



Train and Retain

Career Support for International Students in Canada, Germany, the Netherlands and Sweden



SVR's Research Unit: Study 2015-2

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Executive Summary

International students are increasingly regarded as ‘ideal’, ‘model’ or ‘designer’ immigrants for the labour markets of their host countries. Young, educated, and equipped with host country credentials and experiences, international students are presumed to mitigate future talent shortages, especially in technical occupations in science, technology, engineering and mathematics (STEM). In an effort to retain more international students for their domestic workforce, many host countries have passed legislation to improve post-study work and residency options for the ‘educational nomads’. However, despite these reforms and a high willingness to stay, many international students fail to find adequate employment. For example in Germany, 30 percent of former international students are still searching for a job more than one year after graduation.

For international students, the transition from study to work is further complicated by insufficient language skills, low exposure to the host country’s labour market, a lack of professional networks, and other obstacles. Despite international students’ need for more systematic and coordinated job entry support at the local level, most of them encounter a poorly coordinated patchwork of occasional career fairs, job application training and chance acquaintances with service staff or company representatives who may or may not be able to help them. These are the findings from the first international mapping of local support structures for the study-to-work transition of international students, which the Research Unit at the Expert Council of German Foundations on Integration and Migration (SVR) has conducted in Canada, Germany, the Netherlands and Sweden. The analysis was based on an international survey which generated responses from more than 50 percent of all public higher education institutions (HEIs) in the four countries. The survey was administered among leading staff members of international offices (IO) and career services (CS).

Between 50 and 80 percent of international students in Canada, Germany, the Netherlands and Sweden plan to gain post-study work experience in their host country. The fulfilment of these aspirations is largely decided at the local level where HEIs, local businesses, public service providers and other local actors help facilitate the job entry of international students. The SVR Research Unit’s international survey has identified the following key strengths and weaknesses in the four countries’ local support landscapes for international students:

In **Canada**, international students are very likely to find job application training, networking events and

other job entry support throughout their entire academic careers. Aside from offering continuous career support for all students, 58 percent of Canadian colleges and universities provide additional support for international students including career counselling, internship placement programmes and other support services specifically designed to meet their needs. At around 40 percent of institutions, international students can choose between two or more providers of the same career support service – a duplication, which in some cases may confuse students. Off campus, international students in Canada are likely to encounter diversity-friendly employers: At 40 percent of university and college locations in Canada, large businesses actively hire international students. Furthermore, unlike in Europe, small businesses also actively recruit international students. At the same time, local employment offices (48 %) and other public service providers (40 %) also strive to retain more international students for the local workforce.

In **Germany**, universities and universities of applied sciences (*Fachhochschulen*) do provide career support, however it is concentrated on the later stages of study programmes. When it comes to tailored support for international students, German HEIs are as active as their Canadian counterparts: 56 percent of institutions assist international students through English-language career counselling, information sessions on the German labour market and other specifically designed services. The institutions choose to do so despite their unfavourable student-to-staff ratio and their high share of short-term project-based funding. Similar to Canada, around half of all German HEIs host multiple providers of the same support service, which can lead to unnecessary duplications. Furthermore, communicating these and other features of institutional career support is often challenging since 81 percent of CS and 33 percent of IO are subject to data access restrictions which prevent them from contacting international students directly. When comparing the activity levels of local actors outside the HEI, Germany’s large and medium-sized businesses rank among the most active recruiters of international students. At the same time, international students are still a blind spot in the human resource strategies of small companies. Wanting to raise awareness, local politicians and public service providers are pushing for international student retention in 41 percent of HEI locations.

In **the Netherlands**, most universities and universities of applied sciences (*hogescholen*) develop international students’ career readiness skills during all phases of their study programme. 80 percent of career



services (CS) at Dutch HEIs target newly arrived international students as well as students who are about to graduate. Furthermore, unlike in most other European countries, Dutch CS make strategic use of their institution's international alumni. Around 8 out of 10 CS regularly include their international alumni in guest lectures, career mentoring programmes and internship placements. Outside of their HEI, international students have a good chance of landing an internship or a full-time position with large or medium-sized businesses or at one of many research institutes. In contrast, small companies are hardly hiring international students, partly because of the substantial processing fees collected by Dutch immigration authorities. The same is true for local politicians and public services, which in the Netherlands only serve as active facilitators at 24 percent of locations surveyed.

In **Sweden**, around 60 percent of CS provide career support to newly arrived international students and 30 percent of Swedish HEIs tailor their information sessions on the Swedish labour market, job application training and other career support to international students. Outside of higher education, large businesses and research institutes serve as the only active facilitators of international students' entry to the Swedish labour market. Small and medium-sized companies, employment offices and other local actors are only occasionally involved in assisting international students. Overall, the labour market entry of international students appears to be off the radar of most local actors in Sweden.

In **all four countries**, the individual support efforts made by HEIs, local businesses, public service providers and other local actors can prove very helpful during the job search of international students. However, these isolated approaches are not enough to retain more international students in the local and national workforce. Rather, local actors need to coordinate their individual career support services in order to bridge the gap between study and work. So far, this type of coordinated job entry support can only be found in a few locations in Canada, Germany, the Netherlands and Sweden: only 28 percent of Dutch and German HEIs collaborate regularly with local businesses to organise mentoring programmes, internships and other forms of professional support to international students. Canadian (21 %) and Swedish HEIs (13 %) are even less likely to team up with local businesses. Similarly, the survey found that HEIs' engagement with local politicians, employment agencies and other public services is infrequent and ad hoc. In Canada, only 26 percent of HEIs join forces with public service providers

to offer career support to international students. In the Netherlands, 24 percent of HEIs are actively engaged in this way. In Germany, the number is even lower at 17 percent. In the case of Sweden, with the exception of local employment offices (17 %), HEIs hardly engage in any form of local collaboration with public sector organisations. To move beyond the current state of infrequent and ad hoc collaboration, HEIs, employers, public service providers and other local actors need to reassess and coordinate their job entry assistance. By doing so, the local partners can offer a more structured local support landscape that addresses the major obstacles in the path to employment for many international students. This requires local actors to exchange information regularly, develop and pursue shared goals, and communicate joint achievements in order to rally support for further coordination. HEIs, employers and policy makers alike are required to play their parts:

- **Higher education institutions'** career support should focus on the major obstacles experienced by international students who seek to gain host country work experience, most importantly, the development of language skills, early exposure to the labour market and tailored job application training. In order to roll out select support services to all international students, HEIs should consider supplementing their face-to-face instruction with Massive Open Online Courses (MOOCs), educational gaming apps and other digital technologies.
- **Employers**, especially small businesses, should include international students in their recruiting pool. Through internships, co-op positions, scholarships and other forms of cost-efficient investments, both management and staff can test the added value of a more international work environment. By diversifying their workforce, companies can increase their attractiveness for other skilled migrants, which are increasingly needed to offset talent shortages.
- **Policy makers** at the national level should assess whether their country's legal restrictions for post-study work and residency (length of job search period, minimum remuneration requirements, etc.) are in line with projected labour market needs. Furthermore, procedural barriers such as excessive processing times for providing the proper visa or permits should be addressed. At the local level, given their long-term interest in talent retention, municipalities should play a central role in the local coordination of job entry support.

1. International Students: A Valuable Pool of Skilled Labour¹

Like many other highly industrialised countries, Canada, Germany, the Netherlands and Sweden are projected to suffer a sustained demographic decline in their working-age populations (ages 15 to 65). With fertility rates hovering between 1.4 and 1.9 births per woman,² the countries' workforces already depend upon immigrants and their children to fill the gaps left by a retiring generation of baby boomers.³ At the same time, none of the four countries is currently experiencing a comprehensive national shortage of skilled labour.⁴ Instead, today's talent shortages are limited to certain regions, sectors and occupations, especially technical jobs in science, technology, engineering and mathematics (STEM): census data from Canada show that as early as 2001, half of all IT specialists and engineers were foreign-born (Hawthorne 2008: 8). In Germany, the Netherlands and Sweden, employers have sought to alleviate talent shortages through in-service training of current staff members, more flexible working hours and skilled migration from within the European Union (EU). Yet, going forward, these coping strategies are unlikely to suffice, as even conservative forecasts imply that Europe's overall ageing populations will eventually necessitate a higher inflow of skilled migrants from outside the EU (Brücker 2013: 7–8; SER 2013).

Today, a growing number of Canadian, Dutch, German and Swedish employers consider recruiting skilled workers from abroad. Nevertheless, only a handful of companies have already begun reaching out beyond national borders. Most organisations lack the financial means, professional networks and language skills necessary to attract foreign talent (Ekert et al. 2014: 59). Consequently, small and medium-sized businesses

report a strong preference for domestic recruitment while still failing to notice the potential of thousands of international students who train right in front of their doorstep.

In contrast, policy makers and industry leaders are increasingly regarding international students as 'ideal', 'model' or 'designer' immigrants who can help offset workforce gaps (CIC 2014b; BMI 2012: 54–56; Nuffic 2013; Swedish Institute 2015). Due to their host country experience, international students are expected to overcome many of the problems faced by immigrants arriving directly from abroad. International students are presumed to possess an advanced command of the host country's language and have gained hands-on experiences relevant to employers who can better understand their domestic credentials. Furthermore, the majority of international students plan to stay on and work in their host country (Ch. 2.2), thereby helping to mitigate talent shortages – especially in STEM occupations.

About the study

In order to retain more international students in the domestic workforce,⁵ many host countries have expanded their legal post-study work and residence options along with several pilot initiatives aiming to facilitate international students' transition from study to work (Ch. 3). However, despite recent activities at the national level, very little is known about local support structures for international students who seek to stay and search for employment in their host country. In order to learn more about existing job entry support⁶ and local facilitators in and outside of higher education, the SVR Research Unit's international survey sets out to compare the local support landscapes in Canada, Germany, the Netherlands and Sweden. In doing so, this study contributes to the

1 This study was supervised by Prof. Thomas K. Bauer, a member of the Expert Council of German Foundations on Integration and Migration (SVR). The responsibility for the study lies with the SVR Research Unit. The arguments and conclusions contained herein do not necessarily reflect the opinion of the Expert Council. The authors of this study would like to thank Safia Ahmedou, Dr. Albrecht Blümel, Theresa Crysmann, Martina Dömling, Sara Hennes, Lena Jehle, Deniz Keskin, Dr. Holger Kolb, Alexandra Neumann, Ines Tipura, Aron Vrieler and Alex Wittlif for their contributions.

2 In Canada, fertility rates have been stagnating at 1.6; in Germany, despite generous benefits for families, the number has stayed at 1.4 for many years; in the Netherlands birth rates have declined to 1.7; and in Sweden, the rates have recently fallen below the two-baby mark, now averaging 1.9 newborns per woman (World Bank 2015).

3 Skilled migration is but one of many strategies used to overcome labour shortages. Other approaches include flexible working hours, higher employment rates of women and elderly persons, and in-service training of existing employees (SVR 2011: 48–49; BMAS 2015: 70).

4 Economists do not agree on the extent of future talent shortages, given the plethora of forecasting methods and their adoption or omission of key indicators such as unemployment rates, vacancies, wage and productivity growth, savings and consumption, etc. (Zimmermann/Bauer/Bonin/Hinte 2002: 43–102; Brücker 2013: 8).

5 In this study, the term 'international student retention' exclusively refers to international students' post-study stay. It does not address universities' student enrolment strategies and their efforts to retain international students in a given study programme.

6 In this study, the term 'job entry support' is used synonymously with 'career support', 'study-to-work support' and other support services which facilitate international students' transition to host country employment.



Box 1 Selection of countries

The SVR Research Unit's international survey sets out to map the local support structures for the study-to-work transition of international students in Canada, Germany, the Netherlands and Sweden. The four countries were chosen based on their projected labour shortages, their efforts to attract and retain international talent, and their appeal as study destinations for international students. None of the four countries is suffering from a nationwide shortage of skilled labour. Rather, these shortages are limited to certain regions, sectors and occupations, especially technical STEM jobs. In recent years, all four countries have actively tried to increase labour supply through skilled migration (SER 2013; CIC 2014b; BMAS 2015; Swedish Institute 2015). In this context, international students provide a similar size talent pool in all four countries: in 2013, around 8 percent of students at Canadian, Dutch, German and Swedish HEIs were international students (DZHW 2014; CBIE 2014: 20; Nuffic 2014; UKÄ 2013), the majority of whom intend to stay on in order to gain host country work experience (Ch. 2.2).

Apart from these similarities, the four countries' individual experiences with international student mobility and the study-migration pathway hold valuable insights for the talent retention efforts of other popular study destinations: Canada's years of experience with recruiting fee-paying international students to its university and college campuses and, subsequently, retaining them for the Canadian labour market, suggests that Canada's local job entry support is marked by a high degree of institutionalised cooperation between key actors. Aiming to achieve this level of local coordination, the Dutch programme "Make it in the Netherlands!" has assembled a coalition of HEIs, industry leaders and public sector organisations who join forces in order to attract and retain more international students in the Netherlands. In Germany, the rebounding recruiting success of the country's tuition-free HEIs, as well as the government's 2012 expansion of post-study work and residency options for international students (Ch. 3) have triggered a number of pilot initiatives aiming to support the labour market entry of international students. Whether or not these projects are underpinned by more comprehensive support structures in and around HEIs will be investigated in the context of the international survey. In Sweden, the 2011 introduction of tuition fees for master's students from outside the EU has encouraged some HEIs to expand their services for international students. Whether these services include career counselling, internship placements and other job entry support is also part of the survey, which sets out to provide the first comparative perspective on local support landscapes for the study-to-work transition of international students.

growing body of research on study-migration pathways, which so far have been primarily concerned with capturing student attitudes and experiences, as well as the calculation of stay rates (OECD 2011; SVR Research Unit/MPG 2012; Hanganu/Heß 2014; SER 2013; Arthur/Flynn 2011; Chira/Belkhodja 2013). By identifying activity levels of higher education institutions (HEIs), local businesses and other key actors, as well as the extent to which they jointly facilitate international students' transition from study to work, the SVR Research Unit seeks to develop practical recommendations for local job entry support.

After assessing the international talent pool enrolled at Canadian, Dutch, German and Swedish HEIs in Ch. 2, the study will proceed to compare the four countries' legal frameworks for post-study stay and employment (Ch. 3). Subsequently, Ch. 4 will assess the extent to which existing post-study schemes have enabled international students to stay and which obstacles still remain towards host country employment. Ch. 5 presents the key findings from the international survey, which was administered during the 2014–2015 autumn term at public HEIs in the four countries (inter-

national survey 'Train and Retain'). The international survey was jointly administered by the SVR Research Unit and five partner organisations. In Canada, survey invitations were sent out by the Canadian Bureau for International Education (CBIE); German international offices were contacted by the German Academic Exchange Service (DAAD) while German career services were approached by the *Career Service Netzwerk Deutschland* (CSND); in Sweden, international offices and career services were invited by the Swedish Council for Higher Education (UHR); and in the Netherlands, the Netherlands Organisation for International Cooperation in Higher Education (Nuffic) helped increase the response rate by informing Dutch HEIs about the survey. Based on survey results, literature reviews and expert interviews in Canada, Germany, the Netherlands and Sweden, Ch. 6 provides a set of recommendations for the optimisation of local job entry support.

2. Higher Education Institutions as Magnets for International Talent

Since the early 2000s, the number of international students worldwide has more than doubled.⁷ Today, over 4.5 million students are attending a higher education institution (HEI) outside of their home country (OECD 2014). This growing global demand for foreign credentials and international study experiences has been a boon for the internationalisation of higher education in Canada, Germany, the Netherlands and Sweden. Furthermore, in times of ageing populations and (projected) labour shortages, the rapid surge in foreign talent enrolling at colleges, universities and other HEIs has not escaped the notice of policy makers who are increasingly turning their attention to international students as a source of skilled labour.

2.1 Strong Growth in Canada, Germany and the Netherlands – Readjustments in Sweden

Over the past 15 years, the mobility patterns of international students have changed considerably: next to traditional study destinations like Germany, the United Kingdom and the United States, former second-tier destinations like Australia and Canada have witnessed a steep growth in incoming international students. The ensuing competition for the ‘best and brightest’ has been exacerbated further by emerging receiving countries like China and Malaysia (OECD 2014). Hence, the enrolment growth witnessed in Canada, Germany, the Netherlands and Sweden is largely a function of growing student demand for study abroad and the proliferation of international study programmes (Marinson 2003: 20–33).

Canada: a leading destination with high growth ambitions

Among the four countries compared, Canada has experienced the most rapid increase in international students. Between 2008 and 2013, enrolments at Canadian HEIs almost doubled to 222,530⁸ (Fig. 1). The

recent surge was largely driven by an increased inflow from Canada’s leading source countries China and India, but also emerging senders such as Brazil and Vietnam (CBIE 2013: 11). Canada’s growing popularity can largely be attributed to its generous immigration policies which offer international students a clearly communicated pathway to permanent residence (Ch. 3) as well as higher investments in international marketing by HEIs and the Canadian government. Most notable is the branding campaign “Imagine Education in/au Canada”, which since 2008 has combined the traditionally fragmented communication approaches of the provinces and territories in order to market Canadian higher education more consistently through various channels including an official web portal and education fairs abroad.⁹ Going forward, the Canadian government seeks to increase the number of international students to 450,000 by 2022. To achieve this goal, the government’s international education strategy sets out to recruit more students from ‘priority education markets’ such as Brazil, China and the Middle East. Furthermore, the strategy explicitly aims to retain more international students as permanent residents (DFATD 2014: 10–12).

Germany: Rebounding growth and global appeal

Germany ranks right next to Canada as one of the most popular destinations for international students. In 2014, some 218,848 international students were enrolled at German universities, universities of applied sciences (*Fachhochschulen*) and other HEIs.¹⁰ For many years, higher education in Germany has proven to be an attractive option for prospective international students in many parts of the world. Apart from a sizeable share of students from the EU (30.0 %),¹¹ German HEIs also educate high numbers of students from Asia (35.4 %), Africa (9.8 %) and the Americas (8.1 %) (DZHW 2014, authors’ calculation). As opposed to this, almost half of all international students in other popular receiving countries such as Australia (47.1 %), Canada (46.4 %) and the United States (40.5 %) originate from just two countries, namely China and India (AEI 2014; CIC 2014a; IIE 2014, authors’ calculation). This type of reliance on fee-paying students from one

7 International students are those who have crossed borders for the purpose of study (Knight 2006: 19–30).

8 Data include all temporary residents who have been issued a “university” or “other post-secondary” study permit and were still living in Canada on 1 December of a given year. International students enrolled in “Secondary or less”, “Trade” or other levels of education were excluded in order to improve comparability with Dutch, German and Swedish data.

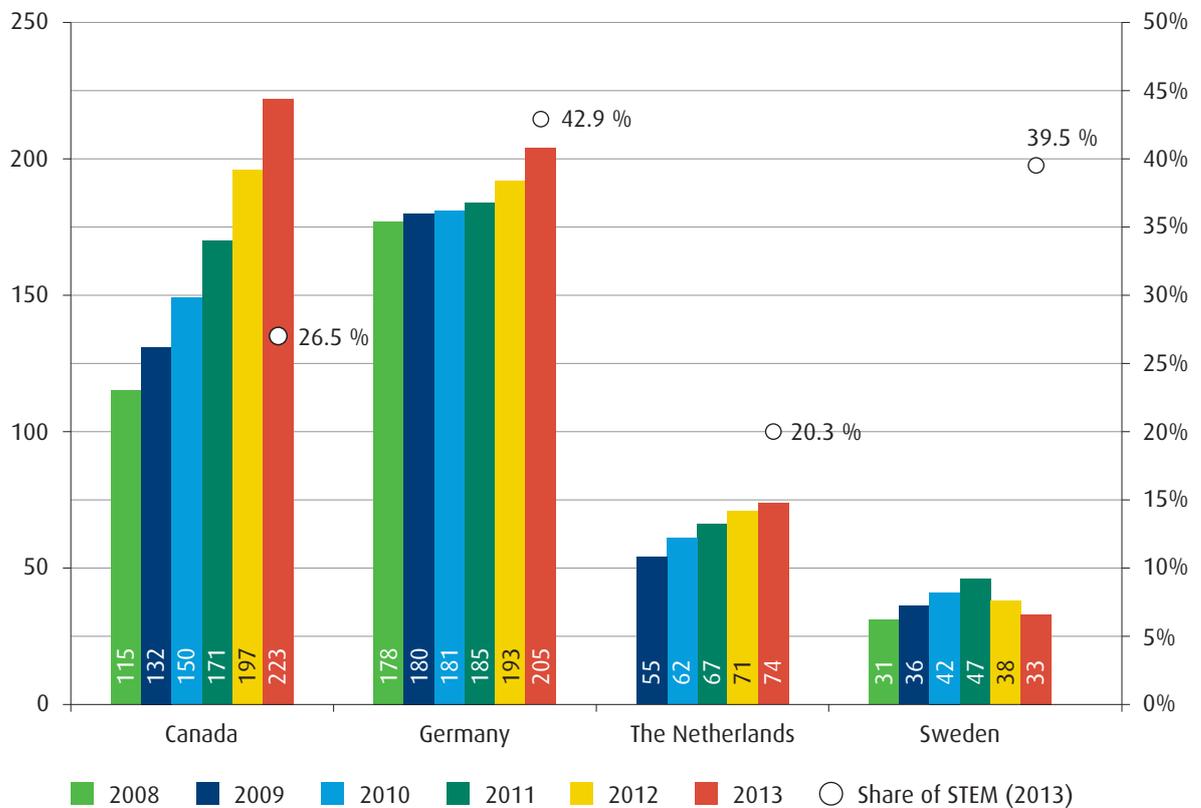
9 “Imagine Education in/au Canada” is a joint initiative of the provinces and territories, through the Council of Ministers of Education, Canada (CMEC) and the Department of Foreign Affairs, Trade and Development Canada (DFATD).

10 Data denote *Bildungsausländer*, i.e. foreign citizens who, before entering Germany for the purpose of study, had completed their secondary education at a non-German institution. German enrolment data are collected each winter term, e.g. 2014 refers to the 2013–2014 winter term.

11 Data include EU citizens, as well as students from member states of the EEA and Switzerland.



Fig. 1 Total international student enrolment in Canada, Germany, the Netherlands and Sweden 2008–2013 (thousands) and share of STEM students 2013



Note: In order to enhance data comparability, both total enrolments and the share of STEM students were calculated based on national statistics. International students in Germany denote *Bildungsausländer* who entered Germany for the purpose of study. Dutch data encompass degree-seeking students (“diploma mobility”) and a proportion of the exchange students hosted by Dutch higher education institutions, while Canadian data include all temporary residents who have been issued a “university” or “other post-secondary” study permit. For the Netherlands, no comparable enrolment data were available for the year 2008.

Sources: DZHW 2014; CIC 2014a; Statistics Canada 2014; EP-Nuffic 2015; UKÄ 2013; authors’ compilation, calculation and illustration

or two source countries may pose a strategic risk for HEIs and their study programmes, whose funding increasingly depends on a steady inflow of international students.¹² However, since international student mobility can be affected by unforeseen events such as a political conflict or a credit crisis in a key source region, sustainable internationalisation strategies should aim to diversify student intake. In this sense, Germany’s truly diverse international student body can be seen as exemplary: none of the major sending countries

accounts for more than 12.5 percent while 29 senders account for at least 1 percent of all international students (DZHW 2014, authors’ calculation).

After five years of stagnation, Germany’s international student enrolments picked up again in 2011. In 2013 and 2014, German HEIs registered yearly increases of 6.1 and 6.9 percent, the highest annual growth in ten years (DZHW 2014; Statistisches Bundesamt 2015, authors’ calculation). Seeking to build on this success, the German government has set an official enrolment

12 In extreme cases, one-dimensional student recruiting has lowered the quality of higher education courses. A lack of academic readiness and insufficient language skills are often observed in fee-paying students from large sending countries (Birrel 2006; Choudaha/Chang/Schulmann 2013: 13–15).

target of 350,000 non-German students by 2020.¹³ In addition, the federal government's demographic strategy plan (*Demografiestrategie*) and the skilled labour concept (*Fachkräftekonzept*) confirm government plans to retain more international students for the German labour market (BMAS 2011: 31–35; BMI 2012: 54–56).

Netherlands: Strong footprint in Europe

The Netherlands has enjoyed increasing popularity among international students – not least because of its large variety of study programmes taught in English. Ranking 15th among the world's leading study destinations, Dutch universities and universities of applied sciences (*hogescholen*) have experienced a 35 percent growth between 2009 and 2013, enrolling just under 75,000 international students.¹⁴ The majority of these students originate from Germany (42.8 % of all degree-seeking international students) and other EU member states that are exempt from the tuition fees for non-EU students.¹⁵ In addition, a sizeable share of fee-paying students from China (6,380), Indonesia (1,240), the United States (1,630) and other non-EU countries are enrolled in undergraduate and graduate programmes in the Netherlands (EP-Nuffic 2015). In the future, HEIs and government programmes will seek to attract and retain more international students in the Netherlands, especially in the STEM disciplines.¹⁶ To do so, a multi-stakeholder coalition of government agencies, HEIs and businesses are committed to contributing to the national programme "Make it in the Netherlands!", which promotes the Netherlands as an attractive country for both study and work (Nuffic 2013).

Sweden: Signs of recovery after enrolment drop

In the case of Sweden, the recent drop in enrolments breaks with the country's long-term growth trend

which has seen the number of international students double from 16,656 in 2003 to 33,959 in 2013 (UKÄ 2013).¹⁷ In 2011, the introduction of tuition fees for degree-seeking students from outside the EU discouraged prospective students from Pakistan, Ethiopia and other key sending countries from applying.¹⁸ This was especially noticeable in the sharp drop of newly entering international students: between the 2010 and 2011 autumn terms, the number of new degree-seeking students from outside of Switzerland, the EU and the rest of the European Economic Area (EEA)¹⁹ dropped by 80 percent to only 1,500 students (UKÄ 2014b: 42). Responding to this downward trend, a few Swedish universities and university colleges (*högskola*) tried to keep up their international student numbers by recruiting more students from within the EU since most had already reached the government-set ceiling for EU student funding and thus would be forced to fund every new EU student themselves (Ecker/Leitner/Steindl 2012: 6–7). That is why some Swedish HEIs have started to actively recruit fee-paying graduate students in North America, Asia and other regions to enrol in their highly specialised master's programmes, which are taught in English. In this way, the introduction of tuition fees has impacted the internationalisation of Swedish higher education and is likely to continue to do so for years to come. By readjusting their outreach efforts and course offerings, Swedish HEIs have helped slow down the country's downward enrolment trend: in the 2013–2014 academic year, Swedish HEIs enrolled 32,556 international students, only marginally less than one year before (33,959) (UKÄ 2014a). This is not enough for many HEIs and industry leaders as they have repeatedly urged the Swedish government to fund more scholarships to attract more non-EU students to come and stay in Sweden (Bennet et al. 2014).²⁰

13 Non-German students include all foreign citizens enrolled at German HEIs and not just the *Bildungsausländer* who specifically come to Germany for the purpose of study. In 2014, 301,350 non-German students were enrolled at German HEIs (Bundesregierung 2013: 29; Statistisches Bundesamt 2014).

14 While Canadian, German and Swedish statistics merge degree-seeking students and exchange students, the Dutch data allow for a separate analysis. Since the number of exchange students at Dutch HEIs can only be approximated through external sources, the actual number of international students in the Netherlands can be expected to be slightly higher. Dutch enrolment data are generated by academic year, e.g. 2013 refers to the academic year 2012–2013.

15 Dutch students and EU students pay 1,700 euros per year. Undergraduate students from outside the EU pay between 6,000 and 12,000 euros and graduate students between 8,000 and 20,000 euros per year (<http://www.studyinholland.nl/scholarships>, 17 March 2015).

16 Science, Technology, Engineering, Mathematics (STEM). The Dutch government has not set an official enrolment target for international students.

17 This includes both exchange students and degree-seeking students (so-called "free movers"). Swedish enrolment data are generated by academic year, e.g. 2013 refers to the academic year 2012–2013.

18 The number of incoming exchange students remained largely unchanged. Exchange students from outside the EU, EEA and Switzerland are also exempt from paying tuition fees.

19 The EEA comprises all EU member states, Iceland, Liechtenstein and Norway.

20 The Swedish government has not set an official enrolment target for international students.

Table 1 International students' intention to stay in host country after graduation 2011

	Germany	The Netherlands	Sweden
Master's students			
Stayers	79.8 %	64.0 %	75.7 %
Undecided	10.9 %	19.6 %	9.9 %
Leavers	9.3 %	16.4 %	14.4 %
PhD students			
Stayers	67.0 %	61.7 %	–
Undecided	17.7 %	18.8 %	–
Leavers	15.3 %	19.5 %	–

Note: International students from non-EU countries were asked how likely they were to remain in their host country using a five-point scale. 'Stayers' are those who deemed their stay as 'likely' or 'very likely', 'Leavers' are those who deemed their stay as 'unlikely' or 'very unlikely'. Due to the low number of PhD students in the Swedish sample, staying intentions were calculated for master's students only. Canada was not part of the survey.

Source: International survey 'Value Migration', SVR Research Unit/MPG 2012

2.2 Natural Science and Engineering Students are Especially Interested in Staying

Policy makers in Canada, Germany, the Netherlands and Sweden are increasingly regarding international students as a valuable pool of skilled labour. In the past decade, this pool has expanded considerably (Ch. 2.1), especially in high-demand fields such as science, technology, engineering and mathematics (STEM). Given the growing demand for engineers, technicians and IT professionals on the labour markets in all four countries, international students are well equipped to help mitigate talent shortages in these and other professions: in Canada, more than one in four international students (26.5 %) is enrolled in a STEM programme, compared to just 18.2 percent of Canadian students (Statistics Canada 2014, authors' calculation). Across the Atlantic, Germany's renowned STEM programmes are very popular with international students: in 2013, 42.9 percent of international students were studying for a career in biotechnology, mechanical engineering or other technical professions – a slightly bigger share than among their German counterparts (38.0 %) (Statistisches Bundesamt 2013; DZHW 2014, authors' calculation). In the same year in Sweden, the share of STEM students was also comparatively high for both international students (39.5 %) and domestic students (38.1 %) (UKÄ 2013; UKÄ 2014c, authors' calculation). Dutch HEIs on the other hand report a lower intake in the natural sciences and technical study fields: 20.3 percent of international students are enrolled in STEM subjects (Fig. 1), slightly more than

the Netherlands' overall average of 18.9 percent (EP-Nuffic 2015, authors' calculation).

An international student survey by the SVR Research Unit and the Migration Policy Group (2012: 40–41) shows that international STEM students tend to be more optimistic about their career chances than are their fellow students in other disciplines. They are also more interested in staying in their respective host country after finishing their studies. In Germany, these intentions are seconded by employers who have been increasingly active at hiring international STEM graduates. Out of those international students who stayed in Germany after graduation, 46.3 percent were pursuing a technical career (Hanganu/Heß 2014: 172).

Given the demographic decline in all four countries, international students have been repeatedly referred to as 'ideal', 'model' or 'designer' immigrants (Ch. 1). However, it should be stressed that international students are by no means a plaything of politics, but individuals who are free to decide whether they want to stay in their host country, move back to their home country or migrate to a third country. In the last few years, the majority of international students have expressed a great interest in staying on (Table 1): in Germany, 80 percent of international master's students and 67 percent of international PhD students intend to stay and work after finishing their programmes. In the Netherlands, international master's students (64 %) and PhD students (62 %) entertain similar intentions. Of all international master's students at Swedish HEIs, 76 percent would also like to extend their time in Sweden (Table 1). The trend is similar in Canada: one in two international students plans to pursue permanent

Box 2 From brain drain to brain circulation

Proponents of the classic brain drain theory argue that the emigration of the ‘best and brightest’ would slow down economic development in the sending countries (Bhagwati/Hamada 1974: 33). This one-dimensional view fails to account for the complex and partly positive effects of international migration on both sending and receiving countries.

More recent studies conclude that a significant share of highly skilled migrants end up returning to their home countries, which benefit from the returnee’s work experiences, language skills and professional networks, e.g. through foreign investments, knowledge transfer, the founding of new businesses and closer ties to businesses abroad. In a globalised world, migration can be increasingly regarded as ‘brain circulation’ – i.e. the temporary and repetitive movements between sending country and one or more receiving countries (Hunger 2003: 58). Even those who choose to stay abroad are often deeply engaged with their home country, e.g. through direct communication or various diaspora activities, which hold benefits for economic and political developments. In the same vein, receiving countries do not automatically miss out if international students choose to leave after finishing their studies. They too can benefit from stronger business ties and knowledge transfer with other countries. Furthermore, after a few years, many former international students express a willingness to return to the country of their alma mater, making the training of international students a long-term investment in workforce development (Hanganu/Heß 2014: 239; SVR Research Unit/BiB/UDE 2015: 14–15).

residence in Canada.²¹ Given the worldwide increase in cross-border mobility, the positive economic and social impact of these stayers is not only felt by the host countries, but they may also fuel economic development in students’ home countries (Box 2).

In order to retain more international students for their domestic labour markets, Canada, Germany, the Netherlands and Sweden have adjusted their legal frameworks by introducing new or reforming existing post-study work schemes, allowing international students to stay on after graduating. The next chapter will compare the legal post-study work and residency options in all four countries.

3. The Legal Framework for International Students Seeking to Stay and Work in Canada, Germany, the Netherlands and Sweden

Most international students choose to go abroad in order to improve their career prospects. Besides earning a degree from a prestigious foreign institution,

many students hope to gain work experience in their host country. To them, countries with flexible and generous rules and regulations for off-campus work and post-study stays are particularly attractive (Ripmeester/Pollock 2013; SER 2013: 16; Alboim/Cohl 2012). Consequently, the introduction of post-study work and residency schemes in Canada, Germany, the Netherlands and Sweden reflect policy makers’ growing interest in retaining more international students as skilled workers. At the same time, the current schemes display notable differences in terms of their maximum duration, access to the labour market and pathways to permanent residence. For EU citizens who pursue a degree at a Dutch, German or Swedish higher education institution²² these rules (Table 2) are of little interest as these students require no visa to live and work in their host country and basically enjoy the same rights as nationals. Therefore, in the case of Germany, the Netherlands and Sweden, the following comparison will focus on non-EU citizens.

Canada: Multiple paths to permanent residence
Canada’s Post-Graduation Work Permit Program (PGWPP) has long been regarded as a forerunner

21 71 percent of students from Sub-Saharan Africa intend to stay while students from Europe (32 %) and the United States (22 %) are less likely to remain in Canada (CBIE 2014: 36).

22 The right to free movement within the EU is also granted to citizens of the member states of the EEA and Switzerland. In 2013, 30.0 percent of international students at German HEIs originated from a member state of the EU, the EEA or Switzerland. In Sweden, the share amounted to 51.1 percent. In the Netherlands, EU/EEA/Swiss students made up more than two-thirds of all international students (DZHW 2014; UKÄ 2013; EP-Nuffic 2015, authors’ calculations).



Table 2 Key characteristics of the legal frameworks governing the study-to-work transition of international students

	Canada	Germany	The Netherlands	Sweden
post-study scheme	Post-Graduation Work Permit Program (PGWPP)	Section 16 subs. 4 Residence Act	Orientation Year (<i>Zoekjaar afgestudeerde</i>)	Residence Permit to Seek Employment After Studies
maximum length of scheme	36 months (depending on length of study programme)	18 months	12 months	6 months
target groups	all international graduates of Canadian higher education institutions	all international graduates of German higher education institutions	all international graduates of Dutch higher education institutions	all international students who have studied at least two terms at a Swedish higher education institution
eligibility period	within 90 days of completing the study programme	at least 4 weeks before student permit expires	within 4 weeks of graduation, PhD students may apply up to three years later	before student permit expires
permitted working hours	full-time employment	full-time employment	full-time employment	full-time employment
special privileges for international students	field of employment does not have to match area of study, priority access to permanent residence	fast track to permanent residence (after two years of skilled labour/self-employment)	lower wage requirements for work permit	PhD students: years in Swedish higher education are counted when applying for permanent residence

Note: The Dutch, German and Swedish regulations only apply to students who are not citizens of the EU, the EEA or Switzerland.

Source: Authors' compilation

among post-study schemes. Designed to help international graduates²³ gain skilled Canadian work experience, the PGWPP feeds directly into Canada's permanent residence streams. After its 2005 reform, the PGWPP allowed international graduates to stay and work in Canada for up to two years. In 2008, the maximum stay period was further extended to three years (CIC 2005; 2008). A work permit under the PGWPP is issued for the length of an international student's study programme at a public HEI.²⁴ Students who graduate

from an eight-month certificate programme are eligible for a work permit of up to eight months. Students graduating from programmes lasting two years or more are generally issued a three-year work permit. Participants in the PGWPP do not face any restrictions in terms of hours, pay or field of employment and their employers are exempt from passing a Labor Market Impact Assessment (LMIA) which requires proof that no Canadian worker was found to fill the position. By lifting these and other bureaucratic hurdles, Canadian

²³ International graduates are former international students who successfully finished their study programme in the host country.

²⁴ International students at private institutions may also be eligible if their HEI offers state-accredited programmes and operates under the same rules and regulations as public institutions.

employers are encouraged to hire international graduates and thereby help them gain the skilled work experience needed to apply for permanent residence through the Canadian Experience Class (CEC) immigration stream: an international graduate can be granted permanent residence through the CEC once he or she has secured an offer for continued employment after a minimum 12 months of skilled full-time work and has met the language requirements in English or French.²⁵ The PGWPP gives international graduates a generous time window of up to three years to meet the requirements of the CEC. Alternatively, PGWPP participants may apply for permanent residence through select immigration streams operated by individual provinces, many of which do not require a job offer.²⁶ Low-populated provinces and provinces with high out-migration have been increasingly active in encouraging their international students to stay and settle, e.g. by lowering the work requirements set forth by federal immigration streams. Other incentives include tax breaks such as those offered in Manitoba and one-off payments for international graduates who choose to stay in Newfoundland and Labrador.²⁷ Furthermore, some provinces have introduced wage subsidies in order to enable employers to offer more internships and full-time positions to international students and graduates (Nova Scotia Department of Energy 2015; Emploi Québec 2015).

Germany: Liberal regulations often unknown

Since 2005, international students in Germany are permitted to stay beyond the end of their study programme. Germany's so far unnamed post-study scheme (officially referred to as Section 16 subs. 4 Residence Act) initially allowed international graduates to stay and look for skilled employment for up to 12 months. In 2012, this search period was extended to 18 months. During their search for an adequate position, international graduates enjoy the same rights as their

German counterparts as they are permitted to work in any job – skilled or unskilled – without prior approval from immigration or labour market authorities. Once an international graduate finds a skilled position and an employer who is willing to sponsor his or her work visa, the employer is exempt from proving that the position could not be filled with a domestic candidate.²⁸

Germany's job search period is not only designed to ease international graduates' transition to the German labour market, but also to pave the way to a long-term stay. After completing two years of skilled work, international graduates are fast-tracked to permanent residence – well before the five-year requirement set forth by EU Directives.²⁹ The two-year rule also applies to international graduates who secure a work visa, but no EU Blue Card due to insufficient gross income (i.e. below 48,400 euros per year or 37,752 euros for occupations in demand).³⁰ Even self-employed graduates can benefit from Germany's fast track rule.

On closer inspection, it does not come as a surprise that Germany's labour migration policies are already considered to rank among the most liberal in the OECD (OECD 2013: 15). At the same time, international students and employers frequently report being uninformed about their legal options, which may have to do with Germany's still hesitant approach to promoting itself as a country of immigration (SVR 2014: 15).

The Netherlands: No money, no visa

Since 2007, international students in the Netherlands enjoy privileged access to the Dutch labour market. Once graduated from a Dutch HEI, they are eligible for an Orientation Year (*Zoekjaar afgestudeerde*) during which they can stay and look for skilled employment. Unlike in Canada and Germany, the Dutch authorities primarily distinguish skilled from unskilled labour by looking at graduates' gross income. International graduates who earn more than 2,201 euros per month (i.e. gross income) can obtain a work visa under the

25 Thirty hours per week are considered full-time work. Part-time work and periods of unemployment are permitted if the graduate completes a minimum of 1,560 hours of skilled work during the PGWPP. According to the Canadian National Occupational Classification, skilled work experience can be gained in managerial jobs, professional jobs, technical jobs and skilled trades. To prove sufficient language skills, graduates must pass a language test approved by CIC (CIC 2015).

26 In Canada, certain provinces or territories can nominate international graduates to become permanent residents. Each province and territory has its own nomination guidelines.

27 International graduates who stay, work and pay income taxes in Manitoba can receive a 60 percent tax rebate on the tuition fees they paid while studying in Canada (up to 25,000 Canadian dollars). For example, an international graduate who paid a total of 40,000 Canadian dollars in tuition fees can later apply for 60 percent income tax rebate (i.e. 24,000 Canadian dollars). In Newfoundland and Labrador, all international graduates who after securing permanent residency have lived in the province for at least one year can apply for a one-off payment of between 1,000 and 2,500 Canadian dollars (Government of Newfoundland and Labrador 2010; Province of Manitoba 2015).

28 This includes German citizens as well as EU/EEA/Swiss citizens residing in Germany.

29 To be eligible, international graduates need to work in a skilled position (i.e. commensurate with his or her degree) and have paid compulsory or voluntary contributions into the statutory pension scheme for at least 24 months (Section 18b Residence Act).

30 Blue Card holders enjoy a minor advantage in that they are eligible for permanent residence after 21 months, providing that they possess basic German language skills (Section 19a Residence Act).



highly skilled migrant scheme (*Kennismigrantenregeling*). All other labour migrants who seek to enter or remain in the Netherlands are required to earn a minimum of 3,071 euros per month if under the age of 30. For those aged 30 or older, a higher minimum of 4,189 euros applies (IND 2015a).

During the Orientation Year, international graduates are free to work in any job without prior approval from the authorities. The Orientation Year ends precisely 12 months after graduation so the Dutch Immigration and Naturalisation Service (IND) recommends that graduates hand in their paperwork within four weeks of obtaining their bachelor's or master's degrees. International PhD students can commence their Orientation Year up to three years after finishing their studies at a Dutch HEI.³¹

Unlike in Canada and Germany, international graduates in the Netherlands do not enjoy preferred access to permanent residence. Just like other immigrants, international graduates can apply for permanent residence once they can prove five years of lawful residence along with sufficient Dutch language skills and knowledge about Dutch culture. Half of the years as a student in the Netherlands are counted against the five-year residence requirement (IND 2015a). In addition, Dutch employers face monetary hardships: in order to retain international graduates beyond their Orientation Year, businesses are obliged to pay a one-off fee of 5,116 euros to IND. On top of that, employers need to pay 870 euros for every international graduate whose work visa they seek to sponsor (IND 2015b).

Sweden: A restrictive newcomer

In 2014, Sweden introduced a post-study residence permit for international students who are willing to stay and look for a job. When compared to their counterparts in Canada, Germany and the Netherlands, international students in Sweden face both advantages and disadvantages. On the one hand, they do not have to obtain a Swedish degree in order to be eligible for the post-study scheme (Table 2). On the other hand, they are subject to a comparatively short job search period of up to 6 months. In the same vein, once they have secured employment, former students do not face the same income thresholds or labour market assessments as in Canada and the Netherlands, but merely a standard authorisation process by the Swedish

migration agency (*Migrationsverket*)³². However, unlike in Canada, Germany and the Netherlands, work permits in Sweden are usually issued for two years at a time and during the first two years, former international students cannot change employers or occupations without prior approval from *Migrationsverket*. After four years of employment, international graduates can be granted permanent residence. Their time as students in Sweden is only counted for PhD holders since most of them are employed by their HEI.

The most generous post-study options are found in Germany

In recent years, lawmakers in all four countries have taken unprecedented steps in liberalising their labour migration policies for international graduates. However, country-specific visa restrictions apply as no place is currently issuing a 'blank cheque' to those who are willing to stay. The international comparison shows that Germany's post-study scheme can be considered as one of the most graduate-friendly regulations in the world (SVR 2015: 42). Even Canada's much-hailed immigration pathways have entry requirements which are more demanding than Germany's current regulations.³³

4. Legal Changes are Not Enough: Even 'Model Immigrants' Need Job Entry Support

The legislative activities in Canada, Germany, the Netherlands and Sweden reflect a general trend towards retaining more international students for the domestic workforce (Ch. 3). This raises the question of how many international students end up staying after finishing their studies (Ch. 4.1) and whether recent legal changes have successfully removed all entry barriers to the labour markets of the host countries (Ch. 4.2).

4.1 Who stays? Who Goes? Stay Rates Provide Inconclusive Evidence

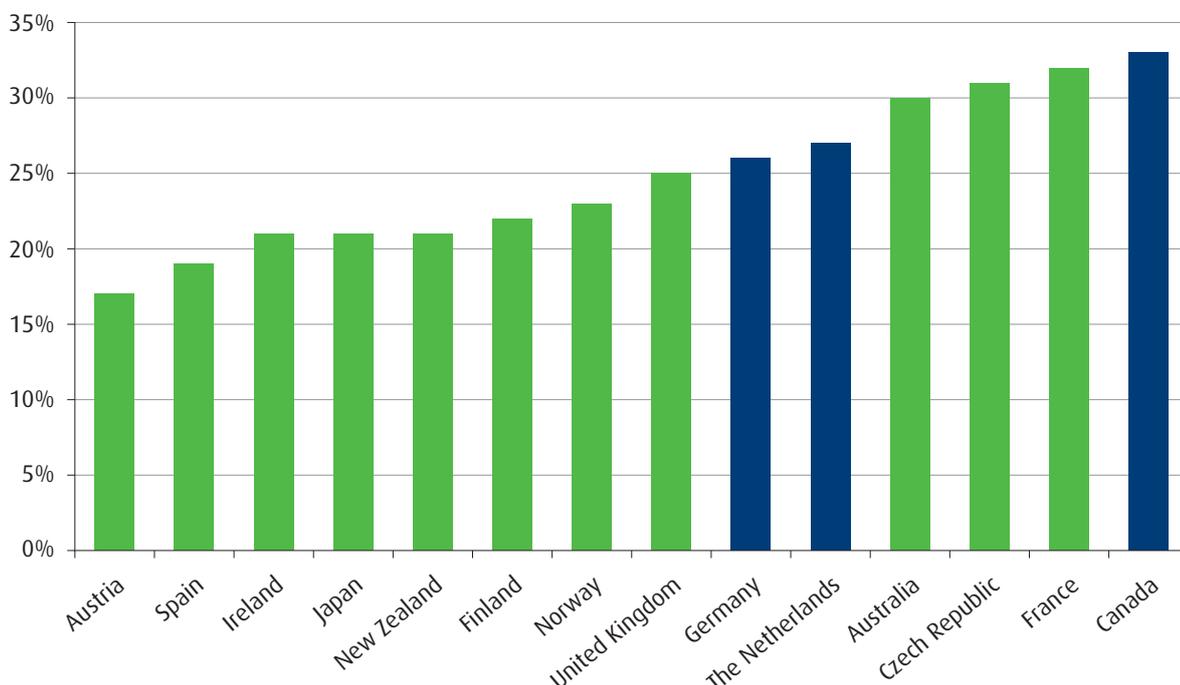
In traditional countries of immigration such as Australia, New Zealand and the United States, international students have long been regarded as a remedy for skilled labour shortages. Yet, until recently, very few

31 The same applies to international graduates from selected master's programmes listed in a database of the Dutch Ministry of Education (IND 2015a).

32 The authorisation process allows unions to check whether contractual details, especially pay and work conditions, are in line with the country's minimum standards. Gross salaries must not be under 13,000 SEK/1,408 euros per month (SVR 2015: 39), which is rather low when compared to the Netherlands.

33 The comparison refers to Canada's federal regulations. Canada's Provincial Nominee Programs continue to allow a comparatively direct access to permanent residence.

Fig. 2 Percentage of international students changing status and staying on in selected OECD countries (stay rate) 2008 or 2009



Note: For European countries, only students from outside Switzerland, the EU and the rest of the EEA were included.

Source: OECD 2011: 67, authors' illustration

studies have attempted to calculate how many international students actually end up staying in their host countries (Finn 1998; Merwood 2007). Given these knowledge gaps, the OECD's 2011 calculation of the stay rates of international students in 14 host countries (Fig. 2) gave rise to a lively debate among policy makers and academics in Canada, Germany, the Netherlands and Sweden. While policy makers and business interest groups criticise the out-migration of international students (SVR Research Unit/BiB/UDE 2015: 6–14), academics have been weighing in on the methodological strengths and shortcomings of the OECD rates (Burkhart/Bruder/Wiktorin 2014: 4–5).

Due to the significant variation of how countries define international students as well as what it means to 'stay on', the OECD was unable to establish an internationally accepted indicator for international student stay rates. By way of a substitute, the OECD defined the stay rate as the proportion of student permit holders changing to a status other than 'student' during the years 2008 or 2009 to the amount of international students not renewing their student permits in the same year. As such, it represents the share of students staying on for any reason, not necessarily those who enter the labour market or stay on a longer-term basis. According to the OECD, Canada is most successful at

retaining its international students (33.0%), Germany and the Netherlands rank in mid-table (26.3% and 27.3%), while Sweden was not included in the study (Fig. 2).

In response to the OECD's country comparison, a rising number of national studies have attempted to pinpoint stay rates for individual countries and regions. However, due to methodological differences and varying national data sources even the stay rates for a single country can differ from one study to another (Box 2). In Germany, the rates range between 23 and 56 percent (Stifterverband/McKinsey 2013: 74; Alichniewicz/Geis 2013: 1; Hanganu/Heß 2014: 49; Hanganu 2015: 3). In Sweden, the only existing model concludes that 17 percent of international students decide to stay (BCG 2013: 59), which is fairly low compared to the Netherlands, where 27 to 43 percent of international students remain for a few years or more (CPB 2012: 23; Nuffic 2013: 12). In Canada, retention rates hover between 5 and 33 percent (van Huystee 2011: 9; OECD 2013: 151), with significant regional differences. The Atlantic provinces of Newfoundland and Labrador, Prince Edward Island, New Brunswick and Nova Scotia experience particular difficulties integrating international students into their labour markets (Chira/Belkhodja 2013).



Box 3 The roots of diverging stay rates of international students in Germany

So far, most of the stay rates of international students in Germany have been calculated based on data from the Central Register of Foreigners (*Ausländerzentralregister*, AZR), Germany's official source of immigration statistics (Mayer et al. 2012; Hanganu/Heß 2014; Hanganu 2015). With these data, students from non-European countries can be identified based on their student permits. On the downside, AZR data are not suitable for determining the stay rates of students originating from members states of the EU, the EEA and Switzerland or of exchange students who stay in Germany for less than six months, since none of these are systematically registered in the database. Although European citizens can be easily identified with Germany's annual microcensus, their (former) student status can only be approximated by the year in which they migrated to Germany and the year in which they obtained their highest educational credential (Alichniewicz/Geis 2013). In addition, stay rates can be calculated using the longitudinal graduate surveys conducted by the German Centre for Research on Higher Education and Science Studies (DZHW) and the Graduate Survey Cooperation Project (KOAB) (Fabian 2014; Schomburg/Kooij 2014).

Germany's diverging stay rates are not only a result of different data sources, but also different observation periods: the OECD (2011) and Mayer et al. (2012) count international students who change their visa statuses within a two-year time window; Alichniewicz and Geis' (2013) microcensus analysis examines the whereabouts of former international students who graduated between 2001 and 2010; while Hanganu and Heß (2014) calculate the stay rates for all temporary residents who held a student permit between 2005 and 2012. The comparison of these and other studies is further complicated by the 2011 and 2014 introductions of mobility rights for tens of thousands of international students from Eastern Europe who have since been able to settle in Germany without a study permit.

So far, all international comparisons are subject to significant methodological limitations. In order to substantiate the research on stay rates in Canada, Germany, the Netherlands and Sweden, further comparative studies are needed, which take into account country-specific contexts (e.g. freedom of movement within the EU) while still applying a robust methodology in order to safeguard validity and comparability of the results (SVR 2015: 49–51).

Most international students who plan to stay in their host country do so because of professional opportunities (Hanganu/Heß 2014: 223; CBIE 2014: 36). After graduating, many of these 'stayers' choose to take advantage of their host countries' post-study schemes (Ch. 3), only to realise that their extended stay does not necessarily lead to skilled employment. The job search experiences of stayers in Germany are a case in point. More than one year after obtaining their German degree, 30 percent of all remaining international members of the graduating classes of 2011 and 2012 were still searching for employment in Germany

(Fig. 3); 11.6 percent of them were unemployed, 9.4 percent worked part-time and 9.0 percent were looking for a new job while working full-time. If the latter group is excluded, close to one-quarter of all stayers were without a job or full-time position for more than one year after leaving higher education.³⁴ In contrast, when assessing the long-term labour market success of former international students in Germany, the country's graduate surveys show comparable achievements for Germans and non-Germans (Fabian 2014; Schomburg/Kooij 2014).³⁵ Therefore, international students appear to face the biggest obstacles during the initial entry to their host countries' labour markets (Ch. 4.2).

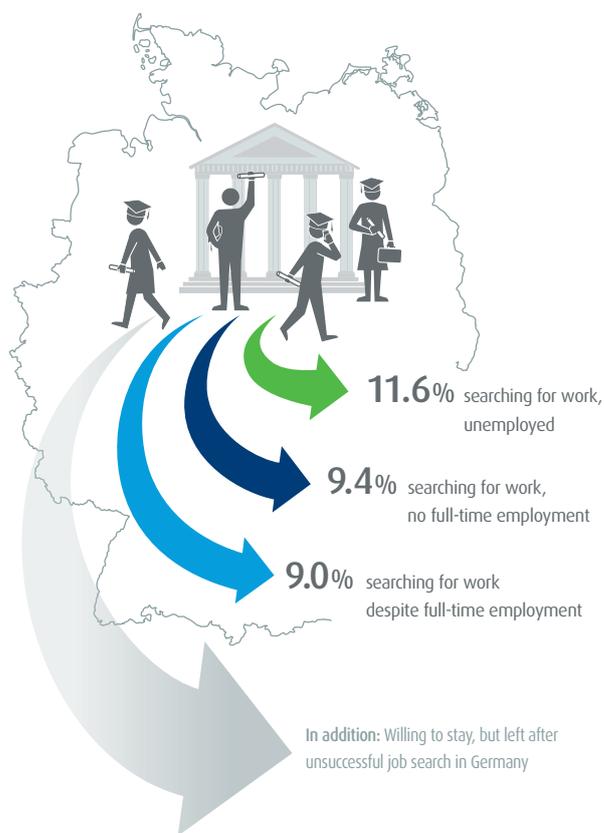
4.2 International Students: Seven Major Obstacles to Finding Employment

Student surveys in Canada, Germany, the Netherlands and Sweden have shown that the majority of international students would like to stay on and work in

34 The actual number of unsuccessful job seekers is expected to be significantly higher since many international graduates had already left Germany by the time the survey was conducted (between January and April 2013) (Hanganu/Heß 2014: 132–140, authors' calculation).

35 At the same time, attainment differs notably by country of origin. In Germany, only one in two African graduates has full-time employment (Hanganu/Heß 2014: 130).

Fig. 3 Former international students who stayed in Germany but are still searching for work more than one year after graduation



Note: Data comprise non-EU/EEA/Swiss citizens who graduated from German higher education institutions between January 2011 and April 2012, and were still living in Germany in early 2013.

Source: SVR Research Unit/Deniz Keskin, reanalysis of survey data from the German Federal Office for Migration and Refugees' Graduates Study (Hanganu/Heß 2014)

their host country after finishing their studies (Ch. 2.2). However, in the same breath, many students report having trouble when trying to overcome a vast array of obstacles to finding skilled employment (Arthur/Flynn 2011; SER 2013; Arajärvi/Drubig 2014; SVR Research Unit/MPG 2012). Field research shows that these stayers are facing similar hurdles in all four host countries – a finding which was also confirmed by the counselling experiences of higher education staff members, which were documented as part of the SVR Research Unit's international survey (Ch. 5).³⁶ International students who are willing to stay and find employment face seven major obstacles:

- (1) **Insufficient language skills:** For international students, a proficient command of the language spoken in their host country is the strongest predictor of labour market success (Hawthorne 2010: 41). The counselling experiences in all four countries confirm that a lack of language proficiency is the biggest obstacle to finding skilled employment. In Germany, the Netherlands and Sweden, more than two-thirds of higher education staff members name language skills as the single biggest barrier for international students. The same is true for Canada, albeit at a lower rate. Only one in three Canadian respondents identifies insufficient

36 In the international Train and Retain survey, leading staff members of the career services and international offices at Canadian, Dutch, German and Swedish HEIs were asked about the biggest obstacles for international students who seek employment in the local labour market. The open-ended question asked respondents to provide a free-text answer (for more information on survey design and methodology see Ch. 5.1).



language skills as a major hurdle.³⁷ The growing number of study programmes at Dutch, German and Swedish HEIs taught primarily or solely in English further impede students' learning of the host country's language. In Germany, 28 percent of international students do not attend a single lecture or seminar which is taught in German. Another 24 percent takes only a few courses which require German language skills. Therefore, it is not surprising that only half of all international students in Germany rate their German language skills as "good" (Esser/Gillessen 2014: 82–83). For those who would like to stay in Germany, but also Canada, Sweden or the Netherlands, this lack of language proficiency disqualifies them from many employment opportunities since most employers – and especially small and medium-sized businesses – expect their employees to be able to communicate in the language of the host country (Arajärvi/Drubig 2014: 8).

- (2) **Lack of host country work experience:** Many international students are poorly informed about the employment opportunities and the workplace culture in their host country as well as the area in which their HEI is located. According to the counselling experiences recorded by the international survey (Ch. 5), this lack of knowledge and first-hand experience represents the second-biggest hurdle for international students who intend to stay. That is why many Canadian colleges and universities are fostering the labour market integration of international students both on and off campus by providing opportunities for students to gain 'Canadian experience' early on, e.g. through on-campus work, internships, co-ops or volunteering in the community (Klabunde 2014: 295; Nunes/Arthur 2013: 38). International students who do not interact with employers early on often find themselves at a large disadvantage when searching for employment towards the end of their studies. Apart from a lack of professional networks, many inexperienced students do not know which job search strategies to employ or what kind of language skills are expected by employers (Arthur/Flynn 2011: 234; Kratz/Reimer 2013: 1–5).
- (3) **Hesitant employers (esp. small businesses):** In spite of employers' expressed interest in the internationalisation of their workforce, many companies continue to hesitate when it comes to hiring international students. According to higher education staff in Germany, the Netherlands and Sweden, this is especially true for small businesses which are often unaware of the international talent pool that is available in their immediate surroundings. And even if they are, many employers are uninformed about rules and regulations and perceive the cost and administrative efforts involved in hiring and integrating an international student as being too high (Arajärvi/Drubig 2014: 8; Hanganu/Heß 2014: 150; SER 2013: 45). As a result, international students find themselves at a disadvantage vis-à-vis their native counterparts. Apart from being perceived as an administrative burden, international students are sometimes regarded as high-risk employees who because of their international mobility may leave the company at short notice. Some employers even suspect that international students could pass on classified information, which may hurt their business (Dömling 2013: 6; Arajärvi/Drubig 2014).
- (4) **Lack of personal and professional networks in host country:** Many international students have strong networks in their home countries, but these contacts are of little help when searching for a job in Canada, Germany, Sweden or the Netherlands. Consequently, in their first semesters abroad, international students not only have to acclimatise to their study programme and life in a foreign country, they also have to build a personal and professional network. Connecting with local students can help these newcomers improve their host country language skills as well as build friendships, which are beneficial for settling in and staying on, e.g. international students with strong networks can tap into more resources during their job search. This type of support is particularly valuable for international students who are often not familiar with employment opportunities and workplace cultures in their host country. Nevertheless, many international students experience difficulties making close connections with their fellow students (Scott et al. 2015; Arthur/Flynn 2011: 228). For some, the pressure to 'fit in' can increase stress which may hamper academic success and career aspirations (Reynolds/Constantine 2007).
- (5) **Lack of job entry support and service accessibility:** Only a handful of HEIs understand work experience to be an integral part of study abroad

37 These differences could be explained by the global dissemination of English and French as well as the fact that many international students in Germany, Sweden and the Netherlands choose to enrol in programmes which are taught solely in English.

(Ch. 5.2). Therefore, it does not come as a surprise that a high number of international students are not satisfied with their institutions' career support. Many are confused because only a few HEIs offer one-stop shop career support. Instead, international students often have to navigate a complex web of job application training courses, counselling sessions and placement services offered by different institutional units, student initiatives and employment agencies (Peters 2014). As a result, many services are accessed too late or not at all,³⁸ which is particularly detrimental to newly arrived international students who could benefit from early support (Dömpling 2014: 9; Arthur/Flynn 2011: 224–225).

(6) **Legal barriers:** Despite the introduction and reform of post-study schemes in all four countries, legal barriers remain. Swedish higher education staff report that the six-month job search permit is too short for most international graduates to find a job. Dutch respondents criticise the administrative and financial obstacles for international students and employers who are willing to hire.³⁹ Since 2015, international students in Canada can only apply for permanent residence if they secure continued employment (Ch. 3).⁴⁰ And in Germany, a lack of transparency and inconsistent decision making by immigration offices (*Ausländerbehörden*) have caused uncertainties among students and employers (Hanganu/Heß 2014; Arajärvi/Drubig 2014: 16). The widespread lack of knowledge about existing rules and procedures remains an issue in all four countries. In Germany, only 14 percent of international students receive counselling on immigration laws, while in Canada, HEI personnel are no longer allowed to advise on immigration matters without prior certification from the Immigration Consultants of Canada Regulatory Council (ICCRC) (Apolinarski/Poskowsky 2013: 51; CIC 2013).

(7) **Dropping out as a general obstacle:** Participation in the Canadian, Dutch, German or Swedish post-study schemes is only open to international

students who have successfully completed their study programmes. Students who drop out early are obliged to maintain a lawful status through other immigration channels. For them, finding skilled employment without a degree from a Canadian, Dutch, German or Swedish HEI represents an ever bigger challenge. In Germany, despite significant improvements, 41 percent of international undergraduate students drop out of their programmes. For students from Latin America (59 %) and Western Europe (55 %) rates are substantially higher (Heublein et al. 2014: 10–11). The reasons for these drop-outs are manifold and require a separate assessment, which is beyond the scope of this study.

The growing body of research on study-to-work transitions in Canada, Germany, the Netherlands and Sweden has unveiled the aforementioned entry barriers for international students. To overcome these obstacles, international students need more support prior to and during their transition to the labour market.⁴¹ Yet, facilitating the labour market entry of international students is not the sole responsibility of HEIs, but also businesses, employment agencies, politicians and other local actors. To determine the extent to which this is already happening, the SVR Research Unit has surveyed leading personnel at higher education institutions in the four countries. The results of this survey are presented in the following chapter.

5. How do Canada, Germany, the Netherlands and Sweden Facilitate the Labour Market Entry of International Students? The Findings from the International Survey

Between 50 and 80 percent of international students plan to stay and work in Canada, Germany, the Netherlands and Sweden. The fulfilment of such aspirations is largely decided at the local level where – at least in theory – higher education institutions (HEIs), local

38 This is especially true for degree-seeking international students at European HEIs who generally receive less support than European exchange students who are eligible for additional services which are funded by the EU (Esser/Gillessen 2014: 101).

39 In the Netherlands, international students can only serve an internship if they switch to private health insurance with higher fees and additional red tape (e.g. documents are only available in Dutch). Furthermore, employers have to pay a fee if they want to hire international students (Ch. 3).

40 Depending on the province or territory, international students may also choose to apply for provincial nomination for permanent residence (Ch. 3).

41 So far, very few studies have investigated the effects of career counselling and other support services on the labour market entry of (international) students. Notwithstanding, the findings from longitudinal graduate studies indicate that work experiences and early contact with employers are beneficial for the transition from study to work (Kratz/Reimer 2013: 1–5).



businesses, public service providers and other local actors help facilitate the job entry of international students. In order to learn more about local support structures in the four countries, the SVR Research Unit has surveyed leading personnel at universities, universities of applied sciences and other HEIs.

5.1 About the Survey⁴²

In order to compare the Canadian, Dutch, German and Swedish support landscapes for international students, the SVR Research Unit has surveyed leading personnel at public higher education institutions (HEIs) in the four countries. The international survey was conducted between September and December 2014 and covered the great majority of HEIs. Only public HEIs whose share of international students is close to zero were not invited to participate. The population of the survey encompasses 218 public HEIs in Germany, 116 in Canada, 45 in the Netherlands and 38 in Sweden.⁴³ Survey invitations were sent to the leadership of career services (CS)⁴⁴ and international offices (IO),⁴⁵ given their expert knowledge about the study-to-work transition of international students (von Luckwald 2010: 50; Helemann 2010: 51–56; Koch 2012: 3–6). This assumption could be confirmed a priori through expert interviews in Canada, Germany, the Netherlands and Sweden.

The international survey was administered online. IO and CS in all four countries received the same questionnaire with 27 closed-ended and three open-ended questions. The questionnaire was available in three languages: English, French and German.⁴⁶ In order to pre-test the questionnaire, a quantitative pilot study was successfully conducted in the summer of 2014.

The international survey was jointly administered by the SVR Research Unit and five partner organisations. In Canada, survey invitations were sent out by the Canadian Bureau for International Education (CBIE); German international offices were contacted by the German Academic Exchange Service (DAAD) while German career services were approached by the *Career Service Netzwerk Deutschland* (CSND); in Sweden, both IO and CS were invited by the Swedish Council for Higher Education (UHR); and in the Netherlands, the Netherlands Organisation for International Cooperation in Higher Education (Nuffic) helped increase the response rate by informing Dutch HEIs about the survey. Survey invitations and reminders were sent by email. The response rates hover between 53 and 79 percent and reflect HEIs' growing interest in the employment situation of their international students (Fig. 4).⁴⁷

The survey results are valid and representative of the population under study. Furthermore, the validity of results is reinforced by the seniority of survey respondents. In all four countries, more than 80 percent of survey participants served in a leading capacity in their HEI, and more than half had worked for five years or more in the CS or the IO.

5.2 Job Entry Support for International Students

In order to find host country employment, international students need their higher education institutions (Ch. 5.2.1) as well as local businesses, public service providers and other local actors (Ch. 5.2.2) to facilitate the often challenging transitions from study to work.

42 A detailed discussion of the survey methodology, the population and the sample is available in German at <http://www.svr-migration.de>.

43 In Canada and Germany, institutional membership in the German Academic Exchange Service (DAAD) and the Canadian Bureau for International Education (CBIE) were applied as further selection criteria.

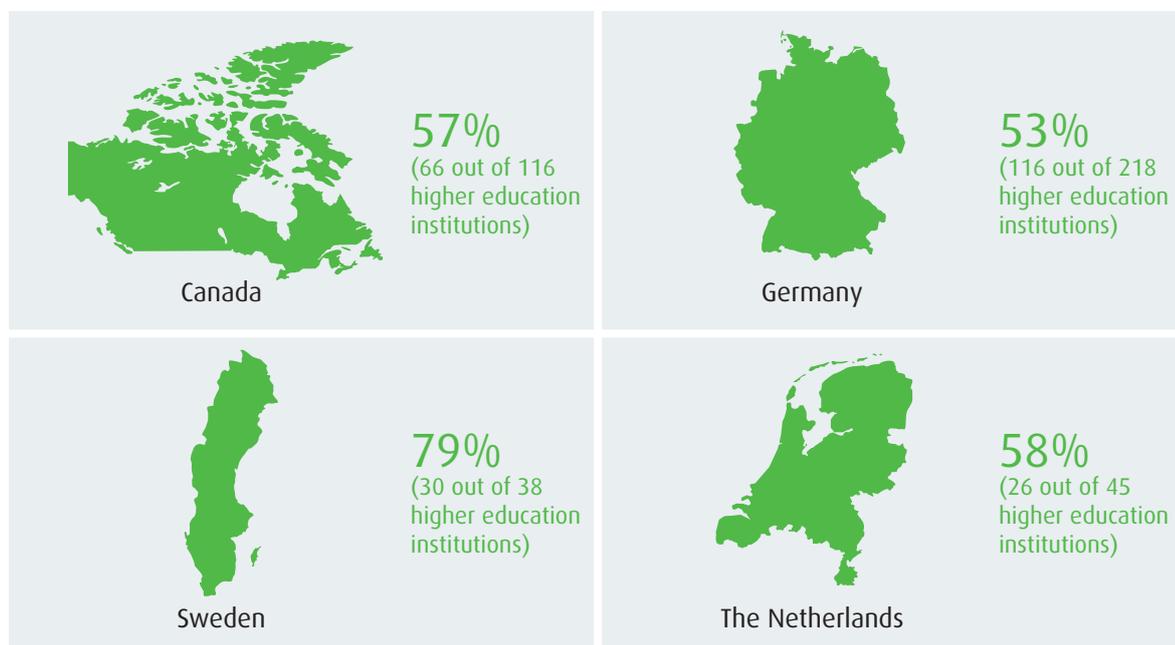
44 In this study, the term 'career services' (CS) is used synonymously with 'career centre', 'career office' and other organisational units in higher education institutions whose main job is to provide support services for the transition of students to the labour market. Key tasks performed by CS include providing individual career counselling, conducting workshops on how to apply for a job, arranging internship placements, liaising with employers, as well as planning and implementing career fairs (CSND 2015; von Luckwald 2010).

45 In this study, the term 'international office' (IO) is used synonymously with 'study abroad office', 'office of international services' and other organisational units in higher education institutions whose main job is to foster the cross-border mobility of students and faculty. Key tasks performed by IO include the counselling of students and researchers (both domestic and international), international marketing and recruitment, as well as the administration of international academic partnerships (Helemann 2010: 141–143).

46 International surveys generally run the risk of generating skewed results due to cultural bias, e.g. North Americans tend to choose more extreme answers (e.g. "fully agree") than respondents from East Asia (Harzing 2006: 244). However, since the SVR Research Unit's international survey does not capture personal views but rather mere facts about the institution and its surroundings, the risk of cultural bias can be considered minimal (Matsumoto/van de Vijver 2011).

47 Similarly, the three open-ended questions yielded a high response rate of 94 percent in Canada and Germany respectively, 88 percent in the Netherlands, and 85 percent in Sweden.

Fig. 4 Survey response rate: share of participating public higher education institutions in Canada, Germany, the Netherlands and Sweden



Source: International survey 'Train and Retain' 2015

5.2.1 Support by Higher Education Institutions

When it comes to successful (labour market) integration, many international students look to their HEI for support. This is the place where they start to adapt to life in a foreign country and the people around them. For many, the personal connections and learning experiences gained during their student years are paramount in their decision to stay on (Hanganu/Heß 2014: 245). Consequently, HEIs serve as important facilitators in international students' decisions on where to start their careers. While both international students and domestic students can benefit from institutional career support, the following analysis will place primary emphasis on international students.

Early career support strongest in Canada and the Netherlands

Only a handful of international students know the ins and outs of job application processes in their host countries or the career opportunities provided by smaller and less well-known companies (Ch. 4.2). Given these and other knowledge gaps, HEIs should raise awareness among their newly arrived international students by offering workshops, career counselling and networking events during the first semesters. At Canadian and Dutch HEIs, between 70 and 80 percent of career services (CS) offer regular career support to their newcomers.⁴⁸ In Germany and Sweden, only about one in every two CS provides these services at an early stage.⁴⁹

48 These support services target both international students and domestic students at the beginning of their studies. CS whose early-stage support services are available at least once per academic year were considered to be providing 'regular support'.

49 New international students can seek help not only from their institution's CS, but also from other service units such as the international office (IO): around 60 percent of Canadian and 30 percent of German IO offer information sessions on the domestic labour market, workshops on how to apply for a job and other career support services. This is rarely the case at Dutch and Swedish HEIs where early-stage IO support is primarily concerned with university-related problems.



Table 3 Share of career services and international offices which do not have direct access to the contact information of international students

	Career Service	International Office
Canada	50 %	7 %
Germany	81 %	33 %
The Netherlands	20 %	10 %
Sweden	41 %	4 %

Note: CS and IO without 'direct access' can only obtain the contact information of up to 25 percent of international students at their institution. To contact more international students, these CS and IO have to file a request with another unit within the HEI.

Source: International survey 'Train and Retain' 2015

International students not only need to receive career support early on, but throughout their entire academic career. However, close to 50 percent of German and Swedish HEIs do not provide continuous support to international students at the beginning, middle and end of their studies. At Canadian (67 %) and Dutch HEIs (80 %), students are generally able to access career counselling, networking events and job application training throughout their entire time at the institution. This is especially helpful for international students who often need consistent, long-term support to overcome language barriers and a lack of professional experience in their host country (Ch. 4.2).

In Germany, data access restrictions complicate outreach to international students

International students are often unaware of their HEI's career support or they feel that existing services do not address their needs (Meschter/Meyer zu Schwabedissen/Pott 2015: 8). In order to spark students' interest in career mentoring programmes and other counselling and placement services, CS and IO should consider reaching out to select subgroups of international students, e.g. international newcomers or graduate students. However, in order to get in touch with these groups, CS and IO must first have access to the contact information of international students at their institution. At German HEIs, this is often not the case: more than 80 percent of CS at German HEIs are unable to directly contact international students about their support services. Instead, they can only access student contact information by requesting them from another unit within the institution. In some cases, such internal requests need to be filed before every single outreach campaign. But CS are not the only service providers at German HEIs whose outreach efforts are hampered by institutional data access restrictions; one in every three IO is subject to similar rules.

The data access restrictions affecting German HEIs appear to be an outlier in international comparison: in Canada, the Netherlands and Sweden, almost every IO has direct access to the contact information of their institution's international students. Among CS, between 20 percent (the Netherlands) and 50 percent (Canada) are subject to said restrictions (Table 3).

More career support for international graduates in Germany

While newly arrived international students are often unable to find support services at German CS, 80 percent of CS offer job application training courses, network events and other types of assistance to the institution's international graduates. In comparison, CS at Canadian (45 %), Dutch (44 %) and Swedish (12 %) HEIs are less likely to provide support services to their international alumni.

Even if alumni support is available, the eligibility period of many services is shorter than the extended stay which is granted by Canadian, German and Swedish post-study schemes (Ch. 3). Between 43 and 47 percent of German and Canadian career support services and 24 percent of Swedish services terminate before graduates have reached the maximum number of months in their post-study stay. Only Dutch CS support their institution's international alumni for the full duration of the so-called Orientation Year, during which international graduates can stay in the Netherlands and search for employment.

Dutch career services make strategic use of international alumni

Many international alumni identify with their former HEI and are willing to actively engage with their alma mater, e.g. by sharing their professional experiences with current students or helping students find an internship (Guhr/Lange/Pakir 2009: 80–85). Nevertheless, around

Table 4 Tailored career support for international students at higher education institutions (HEIs) in Canada, Germany, the Netherlands and Sweden

	HEIs with specific services for international students	Most commonly offered services
Canada	58 %	(1) job application training (2) placement in student jobs, co-ops, trainee positions (3) career counselling
Germany	56 %	(1) job application training (2) information on the German labour market (3) career counselling
The Netherlands	52 %	(1) information on the Dutch labour market (2) job application training (3) career counselling
Sweden	30 %	(1) job application training (2) career counselling (3) information on the Swedish labour market

Source: International survey 'Train and Retain' 2015

two-thirds of German and Swedish CS do not make strategic use of their institution’s international alumni. In contrast, around 50 percent of Canadian CS and 80 percent of Dutch CS regularly include their international alumni in guest lectures as well as career mentoring and internship placement programmes. When it comes to the transition from study to work, current international students can greatly benefit from the experiences and the assistance of their ‘predecessors’.

Canadian and German institutions most active in offering tailored career support

When it comes to entering the labour market in their host country, international students face more obstacles than their domestic counterparts (Ch. 4.2).⁵⁰ To help international students overcome these obstacles, a growing number of HEIs offer a combination of

general career support and additional services that are specifically designed to meet the needs of international students (Arthur/Flynn 2011; Chira/Belkhdja 2013; Arajärvi/Drubig 2014).⁵¹ Today, such tailored assistance can be found at every second HEI in Canada, Germany and the Netherlands. In Sweden, 30 percent of institutions offer information sessions on the Swedish labour market and the country’s new post-study scheme, workshops held in English, and other study-to-work support specifically designed for international students (Table 4).

In all four countries, job application training for international students is the most common form of targeted support. During such training, international students learn about the application process in their host country as well as the formal requirements of a complete application. In Germany, the Netherlands

50 In Germany, 47 percent of international students express the need for more career support for international students. The majority of the 12,194 international students who were surveyed by the German Academic Exchange Service (DAAD) in the autumn of 2013 were looking to their German HEI to provide more or a different type of job search support for international students. This opinion was most pronounced among students from Sub-Saharan Africa (68 %) (Esser/Gillessen 2014: 107–108).

51 The benefits of specific support services were also emphasised by the majority of leading staff members at Canadian, Dutch, German and Swedish HEIs, who participated in the international survey. Arguments against specific support services primarily referred to insufficient financial resources. In addition, a small share of respondents voiced their concerns about the segregating effects of specific support services for international students. However, the much-repeated plea for specific services for international students should not be misunderstood as a categorical call for the separation of international students and domestic students (Box 4).



Box 4 Need-based career support for international students

Need-based career support for international students requires a combination of

- (1) general support services for all students;
- (2) support services that are specifically designed for international students;
- (3) individual counselling, which accounts for cultural differences.

General support services teach a wide range of job-related skills while promoting contact between international students and domestic students through group learning activities. For many international students, however, these general services do not suffice as they do not address major obstacles to host country employment: language skills, knowledge about legal procedures for staying on, host country application strategies, etc. (Ch. 4.2.).

Specific services for international students can assist in addressing these and other knowledge and (language) skills gaps (Yang et al. 2002: 204). Specific services differ from general support in terms of content, language of instruction and forms of outreach to international students. In non-native English-speaking countries, advertising and holding workshops and training in English can encourage the participation of those international students who feel that their host country language skills are not yet up to par. These and other barriers can be lowered further by approaching international students in an environment where they feel comfortable, e.g. peer groups and student clubs.

Furthermore, group training should be complemented by **individual counselling** which accounts for the student's personal circumstances. In the case of international students who were socialised in another culture, counsellors need to be mindful of the assumptions underlying Western models of career counselling, which focus primarily on the individual and his or her career goals. This approach may run counter to the decision making of students from other cultures, in which career decisions can be taken jointly with the parents or other family members (Popadiuk/Arthur 2014: 134–135).

and Sweden, the training is often held in a foreign language, most commonly in English. Since application strategies and formalities are often country-specific, international students can benefit from this training.⁵²

Overall, the range of institutional support services is relatively identical across Dutch, German and Swedish HEIs. In contrast to the three most common services in Europe, Canadian HEIs place more emphasis on connecting international students with potential employers (Table 4). Close to one in two Canadian HEIs assists international students in gaining practical experience, often through so-called co-op training programmes, which are integrated into the curriculum.⁵³ The placement efforts of Canadian HEIs are rooted in the realisation that international students often experience difficulties in finding a company that will employ them full-time for several months (Arthur/Flynn 2011:

229). In Germany, only a few HEIs provide such placements. Unsurprisingly, only 31 percent of international students at German HEIs report being satisfied with their institution's assistance during their search for an internship (Esser/Gillessen 2014: 105). Many end up without an offer and are forced to serve their mandatory internships in a university lab or another institutional unit with very little or no labour market exposure.

Canadian student-to-staff ratio more service oriented
The steep growth in international student enrolments has had a limited impact on institutional staffing decisions, particularly in the career services. In Dutch HEIs, the average staff member in the CS is responsible for 8,800 students; in Germany, the ratio is around 7,300 to 1, while in Sweden, the average is slightly lower at around 5,000 to 1.⁵⁴ When compared to European CS,

52 In some students' home countries, a formal application is entirely replaced by personal contact with the prospective employer. In many host countries, on the other hand, employers expect a well-written, clear and concise application.

53 For their work, co-op students generally receive academic credit and remuneration from the employer. In many cases, co-op placements are highly institutionalised and the result of long-standing relationships between HEIs and the companies in the region.

54 For the international comparison, a ratio between staff members (full-time equivalents) and the total number of students enrolled (full-time and part-time, domestic and international, no distance learning) was calculated. Given the differences in the collection of student data and the types of HEIs which were surveyed in all four countries (i.e. ranging from large universities to medium-sized universities of applied sciences to small art colleges), the ratios in Table 5 can only provide a broad sense of the actual ratio in a given institution.

Table 5 Student-to-staff ratios at career services and international offices

	Career Service	International Office
Canada	2,922 : 1	2,770 : 1
Germany	7,283 : 1	2,082 : 1
The Netherlands	8,765 : 1	2,445 : 1
Sweden	4,999 : 1	1,941 : 1

Source: International survey 'Train and Retain' 2015

Canada’s student-to-staff ratio is significantly lower at 2,900 to 1 (Table 5).⁵⁵

Although IO in Canada, Germany, the Netherlands and Sweden benefit from a lower student-to-staff ratio, their additional tasks in the areas of student recruiting and programme administration⁵⁶ do not leave sufficient time for student support, and especially career support, which is rarely part of the HEI’s internationalisation strategy.⁵⁷ The staffing decisions of Canadian HEIs provide their CS and IO with about the same number of employees and reflect a more service-oriented understanding of the role of universities and colleges: apart from being hubs for research and innovation, Canadian HEIs also see themselves as training providers for the local, regional and national labour markets (Klabunde 2014: 296–312).

Project-based funding of support services: a German peculiarity

The suboptimal student-to-staff ratio at German CS and IO is exacerbated by the temporary nature of student support funding: 53 percent of CS and 39 percent of IO at German universities and universities of applied sciences (*Fachhochschulen*) are primarily

financed through temporary project grants provided by HEIs, state and federal governments, foundations and various other sources.⁵⁸ Since this funding is often project-based, CS activities are significantly bound by project descriptions. Furthermore, the temporary nature of funding requires CS staff to constantly re-apply for new grants, which in turn limits their capacity to provide individual counselling and other student support services. The international comparison shows that only a few Canadian, Dutch and Swedish CS and IO rely as heavily on project-based funds as do their German counterparts: about one in five CS at Dutch universities and *hogescholen* report receiving most of their budget through temporary grants. Virtually all other CS and IO in the Netherlands, Canada and Sweden are funded more permanently by their HEI.

In theory, Germany’s project-based approach can foster innovation since successful workshop and counselling models can first be tested before adding them to the repertoire of CS and IO. However, given the excessive share of project-based funding, both the innovative capacity and especially the sustainability of these projects has been questioned by practitioners. Only 26 percent of staff members at German HEIs

55 Canadian HEIs enrol a comparatively high number of part-time students, many of whom work part-time or full-time and are less likely to access CS and IO support. When subtracting Canada’s part-time students, the Canadian student-to-staff ratio falls to 2,112 to 1 for CS and 1,983 to 1 in the case of IO.

56 These tasks include the administration of student and researcher exchange programmes (in the case of European HEIs primarily the ERASMUS programme) and the maintenance of institutional partnerships. In addition, many international offices are required to contribute to the development of their HEI’s internationalisation strategy (Helemann 2010: 141–143).

57 About one in every four internationalisation strategies at German HEIs explicitly mentions the labour market entry of international students as a strategic goal. In Sweden, every third HEI shares similar strategic objectives; in Canada, one in every six institutions is explicitly committed to helping international students transition to host country employment. In comparison, the Netherlands can be considered an outlier: close to 50 percent of HEIs seek to place international students in the domestic labour market – a strategic prioritisation which may be explained by the long-standing legally required collaboration between Dutch universities of applied sciences (*hogescholen*) and local businesses, as well as HEIs’ commitment to the strategic objectives of the nationwide “Make it in the Netherlands!” initiative, which seek to increase international student retention (Nuffic 2013: 6–10).

58 CS and IO which during the 2013–2014 academic year had sourced more than 50 percent of their total budgets from temporary project grants were considered to be primarily project financed.



Table 6 Share of higher education institutions at which international students find two or more providers of the same job entry support service

	job application training	information on domestic labour market	support in a foreign language
Canada	38 %	39 %	–
Germany	49 %	44 %	47 %

Note: Since Canadian career support is generally provided in English or French, foreign language support could not be analysed. Due to a low response rate for this particular question, Swedish and Dutch answers could not be analysed.

Source: International survey 'Train and Retain' 2015

report that their institutional unit has secured long-term funding as a result of successful project implementation.⁵⁹

Duplication of support services at Canadian and German institutions

Job entry support may be available to international students not only through their HEI's career service and international office, but also through their faculty, their study programme, and other units within the institution. As a result, international students are often unaware of the full range of support services which are available at their institution (Meschter/Meyer zu Schwabedissen/Pott 2015: 8). At around 40 percent of Canadian HEIs, international students can choose between two or more providers of job application training, labour market information sessions and other services which are specifically designed to meet their needs (Table 6). The same is true for career fairs and networking events, which are also frequently offered by two or more units within the HEI. In Germany, this duplication of services is even more pervasive. Close to 50 percent of German HEIs host multiple providers of the same service. Visa information services are one exception as in most cases these are offered exclusively by the IO. Having two or more providers of the same service can lead to confusion on behalf of the institution's international students, especially if the providing units do not coordinate their services.

5.2.2 Support by Local Businesses and Public Services

In order to successfully transition from study to work, international students not only need to be supported by their higher education institution, but also by local businesses, local politics and public service providers. Since talent shortages are not found across the board, but rather in certain regions and professions, this study sought to map the local support landscapes at 238 HEI locations⁶⁰ in Germany, Canada, the Netherlands and Sweden.

Growing demand for international students among local businesses; small businesses largely inactive

Close to one in two HEI locations in Canada, Germany and the Netherlands is home to several large and medium-sized businesses⁶¹ which actively recruit international students. According to leading CS and IO staff at German HEIs, 55 percent of large businesses and 38 percent of medium-sized companies in Germany are interested in hiring the 'educational nomads'. Similarly, Canadian (40 % and 37 %) and Dutch employers (48 % and 40 %) have laid their eyes on international students. This is in contrast to Swedish companies (27 % and 13 %), which seem to be less aware of the international talent training on their doorstep (Table 7).

In Europe, international students are still a blind spot in the human resource strategies of small

59 Respondents referred to the project money they received through the nationwide scholarship and student assistance programme STIBET, which is funded by DAAD and Germany's Federal Foreign Office (Esser/Gillessen 2014: 117).

60 The term 'HEI location' denotes the area within a 100 km radius or a one-hour drive from a given higher education institution. HEI locations may cover multiple municipalities.

61 In the international survey, businesses with more than 250 employees were defined as 'large businesses'; businesses with between 50 and 249 employees were considered to be 'medium-sized businesses'; businesses with 10 to 49 employees were classified as 'small businesses'; and businesses with less than 10 employees were referred to as 'very small businesses'.

Table 7 Share of HEI locations at which local businesses are actively hiring international students

	large businesses (more than 250 employees)	medium-sized businesses (50–250 employees)	small businesses (10–49 employees)	very small businesses (less than 10 employees)
Canada	40 %	37 %	28 %	26 %
Germany	55 %	38 %	12 %	7 %
The Netherlands	48 %	40 %	16 %	4 %
Sweden	27 %	13 %	7 %	3 %

Note: Higher education institution (HEI) locations encompass the area within a 100 km radius/a one-hour drive from the higher education institution. Activity levels denote estimates by leading staff members of career services and international offices at HEIs.

Source: International survey ‘Train and Retain’ 2015

companies. Although domestic recruitment of international students is more resource efficient than attracting skilled labour from abroad, only a handful of small companies have started to actively approach international students. The roots of their inaction are manifold, ranging from a lack of awareness to a lack of information on the administrative procedures and additional costs to the continued availability of domestic applicants (Becker 2013: 63; Hanganu/Heß 2014: 150). While Europe’s international students have a hard time finding employment with small companies, international students in Canada encounter small and even very small businesses with less than 10 employees which are almost as interested in hiring them as their larger competitors (Table 7). This openness of companies in Canada, regardless of size, might be a result of the country’s long tradition as an immigrant receiving country, international students’ advanced language skills in English or French,⁶² and a high need for skilled migration, especially in more remote provinces and territories (Klabunde 2014: 294; House of Commons Canada 2012: 19–21).⁶³

For many international students, local businesses represent only one of many employment options. A sizeable share of international graduate students are interested in a research career in or outside their university. In 48 percent of HEI locations in the Netherlands, this interest appears to be mutual as research institutes actively recruit international students. In

Germany, 44 percent of research institutes see great potential in them. In Canada and Sweden, around one in every three research institutes actively recruits international students.

Apart from local businesses and research institutes, economic development agencies have begun to discover international students as a new target group. At every second HEI location in Canada, key actors in regional and local economic development such as labour organisations and business associations are increasingly supportive of the retention of international students to benefit the local and regional labour markets. In many cases, these institutions act as mediators between HEIs, employers and local, provincial and federal policy makers. The same situation applies in Germany, where 44 percent of HEI locations report significant activity. In the Netherlands (28 %) and Sweden (20 %), agencies involved in economic development efforts show little concern for attracting and retaining international students.

Local politics and public services increasingly active, at least in Canada and Germany

Municipalities are generally interested in attracting and retaining a highly skilled workforce. That is why in Germany, local politics and public service providers are beginning to regard international students as a valuable asset for the local labour market: at 41 percent of HEI locations, local government agencies, immigration

62 It should be stressed that learning English or French is also a challenge for international students in Canada (Chira/Belkhdja 2013: 3). However, an analysis of open-ended questions of the SVR Research Unit’s international survey shows that language skills are less of an issue in Canada than they are in Germany, the Netherlands and Sweden where more than 65 percent of leading CS and IO staff independently named ‘insufficient language skills’ as the biggest obstacle for international students who want to enter the labour market (Ch. 4.2).

63 Another reason could be the activities of immigrant entrepreneurs who have often entered Canada as international students themselves (cf. Eiyebhloria 2012).



offices (*Ausländerbehörden*) and leading local politicians actively support international students during their transition to the local labour market. Germany's local employment agencies (*Arbeitsagenturen*) have also begun to target international students, e.g. through their so-called higher education teams (*Hochschulteams*), which provide job search assistance on site at larger HEIs. In recent years, Germany's local push for international student retention has been fuelled by pilot projects which were funded by federal and *Länder* governments, the German Academic Exchange Service (DAAD) as well as foundations.⁶⁴

A similar development can be observed in several Canadian provinces such as Ontario where local coalitions of businesses, public service providers, HEIs and other stakeholders seek to foster the local integration of newly arrived migrants. A number of these federally funded Local Immigration Partnerships (LIPs) assist international students who would like to find employment in Canada (Wiginton 2012: 23). In addition to local politics and public service providers (40 % are active supporters), Canadian employment agencies (48 %) provide assistance to international students who seek to stay and work.

Furthermore, Canada's international students can benefit from a wide range of settlement services such as immigration-related advice, language courses and information about life and employment in Canada. The often federally funded settlement services are provided by a number of local and regional organisations including economic development boards, language schools and local chapters of ethnic community associations (CIC 2011: 17). Although international students and other temporary residents are traditionally not eligible for settlement service support,⁶⁵ 60 percent of HEI locations report that service providers actively admit the students into their workshops, information and counselling sessions. The ongoing debate on the future of settlement services suggests that going forward, more services will focus on temporary residents, including international students (Pathways to Prosperity 2013: 4).

In the Netherlands and Sweden, the state is not as active. Less than one in four HEI locations in the

Netherlands hosts employment agencies⁶⁶ and other public services which actively seek to retain more international students. In Sweden, the labour market entry of international students appears to be off the radar of most municipalities.

5.3 Coordination of Job Entry Support

Even the best HEI career support is of little help if local employers shy away from hiring international students. In the same vein, employers have a hard time recruiting international students if HEIs choose to withhold all information about future graduates. Consequently, the successful retention of international students in the local labour market requires joint action by HEIs, local businesses, local politics and public service providers. So far, this type of local coordination of job entry support can be found in only a few municipalities across Canada, Germany, the Netherlands and Sweden.

Collaboration between higher education institutions and businesses largely ad hoc

For most international students who look for a job, the local support landscape is a patchwork of occasional career fairs, job application training and chance encounters with service staff or company representatives who may or may not be able to help them in their search for employment. Rarely do HEIs, businesses, local politics and public service providers collaborate in order to facilitate the study-to-work transition of international students. Only 28 percent of Dutch and German HEIs team up regularly⁶⁷ with local businesses to organise mentoring programmes, internships and other forms of labour market exposure for international students. In Canada, 21 percent of universities and colleges engage in this type of collaboration at least once per academic year while Swedish HEIs hardly collaborate at all to help their international students fulfil their career goals in Sweden (13 %) (Fig. 5).

Although labour organisations, business associations and other local economic development actors

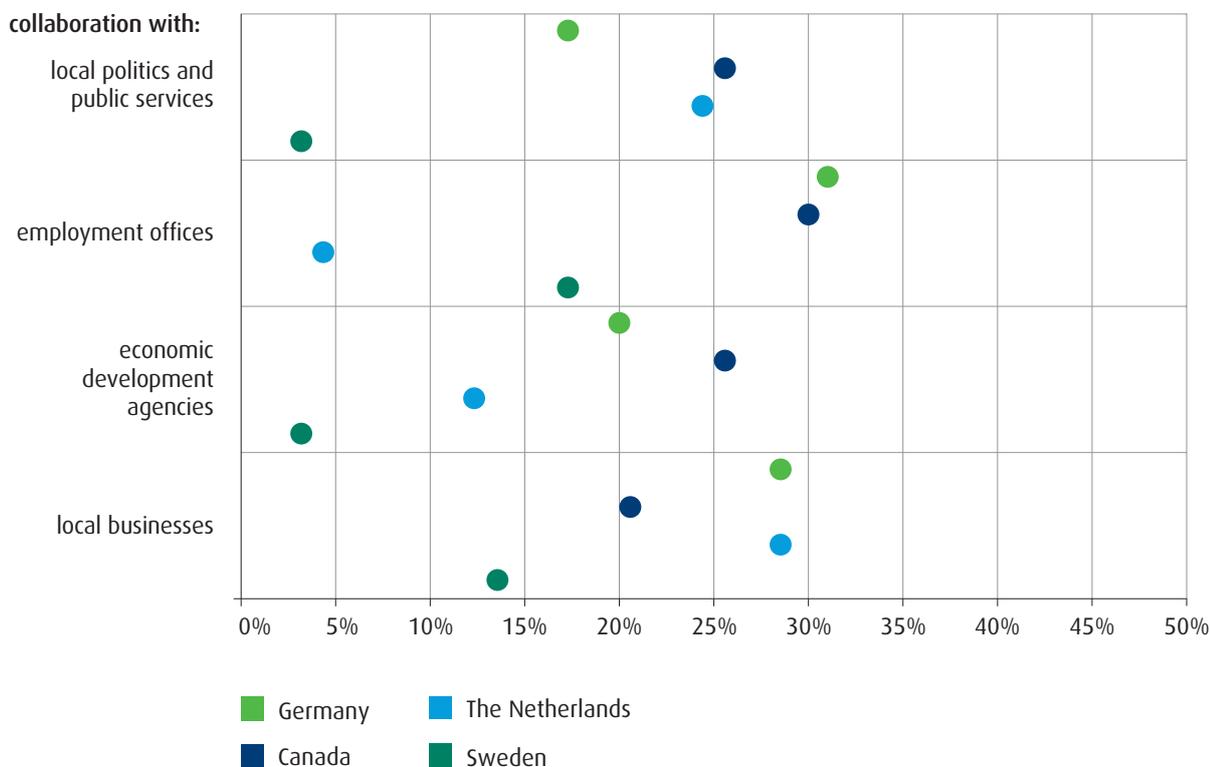
64 One such project is "Study and Work", a two-year initiative supporting the retention of international students. The project is funded by the German Federal Ministry for Economic Affairs and Energy (Federal Commissioner for the East German States) and the *Stifterverband* (<http://www.study-work.de>). The initiative commenced in the spring of 2015.

65 Federal funding stipulations require settlement services to use federal money to support permanent residents. Services for temporary residents, including most international students, cannot be paid for with federal funds. Consequently, settlement services are obliged to tap other funding sources if they seek to support international students and other temporary residents (CIC 2012).

66 In the Netherlands, the state-run employment agencies (UWV) are rarely concerned with the placement of highly skilled professionals since they seek out private services such as Randstad, Tempo-Team or UnDutchables. Therefore, governmental oversight of job entry support is much less pronounced than for example in Germany.

67 HEIs and local actors collaborate regularly if they work together at least once per academic year in order to facilitate the labour market entry of international students.

Fig. 5 Share of Canadian, Dutch, German and Swedish higher education institutions which regularly collaborate with local actors in order to facilitate the job entry of international students



Note: HEIs and local actors collaborate regularly if they work together at least once per academic year in order to facilitate the labour market entry of international students.
 Source: International survey 'Train and Retain' 2015

can help HEIs connect with local employers, only a small number of institutions engage regularly: 26 percent of Canadian HEIs establish new or leverage existing connections to key actors in local economic development at least once per academic year, while 20 percent of German HEIs and 12 percent of Dutch HEIs collaborate regularly. Swedish HEIs (3 %) have not established close connections with chambers of commerce (*Industri- och Handelskammaren*) or other economic development actors (Fig. 5).

No systematic engagement with local politics and public service providers

In a growing number of municipalities, the potential benefits of international students have not escaped the

attention of local politicians and public service personnel. Nevertheless, HEIs are rarely embedded in local talent retention initiatives. In Canada, 26 percent of colleges and universities, and especially their career services and international offices, engage with the local government in order to help more international students stay on after graduation. In the Netherlands, collaboration with municipalities takes place at 24 percent of universities and universities of applied sciences while in Germany, only 17 percent of HEIs engage regularly.⁶⁸ With very few exceptions, Swedish HEIs hardly collaborate with local politics and public service providers to help international students transition to work.

Despite growing interest on behalf of employment offices in Canada and Germany, less than one-third of

68 Collaboration between HEIs and local government was significantly higher (38 %) in the six East German *Länder* (Berlin, Brandenburg, Mecklenburg-Western Pomerania, Saxony, Saxony-Anhalt and Thuringia), which may be explained by a growing political willingness to limit the number of departing graduates – both domestic and international – due to the lower availability of jobs.



HEIs connect with local job placement services in order to organise joint training and information sessions for international students or other forms of regular collaboration. In Sweden, 27 percent of HEIs exchange information with employment agencies (*Arbetsförmedlingen*) but only 17 percent collaborate at least once per academic year in order to assist international students on their way to the Swedish job market. Dutch HEIs were found to have weak ties to state-run employment agencies, whose primary target groups do not include international students (Fig. 5).

In Canada, the aforementioned settlement services are a key partner in HEIs' efforts to assist international students who are willing to pursue post-study employment and permanent residence in Canada. One in three HEIs coordinates its language courses, information sessions and counselling services with the support offered by local settlement services, which are increasingly catering to international students. Among other things, settlement services administer the governmental wage subsidies which employers in some provinces and territories can apply for when hiring an international student (Ch. 3). Hence, HEIs, settlement services and employers have a high interest in a steady flow of information.

Collaboration so far too dependent on chance acquaintances

In order to make collaboration work, HEIs, businesses, local politics and public service providers should agree on a format through which they coordinate their individual support services (Ch. 6.2). In many municipalities, these types of working groups, round tables, coalitions, networks and other formats only exist on paper (Roth 2015: 40). As a result, the quality of job entry support for international students is highly dependent on the personal connections of career counsellors and other HEI staff.⁶⁹ While personal connections are a prerequisite for linking an HEI's career support to key actors in the surrounding area, they are also volatile in that they disappear almost instantly once a staff member changes jobs. Hence, long-term collaboration requires round tables, working groups or another form of institutionalised collaboration.

The survey results confirm that around 50 percent of German HEIs use working groups, annual career fairs, round tables and other formats to engage with

local employers, public service providers and other local actors.⁷⁰ However, many of these vehicles for collaboration are not being utilised sufficiently due to a lack of commitment and resources. Furthermore, only a handful of local initiatives focus on international students as a target group. As a result, at most German universities and universities of applied sciences, the job search of international students continues to rely on chance acquaintances of HEI staff who are often unaware of job opportunities outside the institution.⁷¹

6. Facilitating the Transition from Study to Work: Recommended Actions

This study's four-country comparison has shown that for international students, the transition to host country employment is still highly dependent on chance acquaintances and the availability of quality support. In order to facilitate the labour market entry of international students, higher education institutions (HEIs), employers and policy makers should reassess (Ch. 6.1) and coordinate (Ch. 6.2) their current engagement efforts towards international students who are willing to stay after finishing their studies.

6.1 Reassess Job Entry Support for International Students

In order to successfully transition from study to work, international students need their HEIs (Ch. 6.1), employers (Ch. 6.2) and policy makers (Ch. 6.3) to address existing obstacles which are currently preventing thousands of highly qualified individuals from finding host country employment.

6.1.1 Recommendations for Higher Education Institutions

In recent years, many HEIs have experienced a rapid increase in the number of international students. Yet, at many institutions, the expansion of student support services has not kept pace with upward enrolment trends, thereby increasing the risk of disappointing many help-seeking international students who

69 More than 80 percent of CS and IO staff at German HEIs leverage their personal connections when collaborating with local businesses and public service providers, usually in combination with more institutionalised formats such as round tables. About one-quarter relies solely on personal connections.

70 The open question on forms of local collaboration was administered as an additional question in the German questionnaire.

71 In the international survey, around one in four leading staff members of CS and IO in Canada, Germany, the Netherlands and Sweden were unable to say whether local businesses actively recruit international students.

experience difficulties during their studies or subsequent job search. Given both the importance and the volatility of an institution's reputation among current and prospective students, HEIs should carefully assess whether their current support services are in line with the needs of their increasingly diverse student bodies:

- **Address major obstacles to host country employment.** Need-based career support should focus on the major obstacles experienced by international students who seek to gain host country work experience (Ch. 4.2). For most international students, this means early exposure to the labour market, targeted job application training and intensive language courses. Furthermore, HEIs should continuously raise international students' awareness of the skills and experiences which are expected of entrants to the labour market. When informing their international students, HEIs should use students' preferred communication styles and channels. Anonymous mass email campaigns and the occasional flyer will draw the attention of only a few students. Instead, outreach campaigns should account for international students' linguistic and cultural entry barriers which can be lowered by small-scale meet-and-greet events in student dormitories or joint events with international student clubs.
- **Foster interaction with domestic students and employers.** International students often lack personal and professional connections in their host country (Ch. 4.2). Therefore, HEIs should increase their efforts to pair up international and domestic students, e.g. through cultural events and the expansion of existing mentoring programmes.⁷² In order to improve the labour market integration of international students, HEIs should actively inform local employers about their pool of international students who are eager to gain work experience in the host country. These outreach efforts could be very valuable to small companies who are often unaware of international students and the legal and procedural details involved in hiring them. The respective information sessions could be hosted jointly with other

HEIs, the local employment office or the chamber of commerce (Ch. 6.2).

- **Strategic use of digital technologies.** Many HEIs do not possess the financial means to offer continuous career support to international students. As a result, many career services are forced to neglect the needs of newly arrived international students who may otherwise benefit greatly from early career support. Here is where digital technologies can help achieve a more resource-efficient delivery, especially in the areas of language learning and job market information. With the help of Massive Open Online Courses (MOOCs), international students can improve their host country language skills before, during and after their studies. Once produced, a quality MOOC can supplement face-to-face instruction and thereby allow HEIs to gradually admit more of their current international students to language courses. In the Netherlands, HEIs have already begun to experiment with a Dutch language MOOC.⁷³ Other scalable forms of career support include information sessions on the domestic labour market and post-study visa. With the help of educational gaming apps such as "CareerProfessor", international students can quiz themselves on key facts about host country employment and thereby allow career services to invest more resources in activities which allow for more labour market exposure than traditional information sessions.

6.1.2 Recommendations for Employers

Many human resource managers, especially those in small businesses, still shy away from hiring international students. However, given the projected shortages of highly skilled domestic graduates, employers should include international students in their recruiting pool:

- **Leverage non-conventional skills of international students.** When trying to fill an open position, employers do not typically choose between domestic and international applicants, but rather between

72 The Martin Luther University Halle-Wittenberg's service learning project *International Engagiert Studiert* serves as an interesting example. In this project, international and domestic students volunteer their time and expertise to address a problem in the local community. In doing so, students gain professional insights, ECTS credit points and a better understanding of each other's cultural backgrounds (<http://www.servicelearning.uni-halle.de/cms/index.php?id=55>, 23 April 2015).

73 One example is the University of Groningen's Dutch language MOOC, which can also be utilised by other HEIs. So far, the Dutch language skills taught by the MOOC are largely introductory. In order to facilitate the transition between MOOCs and face-to-face learning, Dutch HEIs plan to list their language courses in a single online portal, which allows international students to find the right course (Nuffic 2013: 5-6). In addition, international students can learn Dutch by using a newly developed mobile app. The *Hoi Holland!* app is free of charge and intends to generate more interest in the Dutch language and culture. The app was also developed in the context of the "Make it in the Netherlands!" initiative (<http://www.studyinholland.nl/hoiholland>, 18 May 2015).



candidates with certain sets of skills or language abilities. Nevertheless, small businesses tend to dismiss international students more often, which is partly due to a lack of information and short-term staff planning (Ekert et al. 2014: 60–66). However, in order to increase their attractiveness for foreign talent in the coming years, small businesses should consider the benefits associated with employing international students today: not only are they domestically trained and accustomed to life in the host country, their personal and professional networks abroad as well as their cultural knowledge and foreign language skills allow them to do more than just substitute for a lack of domestic applicants, e.g. they can help companies enter international markets or assist in developing the intercultural competences of their colleagues.

- **Recruit international students more actively.** International students are often unaware of employment opportunities at small and medium-sized local companies. That is why employers should take greater account of international students when advertising internships, co-op positions, scholarships and other forms of practical experience. By actively including international students in these and other recruitment pools, both management and staff can test the added value of a more international work environment in a cost-efficient way. When doing so, employers should be open to applicants who are not native speakers of the language spoken in the company. As long as an applicant possesses the subject knowledge needed and a willingness to acquire the necessary language skills, companies should not dismiss the candidate outright, but rather regard his or her language learning as part of professional development – as is typically the case with domestic employees who need to learn a foreign language before commencing an assignment abroad. Small companies, which are often unable to fund language courses themselves, could team up with other local companies or the local chamber of commerce in order to provide for the lessons of their foreign-language employees.

6.1.3 Recommendations for Policy Makers

In many industrialised countries, policy makers, especially those at the local level, have a vital interest in retaining international students in the domestic workforce. In order to help more international students find host country employment, policy makers at the national, local and intermediate levels should address both legal and non-legal obstacles:

- **Expand post-study work and residency options.** Even after the introduction and legal reform of post-

study schemes in Canada, Germany, the Netherlands, Sweden and various other countries, international students still experience difficulties when trying to extend their stay. Since legal and procedural barriers differ considerably between host countries (Ch. 3), there is no blueprint for a post-study scheme. Instead, policy makers are encouraged to assess whether their job search restrictions for international graduates (duration, permission to work during job search, minimum remuneration requirements, etc.) are in line with projected labour market needs. Furthermore, policy makers should examine procedural barriers such as processing times, clarity of information and discretion of visa officers. Even in countries with comparatively generous post-study regulations, such as Germany (Ch. 3), international students have described their post-study visa extension as a nerve-racking experience due to overly bureaucratic information and unapproachable service staff (Barié-Wimmer/Müller-Jacquier 2013: 4; Arajärvi/Drubig 2014: 16).

- **Coordinate local job entry support.** Despite growing aspirations towards retaining more international students in the local workforce, local politics and public service providers are still largely inactive when it comes to helping young talent transition from study to work. And even if employment agencies and other local service units have an eye on international students, their efforts usually run side-by-side with other existing support services. Hence, a successful transition to the local labour market requires a more coordinated effort by HEIs, local businesses, research institutes and other local actors. Given their long-term interest in talent retention, municipalities should play a central role in the local coordination of job entry support (Ch. 6.2).

6.2 Coordinate Job Entry Support at the Local Level

While today, some international students can already find job application training, a diversity-friendly employer, or a knowledgeable and devoted public service employee, these isolated instances are not sufficient to systematically retain more international students in the local workforce. Instead, higher education institutions, employers, public service providers and other local partners need to coordinate their individual support services for international students in order to bridge the gap between study and work (Fig. 6).

Local challenges require local solutions

Given the vast local differences in the internationalisation of HEIs, businesses and labour market needs, job entry support for international students should be

Fig. 6 Bridging the gap between study and work: key local actors of a coordinated job entry support system for international students



Source: SVR Research Unit/Deniz Keskin

coordinated at the local level, e.g. within a metropolitan area such as the Brainport Eindhoven Region or the Greater Toronto Area.⁷⁴ In many highly industrialised countries today, local politicians and industry leaders agree that more international students should stay beyond their studies to help mitigate the projected shortage of talent in the local labour markets (Ch. 1). Yet, despite this wide-ranging consensus, only a handful of local talent initiatives include international students among their target groups,⁷⁵ aside from varying considerably in terms of their level of institutionalisation, resources and commitment of key actors. In order to successfully bridge the gap between study and work at the local level, all key actors should coordinate their individual job entry support for international students (Fig. 6). Disregarding the local employment office, research institutes, immigration offices and other local partners may lead to inefficient duplication of services, or in a worst-case scenario, completely prevent international students from staying.

Key to successful coordination: shared goals and shared responsibilities

One of the most challenging obstacles to a local coordination of career support services for international students are the diverging goals and time frames which guide the work of individual partners. Local businesses would like to fill their open positions quickly and cost-efficiently; HEIs want to support their international students for the duration of their study programme and are less interested in paving their way to the local labour market; and municipalities would like to keep international students in the long term to benefit the local workforce, thereby ignoring the fact that many international students do not plan to stay permanently (Roth 2015: 60–61; SVR Research Unit/MPG 2012: 38). To prevent these diverging interests from overshadowing local collaboration efforts, local partners should consider the following key components of successful coordination:

74 Naturally, exceptions apply. For example, a highly internationalised HEI located in a remote region with a primarily low- and medium-skilled labour market would be well advised to also connect with employers in other areas.

75 In Germany, only 8 out of 126 local initiatives explicitly seek to attract and retain international students (Roth 2015: 40–55).



- **Increase transparency:** Successful coordination starts with a comprehensive mapping of relevant local actors and their attitudes, efforts and objectives regarding the retention of international students. This initial mapping exercise can help raise awareness among local businesses, public service providers and other local partners, which may later help during the development of shared goals.
- **Develop shared goals:** Local actors should set quantifiable goals which are achievable through pre-defined deliverables (Innovationsbüro Fachkräfte 2012: 14ff). Both goals and deliverables should be documented. Furthermore, local actors should draw up rules for the resolution of internal conflicts.
- **Establish a regular meeting format:** To achieve their goals, local partners should coordinate their job entry support through round tables or other forms of institutionalised communication. This is where all local partners meet at least once a semester to discuss past, ongoing and future efforts and to develop new goals. Since personal contact, consistency and trust are paramount to successful coordination, all partners should identify a contact person who attends meetings and responds to internal and external enquiries. The meetings should also be attended by international student representatives.
- **Celebrate achievements:** To avoid a fallback to the pre-existing isolationism and the resulting duplication of local support services, the local coordination of job entry support requires constant communication about successful placements and major events (Innovationsbüro Fachkräfte 2012: 18). In this context, flagship projects such as an annual career fair for international students are a viable tool for rallying continued support for more enhanced coordination in the future.

Municipalities to facilitate local coordination efforts

For most of the local partners, coordination means taking on additional responsibilities. That is why in most cases, coordination cannot thrive without operational support by a facilitator. The facilitator sets up regular meetings and serves as the primary contact person for internal and external requests about the local support efforts. Given their vital interest in retaining more international students in the local labour market, municipalities could assume the role of facilitator. Since HEIs often serve more than one municipality, two or

more municipalities could jointly fund the position of facilitator. Further material costs could be covered by the other local partners, e.g. through membership fees which are commonly collected in some local talent initiatives.

7. Discussion and Outlook

The political and economic reframing of international students as 'ideal', 'model' or 'designer' immigrants is a relatively new phenomenon. Nevertheless, given the demographic decline in many popular study destination countries, policy makers and industry leaders can be expected to continue, and even expand, their current efforts to retain the 'educational nomads'. At the same time, the worldwide increase in temporary and circular migration suggests that only a few international students will stay permanently. Instead, even those who stay on may leave again after a few years. As a result, policy makers should also consider the opportunities of emigration as it can lead to a productive exchange of ideas and innovations and help strengthen international networks, which are of growing importance in an increasingly globalised world (SVR Research Unit/BiB/UDE 2015: 14–15, 52). Furthermore, initial exploratory surveys among former international students who have left their host country suggest that most emigration may only be temporary: more than 50 percent of leavers consider returning to the country of their alma mater (Hanganu/Heß 2014: 239).

This study's international mapping of local support structures for the study-to-work transition of international students has shed light on the institutional dimension of this important transition. Yet, a number of crucial questions remain. For example, so far, there is hardly any empirical knowledge about the actual job search experiences of international students. Therefore, in order to learn more, the SVR Research Unit will conduct a nationwide longitudinal study in Germany, starting in 2015. International students will be surveyed towards the end of their studies and 18 months later, i.e. the maximum duration of Germany's post-study job search period (Ch. 3). This way, the study seeks to compare international students' attitudes and expectations towards finding employment in Germany with their actual post-study experiences in Germany, their home country or a third country.⁷⁶

76 The research project is part of the "Study and Work" initiative, which was launched by the German Federal Ministry for Economic Affairs and Energy (Federal Commissioner for the East German States) and the *Stifterverband* in the spring of 2015 (<http://www.study-work.de>).

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Abbreviations

CS	Career service (at higher education institutions)
CEC	Canadian Experience Class
EEA	European Economic Area
EU	European Union
HEI	Higher education institution
IO	International office (at higher education institutions)
LMIA	Labor Market Impact Assessment
LIP	Local Immigration Partnership
MOOC	Massive open online course
PGWPP	Post-Graduation Work Permit Program
STEM	Science, technology, engineering, mathematics
SVR	Expert Council of German Foundations on Integration and Migration

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