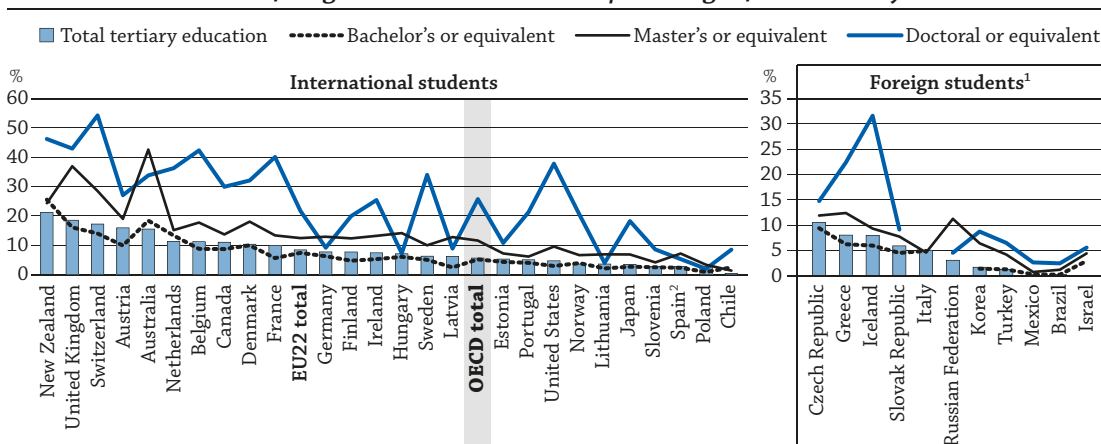


INDICATOR C4

## WHAT IS THE PROFILE OF INTERNATIONALLY MOBILE STUDENTS?

- Students become more mobile as they reach higher education levels. International students account for only 5.6% of total enrolment in tertiary programmes, but over a quarter of enrolments at doctoral level. Although mobility increases steadily with educational level, mobility patterns at doctoral level differ substantially from lower tertiary levels, as some countries become more attractive than others.
- International tertiary students favour science, technology, engineering and mathematics (STEM) fields of study, as well as business, administration and law. This is explained by the central role these disciplines play in innovation and creating job opportunities. About one-third of mobile students in the OECD area are enrolled in STEM fields of study, broken down as follows: engineering, manufacturing and construction (17%); natural sciences, mathematics and statistics (10%); and information and communication technologies (6%). A further 28% are enrolled in business, administration and law. However mobile students converge towards STEM disciplines more markedly at doctoral level, with these fields of study accounting for 59% of OECD mobile students at this level.
- Some countries are more deeply engaged in brain circulation than others. This is the case for English-speaking countries like Australia and New Zealand, which serve as regional educational hubs and count more than 18 international students on their soil for every 100 national students at home and abroad. Several small innovation leaders also perform well in attracting talent: Austria (18 international students per 100), Belgium (12 per 100), Luxembourg (22 per 100) and Switzerland (20 per 100). Some Eastern European countries (Estonia, Latvia, Lithuania and the Slovak Republic) are less well integrated into mobility networks, however, and are experiencing a greater outward mobility as they have more national students studying abroad than international students studying in their countries.

**Figure C4.1. Incoming student mobility in tertiary education, by ISCED level (2015)**  
International or foreign student enrolment as a percentage of total tertiary education



**Note:** Luxembourg (25.5% at bachelor's level, 71.1% at master's level and 87% at doctoral level) is an outlier and is not presented on the figure.

1. Foreign students are defined on the basis of their country of citizenship. In general, international students are a subset of foreign students. Data on foreign students are not comparable with data on international students and are therefore presented separately in the figure.

2. Total tertiary education excludes doctoral students.

Countries are ranked in descending order of the percentage of international (or foreign) students enrolled in tertiary education.

**Source:** OECD (2017), Table C4.1. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

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### Context

Studying abroad has become a key differentiating experience for young adults enrolled in tertiary education, and international student mobility has received increasing policy attention in recent years.

Studying abroad is an opportunity to access quality education, acquire skills that may not be taught at home and get closer to local labour markets that offer higher returns on education. Studying

abroad is also seen as a way to improve employability in increasingly globalised labour markets. Other motivations include the desire to expand knowledge of other societies and to improve language skills, particularly English.

For host countries, mobile students may be an important source of income and have a disproportionate impact on economic and innovation systems (OECD, 2016a). In the short-run, international students often provide tuition fees, and in some countries incur higher registration fees than domestic students (see Indicator B5). They also contribute through their living expenses to the local economy. According to the US Department of Commerce, international students brought more than USD 35 billion to the US economy in 2015 (IIE, 2016). In the longer-run, highly educated mobile students are likely to integrate into domestic labour markets, contributing to knowledge creation, innovation and economic performance.

Attracting mobile students, especially if they stay permanently, is therefore a way to tap into a global pool of talent, compensate weaker educational capacity at lower educational levels, support the development of innovation and production systems and mitigate the impact of an ageing population on future skills supply in many countries (OECD, 2016b). There is however a risk of squeezing-out qualified national students from domestic tertiary educational institutions which differentiate tuition fees by student origin as they may tend to enrol international students who generate higher revenues with higher tuition fees.

For the countries of origin, mobile students might be viewed as lost talent. Yet mobile students can contribute to knowledge absorption, technology upgrading and capacity building in their home country, provided they return home after studies or maintain strong linkages with nationals at home. Mobile students gain tacit knowledge that is often shared through direct personal interactions and that enables their home country to integrate into global knowledge networks. Recent data suggest that students leaving to study overseas are a good predictor of future scientist flows in the opposite direction, providing evidence of a significant brain circulation effect (Appelt et al., 2016). In addition, student's mobility appears to more deeply shape future international scientific co-operation networks than a common language, or geographical or scientific proximity.

For increasingly autonomous educational institutions, competition for talent has become more intense and global, prompting them to access a wider pool of high-potential students with a view to increasing their reputation and revenues, and promoting cross-faculty fertilisation (OECD, 2012; 2016b). In that respect the popularity of university league tables and other institutional rankings have reinforced a perception of cross-institution difference in quality and the value of enrolling at prestigious institutions (Perkins and Neumayer, 2014). As part of their internationalisation strategy, more and more institutions have been creating offshore satellite campuses or double degrees, changing admission rules for foreign students, revising curricula to encourage teaching in foreign languages, or offering Internet courses and international internships. Massive open online courses (MOOCs) have for instance expanded the reach of existing campuses (see Box C6.1 in Chapter C6). As a consequence, the international activities of tertiary educational institutions have not only expanded in volume and scope, but also in complexity.

### ■ Other findings

- The number of foreign students engaged in tertiary education programmes worldwide has exploded within a generation, rising from 0.8 million in the late 1970s to 4.6 million 45 years later (Box C4.2, foreign student definition). In 2015, there were 3.3 million students travelling across the OECD area for study purposes (international student definition).
- Pools and flows of mobile talent remain very concentrated and migration flows are heavily rooted in historical patterns and shaped by proximity factors. The top five OECD destination countries host almost 70% of mobile students in the OECD area, whereas the top five sending countries (worldwide) account for just under 40% of total migration towards the OECD area. The largest host countries are the advanced English-speaking economies: the United States (30% of total international students in the OECD area), the United Kingdom (14%) and Australia (10%). However, France, Germany and the Russian Federation also attract significant numbers of students. Most mobile students in OECD countries originate from China (20%), followed by India (7%), Germany (4%), Korea, France and Saudi Arabia (ranging between 2-3%).

## Analysis

### Profiles of internationally mobile students

Internationally mobile students show some trends in terms of their chosen field of study and level of education.

#### *Student mobility patterns: the case of doctoral programmes*

The relative concentration of international and foreign students in different levels of tertiary education gives a fair indication of the attractiveness of educational programmes across countries.

The more advanced education programmes are, the more internationally open they are likely to be. Save for a few country exceptions, the share of international students enrolled in tertiary programmes increases gradually with education level. On average across OECD countries, international students account for 5.6% of total enrolment in tertiary programmes, but over 25% of all enrolments at doctoral level (Figure C4.1. and Table C.4.1.).

Several factors could account for these trends: capacity constraints in the countries of origin may be particularly severe as education levels increase; returns on investing in international studies, especially in prestigious institutions, may be higher at higher levels of tertiary education; and students who are more likely to travel and live abroad because of their socio-economic background are also more likely to access more advanced educational programmes. For host countries, there are strong incentives to invest in these later education stages, especially doctoral level, because graduates from this education level make a large contribution to research and development (R&D) and innovation, and to addressing socio-economic challenges.

International enrolments in bachelor programmes remain relatively low (below 5% in half of the countries for which data are available and below 10% in over 80% of the countries under review; Figure C4.1). Yet a few countries show a more international profile at these earlier educational stages: Australia (13.3%), Austria (18.4%), Luxembourg (25.5%), New Zealand (16.0%) and the United Kingdom (14.0%).

International enrolments increase significantly at master's level. Across the OECD area, there is on average more than one international student for every ten students enrolled in the country at this level. The proportion of incoming students at least doubles between bachelor's and master's levels in two-thirds of the countries. Sweden hosts four times more international students at master's than bachelor's level (9.9% compared to 2.4%), while Australia (42.6% vs. 13.3%), Denmark (18.0% vs. 5.6%) and Norway (6.6% vs. 2.0%) host three times more. The most striking increases in master's students' inflows occur in Australia and the United Kingdom (36.9% vs. 14.0%) as both were already large recipients of international students at bachelor's level. Austria on the other hand seems relatively less attractive to master's students as its inflows are fairly similar to those at bachelor's level. Data based on foreign students' citizenship show a similar trend. In Korea (6.4% compared to 1.4%) and Turkey (4.2% vs. 1.3%), increase in student's inflows is noticeable between bachelor's and master's programmes.

International enrolments boom at doctoral level in the OECD area is mainly due to the United States, which leads the field as the largest recipient of international doctoral students: the proportion of international students in US doctoral programmes is four times larger than in master's programmes (37.8% versus 9.5% of total enrolments). However, the increase of student inflows from master's to doctoral programmes is much less homogenous across countries than for bachelor's to master's programmes. This is particularly striking in Australia (dropping from 42.6% to 33.8%), Germany (from 12.9% to 9.1%), Hungary (from 14.1% to 7.2%), Latvia (from 12.7 to 8.8%) and Lithuania (from 6.8% to 3.9%). In addition to the United States, doctoral programmes in small R&D and innovation leaders – such as Belgium, Ireland, Norway and Sweden – draw a large share of international students. In Luxembourg and Switzerland, there are more international students in doctoral programmes than nationals (87% and 54% of their enrolments come from overseas at this level). France and Portugal hosts three times more students from abroad in their doctoral schools than in their master's programmes (Figure C4.1).

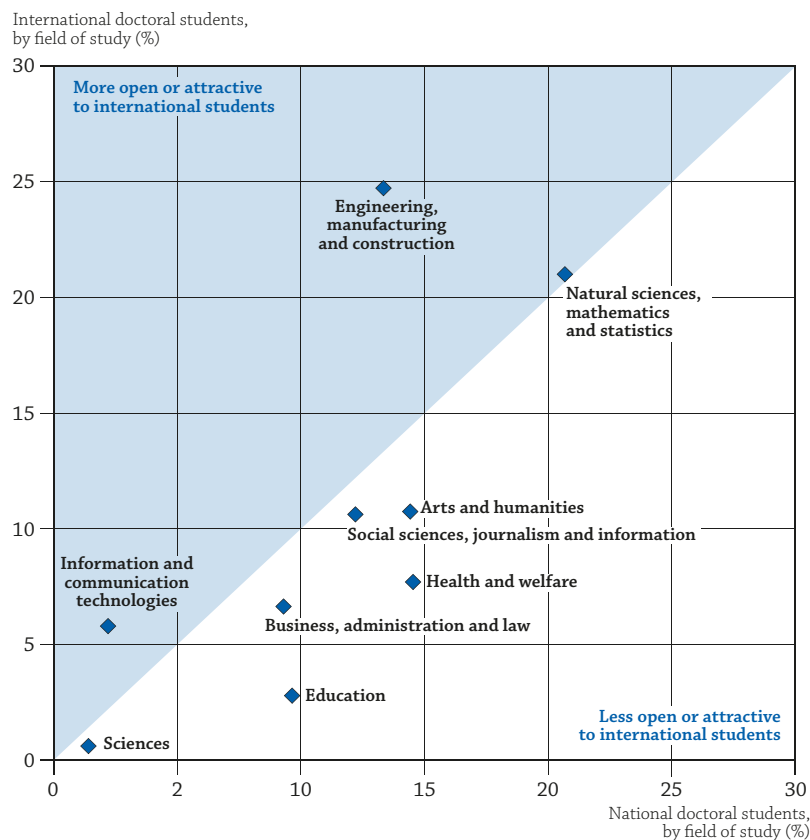
#### *Preferences for science technology, engineering and mathematics studies*

International students tend to mainly enrol in science, technology, engineering and mathematics (STEM) fields of study, as well as in business, administration and law. About one-third of OECD mobile students at all tertiary levels are enrolled in STEM fields of study - broken down as follows: engineering, manufacturing and construction (17%); natural sciences, mathematics and statistics (10%); information and communication technologies (6%), and business, administration and law (27%) (Table C.4.2). This compares to only 22% of national students who are enrolled either in STEM disciplines or business, administration and law. Conversely, mobile students are less likely than national students to pursue tertiary studies in humanities (13%), social sciences (11%) or other non-STEM disciplines.

The lower language proficiency required to perform in STEM could partly explain the internationalisation of these fields of study. But of greater importance is probably the central role played by science, engineering and business management in innovation processes and value creation (OECD, 2012; 2014), and the wage premium and better career opportunities associated with graduating in these disciplines (see Indicator A5).

At doctoral level, mobile students' preferences for STEM disciplines become even more pronounced: 25% of international students enrolled across the OECD area are pursuing advanced research programmes in engineering, manufacturing and construction; 28% are enrolled in natural sciences, mathematics and statistics research; and 6% in information and communication technologies (ICT) (Figure C.4.2). Business, administration and law are much less popular among students at this level than at lower education levels (7%).

**Figure C4.2. Doctoral student mobility by field of study, OECD average (2015)**  
*International and domestic students enrolled in tertiary education at ISCED 8 as a share of total enrolment, by field of study*



Source: OECD (2017), Table C4.2. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).  
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The most internationally open countries for engineering doctorals are Denmark (international students account for 35% of total enrolments), Korea (33%), Canada (30%) and Sweden (30%) (OECD, 2017a). The most international places for natural sciences and mathematics research are Israel (49%), Slovenia (47%) and Norway (43%), while Luxembourg (20%), Estonia (18%) and Finland (12%) draw the most international ICT doctoral candidates.

### International student circulation in tertiary education

In 2015, there were 3.3 million international students enrolled in OECD tertiary education programmes. The pools and flows of this mobile talent remain very concentrated worldwide, however, and mobility pathways are deeply rooted in historical patterns.

### *Origin and destination of mobile students studying in OECD countries*

Data on international student flows illustrate the strength of proximity factors, e.g. language, historical ties, geographical distance, and political framework conditions (e.g. the European Higher Education Area) as key determinants for mobility. Data also show the concentration of flows around dyadic relationships.

Students from Asia form the largest group of international students enrolled in OECD tertiary education programmes at all levels (1.56 million in 2015; OECD, 2017b). Of these, 612 000 come from China. Three-quarters of Asian students converge towards only three countries: the United States (44%), Australia (16%) and the United Kingdom (15%).

The second major region of origin of international students is Europe, with 782 000 European students crossing borders for the purpose of studying. European students prefer to circulate within Europe: 82% of them enrol in tertiary studies in another European country.

Africa (254 000) and the Americas (265 000) remain far behind as sending regions. Three-quarters of African students enrolled in OECD countries study in Europe, especially France (42%), the United Kingdom (14%) and Germany (8%), whereas North and Latin American students are divided between the United States (42%) and Europe (49%). 16% of Latin American students in OECD countries study in Spain. This reflects their stronger cultural, linguistic and historical connections, as does North American students' tendency to gravitate towards the United Kingdom (25%).

In turn, the United States is the top OECD destination country for mobile tertiary students. Of the 3 million international students in the OECD area, 907 000 enrol in US programmes. English-speaking countries overall are the most attractive, with four countries receiving over half the mobile students. After the United States, the United Kingdom counts 431 000 international students, Australia 294 000 and Canada 172 000. International students in these countries mainly originate from Asia, accounting for 87% of international students in Australia, 76% in the United States and 54% in the United Kingdom (Table C4.1).

The European Union is another key geographical area of inward mobility, with 1.52 million international students enrolled in European programmes. France (239 000) and Germany (229 000) are major host countries, far ahead of the Netherlands (86 000) and Spain (75 000). But mobility channels differ significantly between these two large players. While a majority of mobile students entering France come from Africa (41%), other European countries remain the main source of foreign talent for Germany (42%). For both countries, Asia comes in second as a region of origin, accounting for 23% and 35% of total incoming students respectively. International students in the Netherlands are also mainly European (57%), while inflows from Latin American countries make a significant contribution to Spanish tertiary cohorts (37%). Small European countries rely on intra-European mobility in particular. More than 80% of students entering Austria, the Czech Republic, Denmark, Luxembourg, Poland, Slovenia and the Slovak Republic are travelling from inside Europe (OECD, 2017b).

The Russian Federation is also a major destination country, with 226 000 students enrolled from abroad. It is also a regional catalyst of student inflows, two-thirds of whom come from neighbouring countries with historical links with the former Soviet Union, i.e. Kazakhstan (26%), Ukraine (9%), Belarus (8%), Turkmenistan (7%), Uzbekistan (7%) and Azerbaijan (6%) (OECD, 2017b).

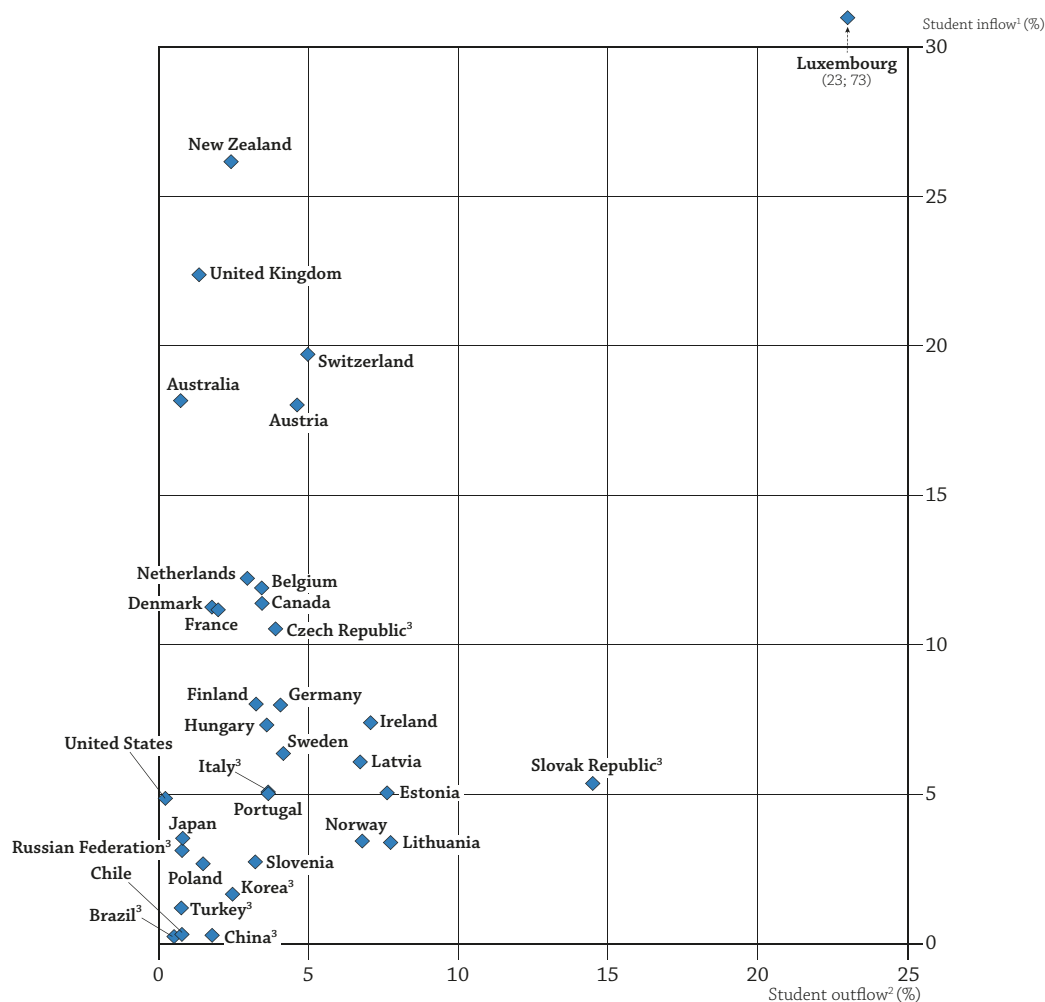
### *Brain circulation: the state of play*

The growth in international student mobility and its impact on national talent pools also vary significantly across countries.

Some countries experience an outward flow of students, measured by the percentage of all national students studying abroad (Figure C.4.3). This is the case for several Eastern European countries, such as the Slovak Republic (14.5%), Lithuania (7.7%), Estonia (7.6%), and Latvia (6.7%); as well as for small European countries, such as Ireland (7.1%) and Norway (6.8%). Luxembourg is a particularly stark example, with three-quarters of its students enrolled in foreign tertiary programmes. In these countries the percentage of national students enrolled abroad significantly exceeds the share of international students enrolled in national institutions.

In some countries large cohorts of international students outnumber their own national talent. This inflow of students is measured by the number of international (or foreign) students on a country's soil in every 100 national students enrolled in tertiary education programmes abroad. The top destination countries for international students are mainly the English-speaking countries: Australia (18%), New Zealand (26%) and the United Kingdom (22%) top the list; followed by small innovation leaders, such as Switzerland (20%), Austria (18%) and Belgium (12%).

**Figure C4.3. International student circulation in total tertiary education (2015)**  
 International or foreign students studying in the country and national students studying abroad  
 as a percentage of total national students studying home and abroad




1. Student inflow represents the number of international students on a country's soil for every 100 national students studying home or abroad in the OECD area (y-axis).

2. Student outflow represents the percentage of national students studying abroad (x-axis).

3. Data refer to foreign students instead of international students.

Source: OECD (2017), Table C4.3. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

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## Determinants of international mobility

Identifying the determinants of international student mobility is key for designing efficient policies to encourage brain circulation.

Student migration is mainly driven by differentials in education capacity, i.e. a lack of educational facilities in the country of origin, or the prestige of educational institutions in the country of destination. It is also driven by differentials in the returns to or rewards for education and skills between the origin and destination country. Economic factors include higher economic performance in the host country; exchange rate differentials that could influence mobility and education cost differentials; and more affordable mobility and education costs in the host country, for instance due to higher education subsidies. In addition, the decision to study abroad may be determined by non-economic factors, such political stability and the robustness of institutions in the receiving country, or cultural and religious proximity between origin and destination countries (Guha, 1977; UNESCO, 2013; Weisser, 2016).

***Mobility costs and network effects***

It is widely assumed that student mobility costs mainly include travel and communication and tend to be linked to the distance from home to destination country. Several variables are used in the literature to measure distance, including geographical distance, shared borders, time zone differences, topographical features (landlocked, continent, size of the country, etc.), languages spoken, and colonial and historical ties. These variables are sometimes combined into gravity models that predict the degree of interaction and bilateral flows between two places (Abbott and Silles, 2016; Mayer and Zignago, 2011). In practice, however, physical distance is often used to proxy migration costs.

Mobility costs, of a financial or psychological nature (Perkins and Neumayer, 2013), can however be mitigated, especially through the use of Internet and digital tools (e.g. email, social media platforms). Networks of family, friends or communities already installed in the host country are also strong facilitators. The diaspora can provide assistance and help lower informational and living costs for newcomers. Recent work argues that pre-existing stocks of migrants may actually be influential in shaping mobilities and that network effects could even be stronger within higher skilled diaspora (Beine et al., 2014; Perkins and Neumayer, 2014).

***Education costs and tuition fees***

Fixing appropriate tuition fees remains one of the most debated topics in the education policy domain, in a context in which policy makers aim to increase participation in higher education and achieve greater equity in education.

The cost of education for individuals differs substantially across countries, as a result of different systems of tuition fees and ancillary services costs, combined with different levels of public allocations for tertiary education and public support for students (see Indicators B3 and B5). Tuition fees typically bridge the gap between the cost incurred by educational institutions and the revenues they receive from public endowments and private sources (e.g. contracts, donations). The levels of tuition fees have been increasingly defined by tertiary educational institutions themselves as they become more autonomous. But governments can modulate or cap fees through regulation or by increasing public appropriations to educational institutions. They can also reduce the financial impact on individuals by subsidising students (e.g. loans, scholarship, etc.). Consequently, although they make up a substantial part of the cost of studying for students (see Indicator A7), tuition fees should be analysed in the context of the student financial aid system in place.

Data collected for some OECD countries suggest that students take tuition fees into consideration when deciding where to study abroad (see Indicator B5; and Box C4.2. in OECD, 2016c), especially since fees can vary substantially across countries (Box C4.1). However, the academic literature remains inconclusive on the impact of tuition fees on students' decisions to migrate and their mobility patterns. Some argue that higher tuition fees could boost the numbers of incoming students as they signal a higher quality of host institutions and potentially higher returns on education (Van Bouwel and Veugelers, 2010; Beine et al., 2014).

In some countries, tuition fees are the same for both national and international students (Box C4.1). For example, within the European Higher Education Area, international students from other EU countries are treated as domestic students with respect to tuition fees (EC, 2010). Outside Europe, Brazil, Colombia, Israel and Korea, to name a few, also charge the same fees for domestic and foreign students.

However, some countries differentiate students according to their origins and charge international students higher tuition fees (Box C4.1). One of the main rationales for doing so is to avoid placing an extra burden on local taxpayers. Another reason is to increase revenues from the international trade of educational services, since the General Agreement on Trade in Services (GATS) provides a supportive regulatory framework for free trade (Altbach and Knight, 2007).

**Box C4.1. International mobility and tuition fees**

The amount of tuition fees that international students have to pay to enrol in tertiary education can vary substantially across countries. For example, in 2015 international students, whatever their country of origin, could enrol in a public institution free of charge in Finland, Germany, Iceland, Norway and the Slovak Republic. This was also the case in Slovenia up to doctoral level (under certain conditions of origin and tax residence, see Table C4.a) and in Estonia for programmes taught in Estonian.

...

On the other hand, average annual tuition fees for international students in public institutions exceed USD 14 000 PPP in Australia, Canada, New Zealand and the United States (see Indicator B5). The maximum average annual fees among countries for which data are available, are reported for private institutions in the United States (USD 27 300) and public institutions in New Zealand (USD 18 500, excluding PhD. programmes). Yet, the large number of students moving to these two countries for studying seems to indicate that these high tuition fees are not preventing students from enrolling (Table C4.a). Indeed, several countries in the Asia-Pacific region have made international education an explicit part of their socio-economic development strategy and have initiated policies to attract international students on a revenue-generating or at least a cost-recovery basis.

In many countries, tuition fees paid by international students are higher than those paid by nationals. The gap is particularly striking in Australia and Canada, where international students pay three times more than nationals; and in Sweden, where international students pay between USD 9 000 (public) and USD 10 400 (private) annually, while national students enrol for free.

**Table C4.a. Tuition fees for international students**

Tuition fee structure	Students' origin	Host countries (OECD and G20)	
		EU countries	Non-EU countries
Differentiated tuition fees (as compared to domestic students)	All countries of origin	Estonia (for some programmes not taught in Estonian), Greece, Ireland, Latvia	Canada, Chile, New Zealand (except students from Australia), Russian Federation, Turkey
	Non-European Union or non-European Economic Area students	Austria, Belgium, <sup>1</sup> Czech Republic, Denmark, Netherlands, Poland, United Kingdom	
Same tuition fees (as compared to domestic students)	All countries of origin	Estonia (except for some programmes not taught in Estonian), France, Hungary, Italy, Luxembourg, Portugal, Slovenia (doctoral's level), Spain.	Australia (most public institutions), <sup>2</sup> Brazil, Colombia, Israel, Japan (public institutions only), Korea, Mexico (to some exceptions), New Zealand (doctoral's level), Switzerland, United States <sup>3</sup>
	European Union or European Economic Area students	Austria, Belgium, <sup>1</sup> Czech Republic, Denmark, Netherlands, Poland, United Kingdom.	
	Countries with bi- or multilateral agreements with the host country		Australia (students from New Zealand), New Zealand (students from Australia)
No tuition fee (for both international and domestic students)	All countries of origin	Finland, Germany, Slovak Republic	Iceland, Norway
	European Union or European Economic Area students	Slovenia (bachelor's and master's levels), Sweden	
	Countries with bi- or multilateral agreements with the host country	Slovenia (bachelor's and master's levels)	
	Tax resident in the host country	Slovenia (bachelor's and master's levels)	

1. In the Flemish Community of Belgium, the institutions have autonomy over setting tuition fees for non-EEA students, except for some categories of students (e.g. refugees, asylum seekers).

2. International students (except from New Zealand) are not eligible for government-subsidised places in Australia. This typically results in higher tuition fees for international students than domestic students, who are usually given subsidised places. Some domestic students in public universities and all students in independent-private universities are full-fee paying and pay the same tuition fees as international students.

3. In public US institutions, international students pay the same fees as domestic out-of-state students. However, since most domestic students are enrolled in-state, international students in practice pay higher tuition fees than domestic students.

Source: OECD (2017), Table B5.1. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).



### ***Quality of programmes and institutional prestige***

The perceived quality of instruction abroad and the perceived value of host institutions are key criteria for international students when selecting their country of destination (Abbott and Silles, 2016; Beine et al., 2014; Marconi, 2013). Top destinations for internationally mobile students include a large number of top-ranked higher educational institutions.

Students worldwide are increasingly aware of quality differences in tertiary education systems as university league tables and other international university rankings are widely diffused. Quality at a country level is assessed through a variety of indicators, including the number of domestic institutions ranked in top international university rankings (e.g. Shanghai ranking), bibliometrics, educational opportunities, total government budget earmarked, etc.

At the same time, ability to attract international students has become a criterion in assessing institutions' performance and quality. As they seek to encourage the internationalisation of higher education, governments have revised performance agreements with domestic institutions, for example by taking into account the inflows of international students into university funding formula. Finland, for example, adopted a new funding model in 2013 that combines various performance indicators, including the share of doctoral degrees awarded to foreigners (EC/OECD, forthcoming).

### ***Language of instruction***

The language of instruction is a strong determinant of students' choice of destination. Countries whose language of instruction is widely spoken and read, such as English, French, German, Russian and Spanish, can be particularly attractive to international students.

English is the *lingua franca* of the globalised world, with one in four people using it globally (OECD, 2016b based on Sharifian, 2013). Not surprisingly, countries where English is an official language (either legally or *de facto*) – such as Australia, Canada, New Zealand, South Africa, the United Kingdom and the United States – are top OECD destination countries for international students (Table C4.1 and UOE data collection 2016). English has increasingly been included in the mandatory school curriculum, even at early education levels, and many students aim to improve their English-language skills through immersion in a native context. In addition, an increasing number of institutions in non-English-speaking countries offer tertiary education programmes taught in English. In Europe, the diffusion of English as a medium of instruction is especially noticeable in the Nordic countries (see Wächter and Maiworm, 2014; and Box C4.1 in OECD, 2015).

### ***Accreditation, multilateral agreements and quality assurance frameworks***

Increasing compatibility and comparability across national education systems is a prerequisite for international student mobility. Educational accreditation standards and information play an important role in removing barriers to student exchanges and supporting the global market for advanced skills. International co-operation in this field is essential. The Bologna Process is an example of such efforts made at the European Union level. It has played an important role for increasing mobility at the European level by harmonising degree structures, strengthening quality assurance and easing the recognition of qualifications and periods of study across EU countries and promoting mobility instruments such as European Credit Transfer and Accumulation System and diploma supplements. Similar international recognition arrangements exist on a bilateral basis (e.g. Switzerland with Austria, Germany, Italy and France, at university level), on a regional basis (e.g. the Regional Convention on the Recognition of Studies, Diplomas and Degrees in Higher Education in Asia and the Pacific) and at government or institution level (EC/OECD, forthcoming).

### ***Immigration policy***

Immigration restrictions and complex related procedures can deter students from entering a country. OECD countries continue to rework their legal and administrative framework for attracting and retaining international students (OECD, 2016a; 2016d). Reforms mainly consist of issuing student visas, amending or simplifying immigration procedures and easing restrictions on short-term work permit for students.

Australia has announced the implementation of a simplified student visa framework as from 2016 (OECD, 2016d). Canada revised its International Student Program in 2014 and streamlined work permit access for international students enrolled in a Canadian institution so as to allow them to work part time off campus (EC/OECD, forthcoming). Korea has increased the number of weekly hours of employment allowed during study from 20 to 25 for international students who have been certified according to the International Education Quality Assurance system (OECD, 2016d).

### Box C4.2. Long-term trends in the global number of students enrolled abroad (foreign students definition)

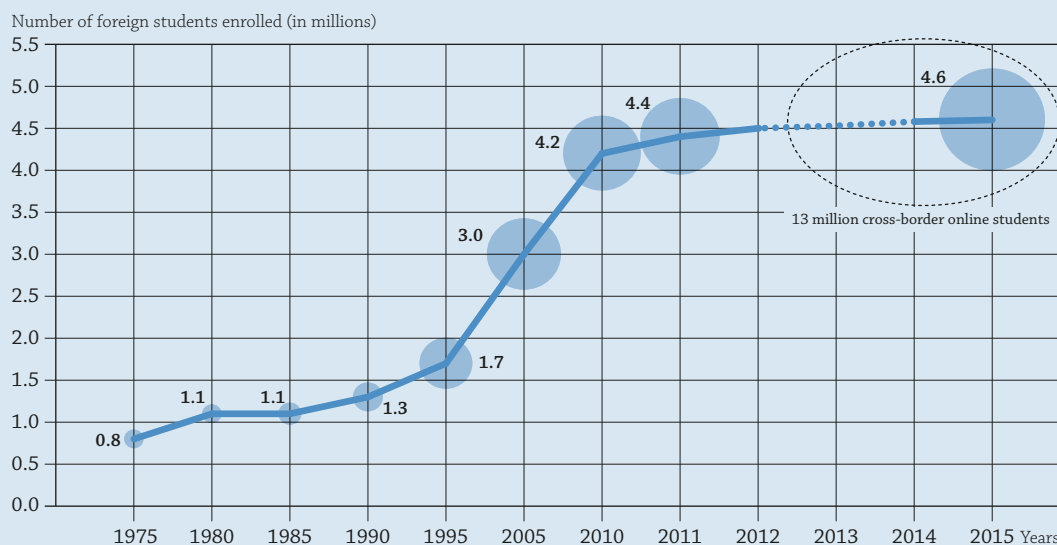
Over the past four decades, the number of foreign students (see *Definitions* section) enrolled in tertiary education programmes worldwide has exploded, rising from 0.8 million in the late 1970s to 4.6 million 45 years later. This increase was exponential until early 2010 when data show an historical levelling off in long-term trends (Figure C4.a).

The increase in foreign enrolment has been driven by a variety of domestic and external, push (encouraging outward mobility) and pull (encouraging inward mobility) factors (UNESCO, 2013). The skills' needs of increasingly knowledge-based and innovation-driven economies have spurred demand for tertiary education worldwide, while local education capacities have not always evolved fast enough to meet a growing domestic demand. Rising wealth in emerging economies has further prompted the children in a growing middle class to look for educational opportunities abroad (OECD, 2016b). At the same time, factors such as economic (e.g. costs of international flights), technological (e.g. the spread of the Internet and social media to maintain contacts across borders) and cultural (e.g. use of English as a common working and teaching language) have contributed to making international mobility substantially more affordable and less irreversible than in the past.

Initiatives at national, regional, local, supranational or institutional level have also contributed to cross-border mobility. In 2011, the European Union set the ambitious goal of increasing the proportion of EU graduates from higher education completing a study or training abroad to 20% by 2020 (Council of the European Union, 2011).

**Figure C4.a. Long-term growth in foreign enrolment in tertiary education worldwide, 1975-2015**


*Total foreign students enrolled in tertiary programmes, whole world (millions)*



**Note:** Data on foreign enrolment worldwide come from both the OECD (2016 figures) and the UNESCO Institute for Statistics (UIS) (2015 figures). The UIS provided the data on all countries for 1975-95 and most of the non-OECD countries for 2000, 2005, 2010 and all years up to 2015. The OECD provided the data on OECD countries and the other non-OECD economies in 2000, 2011 and all years up to 2016. Both sources use similar definitions, thus making their combination possible. Missing data were imputed with the closest data reports to ensure that breaks in data coverage do not result in breaks in time series. From 2012, many countries started reporting on international students only and internationally comparable data on foreign students may not be available after this date.

The estimated number of cross-border online students is drawn from OECD (2016c) based on private sources.

**Source:** OECD (2017), Table B5.1. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

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The Nordic and Baltic countries operate the Nordplus Higher Education Programme, a broad mobility and network programme that aims at reinforcing collaboration, joint curriculum planning, student and teacher mobility and the sharing of best practices between institutions. Most countries have implemented reforms aiming to lower barriers to the migration of the highly skilled, beyond education purposes, and most countries operate funding programmes to support inward, outward or return mobility. While these programmes differ on the conditions of migration (e.g. short-term vs. long-term settlement), their most common target populations are pre-doctoral students and early stage – including doctoral and postdoctoral – researchers. Recent policy data indicate that many countries tend to favour outward mobility of students at advanced education levels, and inward return mobility of more experienced researchers, signalling efforts to appropriate external knowledge spillovers (Kergroach et al., forthcoming; OECD, 2016a) (see also the section on the determinants of international mobility).

Student migration into the OECD area remains dynamic, but new migration poles are consolidating in developing economies. Data on the students who cross borders with the sole purpose of study (also defined as international students – see *Definitions* section) between 2013 and 2015 show an estimated 6.4% increase in international student flows towards the OECD area. Flows towards the largest destination regions have been sustained: inflows towards European countries and the United States increased by 5.0% and 7.5% respectively. Yet trends data also show a polarisation of student flows around new locations, signalling growing educational capacities worldwide. The largest increases in incoming student numbers have been observed in Estonia, Latvia, Poland and the Russian Federation, where the number of international students enrolled in national tertiary programmes increased by between 20% and 27% over the period. Other attracting poles include Brazil (+25%), Chile (13%) and Turkey (+15%). Conversely, Austria, Israel, Japan, Korea and Slovenia experienced a slight decline in the number of international enrolments between 2013 and 2015. Similar shifts in international student flows have taken place in the Asia-Pacific region, with several education hubs developing in Hong Kong (China), Malaysia and Singapore, and universities from Australia, the United Kingdom and the United States setting up branch campuses or signing collaborative agreements with Asian-based providers (UNESCO, 2013).

International enrolment has not grown at the same rate at all education levels, however. This is a consequence of attractiveness gaps across different tertiary education segments in a single country, catching-up effects in lagging segments and a potential specialisation of national tertiary education systems. Between 2013 and 2015, enrolment of international students in the United States increased at the master's and doctoral levels, whereas the strongest increases in enrolments in European countries took place at bachelor's level. International enrolments have increased much faster at doctoral level than at lower educational levels in Israel and Korea, the world's top two R&D intensive countries (as measured as a percentage of GDP). Similarly in emerging poles, Estonia and Poland have created more extra capacity for international students at bachelor's level, and Latvia and the Russian Federation at master's level. Largest enrolment increases occurred in doctoral programmes in Brazil and Chile, and in doctoral and master's programmes in Turkey.

The global marketplace for tertiary education is likely to expand further as global demographic trends and a rising global middle-class spur demand and spending on educational products and services. Information and communication technologies (ICT) are also instrumental to this expansion. ICT not only reduce migration costs, but also increase the reach of domestic education. There are already an estimate 13 million cross-border online students (Sharifian, 2013), though the impact on the scope and patterns of international student mobility remains unclear.

## Definitions

**Foreign students** are those who are not citizens of the country in which they are enrolled and where the data are collected. Although they are counted as internationally mobile, they may be long-term residents or even be born in the “host” country. While pragmatic and operational, this classification may be inappropriate for capturing student mobility because of differing national policies regarding the naturalisation of immigrants. For instance, Australia has a greater propensity than Switzerland to grant permanent residence to its immigrant populations. This implies that even when the proportion of foreign students in tertiary enrolment is similar for both countries, the proportion of international students in tertiary education is smaller in Switzerland than in Australia.

Therefore, for student mobility and bilateral comparisons, interpretations of data based on the concept of foreign students should be made with caution. In general, international students are a subset of foreign students.

**International students** are those who left their country of origin and moved to another country for the purpose of study. The country of origin of a tertiary student is defined according to the criterion of “country of prior education” or “country of usual residence” (see below). Depending on country-specific immigration legislation, mobility arrangements (such as the free mobility of individuals within the EU and the EEA) and data availability, international students may be defined as students who are not permanent or usual residents of their country of study, or alternatively as students who obtained their prior education in a different country.

The **country of prior education** is the country in which students obtained the qualification required to enrol in their current level of education. Where countries are unable to operationalise this definition, it is recommended that they use the country of usual or permanent residence to determine the country of origin. Where this too is not possible and no other suitable measure exists, the country of citizenship may be used.

**Permanent or usual residence** in the reporting country is defined according to national legislation. In practice, this means holding a student visa or permit, or electing a foreign country of domicile in the year prior to entering the education system of the country reporting the data. Country-specific operational definitions of international students are indicated in the tables as well as in Annex 3 ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

## Methodology

Defining and identifying mobile students, as well as their types of learning mobility, is a key challenge for developing international education statistics since current international and national statistical systems only report domestic educational activities undertaken within national boundaries (OECD, 2017c).

Data on international and foreign students are therefore obtained from enrolments in their countries of destination. This is the same method used for collecting data on total enrolments, i.e. records of regularly enrolled students in an education programme. Students enrolled in countries that did not report to the OECD or to the UNESCO Institute for Statistics are not included and, for their countries of origin, the total number of national students enrolled abroad may be underestimated.

The total number of students enrolled abroad refers to the count of international students, unless data are not available and the count of foreign students is used instead. Enrolment numbers are computed using a snapshot method, i.e. counting enrolled students at a given period of time (e.g. a specific day or period of the year).

This methodology has some limits, however. OECD international statistics on education tend to overlook the impact of distance and e-learning, especially fast-developing MOOCs, students who commute from one country to another on a daily basis and short-term exchange programmes that take place within an academic year and therefore go under the radar. Other concerns arise from the classification of students enrolled in foreign campus and European schools in host countries’ student cohorts.

Current data for international students can only help track student flows involving OECD and partner countries as receiving countries. It is not possible to assess extra-OECD flows and in particular the contributions of South-South exchanges to global brain circulation.

For more information please see the *OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications* (OECD, 2017c) and Annex 3 for country-specific notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

## Source

Data on international and foreign students refer to the academic year 2015/16 unless otherwise indicated and are based on the UNESCO/OECD/Eurostat (UEO) data collection on education statistics administered by the OECD in 2016. Additional data from the UNESCO Institute for Statistics are also included.

### Note regarding data from Israel

The statistical data for Israel are supplied by and are under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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## Indicator C4 Tables

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**Table C4.1 International student mobility and foreign students in tertiary education (2015)**

**Table C4.2 Share of tertiary students enrolled in broad fields of study, by mobility status (2015)**

**Table C4.3 Mobility patterns of foreign and international students (2015)**

**WEB** **Table C4.4 Distribution of international and foreign students in master’s and doctoral or equivalent programmes, by country of origin (2015)**

**WEB** **Table C4.5 Students abroad in master’s and doctoral or equivalent programmes, by country of destination (2015)**

Cut-off date for the data: 19 July 2017. Any updates on data can be found on line at <http://dx.doi.org/10.1787/eag-data-en>. More breakdowns can also be found at <http://stats.oecd.org/>, Education at a Glance Database.

C4

Table C4.1. **International student mobility and foreign students in tertiary education (2015)***International and foreign students enrolled as a percentage of all students (international plus domestic)*

Reading the first column of the upper section of the table (international): 16% of all students in tertiary education in Australia are international students and 17% of all students in tertiary education in Switzerland are international students. The data presented in this table on international student mobility represent the best available proxy of student mobility for each country.

Reading the first column of the lower section of the table (foreign): 10% of all students in tertiary education in the Czech Republic are not Czech citizens, and 2% of all students in tertiary education in Korea are not Korean citizens.

	Share of international or foreign students by level of tertiary education					Number of international or foreign students (in thousands)	
	Total tertiary education	Short-cycle tertiary programmes	Bachelor's or equivalent level	Master's or equivalent level	Doctoral or equivalent level		
	(1)	(2)	(3)	(4)	(5)		
	<b>International students</b>						
<b>OECD</b>	Australia	15.5	6.6	13.3	42.6	33.8	294
	Austria	15.9	1.1	18.4	19.0	27.0	68
	Belgium	11.2	2.4	8.6	17.7	42.3	56
	Canada	6.4	2.6	4.8	11.9	24.4	172
	Chile	0.3	0.3	0.2	1.3	8.4	4
	Denmark	10.3	14.1	5.6	18.0	32.1	32
	Estonia	5.2	a	3.9	7.1	10.7	3
	Finland	7.7	a	5.2	12.3	19.9	23
	France	9.9	4.7	7.3	13.3	40.1	239
	Germany	7.7	0.0	4.7	12.9	9.1	229
	Hungary	7.1	0.5	5.0	14.1	7.2	22
	Iceland	8.0	25.4	6.0	9.3	31.6	2
	Ireland	7.4	1.9	6.0	13.2	25.4	16
	Japan	3.4	4.0	2.4	6.8	18.2	132
	Latvia	6.1	1.9	5.1	12.7	8.8	5
	Luxembourg	45.9	10.4	25.5	71.1	87.0	3
	Mexico	0.3	0.0	0.2	0.7	2.6	10
	Netherlands	11.2	0.0	8.7	15.1	36.2	86
	New Zealand	21.1	32.3	16.0	24.3	46.2	57
	Norway	3.6	0.7	2.0	6.6	20.5	10
	Poland	2.6	0.0	2.4	3.3	1.9	44
	Portugal	5.0	3.0	2.9	6.1	21.2	17
	Slovenia	2.7	0.9	2.3	4.1	8.5	2
	Spain <sup>1</sup>	2.7	5.0	0.8	7.1	m	75
	Sweden	6.2	0.2	2.4	9.9	34.0	27
	Switzerland	17.2	0.0	9.8	28.5	54.3	51
	United Kingdom	18.5	5.2	14.0	36.9	42.9	431
	United States	4.6	2.2	3.8	9.5	37.8	907
	<b>OECD total</b>	<b>5.6</b>	<b>2.5</b>	<b>4.3</b>	<b>11.5</b>	<b>25.7</b>	<b>3 296</b>
	<b>EU22 total</b>	<b>8.4</b>	<b>4.6</b>	<b>6.2</b>	<b>12.4</b>	<b>21.7</b>	<b>1 522</b>
<b>Partner</b>	Lithuania	3.5	a	2.6	6.8	3.9	5
	<b>Foreign students</b>						
<b>OECD</b>	Czech Republic	10.5	5.0	9.4	11.9	14.8	42
	Greece	m	m	m	m	m	m
	Israel	m	m	2.9	4.4	5.5	10
	Italy <sup>1</sup>	5.0	6.9	4.9	4.6	m	90
	Korea	1.7	0.2	1.4	6.4	8.7	55
	Slovak Republic	5.9	0.9	4.5	7.7	9.1	11
	Turkey	1.2	0.2	1.3	4.2	6.5	72
<b>Partners</b>	Argentina	m	m	m	m	m	m
	Brazil	8.4	4.6	6.2	12.4	22.4	20
	China	m	m	m	m	m	m
	Colombia	m	m	m	m	m	m
	Costa Rica	m	m	m	m	m	m
	India	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m
	Russian Federation	3.0	1.5	x(4)	11.2 <sup>d</sup>	4.5	226
	Saudi Arabia	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m

1. Total tertiary education excludes doctoral students.

Source: OECD (2017). See Source section for more information and Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.


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Table C4.2. Share of tertiary students enrolled in broad fields of study, by mobility status (2015)

		Total tertiary education																	
		Education		Arts and humanities		Social sciences, journalism and information		Business, administration and law		Natural sciences, mathematics and statistics		Information and communication technologies		Engineering, manufacturing and construction		Health and welfare		Services	
		International students	National students	International students	National students	International students	National students	International students	National students	International students	National students	International students	National students	International students	National students	International students	National students	International students	National students
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
		International students																	
OECD	Australia	2	11	6	11	3	7	51	30	6	5	9	3	13	8	9	20	1	3
	Austria	6	15	16	10	21	10	16	22	10	7	5	4	16	17	8	7	1	5
	Belgium	4	13	13	10	12	9	12	22	6	3	1	3	12	11	34	26	2	1
	Canada	1	6	12	14	14	15	29	23	11	9	6	3	18	11	4	16	1	2
	Chile	6	10	9	4	9	6	26	21	7	2	3	4	18	20	13	22	7	10
	Denmark	2	9	12	13	9	10	28	23	6	5	6	4	19	9	9	23	5	3
	Estonia	0	7	14	13	10	8	44	23	3	6	9	8	10	17	4	11	0	6
	Finland	2	5	10	13	5	7	22	16	6	6	17	8	20	19	11	19	5	4
	France	2	4	18	13	11	8	30	29	11	9	6	2	15	13	6	17	1	4
	Germany	2	8	18	14	8	8	18	23	8	11	8	6	29	20	7	7	1	2
	Hungary	3	11	11	9	9	8	12	26	2	4	2	4	9	20	42	8	2	7
	Iceland	8	12	39	11	9	16	14	22	14	5	2	7	7	9	4	14	1	3
	Ireland	1	6	11	16	6	6	19	20	9	10	8	7	12	11	29	16	2	5
	Japan <sup>1</sup>	2 <sup>d</sup>	9 <sup>d</sup>	25 <sup>d</sup>	16 <sup>d</sup>	36 <sup>d</sup>	8 <sup>d</sup>	22 <sup>d</sup>	2 <sup>d</sup>	3 <sup>d</sup>	x	x	x	20 <sup>d</sup>	16 <sup>d</sup>	3 <sup>d</sup>	17 <sup>d</sup>	2 <sup>d</sup>	6 <sup>d</sup>
	Latvia	2	7	6	8	11	8	36	32	1	3	4	6	8	16	26	12	6	7
	Luxembourg	6	21	9	14	12	12	48	26	8	4	8	4	5	10	3	9	0	0
	Mexico	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Netherlands <sup>2</sup>	2	12	14	8	15	11	12	28	11	5	8	3	12	8	6	18	11	6
	New Zealand	3	9	7	14	7	13	38	19	8	9	10	5	10	8	5	17	9	3
	Norway	5	15	17	10	12	11	14	18	16	5	6	4	15	11	11	18	3	6
	Poland	2	10	10	9	22	11	22	23	2	4	6	4	8	19	17	10	11	8
	Portugal	7	4	12	10	11	11	25	21	8	6	2	2	19	22	10	16	5	6
Slovenia	6	9	12	8	15	10	15	19	9	6	6	4	21	18	10	12	5	9	
Spain <sup>2</sup>	1	12	2	11	2	9	3	21	1	5	3	5	3	16	5	14	3	6	
Sweden	3	13	12	14	13	12	12	15	14	5	7	1	26	18	12	19	1	2	
Switzerland	5	10	15	9	12	8	21	26	17	6	3	3	17	14	7	16	2	5	
United Kingdom	2	8	12	17	12	11	34	15	11	16	4	4	15	8	7	16	0	1	
United States <sup>3</sup>	3	8	13 <sup>d</sup>	19 <sup>d</sup>	11	11	24	17	13	6	6	4	17	7	9 <sup>d</sup>	20 <sup>d</sup>	2	7	
OECD total	3	8	14	15	12	10	27	23	10	6	6	3	17	12	9	16	2	5	
EU22 total	3	8	15	13	12	10	26	22	9	8	5	4	17	15	11	14	2	4	
Partner	Lithuania	3	6	15	8	20	11	29	31	1	4	2	3	11	19	17	13	1	3
	Foreign students																		
OECD	Czech Republic	2	11	10	9	11	9	22	20	7	6	9	4	14	16	18	12	4	8
	Greece	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Israel	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Italy	2	5	26	16	15	14	16	20	5	8	6	5	16	13	13	18	0	0
	Korea	3	6	21	17	14	6	30	15	4	6	1	3	17	25	4	12	6	9
	Slovak Republic	8	12	7	8	4	12	13	20	1	6	1	4	5	14	56	16	2	6
	Turkey	6	6	13	12	15	10	20	43	6	3	1	1	24	13	11	7	3	3
Partners	Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	Brazil	9	6	8	5	8	20	20	16	8	2	4	8	23	12	11	5	4	
	China	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	Colombia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	Costa Rica	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	

Note: The distribution excludes one field (Agriculture, forestry, fisheries and veterinary) which tends to represent a lower share of international enrollees into tertiary education. The data for all fields are available at <http://stats.oecd.org/>, Education at a Glance Database.

1. Data on Information and communication technologies are included in the other fields.

2. Excludes doctoral level.

3. Health and welfare includes all inter-disciplinary programmes, including those without a specific arts and humanities component.

Source: OECD (2017). See Source section for more information and Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.


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Table C4.3. **Mobility patterns of foreign and international students (2015)**

Percentage of national students enrolled abroad, balance on mobility and cross-border mobility in total tertiary education

	Percentage of national tertiary students enrolled abroad	Number of international or foreign students per national student abroad	Number of international or foreign students for every hundred national students home and abroad	Percentage of international or foreign students coming from neighbouring countries <sup>1</sup>	
	(1)	(2)	(3)	(4)	
OECD	Australia	0.7	24.6	18.2	5
	Austria	4.6	3.9	18.0	61
	Belgium	3.0	4.1	12.2	64
	Canada	3.4	3.5	11.9	6
	Chile	0.8	0.4	0.3	41
	Czech Republic <sup>2</sup>	3.5	3.3	11.4	57
	Denmark	1.8	6.3	11.3	39
	Estonia	7.6	0.7	5.0	59
	Finland	3.3	2.5	8.0	20
	France	3.9	2.7	10.5	17
	Germany	4.1	2.0	8.0	18
	Greece <sup>2</sup>	m	m	m	79
	Hungary	3.6	2.0	7.3	27
	Iceland	13.2	0.6	7.5	12
	Ireland	7.1	1.0	7.4	11
	Israel <sup>2</sup>	3.5	0.8	2.7	3
	Italy <sup>2</sup>	3.7	1.4	5.0	23
	Japan	0.8	4.4	3.5	69
	Korea <sup>2</sup>	2.5	0.7	1.7	67
	Latvia	6.7	0.9	6.1	20
	Luxembourg	73.0	0.3	22.9	63
	Mexico	0.9	0.3	0.3	98
	Netherlands	2.0	5.6	11.2	45
	New Zealand	2.4	10.8	26.2	6
	Norway	6.8	0.5	3.4	21
	Poland	1.5	1.8	2.7	74
	Portugal	3.7	1.4	5.1	5
	Slovak Republic <sup>2</sup>	14.5	0.4	5.4	57
	Slovenia	3.2	0.8	2.7	53
	Spain <sup>3</sup>	1.8	2.2	3.9	33
	Sweden	4.2	1.5	6.4	26
	Switzerland	5.0	4.0	19.7	58
	Turkey <sup>2</sup>	0.8	1.6	1.2	44
United Kingdom	1.4	16.5	22.4	13	
United States	0.2	21.3	4.9	6	
OECD average <sup>4</sup>	5.9	4.0	8.7		
EU22 average <sup>4</sup>	7.5	2.9	9.2		
Partners	Argentina	m	m	m	86
	Brazil	0.5	0.5	0.2	37
	China	1.8	0.2	0.3	m
	Colombia	1.2	0.2	m	3
	Costa Rica	1.1	m	m	44
	India	m	m	m	0
	Indonesia	m	m	m	88
	Lithuania	7.7	0.4	3.4	10
	Russian Federation <sup>5</sup>	0.8	4.0	3.1	62
	Saudi Arabia	m	m	m	32
	South Africa	m	m	m	50

1. Neighbouring countries are considered to be those with land or maritime borders with the host country.

2. Domestic tertiary students are calculated as total enrolment minus foreign students instead of total enrolment minus international students.


3. Data exclude students in doctoral or equivalent programmes.

4. OECD average and EU22 average are not directly relevant for Column 4. The number of students studying in neighbouring countries is included in the statistics for the individual member states.

5. The percentage of foreign students coming from neighbouring countries includes those from former Soviet Union countries, mostly in central Asia.

Source: OECD (2017). See Source section for more information and Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

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