

**DIRECTORATE FOR EDUCATION AND SKILLS**

**The Resilience of Students with an Immigrant Background: An Update with PISA 2018**

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# Abstract

Education has a fundamental role in promoting the integration of students with an immigrant background in host societies. It can help them acquire skills to participate in the economy, promote their social and emotional well-being and support their participation in the social and civic life of their communities. However, there are challenges in ensuring good outcomes for students with an immigrant background as, among others, they need to overcome adversities related to displacement, socio-economic disadvantage and language barriers. Building on the 2018 Report “The Resilience of Students with an Immigrant Background: Factors that Shape Well-being” by the OECD Strength through Diversity project, this paper analyses the academic, socio-emotional and motivational resilience of students with an immigrant background across OECD countries. It provides updated findings with data from the OECD’s Programme of International Student Assessment (PISA) 2018 and examines how outcomes across different student groups have changed in recent years.

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# Introduction

Migration flows are profoundly changing the composition of societies and accordingly of schools and classrooms. Non-humanitarian migration to OECD countries increased every year since 2011 but this trend was hidden by the large fluctuations of refugee flows (OECD, 2020<sup>[1]</sup>). Nonetheless, current estimates indicate that humanitarian migration to OECD countries fell sharply in 2020 (-23%) and to the lowest level since 2003 (OECD, 2021, p. 24<sup>[2]</sup>). The 2014-2015 refugee crisis has had a major effect on OECD countries due to the considerable number of those being displaced from conflicts and the comprehensive policy response required. Even though many of the countries had already welcomed refugees in previous flows, the magnitude and diversity of the flows within a short time period was unprecedented (Cerna, 2019<sup>[3]</sup>). From 2015 to 2020, the number of refugees in OECD countries increased from around 4.5 million to over 7 million, with around half of these residing in Turkey (UNHCR, 2021<sup>[4]</sup>). This has had important implications for countries and their education systems.

Refugees constitute only one group of migrants. In 2019, OECD countries, with the exception of Colombia and Turkey, together accepted about 5.3 million new permanent migrants (OECD, 2020<sup>[1]</sup>), a level which remained stable compared to 2018. The COVID-19 pandemic has had a major impact on migration flows in 2020, with the number of new residency permits granted to immigrants down by more than 30% on average across OECD countries (OECD, 2021<sup>[2]</sup>). Permanent migration in 2020 was at 3.7 million, the lowest since 2003<sup>1</sup>.

Migration flows create not only challenges to the host communities that receive them but also opportunities, such as responses to ageing populations and labour force and skills shortages. Nevertheless, effective policies are necessary to unlock the potential benefits of migration, reduce challenges to societies and successfully integrate immigrant children and their families. Education has a key role in this area as it can help migrants acquire skills to participate fully in the economy, foster their socio-emotional well-being and support their participation in the social and civic life of their communities. However, there are challenges in ensuring good outcomes for immigrant students, as they need to overcome adversities related to displacement, socio-economic disadvantage and language barriers, among others (OECD, 2018<sup>[5]</sup>).

Building on the 2018 Report on “The Resilience of Students with an Immigrant Background: Factors that Shape Well-being” (from here on: “the 2018 Resilience Report”) by the OECD Strength through Diversity project (OECD, 2018<sup>[5]</sup>), this paper analyses the resilience of students with an immigrant background across OECD countries. It provides updated findings with Programme of International Student Assessment

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<sup>1</sup> However, the real impact of the COVID-19 pandemic on permanent migration entries in 2020 is expected to be much larger (above 40%) as OECD statistics include not only entries but also in-country status changes from temporary to permanent statuses (OECD, 2021, p. 18<sup>[2]</sup>).

(PISA) 2018 data<sup>2</sup> and examines how outcomes across different student groups have changed in recent years.

The paper understands resilience as referring to an individual's ability to overcome adversity and display positive adjustment (Daniel and Wassell, 2002<sup>[6]</sup>; Howard, Dryden and Johnson, 1999<sup>[7]</sup>; OECD, 2018<sup>[5]</sup>). The key elements that characterise resilience are adversity, adjustment, vulnerability, and risk and protective factors. In particular, adversity refers to external events and circumstances that cause distress to the individual. Adjustment relates to the positive adaptation of the individual who experiences adversity. Vulnerability refers to the likelihood that adversity will lead to positive adjustment or negative outcomes. Risk and protective factors are the host of individual and environmental characteristics that determine an individual's degree of vulnerability. There are two main factors that determine the type of adversity children and youth with an immigrant background might suffer: whether they directly experienced migration or whether their parents did and the age at which the child migrated (OECD, 2018<sup>[5]</sup>). This definition of resilience differs from the one adopted in the PISA reports, which focuses mostly on the socio-economic background of students. Indeed, PISA defines academically resilient students as follows: "students are disadvantaged students who are in the bottom quarter of the PISA index of economic, social and cultural status (ESCS) in their own country/economy but who score in the top quarter of reading in that country/economy. These students are academically resilient because, in spite of their socio-economic disadvantage, they attain educational excellence by national standards. Academic resilience is a relative measure, with both socio-economic disadvantage and performance thresholds defined within each country/economy" (OECD, 2019<sup>[8]</sup>). The definition adopted in this paper following the 2018 Resilience Report chose to highlight the role of different elements in addition to socio-economic status, in particular in relation to individual experiences.

Following the same differentiation as the 2018 Resilience Report, the paper distinguishes between: i) first-generation immigrant students (foreign-born students with two foreign-born parents); ii) second-generation immigrant students (native-born students with two foreign-born parents); iii) students of mixed heritage (native-born students with one foreign-born and one native-born parent); and iv) returning foreign-born immigrant students (foreign-born students with at least one native-born parent).

For first-generation immigrant students, an additional factor that defines the level of adversity is the age at which the student migrated. Students who migrate at an early age often share a life history that is more similar to that of second-generation immigrant students than to that of other first-generation students. By contrast, students who migrate when they are older often face greater institutional barriers, such as having to adapt to a different education system as well as to different ways of being and behaving than those in their country of origin. Students who migrate at an early age may face another kind of adversity because they do not have long-term memories of and attachments to their country of origin. Hence, they may find it difficult to reconcile different identities.

The paper proceeds in the following way: Section 1 provides an overview about who the students with immigrant background are and how they perform in terms of various outcomes. Sections 2, 3 and 4 focus on protective and risk factors for the resilience of students with an immigrant background. In particular, Section 2 examines the socio-emotional well-being of immigrant students, Section 3 language at home and countries of origin and destination, and Section 4 the motivation and career expectations of immigrant students. The paper concludes with a summary of key findings and some policy implications.

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<sup>2</sup> It is assumed that PISA 2018 includes refugee students who arrived during the 2014-2015 refugee crisis in the category of first-generation immigrant students. However, this might not be the case in all countries as in some countries 10% or more students were excluded from the PISA sample.

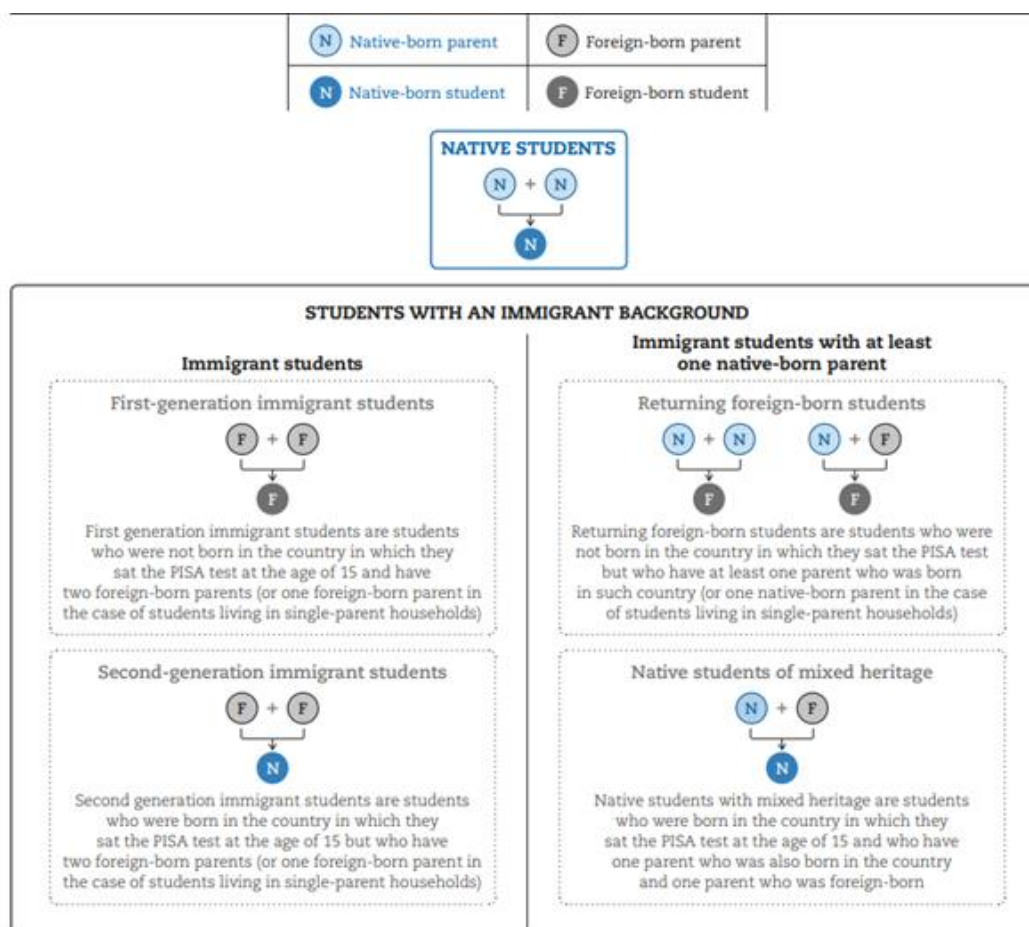


# 1. An overview of students with an immigrant background: Who are they and how do they perform?

Analyses of PISA 2018 data show that in 2018, almost one in four 15-year-old students in OECD (23.8%) and European Union (EU) (22.6%) countries was either foreign-born or had at least one foreign-born parent. This figure is considerably higher than the statistics reported in the 2018 PISA report on the number of immigrant students in OECD and EU countries (OECD, 2019<sup>[9]</sup>). The discrepancy between prevalence figures cited in this paper lies in the definition of students with an immigrant background. This paper follows the definition of immigrant students adopted in the report “The Resilience of Students with an Immigrant Background” (OECD, 2018<sup>[5]</sup>), rather than the one adopted by PISA reports. Like PISA, the 2018 Resilience Report considered native- and foreign-born children of two foreign-born parents (or one foreign-born parent in the case of single-parent households), but also the experiences of foreign-born children of native-born parents and of native-born children who have one native-born and one foreign-born parent (OECD, 2018<sup>[5]</sup>). Thus, in line with the 2018 Resilience Report, this paper identifies different types of students with an immigrant background and maps the academic, social, emotional and motivation outcomes of these students in a wide range of countries.

Students with an immigrant background are defined as those students who are either foreign-born or who have at least one foreign-born parent while native students are students who are native-born from two native-born parents. Among students with an immigrant background, the following groups are identified: i) immigrant students, a group that includes first-generation immigrant students (foreign-born children of two foreign-born parents) and second-generation immigrant students (native-born children of two foreign-born parents); ii) native students of mixed heritage (native-born students with one native-born and one foreign-born parent) and returning foreign-born students (foreign-born students of two native-born parents), as shown in Figure 1.1.

Figure 1.1. A classification of PISA students by immigrant background



Source: OECD (2018<sup>[5]</sup>), *The Resilience of Students with an Immigrant Background: Factors that Shape Well-being*, OECD Publishing, <http://dx.doi.org/10.1787/9789264292093-en>.

### 1.1. Who are the students with an immigrant background in 2018?

Across OECD countries, the percentage of students with an immigrant background reached 23.8% in 2018, close to the EU average of 22.6% (Table 1.1). On average across OECD countries, there was a 5% increase between 2009 and 2018. The countries that experienced the greatest increase in the percentage of students with an immigrant background over this period were mostly located in Europe, such as Austria, Germany, Luxembourg, Sweden, Switzerland and the United Kingdom – all above a 10% increase. There is also considerable variation across countries in the change of shares of first-generation immigrant students, second-generation immigrant students, mixed-heritage students and returning immigrant students. Between 2009 and 2018, the largest increases in the share of first-generation immigrant students occurred in Canada (6.4% points), Luxembourg (8.4% points) and Sweden (5.8% points). For second-generation immigrant students, the largest increases in the share between 2009 and 2018 took place in Greece (5.6% points), Ireland (6.6% points), Luxembourg (6.3% points) and Switzerland (6.7% points). In countries including Costa Rica (5.7% points), Germany (5% points) and the United Kingdom (4.6% points), the share of mixed-heritage students increased considerably as well.

Table 1.1. Snapshot of immigrant groups

	Percentage of immigrant students	Change between 2009 and 2018 in the % of students with an immigrant background	Share of first-generation immigrant students among students with an immigrant background	Change between 2009 and 2018 in the share of first-generation immigrant students	Percentage of late arrivals (as a % of first-generation immigrants)	Share of second-generation immigrant students among students with an immigrant background	Change between 2009 and 2018 in the share of second-generation immigrant students	Share of mixed-heritage students among students with an immigrant background	Change between 2009 and 2018 in the share of mixed-heritage students	Share of returning immigrant students among students with an immigrant background
	%	% dif.	%	% dif.	%	%	% dif.	%	% dif.	%
OECD average	23.8	5.0	18.7	1.2	36.7	26.2	2.2	42.9	1.5	12.2
EU average	22.6	4.7	16.9	1.2	39.2	25.3	1.9	46.1	1.7	11.7
Australia	45.2	2.6	31.3	3.1	28.1	29.9	1.4	34.2	-2.4	4.5
Austria	34.1	11.6	22.9	3.0	33.4	43.6	4.4	29.0	4.0	4.5
Belgium	33.1	4.9	23.7	0.9	35.9	31.0	2.4	39.2	1.7	6.2
Canada	46.0	10.2	37.1	6.4	38.1	38.9	4.2	20.3	-1.0	3.7
Chile	6.2	3.8	43.8	2.3	62.4	11.2	0.6	34.5	1.0	10.4
Colombia	3.2	1.6	7.9	0.2	38.3	9.4	0.0	46.1	0.7	36.6
Costa Rica	22.1	9.4	14.6	-0.3	30.4	30.7	3.9	49.6	5.7	5.1
Czech Republic	12.1	3.2	17.5	1.3	42.2	16.8	0.6	57.5	0.9	8.1
Denmark	23.0	5.6	9.8	-0.5	30.3	36.5	2.5	40.5	2.4	13.2
Estonia	22.5	3.0	3.3	0.1	45.8	42.8	2.3	47.4	0.2	6.5
Finland	13.7	5.9	24.3	1.9	29.4	18.0	1.3	42.5	1.9	15.2
France	28.8	2.3	16.3	1.5	36.7	33.3	-0.4	43.3	1.0	7.1
Germany	35.8	10.0	18.1	0.6	51.6	43.9	4.0	33.4	5.0	4.6
Greece	24.1	5.0	13.1	-3.0	8.7	35.4	5.6	46.6	4.0	4.9
Hungary	7.1	1.7	17.5	0.0	56.4	18.5	0.4	53.8	1.3	10.2
Iceland	20.8	7.8	14.9	1.2	16.8	11.9	2.1	43.8	2.8	29.3
Ireland	36.6	8.4	26.9	3.0	25.9	22.0	6.6	39.2	2.5	11.9
Israel	28.7	-6.3	13.9	-3.1	19.4	43.3	-0.2	36.3	-2.7	6.5
Italy	19.5	6.8	23.4	0.3	24.2	28.0	4.1	41.0	2.5	7.7
Japan	2.9	1.6	9.7	0.1	17.6	11.7	0.2	52.3	0.8	26.3
Korea	1.9	1.3	3.1	0.1	52.4	5.9	0.1	55.2	0.8	35.8
Latvia	18.9	-1.4	4.5	0.5	35.2	19.0	-0.5	70.7	-1.3	5.7
Lithuania	9.3	-0.3	3.6	0.2	50.0	13.1	-0.4	71.3	-0.7	11.9
Luxembourg	72.3	14.6	33.9	8.4	30.4	42.0	6.3	21.1	0.7	3.0
Mexico	4.9	0.3	14.2	-0.4	32.0	17.5	0.1	33.8	0.2	34.6
Netherlands	26.7	6.1	10.3	-0.5	37.2	41.2	2.1	40.0	3.8	8.4
New Zealand	45.5	3.4	32.5	-1.9	35.8	25.7	3.7	31.4	0.9	10.4
Norway	25.4	9.2	24.3	3.0	30.2	24.4	2.6	38.7	2.6	12.6
Poland	2.9	2.0	12.2	0.3	71.9	10.2	0.3	44.2	0.7	33.4
Portugal	24.8	3.0	11.9	0.2	49.2	16.1	1.3	64.5	4.2	7.4
Slovak Republic	7.2	1.1	7.8	0.3	35.2	8.8	0.4	63.3	-0.5	20.1
Slovenia	18.8	2.0	28.0	3.9	46.5	19.4	-2.8	48.1	0.8	4.5
Spain	20.7	4.7	35.2	-1.1	24.8	23.7	3.8	31.6	1.6	9.5
Sweden	34.3	10.8	27.9	5.8	41.0	31.7	2.9	32.5	1.4	7.9
Switzerland	54.0	11.4	22.3	3.6	32.9	40.5	6.7	33.0	1.1	4.3
Turkey	3.8	1.6	7.0	0.1	45.5	15.4	0.2	57.0	1.0	20.7
United Kingdom	33.9	13.8	24.9	3.6	33.2	33.5	5.5	35.7	4.6	6.0
United States	33.5	6.2	17.7	-0.5	39.9	51.1	4.1	27.0	2.3	4.3
Bulgaria	5.5	2.1	9.5	0.2	58.5	11.5	0.4	52.5	0.9	26.6
Croatia	25.7	-3.3	5.3	-2.2	20.2	30.2	0.5	57.7	-0.3	6.9
Malta	25.0	10.1	26.6	4.8	63.1	8.6	1.4	53.3	3.6	11.6
Romania	4.2	3.2	6.5	0.0	35.2	12.1	0.4	33.2	1.0	48.2

Note: statistically significant differences between 2018 and 2009 are shown in bold.

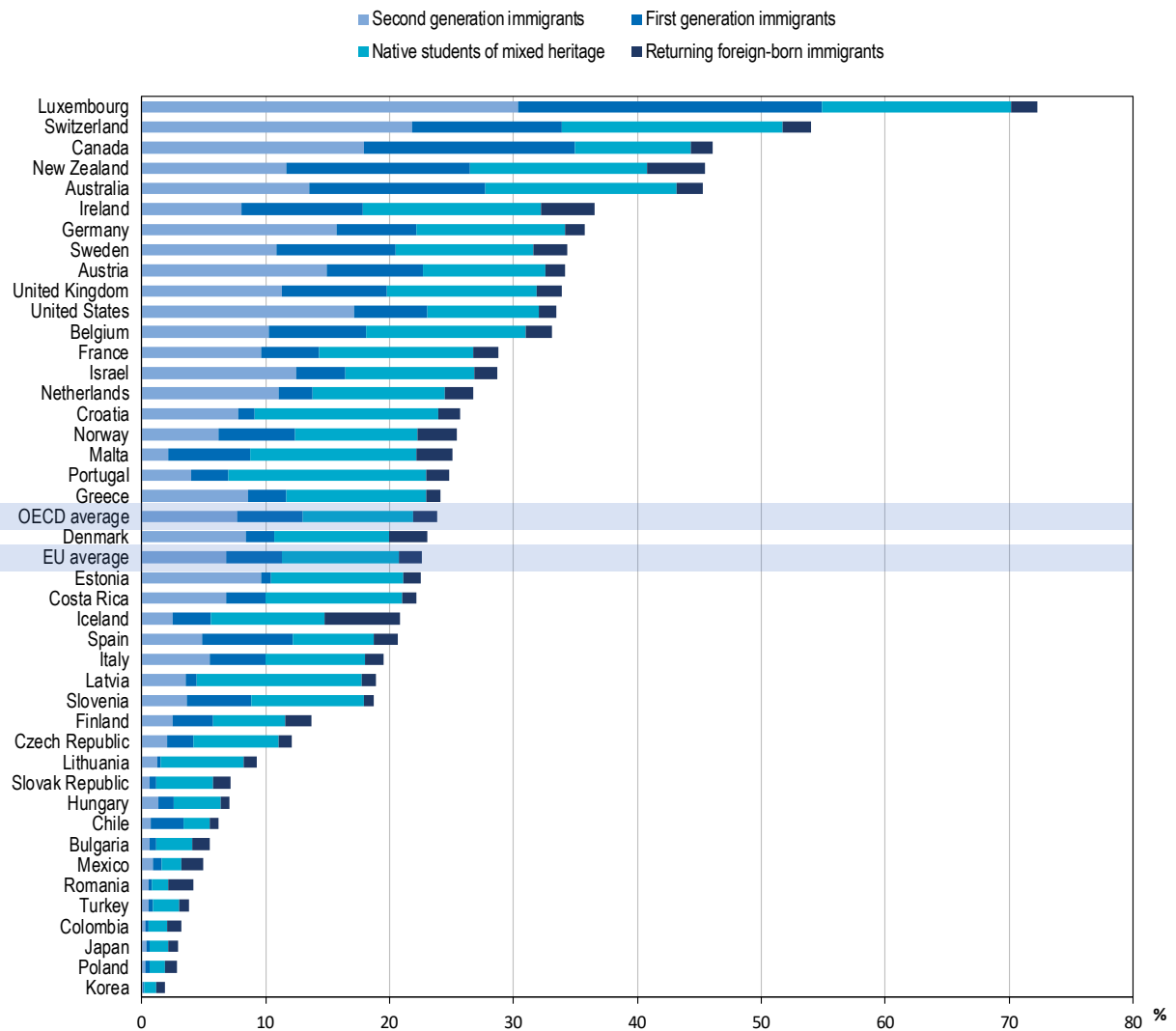
Source: OECD (2018<sup>[10]</sup>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021); OECD (2009<sup>[11]</sup>), PISA 2009 Database, <https://www.oecd.org/pisa/data/pisa2009database-downloadabledata.htm> (accessed on 17 May 2021).

On average across OECD countries, in 2018, the composition of the immigrant student population was quite varied (Figure 1.2). The largest group was that of native students of mixed heritage, who accounted for 9% of population, not only on average in OECD countries but also in the EU. The second group was that of second-generation immigrants, amounting to 8% and 7% respectively, then first-generation immigrants (5% in both the OECD and EU), and returning foreign-born immigrants amounted both to 2%. There was quite a large variation in the composition of the immigrant student population across OECD and EU countries in 2018. On one side of the spectrum were countries such as Luxembourg, Switzerland, Canada, Australia and New Zealand with high percentages (45% and above) of students with an immigrant background. For example in Luxembourg, 30% were second-generation immigrant students, 20% were first-generation students, 15% of students were of mixed heritage and 2% were returning foreign-born students. On the other side of the spectrum, countries such as Japan, Korea and Poland had very small

percentages of students with an immigrant background (around 2-3%), and these students were either of mixed heritage or returning foreign-born students.

**Figure 1.2. Percentage of students with an immigrant background, by group**

Percentage of students that are either first-generation immigrants, returning foreign-born immigrants, second-generation immigrants, or native students of mixed heritage, by country



Note: Countries and economies are ranked in descending order of the percentage of students with an immigrant background.

Source: OECD (2018<sub>(10)</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

### Box 1.1. Asylum-seeker and refugee students

By relying primarily on data from PISA 2018, this paper analyses inevitably general categories of students with an immigrant background, focusing on generations of immigrants and the place of birth of students and their families. This data, in fact, does not provide information on the legal status of students with an immigrant background, and it is thus not possible to analyse the outcomes of groups such as refugees and asylum-seekers. As a result, this paper contains little information on characteristics of and factors that support academic and socio-emotional well-being outcomes of the most recent wave of immigrants, which, in Europe, includes a considerable number of refugees and asylum-seekers. Providing access to education and offering further support can help these children and youths integrate successfully into the education system in the host country.

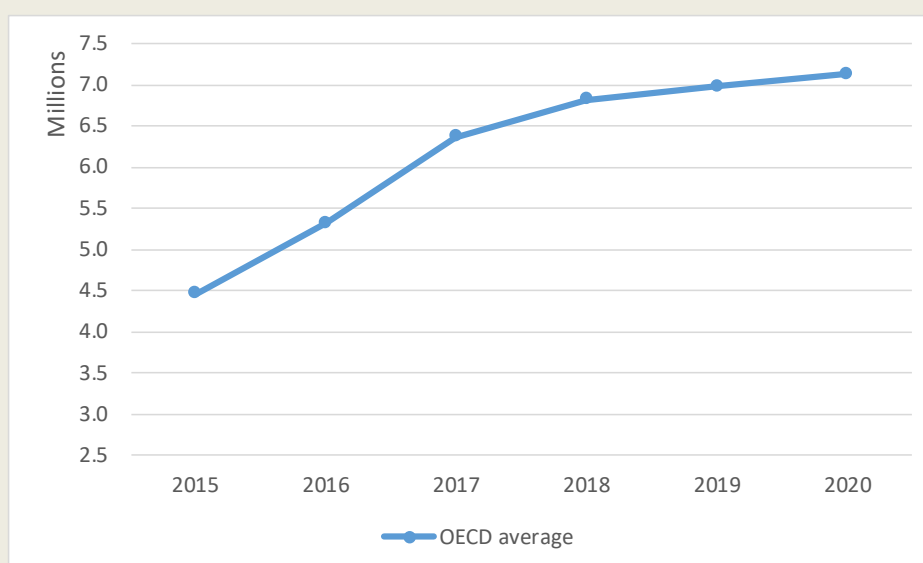
The term “refugee” refers to people who have successfully applied for asylum and have been granted refugee protection. The 1951 Geneva Convention and its 1967 Protocol defines a refugee as a person “who owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership in a particular social group or political opinion, is outside the country of his nationality and is unable, or owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence, is unable or, owing to such fear, is unwilling to return to it” (OECD, 2016<sup>[12]</sup>).

“Asylum-seekers” are people who have formally applied for asylum, but whose claim is pending. In practice, only a minority of asylum-seekers are granted refugee or some other form of humanitarian migrant status, while the rest have to leave the country (OECD, 2016<sup>[12]</sup>).

#### Refugees

The number of refugees in OECD countries has increased since 2015 (see Figure 1.3), and around 50% of these live in Turkey. Worldwide, in 2020, one million children were new refugees in 2020 (UNHCR, 2021<sup>[4]</sup>).

Figure 1.3. Number of refugees in OECD countries, 2015-2020



Source: UNHCR (2021<sup>[4]</sup>), Refugee population statistics, <https://www.unhcr.org/refugee-statistics/download/?url=YZo4gT> (accessed on 27

September 2021).

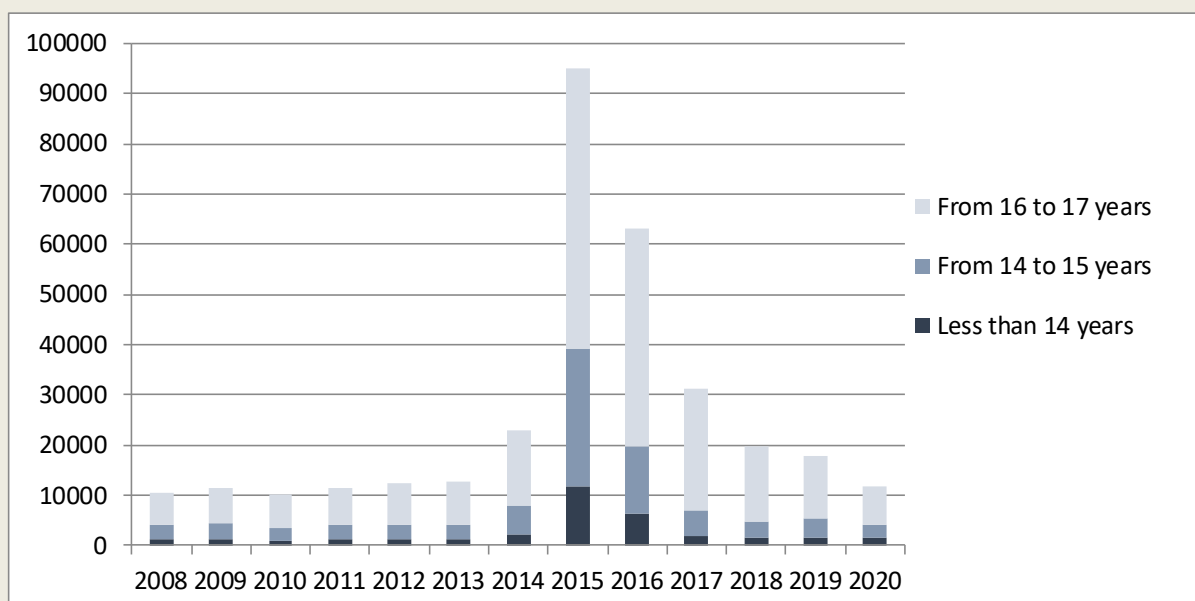
Data on refugee children and youth is scarce, which limits the opportunity to inform policy development and offer targeted support services. Even if refugees access education, their educational achievements and needs remain invisible, as they are no longer captured in their home country's Education Management Information Systems (EMIS) and not yet included in their host country's EMIS (Cerna, 2019<sup>[3]</sup>; OECD, 2018<sup>[5]</sup>).

Although governments are responsible for education-related data collection through EMIS, they face capacity constraints to ensure the collection of accurate gender, age and other disaggregated data on refugees. There is also a question concerning the information sought about educational outcomes and the link to increased access to quality education (Cerna, 2019<sup>[3]</sup>).

### Unaccompanied minors

Data from Eurostat, for instance, shows a significant inflow of asylum applications from unaccompanied minors across European countries since 2015 (Figure 1.4). Unaccompanied minors and unaccompanied children are defined by the United Nations Convention on the Rights of the Child (UNCRC) as those “who have been separated from both parents and other relatives and are not being cared for by an adult who, by law or custom, is responsible for doing so” (UN Committee on the Rights of the Child (CRC), 2005<sup>[13]</sup>). The UNCRC also states that the best interests of the child must be a primary consideration in all actions affecting children.

**Figure 1.4. Asylum applications submitted by unaccompanied minors in the EU 28, by year and age**



Source: Data adapted from: Eurostat (2021<sup>[14]</sup>), Asylum applicants considered to be unaccompanied minors by citizenship, age and sex. Annual data. [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=migr\\_asyunaa&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=migr_asyunaa&lang=en) (accessed on 06 April 2021).

Providing access to education and offering further support can help these children integrate successfully into the education system in the host country. However, a significant proportion of unaccompanied minors in many OECD countries face serious difficulties not only in obtaining access to education but also in receiving basic services and therefore may be particularly vulnerable to suffering from poor academic outcomes and low levels of social, emotional and motivational well-being (OECD, 2018<sup>[5]</sup>).

Source: OECD (2016<sup>[12]</sup>), Making Integration Work: Refugees and others in need of protection, OECD Publishing, <https://dx.doi.org/10.1787/9789264251236-en>; Cerna (2019<sup>[3]</sup>), Refugee education: Integration models and practices in OECD countries, OECD Education Working Papers, <https://dx.doi.org/10.1787/a3251a00-en>.

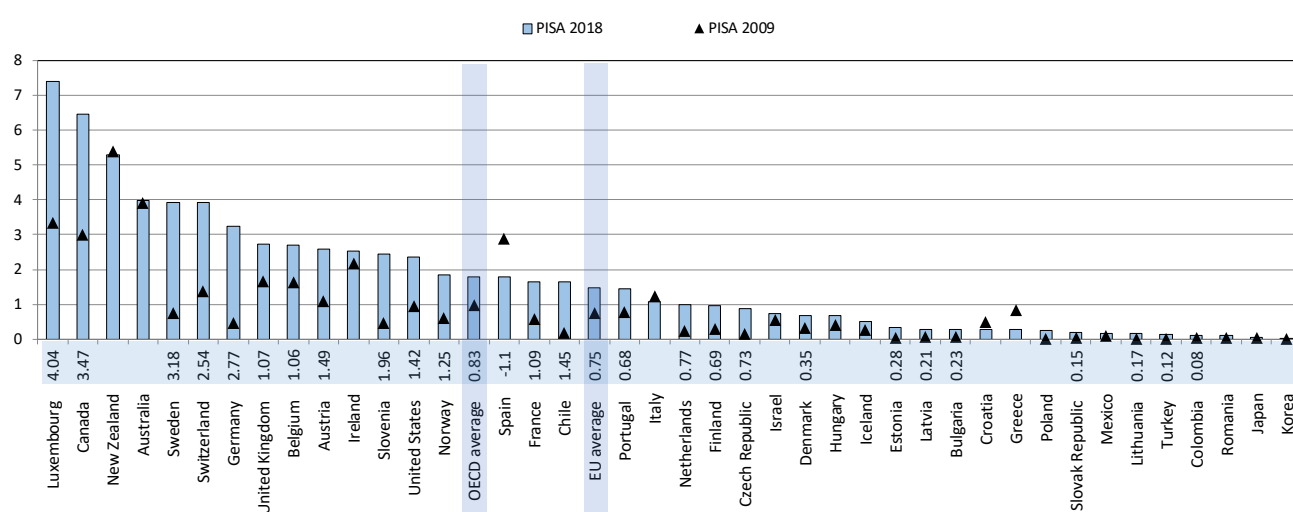
## 1.2. First-generation immigrant students: Differences related to the age at arrival

A crucial challenge for education systems is integrating children who settled in the country at or after the age of 12. In this report, these students are also called “late arrivals”. By contrast, students who arrived in the country of destination before the age of 12, referred to as “early arrivals” in this paper, usually started their schooling in the host country or at least attended several years of primary school in that country. While these students were largely socialised in the host country and community, and thus were confronted with fewer language barriers and less disruption in their studies because of changing education systems, they nonetheless have experienced migration personally.

Figure 1.5 shows that between 2009 and 2018 the percentage of late arrivals with foreign-born parents increased only marginally, on average across OECD countries. However, the OECD average masks large differences across countries in the relative proportion of this group of students in the total student population. The proportion of late arrivals with foreign-born parents increased in as many as 15 of the 41 countries and economies with available data. The increase was larger than two percentage points in Luxembourg (where this group represented around 3.4% of the student population in 2009 but 7.4% in 2018), Canada (where this group represented 3% in 2009 but around 6.5% in 2018), Sweden (where this group represented only 0.7% in 2009 but 3.9% in 2018), Switzerland (where this group increased from 1.4% in 2006 to 3.9% in 2018) and Germany (where this group represented around 0.5% in 2006 but around 3.2% in 2018). By contrast, the proportion of late arrivals whose parents are also foreign-born decreased between 2009 and 2018 in countries such as Spain (around 1 percentage point).

Figure 1.5. Trends between 2009 and 2018 in the prevalence of late arrivals

Percentage of late arrivals with foreign-born parents in 2009 and 2018



Note: Results are displayed only for countries/economies that participated in both PISA 2009 and PISA 2018 and have valid data on late arrivals with foreign-born parents in both rounds.



Statistically significant differences between PISA 2018 and PISA 2009 are shown next to country/economy names.

The OECD and EU averages refer only to the subset of countries/economies with valid information on each cycles.

Late arrivals are foreign-born students who arrived in the host country at or after the age of 12.

Countries and economies are ranked in descending order of the percentage of late arrivals whose parents are also foreign-born in 2018.

Source: OECD (2018<sup>[10]</sup>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021); OECD (2009<sup>[11]</sup>), PISA 2009 Database, <https://www.oecd.org/pisa/data/pisa2009database-downloadabledata.htm> (accessed on 17 May 2021).

### 1.3. An overview of the performance of students with an immigrant background in OECD/EU countries

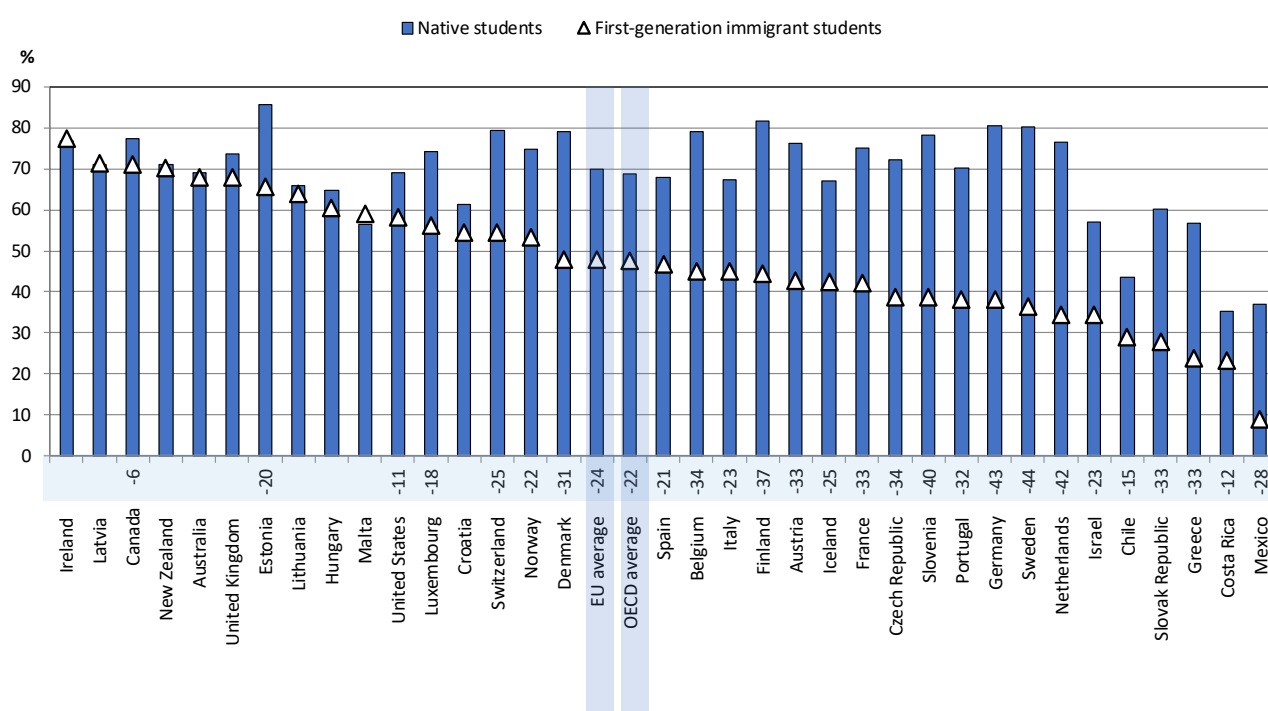
Across OECD countries, students with an immigrant background generally underperform in education systems compared to their native peers, and face specific barriers to their integration in education and beyond, and for the fulfilling of their potential (Mezzanotte, Forthcoming<sup>[15]</sup>). For instance, immigrant background is often one of the most relevant predictors of school drop-out, especially when associated with a low socio-economic background (Hippe and Jakubowski, 2018<sup>[16]</sup>). It is also linked to higher rates of “Not in Education, Employment or Training (NEET) immigrants, which refers to people aged between 15 and 29 (European Commission, EACEA, Eurydice, Cedefop, 2014<sup>[17]</sup>).

Data from PISA 2018 show that, across OECD and EU countries, the performance gap between native students and students with an immigrant background also tends to be wider depending on certain student characteristics. In particular, in 2018 this gap was generally wider when the student had a personal experience of migration (e.g. a first-generation immigrant student) and based on how recent the migration experience was (a gap of 22 percentage points on average across OECD countries and 24 percentage points on average across EU countries between native and first-generation immigrant students).

Moreover, Figure 1.6 shows that there is also great variation between countries, with significant differences between native and first-generation immigrant students reported next to country names. In 2018, the gap between native and first-generation immigrant students was greater than 40 percentage points in four out of 35 countries: Sweden (44 percentage points), Germany (43 percentage points), the Netherlands (42 percentage points) and Slovenia (40 percentage points). In eight other countries, the gap between native and immigrant students was greater than 30 percentage points. These countries include Belgium, the Czech Republic, Denmark, Finland, France, Greece, Portugal and the Slovak Republic. In contrast, the gap between native and first-generation immigrant students was smallest in countries such as Australia, Ireland, Latvia, Lithuania and New Zealand.



**Figure 1.6. Percentage of students attaining baseline academic proficiency, first-generation immigrant students**



*Note:* Only countries with valid values for first-generation immigrant students are shown.

Statistically significant differences between first-generation immigrant and native students are shown next to country/economy name.

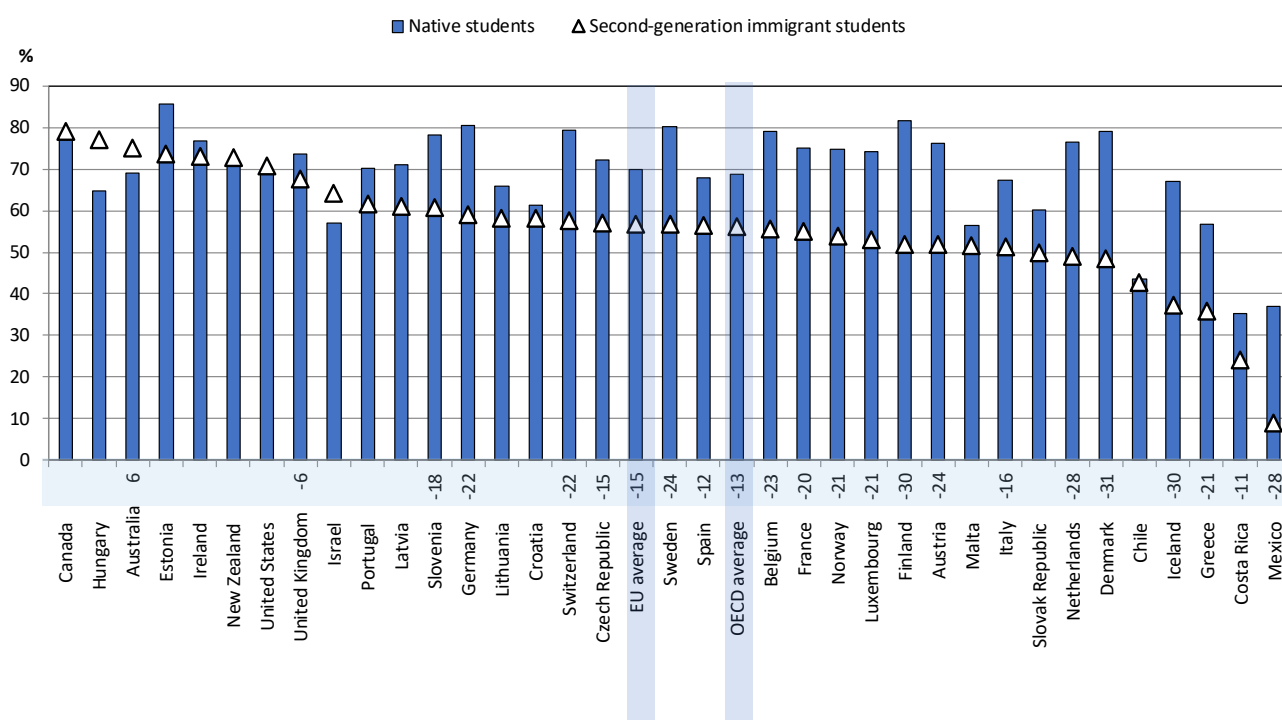
For the OECD and EU average, this number refers only to the subset of countries/economies with valid information on both groups of students. Students who attain baseline academic proficiency are students who reach at least PISA proficiency level two in all three PISA core subjects – mathematics, reading and science.

Countries and economies are ranked in descending order of the percentage of first-generation immigrant students attaining baseline academic proficiency.

*Source:* OECD (2018<sup>[10]</sup>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

Differences between native students and second-generation immigrants are generally smaller than for first-generation students. Figure 1.7 shows that significant gaps between natives and second-generation students are indeed smaller than those presented in Figure 1.6. The countries that show the largest gaps are in this case Finland, Denmark and Iceland with gaps of around 30 percentage points. The Netherlands, Germany and Sweden show smaller gaps than between natives and first-generation students, although they are still over 20 percentage points. On the other hand, countries such as Canada, New Zealand, the United States, Israel, Croatia and Chile show virtually no gap between second-generation immigrant students and native students.

**Figure 1.7. Percentage of students attaining baseline academic proficiency, second-generation immigrant students**



Notes: Only countries with valid values for second-generation immigrant students are shown.

Statistically significant differences between second-generation immigrant and native students are shown next to country/economy name.

For the OECD and EU average, this number refers only to the subset of countries/economies with valid information on both groups of students. Students who attain baseline academic proficiency are students who reach at least PISA proficiency level two in all three PISA core subjects – mathematics, reading and science.

Countries and economies are ranked in descending order of the percentage of second-generation immigrant students attaining baseline academic proficiency.

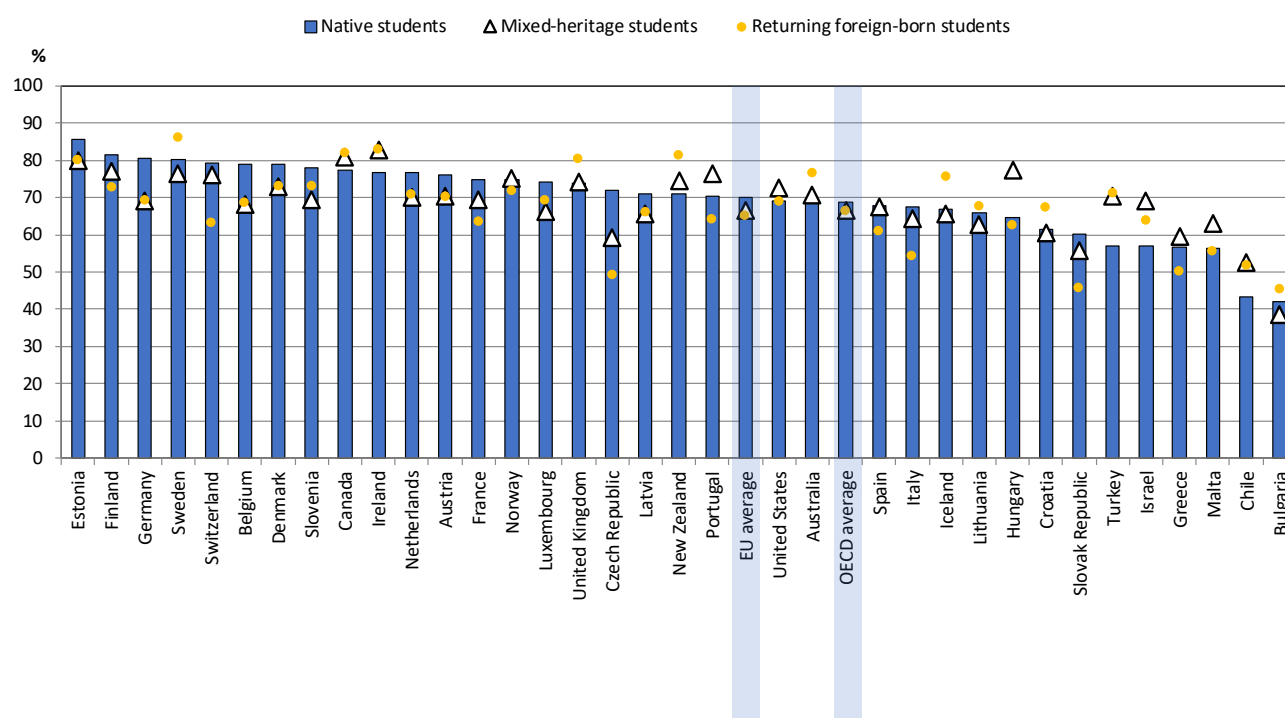
Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

Figure 1.8 shows the percentage of students who achieves baseline academic proficiency, comparing native students and students with immigrant heritage, such as mixed-heritage students and returning foreign born students. The gaps between these two groups and native students are generally smaller than for both first and second-generation students, as shown above. In 2018, on average across OECD countries, when compared to native students, returning foreign-born students were 2.6 percentage points less likely to attain the baseline levels of academic proficiency, and 5 percentage points less likely on average across EU countries. Similarly, mixed-heritage students were also 2.4 percentage points less likely to achieve minimum proficiency compared to native students across OECD countries, and 4 percentage points less so in EU countries.

Some of the largest gaps were between native and returning foreign-born students, in countries such as the Czech Republic (23 percentage points), Japan (20 percentage points), Switzerland (16 percentage points), Slovak Republic (15 percentage points), France (12 percentage points) and Belgium (10 percentage points). Concerning students with mixed-heritage, the largest gaps can be found in Mexico (19 percentage points), Czech Republic and Turkey (13 percentage points), Hungary and Israel (12 percentage points), and Belgium (11 percentage points). However, some countries show higher percentages of returning and mixed-heritage students achieving academic proficiency, compared to native

students. In Australia, Iceland, Ireland and New Zealand, there is a positive significant difference of between 5 and 10 percentage points, among returning foreign-born students and their native peers. Mixed-heritage students showed a significant positive gap compared to natives in Hungary, Ireland, Israel, Portugal, Turkey and Malta, between 5 and 13 percentage points across these countries.

**Figure 1.8. Percentage of students attaining baseline academic proficiency, by immigrant heritage**



*Note:* Statistically significant differences between second-generation immigrant and native students are shown next to country/economy name. For the OECD and EU average, this number refers only to the subset of countries/economies with valid information on both groups of students. Students who attain baseline academic proficiency are students who reach at least PISA proficiency level two in all three PISA core subjects – mathematics, reading and science.

Countries and economies are ranked in descending order of the percentage of second-generation immigrant students attaining baseline academic proficiency.

*Source:* OECD (2018<sup>[10]</sup>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

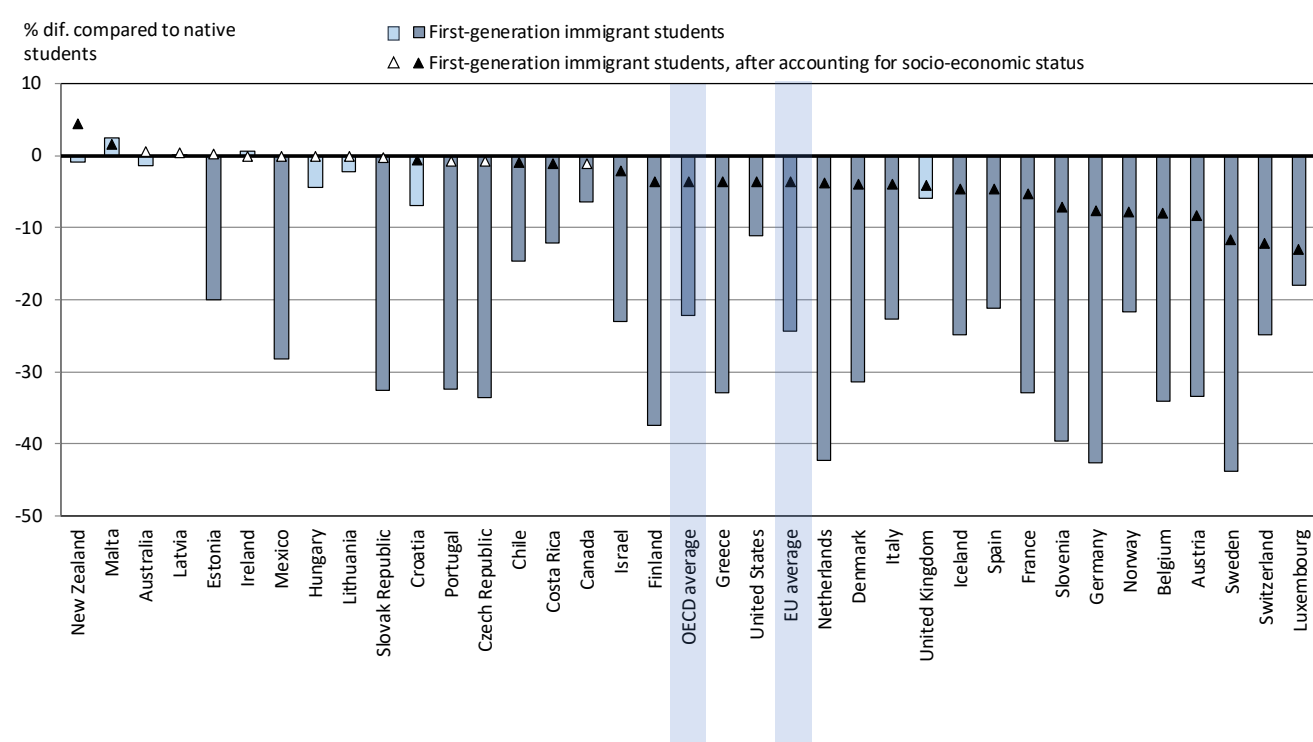
Overall, when taking into account immigrant heritage as discussed, data from PISA 2018 show that in a large majority of countries, students who were born in the country in which they sat the PISA test and who have one native-born and one foreign-born parent had a similar probability of attaining baseline levels of proficiency as native-born students with two native-born parents.

However, immigrant background is only one element that can impact student performance and well-being, and it plays to other individual characteristics. One of the most relevant is the socio-economic background of the students. Indeed, socio-economic background is one of the strongest determinants of students' academic performance and general well-being (OECD, 2016<sup>[18]</sup>) and has been widely studied in the case of students with an immigrant background (OECD, 2018<sup>[5]</sup>; Marks, 2005<sup>[19]</sup>). It affects student outcomes through a variety of channels, at the individual, school and system levels. For instance, a family's socio-economic status can determine parents' ability to provide for their child's needs and to be involved in their education. It can also influence the socio-economic composition of the school that students attend, which has an impact on the school's resources and environment.

In order to estimate the students' socio-economic status, the PISA background questionnaires include items that capture various aspects of students' socio-economic status (such as their parents' level of education and occupational status, the availability of a set of household items including consumer durables, and educational and cultural resources). Student responses are used to develop the PISA index of economic, social and cultural status (ESCS), a composite indicator of students' socio-economic status, designed to have a value of zero for the average OECD student and a standard deviation of one across equally weighted OECD countries. For a more detailed explanation of how the ESCS index was constructed, refer to the PISA 2018 Technical Report.

PISA data shows that socio-economic status is an important mediating factor in the relationship between immigrant background and academic resilience. Indeed, Figure 1.9 shows the differences between native and first-generation immigrant students in the percentage of students who attained baseline levels of proficiency (level 2 of proficiency) in the three core PISA subjects, before and after accounting for socio-economic status in 2018.

**Figure 1.9. Immigrant students attaining baseline academic proficiency, before and after accounting for socio-economic status**



*Note:* Only countries with valid values for first-generation immigrant students are shown. Statistically significant differences between first-generation immigrant and native students, before and after accounting for socio-economic status are shown in a darker tone. Student socio-economic status is measured by the PISA index of economic, social and cultural status (ESCS). Students who attain baseline academic proficiency are students who reach at least PISA proficiency level two in all three PISA core subjects – mathematics, reading and science. Countries and economies are ranked in descending order of the percentage-point difference, after accounting for ESCS. Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

The figure shows that in most OECD countries, the gap between the two groups was considerably smaller after socio-economic differences are considered. On average across OECD countries, the share of native

students who attain such levels was 22 percentage points larger than the share of immigrant students who did so, before accounting for socio-economic status, and only 3.5 percentage points larger after accounting for it. Similarly, the difference across EU countries went from 24 percentage points to 3.6 points after controlling for ESCS. This indicates that gaps in academic proficiency between the two groups of students were at least partly due to immigrant students being more socio-economically disadvantaged than native students. Being disadvantaged is a risk factor for failing to attain baseline levels of academic performance in the three core PISA subjects. In the Czech Republic, Mexico, Portugal and the Slovak Republic, the difference between the two groups decreased from 30 points to virtually zero after controlling for the students socio-economic status, which highlights the importance that this element can have for students' outcomes. In Malta and New Zealand, which showed non-significant gaps before considering the socio-economic status of the students, controlling for ESCS resulted in first-generation immigrant students showing better results than natives, with a difference of respectively about 2 and 5 percentage points in their favour.

## 2. The socio-emotional well-being of students with an immigrant background

Supporting immigrant students in achieving high levels of academic, social and emotional well-being outcomes is a key driver to their integration and motivation to be active participants in the social, economic and civic life in host communities (OECD, 2018<sup>[5]</sup>). In PISA 2015 and 2018, student socio-emotional well-being is assessed through core measures, including students' resilience, sense of belonging at school and life satisfaction. Building on available data from countries included in PISA 2018, this section presents an overview of the academic, social and emotional resilience of immigrant students. It then provides a focus on immigrant students' sense of belonging and life satisfaction.

### 2.1. The resilience of immigrant students

Data from PISA 2015 showed that many students with an immigrant background did not overcome their disadvantage and were less likely to attain baseline academic proficiency in science, reading and mathematics, as well as good socio-emotional well-being outcomes (OECD, 2018<sup>[5]</sup>). PISA 2018 shows a similar picture, with a large share of immigrant students still lacking academic, social and emotional resilience across many countries, as illustrated in Table 2.1.

#### **Academic resilience**

PISA defines as academically resilient those students with an immigrant background who attained at least proficiency Level 2 in all three core PISA subjects: science, reading and mathematics.

Data from PISA 2018 shows that, on average across OECD countries, 54% of immigrant students were academically resilient (and 55% across EU countries). The share of academically resilient immigrant students was particularly high in countries such as Canada (with 81% of immigrant students being academically resilient), Australia (81%), Hungary (80%), New Zealand (74%), and Estonia (70%). In other countries, the percentage of academically resilient immigrant students was rather low, such as Colombia (2%), Mexico (9%) and Costa Rica (33%).

Compared to other forms of social and emotional vulnerability, immigrant students showed a greater academic vulnerability in terms of the relative risk<sup>3</sup> of not achieving baseline academic proficiency (compared to native students), with an average relative risk of 1.68 on average across OECD countries (and 1.78 across EU countries). A relative risk of scoring below Level 2 (i.e. not reaching baseline proficiency) higher than 1 indicates that the factor considered – in this case having an immigrant

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<sup>3</sup> Relative risk is a measure of the risk of a certain event happening in one group compared to the risk of the same event happening in another group. Relative Risk is calculated by dividing the probability of an event occurring for group 1 divided by the probability of an event occurring for group 2.

background - increases the likelihood of scoring below this level, while a risk under 1 points in the opposite direction. Thus, the average relative risk of 1.68 indicates that, across OECD countries, immigrant students were 68% more likely not to achieve level 2 of academic proficiency. The relative risk for immigrant students of not being academically resilient compared to native students was particularly high in countries such as Finland (2.9), Japan (2.8), Sweden (2.6) and Denmark (2.5). It was particularly low in countries such as Hungary (0.9), Australia (0.9) and Malta (1.0).

## **Social and emotional resilience**

### *Sense of belonging*

in terms of sense of belonging, the 2018 Resilience Report defines socially resilient those students with an immigrant background who reported that they “agree” or “strongly agree” with the statement “I feel like I belong at school” and “disagree” or “strongly disagree” with the statement “I feel like an outsider at school” in PISA. When looking at this dimension of immigrant students’ social resilience through PISA 2018, on average across OECD countries, only 57% appeared to be socially resilient (and 54% across EU countries) in 2018. Indeed, on average across OECD countries, immigrant students showed a relative risk of not being socially resilient compared to native students of 1.2 (1.3 on average across EU countries).

When considering countries with an above-average percentage of academically resilient immigrant students, only Australia, Hungary, the Netherlands and New Zealand showed also an above-average share of socially resilient immigrant students. Countries with the largest shares of socially resilient students were Spain (72%, with 44% of academically resilient students), Croatia (69%, with 56% of academically resilient students) and Norway (68%, with 52% academically resilient students). Overall, the countries in which immigrants had a lower relative risk of not being socially resilient, were the same where immigrants had a lower risk of not being academically resilient. This means that in countries where immigrant students were less at risk of not feeling included, they were also less at a risk of not achieving minimum proficiency, suggesting an interesting link between the two areas. This was the case of, among others, Australia, Hungary, Lithuania, New Zealand and the United Kingdom. In contrast, countries with the lowest shares of immigrant students who were socially resilient were Bulgaria (11%), France (25%) and Malta (39%).

### *Life satisfaction*

The 2018 Resilience Report defines as emotionally resilient students, in terms of life satisfaction, students with an immigrant background who reported a life satisfaction of 7 or higher on a scale from 0 to 10.

In 2018, on average across OECD countries, 64% of immigrant students were emotionally resilient (and 65% across EU countries) for what concerns reported life satisfaction. The share of emotionally resilient students was particularly large in Colombia (81%), the Netherlands (80%), Costa Rica (76%) and Croatia (75%). Some of the countries with the lowest shares of emotionally resilient immigrant students were Turkey (36%), Japan (45%) and the United Kingdom (52%).

On average across OECD countries, the relative risk for immigrant students of not being emotionally resilient compared to native students was 1.2 (with a similar relative risk across EU countries), which means that they were 20% more likely to report a life satisfaction lower than 7 out of 10. Countries with the lowest relative risks for immigrant students of not being emotionally resilient – i.e. the ones where immigrant students were more likely to be emotionally resilient - were Hungary (0.8), Slovenia (1.0) and the United Kingdom (1.0). Countries with the highest relative risks for immigrant students of not being emotionally resilient were Spain (1.6), Italy (1.5) and Switzerland (1.4).

*Fear of failure*

The 2018 Resilience Report defined emotionally resilient students also in terms of schoolwork-related anxiety. Students can be defined as emotionally resilient also in terms of fear of failure, when they reported that they “disagree” or “strongly disagree” with the statement “When I am failing, this makes me doubt my plans for the future”.

When looking at emotional resilience in terms of fear of failure, the share of emotionally resilient immigrant students decreased to 56% on average across OECD countries (and 53% across EU countries) in 2018. Most countries with the largest shares of immigrant students reporting low levels of fear of failure were also those countries with the largest shares of immigrant students who were resilient in terms of other dimensions of academic, social and/or emotional (such as for life satisfaction) resilience. For example, this was the case of Australia, with 70% emotionally resilient immigrant students (in terms of fear of failure), 81% academically resilient immigrant students and 62% socially resilient (in terms of sense of belonging) immigrant students. In contrast, France and Turkey were the only countries with a share of emotionally resilient immigrant students above the OECD average but without other dimensions of immigrant students’ resilience above OECD averages.

Considering all dimensions of vulnerability described in this section (and presented in Table 2.1), the area of fear of failure appears to be the one for which immigrant students show the lowest relative risk. This means that they are more at risk of not being academically or socially resilient compared to natives but not so for what concerns their risk of not being emotionally resilient in terms of fear of failure.

On average across OECD countries, the relative risk for immigrant students of not being emotionally resilient in terms of fear of failure was 0.9 (and 1.0 across EU countries), indicating that they are slightly less likely (or equally likely in the EU) than native students to fear failing. Canada and Denmark were the only countries with a relative risk lower than the OECD average (0.8), while Latvia, Lithuania and Malta the only countries with a relative risk higher than the OECD average (between 1.2 and 1.3), meaning that in these countries immigrants students had a higher probability of fearing failure.



Table 2.1. Snapshot of the academic, social, emotional and motivational resilience of immigrant students

	Percentage of immigrant students who are academically resilient	Relative risk for immigrant students of not being academically resilient (compared to natives)	Percentage of immigrant students who are socially resilient (sense of belonging at school)	Relative risk for immigrant students of not being socially resilient (compared to natives) (sense of belonging at school)	Percentage of immigrant students who are emotionally resilient (life satisfaction)	Relative risk for immigrant students of not being emotionally resilient (compared to natives) (life satisfaction)	Percentage of immigrant students who are emotionally resilient (fear of failure)	Relative risk for immigrant students of not being emotionally resilient (compared to natives) (fear of failure)
	%	Relative risk	%	Relative risk	%	Relative risk	%	Relative risk
OECD average	53.8	1.68	56.7	1.22	64.1	1.18	56.0	0.92
EU average	54.9	1.78	53.9	1.26	65.3	1.16	52.6	0.96
Australia	80.6	0.93	61.62	0.86	m	m	69.3	0.92
Austria	42.1	2.15	64.20	1.15	64.8	1.25	44.1	0.93
Belgium	53.1	2.34	47.10	1.19	m	m	55.8	0.92
Bulgaria	c	1.31	10.79	1.67	53.6	1.36	59.8	0.82
Canada	80.7	1.10	58.20	0.93	m	m	72.9	0.78
Chile	c	1.21	62.14	1.04	56.4	1.23	57.2	1.06
Colombia	1.7	1.29	46.98	1.59	81.3	0.70	58.8	0.72
Costa Rica	33.3	1.18	66.84	1.08	75.9	1.18	43.6	0.96
Croatia	56.3	1.10	69.01	1.14	74.8	1.09	46.2	1.01
Czech Republic	59.8	1.88	46.16	1.28	56.7	1.26	55.8	0.96
Denmark	46.4	2.46	59.17	1.34	m	m	58.0	0.77
Estonia	63.5	1.87	57.12	1.36	68.6	1.06	46.9	0.96
Finland	62.8	2.86	56.78	1.44	73.2	1.26	46.9	0.89
France	49.1	1.97	24.97	1.08	64.5	1.25	63.4	0.95
Germany	57.2	2.43	63.03	1.20	63.0	1.18	40.5	0.93
Greece	39.2	1.56	64.90	1.21	62.2	1.11	50.7	0.99
Hungary	80.1	0.88	67.72	0.89	72.5	0.86	55.7	0.84
Iceland	45.9	1.82	52.85	1.47	66.7	1.25	48.2	1.04
Ireland	64.2	1.06	56.80	1.08	59.5	1.07	64.9	0.98
Israel	55.5	1.01	m	m	m	m	m	m
Italy	38.2	1.59	51.11	1.30	54.3	1.48	58.9	0.96
Japan	c	2.80	66.95	1.25	44.8	1.11	74.2	0.66
Korea	c	c	c	c	c	c	c	c
Latvia	63.7	1.28	62.36	1.18	63.4	0.99	39.2	1.20
Lithuania	59.6	1.19	42.85	0.99	70.9	1.20	40.9	1.19
Luxembourg	52.2	1.76	49.00	1.53	65.3	1.27	56.4	0.83
Malta	53.1	0.98	39.15	1.25	58.6	1.06	65.7	1.26
Mexico	3.2	1.45	40.93	1.89	70.0	1.76	58.4	0.97
Netherlands	61.1	2.31	65.59	1.27	79.9	1.00	40.5	0.90
New Zealand	73.7	0.99	62.55	0.84	m	m	71.9	0.81
Norway	52.1	1.84	68.01	1.16	m	m	m	m
Poland	c	c	c	c	c	c	c	c
Portugal	56.0	1.63	63.82	1.48	66.6	1.10	51.9	1.06
Romania	c	c	c	c	c	c	c	c
Slovak Republic	c	1.52	54.41	1.02	64.2	1.19	59.1	0.86
Slovenia	53.6	2.39	53.05	1.30	65.3	0.96	53.5	1.02
Spain	44.0	1.54	72.24	1.65	62.4	1.56	54.2	0.86
Sweden	46.7	2.66	52.13	1.25	66.6	1.04	54.4	0.93
Switzerland	60.5	2.10	57.57	1.24	68.8	1.42	47.7	0.89
Turkey	c	1.06	57.37	1.06	36.3	1.13	70.3	0.84
United Kingdom	66.9	1.23	57.31	0.88	52.6	1.01	72.0	0.93
United States	63.7	1.06	51.60	1.09	55.1	1.23	69.1	0.84

Notes: Academically resilient students are students with an immigrant background who attained at least proficiency Level 2 in all three core PISA subjects: science, reading and mathematics.

Socially resilient students are students with an immigrant background who reported that they “agree” or “strongly agree” with the statement “I feel like I belong at school” and “disagree” or “strongly disagree” with the statement “I feel like an outsider at school”.

Emotionally resilient students (in terms of life satisfaction) are students with an immigrant background who reported a life satisfaction of 7 or higher on a scale from 0 to 10.

Emotionally resilient students (in terms of fear of failure) are students with an immigrant background who reported that they “agree” or “strongly agree” with the statement “When I am failing, this makes me doubt my plans for the future”.

Source: OECD (2018<sup>[10]</sup>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

### ***Resilience by immigrant groups***

Across OECD countries, there seem to be differences in the percentage of academically sound and socially and emotionally well-adapted students by immigrant groups, as illustrated in Figure 2.1. In general, differences appear largest between first-generation immigrant students and native students, and lowest between native students of mixed heritage and students with two native-born parents.

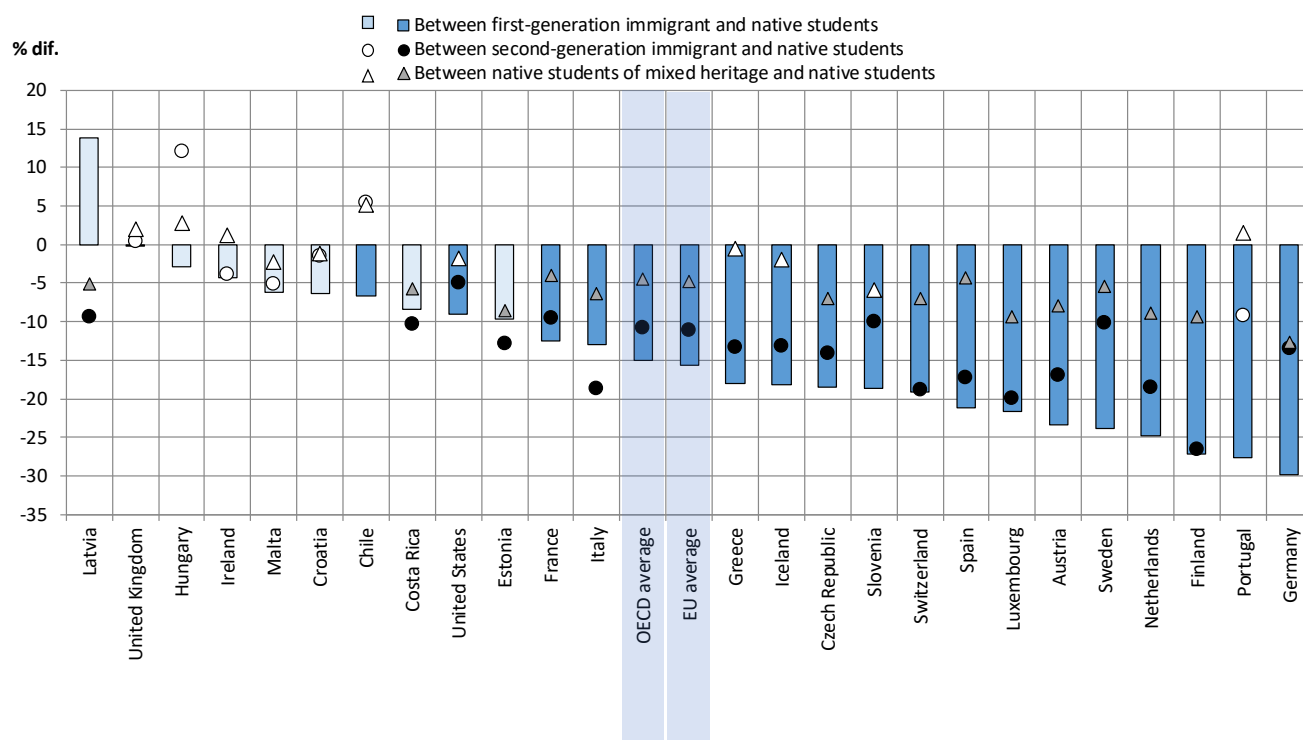
On average across OECD countries, first-generation immigrant students were 15 percentage points less likely to be academically, socially and emotionally sound students compared to native students (and 16 percentage points on average across EU countries). On average across OECD countries, second-generation students were 11 percentage points less likely to be academically, socially and emotionally sound compared to native students (with a similar percentage across EU countries). Native students from a mixed heritage were also 4 percentage points less likely to be academically, socially and emotionally sound compared to students with two native-born parents (and 5 percentage points on average across EU countries).

In particular, in all countries with available data and statistically significant differences, differences between immigrant groups were negative. Austria, Finland, Germany, Luxembourg, the Netherlands, Portugal, Spain and Sweden had the highest differences between first-generation immigrant students and native students, with first-generation immigrant students being at least 21 percentage points less likely to be academically, socially and emotionally sound students compared to native students. Finland also had the highest difference between second-generation immigrant students and native students (27 percentage points). In Austria, Italy, Luxembourg, the Netherlands and Switzerland, second-generation immigrant students were relatively less likely to be academically, socially and emotionally sound students (at least a difference of 19 percentage points between second-generation immigrant students and native students).

Among all countries with available and statistically significant data, Germany was the one where native students from a mixed heritage were the least likely to be academically, socially and emotionally sound compared to students with two native-born parents (with a 13 percentage points difference). In Austria, Estonia, Finland, Luxembourg and the Netherlands, native students of mixed heritage were significantly less likely to be academically, socially and emotionally sound than students with two native-born parents (at least a 7 percentage points difference).

**Figure 2.1. Differences in the percentage of academically sound and socially and emotionally well-adapted students, by immigrant group**

Difference between students with an immigrant background and native students in the percentage of students who attain baseline academic proficiency, report a sense of belonging at school and being satisfied with life



Notes: Statistically significant differences are marked in a darker tone.

Only countries with valid values for immigrant students are shown.

Students who attain baseline academic proficiency are students who reach at least PISA proficiency level two in all three PISA core subjects – math, reading and science.

Students who report a sense of belonging at school are students who reported that they “agree” or “strongly agree” with the statement “I feel like I belong at school” and “disagree” or “strongly disagree” with the statement “I feel like an outsider at school”.

Students who report being satisfied with life are students who reported a life satisfaction of 7 or above on a scale from 0 to 10.

Countries and economies are ranked in descending order of the difference in the percentage of native students of mixed-heritage and native students who attained baseline academic proficiency, reported a sense of belonging at school and being satisfied with life.

Source: OECD (2018<sup>[10]</sup>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

The following sections analyse in greater depth the different areas of students’ resilience, describing different patterns for the specific groups of students with an immigrant background.

## 2.2. Sense of belonging

PISA 2018 defines sense of belonging as the “need to form and maintain at least a minimum number of interpersonal relationships based on trust, acceptance, love and support” (OECD, 2019<sup>[20]</sup>). As reported in previous OECD work (OECD, 2019<sup>[20]</sup>; OECD, 2018<sup>[5]</sup>), a sense of belonging drives individuals to feel accepted, appreciated and connected to others. Students who feel they belong at school generally show higher motivation, self-esteem and academic performance (Goodenow, 1993<sup>[21]</sup>; OECD, 2013<sup>[22]</sup>; Sirin and Rogers-Sirin, 2004<sup>[23]</sup>; Wang and Holcombe, 2010<sup>[24]</sup>), even if these also depend on the social significance given to academic performance across social groups (Bishop, J. et al., 2004<sup>[25]</sup>; Fuller-Rowell and Doan,

2010<sup>[26]</sup>). Also, students with a greater sense of belonging at school appear less likely to be unsatisfied with their lives (OECD, 2017<sup>[27]</sup>), be absent and drop-out of school (McWhirter, Garcia and Bines, 2018<sup>[28]</sup>; Slaten, C. et al., 2015<sup>[29]</sup>), and engage in risky and anti-social behaviours (Catalano et al., 2004<sup>[30]</sup>).

PISA 2018 asked students to report feelings of their sense of belonging at school on a 4-point Likert scale ranging from 1 (“strongly agree”) to 4 (“strongly disagree”). Students were considered to feel like they belong at school when they agreed or strongly agreed with the statement “I feel like I belong at school”, and disagreed or strongly disagreed with “I feel like an outsider (or left out of things) at school”.

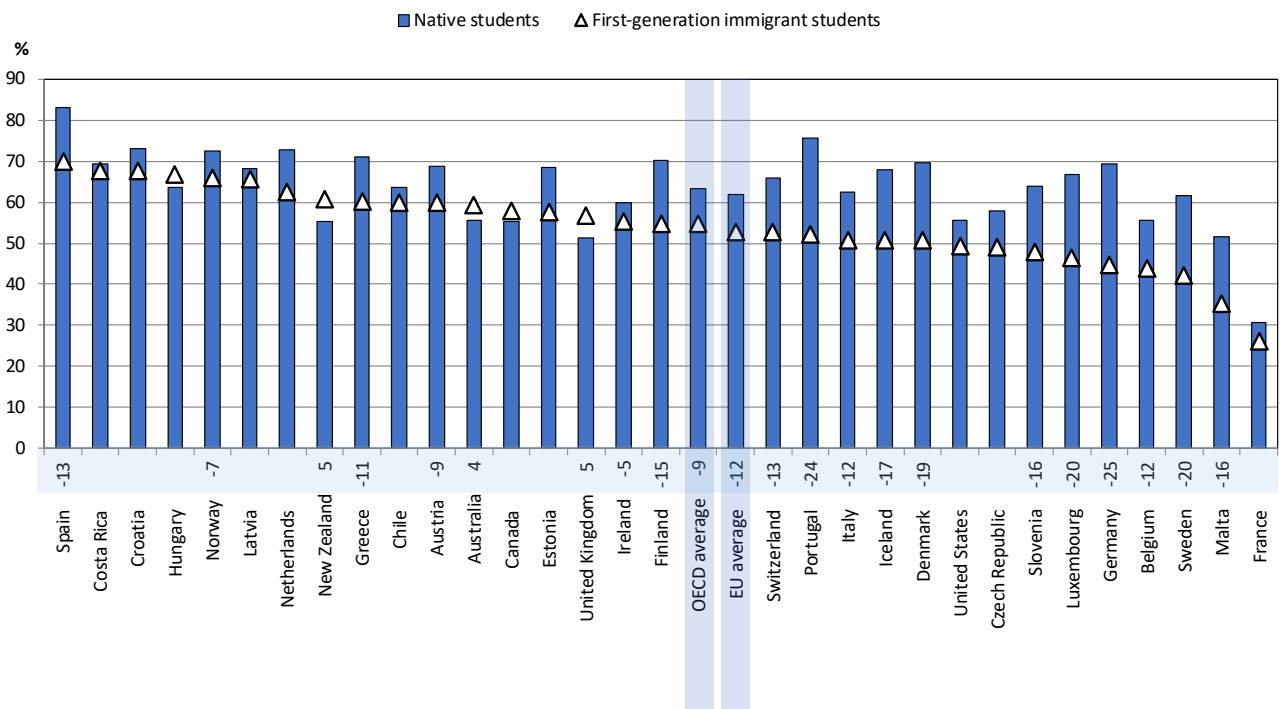
On average across OECD countries, first-generation immigrant students were less likely to report a sense of belonging at school than native students, as illustrated in Figure 2.2. Figure 2.3 shows, for countries with available data, the gaps in sense of belonging at school among native students and different groups of students with an immigrant background. In most countries, the gap between student groups was widest when taking into account first-generation immigrant students and native students, and lowest when considering native students from mixed heritage and students with both native-born parents. In particular, on average across OECD countries, first-generation immigrant students were 9 percentage points less likely to report feeling like they belonged at school than native students (and 12 percentage points across EU countries). On average across OECD countries, second-generation immigrant students were 4 percentage points less likely to feel a greater sense of belonging at school than native students (and 5 percentage points across EU countries). Furthermore, on average across OECD countries, native students of mixed heritage were 3 percentage points less likely to feel like they belong at school than students with two native-born parents (and 4 percentage points in EU countries).

Some of the widest differences in reported sense of belonging at school between first-generation immigrant students and native students were in Germany, Luxembourg, Portugal and Sweden, with first-generation immigrant students being at least 20 percentage points less likely to report they belonged at school compared to native students. Some of the countries with the widest differences between second-generation immigrant students and native students were Czech Republic, Estonia, Finland, Italy and Luxembourg, with second-generation immigrant students being at least 10 percentage points less likely to report belonging at school than native students. Most countries also had negative differences in the reported sense of belonging between native students from a mixed heritage and students with two native-born parents, despite these differences being narrower compared to those between other immigrant groups. Among these countries, Belgium, Czech Republic, Estonia, Germany and Luxembourg were those where students from mixed heritage were at least 6 percentage points less likely to report they belonged at school compared to students with two native-born parents.

While in most countries different groups of students from an immigrant background were less likely to report a sense of belonging at school than native students, in some countries the opposite was true. For example, in countries such as Australia, New Zealand and the United Kingdom, first- and second-generation immigrant students were more likely to report a greater sense of belonging at school than native students. Additionally, in the United Kingdom, native students of mixed heritage were more likely to feel like they belonged at school than students with two native born parents.

Figure 2.2. Sense of belonging at school, by immigrant background

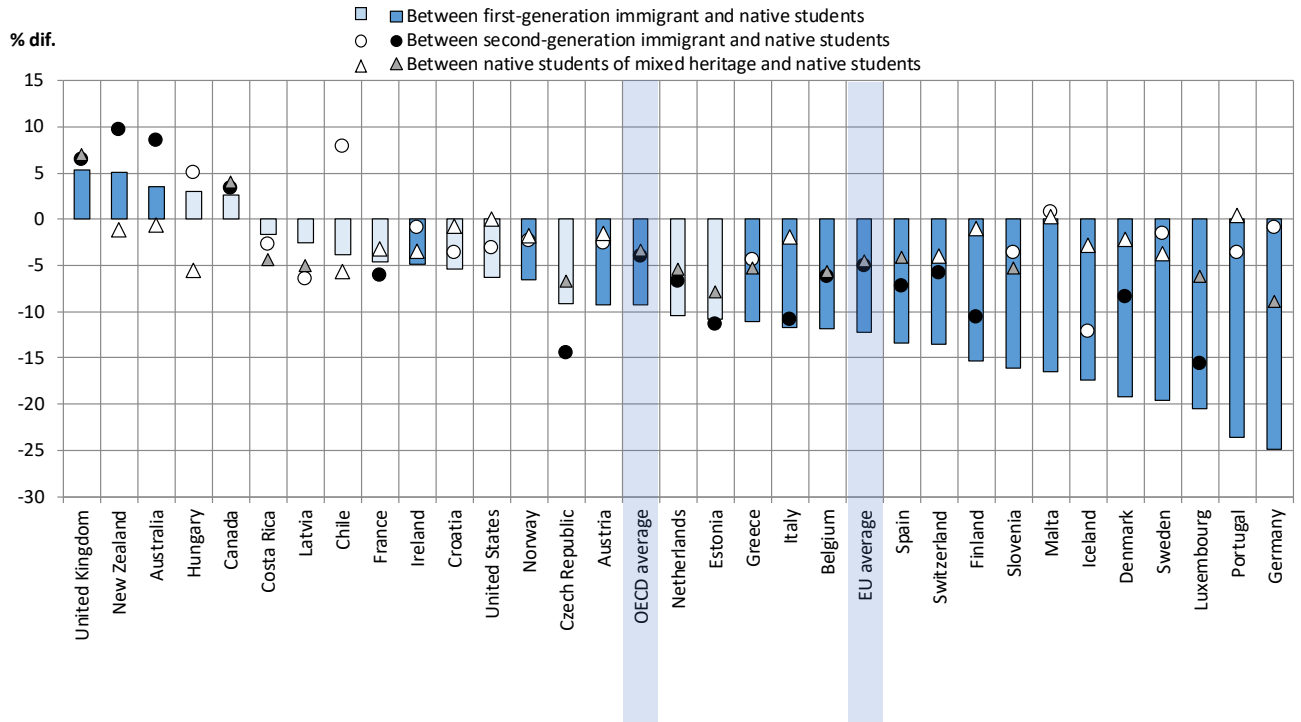
Percentage of students who reported a sense of belonging at school



Notes: Only countries with valid values for first-generation immigrant students are shown. Statistically significant differences between first-generation immigrant students and native students are shown next to country/economy names. For the OECD and EU average, this number refers only to the subset of countries/economies with valid information on both groups of students. Students who report a sense of belonging at school are Students who reported that they “agree” or “strongly agree” with the statement “I feel like I belong at school” and “disagree” or “strongly disagree” with the statement “I feel like an outsider at school”. Countries and economies are ranked in descending order of the percentage of first-generation immigrant students who reported a sense of belonging at school. Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

**Figure 2.3. Difference in sense of belonging at school, by immigrant group**

Difference between native students with an immigrant background and native students in the percentage of students who reported a sense of belonging at school



Notes: Statistically significant differences are marked in a darker tone.

Only countries with valid values for immigrant students are shown.

Students who report a sense of belonging at school are students who reported that they “agree” or “strongly agree” with the statement “I feel like I belong at school” and “disagree” or “strongly disagree” with the statement “I feel like an outsider at school”.

Countries and economies are ranked in descending order of the difference in the percentage of native students of mixed-heritage and native students who reported a sense of belonging at school.

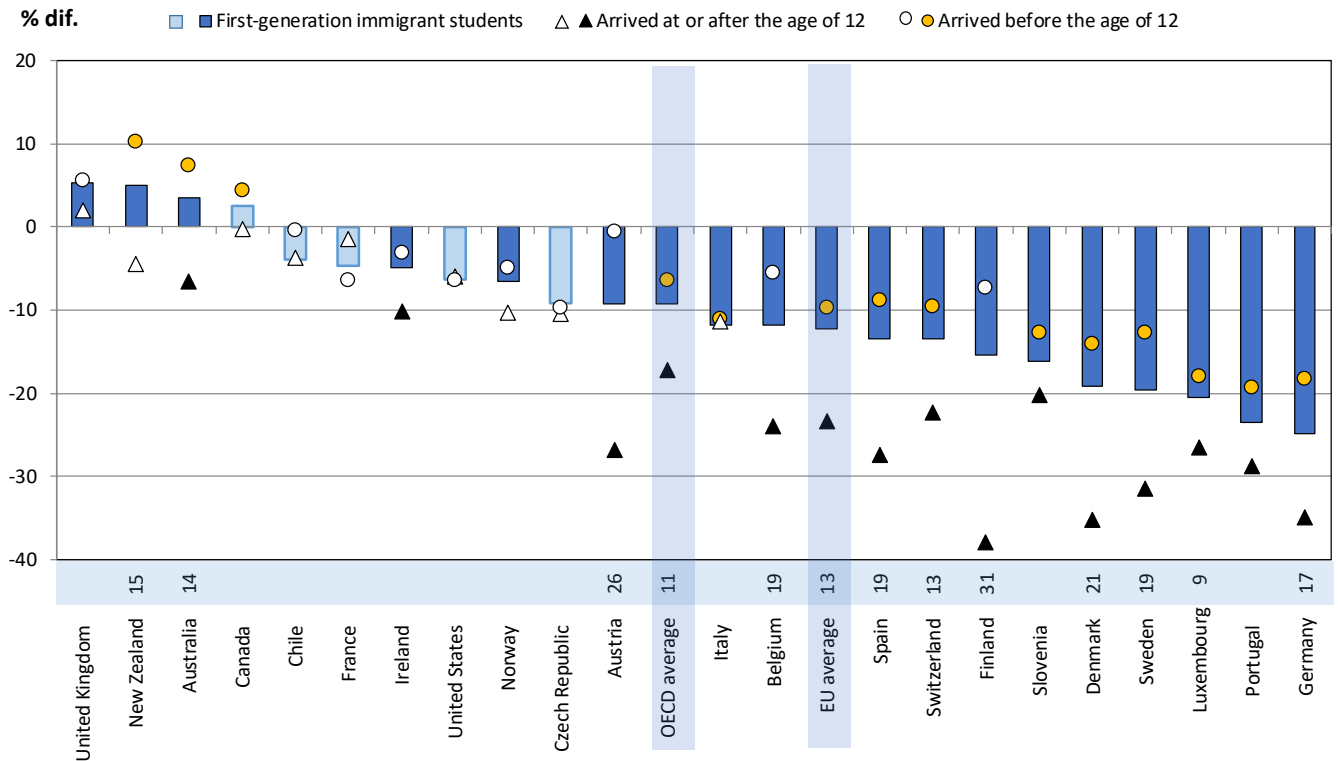
Source: OECD (2018<sub>(10)</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

Figure 2.4 shows the variation in the gap in sense of belonging between native students and first-generation immigrant students related to the age at which immigrant students arrived. In particular, PISA 2018 distinguishes between first-generation immigrant students who arrived before the age of 12, i.e. early arrivals, and after the age of 12, i.e. late arrivals (see Section 1.2).

On average across OECD countries, the difference between early and late arrivals reporting a sense of belonging at school was 11 percentage points (and 13 percentage points on average across EU countries). The difference of reported sense of belonging between late and early arrivals was particularly wide in Finland (31 percentage points), Austria (26 percentage points), Denmark (21 percentage points), Sweden (18 percentage points), Belgium (18 percentage points) and Spain (18 percentage points). Exploring differences in reported sense of belonging at school by age of arrival is particularly interesting for countries such as Australia and New Zealand, where early arrivals were more likely to report a sense of belonging at school compared to native students, but late arrivals were less likely to do so.

**Figure 2.4. Difference in sense of belonging at school, by age at arrival**

Difference between first-generation immigrant and native students in the percentage of students who reported a sense of belonging at school



Notes: Statistically significant differences are marked in a darker tone.

Only countries with valid values for both first-generation immigrant students who arrived before the age of 12 and those who arrived at or after the age of 12.

Statistically significant differences between those that arrived before the age of 12 and those who arrived at or after the age of 12 are shown next to country/economy names. For the OECD and EU average, this number refers only to the subset of countries/economies with valid information on both groups of students.

Students who report a sense of belonging at school are students who reported that they “agree” or “strongly agree” with the statement “I feel like I belong at school” and “disagree” or “strongly disagree” with the statement “I feel like an outsider at school”.

Countries and economies are ranked in descending order of the difference in the percentage of first-generation immigrant students and native students who reported a sense of belonging at school.

Source: OECD (2018<sup>[10]</sup>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

### 2.3. Life satisfaction and fear of failure

PISA 2018 defines life satisfaction as “an overall evaluation that an individual makes about his or her perceived quality of life, according to his or her chosen criteria” (OECD, 2019<sup>[20]</sup>). Supporting all students in achieving greater life satisfaction can promote their cognitive, psychological and social development (Huebner and Hills, 2013<sup>[31]</sup>; Suldo and Huebner, 2006<sup>[32]</sup>). Indeed, life satisfaction is key to promote healthy behaviours and attitudes that can lead to a successful and happy life (Lyubomirsky, King and Diener, 2005<sup>[33]</sup>; Park, 2004<sup>[34]</sup>). Instead, low levels of life satisfaction are associated with, among others, higher school drop-out, risky behaviours and substance abuse (Huebner and Alderman, 1993<sup>[35]</sup>; Valois, R. F. et al., 2001<sup>[36]</sup>; Zullig, K.J. et al., 2001<sup>[37]</sup>).

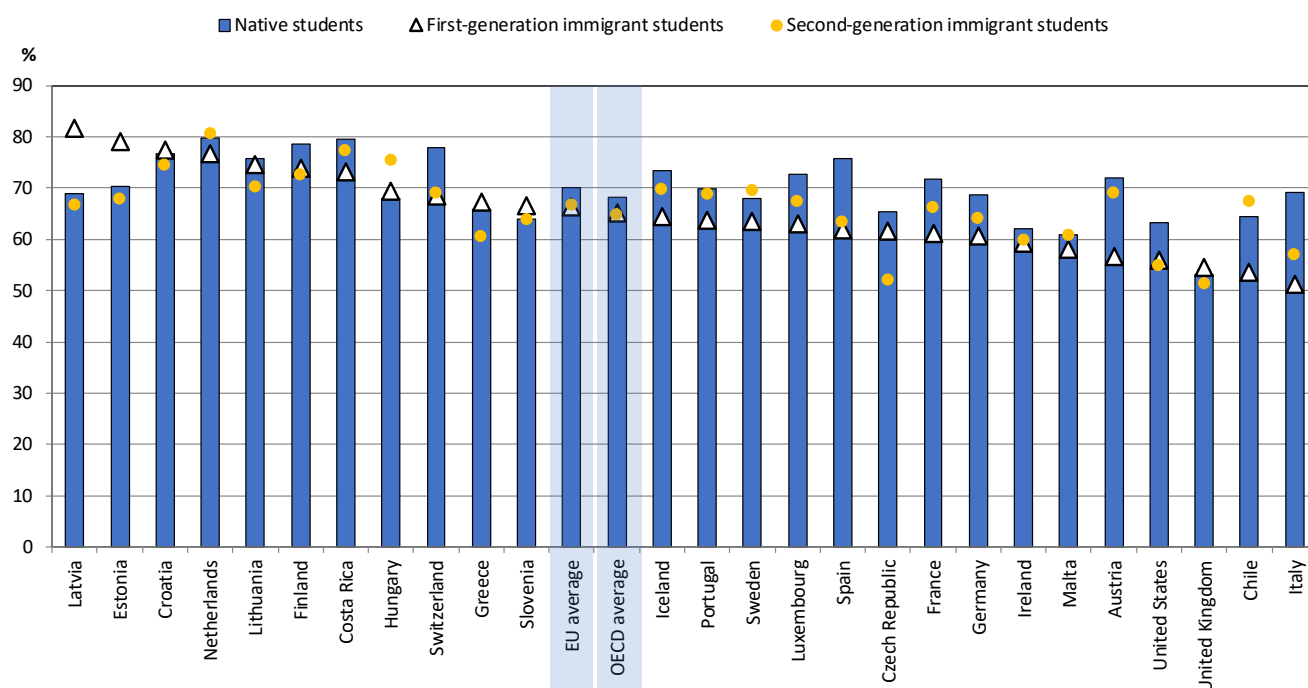
PISA 2018 asked students to assess their life satisfaction on a rating scale from 0 (“not at all satisfied”) to 10 (“completely satisfied”). Students were classified into four groups: i) “not satisfied” for reported values between 0 and 4 on the life-satisfaction scale; ii) “somewhat satisfied” for values equal to 5 and 6; iii) “moderately satisfied”, for values equal to 7 and 8; and iv) “very satisfied” for values 9 or 10. Students reporting levels of life satisfaction between 7 and 10 on the life-satisfaction scale were combined in a fifth group, i.e. “satisfied”.

Building on data from PISA 2015, the OECD (2018<sup>[5]</sup>) presented that, on average across OECD countries, students with an immigrant background showed lower life satisfaction compared to native students. When analysing data from PISA 2018 the picture remains similar, as illustrated in Figure 2.5. On average across OECD countries with available data, 65% of first-generation immigrant students reported being satisfied with life, and 66% did so across EU countries. Comparatively, across the OECD, first-generation immigrant students were 5 percentage points less likely to report being satisfied with life than native students (and 4 percentage points less likely across EU countries). In particular, they reported significantly lower life satisfaction than native students in countries such as Italy (18 percentage points), Austria (15 percentage points), Spain (14 percentage points), Chile (11 percentage points), France (11 percentage points) and Luxembourg (10 percentage points). However, in a few countries, first-generation immigrant students reported greater life satisfaction compared to native students. This was for example the case of Latvia, which showed a significant positive difference of 13 percentage points between first-generation immigrant students being satisfied with life than native students). Moreover, on average across OECD countries the picture for second-generation immigrant students is similar, with a 4.7 percentage points difference between them and native students (3.7 percentage points for EU countries). The situation of second-generation immigrant students is quite similar to first-generation on average across both the OECD and the EU, respectively with 65% and 67% of them reporting being satisfied with life. The difference is thus also similar, with first-generation immigrant students being 5 percentage points less likely to report being satisfied with life than native students on average across OECD, and 4 percentage points across the EU. Moreover, the difference between first- and second-generation immigrant students is virtually zero and not significant.



Figure 2.5. Satisfaction with life, by immigrant background

Percentage of students who reported being satisfied with life



Notes: Only countries with valid values for first-generation and second-generation immigrant students are shown.

For the OECD and EU average, this number refers only to the subset of countries/economies with valid information on all groups of students.

Students who report being satisfied with life are students who reported a life satisfaction of 7 or above on a scale from 0 to 10.

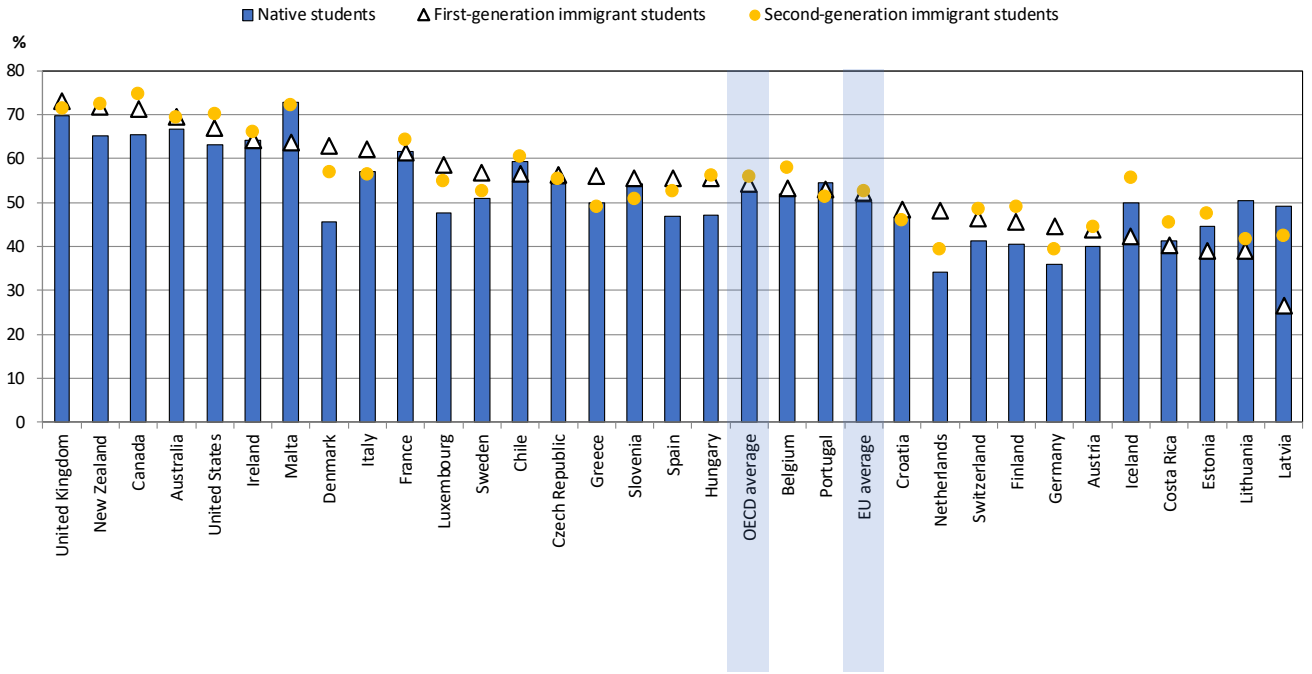
Countries and economies are ranked in descending order of the percentage of first-generation immigrant students who report being satisfied with life.

Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

When looking at differences in reported fear of failure between first-generation immigrant students and native students, overall the gap appears small but in favour of first-generation immigrant students. In particular, on average across OECD countries, first-generation immigrant students appear to be 2 percentage points more likely to report lower fear of failure compared to native students (see Figure 2.6). In some countries where first-generation immigrant students reported lower fear of failure, these differences were relatively wide. Among others, this was the case of Denmark (17 percentage points), the Netherlands (14 percentage points), Luxembourg (11 percentage points) and Germany (9 percentage points). In other countries, first-generation immigrant students reported greater fear of failure compared to native students. This is the case of, among others, Latvia, with first-generation immigrant students being 23 percentage points more likely to report higher levels of fear of failure than native students, and Malta, where first-generation immigrant students were 9 percentage points less likely to report fear of failure compared to native students. The situation is similar for second-generation immigrant students, on average across both the OECD and the EU, respectively with 56% and 53% of them reporting reported doubting their plans for the future when failing.

Figure 2.6. Fear of failure, by immigrant background

Percentage of students who reported doubting their plans for the future when failing



Notes: Only countries with valid values for first-generation and second-generation immigrant students are shown.

Statistically significant differences between first-generation immigrant and native students are shown next to country/economy names. For the OECD and EU average, this number refers only to the subset of countries/economies with valid information on both groups of students.

Students who report fear of failure are students with an immigrant background who reported that they “agree” or “strongly agree” with the statement “When I am failing, this makes me doubt my plans for the future”.

Countries and economies are ranked in descending order of the percentage of first-generation immigrant students who report being a fear of failure.

Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

## 3. Language and origins: barriers to integration

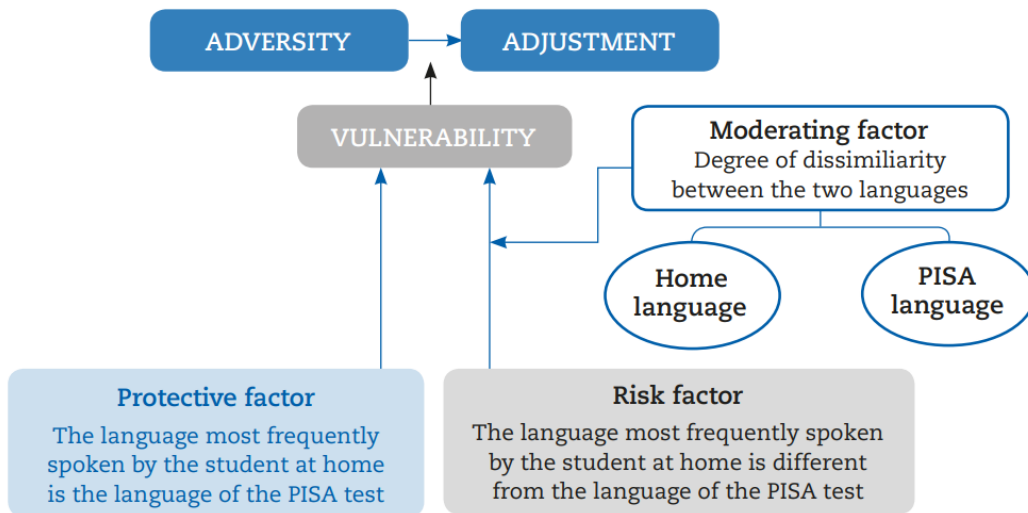
Immigrant students are faced with various sources of disadvantage that affect their academic performance and their overall well-being. Fluency in the language spoken in the host country is one of these factors. Language barriers can also amplify the effects of other sources of disadvantage, such as having migrated after the age of 12, lacking parental support, studying in a disadvantaged school or attending a school with a poor disciplinary climate. Hence, language can be a risk factor when considering the academic and broader well-being of immigrant students. On top of socio-economic and linguistic differences that can affect the well-being of immigrant students, other factors linked to the country of origin and the host country can play a role.

### 3.1. Barriers to integration: the role of language

Limited inclusion in education for immigrant students starts in early care and education (ECEC) programmes, and continues throughout all education levels. Immigrant children generally have lower rates of participation in non-parental care of any type compared to native students. Specific obstacles to inclusion consist of language barriers, bureaucratic complexity and distrust of government programmes, especially among undocumented immigrants (Mezzanotte, Forthcoming<sup>[15]</sup>). Language barriers, in particular, affect the integration of immigrants across all education levels and beyond. Indeed, according to researchers, the fluency in the host-country language does not only affect integration in education, but also in labour markets and within societies more broadly (Chiswick, 2014<sup>[38]</sup>; OECD, 2018<sup>[5]</sup>). In the economic dimension, language fluency is correlated with higher productivity, wages and improved matching of skills and qualifications. Beyond that, research highlights that social outcomes of immigrants are also impacted by the level of language proficiency of immigrants (Bleakley and Chin, 2010<sup>[39]</sup>; Guven and Islam, 2015<sup>[40]</sup>). This can encompass health, marriage, social integration and political participation (Isphording, 2015<sup>[41]</sup>; OECD, 2018<sup>[5]</sup>).

Fluency in the language of the host country is important for students as it can ensure that they can make the most out of their learning opportunities (Geay, McNally and Telhaj, 2013<sup>[42]</sup>), while also enabling them to participate in the social life of their school communities and develop the sense of belonging to said communities (Zhou and Xiong, 2005<sup>[43]</sup>; OECD, 2018<sup>[5]</sup>). On the other hand, evidence shows that students with an immigrant background with language difficulties are more likely to be bullied and discriminated against as well as to suffer emotional problems, such as depression and low self-esteem (Gil, Vega and Dimas, 1994<sup>[44]</sup>; Romero and Roberts, 2003<sup>[45]</sup>; Padilla and Perez, 2003<sup>[46]</sup>). As portrayed in Figure 3.1, speaking a different language at home than that of instruction is considered a risk factor that can increase the vulnerability of immigrant students. Increasing the vulnerability of students can have an impact on the process of adjustment of students to their host countries and impair their integration process. However, if the language spoken at home and the instruction language are more rather than less similar, the degree of risk can vary significantly. The dissimilarity between the two languages can act as a moderating factors towards the risks incurred by students as closer similarity can ease the language learning process for students (or, vice-versa, it can be an additional layer of difficulty when the two languages are very different). Speaking the same language at home and at school can be considered a protective factor which can reduce the difficulties of students in obtaining good academic achievements and being able to develop their socio-emotional well-being.

Figure 3.1. The role of the language spoken at home in the resilience process



Note: Risk and protective factors refer to all individual, household, school and system-level characteristics that influence vulnerability because they explain the degree to which students with an immigrant background can be expected to have acquired academic skills and to report social and emotional well-being. The paper explicitly considers two mechanisms through which risk and protective factors can determine the outcomes of students with an immigrant background: the extent to which students with an immigrant background are more or less exposed to risk and protective factors than students without an immigrant background are, and the extent to which risk and protective factors are differently related to outcomes, depending on students' immigrant background.

Source: OECD (2018<sup>[5]</sup>), *The Resilience of Students with an Immigrant Background: Factors that Shape Well-being*, OECD Publishing, <https://doi.org/10.1787/9789264292093-en>

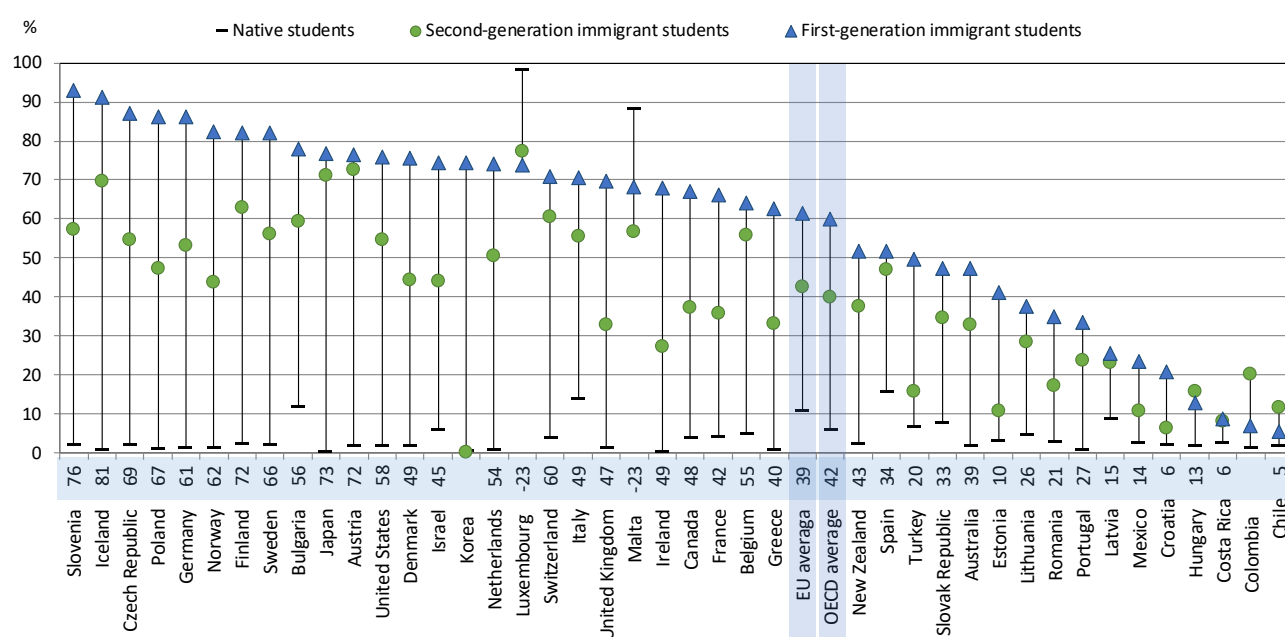
However, it is worth noting that large-scale international assessments have limited information on the mother tongue of students with an immigrant background or the variety of languages spoken within their families, or the level of proficiency in different languages students and their families possess and the context in which they use specific languages. The analysis developed in this section is based on the limited information contained in the PISA dataset, the language of the PISA test and the language that the student reports speaking most frequently at home. In this paper, non-native speakers are students who reported that the language they speak most frequently at home is different from the language of the PISA test, while native speakers are students who reported that the language they speak most frequently at home is the same as that of the PISA test. However, this classification may hide important differences: some students may be bilingual and native speakers in multiple languages, other students may speak at home the language of instruction even if they are non-native speakers, because they and their parents may feel this could help them gain proficiency at a faster pace.

### ***Immigrant background and languages spoken at home: An overview***

Data from PISA show that in 2018, on average across OECD countries, 12% of all students did not speak the language of assessment as their main language at home (OECD, 2019<sup>[9]</sup>). However, there were considerable differences across countries. For example, in Luxembourg, 83% of students did not speak the language of assessment at home, while in Japan and Korea 1% and 0.6% of students did not speak the language of assessment at home, respectively. In particular, large differences occur across different European countries. While Luxembourg has a quite exceptional context, countries such as Switzerland (27%), Spain and Austria (20%) host quite high percentages of students that do not speak the language of assessment at home, contrary to countries such as Hungary, Poland and Portugal that have between 1% and 3% of these students.

Considering exclusively the population of students with an immigrant background, Figure 3.2 shows that in 2018, on average across OECD countries, there was a gap of 42 percentage points between immigrant and native students who did not speak the language of instruction at home. Significant differences between immigrant students (first- and second-generation combined) and native students are reported next to the name of each country or economy. In all countries except Luxembourg and Malta, the percentage of students who reported not speaking the language of assessment at home was greater among immigrant students than among native students. In particular, the percentage of non-native speakers was higher among first-generation immigrant students in most countries than second-generation immigrant students. On average across OECD countries, 5% of native students (10.8% across EU countries), 60% of first-generation immigrant students (61% across EU countries), and 40% of second-generation immigrant students (41% across EU countries) reported not speaking the language of assessment at home. In Czech Republic, Germany, Iceland, Poland and Slovenia more than 85% of students with an immigrant background, but only fewer than 2% of native students, reported speaking a language at home that is different from the language of assessment. Very small differences between first and second generations exist in some OECD countries, such as Austria, Japan and Spain, where second-generation students tend to be non-native speakers as much as first generations. Moreover, in a few countries second-generations appeared to be non-native speakers in larger percentages, such as in Chile, Colombia and Hungary. These countries, however, reported lower than average percentages of non-native speakers overall.

Figure 3.2. Percentage of non-native speaker students, by immigrant background



Note: Non-native-speakers are students who reported that the language they most frequently speak at home is different from the language of the PISA assessment.

Only countries with valid values for first- and second-generation immigrant students are shown.

Statistically significant differences in the percentage of non-native-speaking students among immigrant and native students are reported next to country/economy names.

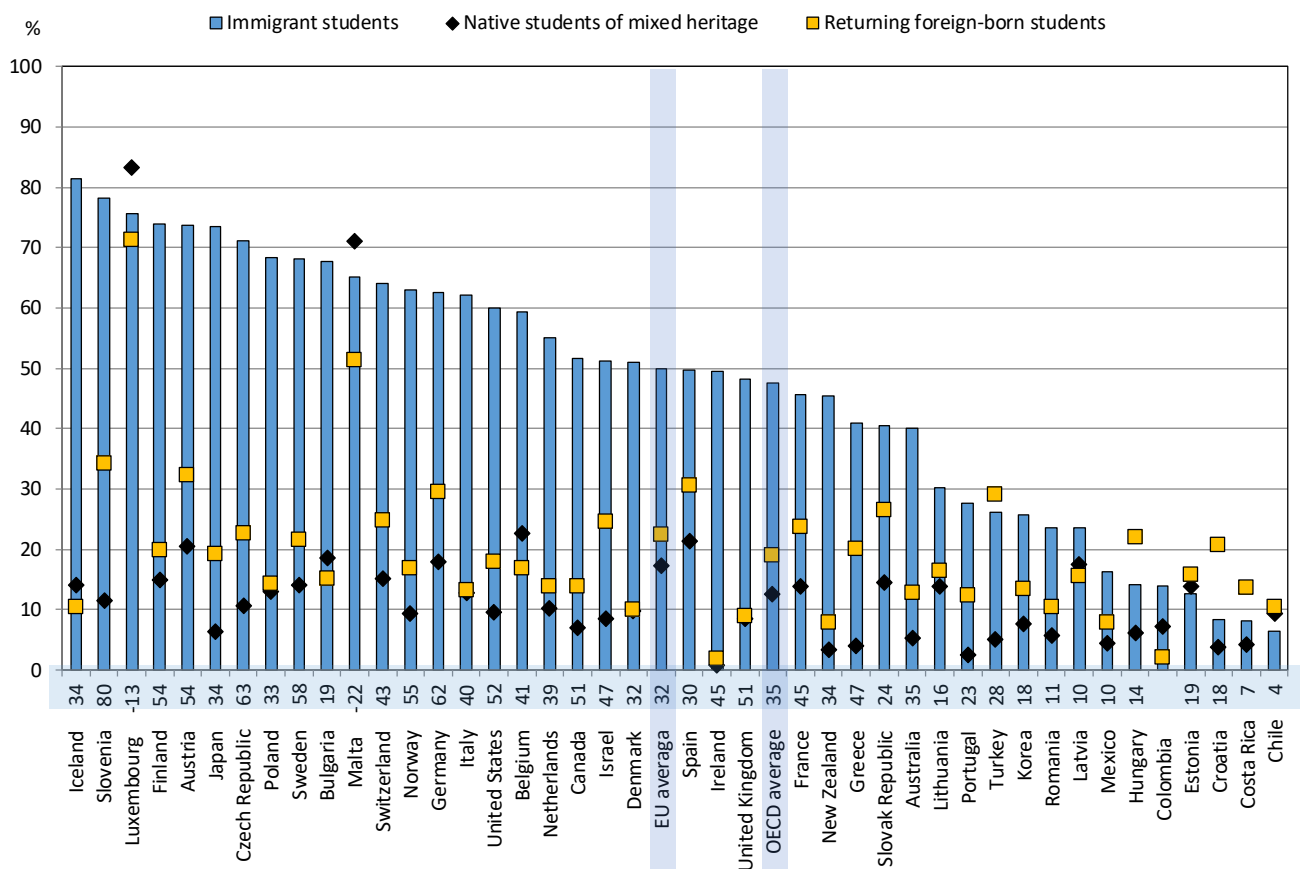
Countries and economies are ranked in descending order of the percentage of first-generation immigrant students who do not speak the language of assessment at home.

Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

Figure 3.3 provides an additional layer of information on the composition of the non-native speaker group in OECD countries. It reports the percentage of returning foreign-born students, native students of mixed

heritage against the category of immigrant students (which comprises both native and foreign-born students who have foreign-born parents). In most countries – all but Luxembourg, Malta, Turkey, Hungary, Estonia, Croatia, Costa Rica and Chile - immigrant students with two foreign-born parents were more likely to speak a language at home that is different from the language of assessment compared to returning foreign-born students and native students of mixed-heritage. In particular, in Austria, Finland, Iceland, and Slovenia between 70% and 80% of immigrant students with two foreign-born parents reported not speaking the language of assessment at home, while the percentage for the other groups was much lower, down to 10% for the other two groups in Iceland and between 20% and 35% in the other three countries.

**Figure 3.3. Percentage of non-native speakers, by immigrant heritage**



Notes: Non-native-speakers are students who reported that the language they most frequently speak at home is different from the language of the PISA assessment.

Only countries with valid values for returning foreign-born students and native students of mixed heritage are shown.

Statistically significant differences in the percentage of non-native-speakers among immigrant students and immigrant students with at least one native-born parent are reported next to country/economy names.

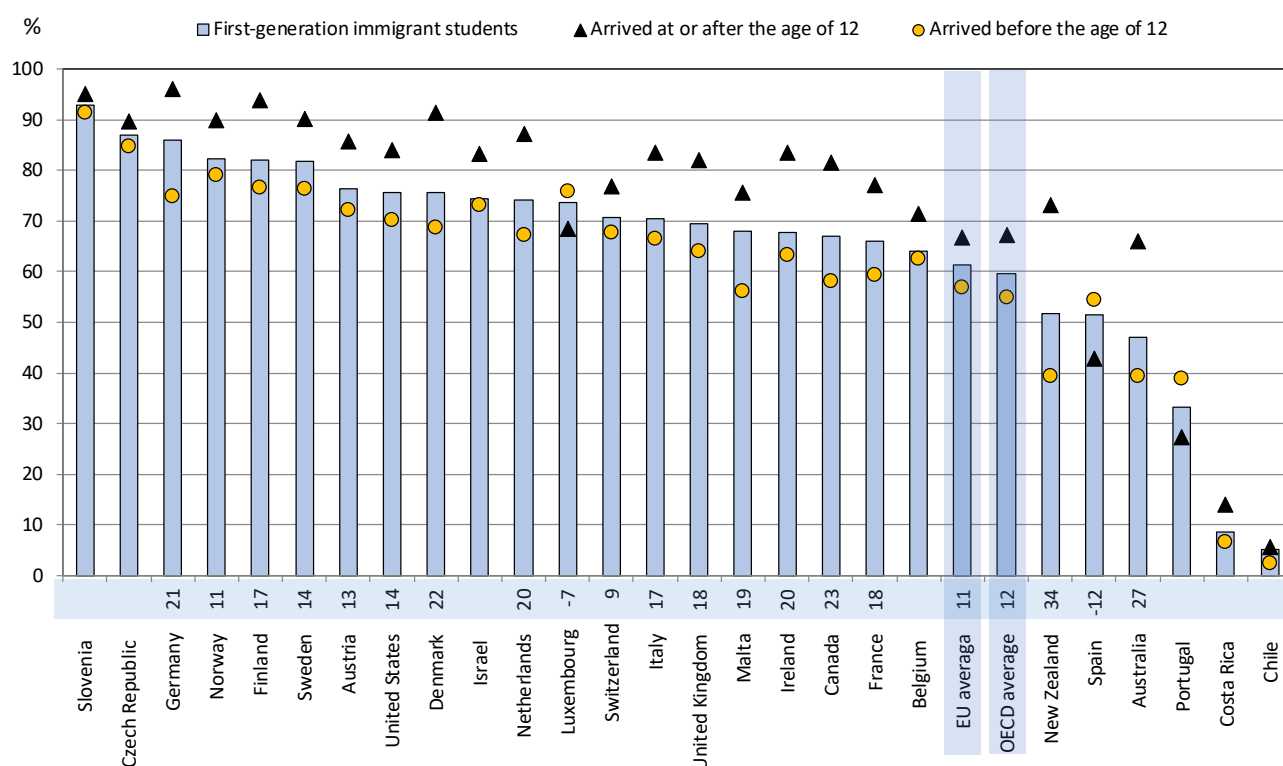
Countries and economies are ranked in descending order of the percentage of immigrant students who do not speak the language of assessment at home.

Source: OECD (2018<sub>(10)</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

When looking at data from PISA, the differences in speaking the language at home appear to be related to the age of arrival of the students in the host country. Specifically, Figure 3.4 shows that first-generation students are less likely to use the language of assessment at home if they arrived in the host country at or after the age of 12. In 2018, on average across OECD countries, the share of non-native speakers among late arrivals was 12 percentage points larger than that those who arrived before the age of 12, i.e. early

arrivals. This gap was slightly higher in the EU, with a difference of 11 percentage points. The only countries where the percentage of late arrivals students being non-native speakers was lower than that of early arrivals are Luxembourg, Portugal and Spain. Nevertheless, the gap in most countries shows that late arrivals speak the language at home less than early arrivals, with countries such as Slovenia, Germany, Finland, Sweden and Denmark reporting over 90% of the former not doing so. The gap between students who arrived at/after 12 and before 12 was greatest and of at least 20 percentage points in countries such as Australia, Denmark, Germany, Ireland and the Netherlands.

**Figure 3.4. Percentage of non-native speakers, by age at arrival**



*Notes:* Non-native-speakers are students who reported that the language they most frequently speak at home is different from the language of the PISA assessment.

Only countries with valid values for first-generation immigrants who arrived before the age of 12 and those who arrived at or after the age of 12 are shown.

Statistically significant differences in the percentage of non-native-speakers among students who arrived at or after the age of 12 and among those who arrived before the age of 12 are reported next to country/economy names.

Countries and economies are ranked in descending order of the percentage of first-generation immigrant students who do not speak the language of assessment at home.

Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

### **Language as a barrier to immigrant students' well-being outcomes**

How well students read in the language of instruction is influenced by whether they commonly speak that language at home and, more generally, outside of school, along with specific support in the area offered in schools (OECD, 2019<sub>[9]</sub>). According to PISA 2018, speaking a language at home that is different from the language of assessment can explain a large part of the difference in academic performance between native students and students with an immigrant background. In particular, being a non-native speaker can

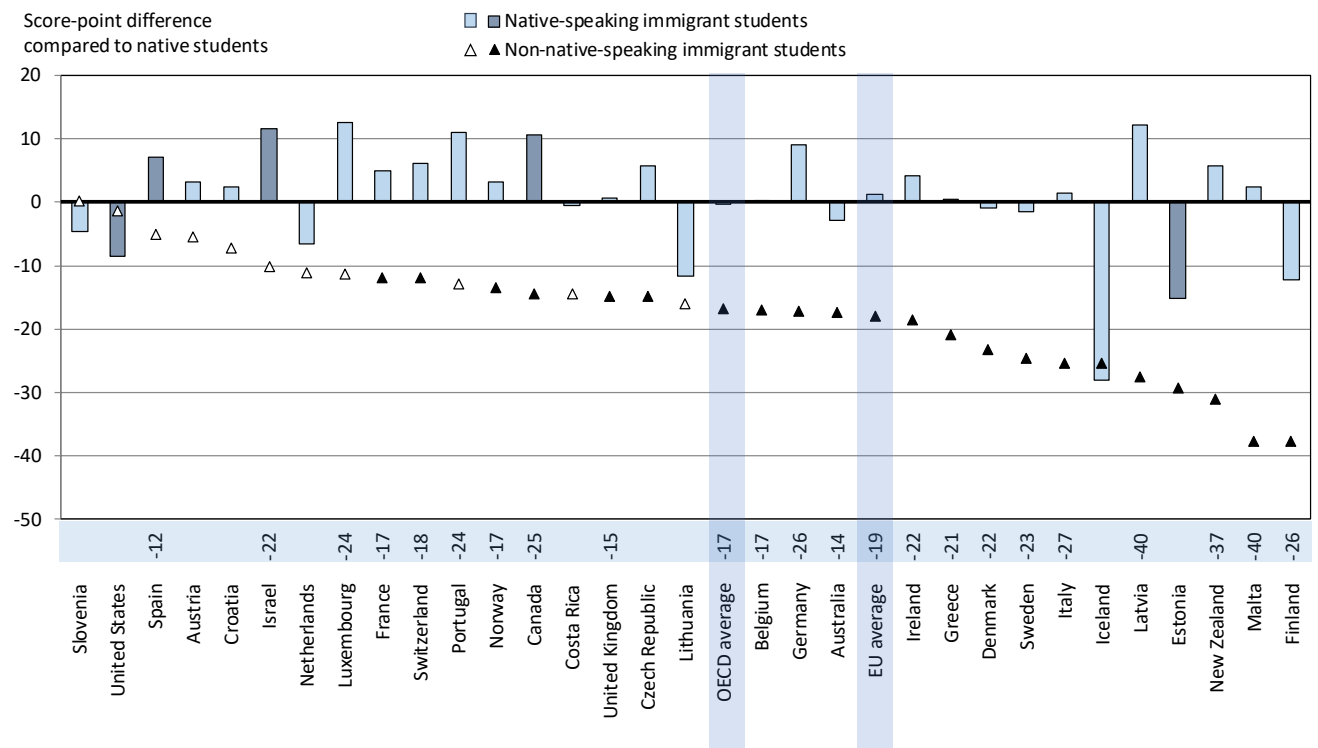


impact students' academic performance by affecting the students' proficiency in reading, which in turn can influence their understanding of and competence in other domains.

Data from PISA 2018 show relevant differences in performance between native students who speak the language of assessment at home and of immigrant students who do and those who do not. Figure 3.5 compares the difference between these groups of students, controlling for mathematics scores and socio-economic status. Significant differences between immigrant students who do and those who do not speak the language of assessment at home are reported next to country names. In most OECD countries, in 2018, there was no significant difference in reading scores between immigrant and native students who reported speaking the language of assessment at home, with the exception of Estonia and the United States. In Canada, Israel and Spain, immigrant students that spoke the language at home scored at higher levels compared to native students. In particular, focusing on immigrant students, it appears that native-speaking immigrant students obtain better academic results: on average across OECD countries, native-speaking students scored 17 percentage points higher than non-native speakers (and 19 percentage points on average across the EU). Significant differences across different countries between native and non-native-speaking immigrant students are reported next to the country names in Figure 3.5.

**Figure 3.5. Difference in reading scores, by immigrant background and language spoken at home**

After accounting for performance in mathematics and socio-economic status



Note: Statistically significant differences are marked in a darker tone.

Native students are students without an immigrant background who speak most frequently at home the language of the PISA assessment.

Native-speaking students are students who speak most frequently at home the language of the PISA assessment.

Non-native-speaking students are those who reported that the language they most frequently speak at home is different from the language of the PISA assessment.

Only countries with valid values for both native- and non-native-speaking immigrant students are shown.

Statistically significant differences between non-native- and native-speaking immigrant students are shown next to country/economy names. For the OECD and EU averages, this number refers only to the subset of countries/economies with valid information on both groups of students.



Countries and economies are ranked in descending order of the gap in reading scores between non-native-speaking immigrant students and native students, adjusted for socio-economic status and performance in mathematics.

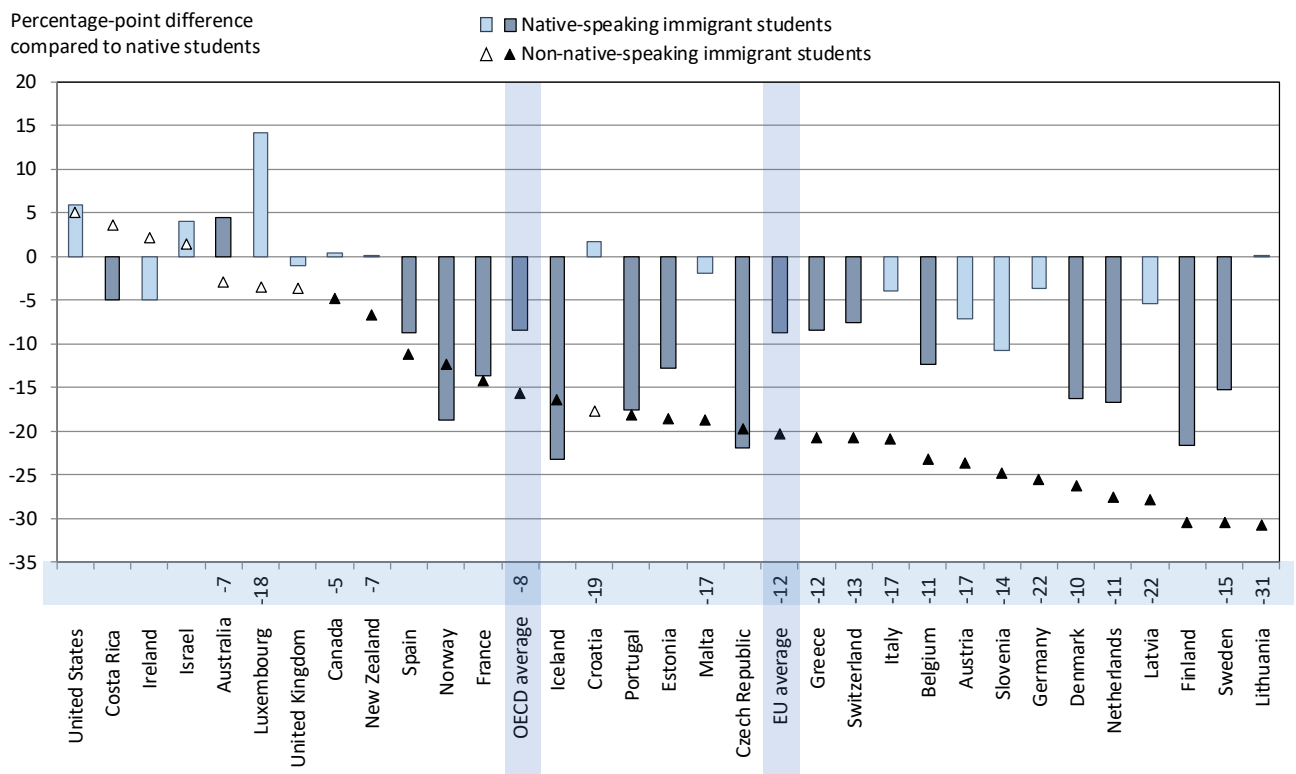
Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

### Attaining baseline levels of proficiency in the core PISA subjects

As mentioned, PISA 2018 shows that immigrant students' proficiency in the language of the assessment at home is strongly associated with their overall academic performance. The language spoken at home is significantly associated not only with reaching high levels of proficiency, but also baseline levels in all three core PISA subjects. Figure 3.6 shows the percentage-point difference in students achieving baseline proficiency between immigrant students who do and do not speak the language of assessment at home and native students.

**Figure 3.6. Students attaining baseline academic proficiency, by immigrant background and language spoken at home**

After accounting for socio-economic status



Note: Statistically significant differences are marked in a darker tone.

Students who attain baseline academic proficiency are those who attain at least proficiency Level 2 in all three core PISA subjects: science, reading and mathematics.

Native students are students without an immigrant background who speak most frequently at home the language of the PISA assessment.

Native-speaking students are students who speak most frequently at home the language of the PISA assessment.

Non-native-speaking students are those who reported that the language they most frequently speak at home is different from the language of the PISA assessment.

Only countries with valid values for both native- and non-native-speaking immigrant students are shown.

Statistically significant differences between non-native- and native-speaking immigrant students with at least one native-born parent are shown next to country/economy names. For the OECD and EU averages, this number refers only to the subset of countries/economies with valid information on both groups of students.

Countries and economies are ranked in descending order of the gap between non-native-speaking immigrant students and native students in the percentage of students attaining baseline academic proficiency, adjusted for socio-economic status.

Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

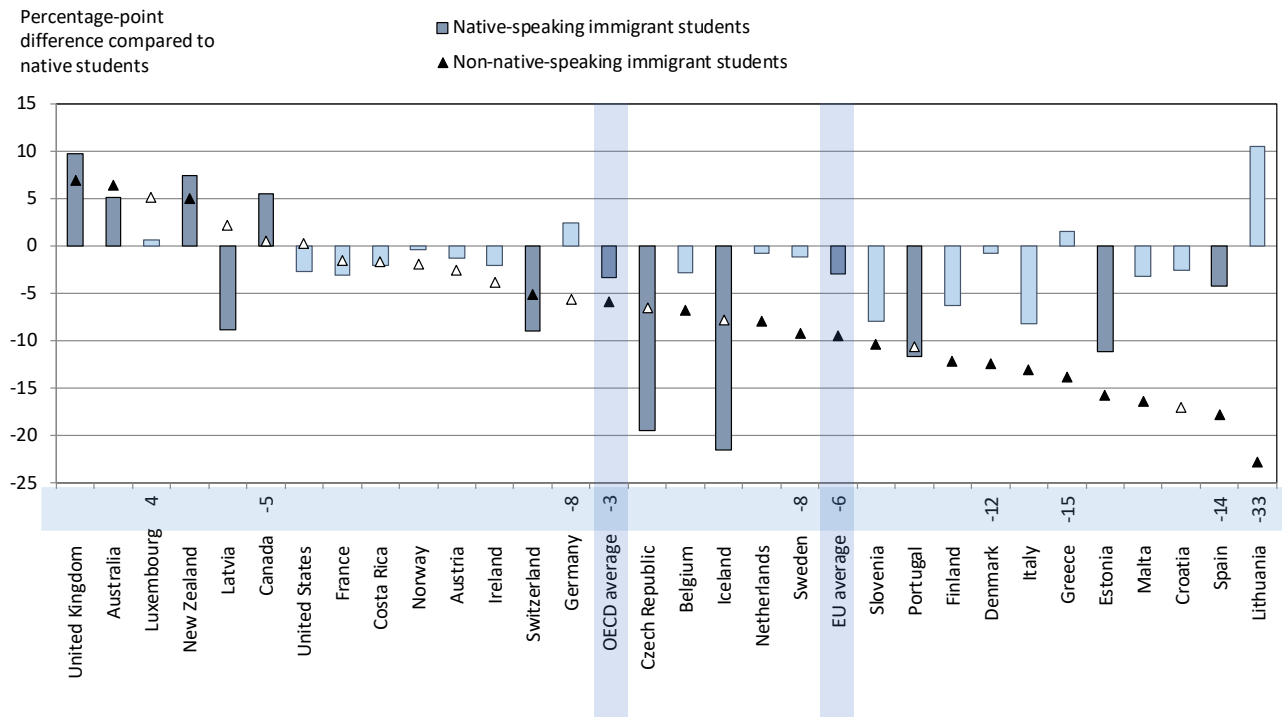
In most OECD countries, the percentage of non-native-speaking immigrant students who perform at proficiency Level 2 or higher in reading, mathematics and science is lower than the percentage of native students who do. In 2018, on average across OECD countries, 16 percentage points separated the two groups (20 percentage points on average across EU countries). In countries such as Finland, Lithuania and Sweden, the difference between the two groups was about 30 percentage points. Differences with natives were smaller for immigrant students who speak the language at home. These students were still less likely to attain baseline levels of proficiency compared to natives, but the average for OECD countries was 8 percentage points and about 9 for EU countries. In Lithuania, for instance, the gap was virtually reduced to zero, compared to the difference with non-native speakers. In Sweden and Finland, the gap remained but decreased down to 15 and 21 percentage points respectively. In other countries, including Canada, Croatia, Lithuania, Malta and New Zealand, native students and immigrant students who are native-language speakers stood an equal chance of reaching baseline levels of proficiency in all three subjects, while immigrant students who are non-native speakers were significantly less likely to achieve the same result. Croatia, Germany, Latvia and Lithuania had some of the largest gaps between non-native speaker and native-speaker immigrant students, between 19 and 30 percentage points. This suggests that, in these countries, fluency in the language of assessment is key to whether immigrant students attain the baseline level of proficiency in reading, mathematics and science, after accounting for socio-economic status.

### *Language proficiency and well-being*

Having a limited proficiency of the language of the host country can have a significant impact not only on students' academic outcomes, but also on their well-being. Figure 3.7 shows the percentage point differences in immigrant students who attain a baseline sense of belonging (i.e. who feel that they belong at school) compared to native students. In particular, Figure 3.7 shows that in a large number of OECD countries in 2018, non-native-speaking immigrant students were less likely than native and native-speaking immigrant students to feel like they belong at school. On average across OECD countries, the share of students who reported a sense of belonging was three percentage points smaller among non-native-speaking immigrant students than among native-speaking immigrant students (six percentage points in the EU) and six percentage points smaller than among native students (ten percentage points across EU countries). In some countries, native-speaking immigrant students were more likely to report that they feel like they belong at school, even compared to native students. In particular, in Austria, New Zealand and the United Kingdom, both non-native speaking and native-speaking immigrant students reported feeling a sense of belonging more than native students did. In other cases, such as Czech Republic, Ireland, Latvia and Switzerland, the percentage-point difference was larger between native-speaking immigrant students and natives than between non-native speaker and natives.

**Figure 3.7. Students reporting a sense of belonging at school, by immigrant background and language spoken at home**

After accounting for socio-economic status



Note: Statistically significant differences are marked in a darker tone.

Students who reported a sense of belonging at school are those who reported that they “agree” or “strongly agree” with the statement “I feel like I belong at school” and “disagree” or “strongly disagree” with the statement “I feel like an outsider at school”.

Native students are students without an immigrant background who speak most frequently at home the language of the PISA assessment.

Native-speaking students are students who speak most frequently at home the language of the PISA assessment.

Non-native-speaking students are those who reported that the language they most frequently speak at home is different from the language of the PISA assessment.

Only countries with valid values for both native- and non-native-speaking immigrant students are shown.

Statistically significant differences between non-native- and native-speaking immigrant students with at least one native-born parent are shown next to country/economy names. For the OECD and EU averages, this number refers only to the subset of countries/economies with valid information on both groups of students.

Countries and economies are ranked in descending order of the gap between non-native-speaking immigrant students and native students in the percentage of students who reported a sense of belonging at school, adjusted for socio-economic status.

Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

As mentioned, speaking a language at home that is different from the language of instruction is also associated with the emotional well-being of students, as measured by their satisfaction with life. While the 2018 Resilience report (OECD, 2018<sub>[5]</sub>) also analysed student well-being in relation to their self-reported levels of anxiety in 2015, this paper does not discuss this aspect as the indicator was not included in PISA 2018.

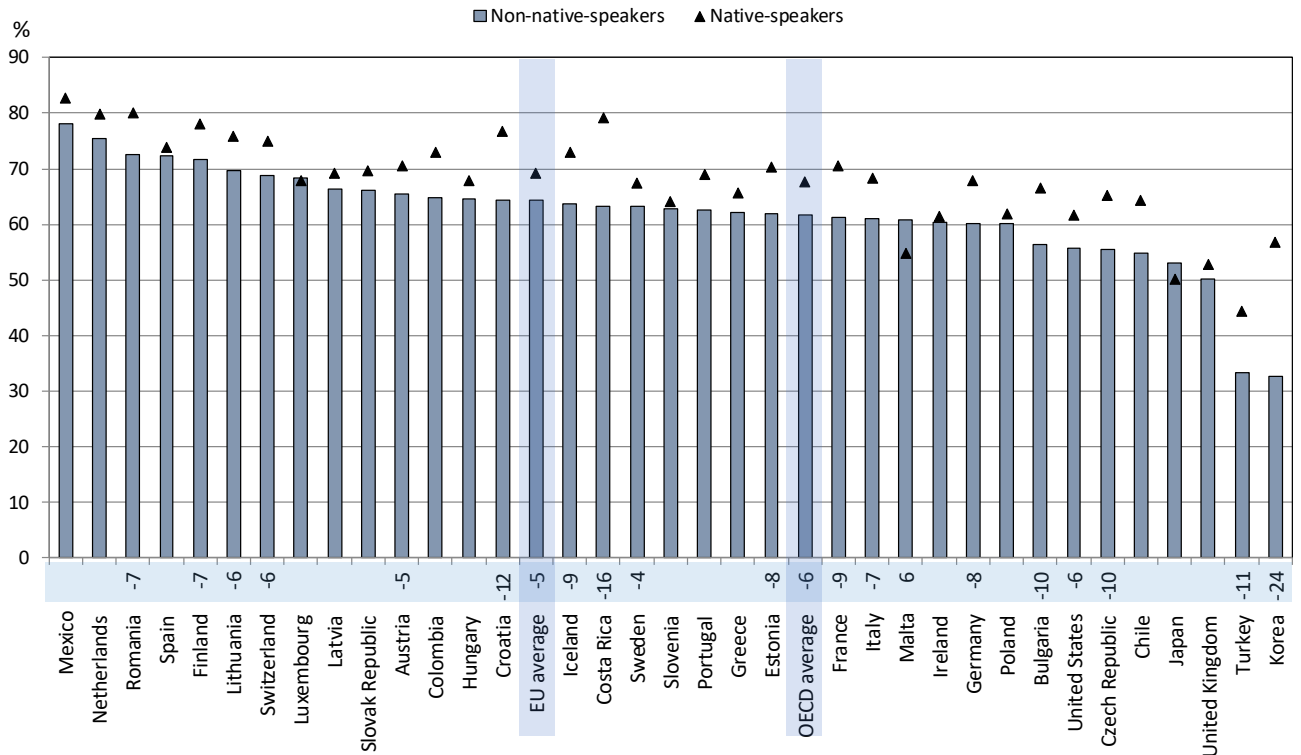
Figure 3.8 displays the percentage of students who reported being satisfied with life<sup>4</sup> among students who do and do not speak the language of assessment at home. In the great majority of countries, native-speaker students were more likely to report being satisfied with life than students who speak a

<sup>4</sup> Students who reported a life satisfaction of 7 or above on a scale from 0 to 10.

different language. On average across OECD countries, the share of students who reported being satisfied with life was 6 percentage points larger among native speakers than the share of non-native speakers (5 percentage points across the EU). In countries such as Bulgaria, Costa Rica, Croatia, Czech Republic, Korea and Turkey the difference between the two groups was particularly marked, with a difference of at least 10 percentage points.

**Figure 3.8. Life satisfaction, by language spoken at home**

Percentage of students who reported being satisfied with life



Notes: Statistically significant differences between non-native- and native-speakers are shown next to the country/economy name. Only countries/economies with valid data on native and non-native speakers are shown. Students who reported being satisfied with life are those who reported a life satisfaction of 7 or above on a scale from 0 to 10. Countries and economies are ranked in descending order of the percentage of non-native-speaking students who reported that they are satisfied with life. Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

### 3.2. Country of origin and host country as barriers to immigrant students' academic and well-being outcomes

The country immigrant students migrated from and the country in which they settle influence the likelihood that these students will be academically, socially and emotionally resilient. Immigrant students with the same heritage but living in different host countries are not equally likely to be academically or socio-emotionally resilient, after accounting for socio-economic status.

In many OECD countries, immigrant students have worse academic and well-being outcomes than native-born students. However, these outcomes need to be interpreted within the context of each country's population of immigrant students, which is shaped by each country's immigration policies (OECD, 2019<sub>[8]</sub>).

One component is whether the country has long-standing or more recent experience with immigrants, and whether they may be integration policies in place. Another component is admission criteria and whether they give preferential admissions to high-skilled immigrants or whether they also accept a greater share of low-skilled immigrants and refugees. In the former case, selection by skill can then also impact the attitudes these immigrants have towards education and the support they can provide to their children. Furthermore, countries vary considerably in the composition of their immigrant populations. Immigrants often choose destinations with colonial, linguistic or cultural links with their home country or already existing networks (OECD, 2019<sup>[8]</sup>).

Moreover, PISA data also show that students with an immigrant background are more likely than native students to work for pay or work in the household. The difference in likelihood to work for pay can be a particularly strong mediating factor between immigrant background and academic performance (OECD, 2018<sup>[5]</sup>). Generally, on average across OECD countries with available data, immigrant students were also less likely than native students to have participated in pre-primary programmes.

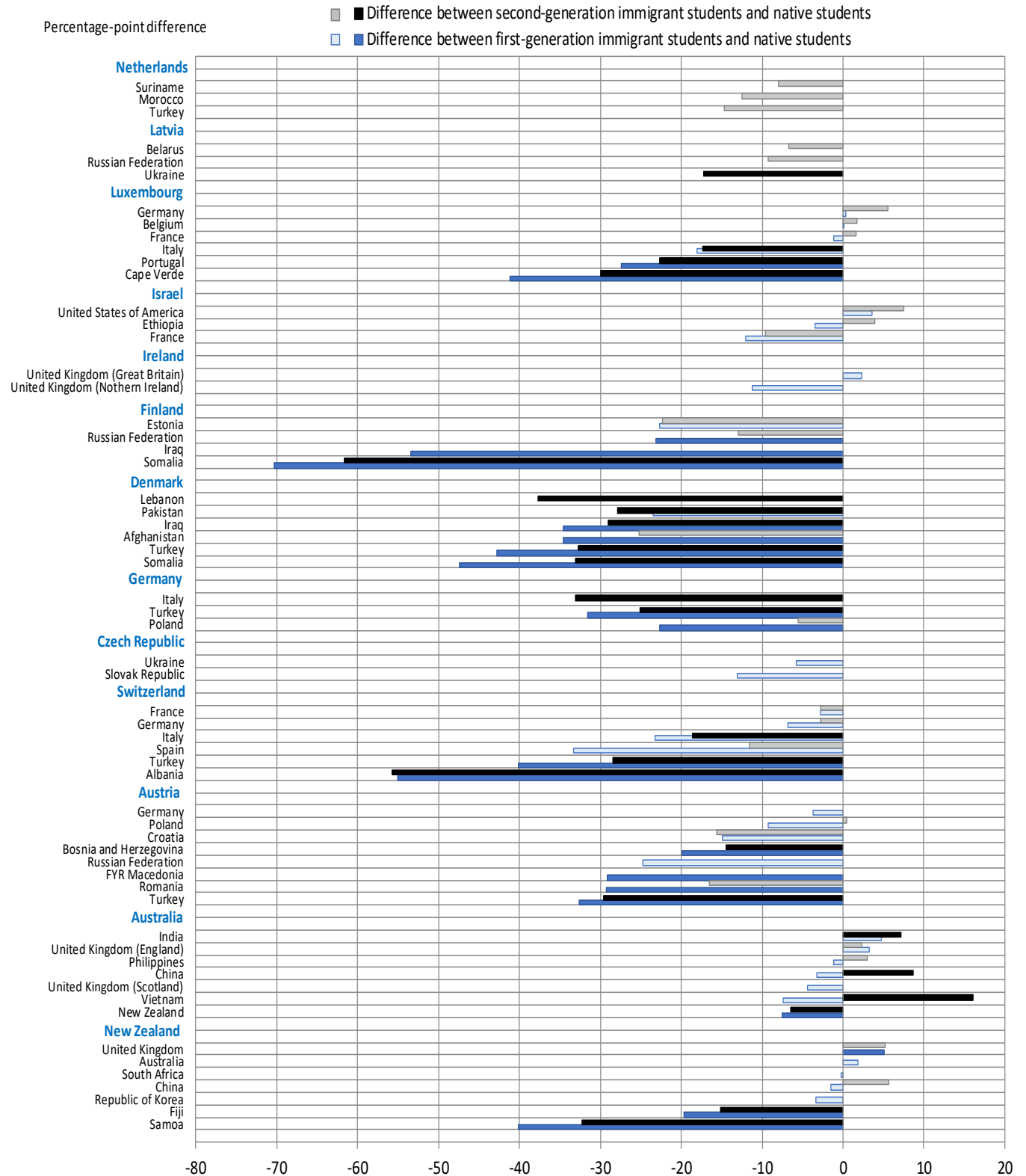
### ***Country of birth effects***

The academic performance of students with an immigrant background in their host country is generally correlated to their country of origin. Part of this relationship is explained by socio-economic and linguistic differences across countries, but other factors, such as cultural similarities and the quality of host- and origin- country education systems, also play a role (OECD, 2018<sup>[5]</sup>). Figure 3.9 illustrates these points by pooling data from PISA 2006, 2009, 2012, 2015 and 2018. For a selected group of countries with available information, the figure shows how immigrant students in the same host country and with similar socio-economic status perform depending on their country of origin. In particular, it compares the percentage of students who attain baseline levels of proficiency in the three PISA subjects among native students and first- and second-generation immigrant students from different countries. In this section, native-born students of foreign-born parents are considered second-generation immigrant students from a given country, when both their parents were born in that country, or one parent for students living in single-parent households. Native-born students of foreign-born parents born in two different countries are not considered in the analyses by country of origin.

For instance, in Finland academic performance varies greatly depending on immigrant students' countries of origin. First-generation immigrant students from Somalia were 70 percentage points less likely than native students to attain baseline proficiency, while students from Russia were only 23 percentage points less likely to do so. Considering instead second-generation immigrant students, the only significant difference with native students was again for students from Somalia, who displayed a gap of 62 percentage points. New Zealand, instead, shows a different pattern. While first-generation immigrant students from Samoa and Fiji appeared to be respectively 40 and 20 percentage points less likely than native students to attain baseline proficiency, students from the United Kingdom appeared to be 5 percentage points more likely to perform well than native students. Similar patterns appear in other countries, such as Luxembourg, where students from Cape Verde and Portugal showed a large gap, contrary to those from Belgium, France and Germany. The same pattern appeared in Switzerland between students from Albania and Turkey, opposite to those from France and Germany.

**Figure 3.9. Attaining baseline academic proficiency, by country of origin**

Difference between immigrant and native students in the percentage of students attaining baseline academic proficiency. Countries in blue denote the country of destination and countries in black denote the country of origin



Note: Estimates are obtained by pooling data from the PISA 2006, 2009, 2012, 2015 and 2018 databases.

Statistically significant differences are indicated in a darker colour.

Only countries with at least 30 immigrants attending at least 5 different schools from a minimum of 2 foreign countries were included in the analysis.

All estimates control for the socio-economic status of students.

Students who attain baseline academic proficiency are those who attain at least proficiency Level 2 in all three core PISA subjects: science, reading and mathematics.

Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021); OECD (2015<sub>[47]</sub>), PISA 2015 Database, <https://www.oecd.org/pisa/data/2015database/> (accessed on 17 May 2021); OECD (2012<sub>[48]</sub>), PISA 2012 Database, <https://www.oecd.org/pisa/pisaproducts/pisa2012database-downloadabledata.htm> (accessed on 17 May 2021); OECD (2009<sub>[11]</sub>), PISA 2009 Database, <https://www.oecd.org/pisa/data/pisa2009database-downloadabledata.htm> (accessed on 17 May 2021); OECD (2006<sub>[49]</sub>), PISA 2006 Database, <https://www.oecd.org/pisa/pisaproducts/database-pisa2006.htm> (accessed on 17 May 2021).

What could be the drivers of these differences across countries? On the one hand, socio-economic disparities between immigrant students from different countries account for a significant part of the academic gaps. Yet, they are not the sole explanation. First, all estimates presented account for students' socio-economic status. Second, in some countries, immigrant students from economically diverse countries have similar academic performance. For example, in Denmark, second-generation immigrant students from Iraq, Pakistan, Somalia and Turkey were between 28 and 33 percentage points less likely than native students to attain baseline academic proficiency. In Germany, second-generation immigrant students from Italy were 33 percentage points less likely than native students to attain baseline academic proficiency, while those from Turkey were 25 percentage points less likely than native students.

On the other hand, linguistic differences could also likely explain some of the academic gaps, such as the marked difference between French and Turkish immigrant students in Switzerland. However, they do not explain all the existing differences between groups with different country of origin. As mentioned above, Iraqi and Somali first-generation immigrant students in Finland were, respectively, similarly less likely than native students to attain baseline academic proficiency, and Arabic is a national language in both countries of origin.

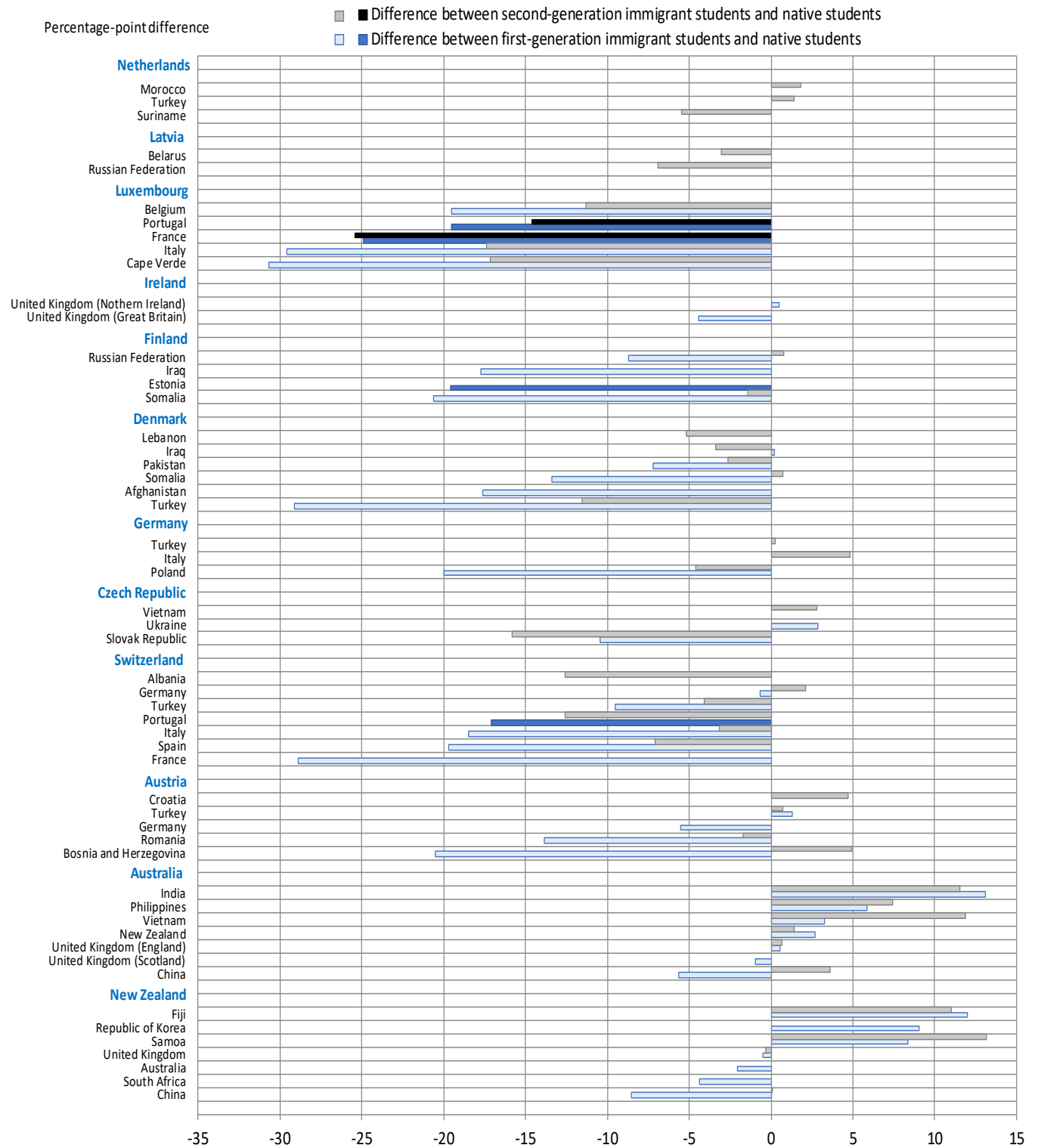
Moreover, the culture and education acquired before migrating are strongly related to the performance of first-generation immigrant students (OECD, 2018<sub>[5]</sub>). In Luxembourg, Italian and Portuguese first-generation immigrant students are likely to experience similar socio-economic and linguistic difficulties; however, the former groups of students was 18 percentage points less likely than native students to attain baseline academic proficiency in 2018, while the latter were 27 percentage points less likely.

Differences exist also between generations of immigrant students and their integration within host countries. Indeed, the barriers to academic achievement faced by immigrant students tend to be lower for second-generation immigrants. However, the extent to which they vary greatly across countries of origin and destination. For instance, in Switzerland, when compared to native students, Turkish first-generation immigrant students were 40 percentage points less likely to attain baseline academic proficiency, while second-generation immigrants were only 28 percentage points less likely to do so. In some countries, there were only marginal differences between first- and second-generation immigrant students in their academic performance, implying that barriers to achievement do not diminish substantially across generations. For example, in Finland, first- and second-generation immigrant students from Estonia were 22 percentage points less likely than native students to attain baseline academic proficiency.

Data from PISA 2018 show that the country of origin does not only influence students' academic achievement, but also their social well-being, measured as reported sense of belonging at school. Similarly to the previous figure, Figure 3.10 compares for a selected group of countries the percentage of students from different countries who reported a sense of belonging at school, compared to native students. All estimates account for students' socio-economic status and are obtained from pooled PISA 2003, 2012, 2015 and 2018 databases.

**Figure 3.10. Difference between immigrant and native students' sense of belonging at school, by country of origin**

Difference between immigrant and native students in the percentage of students reporting a sense of belonging at school. Countries in blue denote the country of destination and countries in black denote the country of origin





Notes: Estimates are obtained by pooling data from the PISA 2003, 2012, 2015 and 2018 databases.

Statistically significant differences are indicated in a darker colour

Only countries with at least 30 immigrants attending at least 5 different schools from a minimum of 2 foreign countries were included in the analysis.

All estimates control for the socio-economic status of students.

Students who report a sense of belonging at school are those who reported that they “agree” or “strongly agree” with the statement “I feel like I belong at school” and “disagree” or “strongly disagree” with the statement “I feel like an outsider at school”.

Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021); OECD (2015<sub>[47]</sub>), PISA 2015 Database, <https://www.oecd.org/pisa/data/2015database/> (accessed on 17 May 2021); OECD (2012<sub>[48]</sub>), PISA 2012 Database, <https://www.oecd.org/pisa/pisaproducts/pisa2012database-downloadabledata.htm> (accessed on 17 May 2021); OECD (2003<sub>[50]</sub>), PISA 2003 Database, <https://www.oecd.org/pisa/pisaproducts/database-pisa2003.htm> (accessed on 17 May 2021).

Some of the main determinants of the social well-being of immigrant students relate to the cultural differences between the heritage and host country’s culture. In Switzerland, first-generation immigrant students coming from Italy, Spain and Portugal were respectively 19, 20 and 17 percentage points less likely than native students to report a sense of belonging at school. By contrast, first-generation immigrant students from France were 29 percentage points less likely to report so, and those from Germany showed virtually no difference from native students.

The geographical proximity and the historical ties between two countries influence the flow of immigrants between the countries. Past migrant flows are reflected in the size of immigrant communities in host countries, which has an impact on the ease with which immigrant students can integrate and become socially resilient. For instance, in 2018, in Austria, first-generation immigrants from Turkey – which has a long history of immigration to the country – were as likely as native students to feel like they belong at school compared to French immigrants, while students from Bosnia and Herzegovina and Romania were less likely to do so (20 and 14 percentage points of difference).

Moreover, as for academic performance, also social well-being is impacted by generational integration as second-generation students are generally more likely to feel a sense of belonging to their school community. For instance, this was the case in 2018 of immigrant students from China in New Zealand, who showed a gap of 9 percentage points for the first-generation and no gap for the second generation. Similar patterns appeared across countries regardless of the country of origin of students, such as for students from Bosnia and Herzegovina and Romania in Austria, from Poland in Germany, and from Somalia in both Denmark and Finland.

### ***Country of destination effects***

The discussion above identifies some of the risk and protective factors associated with immigrants from different countries of origin moving to a specific country, such as their socio-economic status, the quality of education in the country of origin, and linguistic and cultural differences between origin and host countries. While these factors clearly matter, the performance of immigrant students is also strongly related to the characteristics of education systems in host countries. To illustrate this point, Figure 3.11 compares the academic performance of immigrant students from the same country of origin in different host countries. For countries of origin that took part in PISA, the result for the students who did not migrate and have native-born parents (i.e. native students) is also displayed. Estimates account for differences in socio-economic status and are obtained by pooling data from PISA 2006, 2009, 2012, 2015 and 2018.

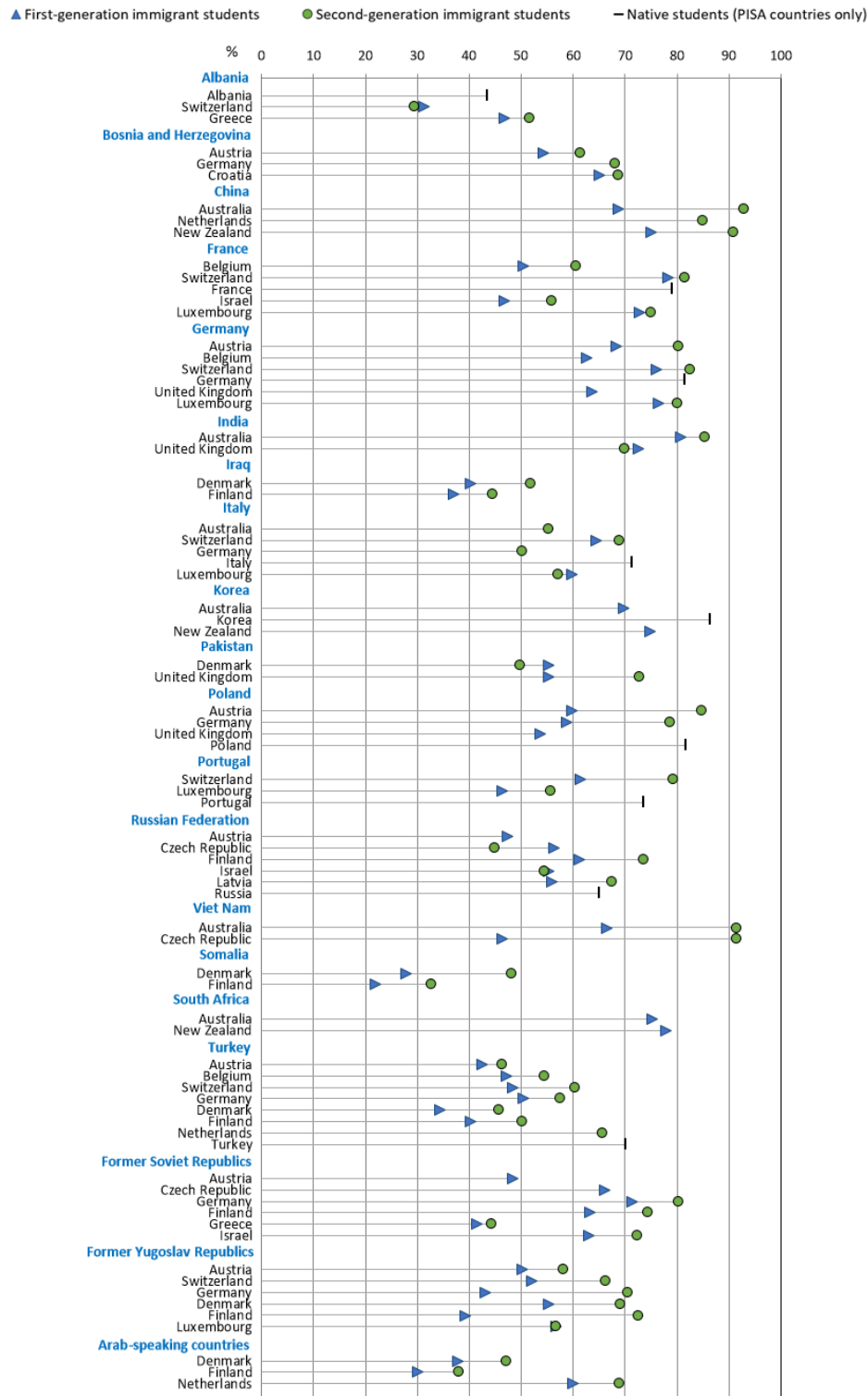
Results presented in Figure 3.11 show that immigrant students from the same country of origin - meaning that they were either born in that country or had both parents who were - have different likelihoods of being academically resilient depending on the country where they settle. After accounting for socio-economic status, first-generation immigrant students from Albania who settled in Greece were 16 percentage points more likely to attain baseline academic proficiency than those who settled in Switzerland, and about 4 percentage points more likely than those who sat the PISA test in Albania. Second-generation immigrant students from Italy who settled in Switzerland were about 14 points more likely to attain basic proficiency

than those who settled in Australia, and 19 percentage points more than those in Germany. As mentioned earlier for countries of origin, the geographical proximity of countries does play a role. Second-generation students from Russia, for instance, performed much better in Finland and Latvia (73% and 67% reach basic proficiency) than in the Czech Republic (45% reach basic proficiency). As there is a considerable Russian-speaking minority in Latvia, this could influence the outcomes of and the support received by second-generation students in the country.

Moreover, host communities that are culturally similar often have different capacities to nurture the talents of students with different academic and cultural backgrounds. For instance, students from Arab-speaking countries who settled in the Netherlands were about 30 percentage points more likely to be academically resilient compared to those who settled in Finland, and 22 points more likely than those who settled in Denmark.

**Figure 3.11. Attaining baseline academic proficiency, by host country**

Percentage of immigrant students from the same country of origin attaining baseline academic proficiency accounting for socio-economic status, by host country. Countries in blue denote the country of origin and countries in black denote the country of destination



Notes: Estimates are obtained by pooling data from the PISA 2006, 2009, 2012, 2015 and 2018 databases.

The average performance by immigrant group and host country accounts for differences in socio-economic status. It corresponds to the predicted performance of the group if all immigrant students who migrated from that country of origin and all the non-immigrant students across all the host countries shared the same socio-economic status of the average student.

Students who attain baseline academic proficiency are those who attain at least proficiency Level 2 in all three core PISA subjects: science, reading and mathematics.

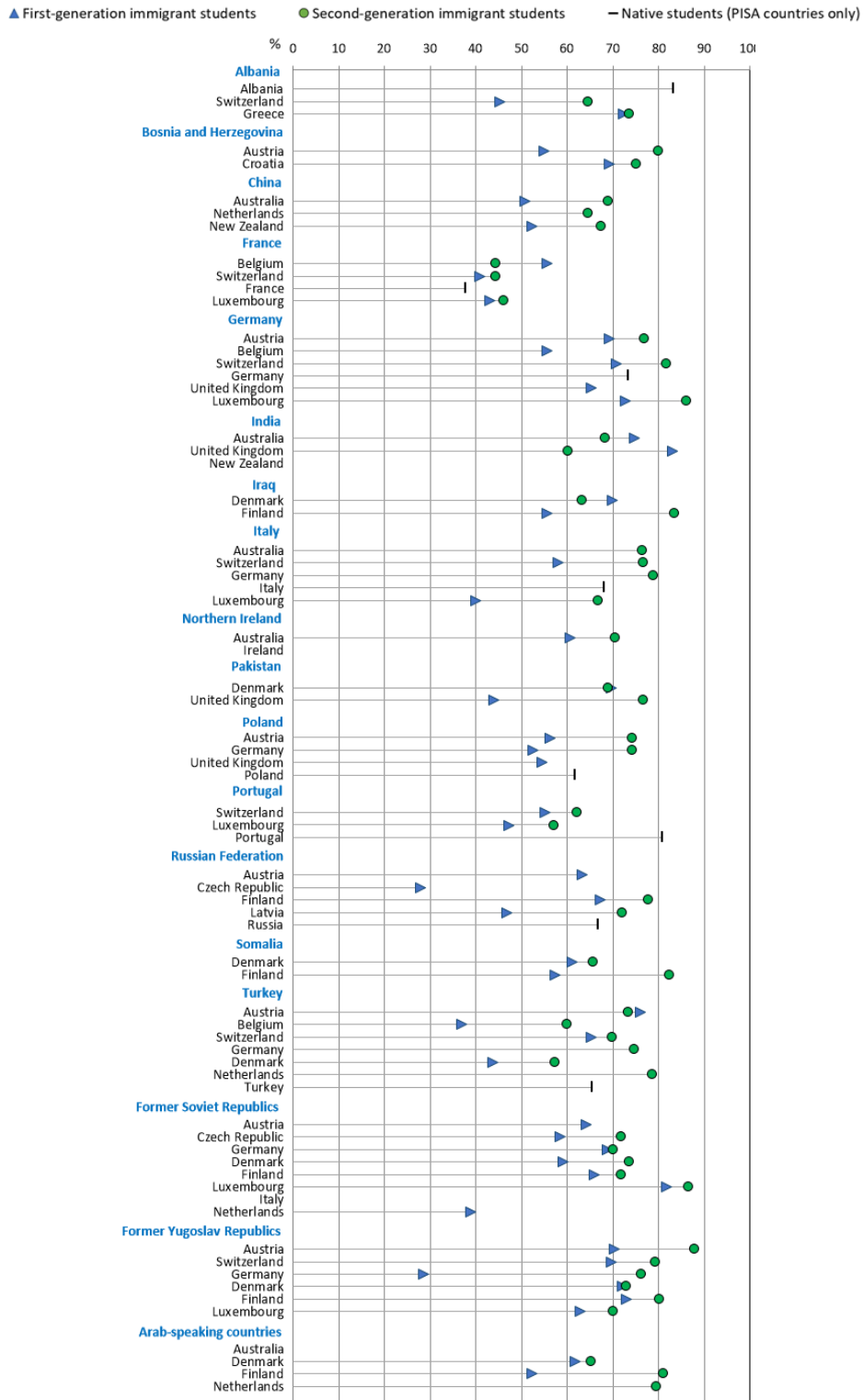
Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021); OECD (2015<sub>[47]</sub>), PISA 2015 Database, <https://www.oecd.org/pisa/data/2015database/> (accessed on 17 May 2021); OECD (2012<sub>[48]</sub>), PISA 2012 Database, <https://www.oecd.org/pisa/pisaproducts/pisa2012database-downloadabledata.htm> (accessed on 17 May 2021); OECD (2009<sub>[11]</sub>), PISA 2009 Database, <https://www.oecd.org/pisa/data/pisa2009database-downloadabledata.htm> (accessed on 17 May 2021); OECD (2006<sub>[49]</sub>), PISA 2006 Database, <https://www.oecd.org/pisa/pisaproducts/database-pisa2006.htm> (accessed on 17 May 2021).

Figure 3.12 is similar to the previous figure, but represents the percentage of immigrant students from the same country of origin in different host countries who reported a sense of belonging at school. Estimates account for differences in socio-economic status and are obtained by pooling data from PISA 2003, 2012, 2015 and 2018. Results show that the social well-being of immigrant students varies considerably according to the country in which they, or their parents, settled. First-generation immigrant students from Russia who settled in Finland were almost 40 percentage points more likely than those who settled in the Czech Republic to report a sense of belonging at school. First-generation students from Turkey reported a much higher sense of belonging in Austria than in Belgium or Denmark. Considering instead generational developments, the socio-emotional well-being of Turkish students improved substantially in Belgium, where the gap with those in Austria went from 39 percentage points for first generations to 13 percentage points for second generations.

**Figure 3.12. Sense of belonging, by host country**

Percentage of immigrant students from the same country of origin reporting a sense of belonging at school accounting for socio-economic status, by host country

Countries in blue denote the country of origin and countries in black denote the country of destination



Notes: Estimates are obtained by pooling data from the PISA 2003, 2012, 2015 and 2018 databases.

The average sense of belonging by immigrant group and host country accounts for differences in socio-economic status. It corresponds to the predicted sense of belonging of the group if all immigrant students who migrated from that country of origin and all the non-immigrant students across all the host countries shared the same socio-economic status of the average student.

Students who report a sense of belonging at school are those who reported that they “agree” or “strongly agree” with the statement “I feel like I belong at school” and “disagree” or “strongly disagree” with the statement “I feel like an outsider at school”.

Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021); OECD (2015<sub>[47]</sub>), PISA 2015 Database, <https://www.oecd.org/pisa/data/2015database/> (accessed on 17 May 2021); OECD (2012<sub>[48]</sub>), PISA 2012 Database, <https://www.oecd.org/pisa/pisaproducts/pisa2012database-downloadabledata.htm> (accessed on 17 May 2021); OECD (2003<sub>[50]</sub>), PISA 2003 Database, <https://www.oecd.org/pisa/pisaproducts/database-pisa2003.htm> (accessed on 17 May 2021).

The figure also shows that, in 2018, 83% of second-generation immigrant students from Iraq who live in Finland reported a sense of belonging at school, while only 63% of those who live in Denmark reported the same. Similarly, 82% of Somalian second-generation immigrant students who live in Finland reported a sense of belonging at school, while only 66% of those living in Denmark reported so.

These results suggest that the psychological well-being of immigrant students is affected not only by cultural or linguistic differences between the country of origin and the host country, but also by how schools and communities help these students deal with daily problems of living, learning and communicating.

In this context, a key issue for policy makers and school leaders is to understand teachers’ readiness to teach multicultural classes and, thus, it is important to examine how confident teachers feel about teaching a culturally diverse class (as discussed in Box 3.1).

### Box 3.1. Teacher readiness to support multicultural and multilingual classes (TALIS 2018)

Teachers’ readiness to support students with an immigrant background is a fundamental element for their integration in education systems. The OECD Teaching and Learning International Survey (TALIS) 2018 included several questions on teaching in diverse environments for teachers who have previously taught a classroom with students from different cultures (OECD, 2019<sub>[51]</sub>).

In particular, TALIS 2018 asked teachers to report on their preparedness for teaching in a multicultural or multilingual settings and the vast majority of teachers did not feel ready for the challenge at the time they completed their teacher education. More than 50% of teachers report that they were not well prepared to teach in a multicultural or multilingual setting in all OECD countries (Brussino, 2021<sub>[52]</sub>)

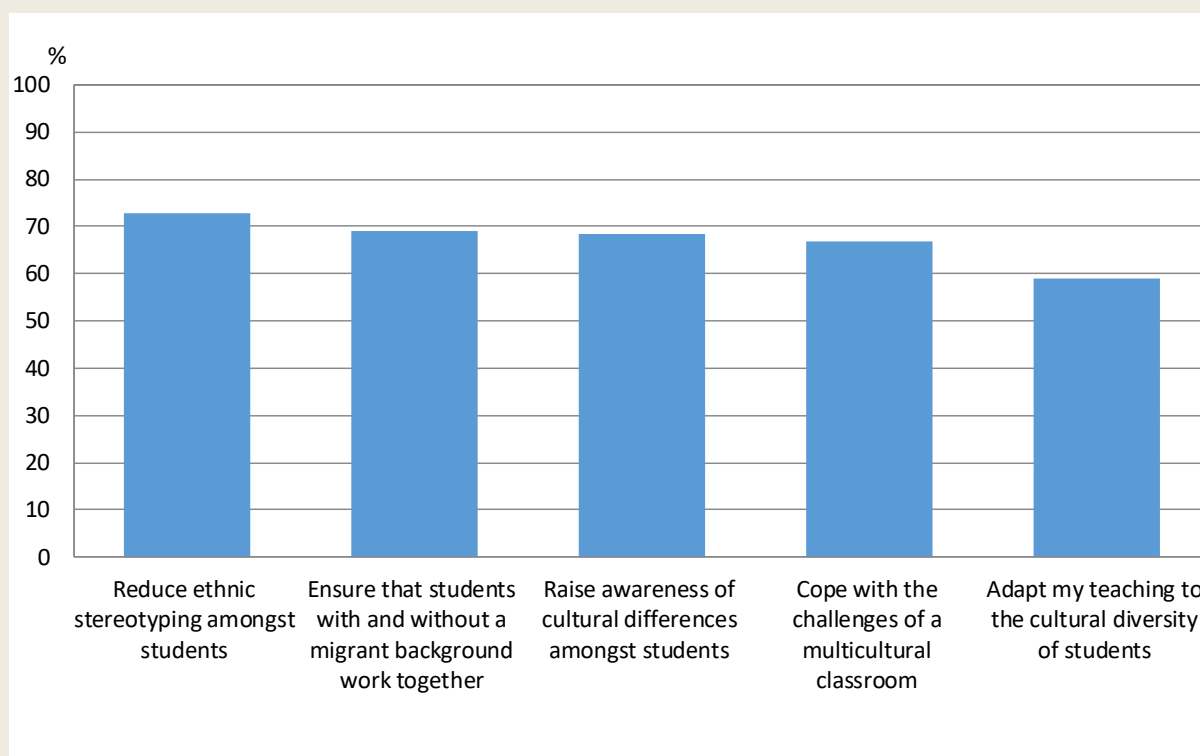
As shown in Figure 3.13, TALIS 2018 also asked teachers who have previously taught classrooms with students from different cultures a range of questions about their experience and self-efficacy teaching a culturally diverse class, and to what extent (“not at all”; “to some extent”; “quite a bit”; “a lot”) they could manage a number of aspects of teaching in multicultural contexts. Results show that, on average across the OECD:

- Teachers’ self-efficacy in multicultural settings was highest with respect to reducing ethnic stereotyping among students, with 73% of teachers feeling that they could do this “quite a bit” or “a lot”.
- Ensuring that students with and without a migrant background work together comes next, with 69% of teachers reporting high levels of self-efficacy in this area.
- 68% of teachers reported high levels of self-efficacy in raising awareness of cultural differences amongst students.
- 67% reported high levels of self-efficacy in coping with the challenges of a multicultural classroom.
- It is noteworthy that the proportion of teachers reporting high levels of self-efficacy drops to 59%

when it comes to adapting their teaching to the cultural diversity of students, i.e. much lower than for aspects related to promoting positive relationships and interactions between students from different backgrounds.

### Figure 3.13. Teachers' self-efficacy in teaching multicultural classes

Percentage of lower secondary teachers who feel they can do the following "quite a bit" or "a lot" in teaching a culturally diverse class



*Note:* The sample is restricted to teachers reporting that they have already taught a class with students from different cultures. Values are ranked in descending order of the percentage of teachers reporting that they feel they can do the following "quite a bit" or "a lot" in teaching a culturally diverse class.

*Source:* OECD (2018<sup>[53]</sup>), TALIS 2018 Database, Table I.3.38, <https://www.oecd.org/education/talis/talis-2018-data.htm> (accessed on 17 May 2021).

The data presented are in line with the finding that teachers reported a high need for continuous professional learning for teaching in a multicultural setting and for communicating with people from different cultures or countries, while having received little training on the topics during their studies. More specifically, in TALIS 2018, 15% of teachers reported a high need for continuous professional learning in teaching in a multicultural or multilingual setting (Brussino, 2021<sup>[52]</sup>). It also represents the third-highest area of need for professional learning reported by teachers, after teaching students with special education needs (22%) and information and communication technology (ICT) skills for teaching (17%). As mentioned, only 22% of teachers reported participating in training concerning teaching in multicultural settings, and 19% in communicating with people from different cultures.

*Source:* Brussino (2021<sup>[52]</sup>), Building capacity for inclusive teaching: Policies and practices to prepare all teachers for diversity and inclusion, OECD Education Working Papers, OECD Publishing, Paris, <https://dx.doi.org/10.1787/57fe6a38-en>; OECD (2019<sup>[51]</sup>), *TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners*, TALIS, OECD Publishing, Paris, <https://dx.doi.org/10.1787/1d0bc92a-en>.

## 4. The potential of students with an immigrant background: Motivation and expectations for the future

Holding higher education and career expectations can signal the desire of immigrant students to succeed and fulfil their ambitions in host countries. Looking at whether these expectations are aligned with the skills and academic proficiency held by immigrant students can be an indication of the potential that this student population can have. This can also allow education systems to understand the extent to which immigrant students have the skills necessary to match their ambitions and adequately support them in acquiring such skills. This section presents an overview of the education and career expectations that immigrant students have for their future based on data from PISA 2018.

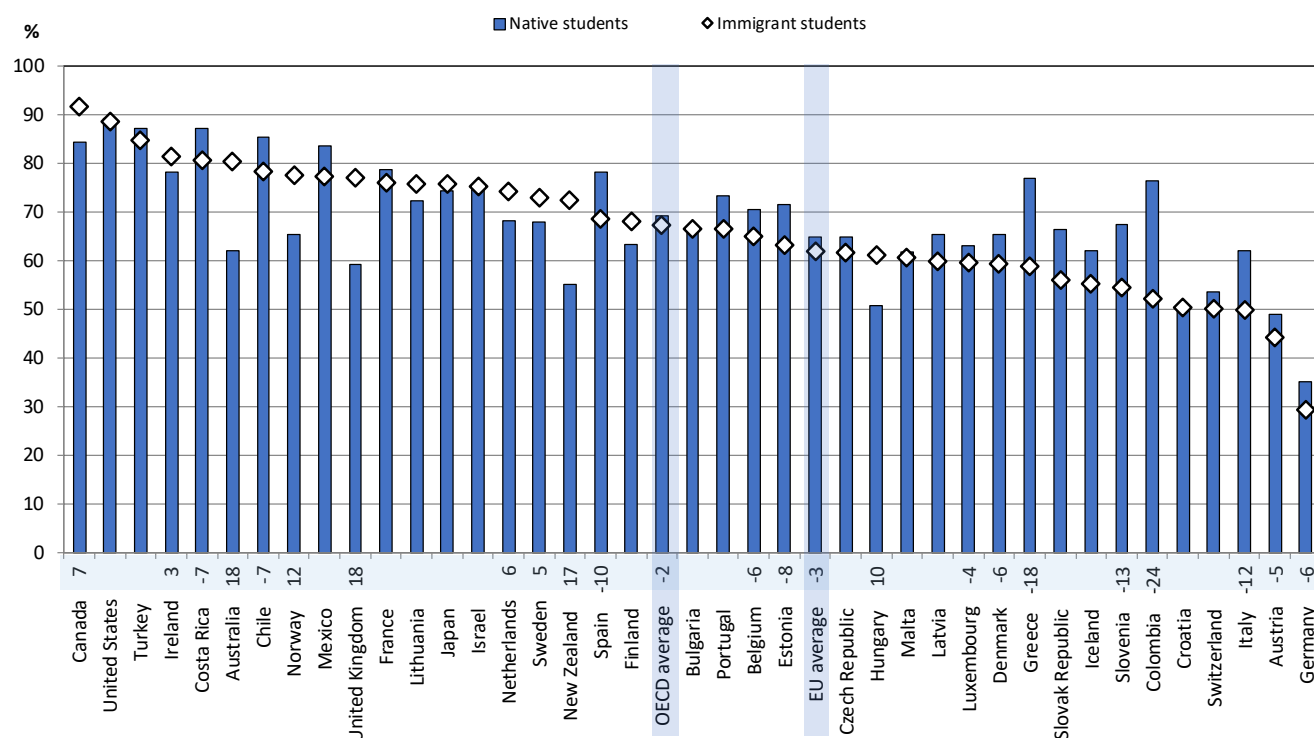
### 4.1. Educational expectations

As explained in OECD (2018<sup>[5]</sup>), holding ambitious educational expectations can lead students to be more willing to commit to their learning and be successful at it. In particular, students who hold ambitious educational expectations appear more likely to make effort in learning as well as capitalise on the educational resources available to pursue their educational goals (OECD, 2017<sup>[27]</sup>; OECD, 2012<sup>[54]</sup>). Eventually, students holding expectations to graduate from tertiary education are more likely to do so compared to students who do not hold educational expectations (OECD, 2012<sup>[54]</sup>).

Figure 4.1 illustrates differences in expectations to complete tertiary education between immigrant and native students reported in PISA 2018. Although on average across OECD countries students from an immigrant background were 2 percentage points less likely to expect to complete tertiary education compared to native students (and 3 percentage points across EU countries), there appears to be considerable variation across countries. In a number of countries, immigrant students were more likely to hold expectations to complete tertiary education compared to native students. This was the case of Australia (with immigrant students being 18 percentage points more likely to expect to complete tertiary education compared to native students), the United Kingdom (18 percentage points), New Zealand (17 percentage points), Norway (12 percentage points) Canada (7 percentage points), the Netherlands (6 percentage points), Sweden (5 percentage points), and Ireland (3 percentage points). In several other countries, the opposite held true, with immigrant students being significantly less likely to expect to complete tertiary education. These countries include, among others, Colombia (with immigrant students being 24 percentage points less likely to hold expectations to complete tertiary education), Greece (18 percentage points), Slovenia (13 percentage points), Italy (12 percentage points), Spain (10 percentage points), Estonia (8 percentage points), Costa Rica (7 percentage points), Chile (7 percentage points), Germany (6 percentage points) and Denmark (6 percentage points). In a few countries differences in expectations to complete tertiary education held by immigrant and native students were non-significant, such as in Bulgaria, Croatia, Israel and the United States.



Figure 4.1. Expectation to complete tertiary education, by immigrant background



Notes: Only countries with valid data for immigrant students are shown.

Statistically significant differences between immigrant and native students are shown next to country/economy names. For the OECD and EU average, this number refers only to the subset of countries/economies with valid information on both groups of students.

Countries and economies are ranked in descending order of the percentage of immigrant students who expect to complete tertiary education.

Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

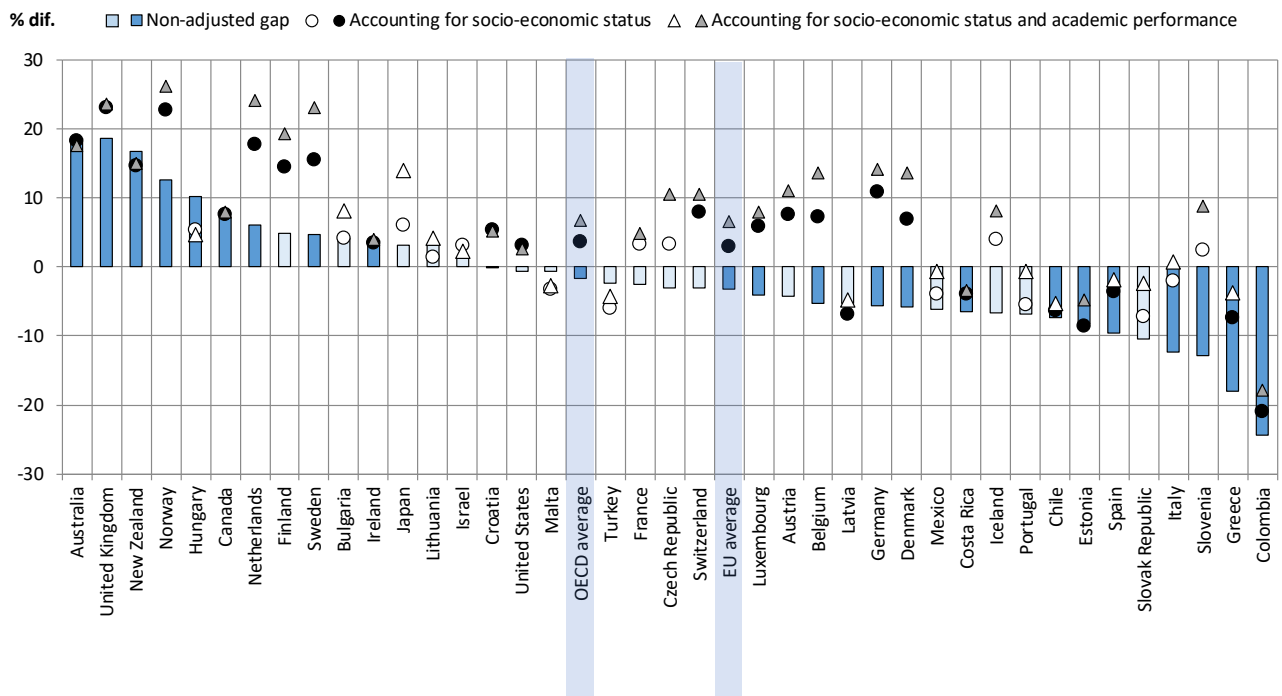
When comparing immigrant and native students with similar socio-economic status and academic performance, students from an immigrant background appear more likely to expect to complete tertiary education, as illustrated in Figure 4.2. After accounting for socio-economic status, students from an immigrant background were 4 percentage points more likely to hold expectations to complete tertiary education compared to native students, on average across OECD countries (and 3 percentage points across EU countries). When accounting for socio-economic status and whether a student attained baseline academic proficiency in science, reading and mathematics, the difference between immigrant and native students appeared even wider. When comparing students with similar socio-economic status and academic performance, immigrant students were 7 percentage points more likely to expect to complete tertiary education, on average across OECD countries (and 7 percentage points across EU countries).

After accounting for socio-economic status and academic performance, the difference in tertiary education expectations held by immigrant and native students was greatest in countries such as the Netherlands, Norway, Sweden and the United Kingdom, which all had at least a 20 percentage points difference favouring immigrant students. In these countries, the non-adjusted gap already favoured immigrant students. In other countries, before accounting for socio-economic status and academic performance, immigrant students appeared less likely to hold expectations to complete tertiary education compared to native students. However, after adjusting for socio-economic status and academic performance, the picture was reversed, with immigrant students being more likely to hold expectations to complete tertiary education compared to native students with similar characteristics. This was the case of, among others, Belgium, Denmark, Germany, Luxembourg and Slovenia. In countries such as Colombia, Costa Rica and Estonia,

immigrant students were also less likely to expect to complete tertiary education before accounting for socio-economic status and academic performance. After adjusting for socio-economic status and academic performance, the gap narrowed but persisted with immigrant students still being less likely to hold educational expectations compared to native students with similar characteristics.

**Figure 4.2. Difference in the expectation to complete tertiary education**

Difference between immigrant and native students



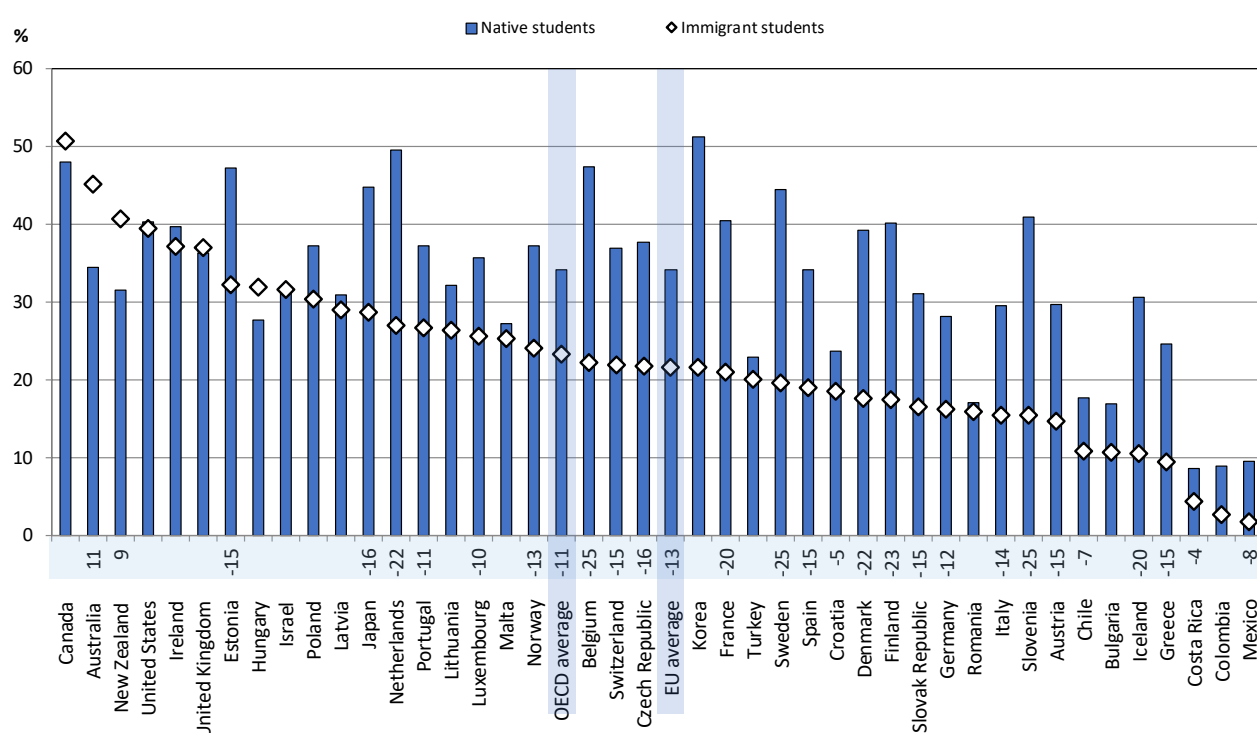
Notes: Only countries/economies with valid estimates of the immigrant-native gap are shown. Statistically significant differences are marked in a darker tone. Socio-economic status is measured by the PISA index of economic, social and cultural status (ESCS). Only students with non-missing values for the index are considered. Academic performance is measured by whether a student achieved at least PISA proficiency Level 2 in all three core PISA subjects – science, reading and mathematics. Countries and economies are ranked in descending order of the difference in the percentage of immigrant and native students who expect to complete tertiary education, before accounting for socio-economic status and academic performance. Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

PISA 2018 defines students with ambitious but realistic educational expectations as those who expect to complete tertiary education and also attain at least PISA proficiency Level 2 in all three core PISA subjects – science, reading and mathematics – and attain Level 4 in at least one core PISA subject. When students holding expectations to complete tertiary education have academic skills that match their expectations, they are more likely to attain their objectives (OECD, 2018<sub>[5]</sub>). Figure 4.3 illustrates the share of immigrant and native students who have expectations to complete tertiary education and baseline academic proficiency. On average across OECD countries, immigrant students were 11 percentage points less likely to hold ambitious but realistic educational expectations (and 13 percentage points across EU countries). This gap was wider and above 20 percentage points in Belgium, Denmark, Finland, France, Iceland, the Netherlands, Slovenia and Sweden. Only in a number of countries, including Australia and New Zealand,

the gap in ambitious but realistic educational expectations held by immigrant and native students favoured immigrant students, with a statistically significant difference of at least 9 percentage points. In other countries such as Israel, the United Kingdom and the United States the gap was rather small and not significant.

**Figure 4.3. Students with ambitious but realistic educational expectations, by immigrant background**

Percentage of students who expect to complete tertiary education and who attain baseline academic proficiency and at least attain Level 4 in one domain



Notes: Only countries with valid data for immigrant students are shown.

Statistically significant differences between immigrant and native students are shown next to country/economy names. For the OECD and EU average, this number refers only to the subset of countries/economies with valid information on both groups of students.

Students with ambitious but realistic educational expectations are those who expect to complete tertiary education (ISCED levels 5a and 6<sup>5</sup>) and also attain at least PISA proficiency Level 2 in all three core PISA subjects – science, reading and mathematics – and attain Level 4 in at least one core PISA subject.

Countries and economies are ranked in descending order of the percentage of immigrant students who expect to complete tertiary education and who attain baseline levels of academic proficiency.

Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

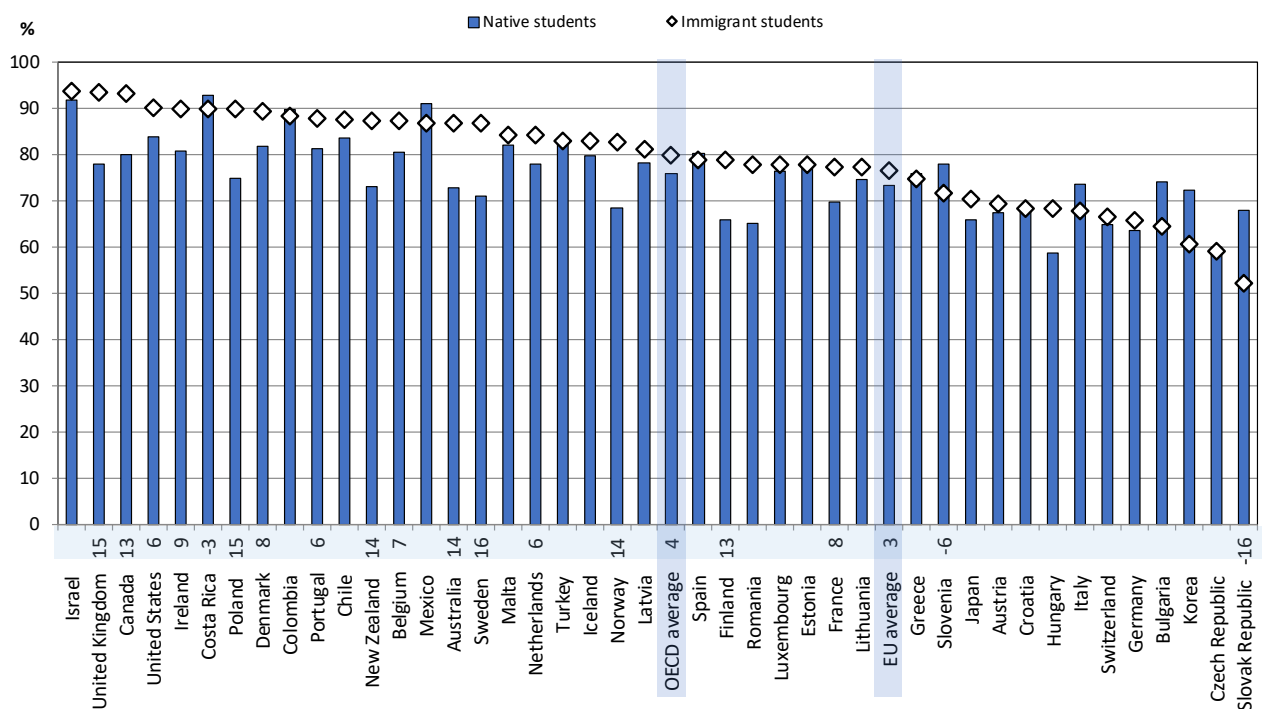
<sup>5</sup> The International Standard Classification of Education (ISCED) is the reference classification for organising education programmes and qualifications by education levels and fields. The levels are: ISCED 0: Early childhood education; ISCED 1: Primary education; ISCED 2: Lower secondary education; ISCED 3: Upper secondary education; ISCED 4: Post-secondary non-tertiary education; ISCED 5: Short-cycle tertiary education; ISCED 6: Bachelor's or equivalent level; ISCED 7: Master's or equivalent level; and ISCED 8: Doctoral or equivalent level (OECD/Eurostat/UNESCO Institute for Statistics, 2015<sub>[56]</sub>).

## 4.2. Career expectations

PISA 2018 provides an opportunity to learn about the career expectations that immigrant students have and whether these expectations are aligned with their skills and academic proficiency. In particular, by looking at ambitious career expectations as well as ambitious but realistic career expectations held by immigrant and native students assessed by PISA 2018, it is possible to gain an understanding of the aspirations and potential of immigrant students across OECD countries.

PISA 2018 defines students with ambitious career expectations those who expect to become managers, professionals or associate professionals and technicians by the age of 30. Figure 4.4 shows the percentage of immigrant and native students holding ambitious career expectations. On average across OECD countries, immigrant students were 4 percentage points more likely to hold ambitious career expectations compared to native students (and 3 percentage points across EU countries). This gap was wider and above 10 percentage points in countries such as Australia, Canada, Finland, New Zealand, Norway, Poland, Sweden and the United Kingdom. It was not significant and close to zero in countries such as Croatia and Turkey. In a smaller number of countries, the picture was reversed and immigrant students were less likely to hold ambitious career expectations compared to native students. This reversed gap was particularly wide and significant in the Slovak Republic (with immigrant students being 16 percentage points less likely to hold ambitious career expectations) and Slovenia (6 percentage points).

Figure 4.4. Ambitious career expectations, by immigrant background



Notes: Only countries with valid data for immigrant students are shown.

Statistically significant differences between immigrant and native students are shown next to country/economy names. For the OECD and EU average, this number refers only to the subset of countries/economies with valid information on both groups of students.

Students with ambitious career expectations are those who expect to become managers, professionals or associate professionals and technicians by the age of 30.

Countries and economies are ranked in descending order of the percentage of immigrant students with ambitious career expectations.

Source: OECD (2018<sub>[10]</sub>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

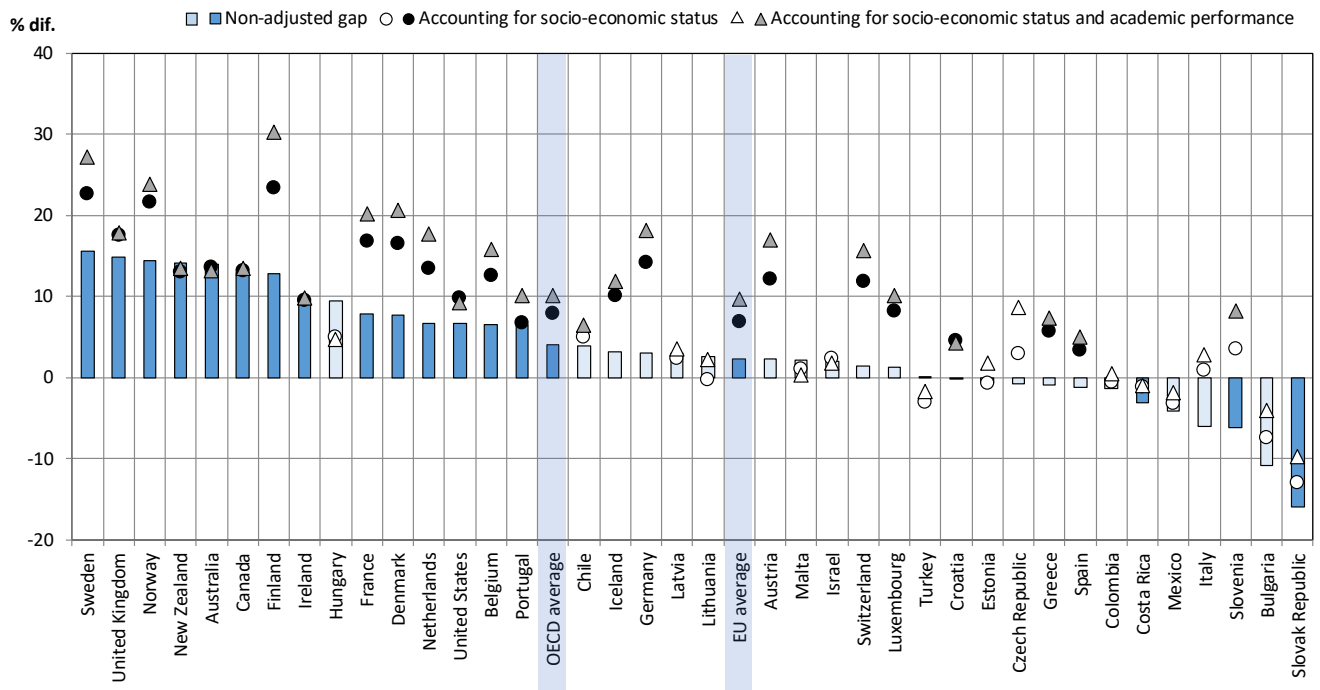
When adjusting the difference in holding ambitious career expectations between immigrant and native students for socio-economic status and baseline academic proficiency, the gap widens, as shown in Figure 4.5. On average across OECD countries, immigrant students were 8 percentage points more likely to hold ambitious career expectations compared to native students from similar socio-economic status (and 7 percentage points across EU countries). When accounting for socio-economic status and baseline academic proficiency, immigrant students were 10 percentage points more likely to hold ambitious career expectations than native students on average across OECD countries (and 10 percentage points across EU countries).

In most countries, before accounting for socio-economic status and baseline academic proficiency, immigrant students appeared more likely to hold ambitious career expectations compared to native students, with a positive un-adjusted difference in ambitious career expectations between the two student groups. After accounting for socio-economic status and baseline academic proficiency, the difference resulted wider and statistically significant in the majority of countries, meaning that immigrant students were on average considerably more likely to hold ambitious career expectations than native students sharing similar characteristics. This was the case of, among others, Sweden (from a non-adjusted difference of 16 percentage points to an adjusted difference of 27 percentage points), Norway (from 14 to 24 percentage points), Finland (from 13 to 30 percentage points), Denmark (from 8 to 21 percentage points) and France (from 8 to 20 percentage points). Among countries with a positive non-adjusted difference favouring immigrant students, only a few such as Australia and New Zealand saw the difference slightly narrowing after accounting for socio-economic status and baseline academic proficiency. In Ireland, the difference between immigrant and native students in terms of ambitious career expectations remained largely unchanged before and after accounting for socio-economic status and baseline academic proficiency.

In other countries, such as Costa Rica, Slovenia and the Slovak Republic, where immigrant students were less likely to hold ambitious career expectations compared to native students before accounting for socio-economic status and baseline academic proficiency, adjusting the difference for these factors leads to interesting findings. In Slovenia, for example, students from an immigrant background were 6 percentage points less likely to hold ambitious career expectations than native students before accounting for socio-economic status and baseline academic proficiency. When accounting for these factors, the situation appears reversed. In particular, immigrant students with a similar socio-economic background and baseline academic proficiency to native students were 8 percentage points more likely to hold ambitious career expectations than native students in the country.

Figure 4.5. Difference in holding ambitious career expectations

Difference between immigrant and native students



Notes: Only countries/economies with valid estimates of the immigrant-native gap are shown.

Statistically significant differences are marked in a darker tone.

Students with ambitious career expectations are those who expect to become managers, professionals or associate professionals and technicians by the age of 30.

Socio-economic status is measured by the PISA index of economic, social and cultural status (ESCS). Only students with non-missing values for the index are considered.

Academic performance is measured by whether a student achieved at least PISA proficiency Level 2 in all three core PISA subjects – science, reading and mathematics.

Countries and economies are ranked in descending order of the difference in the percentage of immigrant students and native students who hold ambitious career expectations.

Source: OECD (2018<sup>[10]</sup>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

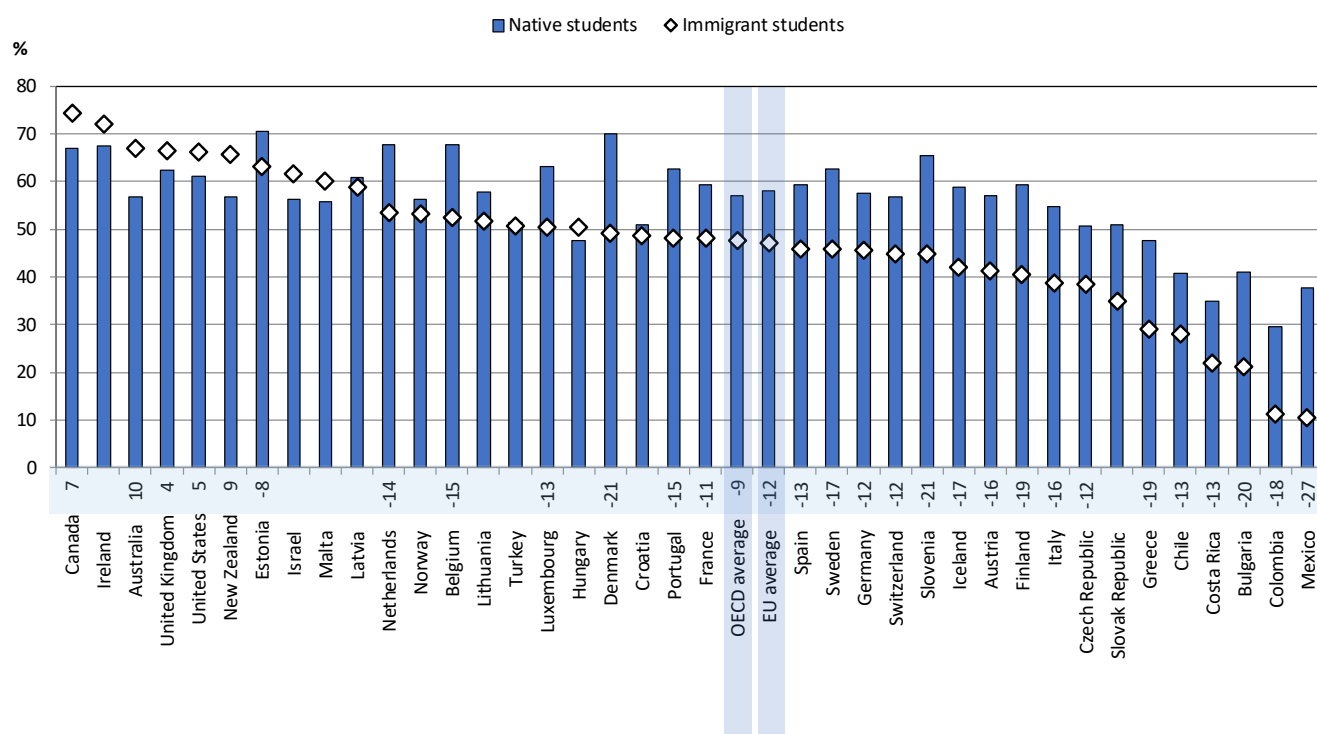
Figure 4.6 illustrates the difference between immigrant and native students in terms of ambitious but realistic career expectations held by students. PISA 2018 defines students holding ambitious but realistic career expectations as those who expect to become managers, professionals or associate professionals and technicians by the age of 30 and who achieved at least PISA proficiency Level 2 in all three core PISA subjects. Overall, immigrant students seem less likely to hold ambitious but realistic career expectations. On average across OECD countries, the difference between the share of immigrant and native students holding ambitious but realistic career expectations accounted to 9 percentage points (and 12 percentage points across EU countries).

In most countries, immigrant students were less likely to hold ambitious but realistic career expectations compared to native students. This gap was widest and above 20 percentage points in countries including Bulgaria, Denmark, Mexico and Slovenia. Only in a number of countries immigrant students were more likely to hold ambitious but realistic career expectations compared to native students. This was the case

of countries such as Australia, Canada, New Zealand, the United Kingdom and the United States, which had significant and positive differences between 4 and 10 percentage points.

**Figure 4.6. Students with ambitious but realistic career expectations, by immigrant background**

Percentage of students who hold ambitious career expectations and who attain baseline academic proficiency



Notes: Only countries with valid data for immigrant students are shown.

Statistically significant differences between immigrant and native students are shown next to country/economy names. For the OECD and EU average, this number refers only to the subset of countries/economies with valid information on both groups of students.

Students with ambitious but realistic career expectations are those who expect to become managers, professionals or associate professionals and technicians by the age of 30 and who achieved at least PISA proficiency Level 2 in all three core PISA subjects – science, reading and mathematics.

Countries and economies are ranked in descending order of the percentage of immigrant students who hold ambitious career expectations and who attain baseline academic proficiency.

Source: OECD (2018<sup>[10]</sup>), PISA 2018 Database, <http://www.oecd.org/pisa/data/2018database/> (accessed on 17 May 2021).

# Conclusions

Education plays a key role in promoting the integration of students with an immigrant background in host societies. It can help immigrants acquire skills to participate in the economy, promote their social and emotional well-being and support their social and civic participation in their communities. However, there are challenges for students with an immigrant background to achieve good academic and well-being outcomes since they need to overcome adversities related to displacement, socio-economic disadvantage and language barriers.

This paper builds on the similar analysis done with PISA 2015 regarding the resilience of students with an immigrant background (OECD, 2018<sup>[5]</sup>) and provides an updated overview of how migration flows continue to reshape the composition of classrooms in different education systems. The analysis of PISA 2018 data shows that, overall, differences persist between the outcomes of immigrant and native students as well as between different groups of immigrant students. Students with an immigrant background in many education systems are at an increased risk of academic underperformance, a low sense of belonging to their school community and low life satisfaction. Yet, many express high levels of motivation to achieve in school and beyond. These findings are similar to those in the earlier 2018 Resilience report (OECD, 2018<sup>[5]</sup>). Nonetheless, there is considerable variation in outcomes of students with an immigrant background across countries.

A relevant contribution of this paper is that it not only identifies possible effects of having an immigrant background, but it also underlines relevant differences between immigrant groups. Consequences of an immigrant background sometimes span over more than one generation – as it happens for academic underachievement of second-generation immigrant students – while others pan out in a non-linear way, depending on students' individual characteristics. The analysis also shows that factors such as late arrival in the host country, language spoken at home, and the country of origin and destination, can have different impacts on students with an immigrant background. In many OECD countries, fluency in the language of assessment is not only key to whether immigrant students attain the baseline level of proficiency in reading, mathematics and science, but also whether they report a sense of belonging to the host community.

The capacity of different countries to integrate students with an immigrant background also matters as students from the same country of origin appear to achieve different outcomes depending on the host country and its education system. Some factors, including cultural and geographical proximity as well as generational integration, appear to be mediating this relationship and are among the determinants of the broader well-being of immigrant students. Furthermore, the country's length of experience with immigration and its immigration policies can also influence the composition of immigrants as well as their integration potential.

This paper provides an up-to-date overview of the resilience of students with an immigrant background across OECD countries as of 2018, identifying key barriers to the academic, socio-emotional and motivational well-being of these students. It enables a comparison across education systems and provides evidence for countries to reflect on key policy areas to develop more effective responses. Supporting students with an immigrant background can help education systems develop adequate responses to tackle



underachievement and poor student well-being more generally. It can also support classrooms in becoming inclusive and responsive to individual student needs (OECD, 2018<sup>[5]</sup>).

Education systems can thus be equipped with the necessary knowledge of the determinants of immigrant students' well-being to respond more effectively to their needs and promote their integration in education and beyond. Concrete examples of education policies and practices that could help students with an immigrant background reach their academic potential, become better socially integrated, emotionally adjusted and motivated to achieve can be found in previous OECD work (OECD, 2018<sup>[5]</sup>; OECD, 2019<sup>[55]</sup>). Ultimately, education systems should seek to move beyond the integration of students with an immigrant background to the inclusion of all students.

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