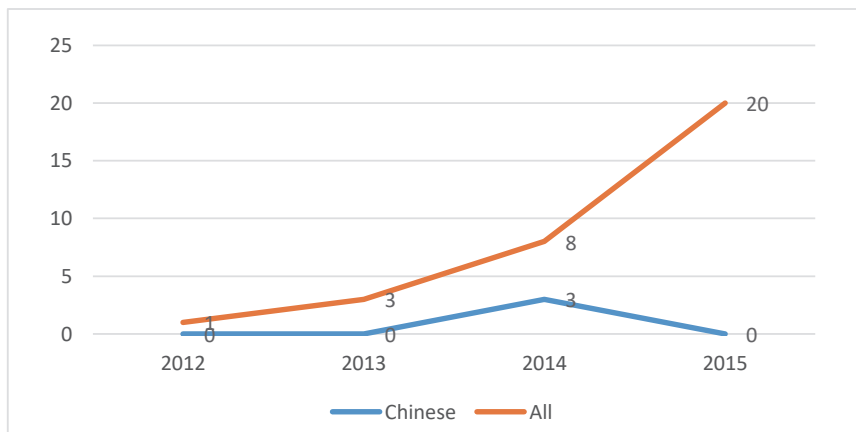
Figure 32 Number of medium-term first work permits issued by the Netherlands to Chinese migrants by category, 2008–14



Source: Authors, based on data in Eurostat, 2016d.

According to Eurostat, only three Blue Cards have been issued in the Netherlands to Chinese nationals, all in 2014 (figure 33). As in the case of Germany and Spain, Eurostat does not hold a record of the occupations for which they were granted.

Figure 33 EU Blue Cards granted or renewed by the Netherlands to Chinese migrant workers and to all foreign workers, 2012–14

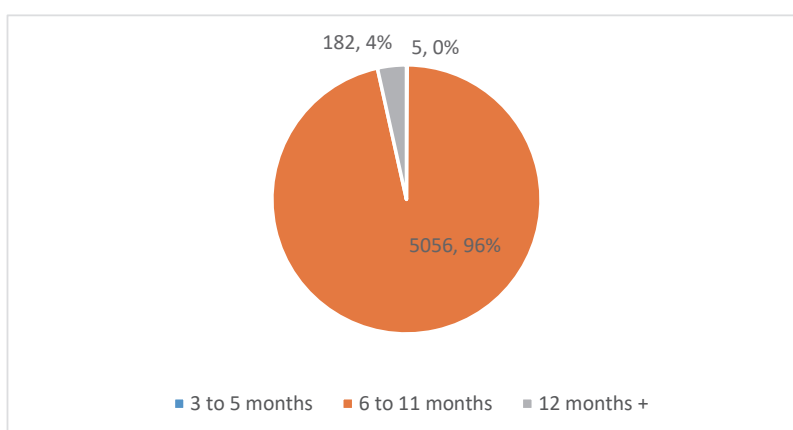


Source: Authors, based on data in Eurostat, 2016d.

Among first work permits for “other work”, almost all were medium-term permits of six to 11 months. But as the absolute numbers of medium-term permits decreased, the Netherlands started to issue more long-term permits in 2014.

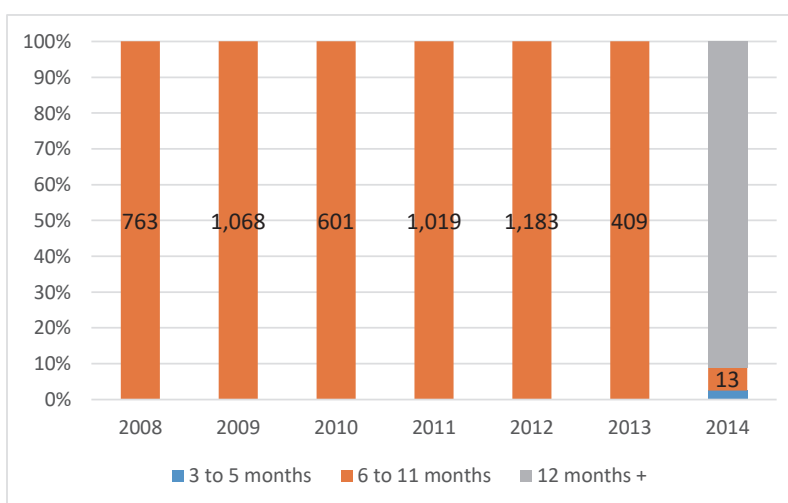
Since neither short- nor long-term permits were issued by the Netherlands to Chinese nationals before 2014, it is not surprising that the vast majority of permits for “other work” issued in 2008–15 were for the medium-term (six to 11 months) (figure 34). But as soon as short- and long-term permits were finally introduced, long-term permits immediately became the most commonly issued to Chinese workers (figure 35).

Figure 34 Duration of permits for “other work” issued by the Netherlands to Chinese migrants, 2008–15



Source: Authors, based on data in Eurostat, 2016d.

Figure 35 Number of permits for “other work” issued by the Netherlands to Chinese migrants by year and duration, 2008–15



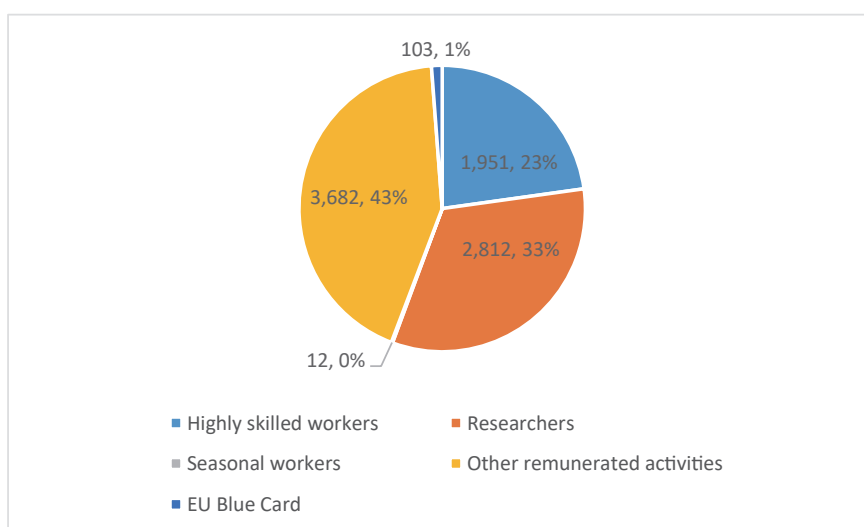
Source: Authors, based on data in Eurostat, 2016d.

France

Chinese workers were admitted to France for research and highly skilled work at a higher rate than in any of the other case study countries.

Less than half of all first work permits issued by France to Chinese workers in 2008–15 were granted in the “other remunerated” category – that is, work that is not highly skilled or seasonal. Thus France issued the smallest proportion of first work permits for “other work” to Chinese applicants among the six case study countries. Nearly one third of Chinese workers in France were granted their permit to conduct research and nearly one quarter to perform highly skilled work. Only 1 per cent of Chinese workers were granted EU Blue Cards, more than in Italy and the Netherlands (figure 36).

Figure 36 Total numbers and average proportions of first work permits issued by France to Chinese migrants, by category, 2008–15

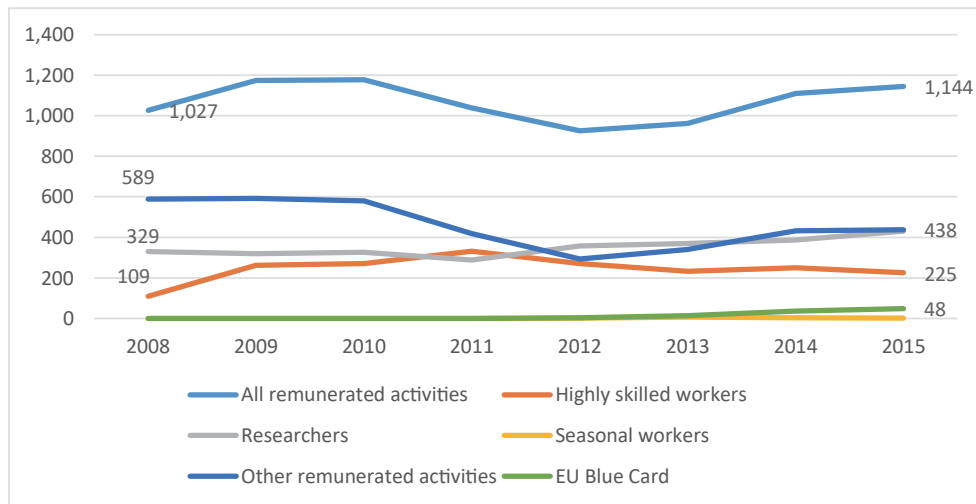


Source: Authors, based on data in Eurostat, 2016d.

The higher proportions of permits for researchers and highly skilled Chinese workers may be one reason why France’s overall admissions of Chinese workers were less sensitive to fluctuations.

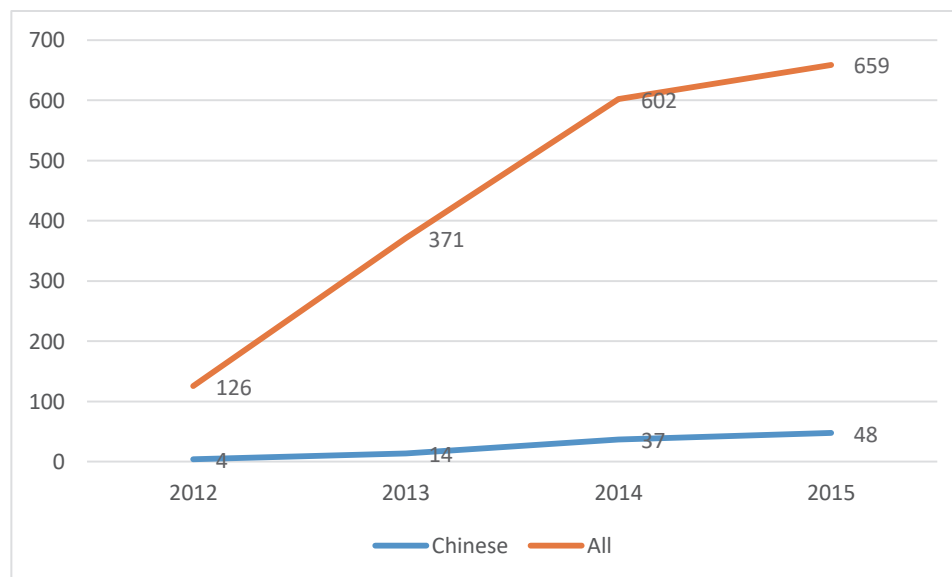
Having plateaued in 2009, the numbers of all permits issued to Chinese workers declined gradually in 2011 and rose equally as gradually since then. This small fluctuation was due to the changes in the number of permits issued for “other work” and highly skilled work, since permits issued for research and Blue Cards increased over time (figures 37 and 38).

Figure 37 First work permits issued by France to Chinese migrants, by category, 2008–15



Source: Authors, based on data in Eurostat, 2016d.

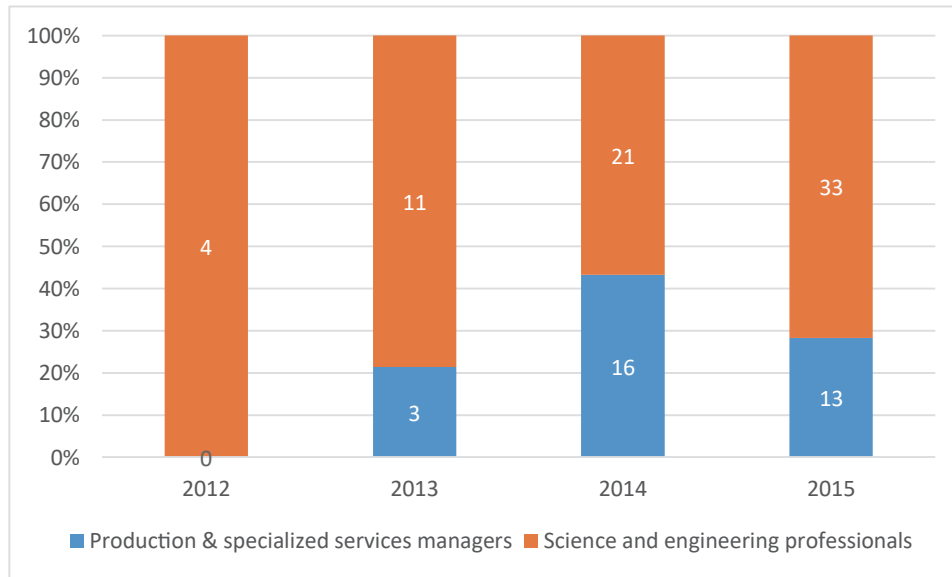
Figure 38 EU Blue Cards granted or renewed by France to Chinese migrant workers and to all foreign workers, 2012–14



Source: Authors, based on data in Eurostat, 2016d.

France and Italy were the only countries that provided occupation breakdowns for the EU Blue Cards they authorized. Chinese Blue Card holders in France tended to be science and engineering professionals (figure 39).

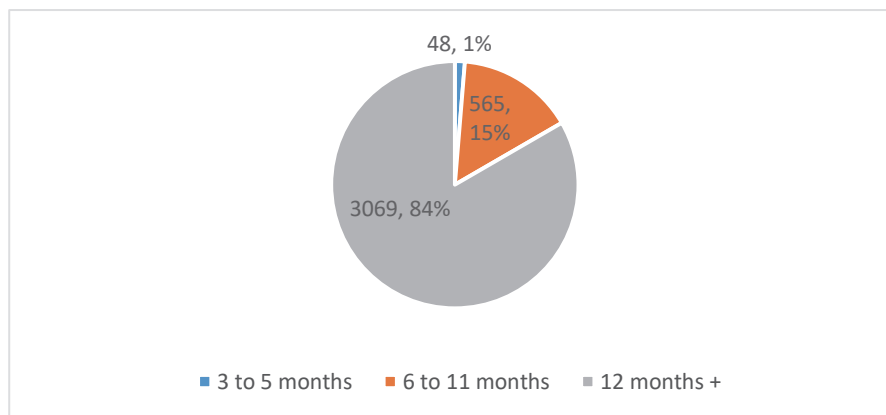
Figure 39 EU Blue Cards granted by France to Chinese workers by occupation (ISCO 08), 2012–15



Source: Authors, based on data in Eurostat, 2016d.

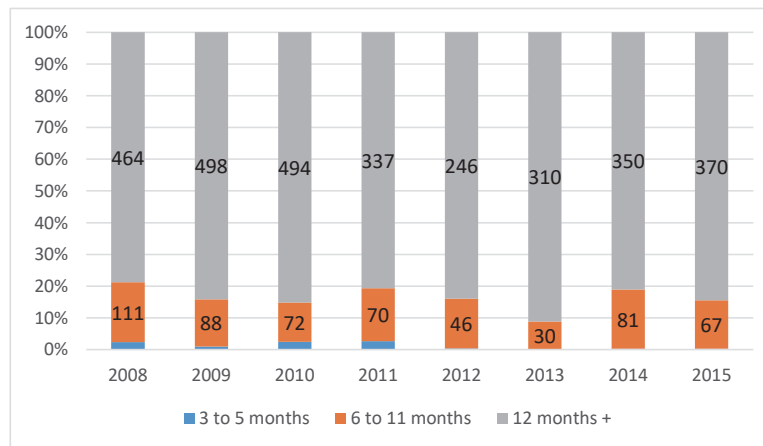
The majority of permits issued to Chinese workers in the “other work” category were long-term permits of more than 12 months’ duration (figure 40). Fluctuations in the ratio of long- and medium-term permits issued by France were minimal (figure 41).

Figure 40 Duration of permits issued for “other work” issued by France to Chinese migrants, 2008–15



Source: Authors, based on data in Eurostat, 2016d.

Figure 41 Number of permits for “other work” issued by France to Chinese migrants by year and duration, 2008–15



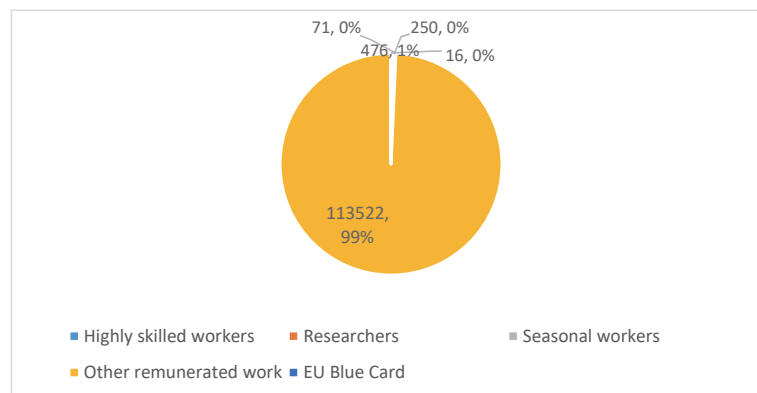
Source: Authors, based on data in Eurostat, 2016d.

Italy

Almost all first work permits issued by Italy to Chinese migrants concerned “other work” – that is, work that is not highly skilled or seasonal. Among the 1 per cent of permits that were issued for other reasons, over half were given to the highly skilled and one third to researchers.

Almost all first permits issued by Italy to Chinese workers in 2008–15 were granted in the “other remunerated” category. Permits issued to highly skilled workers, researchers, seasonal workers, and Blue Card holders altogether accounted for about 1 per cent of all permits issued. Among the total of 813 permits issued in those four residual categories, 58 per cent were granted to the highly skilled; 31 per cent to researchers; 9 per cent to seasonal workers; and only 1 per cent to EU Blue Card holders (figure 42).

Figure 42 Total numbers and average proportions of first work permits issued by Italy to Chinese migrants, by category, 2008–15

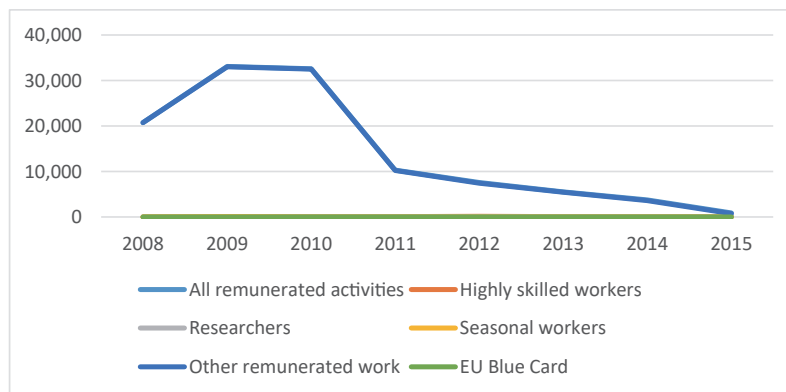


Source: Authors, based on data in Eurostat, 2016d.

Having plateaued at their highest level in 2009, the total number of permits issued by Italy to Chinese workers declined sharply in 2011 and have been declining ever since.

As noted above, permits to perform “other work” constituted about 99 per cent of Chinese worker admissions to Italy in 2008–15. “Other work” permits peaked at 33,000 in 2009 and 2010, but declined to about 10,000 in 2011. They have fallen ever since to a mere 800 for 2015 (figure 43).

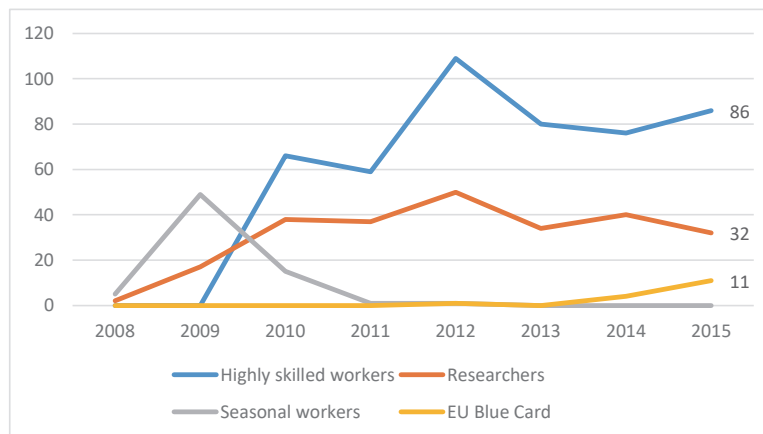
Figure 43 First work permits issued by Italy to Chinese migrants (including Hong Kong, China), by category, 2008–15



Source: Authors, based on data in Eurostat, 2016d.

Except for 2009 and 2010, seasonal admissions to Italy were irrelevant among Chinese workers during the study period. The same can be said for EU Blue Card admissions. The two categories of Chinese workers who resisted the decline in work permit issuance were highly skilled workers and researchers. The admissions of both have risen, particularly of the highly skilled (figure 44).

Figure 44 First work permits issued by Italy to Chinese migrants, for all categories except “other work”, 2008–15

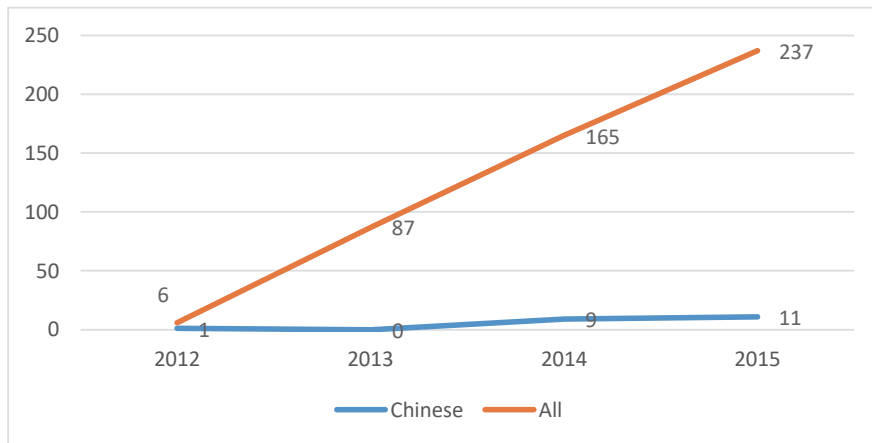


Source: Authors, based on data in Eurostat, 2016b.

The number of EU Blue Cards issued by Italy was modest and mostly concerned managers and engineers.

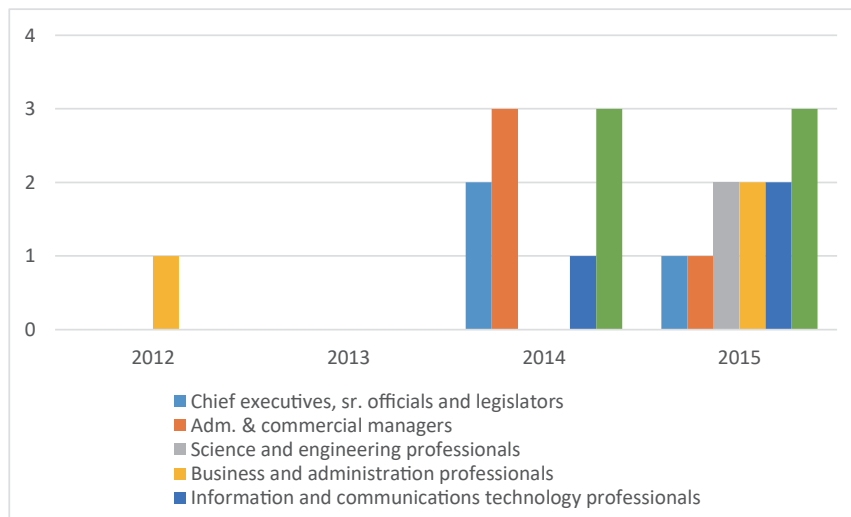
As in the other case study countries, the number of (new and renewed) EU Blue Cards issued by Italy to Chinese workers were modest. Blue Cards were issued to production and specialized service managers, as well as science and engineering professionals (figures 45 and 46).

Figure 45 EU Blue Cards granted or renewed by Italy to Chinese migrant workers and to all foreign workers, 2012–14



Source: Authors, based on data in Eurostat, 2016a.

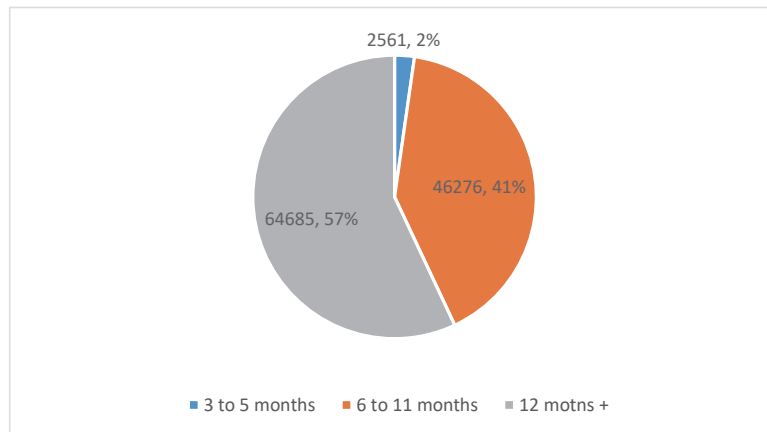
Figure 46 EU Blue Cards granted by Italy to Chinese workers by occupation (ISCO 08), 2012–15



Source: Authors, based on data in Eurostat, 2016a.

Among first permits for Chinese workers engaged in “other work”, more than half of those issued by Italy were long-term permits (12 months or longer) (figure 47). But while in 2008 over 60 per cent of “other work” permits issued were long-term permits, in 2015 over 60 per cent were short-term permits of less than six months’ duration.

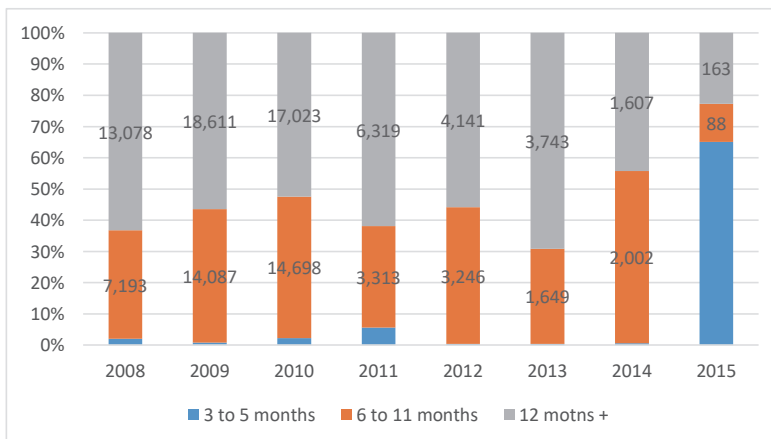
Figure 47 Duration of permits for “other work” issued by Italy to Chinese migrants, 2008–15



Source: Authors, based on data in Eurostat, 2016d.

The admission of Chinese workers on long-term permits and mid-term permits has generally been on the decline since 2009 and 2010 respectively. In 2008 some 20,000 first work permits of any duration were issued by Italy to Chinese workers. In 2015 the number of permits of any duration had dropped to just 700, with the vast majority of those permits being short-term permits of less than six months’ duration (figure 48).

Figure 48 Number of permits for “other work” issued by Italy to Chinese migrants by year and duration, 2008–15



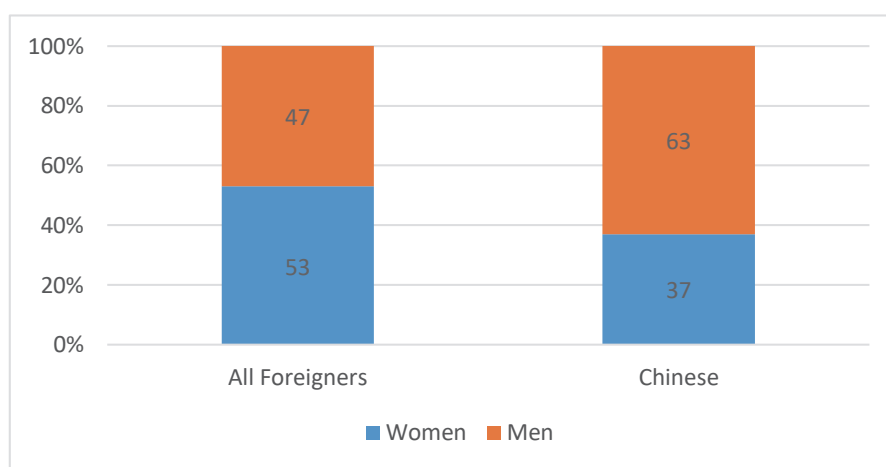
Source: Authors, based on data in Eurostat, 2016d.

Appendix IV. What is the demographic profile of Chinese workers? ³⁵

Spain

Based on Eurostat 2010–15 data, the proportion of women among Chinese workers entering Spain was smaller than the average proportion of women across all foreign workers entering those countries. Among all foreigners, women received over half of work permits. However, among Chinese workers, women received just over one third of work permits (figure 49).

Figure 49 Average gender proportions among first work permits issued by Spain to all foreign workers and to Chinese workers, 2010–15



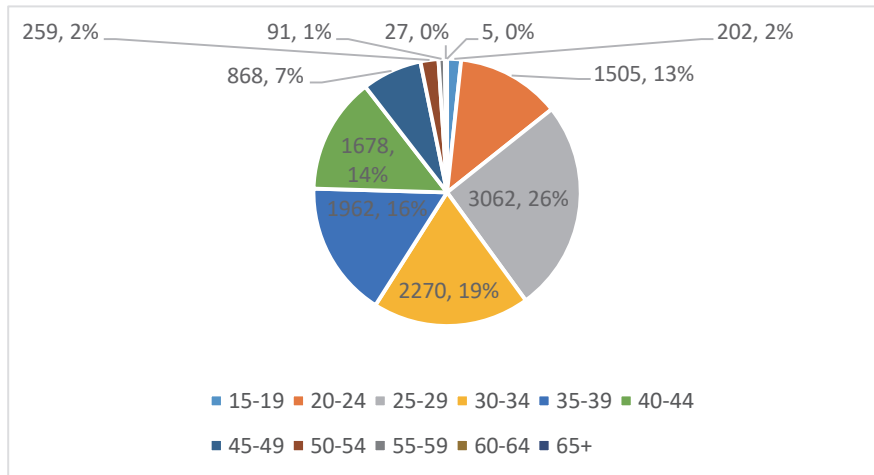
Source: Authors, based on data in Eurostat, 2016c.

Most work permits issued by Spain to Chinese workers went to workers in their 20s, followed by those in their 40s and –to much smaller extent – those in their 50s.

Thirty-nine per cent of first work permits granted by Spain to Chinese workers were issued to individuals in their 20s. Workers 25-29 years old alone received over a quarter of all first work permits. Thirty-five per cent of first work permits granted to Chinese workers were granted to individuals in their 30s; 31 per cent to workers in their 40s; and only 3 per cent to workers in their 50s (figure 50).

³⁵ This appendix will provide figures for Spain, the Netherlands, France, and Italy only, as Eurostat did not have age and gender data available for Germany and the United Kingdom.

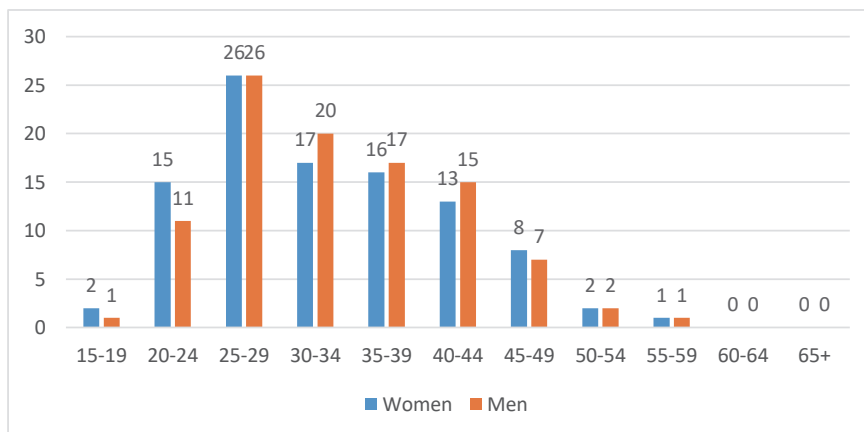
Figure 50 Number and proportion of first work permits issued by Spain to Chinese workers, by age group, 2010–15



Source: Authors, based on data in Eurostat, 2016c.

Of Chinese migrants granted a first work permit by Spain, the highest proportion of men (37 per cent) and women (41 per cent) obtained their first permit in their 20s; followed by those in their 30s (37 per cent for men and 33 per cent for women); and then by those in their 40s (22 per cent for men and 21 per cent for women). Compared to France, Italy, and the Netherlands, Spain had the most equal distribution of ages among first work permits for Chinese men and women (figure 51).

Figure 51 Proportions of first work permits issued by Spain to Chinese workers by age group and sex, 2010–15

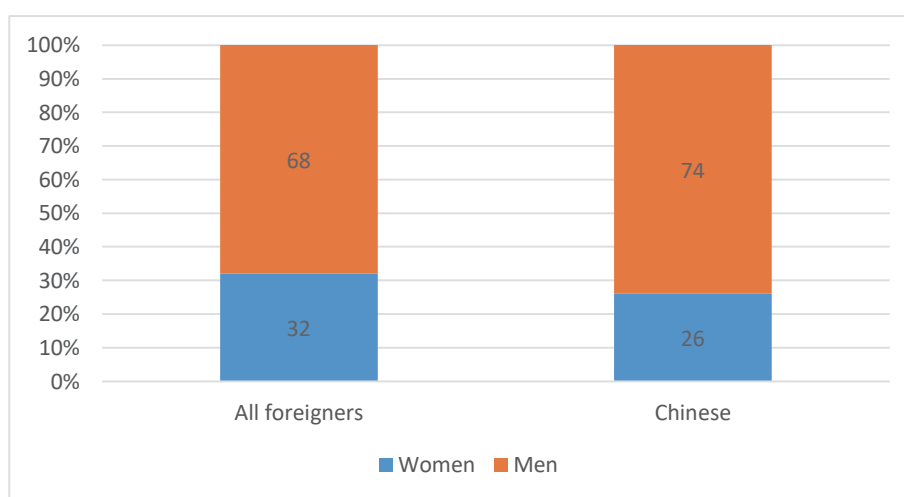


Source: Authors, based on data in Eurostat, 2016c.

Netherlands

As of August 2016, Eurostat data on the gender and age of those issued work permits in the Netherlands was limited to 2011. Among those who received a first work permit from the Netherlands, the proportion of women workers was smaller among Chinese workers than among all foreigners. Among all foreigners issued first work permits by the Netherlands, women received nearly one third (32 per cent) of work permits. Chinese women only received just over a quarter (26 per cent) of work permits among all Chinese work permit recipients (figure 52).

Figure 52 Average gender proportions among first work permits issued by the Netherlands to all foreign workers and to Chinese workers, 2011

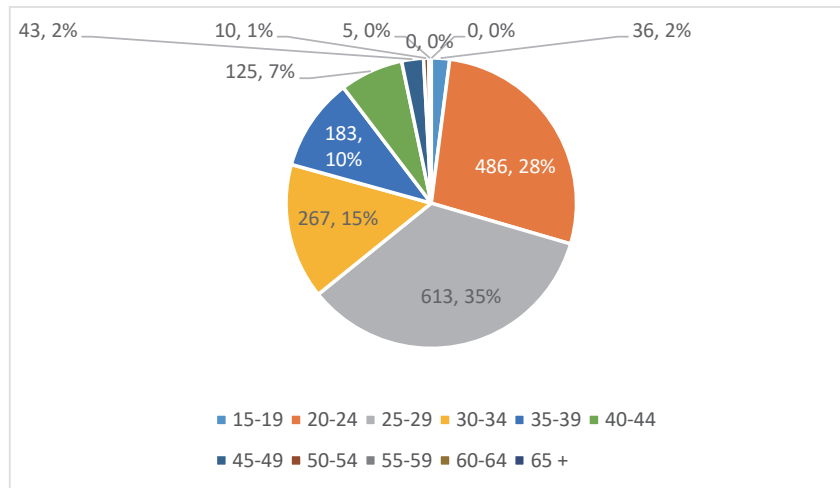


Source: Authors, based on data in Eurostat, 2016c.

Considering five-year age brackets, the largest proportion of permits issued by the Netherlands to Chinese workers went to workers in their upper 20s. About 60 per cent of first work permits were issued to individuals in their 20s, and further quarter went to those in their 30s.

About 60 per cent of Chinese workers granted first permits in the Netherlands in 2011 were in their 20s. The 25-29-year-old age bracket alone accounted for 35 per cent of all first work permits received by Chinese workers. Twenty-five per cent of Chinese workers granted first permits in the Netherlands were in their 30s; 9 per cent in their 40s; and 1 per cent in their 50s (figure 53).

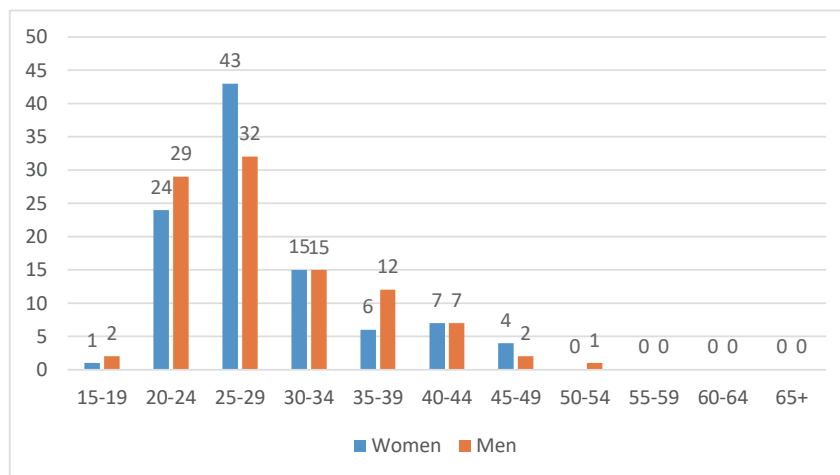
Figure 53 Number and proportion of first work permits issued by the Netherlands to Chinese workers, by age group, 2011



Source: Authors, based on data in Eurostat, 2016c.

In general, female Chinese workers entering the Netherlands tended to be younger than Chinese male workers. Individuals in the 25-29 age bracket made up a much larger proportion of Chinese women workers than they did of men workers (43 per cent versus 32 per cent). Workers in their 20s in general accounted for 67 per cent of Chinese women workers versus 61 per cent of male workers. That said, workers in their 40s made up a slightly higher percentage of women (11 per cent than they did of men (9 per cent). Chinese men workers entering the Netherlands were more likely to be in their 30s than Chinese women (27 per cent versus 21 per cent) (figure 54).

Figure 54 Proportions of first work permits issued by the Netherlands to Chinese workers by age group and sex, 2011

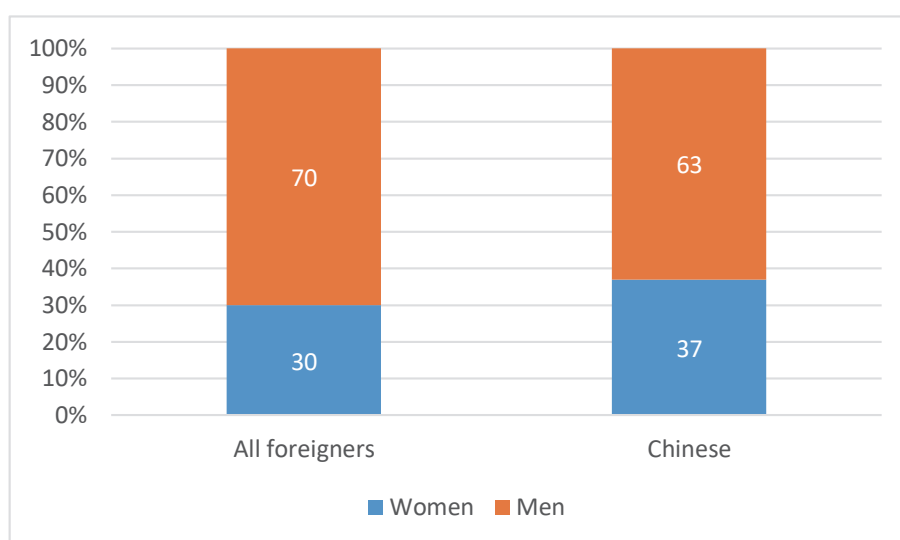


Source: Authors, based on data in Eurostat, 2016c.

France

Based on 2012–15 Eurostat data, among those who received a first work permit from France, the proportion of women workers was larger among Chinese workers than among all foreigners. Among all foreigners issued first work permits by France, women received 30 per cent of work permits. Chinese women, on the other hand, received 37 per cent of work permits among all Chinese work permit recipients (figure 55).

Figure 55 Average gender proportions among first work permits issued by France to all foreign workers and to Chinese workers, 2012–15



Source: Authors, based on data in Eurostat, 2016c.

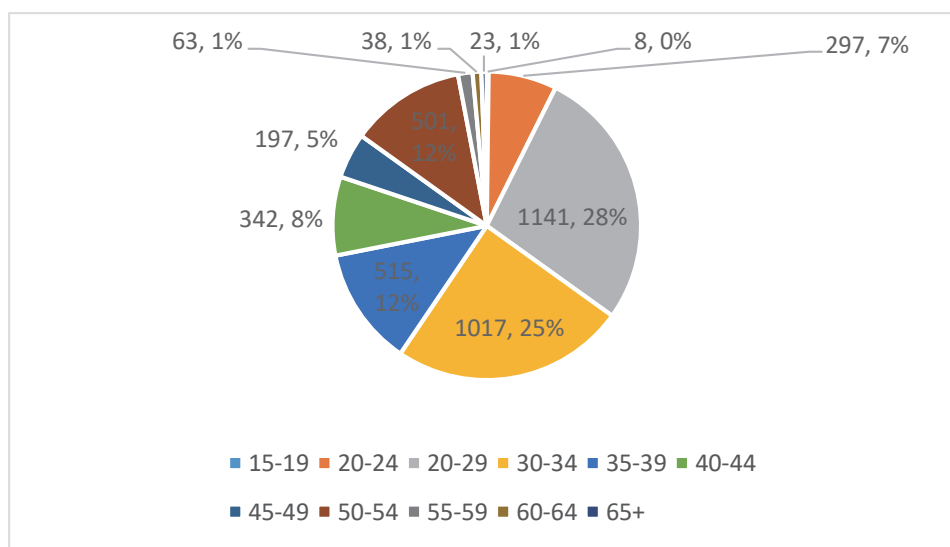
About 60 per cent of Chinese workers granted first permits in the Netherlands in 2011 were in their 20s. The 25-29-year-old age bracket alone accounted for 35 per cent of all first work permits received by Chinese workers. Twenty-five per cent of Chinese workers granted first permits in the Netherlands were in their 30s; 9 per cent in their 40s; and 1 per cent in their 50s (figure 53).

As in Italy, the Netherlands, and Spain, if one considers five-year age brackets, the largest proportion of first work permits issued by France to Chinese workers went to workers in their upper 20s. However, if one considers age by decade, France issued the largest proportion of work permits to Chinese workers in their 30s, and France was more likely than other case study countries to issue work permits to Chinese applicants in their 50s.

Eurostat age data of Chinese workers who received first work permits in France is limited to 2012–15. During that period, 28 per cent of Chinese first work permit recipients were between

25 and 29 years old, while a quarter were between 30 and 34. Most Chinese workers to France (37 per cent) were in their 30s, followed by those in their 20s (35 per cent), and those in their 40s (13 per cent). Compared to Italy, the Netherlands, and Spain, France registered a relatively large proportion of workers in their 50s (13 per cent) (figure 56).

Figure 56 Number and proportion of first work permits issued by France to Chinese workers, by age group, 2012–15



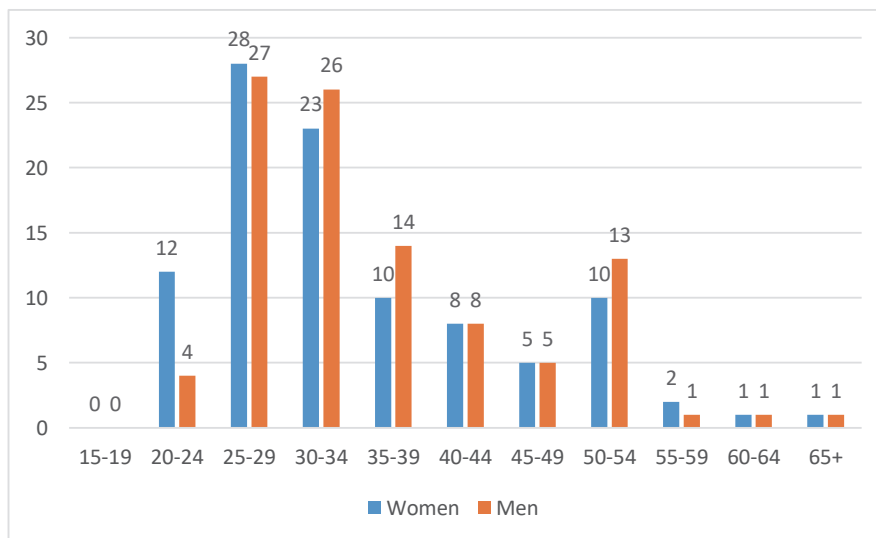
Source: Authors, based on data in Eurostat, 2016c.

For both Chinese women and men, the highest proportion of permits were given to workers between 25 and 29 (figure 57). Unlike in the Netherlands, the proportions of Chinese women and men in this age bracket who received a work permit from France were almost equal, 28 per cent for women versus 27 per cent for men.

Chinese women in their 20s received 40 per cent of all work permits granted by France to Chinese women, followed by those in their 30s (33 per cent), in their 40s (13 per cent), and in their 50s (12 per cent).

Chinese men in their 20s received 31 per cent of all work permits issued to Chinese men by France. Those in their 30s received 40 per cent; those in their 40s – 13 per cent; and those in their 50s – 14 per cent. The higher proportion of permit receivers among Chinese in their 50s (both women and men) distinguished France from Italy, the Netherlands, and Spain.

Figure 57 Proportions of first work permits issued by France to Chinese workers by age group and sex, 2012–15



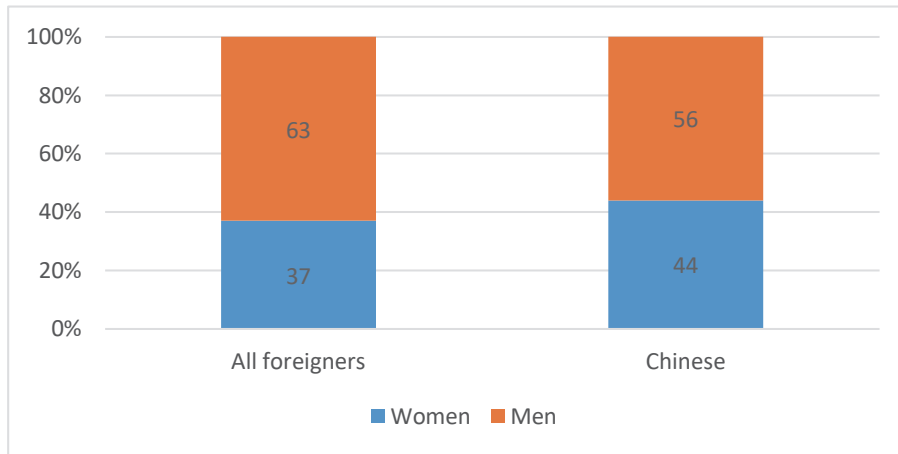
Source: Authors, based on data in Eurostat, 2016c.

Italy

As in France, the Netherlands, and Spain, when considering five-year age brackets, the largest proportion of first permits issued by Italy to Chinese workers were granted to individuals in their upper 20s. Similar to Spain, Italy admitted twice as many Chinese women and men in their 40s than France or the Netherlands (proportionally speaking). Only in Italy did Chinese women in their 30s obtain more permits than those in their 20s.

Based on 2010–15 Eurostat data, among those who received a work permit from Italy, the proportion of women workers was larger among Chinese workers than among all foreigners. Among all foreigners issued first work permits by Italy, women received 37 per cent of work permits. Among all Chinese workers, women received 44 per cent of work permits issued by Italy (figure 58).

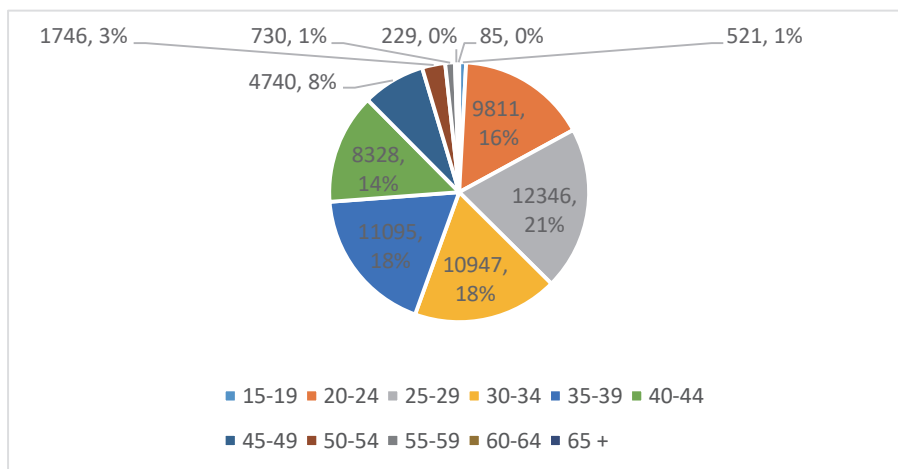
Figure 58 Average gender proportions among first work permits issued by Italy to all foreign workers and to Chinese workers, 2010–15



Source: Authors, based on data in Eurostat, 2016c.

Twenty-one per cent of Chinese workers issued a first work permit by Italy were 25-29 years old. Workers in their 20s received 37 per cent of all first work permits granted to Chinese workers in Italy. Chinese workers in their 30s received 36 per cent of work permits; those in their 40s – 22 per cent; and those in their 50s – 4 per cent (figure 59).

Figure 59 Number and proportion of first work permits issued by Italy to Chinese workers, by age group, 2010–15



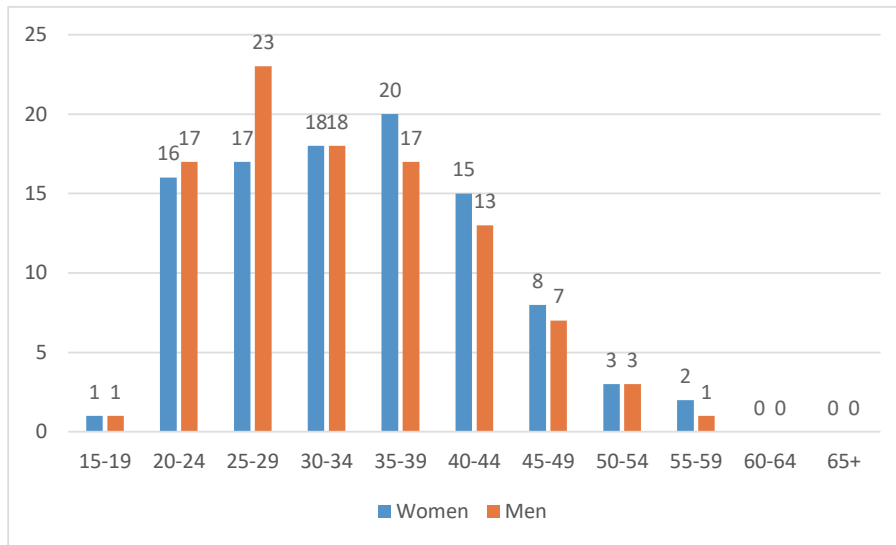
Source: Authors, based on data in Eurostat, 2016c.

Proportionally speaking, Italy issued more first work permits to Chinese women in their 30s and their 40s than France, the Netherlands, or Spain. Among Chinese women issued a first work permit by Italy, the largest proportion were in their 30s (38 per cent); followed by those in their

20s (33 per cent); and those in their 40s (23 per cent) (figure 60).

The largest proportion of permits issued by Italy to Chinese men were issued to those in their 20s (40 per cent). Chinese men between 25 and 29 years old alone received 23 per cent of all permits granted to Chinese men by Italy. Chinese men in their 30s obtained 35 per cent of first work permits granted to Chinese men in Italy, and those in their 40s received 20 per cent.

Figure 60 Proportions of first work permits issued by Italy to Chinese workers by age group and sex, 2010–15



Source: Authors, based on data in Eurostat, 2016c.



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