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Post Study Work Visa Options: An International Comparative Review



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Post Study Work Visa Options: An International Comparative Review

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Executive summary

Many developed countries worldwide are currently facing the challenges of ageing populations and labour shortages, including for highly skilled labour in the knowledge economy. It is increasingly recognised that in these terms, international students are a valuable resource: they are young, an 'adjunct workforce in waiting', and, unlike highly skilled migrants recruited from abroad, face no regulatory barriers, plus are familiar (at least to some extent) with the host country's culture, language and institutions. Therefore, countries entering the 'global competition for talent' are increasingly developing competitive migration policies aimed at attracting and retaining international students. One of the key ones is the post-study work offer.

The aim of this review was to evaluate how the UK's post-study work offer compares against its main competitor countries. Nine countries were chosen for the review: Australia, Canada, New Zealand, and the US outside Europe, and France, Germany, Ireland, the Netherlands, and Sweden within Europe. The comparator countries were chosen on the basis of three criteria: their post-study work offer, numbers of international students they attracted, and, in the case of non-English speaking countries, high numbers of academic courses offered in English. The review was based on a variety of sources including academic literature, administrative evaluations, governmental websites, statistical databases, policy documents and others.

The review demonstrated that the UK's current as well as proposed post-study work offer (as part of the new post-Brexit immigration system) compare poorly with those of its international competitors. Therefore, if the UK wishes to maintain a competitive edge in terms of attracting and retaining international students by means of its post-study work offer, this should be carefully revised and further extended.

More generally, this review found that the post-study work offer is effective in attracting international students and retaining them in the short-term: the more flexible the programme, the higher its uptake. Nevertheless, an attractive post-study work offer in itself is not sufficient to ensure longer-term retention. This must be supported by a number of other policy measures, such as language, employability and integration support; availability of satisfactory employment; affordable housing and healthcare; and an overall welcoming attitude towards migrants in the host country.

The report concludes that to improve its global competitiveness in terms of attracting and retaining international students, the UK should:

- Introduce a more competitive post-study work offer taking into consideration ease of application and application timescales, programme length, work entitlement, and opportunities for applying to the programme after leaving the UK;
- Implement additional measures supporting the longer term retention of international students, such as: language and employability support; integration programmes; provision of information and advice on conditions of stay, employment opportunities, and life in the UK; creating opportunities for establishing professional networks;
- Ensure systematic monitoring of the programme and its implementation to prevent its potential misuse (and evaluate its effectiveness).

Introduction

Many countries worldwide are currently facing the challenges of ageing populations and labour shortages, including for high-skilled labour in certain sectors and occupations. Technological change and the transition to knowledge-based economies have created a demand for a highly specialised and diversified labour force which most countries cannot 'produce' themselves, at least not in the short-term and to the extent required.¹ This has created a global competition for talent, with traditional immigration countries (Australia, Canada, New Zealand, and the US), European countries, and increasingly countries in Asia and Latin America implementing a range of national and regional policies aimed at attracting 'the brightest and the best'.² Since the mid-2000s, the majority of OECD countries and an increasing number of non-OECD countries have introduced selective immigration policies specifically aimed at attracting or retaining high skilled migrants.³

Policies targeted at international students have become a crucial part of this global competition for talent. Students are not only young, and hence a valuable demographic and economic resource, but they are also future highly skilled workers. What is more, they have gained qualifications within the host country's education and training system, and have become familiarised (to some extent at least) with its culture, language and institutions. Research demonstrates that international graduates tend to fare better in the host country's labour market than highly skilled migrants recruited from abroad.⁴

Recognition of this fact has led many countries to adopt a range of policies aimed at attracting and retaining international students by, for instance, easing entry restrictions, providing various temporary or permanent visa schemes, or implementing bilateral agreements regulating the mutual recognition of degrees and certificates. Many governments increasingly aim to retain international students as prospective skilled workers, hence the increasing popularity of and emphasis on post-study work schemes. In recent years, many countries already operating such schemes have largely relaxed their formal requirements (e.g. Australia or New Zealand), while other countries have only introduced such schemes (which is the case for most EU countries).

Essentially, post-study work programmes serve three main purposes:

1. To provide international students with the opportunity to gain valuable (international) work experience (often with the aim of attracting international students to study in a given country in the first place);
2. To attract and retain young migrants (especially for countries aiming at growing their population); and,
3. To become a route for highly skilled migration (especially for countries aiming to fill gaps in the knowledge economy).

¹ Czaika, M. (2018). High-Skilled Migration. Introduction and Synopsis, in: Czaika, M. (ed). High-Skilled Migration: Drivers and Policies. Oxford Scholarship Online, 2018, p. 6.

² Cerna, L. (2018). European High-Skilled Migration Policy. Trends and Challenges, in: Czaika, M. (ed). High-Skilled Migration: Drivers and Policies. Oxford Scholarship Online, 2018, p. 88.

³ Czaika (2018), op. cit., p. 2.

⁴ Hawthorne, L and To, A. (2014). Australian Employer Response to the Study-Migration Pathway: The Quantitative Evidence 2007-2011. *International Migration* Vol. 52 (3) 2014.

The analysis presented in this report will consider all of the above aspects of post-study work programmes.

This study has been commissioned by the Scottish Government and was carried out in March-June 2019. The aim of the review is to evaluate how the UK's post-study work offer compares against its key competitor countries. Nine countries were chosen for the purposes of this review:

- four non-European countries: Australia, Canada, New Zealand and the US; and,
- five EU countries: France, Germany, Ireland, the Netherlands and Sweden.

These countries were selected on the basis of:

- numbers of international students they attracted;
- their post-study work offer to international students; and,
- in the case of European countries where English is not the native language - the number of academic courses offered in English.

All the above countries offer post-study work routes. The non-European countries under review are leading destinations for international students; the European countries all offer study programmes in English, have set ambitious targets for recruiting international students, and are indeed becoming increasingly popular study destinations. While numbers of international students in Sweden are lower than in a few other European countries (such as Austria or Belgium), it was chosen on the basis of its competitive English-language offer. Ireland, which has relatively low numbers of international students, has also been included as a competitor country mainly due to its linguistic advantage over non-English speaking countries.

This report is structured as follows: firstly, we shall discuss available data relevant to the subject matter and its limitations. Secondly, we shall consider current trends in international student migration looking at key information on international student mobility and factors shaping destination choices. Next, we shall take a broad overview of factors and considerations related to retaining international students. We shall consider factors shaping students' decisions to stay or leave after graduating, including post-study work programmes. Furthermore, we shall analyse the benefits of student retention but also challenges arising from their stay, both for the host country and for the graduates. Next, we shall move to a comprehensive overview of the position of post-study work offers and the political, social and economic contexts shaping these in traditional immigration countries and EU countries. The report ends with a summary and conclusions, and includes recommendations relevant to (re)introducing a post-study work scheme in the UK.

Evaluation of the evidence base

This study aimed at reviewing and evaluating evidence related to:

- each competitor country's post-study work 'offer' to international students, its priorities and objectives, and reasons behind any changes to the programme;
- numbers of international students who have benefitted from the post-study work 'offer' in each of the competitor countries and changes in numbers;
- evidence on retention rates of international students and how these may be connected to post-study work;
- any cross-cutting issues related to attracting and retaining international students.

The review was broad in scope and covered a large number of diverse sources from each country as well as international literature and data sources. These included:

- governmental websites with information on post-study work programmes;
- available statistical datasets on international (student) migration, take up of post-study work programmes, and student retention rates in each of the countries;
- administrative reviews and reports on international students and their post-study pathways;
- policy documents, such as notes from policy debates related to international students and post-study pathways and relevant EU Directives;
- academic literature on international student migration, attracting and retaining international students, and their post-study pathways;
- related comparative studies by international organisations and institutions, such as the OECD, the European Commission (EC), the European Migration Network (EMN), or Institute of International Education (IEE);
- university, legal and governmental agency websites providing information to international students, e.g. on formal entry requirements including visas, opportunities for post-study employment etc.;
- online newspaper commentaries on policy changes to post-study work programmes.

The review demonstrated that, generally speaking, the evidence base is patchy and insufficient, which makes it challenging to draw international comparisons in a consistent way. Few countries have evidenced each policy change related to international students, including their post-study work offer, and/or have closely monitored the effects of implemented changes. As the literature concludes:

Notwithstanding the importance attributed to international student migration and a growing scholarly interest in this issue, research on international student policymaking and changes in it remains limited. This situation is unfortunate given the role policies play in migration choices and patterns.⁵

The above conclusion also holds true for the availability of statistical data tracking international students' post-study pathways and destinations, especially in the longer term. Most of the countries under review collect data on students' immediate post-study

⁵ Riaño, Y. and Pigué, E. (2016). International Student Migration, in: Barney, W. (ed). Oxford Bibliographies in Geography. New York: Oxford University Press, pp. 1-24.

destinations yet there is much less availability of data on their destinations after a longer period of time, e.g. after 5 years. Moreover, where such statistical data is available, it rarely records specific programmes which international students have used within this 5-year interval. This means that while data on international student numbers and numbers of post-study work programme enrolments is mostly available, data tracking the links between the use of these programmes and student pathways after completing them is much more limited. Therefore, there is in fact very little (publicly available) statistical data evidencing the potential impact of post-study work programmes internationally.

This is largely true for both traditional and 'new' (European) countries of immigration. The lack of relevant and/or comparable data for EU Member States has been identified as a particular issue by the European Commission: *'there is a particular need for improved data collection on international learner, researcher and staff mobility flows, and on international academic cooperation'*.⁶ As a recent report from Norway, which has the most advanced system of tracking the pathways of international graduates among EU countries, concludes: *'There is insufficient reliable material about the stay rates of international graduates in other Member States'*.⁷

Even for the traditional immigration countries, which have highly developed systems of monitoring immigration, until recently very few studies have attempted to calculate how many international students actually remain in the host country longer-term.⁸ Moreover, most available data on international students in these countries does not trace the links between usage of post-study work programmes and student pathways - with the exception of Canada. Relevant statistical datasets in Australia, New Zealand and the US trace visa category changes of international students (e.g. study to work, study to residence) rather than changes to and/or from particular visa programmes (such as post-study work schemes). Canada is the only of these countries that has data available to this level of detail.

In terms of international comparisons of available statistical data, a further challenge is the lack of consistency in how countries define 'international students' and calculate student 'retention'. Such differences make direct comparison of available country-level data on international students difficult, if not impossible. Given these inconsistencies the OECD, for instance, was unable to establish an internationally accepted indicator for international student stay rates; the indicator applied in OECD country comparisons has been subject to wide methodological debate. What is more, due to methodological differences and varying national data sources, data variation is frequent even at country level.⁹

An added difficulty in the case of this review was accessing information and data sources in English. For the non-English speaking countries under review here, that is France, Germany, the Netherlands and Sweden, relevant statistical databases are available in the respective native languages exclusively. However, as has been mentioned above, these sources have their limitations. While some of the countries under comparison might collect detailed data on international student pathways which could potentially lend itself to such analysis, this data is not publicly available. Details of datasets included in this analysis and

⁶ European Commission (2013). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: European Higher Education in the World, p. 14.

⁷ de Coning, M.V. and D. Huberts (2016). Stayrate van Internationale Afgestudeerden in Nederland, NUFFIC, 2016.

⁸ The Expert Council of German Foundations on Integration and Migration (2015). Train and Retain Career Support for International Students in Canada, Germany, the Netherlands and Sweden, p. 16.

⁹ The Expert Council of German Foundations on Integration and Migration (2015), op. cit., p. 16.

their limitations will be provided for each country separately in the country overview sections.

However, we must emphasise that analysis of statistical data alone may not be sufficient for determining the links between a given policy or policy change and retention rates of international students. This is for at least two reasons. Firstly, intersecting policies may be at play at any one point in time making it impossible to single out and evaluate the effects of one particular policy. Secondly, the effects of given policies are not independent of external conditions. The economic, political and social situation in both the home and host country (as well as other countries) at the time of graduation also impacts on students' decisions to stay or leave. Therefore, these cannot be separated from the broader context and attributed to policies aimed at retention alone. Canada, which has the most advanced system of tracking and evidencing policy change among all the countries under review here, is a prime example of looking at policies more broadly and applies both quantitative and qualitative methods in specific policy evaluations.¹⁰ It may thus be argued that effective monitoring of the impacts of post-study work programmes requires both detailed statistical data but also longitudinal qualitative studies exploring the factors behind mobility decisions (both international and internal).

Summing up, while it is generally agreed that international students constitute an important source of income for host countries as well as a potential pool of highly skilled workers, there is in fact little systematic evidence on the effects of post-study work programmes on international students' pathways post-graduation. In carrying out this review, we note the data limitations discussed here and focus on analysis of available data, and a broad overview of factors impacting on attracting and retaining students.

¹⁰ See e.g. CIC (Citizenship and Immigration Canada) (2010). Evaluation of the International Student Program. Evaluation Division, July 2010.

Trends in international student migration

International student migration: key facts and figures

The popularity of international education continues to grow, and the volume of student mobility is at an all-time high. In 2015, there were an estimated 4.6 million globally mobile higher education students, a massive increase from the 2.1 million students who went abroad in 2001.¹¹ The US, the UK, China, France, and Australia rank as top host destinations of international students worldwide and collectively host an estimated two-thirds of all international students. In terms of student numbers, the US is the global leader for international students with 971,000 students in 2016, followed by the UK which had 432,000 international students in the same year. At the same time, however, international students comprised only 5% of the total student population in the US as compared to 18% in the UK.¹²

The academic levels and degree types pursued by international students vary by destination. For example, degree seeking undergraduates form the majority of international students in New Zealand (75%) and Australia (50%), while Germany attracts more graduate full-degree students (53%). This may partly be explained through the role of language: Germany (as well as all the other non-English speaking countries considered in this review) offers study courses in English predominantly at the second and third cycle, i.e. Masters and Doctoral levels.¹³ In the US and the UK, degree-seeking international students' academic levels are more evenly divided. A large proportion of students in these key destinations pursue STEM fields, including 50% of all international students in Germany and 46% in the United States.¹⁴

Asia remains the top source region for international students globally, including in the key destination countries. China and India are the major source countries for international students to Australia, Canada, New Zealand and the US, and an (increasingly) important source of flows into European countries as well. Considering the demographic and socio-economic conditions in China and India, these two countries may be expected to continue being the lead source countries for international students worldwide.

In the US, students from across Asia accounted for 66% of all international students in 2015/16. Since 2001/2002, students from China and India have consistently accounted for the largest international student populations in the country. In 2015/16, Chinese students reached a high of 328,547, comprising 32% of all international students in the US and by far exceeding those from any other country for the seventh consecutive year. The number of Indian students in the same year came up to 165,918, growing by 25% since the previous year.¹⁵

This pattern is replicated across the traditional immigration countries: Chinese students lead in terms of international student numbers in all of them, followed by students from

¹¹ Institute of International Education (IIE) (2017). *A World on the Move. Trends in Global Student Mobility*. October 2017.

¹² OECD (2018), *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris.

¹³ All the countries under review operate a three cycle educational system, where the first cycle equals Bachelor level study, the second equals Masters level study and the third equals Doctoral studies.

¹⁴ IIE (2017), *op. cit.*

¹⁵ IIE (2017), *op. cit.*

India. In 2017, their numbers in the other traditional immigration countries were: in Australia – 114,006 from China, and 44,775 from India; in Canada – 132,345 from China, and 76,530 from India; in New Zealand – 31,075 from China, and 19,585 from India.¹⁶ In Australia, over one third of students in June 2018 were from China (23.1%) and India (14.4%).¹⁷

The position of Chinese and Indian students is slightly different in the European countries included in this review, especially for the latter. While China is among the top 5 source countries of international students in each of the EU countries, this is not the case for students from India who are outside the top 5 in France, Ireland and Sweden. In the EU member states, main countries of origin of international students are often state-specific with historical and linguistic ties, as well as established collaborations (such as bilateral agreements) playing a key role in shaping flows. For example, the colonial history and linguistic ties of France is clearly reflected in the main international student origin countries, with high numbers from Morocco, Algeria, Tunisia and Senegal.

Finally, universities carry out their own recruitment campaigns in various countries, sometimes reaching out to new destinations. Their efforts are increasingly impacting on students' choice of place of study and hence on mobility flows, as discussed in more detail the following section.

Factors shaping student destination choices

Already at a high, numbers of students wanting to study abroad are expected to continue growing. Leading world universities have been competing for international students for decades as hosting them brings clear financial benefits, undoubtedly adding to the host country's economy. Nevertheless, it is fairly recent that international students have also become included in the global 'competition for talent' as a potential (future) workforce. Previously this 'competition' focused predominantly on attracting highly skilled workers who already had the qualifications and skills in demand. However, the growing recognition that students will join the pool of highly skilled workers within a few years has spurred global competitors for talent to extend their activities to this group. Students are now being portrayed as an 'adjunct workforce in waiting' which is worthwhile retaining: international students have the advantage of being qualified locally and already being familiar with the host country, as opposed to highly skilled workers recruited from abroad. Therefore, countries worldwide have been developing policies and strategies aimed at attracting international students – not only to boost the education sector and the economy, but also with a view to retaining this future skilled workforce longer-term. Their actions shape current migration flows of international students to some extent and draw them to new destinations.

Ireland may serve as an example here. Currently, Ireland has relatively low numbers of international students in comparison to the other countries under review. Nevertheless, its recently developed internationalisation policies and strategies, a concerted effort of the Irish government, universities, and other agencies, are already bringing positive results. The policies and strategies applied include worldwide outreach (such as organising student fairs in various countries), making the application system for international students

¹⁶ Institute of International Education (IIE) (2018). *A World on the Move. Trends in Global Student Mobility. Issue 2, March 2018.*

¹⁷ Department of Home Affairs (2018). *Student visa and Temporary Graduate visa program report ending at 30 June 2018, p. 7.*

easy and accessible (they can apply online), and increasing the flexibility and attractiveness of Ireland's post-study work offer. Ireland has indeed achieved considerable success with a substantial growth in international student numbers in the 2000s: from 4,184 in 2000/01 to 10,981 in 2012/13.¹⁸ It has also successfully diversified the range of countries of student origin, with enrolments from the more obvious source countries such as China, India, and the US (which has historical ties with Ireland) but also new source countries such as Brazil and Saudi Arabia.¹⁹ Germany may also serve as a fairly recent example of a country shaping student flows within Europe. In order to attract more international students, Germany has *inter alia* developed information websites in English, established missions abroad providing information and advice to potential students and graduates, and has implemented changes to its post-study work offer. In consequence, the numbers of international students coming to Germany are growing rapidly,²⁰ and the country has already exceeded its target of attracting 350,000 international students by 2020.²¹ Therefore, new policies and strategies aimed at attracting international students may indeed bring effects and hence shape student flows. While the UK and the traditional immigration countries are well-established destinations for international students this is not the case for their European competitors. How their efforts to attract international students will impact on student flows in the longer term remains to be seen.

One factor that works to the definite advantage of English-speaking countries in terms of attracting international students is language. Australia, Canada, Ireland, New Zealand, the UK and the US all have a clear linguistic advantage over non-English speaking competitor countries as English remains the most popular language of study for international students globally. With the exception of Ireland, English-speaking countries are among the largest hosts of international students, especially the US which hosts about one-quarter of all the world's globally mobile students – roughly twice as many as the UK, which is the next largest host country. Taken together, 50% of the world's international students take up studies in five English-speaking countries (United States, UK, Australia, Canada, and New Zealand).²² The key importance of English as a medium of instruction has been recognised by non-English speaking countries aiming to attract international students and these are increasingly expanding their educational offer in English. All the non-English speaking countries under review belong to this category, with each, the Netherlands, France, Germany and Sweden, offering high numbers of courses taught in English. Nevertheless, as previously mentioned, the majority of these courses are offered at higher degree level (Masters and above) while their undergraduate offer to international students in English remains limited. This undoubtedly decreases their competitiveness against English-speaking countries.

The importance of post-study work schemes in attracting international students is often underlined in the literature and reflected in student surveys.²³ A post-study work offer may impact on student choices as:

¹⁸ Finn, M. and Darmody, M. (2017). What predicts international higher education students' satisfaction with their study in Ireland? *Journal of Further and Higher Education*. 41(4): 545-555.

¹⁹ Higher Education Authority (2016). *Internationally oriented, globally competitive higher education institutions*. HEA input into the International Education Strategy 2016–2020. Dublin: Higher Education Authority.

²⁰ Nafie, R. (2017). What Germany is doing right to edge past the competition. *The PIE News*.

²¹ Note: This number also includes students coming to Germany on temporary mobility programmes, such as Erasmus. Hoffmeyer-Zlotnik, P. and J. Grote (2019). *Attracting and retaining international students in Germany*. Study by the German National Contact Point for the European Migration Network (EMN). Federal Office for Migration and Refugees, 2019.

²² IIE (2018), *op. cit.*

²³ E.g. Hobsons EMEA (2017). *International Student Survey*. Welcoming the World. An International Future for European Higher Education; i-graduate International Student Satisfaction Survey (2016).

- prospective students may find the sheer opportunity of gaining work experience in the host country appealing;
- they may be looking for opportunities for longer-term migration and hence see the post-study work route as attractive;
- they may see an appealing post-study work offer as an indication of an overall favourable climate towards international students/migrants in the host country.

Therefore, while the post-study work offer may be seen as attractive per se it can also be perceived as a signifier of attitudes towards immigrants in the host country. As Mellors-Bourne et al. put it: *In a modern inter-connected world where students, prospective students and their influencers are involved in many social networks, perceptions of tighter immigration controls may for some paint a picture of an unwelcoming student destination.*²⁴

Indeed, it has been found that tightening regulations for post-study work offers or cutting these down have had a negative impact on international student numbers in the years immediately following the change. For example, research has shown that a key factor in the declining proportion of international students choosing the UK as their study destination after 2012 (when the post-study work route had been closed) was the country's comparatively poor post-study work offer. In 2015, a study²⁵ found that 36% of prospective students who chose not to study in the UK cited post-study work options as the principal reason for this decision. Two very similar concerns followed: about job prospects in the UK, and ability to stay in the UK after completing their studies. Similarly, it was found that stricter visa controls introduced in Australia in 2008 led to a decline in international student numbers.²⁶

As follows from the above, while international students' motivations to choose given destinations are to some extent shaped by the scope of action created by government policies and the policies of higher education institutions (henceforth HEIs), there is a whole host of other factors prospective students take into consideration. Some of these are related to the home country, such as demand vs. supply of tertiary education courses (e.g. in China demand outstrips supply which motivates many Chinese young people to study abroad) or type and scale of sponsorship programmes available. Moreover, some of these factors are unpredictable, such as currency fluctuations and changes in exchange rates, hence their impact on student choice may change over time. For example, New Zealand, a highly popular and established student destination, experienced a considerable drop in international student numbers as the exchange rate between the New Zealand dollar and the US dollar changed. As the value of the New Zealand dollar increased in 2006, the number of international fee paying students enrolled in New Zealand universities decreased. A clear correlation between growth in exchange rates and decline in (fee paying) student numbers can be intuitively expected: a higher rate of a given currency makes it relatively more expensive to study in the destination country and therefore reduces its attractiveness to students. Conversely, the fact that e.g. Germany is a relatively cheap country to live in increases its attractiveness.

²⁴ Mellors-Bourne, R., Humfrey, C., Kemp, N. and Woodfield, S. (2013). The Wider Benefits of International Higher Education in the UK. BIS Research Paper number 128, September 2013, p. 7.

²⁵ Hobsons EMEA (2015). International Student Survey 2015: Value and the Modern International Student. A survey of 45,543 prospective international students from 210 countries and 207 nationalities, of whom 17,336 (from 199 countries and 193 nationalities) had enquired to UK institutions.

²⁶ Institute of International Education (IEE) (2012). International Education: A Global Economic Engine. 2012 International Education Summit on the Occasion of the G8. Washington DC: Institute of International Education.

It also needs to be underlined that policies aimed at attracting international students cannot be viewed as separate from other political developments in potential destination countries. The rise of nationalism around the world, and what is perceived as a turning inward, may also have impacts in terms of international student numbers. In this context, the literature mentions recent developments in two major destination countries: the Brexit vote in the UK (2016), and travel bans for nationals of certain countries in the US (2017). It is expected that Brexit may have far-reaching consequences on student mobility into and out of the UK, as well as on student mobility between the UK and continental Europe. Similarly, political shifts in the United States and the introduction of two travel bans against individuals from seven countries in January and March 2017 have raised many questions about the effect these developments will have on international student mobility from affected countries and elsewhere.

The University sectors in both countries are indeed striving to counter their potentially negative impacts on the sector, for example by lobbying for a more attractive post-study work offer for international students (the UK), or by launching campaigns to send messages of welcome to international students (the US).²⁷ US-based surveys on the impacts of Trump's policies on student choices are so far inconclusive. Nevertheless, data gathered in competitor countries may be more useful for such evaluations. For example, a recent study looking into students' motivations for choosing Ireland as their (potential) study destination provides some insight into the matter. One of the Polish study participants explained her decision to choose Ireland over the UK in terms of the uncertainty around Brexit.²⁸ What is important here and should be emphasised, is the growing role of international networks in shaping student choices.

While, as mentioned earlier, universities in the UK and the US have taken steps to offset the impact of negative political developments on the sector, such efforts might not bring expected results. In the age of social media and open communication technologies, it is often international networks which act as key provider of information and reference point. The example of the earlier mentioned Polish study participant is relevant here: she explained there were large Polish communities in both the UK and Ireland, and these were a vital source of information for her. While interactions with the Polish community in Ireland provided reassurance that it was a welcoming country, the Polish community in the UK expressed uncertainty and multiple insecurities resulting from Brexit. This led the prospective student to conclude *'I think I will not go to U.K. because I don't want to have those problems [which the Polish community there is experiencing]'*.²⁹

Summarising the above discussion, we can say seven key factors (related to the host country exclusively) shape prospective students' choices:

1. The academic offer per se and the international reputation of a given university or a given country's education system more generally as well as language of instruction/official language of the country;
2. Ease of meeting formal requirements (fulfilling university recruitment and visa requirements);
3. Finances: affordability of studying and living in the host country; sponsorship opportunities in host country;
4. Presence of networks in the host country;

²⁷ IEE (2018), op. cit.

²⁸ Clarke et al. (2018), p. 46.

²⁹ Clarke, M., Hui Yang, L., and D. Harmon (2018). The Internationalisation of Irish Higher Education. HEA, 2018, p. 46.

5. General atmosphere in a given country: attitudes towards international students (and immigrants in general), lifestyle;
6. Work opportunities during and after studies; and,
7. For those looking to emigrate permanently – the country's immigration policy and pathways to settlement post-study.

Concluding, even when policies towards international students become more open, liberalization does not necessarily translate into desired policy outcomes, such as greater inflow of international students.³⁰ Future students do not select their study locations based on a given country's policies alone. Other factors also play a role, including the academic standing of HEIs, language, presence of networks, and feelings/knowledge about the likely welcome.

³⁰ Czaika, M. and Parsons, C.R. (2017). *The Gravity of High-Skilled Migration Policies*. Demography, Springer.

Retaining international graduates: an overview of factors and considerations

As mentioned in the previous section, international students are becoming an increasingly desired resource and many countries have been shifting their migration policies with a view to attracting and retaining this group of migrants. In the previous section we analysed the various factors which play a role in shaping international students' choice of study destination. In this section we shall move to the question of student retention. First, we will take a closer look at factors impacting on student retention, and especially the role of post-study work programmes. We shall then analyse the impacts of student retention – both positive and negative – on the source country but also on the international students.

Factors in retaining international students

The key factors determining international students' decisions to stay or leave the host country upon graduation are:

1. Work permit regulations and work opportunities around the time of graduation;
2. Having work experience in the host country, especially in a field related to the field of post-graduation employment;
3. Proficiency in the host country's language (which largely impacts on work opportunities);
4. Length of time spent in host country and social ties developed there (especially close ties such as marriage/partnerships, starting a family);
5. Economic, political and social conditions in the host and home countries (and potentially in other countries) at the time of graduation.

The factors listed above are largely interconnected. Being able to meet the formal requirements of work and stay after graduation is of course crucial to remaining in the host country; therefore, the more flexible the requirements, the greater the potential for international students to stay after completing their studies, at least for some time. Work opportunities in the host country also play a crucial role in decisions to stay. However, these are often compared to conditions in the home country – along such factors as political stability and social climate. The more favourable the opportunities and atmosphere in the host country, the higher the propensity to stay. This is especially visible when looking at migration decisions of international students from OECD vs. non-OECD countries studying in the EU: stay rates are typically very low among students from other OECD countries and much higher for students from less developed or politically less stable countries.³¹ Research also points to the key role of language in shaping opportunities for further stay. Lack of fluency in the language of the host country, especially spoken, has been identified as a serious barrier to finding employment in the

³¹ Weisser, R. (2016), Internationally mobile students and their post-graduation migratory: An analysis of determinants of student mobility and retention rates in the EU. OECD Social, Employment and Migration Working Papers, No. 186, OECD Publishing, Paris, p. 3.

host country for many international students. This may be especially true for students of English-language courses in non-English speaking European countries, such as Germany, France, the Netherlands or Sweden. While high-quality study courses in English attract many international students to these countries, their lack of or poor knowledge of the host country's native tongue often proves to be a major barrier to finding employment there, and hence being able to stay.³² Insufficient language skills are also problematic for many non-native English speakers studying in English-speaking countries.³³

Finally, research points to the crucial role of time and relationships built over time in encouraging further stay in the country of migration.³⁴ It is natural that the stronger the ties in a given place, the more difficult it is to leave it. In these terms, social integration into the host country's society also plays a highly significant role in student retention. Findings reveal a gender difference in this respect, with women tending to be more inclined towards staying in the host country than men. Therefore, the main conclusion drawn from literature on student decision-making is that *'international graduates do not decide lightly where they start their career after graduation. Instead, they stay if they consider a destination to be a country of social and economic opportunities, as other types of migrants do as well'*.³⁵

The role of post-study work programmes

The post-study work option is a policy instrument which may crucially support the goal of retaining international students as:

1. It allows them to seek opportunities in the host country's labour market, often with few or no restrictions, hence providing time for 'experimentation' and increasing chances of finding (suitable) employment; moreover, if relevant employment is found, it allows for accumulation of work experience which may count towards permanent residency requirements in some countries;
2. It extends the time spent in the host country, which:
 - a. supports developing new or stronger networks and ties there, which in turn increases chances of longer-term stay, and,
 - b. adds to the period required to fulfil permanent residency requirements;
3. It is a symbolic indication of a positive attitude towards students (and migrants more generally) in the host country: a sign that they are valued and are welcome to stay.

Research proves that having worked during one's studies in a field related to the field of post-graduation employment increased the likelihood of staying. Such job opportunities during studies might have served as an entrance ticket to the labour market, for instance by granting more direct access to job networks or by providing more country- and occupation-specific human capital.³⁶ Furthermore, in some countries relevant work-experience supports the application for permanent residency. This is a requirement for certain permanent residency streams in Canada, for example.

³² Lam, Q.K.H. and Maiworm, F. (2014). English in the classroom and beyond, in: Wächter, B., Maiworm, F. (eds.). English-Taught Programmes in European Higher Education. The State of Play in 2014. Bonn: Lemmens Medien GmbH, 2014, p. 105.

³³ Yates, L and Wahid, R. (2013). Challenges to Brand Australia: international students and the problem with speaking, Higher Education Research and Development 32:6, pp. 1037-1050.

³⁴ de Coning, M.V. and D. Huberts (2016). Stayrate van Internationale Afgestudeerden in Nederland, NUFFIC, 2016.

³⁵ Weisser (2016), op. cit., p. 36.

³⁶ Weisser (2016), op. cit., p. 35.

Moreover, it has been found that the length of time spent in the host country has direct impact on longer-term stay. As research demonstrates, plans change with time, with time spent in the country, with meeting new people, and all this impacts on migration decisions. Since the post-study work scheme extends the time spent in the host country and provides further opportunities for meeting people and gaining work experience, it enhances the whole experience of living in the host country and is commensurate to encouraging longer stay.³⁷

Research on post-study pathways of international graduates in Norway found PhD graduates to be significantly more likely to remain in the country, as were those who had started a family. Moreover, it was found that having worked during one's studies in a field related to the field of post-graduation employment increased the likelihood of staying. Therefore, it can be assumed that opportunities to work in one's field following graduation may have similar impact on international students' stay rates.³⁸ Moreover, in the case of certain countries and/or nationals, time spent in a post-study work programme will count towards length of stay requirements for permanent residency.

Finally, as mentioned earlier, post-study work opportunities are often seen as a symbolic reflection of the overall attitude to international students and migrants in a given country. Feeling welcome in the host country is of considerable importance for making the decision to stay there.

Benefits and challenges of retaining international students

International students, who have already acquired social and cultural experience in the host country, are generally portrayed as precious human capital or 'an adjunct workforce in waiting' which can significantly boost the host country's economy. Consequently, an increasing number of industrialised countries are re-tailoring their policies to retain highly skilled foreign graduates.³⁹ Nevertheless, retaining international students also brings challenges – to the host country and to the graduates. In this section we will consider both the benefits and challenges (related to the host country exclusively) of retaining international students.

Benefits

The literature points to the following key benefits of retaining international students post-graduation:

- They bring financial gains to the host country;
- They are a valuable demographic and economic resource;

³⁷ Mellors-Bourne et al. (2013), op. cit., p. 82.

³⁸ de Coning, M.V. and D. Huberts (2016), op. cit. p. 35.

³⁹ Riaño, Y., van Mol, C. and Parvati, R. (2018). New directions in studying policies of international student mobility and migration. *Globalisation, Societies and Education*, 16:3, p. 283-294.

- They may become ‘transnational representatives’ of the host country, a source of information and advice for other prospective immigrants.

Research shows that retaining international graduates has a positive economic impact on the host country. For instance, a 2012 study by the Dutch Government shows that if only a modest 2.5% of international graduates remained to work in the Netherlands, this would result in positive long-term effects on public finances, over and above the recouped investment.⁴⁰ The Netherlands has furthermore estimated that at a stay rate of at least 19%, international graduates who remain in the country provide a net profit of at least €1.64 billion annually.⁴¹

Significantly, international students have the potential to offer governments and employers a ‘productivity premium’: they are typically much younger than highly skilled migrants recruited from abroad, they face no regulatory barriers (as they have gained professional qualifications within the host country’s training system), and their careers are likely to span decades. The young age of international graduates means they are also a valuable demographic resource: they may be expected to start families in the future and their young profile helps balance that of the ageing populations in advanced economies. Moreover, research confirms they are much more likely to integrate well into the host country’s labour market, and have overall higher employment rates (and often higher earnings) than migrants with the same skills recruited from abroad. Taking the example of Australia and looking at graduates’ employment rates in the years 2009-2011, 99% of former international medical students were employed within four months of course completion, compared to 57% of medical migrants within five years of arrival. Full-time employment rates for students qualified in dentistry, pharmacy, and nursing were 98%, 96%, and 66% respectively as compared to 40%, 32%, and 66% for skilled migrants recruited from abroad in their first five years in Australia.⁴² Furthermore, international graduates who enter the labour market as highly skilled workers may also create ‘significant positive externalities’ that trigger an internal migration dynamic within and across occupations and professional networks and can create ‘peer-attracting professional and sociocultural environments’.⁴³

On this last note, international graduates should not be seen as a tool for alleviating skill shortages or demographic issues exclusively. They can also act as ‘ambassadors’ for the host country by becoming ‘international information brokers’ who provide information and advice on the host country to their (personal and professional) networks. Therefore, if their own experiences are positive and they deem the host country commendable, they may encourage others to immigrate to the country, or reinforce its positive image abroad.

Challenges

Retaining international graduates, though generally seen as a positive phenomenon, can also create a number of challenges, both to the host country (and domestic labour) and to the graduates themselves. Different post-study work policies have brought about the following issues:

⁴⁰ European Commission (2013). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: European Higher Education in the World, p. 8.

⁴¹ de Coning, M.V. and D. Huberts (2016). Stayrate van Internationale Afgestudeerden in Nederland, NUFFIC 2016.

⁴² Hawthorne and To (2014), op. cit.

⁴³ Czaika, M. (2018). High-Skilled Migration. Introduction and Synopsis, in: Czaika, M. (ed). High-Skilled Migration: Drivers and Policies. Oxford Scholarship Online, 2018, p. 9.

- Political tensions;
- Oversupply of graduates with certain degrees in local markets and hence increased competition for domestic graduates;
- Down-skilling and/or lower earnings for international students/graduates;
- Abuse of international graduates by employers;
- Issues with integrating into society and/or the labour market.

In policy circles, the belief that international students are a valuable resource and their retention is beneficial to the host country is generally accepted. Nevertheless, this does not mean it is universally supported. Contemporary states are faced with the challenge of how to regulate migration in the face of economic forces that push them toward greater openness,⁴⁴ while political logic and security concerns simultaneously push them toward closure.⁴⁵ This tension also plays out in relation to international students: the UK is a prime example of a country which has shifted immigration policies related to students towards closure at a time when many other of its competitor countries have been moving them towards greater openness. Nevertheless, this does not mean that retention of international students is universally accepted in the other competitor countries. For example, at the beginning of 2018 a public debate emerged in the Netherlands whereby the growing number of international students is considered as a problem by some actors in the academic landscape as well as policy-makers.⁴⁶ Similar debates also regularly surface in traditional immigration countries, such as Australia or the US. As a result, international students are not always perceived as an asset, and individuals and groups (not only policymakers but also education providers and employers) have to lobby and negotiate to make specific policies possible.⁴⁷ This, in turn, means that they are subject to change depending on the political, economic and social climate in a given country at a given point in time. Still, despite country-specific contexts and considerations, there has been a definite move towards openness of policies towards international students in many competitor countries, as exemplified by the growing popularity and flexibility of their post-study work programmes.

International students are associated with highly skewed enrolment patterns and are 'overrepresented' in certain study programmes. This, in turn, may impact negatively both on their success in the host country's labour market and on domestic graduates. Research from Australia demonstrates that the oversupply of graduates in certain fields increases competition for employment and leads to lower employment rates, underemployment, lower wages, and lower job satisfaction for international graduates in comparison to Australian citizens and permanent residents of migrant background.⁴⁸ In the US, in turn, it has been argued that oversupply of international graduates of specific degrees creates increased and unfair competition for domestic graduates,⁴⁹ and this has been borne out by a number of studies. For instance, a 2009 study by Borjas on retention of international PhD graduates in the field of science and engineering found that the 'supply shock' of such graduates in the early 2000s led to depressing wages by 3 to 4% as well as the flight

⁴⁴ Findlay, A. (2011). An Assessment of Supply and Demand-Side Theorizations of International Student Mobility. *International Migration* 49 (2): 162–190; Universities UK. 2017. The Economic Impact of International Students. London: Universities UK.

⁴⁵ Hollifield, J. F. (2004). The Emerging Migration State. *International Migration Review* 38 (3): 885–912.

⁴⁶ Bouma, K. (2018). Buitenlandse student heerst bij 210 studies. *De Volkskrant*, March 8 2018; Truijens, A. (2018). Toestroom buitenlandse studenten kost meer dan het oplevert, en zorgt voor boze studenten. Voor wie is het precies gunstig? *De Volkskrant*, March 9 2018.

⁴⁷ Riaño et al. (2018), op. cit., p. 284.

⁴⁸ Hawthorne (2018), op. cit., p. 211.

⁴⁹ Miano, J. (2017). A History of the 'Optional Practical Training' Guestworker Program. Centre for Immigration Studies, online report, September 2017.

of US scientists to professional occupations that had not been ‘targeted by immigrants’.⁵⁰ As follows, if international graduates add to the ‘supply shock’ in given sectors and/or local labour markets, they may also add to pressures on the domestic labour market and for domestic workers. Though international literature argues that increases in the supply of immigrants may have little or no impact on local labour markets, this relates to contexts where migrants complement rather than substitute domestic labour.⁵¹ However, as illustrated by the US case, oversupply of international students with given degrees at given points in time may lead to labour market substitution rather than complementarity, and hence to negative labour market outcomes for domestic graduates – a problematic issue if protection of local jobs is a primary policy aim.⁵² Indeed, in the US the growing numbers of international graduates in certain fields has caused much concern and has led to lobbying for more protection of domestic workers’ rights.⁵³ However, it is difficult to predict the actual effects of oversupply of international graduates on labour market outcomes for domestic graduates: this depends on a number of factors, such as the spatial distribution of the graduates, the state of the (local/national) economy and development of given sectors, or the degree and pace at which new jobs are created.

Furthermore, research from a number of countries demonstrates that international students earn less than domestic students. In New Zealand, for example, the median earnings for young, international graduates tend to be lower than those for young, domestic graduates in most fields of study and at all qualification levels except doctoral level.⁵⁴

New Zealand has also faced other challenges resulting from the post-study work policies implemented which resulted in discontinuing one of its programmes last year. Up till November 2018 New Zealand operated two streams under its Post-Study Work Visa programmes: the Employer-Assisted Stream and the Open Stream. Following a review which highlighted serious abuse of the system, the Employer-Assisted Stream was closed. The Employer-Assisted programme basically provided a straightforward route into permanent migration: it tied the students to a particular employer and after completing the programme with them they could qualify for a resident visa under the Skilled Migrant Category. This resulted in serious abuse of the system giving rise to a whole exploitive ‘international student migration industry’. It was found that some HEIs created bogus study programmes for international students or would seriously lower their degree requirements. Furthermore, some of these HEIs also established collaborations with exploitive employers to ensure their students were offered work after graduation: typically low-paid, below the students’ skills level, and in bad working conditions. Therefore, abuse of the Employer-Assisted Post-Study Work Visa Stream led to highly negative (and longer-term) impacts: lowering of skills of international students (and in effect some future residents’ skills set) on the one hand, and their labour market abuse on the other. These corruptive practices also had a knock-on effect on New Zealand’s reputation as an international education provider and a job market for skilled migrants. Therefore, certain policies aimed at retaining international students need to be closely monitored with strict inspection of the actors involved in their implementation.

⁵⁰ Borjas, G. J. (2009). ‘Immigration in high-skill labor markets: The impact of foreign students on the earnings of doctorates’, in: R. B. Freeman and D. L. Goroff (eds), *Science and Engineering Careers in the United States: An Analysis of Markets and Employment*. Chicago: University of Chicago Press.

⁵¹ Migration Advisory Committee (2018). *EEA migration in the UK: Final report*, September 2018, pp. 16-21.

⁵² Hawthorne, L. (2018). *Attracting and Retaining International Students as Skilled Migrants*, in: Czaika, M. (ed). *High-Skilled Migration: Drivers and Policies*. Oxford Scholarship Online, 2018, p. 216.

⁵³ Miano (2017), op. cit.

⁵⁴ Ministry of Education New Zealand (2017). *Young, international graduates – employment outcomes*. November, 2017.

Finally, despite the general view that international students are 'by default' well integrated into the host country, the literature questions this assumption. It points out there is no clear policy coherence between integration policies and migration policies regarding international students, and this has specific outcomes for their experiences and choices.⁵⁵ It has to be underlined that, even in countries which have developed integration policies, students are generally not covered by these. It is assumed that international students are already well integrated into the host country's institutions and culture, and will also integrate well into the labour market. Nevertheless, this is may be a largely false assumption, especially for students of certain nationalities or ethnicities who face many challenges on remaining in the country post-graduation. For example, O'Connor (2018),⁵⁶ who looks at the situation of international graduates in Ireland, points to the contradictions in Ireland's institutional migration policies aimed at attracting students on the one hand, and the lack of diversity policies in a country where migration is a relatively recent phenomenon on the other. The drive to recruit international students sits alongside policies around surveillance, racialisation, increasing restrictions and divisive rhetoric towards non-EEA students.⁵⁷ In result, despite generally having high language skills and educational levels, student migrants of various nationalities experience similar difficulties in integration as other migrants, including racialisation and marginalisation.

One key barrier to integrating into the host country's society and labour market is language. While this might not be surprising in the case of English-speaking students doing courses in countries where English is not the native tongue, it is also a very frequent issue for non-native speaker students doing their degrees in English-speaking countries. For example, poor levels of spoken English among Asian graduates have been identified as a serious problem in Australia and New Zealand,⁵⁸ yet the same is true for other English-speaking countries, including the UK. International students may in fact lead rather isolated lives during their studies and have little opportunity to mix with members of the wider society, be it due to remaining within their nationality group or through shyness or reticence. Consequently, their actual experiences of the host society and the living language remain limited, creating serious barriers to employment and/or integration. Although the issue of facing difficulties in integrating is not infrequently raised by international students, the general assumption that they will become well-integrated by the time they graduate holds sway. Therefore, few countries have taken steps to address the issue at national level – it is typically seen as the responsibility of universities who provide pastoral care and 'student experience'. The Netherlands can serve as a progressive example in these terms: over the last few years, the country has been developing strategies aimed at making international students feel welcome, and these include creating opportunities for them to mix with Dutch students.⁵⁹

⁵⁵ O'Connor, S. (2018). Problematising strategic internationalisation: tensions and conflicts between international student recruitment and integration policy in Ireland. *Globalisation, Societies and Education*, 16:3.

⁵⁶ O'Connor, S. (2018), op.cit.

⁵⁷ Riaño et al. (2018), op. cit., p. 288.

⁵⁸ Yates, L and Wahid, R. (2013), op. cit.

⁵⁹ This is part of the national strategy for the 'Make it in the Netherlands!' programme:

[<https://www.rijksoverheid.nl/documenten/rapporten/2016/09/19/make-it-in-the-netherlands>] [DOA: 2/05/2019]

Country overview

Policies on international migration are subject to regular change, depending on a country's economic, political and social needs at a given point in time. The 'traditional immigration countries' – Australia, Canada, New Zealand and the United States – are unique in that immigration was essential for their founding and development, and they have continued to encourage immigration for permanent settlement on a significant scale. In European countries, in contrast, mass immigration occurred only when they were already economically developed nations and resulted from their colonial history (e.g. the UK, France and the Netherlands) and/or active recruitment of workers (e.g. Germany, Sweden), especially after the Second World War. Moreover, some European countries only recently transformed from emigration to immigration countries (e.g. Ireland).⁶⁰ Therefore, different histories and different needs have shaped immigration policies in these countries over the centuries. Nevertheless, with the beginning of the 21st century the 'global race for talent' has become a clear factor in forming immigration policies in highly-developed countries worldwide; since the mid-2000s, all the countries under comparison in this review have developed new or reviewed existing policies aimed at highly skilled migrants and international students, including those related to post-study work. In this section we shall analyse developments related to post-study work options in particular. We shall first look at trends and national policies in the traditional immigration countries. Then we shall move to European countries and consider supranational EU-level policies as well as national-level policies in the EU states under comparison.

Traditional immigration countries

Australia, Canada, New Zealand and the United States are referred to as 'traditional immigration countries' as in their case nation-building and immigration were tied together from the very beginning of their existence as nation states. Therefore, these countries have had explicit immigration policies for centuries. Nevertheless, there are considerable differences between their immigration systems: while Australia, Canada and New Zealand all adopted points-based immigration systems in the second half of the 20th century, the US continues to operate a highly complex visa-based system.

Australia, Canada and New Zealand have a similar history of immigration and immigration policy. Historically, in all three countries entry was based on preferred source countries consisting mainly of the UK, Western Europe and North America. Over time, they moved away from selection based on nationality and ethnicity to human capital and labour market characteristics as key criteria for selection.⁶¹ This change was reflected in the points-based systems (PBS) they adopted: Canada was the first to move to a points-based system (in 1967), followed by Australia (1989), and New Zealand (1991). Over the last decades, all three countries have operated large permanent migration programmes sharing two priority goals: nation-building and economic growth. In terms of selection policy, their primary focus is on skills, accounting for two-thirds of permanent intakes. Moreover, in the past two decades each country has expanded quotas, diversified source

⁶⁰ Bauer, T.K., Lofstrom, M. and K.F. Zimmermann (2000). Immigration Policy, Assimilation of Immigrants and Natives' Sentiments towards Immigrants: Evidence from 12 OECD-Countries. IZA Discussion Paper No. 187, August 2000, pp. 1-2.

⁶¹ Bauer et al. (2000), op. cit., p. 1-2.

countries and fields, and dramatically increased temporary labour flows (driven by state and employer sponsorship). They have also cultivated ‘two-step migration’, facilitating category-switching by temporarily employed workers, and the retention of former international students. In Australia, 66% of Indian and 38% of Chinese students category-switched to become permanent skilled migrants by 2005. In New Zealand, a study-to-work followed by a work-to-residence pathway has existed for more than a decade, retaining a third of all international students. Canada launched a strategy designed to double the number of international enrolments within ten years (to 450,000) in 2013, after tripling retention.⁶² By 2014, Australian, Canadian and New Zealand strategies, informed by national and international research evidence, had largely converged. All three countries aim to attract ‘the brightest and the best’ defined as skilled migrants capable of integrating into the labour market early, and bringing beneficial fiscal outcomes.⁶³

The US does not operate a points-based system but a much more complex visa system with different entry routes for temporary and permanent migration: through family reunification, family sponsorship, an employment-based route, the refugee and asylum seeker route or through the Diversity Visa Programme. Contrary to policies of the other traditional immigration countries, the US immigration policy has long stressed family reunification over labour market skills – with the exception of the H-1B temporary visas for highly skilled workers (Bauer et al. 2000: 6). Following an increase in the annual cap on H1-B visa numbers in 2001, the United States became the main attractor of high-skilled migrants among OECD countries (OECD 2008). The US also aims to attract and retain students of US universities through the (recently expanded) Optional Practical Training (OPT) programme. Temporary visas have become an important part of the current high-skilled workforce in the US, and in STEM fields – science, technology, engineering, and mathematics – in particular. These developments have largely taken place under the influence of certain interest groups, advocates, and lobbyists representing employers in high-skilled sectors.⁶⁴

While comparative studies have often contrasted the supply-driven points-based systems of Canada and Australia to the demand-driven policies of the US, it has been argued that this categorisation is becoming obsolete as the respective governments are continually changing policies and effectively moving towards other models.⁶⁵ The points-based systems of Canada and Australia started diverging in the mid-1990s as the countries adopted different selection criteria. Canada adopted a human capital model with a points-based system emphasising education and language while Australia adopted a neo-corporatist model with a points-based system focusing on occupations in demand, as determined by industry in cooperation with workforce experts and representatives. However, the Canadian government stopped processing the vast majority of applications selected by its human capital-weighted points-based system in favour of applicants with skills on rather narrow occupational lists, as is the case in Australia. Meanwhile, the Australian government has shifted its skilled migration programme to favour employer-sponsored permanent immigrants and temporary migrant workers, like the US demand-driven model. The US model currently allows employers to select highly skilled migrants by means of sponsorship for temporary visas and permanent residence yet this might change

⁶² Hawthorne (2018), *op.cit.*, p. 198.

⁶³ Hawthorne, L. (2014). *A Comparison of Skilled Migration Policy: Australia, Canada and New Zealand*, SSRN.

⁶⁴ Teitelbaum, M.S. (2018). *High-Skilled Migration Policy Challenges from a US Perspective*, in: Czaika, M. (ed). *High-Skilled Migration: Drivers and Policies*. Oxford Scholarship Online, 2018.

⁶⁵ Koslowski, R. (2018). *Shifts in Selective Migration Policy Models. A Comparison of Australia, Canada, and the US*, in: Czaika, M. (ed). *High-Skilled Migration: Drivers and Policies*. Oxford Scholarship Online, 2018.

as introducing a points-based system which would prioritise highly skilled migrants has recently been subject of parliamentary discussion.⁶⁶

The 2000s have brought about distinct changes in migration policies of the respective traditional immigration countries. These were partly driven by the global competition for talent with each of the countries reviewing its post-study work policies. We shall discuss these in detail in the country overview sections below.

Australia

Policy context

Australia needs to grow its population to address issues of an ageing population and shrinking of the workforce. Immigration certainly impacts on Australia's population to a greater degree than is the case for most Western nations. Among OECD countries, only Switzerland and Luxembourg have a higher percentage of foreign-born people than Australia with 28% of the Australian population being born overseas. The proportion of Australians born overseas is now at the highest point in 120 years. Indeed, since 2005-2006, migration has been the main driver of Australia's population growth, contributing approximately 60% to total growth. The spatial distribution of new migrants is also a key issue for Australia's immigration policy as immigrants are more likely to live in large cities than smaller cities and regions where population challenges are most pronounced.

Younger migrants have generally been favoured in Australia's immigration policy, especially over the last 30 years. Furthermore, Australia has long focused on attracting high-skilled migrants and has the world's largest skilled migration programme.⁶⁷ Apart from a national-level scheme, Australia also operates the Regional Skilled Migration Scheme which allows employers in given regions and low population growth areas to fill skilled positions they are unable to fill from the local workforce. It was the second most popular destination of OECD-born high-skilled expatriates in 2001 and the third OECD nation in terms of a high-skilled immigrant population.⁶⁸ Over the last two decades, Australia introduced a number of changes to policies related to highly skilled migration to ensure that migrants to the country meet the specific needs of the economy and fill gaps in the labour market where they currently exist.⁶⁹ One of these changes has been the introduction in 2007 of the Temporary Graduate Visa (subclass 485), aimed at retaining international graduates with relevant skills gained from local higher education institutions.⁷⁰ In 2008, Australia accounted for 11% of the global market of international students⁷¹ and became the third OECD nation with the largest high-skilled immigration population.⁷²

⁶⁶ Czaika (2018), op. cit., p. 13.

⁶⁷ Tani, M. (2017). Skilled Migration Policy and the Labour Market Performance of Immigrants. IZA DP No. 11241, December 2017.

⁶⁸ OECD (2008). International Migration Outlook. OECD Publishing, Paris.

⁶⁹ Spinks, H. (2010). Australia's Migration Program. Parliament of Australia, Parliamentary Library, 29 October 2010.

⁷⁰ Faggian, A., Corcoran, J., Rowe, F. (2016). Evaluating the effects of Australian policy changes on human capital: the role of a graduate visa scheme. Environment and Planning C Government and Policy 34(1), p. 153.

⁷¹ Koleth, E. (2010). Overseas Students: Immigration Policy Changes 1997–May 2010 (Parliament of Australia, Department of Parliamentary Services, Canberra).

⁷² OECD (2008), op. cit.

International students in Australia

Australia had 336,000 international tertiary-level students in 2016 (at bachelor, master and PhD level) with international students constituting 17% of all student enrolments in that year.⁷³ The top 5 countries of student origin in 2017 were: China (114,006); India (44,775); Nepal (15,211); Malaysia (14,721); Vietnam (13,949).⁷⁴

Temporary Graduate Visa Scheme (subclass 485) - overview

The Temporary Graduate Visa Scheme (subclass 485) was introduced in September 2007 to address the need to attract and retain highly skilled individuals. The scheme initially granted the right to work in Australia for 18 months post-graduation to graduates of selected courses, both vocational and university degree courses. Since then a number of changes were introduced, essentially aimed at increasing the attractiveness of the offer to graduates of university degree courses. In 2013, the post-study work path was introduced into the 485 subclass: it granted longer and less restrictive work rights to university graduates in particular (rather than those in vocational training).⁷⁵ The object of this policy change was attracting more 'higher quality' migrants on the one hand, and discouraging the 'overproduction' of graduates of vocational courses on the other.

Currently, the Temporary Graduate Visa (subclass 485 - Post-Study Work Stream) can be granted to graduates of recognised Australian HE institutions for 2-4 years, depending on the level of degree obtained.

Eligibility

Graduates of registered courses of at least 2 years length who:

- are under the age of 50;
- hold an eligible student visa (granted on or after 5 November 2011);
- fulfil the proficiency in English requirement;
- have valid health insurance cover for the length of stay;
- meet the 'good character' requirement.

Graduates need to apply for the visa within 6 months of the official date of course completion. The visa allows them to bring over family members: their spouse or partner and dependent children.

Length of programme

The Post-Study Work Visa is granted for 2-4 years depending on the level of qualification received by the applicant. The higher the level of qualification, the longer the length of the visa, namely:

⁷³ OECD (2018), Education at a Glance 2018: OECD Indicators, OECD Publishing, Paris, p. 228.

⁷⁴ IEE 2018, op. cit.

⁷⁵ The Temporary Graduate Visa (subclass 485) also includes the Graduate Work stream for international graduates of Australian HEIs who have a qualification relevant to an occupation on the skilled occupation list [<https://immi.homeaffairs.gov.au/visas/getting-a-visa/visa-listing/temporary-graduate-485/graduate-work>].

- bachelor degree (including honours) – 2 years;
- master’s by coursework – 2 years;
- master’s by research – 3 years;
- doctoral degree - 4 years.

The Post-Study Work Visa cannot be extended.

Evaluation of programme and available evidence

The programme has been successful in terms of achieving the objective of attracting and retaining international students in the short-term. However, it has also raised a number of challenges related to the quality of students attracted, oversupply of graduates of certain subjects, the position of international graduates in Australia’s labour market, and their spatial distribution post-study. Also, the sheer growth in numbers of programme participants is currently seen as problematic.

The aim of introducing the Post-Study Work Stream into the Temporary Graduate Visa (subclass 485) was to increase the attractiveness of Australia's HE sector and the numbers of international university-degree students staying in Australia after graduation. This objective has been achieved with a staggering increase in student numbers and applications for the programme since its introduction. While in 2013/14 a total of 974 Temporary Graduate Visas (subclass 485 - Post-Study Work Stream) were granted to primary applicants,⁷⁶ in 2017/18 the respective number was 32,748.⁷⁷ This is due to the increasing size of the student visa program and a greater number of students in Australia becoming eligible to meet the requirements for the Post-Study Work stream.⁷⁸ In the 2017-18 programme year to 30 June 2018, 24.2% of former student visa holders who were granted another substantive visa moved on to the Temporary Graduate (subclass 485) Visa (this includes both the Graduate Work programme and the Post-Study Work stream).⁷⁹

While China and India lead in the number of applicants to the programme, the top 5 countries of origin of the programme beneficiaries have changed to some extent since its introduction:

- in 2013/14 these were: India (341 visa holders); China (151); Malaysia (71); Philippines (58); Pakistan (48);
- in 2017/18 these were: China (9,441); India (8,443); Nepal (2,877); Pakistan (1,779); Vietnam (1,299).⁸⁰

Nevertheless, the effectiveness of the programme in terms of longer-term retention of former international students is unclear at this point. Statistics show that whilst student visa numbers increased over the last few years and a record 41,387 Temporary Graduate visas

⁷⁶ Primary applicant is here defined as the person who must satisfy the primary criteria for the grant of a visa.

⁷⁷ Department of Home Affairs 2019: <https://data.gov.au/dataset/ds-dga-c957d829-4f9b-4213-a0c2-8cbeb9a03ffb/distribution/dist-dga-960da160-ed72-4776-b19c-bf3005ee9aeb/details?q=graduates> [DOA: 14/04/2019]

⁷⁸ Department of Home Affairs (2018b). Student visa and Temporary Graduate visa program report ending at 30 June 2018, p.7.

⁷⁹ Department of Home Affairs (2018b), op. cit., p.8.

⁸⁰ Department of Home Affairs (2019) [dataset] <https://data.gov.au/dataset/ds-dga-c957d829-4f9b-4213-a0c2-8cbeb9a03ffb/details?q=graduates> (DOA: 29/04/2019). Note: While Malaysia and Philippines have moved down the rank between 2003/14 and 2017/18 and are no longer in the top 5 they still remain in the top 10. Vietnam and Nepal, in turn, were in the top 10 in 2013/14 yet moved up the rank by 2017/18.

(the whole subclass 485) were granted in 2016–17, up 27.6% relative to 2015-16, the number of permanent visas granted to former international students fell by 6.3% in 2016–17 relative to 2015–16.⁸¹ Available analysis of destinations of former Temporary Graduate Subclass 485 Visa holders (note this category includes both the Graduate Work stream and the Post-Study Work stream) shows that in 2017-2018 the majority either moved into work or went back to studying with 51.1% changing to the Skilled visa category (as either Independent or Nominated skilled worker) and 29.6% changing to a Student visa.⁸²

Despite its success in terms of beneficiary numbers, the programme has also brought about a number of challenges. International students are associated with highly skewed enrolment patterns and source countries in Australia (a pattern replicated globally), with international students being ‘overrepresented’ in certain study programmes, such as business studies.⁸³ In effect, employment outcomes for international students vary greatly by sector and nationality (which is often directly linked to levels of fluency in English).⁸⁴ It has been found that the oversupply of graduates in certain fields increases competition for employment and leads to lower employment rates, underemployment, lower wages, and lower job satisfaction for international graduates in comparison to Australian citizens and permanent residents of migrant background.⁸⁵ In these terms, the large increase in beneficiaries of the Post-Study Work Visa is seen as problematic. Moreover, it has been argued that the introduction of less restrictive conditions for the Post-Study Work Visa in 2013 makes Australia more attractive to less capable and hence ‘lower quality’ students who would have had no chances of getting a work visa under previous regulations. As further growth in numbers of enrolments is expected in the coming years, concerns around the sustainability of the programme and international graduates displacing native workers have been raised. This topic is currently subject of political debate⁸⁶ yet it is too early to evaluate the effects of the policy change on labour market outcomes.

In terms of available evidence, no datasets tracking changes from the Temporary Graduate Visa Subclass 485 - Post-Study Work Stream to further destinations were found. Publicly available datasets related to the programme record numbers of Temporary Graduate Visas Subclass 485 lodged and granted (for the Graduate Work Stream and the Post-Study Work Stream separately) in given financial years. The dimensions include the financial year and quarter of visa grant, gender, age and citizenship country.⁸⁷

Data on category changes from Temporary Graduate Visa Subclass 485 to other categories is collected and analysed, as follows from reports and analysis found (and presented in this section). However, these changes seem to be tracked at the level of Temporary Graduate Visa Subclass 485 rather than for the two streams constituting it - Graduate Work and Post-Study Work - separately.

⁸¹ Note: This data relates only to Temporary Graduate Subclass 485 Visa holders who moved into another visa category, i.e. remained in Australia. It does not include data on retention, i.e. how many programme participants have stayed in or left Australia after the expiry of their Temporary Graduate Subclass 485 Visa. Source: Department of Home Affairs (2018a). Australia’s Migration Trends 2016–17 Highlights, p. 5.

⁸² Department of Home Affairs (2018b), op. cit., p.83.

⁸³ Hawthorne (2018), op. cit., p. 212.

⁸⁴ Hawthorne (2018), op. cit., p. 215.

⁸⁵ Hawthorne (2018), op. cit., p. 211.

⁸⁶ Gothe-Snape, J. (2018). ‘Record number of international students sticking around on visas with full work rights.’ ABC News, 26 July 2018.

⁸⁷ Department of Home Affairs 2019: <https://data.gov.au/dataset/ds-dga-c957d829-4f9b-4213-a0c2-8cbeb9a03ffb/distribution/dist-dga-960da160-ed72-4776-b19c-bf3005ee9aeb/details?q=graduates> [DOA: 14/04/2019]

Canada

Policy context

By 2005 Canadian fertility rates had fallen to 1.5, fuelling widespread belief that migration represented demographic and economic stability: it was predicted migration could account for all net labour force growth by 2020 in Canada. High intakes of immigrants have been the norm since the late 1980s with the skilled migration category becoming an increasingly important component of these flows. For decades Canada's selection policy was based on the belief that well-educated migrants were flexible and would easily adapt to the host country's labour market. Selection was largely based on education level rather than field and place of qualification. This meant admitting substantial numbers of highly educated migrants with limited English or French language ability, non-recognised qualifications, and qualified in fields of low market demand. Such selection, based on human capital criteria, was however found ineffective and brought negative labour market outcomes for these migrants.⁸⁸ Subsequently, Canada started reforming its system and moving towards demand-driven selection based on shortage occupation lists.

It is worth noting that Canada has a highly decentralised immigration system with its provinces carrying out their own immigrant selection and retention policies, especially since the 1990s. The province of Quebec has a unique position within the Canadian immigration system: the Quebec government has been involved in immigration since the 1960s and has exclusive responsibility for immigrant selection, independently of the national quota, with a view to protecting the 'distinct identity' of the province. Other provinces operate the Provincial and Territorial Nominee Programme (PTNP) which allows them to nominate a number of immigrants for admission as part of the national immigration target set by the federal government.⁸⁹

Canada seeks to maintain a competitive edge in attracting international students and introduced a Post-Graduation Work Permit (PGWP) in 2003. The programme was aimed at international graduates from recognized Canadian educational institutions. Enhancements to the programme were made in 2005 and 2008 with a view to encouraging students to stay outside the main metropolitan areas of Montreal, Toronto and Vancouver: they were permitted to work for an additional year after graduation (up to a total of two years). In April 2008, further changes were made to the Post-Graduation Work Permit Programme, allowing recent graduates to obtain an open work permit for up to 3 three years (depending on length of their program of study) with no restrictions on location of study or requirement of a job offer. The objective of these initiatives was to promote Canada as a destination of choice, both for study and potential immigration, as well as to help address labour market needs.⁹⁰ The most recent change to the programme was made in February 2019, extending the application period for the programme from 90 to 180 days after graduates are issued their final marks.

⁸⁸ Hawthorne (2014), op. cit.

⁸⁹ Hepburn, E. (2017). Options for Differentiating the UK's Immigration System. Report prepared for the Culture, Tourism, Europe and External Relations Committee, p. 30.

⁹⁰ CIC (Citizenship and Immigration Canada)(2010). *Evaluation of the International Student Program*. Evaluation Division, July 2010.

International students in Canada

Canada had 189,000 international tertiary-level students in 2016 (at bachelor, master and PhD level) with international students constituting 12% of all student enrolments in that year.⁹¹ The top 5 countries of student origin in 2017 were: China (132,345); India (76,530); South Korea (21,345); France (20,790); United States (12,915).⁹²

Post-Graduation Work Permit – overview

In its effort to retain international students, Canada operates a Post-Graduate Work Permit (PGWP) Programme. The PGWP Programme allows students who have graduated from a recognized Canadian post-secondary institution to gain work experience in Canada. Furthermore, it can provide the necessary job experience required to apply for certain permanent residence streams. A work permit under the Post-Graduation Work Permit Program is limited to the duration of the student's study program (minimum of eight months, and up to a maximum of three years). This allows them to work for any Canadian employer in any industry without the requirement of a Canadian job offer at the time of applying. International students can only receive one Post-Graduation Work Permit.

Since the launch of the PGWP in 2003, Canada has introduced a number of changes with a view to increasing its attractiveness. In contrast to earlier regulations, beneficiaries are no longer required to work in their field of study, nor does their region of employment affect the duration of the permit.⁹³ The most recent change to the programme was introduced in February 2019, extending the application period for the programme from 90 to 180 days after graduates are issued their final marks.

Eligibility

The Post-Graduation Work Permit (PGWP) is available to graduates of Canadian 'designated learning institutions' at post-secondary level. It allows to search for work flexibly, and graduates have 180 days upon study completion to apply for the PGWP. Spouses and common law partners of PGWP holders may be eligible for an open work visa.

Length of programme

The length of the PGWP is dependent on, and proportional to, the graduate's combined length of study, and may last between 8 months and 3 years. Graduates of programmes lasting more than 8 months and less than 2 years may receive a visa valid up to the same length as the length of the study programme; graduates of study programmes of 2 years or more may receive a 3 year visa.

Graduates can only receive one PGWP and it cannot be extended.

⁹¹ OECD (2018), op. cit., p. 228.

⁹² IEE 2018, op. cit.

⁹³ OECD (2008), op. cit., p. 26.

Evaluation of the programme and available evidence

In terms of increasing numbers of international students taking up the PGWP, the programme has achieved considerable success. The number of post-graduation work permits issued rose steadily between 2003 and 2007, and then increased sharply by 64% in 2008: from 2,808 in 2003 to a staggering 17,810 in 2008. This corresponded to the change in the programme in April 2008 when the requirement of a job offer in the student's field of study was lifted. Since then the number of programme participants has been on the increase almost every year and reached over 114,000 in 2017.⁹⁴

In terms of the other key programme objectives, that is providing international students with the flexibility to find suitable work and retaining them in Canada longer-term, the evidence is more mixed.

In 2010, an evaluation report of the International Student Programme reviewing the programme outcomes for the period 2003-2008 noted that international students were increasingly staying to work post-graduation or reside in Canada yet the numbers retained were still relatively small compared to the total numbers of those studying in Canada. In 2008, 11,760 international students transitioned to foreign worker status (compared to 3,454 in 2003); of which, 66% did so with a PGWP. The number of those transitioning to foreign worker status was about 8% of the total stock of international students in post-secondary or other studies. In 2008, 10,357 international students transitioned to permanent resident status (compared to 5,486 in 2003). A little over half of those transitioning (55%) did so as a skilled worker (3,717) or as the spouse or dependant (1,939) of a skilled worker; 55% studied previously at the university level; and 11% studied previously at the trade level. The number of those transitioning to permanent resident status was about 7% of the total stock of international students in post-secondary or other studies.⁹⁵

Nevertheless, while earlier evidence on the impact of PGWP on retention rates has been inconclusive, more recent data indicated that the total numbers of PGWP beneficiaries who have acquired permanent residency of Canada is growing rapidly, with their number more than doubling over the period of 4 years (from 10,215 in 2015 to 24,535 in 2018).⁹⁶

In terms of labour market outcomes for PGWP beneficiaries, available evidence is again inconclusive. The 2010 programme evaluation report noted that following the 2008 change to the programme (lifting the requirement of a job offer related to the graduates' field of study) it has been difficult to evidence what kind of work PGWP have been taking up and whether the programme has indeed provided them with valuable work experience.⁹⁷ A later internal Citizenship and Immigration Canada report reviewing the years 2008-2014 apparently found that over a third of graduates employed through the PGWP were in low-

⁹⁴ Immigration, Refugees and Citizenship Canada (2018), Annual Report to Parliament on Immigration 2018, p. 30.

⁹⁵ CIC (Citizenship and Immigration Canada) (2010). Evaluation of the International Student Program. Evaluation Division, July 2010, p.18.

⁹⁶ Open Government. Transition from Temporary Resident to Permanent Resident Status – Monthly IRCC Updates: <https://open.canada.ca/data/en/dataset/1b026aab-edb3-4d5d-8231-270a09ed4e82> [DOA: 3/05/2019]

⁹⁷ CIC (2010), op. cit., pp. i-iii.

skilled jobs in the service sector, and had median earnings that were less than half of other recent university and college graduates.⁹⁸

Additionally, other challenges to the programme were pinpointed. The 2010 evaluation report also noted reported fraud and misuse of the International Student Programme. The extent to which this was taking place was however unclear due to a lack of data and consistent reporting. The main concerns raised around abuse of the programme were non-genuine students and questionable educational institutions. It was noted that Citizenship and Immigration Canada, the body issuing the permits, did not have a complete inventory of legitimate educational institutions in Canada, nor the authority to ensure their quality.⁹⁹ Furthermore, the internal Citizenship and Immigration Canada report mentioned earlier apparently found that the programme was indeed creating a low-wage workforce, encouraging low-quality postsecondary programmes, and needs to be redesigned.¹⁰⁰

Canada tracks international students' pathways and changes to/from particular immigration schemes as well as geographical location. Relevant datasets are published on the Canadian government website. Data on permanent stays of students who were holders of a PGWP is publicly available for the period of January 2015 – February 2019.¹⁰¹

New Zealand

Policy context

Immigration is a central aspect of New Zealand's (NZ) economic and social policies. NZ has been struggling to maintain a stable population due to high levels of outflow of its native population to other countries (Australia and the UK in particular). Since the introduction of the points-based system in 1991, New Zealand's immigration policy has been focused on selection of migrants based on economic and related socio-demographic characteristics as well as skills. However, the 21st century brought about significant shifts in NZ's immigration policy development and implementation. While a consistently high volume of immigration is deemed vital to NZ's 'demographic viability', retention of immigrants has been a long-standing issue for the country. This led to an extensive public consultation in 2004-2005, a review of NZ's immigration policy in 2006, and the implementation of a new and more flexible immigration law in 2009. It provides a framework for a more flexible immigration system enabling policy responses to the changing needs of the country, including the increased need for particular skills and attracting global talent. NZ currently focuses its immigration policy on ensuring the economic and demographic needs of NZ are met but at the same time its workforce is protected from unfair competition and abuse.

Post-Study Work Visa (PSWV) policies are thus tied to both national and regional migration needs. The retention of skilled migrants in New Zealand is a chronic challenge

⁹⁸ Chiose, S. "International Student Work Program Creating Low-Wage Work Force: Report," The Globe and Mail, March 31, 2016, <https://www.theglobeandmail.com/news/national/international-student-work-program-needs-overhaul-report-says/article29463566/> [DOA: 3/05/2019]

⁹⁹ CIC (Citizenship and Immigration Canada)(2010). Evaluation of the International Student Program. Evaluation Division, July 2010, pp. i-iii.

¹⁰⁰ Chiose, S. (2016), op. cit.

¹⁰¹ Open Government. Transition from Temporary Resident to Permanent Resident Status – Monthly IRCC Updates: <https://open.canada.ca/data/en/dataset/1b026aab-edb3-4d5d-8231-270a09ed4e82> [DOA: 3/05/2019]

given its small economy and geographic remoteness. In order to encourage international students to study and then potentially stay, the PSWV was introduced in 2005.¹⁰² The purpose of New Zealand's student visas, including the PSWV, is to contribute to New Zealand's sustainable economic development by facilitating the entry of genuine students with a focus on attracting and developing students who have the skills and talent New Zealand needs, while managing risk to the country and maintaining social cohesion.¹⁰³ Moreover, the PSWV policies aim to encourage international graduates not only to stay in the country but also to move and remain in regions/areas with more acute demographic needs. Therefore, graduates who commit to studying and staying outside the popular Auckland area are granted a longer length of stay on the PSWV by 12 months than those studying in Auckland.

International students in New Zealand

New Zealand education providers experienced a rapid rise in their international enrolments from 1998 to 2003, driven primarily by interest from Chinese students. New Zealand was one of the first Western countries to permit open access to student visas by Chinese nationals (a measure quickly followed by Australia, the United Kingdom, Canada and the United States of America).¹⁰⁴

NZ had 54,000 international tertiary-level students in 2016 (at bachelor, master and PhD level) with international students constituting 20% of all student enrolments in that year.¹⁰⁵ The top 5 countries of student origin in 2017 were: China (31,075), India (19,585); United States (4,445), Malaysia (2,725); Philippines (2,160).¹⁰⁶

It is worth noting that international students in NZ are more satisfied with social integration aspects of the study experience, including being able to make friends with fellow students from their country of origin as well as making local friends from NZ, than those in comparator countries.¹⁰⁷

Post-Study Work Visa (Open) – overview

NZ introduced a number of changes to the Post-Study Work Visa in order to increase its attractiveness and accessibility to international students since its introduction in July 2005. Until November 2018, two streams of Post-Study Work Visa were in operation: Open Stream and Employer-Assisted Stream. The Open Visa allowed for 12 months' stay to look for work, the Employer-Assisted Visa allowed for a further 2-3 years of stay once employment was found. The Employer-Assisted Visa tied graduates to a particular employer. After its completion the graduate could qualify for a New Zealand resident visa under the Skilled Migrant Category. Nevertheless, as discussed in the section on challenges, abuse of the Employer-Assisted Visa Stream ultimately led to the creation of bogus degrees and consequent lowering of international students' skills level as well as

¹⁰² Trlin, A., Spoonley, P. and Bedford, R. (eds.) (2010). *New Zealand and International Migration. A Digest and Bibliography*, Number 5. Massey University Printery, Palmerston North, p. 26.

¹⁰³ Ministry of Business, Innovation and Employment (MBIE) New Zealand (2018). *Migration Trends and Outlook 2016/17*, p. 13.

¹⁰⁴ Ministry of Education New Zealand (2013a). *International student enrolments in New Zealand 2006 – 2012*. International Division, Ministry of Education, 1 May 2013.

¹⁰⁵ OECD (2018), *op. cit.*, p.228.

¹⁰⁶ IEE 2018, *op. cit.*

¹⁰⁷ Ministry of Education New Zealand (2011). *New Zealand Universities. The International Student Barometer 2011*. IGI Services 2011, p.6.

their labour-market exploitation.¹⁰⁸ Following an evaluation, the Employer-Assisted Visa Stream was discontinued altogether in November 2018. Currently, only the open Post-Study Work Visa is in operation in NZ.

The NZ Post-Study Work Visa is available to graduates of both degree and selected non-degree programmes for 1-3 years depending on qualification level and place of study (Auckland or elsewhere). It is an open visa allowing to search for work flexibly. PSWV holders can support their partners in applications for work visas.

Eligibility

Students of both degree and selected non-degree study programmes may be eligible for the PSWV, depending on type of qualification and time spent for study in New Zealand. Eligibility criteria:

- Obtaining a qualification at level 7 on the New Zealand Qualifications Framework (Equivalent to Graduate Certificate/Graduate Diploma/Diploma/Bachelor's Degree) and having studied for at least 30 weeks in New Zealand; or
- Obtaining one qualification at levels 4-6 on the New Zealand Qualifications Framework (equivalent to a Certificate/Diploma) and having studied for at least 60 weeks in New Zealand; or
- Obtaining two qualifications at levels 4-6 on the New Zealand Qualifications Framework (equivalent to a Certificate/Diploma) and having studied for at least 30 weeks each in New Zealand (a total of 60 weeks), where the second qualification is of a higher level than the first.

Graduates at bachelor and master level must apply for the PSWV no later than 3 months after the end date of their student visa, and graduates at Doctoral level no later than 6 months after the end date of their student visa.

Length of programme

The PSWV can be granted for 1-3 years depending on qualification level and whether the beneficiary studied in or outside Auckland. Graduates with a bachelor degree or higher qualification are entitled to a 3-year open visa. Graduates with qualifications below bachelor level are currently entitled to a 1 year visa if they studied in Auckland and 2-year visa if they studied outside Auckland. From 1st January 2022 all graduates with lower degree qualifications will be entitled to a 1-Year Open Post-Study Work Visa plus 1 additional year for students with a Graduate Diploma who are working towards registration with a professional or trade body.

Currently there are no extensions to the programme. As mentioned above, from 1st January 2022 a 1-year extension will be available to students who have completed a Graduate Diploma that is used for registration with a professional or trade body.

¹⁰⁸ Stringer, C. (2016). Worker Exploitation in New Zealand: A Troubling Landscape. Report prepared for: The Human Trafficking Research Coalition.

Evaluation of the programme and available evidence

One of the aims of the PSWV was to attract international students to regions outside the most densely populated Auckland. Statistics indeed demonstrate there has been a 5% decline in student visa holders (stock) in Auckland between June 2016 and June 2017 and a simultaneous increase in other regions: by 8% in Wellington and Otago and by 6% in Waikato.¹⁰⁹ Whether there is a correlation between the policy and these figures is however unclear: in terms of new visa applications, Auckland remains by far the most popular region of applications (60% of all new student approvals for 2016/17) while e.g. Waikato experienced the greatest decline between 2015/16 and 2016/17 - of 15%.¹¹⁰

In terms of available data on retention rates and student pathways, it has a broader focus on visa categories (e.g. student visa, work visa, resident visa) looking at 5 year intervals. Among international graduates whose last student visa ended between July 2006 and June 2012, 5 years later 28% had a resident visa, 3% were still on a (temporary) work visa, and 68% had left NZ. Notable year-to-year variations on graduate pathways are visible. For example, the proportion of full-fee paying student visa holders who transitioned to residence 3 years after the end of their student visa fell from a high of 29% in the 2006/07 cohort to 22% among the 2009/10 cohort (notably, this might be attributable to the effects of the global economic crisis).¹¹¹

No publicly available evaluations of or data on the impact of Post-Study Work Visa policy changes on student numbers or graduate retention rates have been found. Available statistical data focuses on visa category change (e.g. student visa to work visa) without differentiating between the different paths through which the transition could be made (i.e. whether a previous student visa holder moved to the work category by means of securing a Post-Study Work Visa or another type of work visa, e.g. for highly skilled migrants).

United States

Policy context

In 2017, immigrants made up nearly 14% of the U.S. population. Given native-born Americans' relatively low birth rates, continued immigration to the US is seen as essential to maintain the country's demographic balance and ensure sufficient numbers of working-age adults. The Immigration and Naturalization Act (INA), the body of law governing current immigration policy, provides for an annual worldwide limit of 675,000 permanent immigrants, with certain exceptions for close family members. Permanent residency allows immigrants to work and live permanently in the United States, apply for nearly all jobs (apart from jobs restricted to U.S. citizens), and remain in the country even if they are unemployed. Each year, the United States also admits foreign nationals on a temporary basis. Moreover, Congress and the President determine a separate number for refugee admissions.

¹⁰⁹ MBIE (2018), op. cit., p. 20.

¹¹⁰ MBIE (2018), op. cit., p. 18.

¹¹¹ MBIE (2018), op. cit., p. 35.

The US operates a highly complex immigration system based on issuing different visa categories. Immigration to the US is based upon the following principles: the reunification of families, admitting immigrants with skills that are valuable to the U.S. economy, protecting refugees, and promoting diversity. Highly skilled migration is thus an important part of inflows. The US is also the leading destination country for international students, who significantly contribute to its economy.

International students are admitted to the country on temporary student visas. However, the US offers the opportunity to change status to different groups of foreign students. The principal programme is the H1-B visa for graduates of US universities. Following an increase in the annual cap on the H1-B visa program in 2001, the US became the main attractor of high-skilled migrants among OECD countries.¹¹² Currently, a total of 85,000 such visas are granted every year: 65,000 for applicants with a bachelor's or equivalent degree, and 20,000 for those with a master's or higher degree.¹¹³ However, the numbers of graduates admitted into the workforce through this scheme was seen as too low by US employers, especially in STEM-related professional fields. In effect, the Optional Training Programme (OPT), which has essentially become a post-study work route for international students, was expanded greatly over the last decade. Significantly, this has occurred in response to the pressures exercised by employer lobby groups rather than in result of planned changes to the USA's immigration policy with regards to international students. It has to be noted here that attitudes and policies towards immigration under the current US presidency have become much more radicalised than previously. President Donald Trump, who holds strong anti-immigration views and believes in the protection of 'native Americans' from immigrants, has recently introduced a number of policy changes with a view to deterring immigrants. These include e.g. introducing tighter selection criteria for the H1-B visa programme and an indefinite ban for nearly all people from seven countries – Iran, Libya, Somalia, Syria, Yemen, North Korea, and Venezuela – from entering the US. Although students are exempt from this ban, the negative atmosphere around immigration from their countries may in itself act as a deterrent from taking up studies in the US. Moreover, the Trump administration is considering changing the whole immigration system of the US and introducing a points-based system. Therefore, American policies towards immigrants are currently in flux and subject to change. The longer-term impacts of these recent political developments, including on international student migration and retention, are hard to evaluate at this point.

International students in the US

The USA is the world leader in international education at tertiary level and has by far the largest international student numbers at 971,000 in 2016 (at bachelor, master and PhD level). At the same time, international students constituted only 5% of all student enrolments in that year.¹¹⁴ The top 5 countries of student origin in 2017 were: China (350,734); India (186,264); South Korea (58,660); Saudi Arabia (61,287); Canada (26,973).¹¹⁵

¹¹² OECD (2008), op. cit.

¹¹³ <https://www.forbes.com/sites/andyisemotiuk/2019/01/02/recent-changes-to-the-h1b-visa-program-and-what-is-coming-in-2019/#53d411a84a81> [DOA: 2/05/2019]

¹¹⁴ OECD (2018), op. cit., p.228.

¹¹⁵ IEE 2018, op. cit.

Optional Practical Training (OPT) - overview

Optional Practical Training (OPT) is temporary employment that is directly related to an F-1 student's major area of study. The OPT had evolved through consecutive changes to the 1964 immigration law regarding students when the option of 'practical training' during study was introduced. At the time, it was not meant to become a route for longer-term student retention, quite the opposite, it was established with the sole aim of providing international students with practical training opportunities linked to their course of study.

With time, this option evolved into the OPT programme, eventually allowing international students to work both during their studies and after graduating. The programme has evoked and continues to cause a lot of controversy, the main concern being that it creates unfair competition for domestic graduates. Changes to the OPT have been introduced over the years predominantly due to lobbying of various pressure groups. Depending on their demands, both tightening and relaxing OPT regulations has taken place throughout the 1980s, 1990s and 2000s. These changes related to eligibility for the programme, its length, and where the OPT could take place. The biggest change occurred in 2008 when the STEM extension was introduced, providing graduates of certain STEM degrees with the opportunity to extend the OPT by 17 months. This change, however, has been deemed unlawful and has been legally challenged. Despite this, a further STEM extension, to 24 months, was introduced in 2016.¹¹⁶ The introduction of the two STEM extensions has resulted in a huge increase in the number of foreign STEM graduates participating in OPT: by 400% between 2008 and 2016¹¹⁷.

The OPT programme has been the subject of continuous litigation for many years yet remains to be in operation.¹¹⁸ The Trump administration has recently tightened regulations for OPT and announced plans to roll back the 2016 employment extension for STEM graduates.

Currently, there are two types of OPT: pre-completion and post-completion. Eligible students can apply to receive up to 12 months of OPT employment authorization before (pre-completion) or after (post-completion) completing their academic studies. A 2-year extension is available to graduates of selected STEM degrees working in line with their training. (Post-completion) OPT is flexible in terms of the number of hours worked (but only part-time work of up to 20 hours is permitted in the case of pre-completion).

Eligibility

Students on F1 visas may apply for OPT. It must be directly related to the applicant's major area of study.

¹¹⁶ Ruiz, N.G and Budiman, A (2018). 'Number of foreign college graduates staying in the US to work climbed again in 2017, but growth has slowed,' Pew Research Centre, online article [DOA: 18/05/2019] <https://www.pewresearch.org/fact-tank/2018/07/25/number-of-foreign-college-graduates-staying-in-u-s-to-work-climbed-again-in-2017-but-growth-has-slowed/>

¹¹⁷ Ruiz, N.G and Budiman, A (2018). 'Number of Foreign College Students Staying and Working in U.S. After Graduation Surges,' Pew Research Centre, online article [DOA: 18/05/2019] <https://www.pewglobal.org/2018/05/10/number-of-foreign-college-students-staying-and-working-in-u-s-after-graduation-surges/>

¹¹⁸ Miano, J. (2017). A History of the 'Optional Practical Training' Guestworker Program. Centre for Immigration Studies, online report, September 2017.

Length of programme

The post-completion OPT may last up to 12 months providing the applicant has not done OPT training prior to completion of their studies. If they have, the amount of time spent in OPT prior to completion is deducted from the available period of post-completion OPT. Graduates of selected STEM degrees may apply for a 2-year extension providing that: their degree is on the STEM Designated Degree Programme List, their OPT authorisation was based on this degree, and their employer is enrolled in and using a designated visa verification programme.

Evaluation of the programme and available evidence

No publicly available data tracking the impact of the OPT on graduate retention levels has been found. The OPT is a temporary 'guestworker' programme and the US does not report on how long a guestworker stays in the country.¹¹⁹ However, some indication of the numbers of OPT beneficiaries who have stayed in the US may be drawn from data on changes to another visa category, e.g. to H1-B.¹²⁰ As mentioned earlier, OPT has evoked a lot of controversy since its introduction, and is deemed to be unlawful. Therefore, many evaluations of the programme have focused on its legal aspects¹²¹ and the negative impacts it may have on domestic graduates, especially at times when there is a 'supply shock,' that is oversupply of graduates in certain fields. For example, the high levels of retention of doctoral students in science and engineering in the 2000s was found to lead to depressing wages by 3-4% and 'increased prevalence of low-pay postdoctoral appointments in fields that have softer labour market conditions'.¹²² At the same time, however, businesses have argued that the programme is hugely beneficial as it provides a key channel through which highly skilled immigrants contribute to the economic growth of the US – both through work and consumer activity. They also argue that the planned tightening of the programme will make it less attractive and result in a drop in participation rates but also deter some students from coming to the US altogether.

A recent report by the Business Roundtable reviews the possible impact of a 60% decline in OPT participation by 2020 (modelling assumption). It concludes that such a decline would result in a decrease in real US gross domestic product by about a quarter of a percentage point by 2028, would bring a loss of 443,000 jobs over the next decade (including 225,000 jobs held by native-born workers), and a 17% decline in the average hourly wage by 2028.¹²³ Similarly, a recent policy report notes the positive rather than negative effects of the OPT: it finds higher levels of OPT participants in a given region lead to increased innovation in that region (as measured by the number of patents) and higher average earnings among those educated at college level. Moreover, the report finds no evidence of adverse effects on average earnings, unemployment, or labour force participation. The report concludes that the US largely benefits from the OPT programme and also argues against tightening of the regulations governing it. What is more, in the

¹¹⁹ Miano, J. (2017), op. cit.

¹²⁰ Data on pathways of OPT beneficiaries who have remained in the US and moved to another type of visa, e.g. the H1-B visa, may be available from USCIS through placing a freedom of information request, c.f. Pierce, S. and Gelatt, J. (2018). Evolution of the H1-B. Latest Trends in a Program on the Brink of Reform. Migration Policy Institute Brief, March 2018, p. 6.

¹²¹ See for example: United States Government Accountability Office (2014). Report to the Ranking Member, Committee on the Judiciary, U.S. Senate. Student and Exchange Visitor Program. DHS Needs to Assess Risks and Strengthen Oversight of Foreign Students with Employment Authorization, February 2014.

¹²² Borjas(2009), op. cit.

¹²³ Business Roundtable (2018). The Economic Impact of Curbing the Optional Practical Training Program. December 2018, p. 1.

interests of further economic development, it recommends granting permanent residency to international graduates of all US higher education institutions (subject to degree level and/or subject area requirements), i.e. retaining selected international students.¹²⁴

European countries

Policies aimed at attracting and retaining international students/highly skilled migrants

Policies at EU (supranational) level

The importance of attracting international students is well-recognised by the European Union which has the ambition to compete with leading international education providers (such as its non-European competitor countries: Australia, Canada, New Zealand and the US) in the global student market. Moreover, as many European countries face the challenges of ageing populations and labour shortages in the knowledge economy, there has been a growing interest in retaining international students within the EU, and especially the more developed EU-15 countries.

One key difference in terms of policies aimed at attracting and retaining international students within EU Member States as compared to the traditional immigration countries needs to be emphasised at this point – within EU countries immigration policies relate to non-EEA students and graduates exclusively since EEA nationals can move and settle freely within the EU. Therefore, while student recruitment strategies in given Member States are typically aimed at international students across the board, immigration policies relate to students/graduates from third countries (non-EEA nationals) exclusively.

There has been considerable supranational action by European Union (EU) institutions to influence international student mobility, and migration to and within the EU over the last 20 years.¹²⁵ This has focused on two domains: firstly, harmonising European higher education systems, and secondly, harmonising and increasing the flexibility of Member State policies towards students and academics from non-EU/EEA countries.

With a view of increasing Europe's attractiveness to international students, the EU has been promoting the integration of national higher education systems in Europe over the last two decades. In 1999, the European Higher Education Area (EHEA) was established with a view to harmonising European higher education systems ('the Bologna Process'). In result, a common three-cycle structure of higher education¹²⁶ based on the Anglo-Saxon model was introduced across all EU Member States (along with a number of non-EU

¹²⁴ Neufeld, J. L. (2019). Optional Practical Training (OPT) and International Students After Graduation. Human Capital, Innovation, and the Labor Market. Niskanen Center, March 2019.

¹²⁵ European Commission (2018). Attracting and retaining international students in the EU. Common Template for EMN Study 2018.

¹²⁶ The three cycle structure is as follows: first cycle – Bachelor level study, second cycle – Masters level study, third cycle – Doctoral level study.

EHEA signatory countries). This largely facilitated the recognition of European degrees and the circulation of students within Europe.

Promoting the mobility of intra-EU students and attracting third-country nationals to the EU for the purposes of study has also been a key part of the European Commission's policy over the last 25 years. The European Commission specifically aims to establish favourable conditions for non-EU/EEA students and researchers, with the goal of making Europe attractive as a centre of excellence for studies, vocational training and research.¹²⁷ In 1994 the Council Resolution on the 'Admission of Third-Country Nationals to the Territory of the Member States of the EU for Study Purposes' was adopted. The EU also launched several initiatives to foster the mobility of students from both EU and non-EU countries, such as the Erasmus programme. The European Council Directives of 2004 (2004/114/EC) and 2005 (2005/71/EC) created a common legal framework for the admission of non-EU/EEA students and researchers to European institutions.¹²⁸ A specific policy to promote immigration of highly skilled persons, students and researchers (both from other EU/EEA as well as third countries) was implemented in 2008.¹²⁹ Next, in 2009 regulations facilitating the retention of third-country postgraduate students were implemented,¹³⁰ and in May 2016 a new Students and Researchers Directive aimed at further harmonisation of the different national legislative frameworks on these issues was adopted (2016/801).

The 2016 recast Directive is aimed at retaining higher numbers of third-country national students in the EU after graduation. It clarifies the admission and residence requirements by setting out general conditions for admission, and specific conditions for researchers, students, school pupils, trainees and volunteers. With regard to students, it allows them to stay at least nine months after finishing their studies in order to look for a job or set up a business. In addition, it allows for greater mobility of students within the EU as they only need to notify the Member State to which they are moving, instead of filing a new visa or residence permit application. Lastly, the Directive gives students the right to work for a minimum of 15 hours per week. The deadline for transposition of the 2016 Directive was 23 May 2018. Therefore, many policies aimed at attracting and retaining (non-EEA) students within the Member States will have been introduced recently and have not yet been evaluated. However, a study on Member States' policies and strategies aimed at attracting and retaining international students is currently at completion stage, with results expected to be published in May 2019.¹³¹

Policies and strategies at Member State (national) level

The EU already is an attractive destination for international students, with over 0.6 million first residence permits issued to non-EEA nationals for the purpose of education activities in 2016. In terms of attracting international students, the UK and France ranked second

¹²⁷ European Commission (2013). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: European Higher Education in the World.

¹²⁸ Levatino, A., Eremenko, T., Molinero Gerbeau, Y., Consterdine, E., Kabbanji, L., Gonzalez-Ferrer, A., Jolivet-Guetta, M. and C. Beauchemin (2018). Opening or closing borders to international students? Convergent and divergent dynamics in France, Spain and the UK. *Globalisation, Societies and Education*, 16:3, p. 368.

¹²⁹ European Commission (2011). European Migration Network specifications for Annual Policy Report 2011.

¹³⁰ Riaño et al. (2018), op. cit., p. 290.

¹³¹ The study 'Attracting and retaining international students in the EU' is being carried out by the EMN for the European Commission. Its aim is to draw information from all EU Member States on policies related to international students and collect any data on international student mobility. The final specifications for the study were announced in 2018 and the results are expected to be published in May 2019 (as stated in private correspondence with the Author).

and fourth among the leading host countries for international students in 2014.¹³² The UK has a leading role as the main destination country for students to Europe, and the second largest destination country for students in the world (the US being in lead). In European countries where English is not the native language, introducing English language study programmes has become paramount to attracting international students. However, these are predominantly offered in the second and third cycle, i.e. at Master's and Doctoral level. Within the EU, the Netherlands is the outstanding provider of programmes taught in English with the largest absolute number of such programmes (1,078 in 2014), followed by Germany (1,030), Sweden (822), and France (499).¹³³ The high number of programmes offered in English in these countries is the key reason why they were chosen for the purposes of this review as European competitors of the UK.

While the number of international students in the EU has been rising steadily, the percentage of graduates choosing to stay within the EU remains relatively low. According to the OECD, only 16% to 30% of foreign graduates stay in the EU after completing their studies. Furthermore, stay rates are typically very low among students from other EU/OECD countries, and much higher for students from less developed or politically less stable countries. Data for 2015-2016 shows that the numbers of third country students remaining in the EU post-graduation have increased in many Member States over this period (including in Austria, the Czech Republic, Estonia, France, Germany, Hungary, Italy, Lithuania, Luxemburg and Sweden) with the exception of the UK, which has noted a decrease of 20.8% between 2015 and 2016. At this point in time, evidence on longer-term stay rates in EU countries remains highly limited with some analysis available¹³⁴ for the Netherlands, Norway and Denmark.¹³⁵

Although harmonisation of policies regarding third country nationals is under way, the various EU member states continue to regulate non-EU/EEA student migration differently to some extent.¹³⁶ Political tensions at Member State level also play out in this process. This has for instance led the UK Government to tighten its policies towards international students in 2012, at a time when its European (and global) competitor countries were moving towards a greater opening of policies.¹³⁷

The majority of Member States do not have a national strategy for third-country national student retention, nor a national coordinating body for this strategy. Instead, several actors are usually involved, such as the Ministries of Interior and higher education institutions. Although some EU Member States, such as Germany or the Netherlands, have been implementing various strategies aimed at retaining international students, these do not form a systematic national policy on retention.¹³⁸ The Netherlands, however, has been working on developing such strategies with support of a national co-ordinating body (Nuffic) and is currently running a number of regional retention strategies supported by the central government.

¹³² Levatino et al. (2018), op. cit., p. 368.

¹³³ Lam, Q.K.H., Maiworm, F. (2014). English in the classroom and beyond, in: Wächter, B., Maiworm, F. (eds.). English-Taught Programmes in European Higher Education. The State of Play in 2014. Bonn: Lemmens Medien GmbH, 2014, p. 16.

¹³⁴ Further analysis of the issue may soon be available with the expected publication of the EMN study on 'Attracting and retaining international students in the EU' in May 2019.

¹³⁵ Weisser (2016), op. cit., p. 35.

¹³⁶ Levatino et al. (2018), op cit., p. 368.

¹³⁷ Cerna (2018), op cit., p. 89.

¹³⁸ European Commission (2017). EMN Inform – Retaining third-country national students in the European Union.

Five types of national incentives aimed at retaining international students have been identified across the Member States:

- simplified application procedures for an authorisation to stay for work or business (e.g. in France);
- lowered salary requirements for international students as compared to those who have not studied in the Member State (e.g. in the UK);
- full access to the labour market after graduation that is not restricted by the field of study/work nor limited by reduced working hours (e.g. in France and Sweden);
- a possibility to remain in the Member State for job search or to set up a business post-study (e.g. France, Germany, Ireland, the Netherlands and the UK);
- additional incentives, e.g. shortening the number of years former students have to reside in their territory in order to qualify for a permanent residence permit (e.g. in Germany); being entitled to apply for a permit with a view to seeking work up to a few years upon graduating and even after leaving the country of study (e.g. in the Netherlands).

So far, seven Member States have complied with the 2016 Directive and allow third-country national students to remain in their territory for a minimum period of 9 months after completing their studies, including France, Germany, Ireland, and the Netherlands. The UK has not implemented the Directive at this point in time.

In the following sections, we shall look at national-level policies on post-study employment for each of the Member States under review.

France

Policy context

France has been developing policies encouraging economic migration from outside the EU/EEA since 2006 when new residence permits were introduced, including a 'Skills and Talents' permit for highly skilled workers. A few years ago France carried out a comprehensive reform of the legislation on foreigners. It entered into force in 2016, relaxing regulations for economic migrants in particular (e.g. the roll-out of multi-annual residence permits, new 'talent-based' residence permits).

International students in France

France had 245,000 international tertiary-level students in 2016 (at bachelor, master and PhD level) with international students constituting 10% of all student enrolments in that year.¹³⁹ The top 5 countries of student origin in 2017 were: China (25,388); Morocco (25,223); Algeria (16,558); Tunisia (8,955); Senegal (7,439).¹⁴⁰

¹³⁹ OECD (2018), op. cit., p.228.

¹⁴⁰ IEE 2018, op. cit.

Autorisation Provisoire de Séjour (APS) (Temporary Resident Permit) – overview

In France, the new immigration legislation of 2006 introduced an option for ‘high-potential’ Masters students from third countries to stay for six months after graduation and seek a job in their field of study. The graduates could thus apply for a Temporary Resident Permit or *Autorisation Provisoire de Séjour* (henceforth APS). The authorisation was non-renewable and in order to receive a temporary work permit afterwards the graduates had to secure employment with a salary of at least 1,5 times the monthly minimum wage and which ‘directly or indirectly benefit(ed) the economic development of France and the student’s home country’.¹⁴¹ As follows, this policy was not aimed at retaining students in France, quite the opposite – its aim was to provide the students with relevant work experience which they could utilise upon returning to their home country.

In 2013, a new more flexible law was introduced with a view to facilitating the longer-term retention of third country students. It continued to be limited to students at Masters level or higher but the period of APS granted for job search had been extended from 6 to 12 months, and the condition of returning to the home country after their temporary employment finished had been lifted. However, the implementation of the new law proved challenging with differences occurring across the country (it is the local French prefectures which grant the APS) and some of the rules being dependant on the country of origin.¹⁴²

Another revision and policy change in 2016 further relaxed the regulations for post-study stay. The programme was extended to graduates at bachelor degree level and APS can now be granted not only to look for employment but also to prepare opening one’s own business if this is related to the field of study. Moreover, regulations encouraging circular migration were introduced: a temporary residence permit can be issued to third country graduates who returned to their home countries but wish to return to France for professional purposes within 4 years of obtaining a qualification.

Eligibility

As is the case for all EU Member States, EU/EEA students are free to stay in France to look for work after graduation.

The APS is open to non-EU/EEA graduates of French universities who have a professional Bachelor's or higher degree and/or want to start their own business related to their field of study. Until they sign a fixed-term or permanent work contract and move onto a different residency permit, APS holders are authorised to work under the same conditions as if they were students: a maximum of 964 hours per year or approximately 20 hours per week.

Candidates have to apply for the APS prior to the expiration date of their current residency permit (before or after study completion, depending on permit expiry date).

¹⁴¹ OECD (2008), op cit.

¹⁴² Kabbanji, L., Jolivet-Guetta, M., Consterdine, E. and A. González-Ferrer (2016). Inventory of programs aimed at attracting international students and academics to the EU. Temper Working Paper Series: Temporary versus Permanent Migration, WP 2 (2016).

Length of programme

Up to 12 months. The post-study APS cannot be extended.

Evaluation of the programme and available evidence

There appear to be no formal evaluations of the impacts of the most recently implemented post-study regulations. However, France is one of the countries taking part the 2018 EMN (European Migration Network) Study on 'Attracting and retaining international students in the EU', the results of which are expected to be published in May 2019.

Germany

Policy context

Germany introduced an immigration law in 2005 allowing international graduates of German universities to stay in the country for up to 12 months to seek employment. Since November 2007, foreign graduates of German universities are also exempt from the labour market test if their employment corresponds to their studies.¹⁴³ In January 2009 numerous legal changes aimed at facilitating migration of the highly skilled, students and researchers were introduced in Germany through the Labour Migration Steering Act. Germany is continuing to review its policies. The most recent change in German's migration policy has been the adoption of a draft for a Skilled Labour Immigration Act by the Federal government in December 2018, which might lead to changes in the legal stipulations for international students, too.¹⁴⁴

Germany has developed strong outreach aimed at attracting and retaining international graduates. It has a network of missions worldwide at which graduates of German universities who returned their countries of origin after completing their studies can apply for a visa to return to Germany to look for employment (within four years of obtaining their degree). Moreover, several governmental initiatives and online information portals informing third-country nationals of the options regarding studying and finding employment have been established in Germany.¹⁴⁵ Germany has also been working on expanding its offer of study programmes in English and German HEIs currently offer 1,438 courses of study (or 7% of the total) in English. Even though the number of English-language courses has risen significantly over the last decade, it is still small in comparison to other major destination countries. Nevertheless, Germany has been very successful in increasing numbers of international students and has already surpassed its goal of having 350,000 foreign students enrolled at German HEIs by 2020 with 358,895 foreign students already enrolled in German HEIs in the winter semester of 2016/17.¹⁴⁶ It must be noted, however, that the term 'foreign students' used for this statistic encompasses third-country nationals who enter Germany for either a complete course of study or only parts of it.

¹⁴³ OECD (2008), op. cit.

¹⁴⁴ Hoffmeyer-Zlotnik, P. and J. Grote (2019). Attracting and retaining international students in Germany. Study by the German National Contact Point for the European Migration Network (EMN). Federal Office for Migration and Refugees, 2019.

¹⁴⁵ European Commission (2017), op. cit.

¹⁴⁶ Hoffmeyer-Zlotnik, P. and J. Grote (2019), p. 20.

International students in Germany

Germany had 245,000 international tertiary-level students in 2016 (at bachelor, master and PhD level) with international students constituting 8% of all student enrolments in that year.¹⁴⁷ The top 5 countries of student origin in 2017 were: China (32,268); India (13,537); Russia (11,413); Austria (10,129); France (7,330).¹⁴⁸

Residence Permit for purposes of job seeking - overview

Eligibility

As is the case for all EU Member States, EU/EEA students are free to stay in Germany to look for work after graduation.

Non-EU/EEA graduates of German universities can apply for a residence permit which extends their right to stay and work in Germany by 18 months. They need to have comprehensive health insurance and proof of means to support themselves during job-seeking or a declaration from a guarantor. Candidates can apply as soon as they have passed their final university exams.

Graduates who left Germany after graduation may apply for a 6-month residence permit to return to look for work, providing they are able to support themselves while staying in Germany. Germany has a world-wide network of missions and candidates can apply for the visa at the relevant German mission abroad (Federal Government of Germany: 2019).

Length of programme

Up to 18 months. The post-study residence permit cannot be extended.

Evaluation of the programme and available evidence

There are no formal evaluations of the impacts of the most recently implemented post-study regulations on stay rates of international students in Germany. The most extensive source of evidence on attracting and retaining international students in Germany is a recently published (March 2019) country report¹⁴⁹ for the purposes of the broader EU studies mentioned earlier, the EMN Study on 'Attracting and retaining international students in the EU'.

The Statistics of higher education by the Federal Statistical Office provide the most thorough statistical information on foreign and international students in Germany. They are based on the HEIs' administrative data (Statistisches Bundesamt) and do not include information on the students' residence status or the type of residence title they hold.¹⁵⁰ Therefore, currently there is no statistical data available in Germany which would allow to track the links between the Residence Permit for purposes of job seeking (or Germany's post-study work offer in other words) and student retention rates.

¹⁴⁷ OECD (2018), op. cit., p.228.

¹⁴⁸ IEE 2018, op. cit.

¹⁴⁹ Hoffmeyer-Zlotnik, P. and J. Grote (2019). Attracting and retaining international students in Germany. Study by the German National Contact Point for the European Migration Network (EMN). Federal Office for Migration and Refugees, 2019

¹⁵⁰ Hoffmeyer-Zlotnik, P. and J. Grote (2019), op. cit.

Ireland

Policy context

Ireland's immigration policy operates within the framework of an employment permit system. It is designed to supplement Ireland's skills and labour supply over the short to medium term by allowing enterprises to recruit nationals from outside the EEA where such skills or expertise cannot be sourced within the EEA at that time. Therefore, Irish immigration policy is based on the premise that the country should recruit non-EEA workers only for those jobs which cannot be filled by domestic or EEA labour. Since Ireland has many high tech businesses, this creates a distinct need for highly skilled workers, and this has been Ireland's focus for many years. In late 2012, the State's economic migration policy was reviewed. It concluded that, despite the recession and a labour market surplus, Ireland still needed skills which were in short supply globally. To position the State to better compete with other countries for highly skilled migrants to meet the skills requirements of enterprise, the employment permits system was accordingly adjusted within the legal framework of the Employment Permits Act 2006. The Employment Permits (Amendment) Act 2014 clarified the statutory basis for the regime, and provided for more flexibility and targeted instruments in support of the economy's evolving skills' needs. However, the growing demand for workers in lower-skilled sectors has led Ireland to yet again review its permit system in 2018.

Ireland's 2010-2015 International Education Strategy set out a coherent government strategy around internationalisation and was the first of its kind in Europe to set targets.¹⁵¹ The majority of the actions focused on increasing the recruitment of international students and was successful in exceeding set targets. The 2016-2020 International Education Strategy aims *inter alia* to increase the numbers of international students and researchers coming to Irish HEIs and to 'connect the benefits of internationalisation with enterprises in support of national economic ambitions'.¹⁵² These goals are interconnected with Ireland's current immigration policy.

International students in Ireland

Despite being an English-speaking country, Ireland is not an internationally well-known study destination yet and has the lowest numbers of international students of all the countries under review. However, the Irish government and university sector have great ambitions for expansion. Irish HEIs have indeed achieved considerable success in their internationalisation efforts over the last two decades. Between 2000/01 and 2012/13 the number of international students attending Irish HEIs increased from 4,184 to 10,981¹⁵³ and reached 18,000 by 2016.¹⁵⁴ Ireland has also been successful in diversifying the range of students' origin countries, attracting students from the more 'obvious' source countries, such as China, India, and the US (where there is a large Irish diaspora) but also Brazil and Saudi Arabia.¹⁵⁵

¹⁵¹ Finn, M. and Darmody, M. (2017), op. cit.

¹⁵² Higher Education Authority (HEA) (2017). Higher Education Factsheet: Internationalisation. Irish Educated, Globally Connected.

¹⁵³ Finn and Darmody (2017), op. cit.

¹⁵⁴ OECD (2018), op. cit., p.228.

¹⁵⁵ HEA (2016), op. cit.

As mentioned, Ireland had 18,000 international tertiary-level students in 2016 (at bachelor, Mmaster and PhD level) with international students constituting 8% of all student enrolments in that year.¹⁵⁶ The majority of international students in Ireland are enrolled in postgraduate level courses.¹⁵⁷ In 2016-17, the USA accounted for most international students in Ireland (4,696), followed by China (2,153), Saudi Arabia (1,396), Malaysia (1,380) and Canada (1,356).¹⁵⁸

Third Level Graduate Programme – overview

The Third Level Graduate Programme (TLGP) was first introduced in April 2007. It allowed non-EEA graduates from Irish universities to remain in Ireland for six months after graduation in order to find employment and apply for a work permit or green card. During this period they were allowed to work.¹⁵⁹

The programme was subsequently amended in 2011 in the context of the student immigration reforms of that year and reviewed once again in 2016 as part of the second international education strategy, 'Irish Educated Globally Connected'. In 2017 further changes, focused on retaining the highest achieving students and assisting them to transition into the workforce, were introduced. Graduates who received an award on or before 31st December 2016 were entitled to a 6-month residence permit. The changes of 2017 extended the permit period to 12-24 months. At the same time, however, the required level of qualification was put up from level 7 (Ordinary Bachelor degree) to level 8 (Honours Bachelor degree).

The TLGP allows legally resident non-EEA graduates who hold degrees from recognised Irish HEIs to remain in Ireland after their studies and look for graduate level employment. TLGP beneficiaries are expected to apply for a general employment permit, a critical skills employment permit or research hosting agreement by the end of the programme.

Eligibility

As is the case for all EU Member States, EU/EEA students are free to stay in Ireland to look for work after graduation.

The TLGP is open to non-EEA graduates who:

- completed their studies in Ireland and have been awarded a qualification by a recognised Irish awarding body at Higher Diploma/Honours Bachelor's Degree or above (language and non-degree programme students are not eligible for the programme), and;
- hold a current Stamp 2 student immigration permission and an up-to-date immigration registration card; and,
- have not exceeded the seven-year limit on their permission to stay in Ireland as a non-EEA student.

¹⁵⁶ OECD (2018), op. cit., p.228.

¹⁵⁷ HEA (2016), op. cit.

¹⁵⁸ HEA (2017), op cit.

¹⁵⁹ OECD (2008), op. cit.

Candidates must apply within 6 months of receiving their qualification. TLGP beneficiaries are permitted to work full time in accordance with employment law provisions but are not permitted to operate a business or to be self-employed.

Length of programme

The length of the TLGP depends on qualification level:

- Graduates at bachelor level are entitled to stay from 12 months up to any length of time that will amount to a total of 7 years of residence under a student visa and the TLGP combined;
- Graduates at Masters and Doctoral level are entitled to stay from 24 months up to any length of time that will amount to a total of 8 years of residence under a student visa and TLGP combined. However, Masters level graduates are initially granted 12 months' stay with a further possibility of a 12-month extension dependent on an evaluation of their job seeking efforts and employability. While a minimum salary threshold is not a formal requirement, candidates seeking extension are assessed in line with the salary thresholds set by the Department of Jobs, Enterprise and Innovation.

Evaluation of the programme and available evidence

There are no formal evaluations of the impacts of the most recently implemented post-study regulations. However, Ireland is one of the countries taking part the 2018 EMN (European Migration Network) Study on 'Attracting and retaining international students in the EU', the results of which are expected to be published in May 2019.

The Netherlands

Policy context

The Netherlands has a highly internationally oriented knowledge economy and a keen interest in improving its current policies aimed at attracting and retaining highly skilled migrants.¹⁶⁰ It is one of the few EU countries which monitors international student retention and has implemented initiatives aimed at attracting and retaining international students, in given regions especially. Nuffic, the Dutch organisation for internationalisation in education, plays the role of national coordinator of international student retention programmes. It facilitates access of international graduates to the Dutch labour market by removing bureaucratic obstacles and coordinates an alumni network of international students.¹⁶¹ It also provides statistics and analysis on international students in the Netherlands.

¹⁶⁰ Huberts, D. (2016). Analyse stayrate van internationale afgestudeerden: 2007-14. NUFFIC 2016.

¹⁶¹ European Commission (2017), op. cit.

In 2014 the Netherlands launched ‘Make it in the Netherlands!’, an action plan of the government, universities, colleges, municipalities, student organizations and companies aimed at retaining international students. The aims of this programme were:

- To make all international students feel welcome in the Netherlands;
- To retain as many international students as possible to work in the Netherlands after they graduate;
- To ensure that all international students maintain a bond with the Netherlands after they have completed their studies, even if they return to their home countries.

The programme activities focused on five areas:

- Facilitating learning Dutch (both through classroom-based and online language courses);
- Providing detailed information (including through events such as career fairs and meetings with employers) on the Dutch labour market, work opportunities and transition from study to work;
- Providing opportunities for international students to mix with Dutch students;
- Removing formal barriers to staying in the Netherlands post-study as far as possible, including simplification of administrative processes and providing wide-ranging information in English;
- Supporting regional retention projects with the aim of building on these as examples for national-level policy.

A detailed description and evaluation of the ‘Make it in the Netherlands’ programme is available in Dutch and has not been included in this review.¹⁶²

As mentioned above, some regions in the Netherlands carry out their own recruitment of highly skilled workers (including international students and graduates). For example, Brainport Eindhoven is a world-class technology region which is actively running its own advertising campaign aimed at attracting and retaining global talent. They have a recruitment and information website¹⁶³ and provide various forms of assistance to facilitate settling in the region. The programme is supported by the Dutch government. For instance, Expat Centre South, a non-profit governmental agency, helps arrange formalities free of charge. Moreover, it offers in-depth information about studying, working and living in the region, and even organises events enabling migrants considering moving there to meet people already settled in Brainport. Brainport Eindhoven provides an example of a wide-ranging global talent recruitment campaign at regional level within the EU.

International students in the Netherlands

The Netherlands had 90,000 international tertiary-level students in 2016 (at bachelor, master and PhD level) with international students constituting 11% of all student enrolments in that year.¹⁶⁴ The top 5 countries of student origin in 2017 were: Germany (22,189); China (4,347); Italy (3,347); Belgium (2,976); United Kingdom (2,778).¹⁶⁵

¹⁶² See [<https://www.rijksoverheid.nl/documenten/rapporten/2016/09/19/make-it-in-the-netherlands>] [DOA: 12/03/2019]

¹⁶³ [<https://brainporteindhoven.com/>] [DOA: 30/03/2019]

¹⁶⁴ OECD (2018), op. cit., p. 228.

¹⁶⁵ IEE 2018, op. cit.

Orientation Year for Highly Qualified Persons – overview

The Netherlands introduced opportunities for international students to stay and look for high-skilled work after the completion of their studies in 2006. Initially, this was for up to three months after graduation. If the graduate managed to find highly skilled employment within this period, they would receive a residence permit; otherwise, they had to leave the Netherlands.¹⁶⁶

Since that time a number of changes aimed at providing greater flexibility for attracting and retaining international students have been introduced. A major change was implemented in 2014 following an evaluation of immigration policies aimed at highly skilled migrants. In effect, two schemes for highly skilled migrants were merged into one: the 'Orientation Year for Graduates' was combined with the 'Highly Qualified Migrants Scheme' to become the 'Orientation Year for Highly Qualified Persons'. The target group of the scheme was expanded to include researchers who had completed a programme of research in the Netherlands, and third-country nationals who had completed a post-doctoral programme in the Netherlands or at an international top-200 university.¹⁶⁷

The Dutch Orientation Year for Highly Qualified Persons (henceforth Orientation Year) is a very flexible programme allowing non-EEA graduates of degree courses completed at Dutch HEIs to stay and look for work after completing their studies. In some cases it is also open to graduates from abroad. Candidates can apply for the 'Orientation Year' within 3 years of completing their studies. The Orientation Year provides the opportunity to work in the Netherlands without any restrictions, and allows for self-employment and opening one's own business.

Eligibility

As is the case for all EU Member States, EU/EEA students are free to stay in the Netherlands to look for work after graduation.

The Orientation Year is open to non-EEA graduates who:

- Completed studies at bachelor, master or doctoral level in the Netherlands;
- Completed part of their studies in the Netherlands (e.g. Master's Erasmus Mundus students)
- Completed their studies at a top international HE institution and fulfil a number of additional requirements.

Candidates may apply for the programme up to 3 years from completing their studies and it is possible to apply from outside the Netherlands.

Length of programme

Up to 12 months. The length of the programme cannot be extended but graduates can apply for an Orientation Year more than once if they go on to complete a different course of study or programme of scientific research.

¹⁶⁶ OECD (2008), op. cit., p. 25.

¹⁶⁷ European Commission (2015). European Migration Network Synthesis Report for the EMN Focussed Study 2015 Changes in immigration status and purpose of stay: an overview of EU Member States' approaches, p. 17.

Evaluation of the programme and available evidence

The Netherlands has the most comprehensive monitoring system and data on international student retention out of the EU countries reviewed in this report (and possibly within the EU in general). Nevertheless, the effects of a number of policy actions introduced in recent years, such as the Orientation Year and the 'Make it in the Netherlands!' programme are not yet reflected in the data.¹⁶⁸ Statistical data on pathways of international students in the Netherlands is available from 2006. Available analysis looks at student retention rates up to 5 years of completing their studies, and relates to cohorts of students who began or completed their studies prior to the introduction of the above mentioned policies/strategies (2006-2007 up to 2012-2013).

On average, 24.7% of all international graduates of Dutch HEIs who completed their studies between 2006 and 2013 were still living in the Netherlands 5 years after graduating. This amounts to around 22,000 international students in total. However, there are significant differences in stay rates between different cohorts. For instance, the stay rate for those who graduated in 2006 was 29.3% but for the 2012 cohort it fell to 22.7%, that is by 6.6%. This can be largely attributed to economic conditions at the time of graduation: the 2006 cohort entered the labour market prior to the global economic crisis of 2008 while at the time the 2012 cohort was graduating the high skilled work sector had not yet recovered from the effects of the crisis (the recovery only started after 2013).¹⁶⁹

Dutch retention statistics confirm the role of length of time spent in the country for retention. International students in the Netherlands are most likely to leave in the first year following their graduation: about half of them leave within this time. After one year the stay rate is still high at 49.0% yet it drops to 24.7% after five years (these figures are based on stay rates of graduates who began their studies between 2006 and 2012).¹⁷⁰

Significantly, graduates from outside the EEA stay more often than graduates from EEA countries: for international graduates who graduated in the Netherlands between 2006-2007 and 2012-2013 the stay rate 5 years after study completion was 38.6% for non-EEA graduates as compared to 18.3% for EEA graduates.¹⁷¹ While the overwhelming majority of international students in the Netherlands are from Germany (near 22,000 in 2017), their stay rate of around 25% five years after graduation is lower than that for the second country of origin, China (near 4,350 students in 2017). China has an average stay rate of around 36% on an annual basis and accounts for more than 350 graduates staying in the Netherlands. Indonesia, Poland and Belgium all have a relatively high stay rate, between 38% and 48%, which amounts to more than 100 stayers from each of these countries five years after graduation.¹⁷²

Moreover, there are notable differences in stay rates depending on degree level and field of study. On average, university graduates stay more often than college graduates in the Netherlands, with technical universities having a particularly high stay rate.

¹⁶⁸ de Coning, M.V. and D. Huberts (2016), op. cit.

¹⁶⁹ de Coning, M.V. and D. Huberts (2016), op. cit.

¹⁷⁰ de Coning, M.V. and D. Huberts (2016), op. cit.

¹⁷¹ <https://www.nuffic.nl/en/subjects/stayrates-of-international-graduates/> [accessed 2/05/2019]

¹⁷² de Coning, M.V. and D. Huberts (2016), op. cit., p.15.

In terms of spatial distribution, international graduates do not evenly distribute themselves throughout the Netherlands and do not always live where they have studied. Most settle in three major cities: Amsterdam, Rotterdam and The Hague.¹⁷³

Looking at employment rates of international graduates 5 years after study completion, these are comparable to employment rates for the Dutch population.

It has been estimated that – at a stay rate of at least 19% – international graduates in the Netherlands provide a net profit of at least € 1.64 billion annually.

Sweden

Policy context

Sweden carried out a reform of its immigration policies related to workers from abroad in December 2008. The reform was designed to create an effective, flexible system for labour immigration – an entirely demand-driven and employer-led system allowing for recruitment at all skills levels. The reform was driven by the following factors:

- particular skill/labour shortages that could not be filled by workers resident in Sweden or those from other EU countries;
- an ageing population and diminishing numbers of people of working age; this was seen as a threat to Sweden's future economic growth and the long-term sustainability of its welfare system.

Under the reformed system, employers needed to prove that they could not recruit a suitable employee from Sweden or any other EU country. The new legislation also guaranteed full protection of migrants' employment rights and of employers, and prevention of wage and social dumping.

With regards to non-EEA students, a few important policy changes took place over the last decade. In 2011 Sweden introduced tuition fees for third country students (while studies for native and EEA students remained free) along with residence permit cards with biometric identifiers. This resulted in a sharp decline in student numbers with 6,836 residence permits for the purpose of study issued in 2011 as compared to 14,188 in 2010. Another key policy change took place in 2014 with the introduction of a Residence Permit for the purposes of seeking work post-study. Up till that time, non-EEA students were only permitted to remain in Sweden if they had secured work prior to graduation and applied for a residence permit for work before the expiry date of their study-related residence permit (which is very similar to current policies in the UK). The new Residence Permit allowed students who had studied in the country for at least 2 years to remain in Sweden for the purposes of seeking employment for 6 months after graduation (subject to meeting a number of formal requirements).

A recent study has shown that attracting and retaining international students is an evolving policy area in Sweden. It is both a matter of migration policy and the Swedish

¹⁷³ <https://www.nuffic.nl/en/subjects/stayrates-of-international-graduates/> [accessed 2/05/2019]

government's and HEIs' ambitions to create internationally competitive higher education, teaching and research environments and a lot of concerted effort has been put into developing relevant policies over the last years. Significantly, study-related immigration has not triggered any major controversial debates in Sweden, it is overwhelmingly seen positively.¹⁷⁴

International students in Sweden

Sweden had 28,000 international tertiary-level students in 2016 (at bachelor, master and PhD level) with international students constituting 7% of all student enrolments in that year.¹⁷⁵ The top 5 countries of student origin in 2017 were: France (11,771); Germany (3,625); Finland (2,495); China (2,374); India (1,316).¹⁷⁶

Residence Permit for the purposes of seeking work - overview

Non-EEA graduates of Swedish universities at bachelor and master level may apply for a residence permit to seek employment or open their own business subject to meeting certain requirements. The graduates need to be resident in Sweden at the time of applying. The permit is valid for up to 6 months. The beneficiary's family members also receive a residence permit for this time. Doctoral-level students may qualify directly for permanent residency after 4 years' residence subject to meeting certain conditions.

Eligibility

As is the case for all EU Member States, EU/EEA students are free to stay in Sweden to look for work after graduation.

Non-EEA graduates of Swedish universities at bachelor and master levels may apply for a 6-month residence permit to look for work in Sweden upon completion of their studies providing they meet the following requirements:

- they studied in Sweden for at least two terms and had a study visa valid for minimum 2 years;
- they are based in Sweden at the time of application;
- they have the means to sustain themselves during the application process;
- they have comprehensive healthcare cover;
- their passport is valid for the whole period of intended stay in Sweden.

Graduates of Doctoral studies may apply for permanent residency upon completion of their studies providing they have lived in Sweden and have had a residence permit for doctoral studies for a total of four years within the past seven years and intend to stay in Sweden.

¹⁷⁴ Migrationsverket (2019). EMN study 2018: Attracting and retaining international students in the EU - Country Report Sweden, p.40.

¹⁷⁵ OECD (2018), op. cit., p.228.

¹⁷⁶ IEE 2018, op. cit.

Length of programme

The length of the Residence Permit issued for the purposes of seeking work depends on the degree level:

- graduates with bachelor's and master's degrees may receive a permit of up to 6 months;
- graduates with doctoral degrees may apply for permanent residency upon completing their studies.

The Residence Permit issued for purposes of job seeking post-study cannot be extended.

Evaluation of the programme and available evidence

Looking at the data on student numbers over the last 15 years, it seems that the introduction of the 2014 post-study residence permit for the purpose of job seeking has had a positive impact on attracting non-EEA students. Prior to introducing tuition fees for non-EEA students in 2011 (and the residency permit in 2014) study-related immigration from outside the EU/EEA increased strongly in Sweden: from 6,837 residence permits for purpose of study in 2005 to 14,188 in 2010. As noted previously, the introduction of tuition fees in 2011 had a huge negative impact on numbers of non-EEA students as issued permits plummeted to 6,836 in 2011 and 7,092 in 2012. However, since the introduction of the post-study Residence Permit non-EU/EEA student numbers have been growing steadily with a record 13,416 residence permits issued for the purpose of study in 2017. Its positive effects are also reflected in uptake of the opportunity: since the policy was introduced in 2014 almost 1,500 third country graduates moved from the residence permit for the purposes of study to one for the purposes of job seeking. 122 such permits were granted in 2014, 334 in 2015, 445 in 2016, and 562 in 2017. Research has also found that the stay of international graduates in Sweden is increasingly related to work purposes. Among all third-country nationals who were granted a residence permit for work purposes in 2017, 778 were graduates of Swedish HEIs.¹⁷⁷ Nevertheless, the retention rates for international students in Sweden remain relatively low: in 2015-2016, it was estimated to be around 7%.¹⁷⁸ The low stay rates of international students in Sweden despite the favourable formal conditions of stay may partly be attributed to practical barriers: lack of affordable housing, poor knowledge of Swedish resulting in difficulty in accessing the labour market, lack of professional networks, residence permit processing times, and the need to provide proof of evidence of sufficient resources.¹⁷⁹

Access to data and evidence on Sweden is limited due to language issues and only evidence available in English has been assessed. Nevertheless, as follows from the recently published country report for the 2018 EMN study on 'Attracting and retaining international students in the EU' it follows that at this point in time Sweden does not have developed systems of tracking international students' further destinations and retention rates.¹⁸⁰

¹⁷⁷ Migrationsverket (2019). EMN study 2018: Attracting and retaining international students in the EU - Country Report Sweden, p. 26.

¹⁷⁸ Note: The estimated 'retention rate' quoted here is calculated on the basis of the share of third-country nationals who were granted a work permit after having had a residence permit for studies. Migrationsverket (2019). EMN study 2018: Attracting and retaining international students in the EU - Country Report Sweden, p.33.

¹⁷⁹ Migrationsverket (2019). EMN study 2018: Attracting and retaining international students in the EU - Country Report Sweden, p.33-34.

¹⁸⁰ Migrationsverket (2019). EMN study 2018: Attracting and retaining international students in the EU - Country Report Sweden.

The UK/Scotland

Policy context

The UK carried out a major change to its immigration system when the current points-based system (PBS) for third country nationals was introduced. It was based on the Australian model and its object was to simplify the (visa-based) immigration system on the one hand, and enable careful selection of migrants on the other. Only those non-EEA migrants with skills that could not be filled from the domestic/EEA workforce were to be accepted, with a focus on highly skilled workers. The PBS was launched in phases between March 2008 and March 2009, through successive Statements of Changes to the Immigration Rules. Tier 4 (for students) was the last to be launched, in March 2009. It substituted the earlier student visa system.

At present, the UK has no designated post-study work scheme. However, such schemes operated in the UK in the 2000s, both prior to and after the introduction of the PBS. The first of these was the 'Fresh Talent: Working in Scotland Scheme', the aim of which was to address (to some extent) the demographic challenge facing Scotland as well as labour shortages in key sectors. It was launched in June 2005 as part of the wider 'Fresh Talent Initiative'. 'Fresh Talent: Working in Scotland Scheme' was rather flexible and enabled non-EEA graduates of Scottish HEIs to remain in, or return to, Scotland in order to work. Applicants had to fulfil three basic conditions: to be awarded a Higher National Diploma, UK recognised undergraduate degree, master's degree or PhD by a Scottish HEI within a period of 12 months prior to applying; to have lived in Scotland for at least 3 months for a course lasting one academic year and at least 6 months for a two-year course; and to work or look for work in Scotland. There were no restrictions on the type of work and no salary threshold requirements. Candidates could apply from within the UK or from overseas. Programme beneficiaries could stay in Scotland for a maximum of two years on the scheme, and were expected to apply for other work visas after its end. The scheme was managed by the Home Office and operated between 2005 and 2008.¹⁸¹

In 2008, the UK (Labour) Government decided to extend the scheme to all foreign graduates in the UK. It was subsequently made part of the general Points Based System (PBS) under Tier 1 - Post-Study Work. Under this scheme, third country nationals who graduated from British HEIs were allowed to stay in the UK for two years after completing their studies to work or look for work. However, in 2012 a decision to discontinue the scheme was taken due to the apparent abuse of the immigration system and the scheme's objectives not being met (many graduates on this visa were not being employed in skilled work which was a key objective of the programme). The decision was met with strong opposition on the part of the UK University sector concerned about its negative impact on international student numbers and the UK's competitiveness in the global higher education market. The Scottish Government also raised objections to the decision. Following the closure of the scheme, graduates of UK HEIs are still able to work after their studies but under the more selective routes for skilled workers, graduate entrepreneurs, and professional training or internships.¹⁸²

¹⁸¹ Scottish Parliament (2016). Devolution (Further Powers) Committee. Welcome to Scotland? A Report on Post-Study Work Visas., 2nd Report, 2016 (Session 4).

¹⁸² European Commission (2015), op. cit., p. 17.

Significantly, the post-study work scheme might be re-introduced post-Brexit. The UK Government's 2018 immigration white paper, 'The UK's Future Skills-Based Immigration System,' includes plans of introducing an extended post-study work visa of 6 months for bachelor's and master's degree students and of 12 months for doctoral students. During this time the graduates will have unrestricted access to work. Moreover, international students will be able to apply for a skilled work visa 3 months before their course ends, or to switch into skilled work from their home country for up to two years after graduation.¹⁸³

International students in the UK

The UK remains an extremely popular destination for international students, attracting more students from abroad than any other country except the much larger USA. However, the UK's closest competitors, such as the USA, Australia, France and Germany, all continue to grow at a faster rate than the UK with growth rates of 9.4%, 10.7%, 1.8% and 8.7% respectively in 2014-15.¹⁸⁴

International students to the UK come primarily from non-EU countries. In 2017, an estimated 70% of students moving to the UK came from non-EU countries (128,000 out of 184,000 non-UK long-term immigrants). China has been an increasingly important country of origin for international students, rising from just 10% of student visas in 2005 to 40% in 2017.¹⁸⁵

The UK had 432,000 international tertiary-level students in 2016 (at bachelor, master and PhD level) with international students constituting 18% of all student enrolments in that year.¹⁸⁶ The top 5 countries of student origin in 2017 were: China (97,850); the United States (28,125); Malaysia (18,400); Germany (18,205); India (18,015).¹⁸⁷

Post-study work options – overview

Currently, the UK has no designated post-study work programme. Non-EEA graduates who have a student visa (Tier 4) may stay in the UK to look for work for 4 months after completing their studies. If they receive a job offer during this time, they may apply for a general visa (Tier 2) which allows them to stay in the UK for the purposes of work. Otherwise, they must leave the UK.

Eligibility

As is the case for all EU Member States, EU/EEA students are currently free to stay in the United Kingdom to look for work after graduation. Nevertheless, at this point in time how their situation will change post-Brexit remain unclear.

¹⁸³ HM Government (2019). International Education Strategy: global potential, global growth. Department for Education and Department for International Trade, March 2019.

¹⁸⁴ Universities UK (2018). Parliamentary Briefing: An improved post-study work system. September 2018.

¹⁸⁵ Migration Observatory (2018). Non-European Student Migration to the UK. Briefing, October 2018.

[<https://migrationobservatory.ox.ac.uk/resources/briefings/non-european-student-migration-to-the-uk/>]

¹⁸⁶ OECD (2018), op. cit., p.228.

¹⁸⁷ IEE 2018, op. cit.

The Tier 4 student visa includes a 4 month period on completion of studies where the graduate can legally remain in the UK and look for an employer who will sponsor them. If the graduate finds a sponsor they can transfer to a Tier 2 points based visa while in employment. The eligibility requirements for a Tier 2 visa are:

- Having a UK bachelor's degree /UK master's degree/ PGCE/PGDE/minimum 12 months PhD study;
- proven English language ability;
- sufficient funds to support themselves and their dependants.

Length of programme

The period permitted for post-study job seeking under Tier 4 (study visa) is 4 months and cannot be extended.

The Tier 2 (general) visa allows third country nationals to work in the UK for 3 years with the possibility of extending the visa by another 2 years.

Evaluation of the programme and available evidence

Between 2005 and 2008, 7,620 non-EEA students benefitted from the 'Fresh Talent: Working in Scotland' scheme.¹⁸⁸ Between 2008 and 2012, the Tier 1 (Post-Study Work Visa) was in operation for third country nationals in the whole of the UK. The scheme was very popular and it has been argued that its closure resulted in a fall in student numbers. The UK suffered an unprecedented decline in international student applications (-29%) between 2007 and 2013, most notably from India. However, this can also be attributed to other changes the Home Office introduced in the student visa system from 2010 onwards. The changes were aimed at reducing abuse of the student route and included new requirements for international students and the institutions hosting them, such as English language competence, restriction to bring dependants for below degree level students, or a Highly Trusted Status license for sponsoring institutions. Nevertheless, other evidence indicates that the UK's comparatively poor post-study work offer is indeed a key factor in the decrease in international students coming to the UK. A study carried out in 2015 found that 36% of prospective students who chose not to study in the UK cited post-study work options as a reason for their decision.¹⁸⁹ This was the principal factor given, followed by two very similar concerns about job prospects in the UK and ability to stay in the UK.¹⁹⁰

The closure of the Post-Study Work programme (Tier 1 category) was also reflected in the stay rates of international students: the number of visa changes from education reasons into remunerated activities reasons dropped from 38,505 in 2012 to 6,235 in 2013. In March 2014, the Home Office reported a drop of post-study applicant approvals from 23,149 to 713 (particularly affecting former Nigerian, Bangladeshi, and Sri Lankan applicants).¹⁹¹ In 2017, 8,486 people who previously held study visas were granted

¹⁸⁸ Parliament UK: Past and present post-study work routes. [DOA: 15/04/2019]

<https://publications.parliament.uk/pa/cm201516/cmselect/cmsscota/593/59305.htm>

¹⁸⁹ Hobsons EMEA (2015). International Student Survey 2015: Value and the Modern International Student. A survey of 45,543 prospective international students from 210 countries and 207 nationalities, of whom 17,336 (from 199 countries and 193 nationalities) had enquired to UK institutions.

¹⁹⁰ UUK (2018), op cit.

¹⁹¹ Hawthorne (2018), op. cit., p. 203.

extensions to remain in the UK in a category other than study.¹⁹² This is down from 44,144 (81% decrease) in 2012, the year in which the dedicated 'post-study work' route was closed.¹⁹³

The literature points out that little evaluation of the UK's post-study work scheme had occurred prior to its closure in 2012, including on former international students' attractiveness to prospective UK employers.¹⁹⁴ The UK Government argued that the scheme had been misused and failed to fulfil its main object to enable foreign graduates to gain UK work experience commensurate with their qualifications and skills level. However, the closure was largely motivated by the UK Government's commitment to cutting down net immigration. The reliability of the data and analysis on which the UK Government based the decision to discontinue the scheme has been repeatedly questioned.¹⁹⁵

¹⁹² This category encompasses a number of reasons, e.g. work, family reasons.

¹⁹³ Migration Observatory (2018), op. cit.

¹⁹⁴ Hawthorne (2018), op cit., p. 203.

¹⁹⁵ Universities UK (2011). Universities UK response to 'The student immigration system – a consultation,' February 2011.

Summary

Despite the growing interest in attracting and retaining international students globally, research on policymaking related to this group of migrants remains limited, and the evidence base on the effectiveness of given (national and supranational) policies aimed at students is patchy and inconclusive.

International evidence on the impacts of post-study work programmes on attracting and retaining international students is mixed. International student surveys indicate that opportunities for staying in a given country post-study (to look) for employment and gain work experience are highly valued and important (though not most important) in choice of study destination. Moreover, the evidence points to the relative success of post-study work schemes in terms of attracting international students and increasing stay rates of international graduates in the short term (at least for the duration of the programme); the more flexible the scheme, the higher the numbers participating in it. Nevertheless, there is far less evidence on the impact of post-graduate work programmes on the longer-term retention of international students. While the literature argues such programmes facilitate longer-term stay (because the graduates spend more time in the country which in itself supports longer stay, have the opportunity to establish new and strengthen old networks, and to gain valuable work experience), statistical data on the matter remains limited and inconclusive. This is for two reasons. Firstly, there seems to be little systematic monitoring of the impacts of respective post-study work offers across the countries under comparison (with the exception of Canada), or alternatively, such evaluations are not publicly available. There are few statistical data sources that track international student pathways in sufficient detail to make connections between the uptake of given schemes and student retention (plus statistical data alone may be inadequate to draw conclusions about a given policy). Secondly, in some of the countries under consideration post-study work programmes have only recently been implemented (while in others they have been reviewed and changed over the last few years), and it is too early to draw conclusions on their impact on student retention rates in the longer term (i.e. 5 years upon completing the programme and later).

Meanwhile, challenges created by various post-study work policies have been fairly well evidenced, especially in the case of the traditional immigration countries. The main issues identified were connected with corruptive practices on the part of educational providers and employers in given countries (such as New Zealand or Australia). These have led to lowering of educational standards and in effect lowering of the international students' skills level on the one hand, and labour market abuse of the graduates on the other. Other major challenges found were: underemployment of international graduates, and 'oversupply' shocks and increased competition for domestic graduates. This points to the risk of misuse of post-study work programmes and the need for close monitoring of the actors involved in their implementation.

Despite limited statistical data related to the impact of post-study work policies on student numbers, international student surveys and qualitative data confirm that post-study work opportunities are a significant factor in choosing country of study, and therefore play an important role in attracting international students to a given country. However, while such policies may support the goal of retaining international students, they are not the only, and possibly not the decisive factor in making the decision to stay. Being able to look for work in the host country after graduation obviously facilitates stay, yet only initially. Research

shows that the stay rates of international students in the first year after graduation are highest yet drop considerably within the next few years. Therefore, if a given country aims at retaining international students longer-term, it should develop additional policies or strategies that would encourage students to extend their stay. The literature underlines the need for, but simultaneous lack of, integration policies aimed at international students. The one European country which is currently leading the way in developing such strategies – with apparent success – is the Netherlands. Germany has also been singled out as an example of good practice in this respect. It is too early, however, to evaluate the impact of these very recent developments (both in terms of implementing flexible post-study work policies and integration strategies) on student retention rates in the longer term.

The literature stresses the importance of indirect policies and factors in retaining highly skilled (or any, for that matter) migrants. Creating an attractive physical and cultural environment is of great importance, and an attitude of welcome within the host country plays a key role in the process. The availability of (suitable) employment is also crucial. Moreover, housing, healthcare, and education policies must all be considered. In some cases these can be seen as even more important than direct immigration policies. This seems the case for EEA graduates who completed their degrees in other EEA countries and who have the choice to move wherever they wish to within the EEA. Their stay rates are considerably lower than those of non-EEA students, for whom the relative political and economic stability in Europe might be an attracting factor in itself. Therefore, successful retention of international students in the long run requires implementing a number of policy measures beyond the post-study work offer: although it is a good starting point in encouraging further stay in the host country, it is by no means sufficient.

Conclusions and recommendations

Over the last two decades, policies targeted at international students have become a crucial part of the global competition for talent. Countries worldwide are competing to attract and retain international students in various ways, including by offering post-study work programmes. In recent years, many countries have introduced post-study work schemes or reviewed existing ones with a view to increasing their attractiveness to international students. The UK, however, has moved in the opposite direction than its competitor countries and closed down its post-study work scheme in 2012.

On the basis of this review we can state that the UK's current post-study work offer to international students is much less attractive than that of any of its global competitors. All of the countries covered in this evaluation, that is the non-European competitors – Australia, Canada, New Zealand, and the United States – as well as the European competitors – France, Germany, Ireland, the Netherlands, and Sweden – have more generous offers. For instance, Germany and France, which are currently growing their international student rates much faster than the UK, have recently revised their post-study work offers to ensure their greater flexibility and openness.

The UK currently allows international students to remain in the country for 4 months to look for work after completing their studies. If they fail to find a job offer allowing them to move onto a work visa within this time they need to leave the country. Meanwhile, all of UK's competitor countries allow for a longer stay and in the case of most, much longer, ranging between 1 and 3 years. Moreover, in a number of countries graduates are granted a considerable length of time to apply for the post-study work scheme per se upon completing their studies: in some cases even up to 3 years and after leaving the host country. Furthermore, most competitor countries now offer completely flexible work conditions as part of the post-study work scheme, with no restrictions on type of work carried out or number of hours worked. Therefore, the current UK offer of post-study work opportunities is indeed highly limited in comparison to the much more flexible offers of its competitor countries.

It needs to be noted here that the UK Government has put forward plans for restructuring Britain's post-study work offer after Brexit, when a revised immigration policy is to be implemented. The new system is to offer graduates with bachelor's and master's degrees 6 months to seek work with no restrictions and PhD level graduates 12 months. Nevertheless, even if such an offer is indeed introduced, it is still rather limited in comparison to that of UK's competitor countries. Therefore, if the UK wishes to maintain a competitive edge in terms of attracting and retaining international students by means of its post-study work offer, this should be carefully revised and further extended.

More generally, this review has found that:

- the post-study work offer is effective in attracting and retaining international students in the short-term, and the more flexible the programme, the higher its uptake;
- although post-study work schemes may support retention, international students' decisions to stay longer-term depend on a wide variety of factors, including employment opportunities, ties developed in the host country, and how they feel there;

- a post-study work offer alone is not sufficient to ensure longer-term retention of international students; this must be supported by a number of other policy measures, such as language support, integration support, availability of affordable healthcare, housing and others.

Concluding, with a view to improving the UK's competitiveness in terms of attracting and retaining international students, the following recommendations can be made:

1. To introduce a more competitive post-study work offer taking into consideration: ease of application and time given to apply, programme length, work entitlement, and opportunities for applying to the programme after leaving the UK;
2. To introduce additional measures supporting the longer term retention of international students, such as: language support; integration programmes; provision of information and advice on the UK labour market and employment opportunities, as well as conditions of stay, and life in the UK; creating opportunities for establishing professional networks;
3. To ensure systematic monitoring of the programme and its implementation in order to prevent its potential misuse and negative impact on the beneficiaries (and also to evaluate its effectiveness).

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