



## **Performance and academic resilience amongst students with an immigrant background**

This chapter examines the reading performance of immigrant students across PISA-participating countries and economies. It investigates how these students' circumstances are related to their performance in reading. The chapter also explores the factors that are associated with academic resilience, and shows how resilience is related to students' well-being.

The number of students with an immigrant background has grown considerably over the past 20 years in most OECD countries. In 2015 alone, an estimated 4.8 million immigrants arrived in OECD countries, a wave that reinforced a long and steady upward trend (OECD, 2018<sup>[1]</sup>). How schools and education systems respond to the challenges and opportunities that arise with immigrant flows has profound implications for the economic and social well-being of all members of society, including immigrants themselves.

In the majority of countries, non-immigrant students outperformed their first- and second-generation immigrant peers. This finding has held true across previous cycles of PISA, and has been shown to be related to the socio-demographic circumstances of immigrant students (OECD, 2016<sup>[2]</sup>). However, this pattern was not observed in all countries. For example, in Australia and Canada, immigrant students performed as well as their non-immigrant peers; and across many countries a sizeable proportion of immigrant students were able to attain at least minimum levels of performance despite the overwhelming odds against them. So how do immigrant students in some education systems manage to score as high as their non-immigrant peers? What makes immigrant students academically resilient?

### What the data tell us

- On average across OECD countries, 13% of students in 2018 had an immigrant background, up from 10% in 2009. In most countries, immigrant students tended to be socio-economically disadvantaged, with the largest proportions in Austria, Denmark, Finland, France, Germany, Greece, Iceland, the Netherlands, Norway, Slovenia and Sweden, where at least 45% of immigrant students were disadvantaged.
- The average difference in reading performance between immigrant and non-immigrant students across OECD countries is 41 score points in favour of non-immigrant students. The difference shrinks to 24 score points after accounting for students' and schools' socio-economic profile.
- Across all countries with a relatively large proportion of immigrant students, segregation of immigrant students across schools is the most prevalent in Brunei Darussalam, Denmark, Estonia, Finland, Kazakhstan, Lebanon, Malta, Panama, Portugal, Saudi Arabia and the United Kingdom.
- Even though, in some countries, immigrant students tend to be disadvantaged, some are able to attain academic excellence. On average across OECD countries, 17% of immigrant students scored in the top quarter of reading performance in the country where they sat the PISA test. In Brunei Darussalam, Jordan, Panama, Qatar, Saudi Arabia and the United Arab Emirates, more than 30% of immigrant students performed at that level.

This chapter highlights the association between students' immigrant background and their academic performance, and explores immigrant students' academic resilience and well-being. It examines two dimensions of equity: inclusion, which refers to the objective of ensuring that all students acquire a minimum level of skills, regardless of their socio-economic status and immigrant background; and fairness, which involves removing barriers to student achievement that arise from circumstances over which students have no control, such as their immigrant background.

The following sections examine the reading performance of immigrant students across PISA-participating countries and economies. They investigate whether and how some of the circumstances surrounding these students (e.g. socio-demographic background, language spoken at home, engagement with reading, support at school, and personal attitudes and dispositions) are related to their performance in reading. The chapter also examines the factors that are related to academic resilience, and shows how resilience is related to students' well-being.

When examining the outcomes of immigrant students across countries, it is important to keep in mind that countries' immigration policies vary widely. Moreover, within each country, immigrant students are a diverse group, coming from different countries, cultures and socio-economic circumstances, and speaking different languages. While immigrant students tend to be socio-economically disadvantaged, this is not always the case. Existing evidence suggests that immigrant students' performance is shaped by a plethora of factors. For example, family circumstances affect the amount of resources students have at their disposal, and how much parental attention and support they receive. At the school level, education policies determine the characteristics of the schools immigrant students attend (Buchmann and Parrado, 2006<sup>[3]</sup>). At the country level, social policies define the environment in which immigrant students, schools and communities evolve and ultimately determine how successfully immigrant students integrate into their host communities.

Thus, when conducting cross-country analyses it is important to take into account the nature and selectivity of national immigration policies, which affect the composition of the immigrant student population. In addition, given the nature of a

country's immigration system, comparisons between first- and second-generation immigrant students and their non-immigrant peers are essential for exploring the association between student background and school profile on performance at school. Box II.9.2 shows how immigration policies vary across PISA-participating countries and economies.

### Box II.9.1. Who is an immigrant student?

In PISA 2018, students were classified into several categories based on their and their parents' immigrant background. This chapter is concerned with three categories of students:

**Non-immigrant students**, who are students whose mother or father (or both) was/were born in the country/economy where the student sat the PISA test, regardless of whether the student him/herself was born in that country or economy.

**Immigrant students**, who are students whose mother and father were born in a country/economy other than that where the student sat the PISA test. Amongst immigrant students, a distinction was made between first- and second-generation students, based on whether the student was born in or outside the country/economy of assessment.

- **First-generation immigrant students** are foreign-born students whose parents are both foreign-born
- **Second-generation immigrant students** are students born in the country of assessment but whose parents are both foreign-born.

In some analyses, these two groups of immigrant students are considered separately; in others, the two groups are combined.

### Box II.9.2. Immigration policies and the composition of the immigrant student population

In most PISA-participating countries/economies, immigrant students perform worse than their non-immigrant peers. However, these performance differences must be interpreted within the context of each country's population of immigrant students, which is shaped by each country's/economy's immigration policies. For example, immigration is a relatively new phenomenon in some countries, while it has been a feature of other countries for decades. In the latter cases, many immigrant students may be second- or third-generation immigrants, and there may be social and economic policies in place to help them integrate into their host societies, something that might be absent in countries where immigrants have only recently begun to arrive.

The criteria used for admitting immigrants into countries vary considerably. Some countries give preferential admissions to highly educated immigrants, while others accept a greater share of low-skilled immigrants or humanitarian migrants, refugees and asylum-seekers. Parents who are more educated might value education more for their own children and may be better placed to assist with homework or navigate the destination country's education system, facilitating their children's academic success.

In addition, countries/economies differ markedly in the composition of their immigrant populations. Migrants often choose destinations that have colonial, linguistic or cultural links with their home country or where there is a large community of their compatriots; some may choose to move to countries closer to home.

Across most countries and economies, immigrant populations are far from homogeneous. The diversity of immigrants' geographic and cultural origins is usually mirrored in linguistic diversity: large numbers of immigrant students speak a language at home that is different from the language of instruction in the host community's schools.

OECD countries (and several partner countries and economies) can be grouped into a few categories according to the characteristics of their immigrant populations. Amongst countries with large immigrant populations, five such groups can be identified:

1. **Settlement countries**, where immigration has contributed to the country's development and is considered to be part of its heritage and history. In these countries, around one in two people is either foreign-born or has at least one foreign-born parent, and there are large proportions of highly educated immigrants. These countries include Australia, Canada, Israel and New Zealand.

...

2. **Long-standing destination countries with many recent and highly educated immigrants**, including Luxembourg, Switzerland and the United Kingdom, where many recent immigrants arrived through free movement in the EU/EFTA for labour purposes. The United States can also be included in this group of countries, although its more recent arrivals include large numbers of low-educated immigrants from Latin America. In some of these countries there are also many settled, low-educated immigrants with second-generation immigrant children.
3. **Long-standing destination countries with many settled, low-educated immigrants**. Guest workers came to these countries after World War II for what were often supposed to be temporary stays, but many settled permanently. There are many second- and third-generation immigrant children and relatively fewer new immigrants in these countries. Immigrant adults have relatively poor employment rates and are socio-economically disadvantaged compared to the native population. This group of countries includes Austria, Belgium, France, Germany and the Netherlands. In recent years, some of these countries have welcomed a substantial number of new humanitarian immigrants in addition to low-qualified workers moving across member countries of the European Union.
4. **Countries with large populations of recent immigrants and humanitarian migrants**. Much of the immigrant population arrived after 2000 and the vast majority did not speak the language of the destination country upon arrival. Immigrants in these countries tend to be disadvantaged compared to the non-immigrant population, but these destination countries have strong integration policies. These countries include Denmark, Finland, Norway and Sweden.
5. **New destination countries with large populations of low-educated immigrants**. These immigrants came to fill low-skilled, manual labour jobs and arrived in significant numbers in the early 2000s. Most of them are either young and childless or have left their children in their home countries. The immigrant children who have grown up in these destination countries tend to have poorer outcomes than their native-born peers. Greece, Italy, Portugal and Spain are included in this group.

Amongst countries with smaller shares of immigrants, relative to the native-born population, another three groups can be distinguished:

6. **New destination countries with many recent, highly educated immigrants**. These countries have received increasing numbers of labour migrants, especially over the past decade, many of whom are highly skilled and come from high-income countries. Overall integration outcomes tend to be good relative to other new destination countries, although many highly educated immigrants are considered to be overqualified in the labour market. These countries include Iceland, Ireland and Malta.
7. **Countries with an immigrant population shaped by border changes and/or by national minorities**, where the majority of the foreign-born population “arrived” as a result of border changes or nation-building in the late 20th century. This immigrant population is an ageing group with social and economic outcomes that are often similar to, if not better than, those of their native-born peers. Most of these countries are located in Central and Eastern Europe. They include Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic and Slovenia.
8. **Emerging destination countries with small immigrant populations**. This group of countries is composed of OECD countries where less than 2% of the population is foreign-born, but where the share of foreign-born residents has more than doubled since 2000 and where integration outcomes vary widely. Countries in this group include Bulgaria, Chile, Japan, Korea, Mexico, Romania and Turkey.

Even within groups of countries in similar circumstances, there are wide disparities in integration outcomes. This suggests that policies have a key role to play. Integration policies, and extra support targeted towards immigrant families and children, can make a significant difference in how immigrant students fare in their host communities.

In this chapter and in Chapter 10, the typology of immigration systems is used to inform the interpretation of findings whenever it helps. However, in many instances the results do not fit the typology neatly. In such cases, results are interpreted with caution and without making generalisations about groups of countries. Moreover, some countries may fit into more than one group or may have changed group over time.

**Sources:** (OECD/EU, 2018<sup>[4]</sup>)

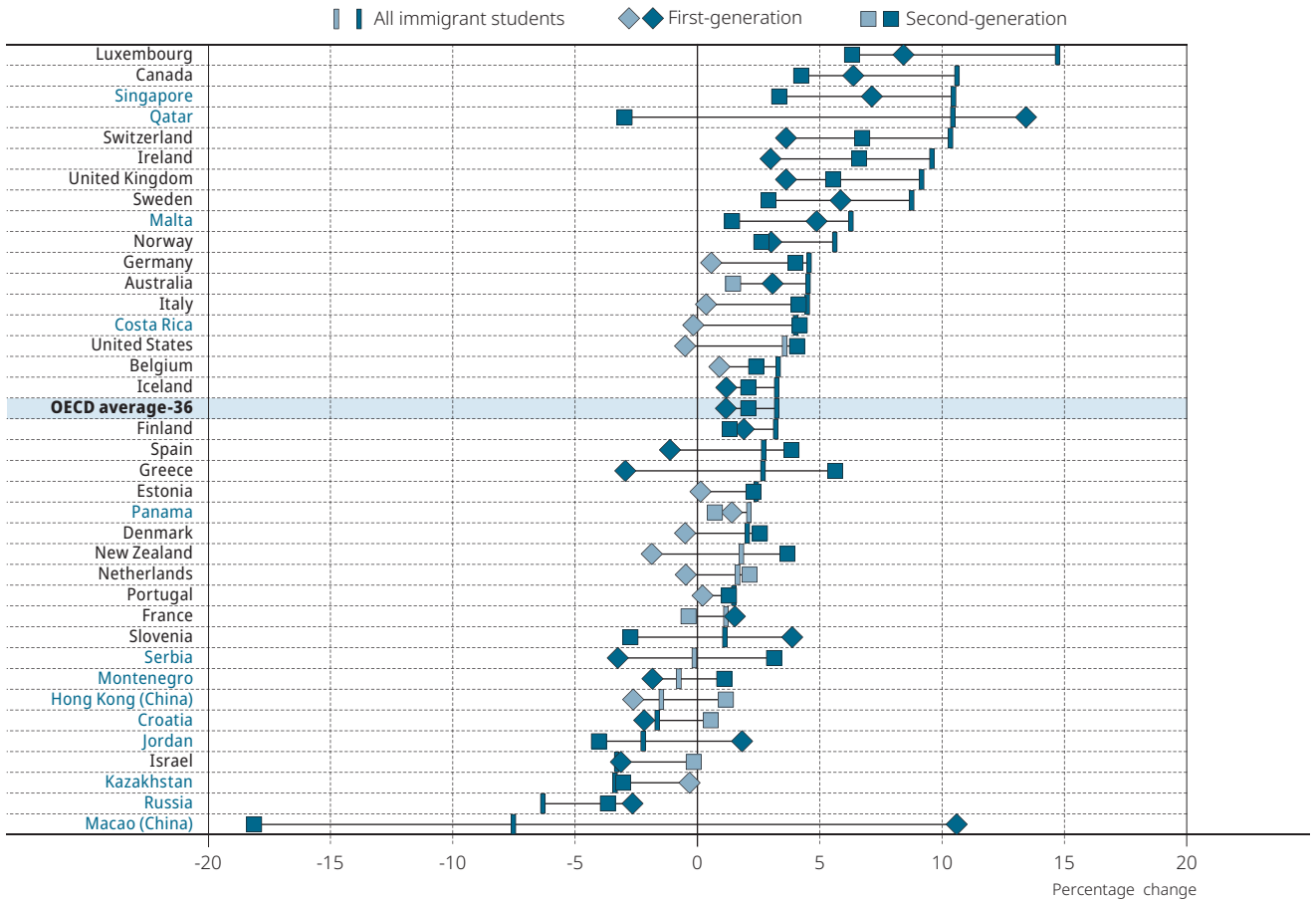


In the following sections, the figures show results only for countries where, in 2018, more than 5% of 15-year-old students had an immigrant background. This threshold is equal to half of the average percentage of immigrant students across all OECD countries. The countries where more than 5% of students had an immigrant background are, in descending order of this proportion: Macao (China), Qatar, the United Arab Emirates, Luxembourg, Hong Kong (China), Canada, Switzerland, Australia, New Zealand, Singapore, the United States, Austria, Germany, Sweden, the United Kingdom, Belgium, Ireland, Israel, France, the Netherlands, Norway, Spain, Saudi Arabia, Greece, Jordan, Denmark, Estonia, Italy, Costa Rica, Serbia, Croatia, Slovenia, Malta, Kazakhstan, Brunei Darussalam, Portugal, Lebanon, Panama, Montenegro, Finland, the Russian Federation (hereafter "Russia"), Iceland and Baku (Azerbaijan). More than 50% of students in Luxembourg, Macao (China), Qatar and the United Arab Emirates had an immigrant background.

**A PROFILE OF IMMIGRANT STUDENTS**

Figure II.9.1 shows the change between 2009 and 2018 in the percentage of first- and second-generation immigrant students. On average across OECD countries, the proportion of students who reported an immigrant background increased by 3 percentage points – from 10% to 13% – during that period. Amongst countries and economies where, in 2018, more than 5% of students had an immigrant background, the largest increases occurred in Canada, Ireland, Luxembourg, Malta, Norway, Qatar, Singapore, Sweden, Switzerland and the United Kingdom, with a minimum increase of 5 percentage points. In Luxembourg the proportion of immigrant students increased by 14.7 percentage points, followed by Canada with an increase of 10.6 percentage points and Singapore with a rise of 10.5 percentage points. Most of these countries are long-standing immigration destinations. Some, especially those in Europe, have witnessed two trends: a recent trend of humanitarian migration since 2015 and a historic trend of workers moving from other parts of the European Union. The increases in Ireland, Switzerland and the United Kingdom mostly involved second-generation immigrants. This could reflect historic migration waves amongst the parents of students who reached 15 years of age in 2018.

Figure II.9.1 **Change between 2009 and 2018 in the percentage of students with an immigrant background**



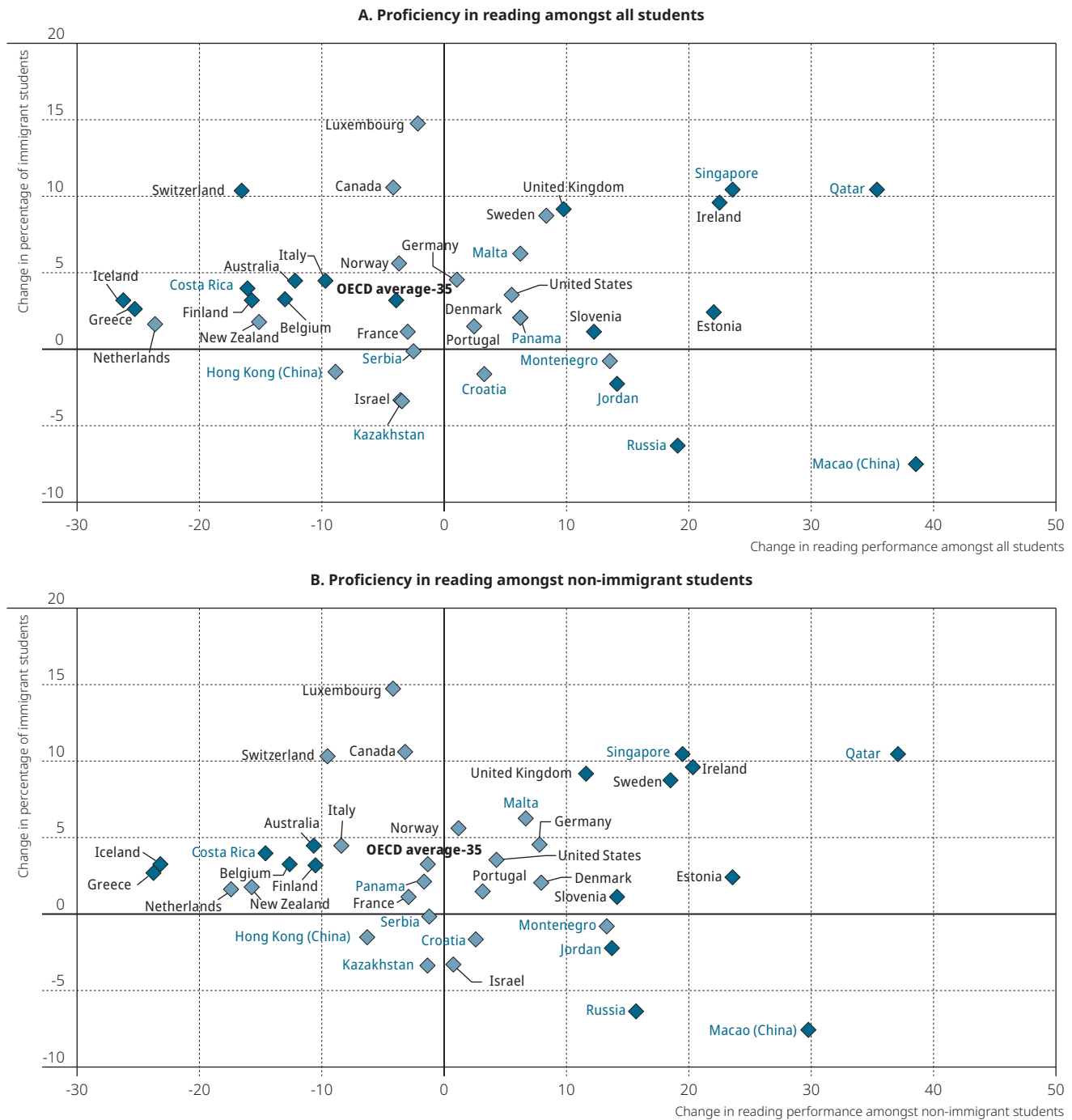
**Notes:** Statistically significant changes are shown in a darker tone (see Annex A3). Only countries and economies that participated in both PISA 2009 and PISA 2018 and where the percentage of immigrant students was higher than 5% in 2018 are shown. OECD average-36 refers to the arithmetic mean across OECD countries (and Colombia), excluding Austria. Countries and economies are ranked in descending order of the percentage change in the share of students with an immigrant background.

**Source:** OECD, PISA 2018 Database., Table II.B1.9.9.  
**StatLink** <https://doi.org/10.1787/888934038229>

## Performance and academic resilience amongst students with an immigrant background

The results presented in Figure II.9.2 show the change in the proportion of students with an immigrant background between 2009 and 2018 against the change in reading performance amongst immigrant students (left side) and non-immigrant students (right side) over the same period. The figure shows no clear association between the change in the proportion of immigrant students and the change in average reading proficiency, for either group, in each country. In a few countries, a substantial increase in the proportion of immigrant students coincided with a decline in reading proficiency. However, in most countries the decline in reading performance was too small to suggest a direct effect of immigration on performance. Furthermore, countries whose performance declined considerably did not show a major increase in the proportion of immigrant students.

Figure II.9.2 **Change in proportion of immigrant students and change in reading proficiency**



**Notes:** Statistically significant changes in both the proportion of immigrant students and the score difference are shown in a darker tone (see Annex A3). Only countries and economies that participated in both PISA 2009 and PISA 2018 and where the percentage of immigrant students is higher than 5% in 2018 are shown. OECD average-35 refers to the arithmetic mean across OECD countries (and Colombia), excluding Austria and Spain.

**Source:** OECD, PISA 2018 Database, Table II.B1.9.9 and Table II.B1.9.10.

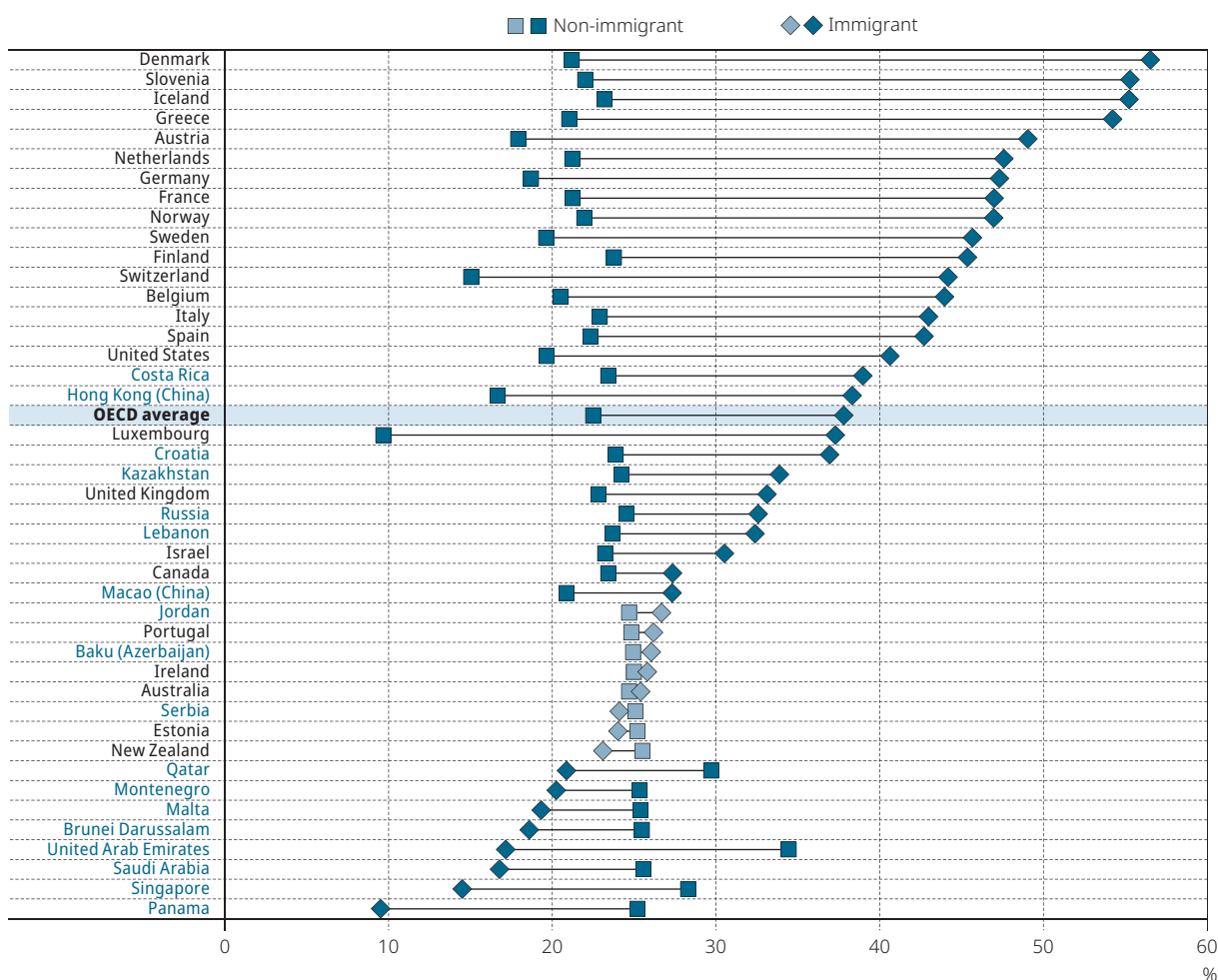
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While migration is commonly associated with a desire to improve living standards, in an increasing number of cases it is taking place under even more unfavourable, if not life-threatening, circumstances. In 2015, and in the years that followed, a large number of immigrants fled war in their home countries in the hope of finding refuge elsewhere. This phenomenon was particularly notable with recent migration to Europe. As such, it is not surprising that immigrant students in most countries and economies are more likely to be socio-economically disadvantaged (i.e. in the bottom quarter of the PISA index of economic, social and cultural status) than their native-born peers.

As shown in Figure II.9.3, the largest proportions of disadvantaged immigrant students were found in Austria, Denmark, Finland, France, Germany, Greece, Iceland, the Netherlands, Norway, Slovenia and Sweden, with more than 45% of first- and second-generation immigrant students in these countries/economies in the bottom quarter of socio-economic status in their country. These countries are mostly long-standing destination countries with old, low-educated immigrant populations or countries with large shares of recent migrants who were granted admission on humanitarian grounds. In this group of countries, the proportion of non-immigrant students who were disadvantaged was smaller, ranging between 17.9% in Austria and 23.7% in Finland.

Figure II.9.3 **Percentage of disadvantaged students, by immigrant background**  
 Percentage of students in the bottom quarter of the PISA index of economic, social and cultural status



**Notes:** Statistically significant differences between the percentage of immigrant and non-immigrant students are shown in a darker tone (see Annex A3). Only countries and economies where the percentage of immigrant students is higher than 5% are shown. Countries and economies are ranked in descending order of the percentage of disadvantaged students with an immigrant background.

**Source:** OECD, PISA 2018 Database, Table II.B1.9.1.

**StatLink** <https://doi.org/10.1787/888934038267>

The largest differences in the proportion of disadvantaged students amongst students with an immigrant background, on the one hand, and those without an immigrant background, on the other, were observed in Austria, Denmark, Greece, Iceland and Slovenia. In these countries/economies, the difference in the share of disadvantaged students between the two groups of students ranged between 30 and 35 percentage points. This finding was also confirmed by similar differences in average socio-economic status (Table II.B1.9.1).

## Performance and academic resilience amongst students with an immigrant background

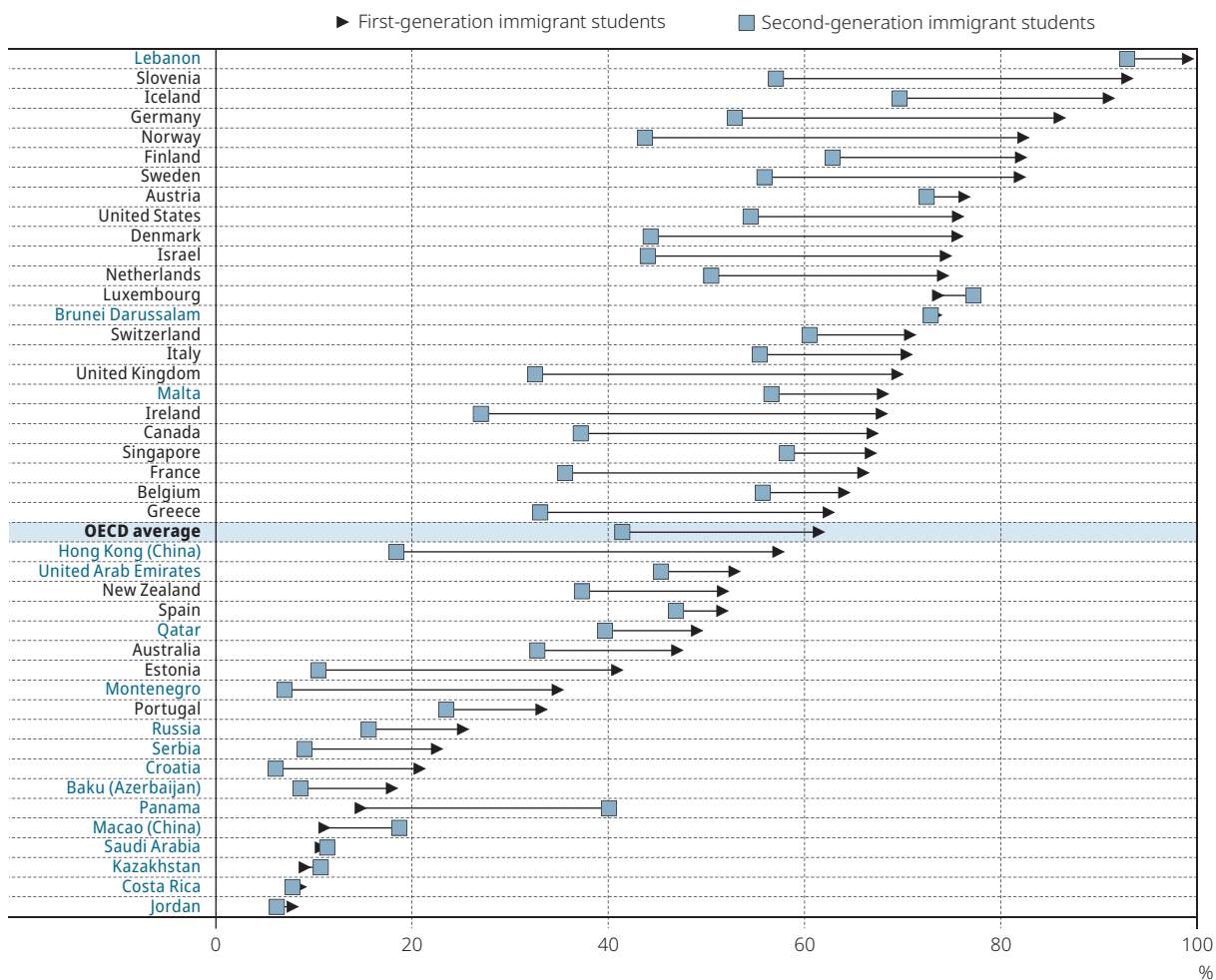
But this picture is changing in some countries as more highly skilled workers are migrating too. In Brunei Darussalam, Panama, Qatar, Saudi Arabia, Singapore and the United Arab Emirates, immigrant students in 2018 tended to be of higher socio-economic status than their non-immigrant peers. In these countries, immigrants tended to be the children of educated and well-paid expatriate professionals.

Migration flows also imply greater linguistic diversity and the need for immigrant students to learn the language of the destination country. On average across OECD countries in 2018, 48% of 15-year-old first- and second-generation immigrant students did not speak the language of the PISA assessment at home. Amongst the countries where more than 5% of students had an immigrant background, the proportion of those who did not speak the language of instruction at home was largest (i.e. more than 70%) in Austria, Brunei Darussalam, Finland, Iceland, Lebanon, Luxembourg and Slovenia. These countries had a variety of immigration systems. By contrast, in Costa Rica, Croatia, Jordan and Kazakhstan, less than 10% of immigrant students spoke a language at home that was different from the language of instruction (Table II.B1.9.2).

When considering linguistic differences between first- and second-generation immigrant students, it is clear that in most countries a smaller proportion of second-generation than first-generation immigrant students spoke a language at home that was different from the language of instruction. In Hong Kong (China), Ireland, Norway, Slovenia and the United Kingdom, the difference between first- and second-generation immigrant students in this measure exceeded 35 percentage points. In spite of the different immigration systems in these countries, immigrants were well-integrated linguistically (Figure II.9.4).

The two previous figures (II.9.3 and II.9.4) show that immigrant students are at a clear disadvantage in most countries when it comes to their socio-economic status and their use of the destination-country language. However, the results vary considerably between countries and between first- and second-generation immigrant students.

Figure II.9.4 **Percentage of immigrant students who do not speak the language of instruction at home**



**Note:** Countries where less than 5% of students had an immigrant background are not represented in the figure.

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

**Source:** OECD, PISA 2018 Database, Table II.B1.9.2.

**StatLink** <https://doi.org/10.1787/888934038286>



## IMMIGRANT BACKGROUND AND PERFORMANCE IN READING

National and international studies show that immigrant students perform less well in school than their native-born peers (Marks, 2005<sup>[5]</sup>; Mostafa, 2010<sup>[6]</sup>). Reasons for these results vary widely. Some argue that immigrant students tend to lack the resources that their non-immigrant peers enjoy. For example, in many countries, the parents of immigrant students tend to be less educated, work in lower status jobs, earn lower incomes, hold less wealth, and are less proficient in the language of the destination country. Socio-economic disadvantages are also compounded by other factors, such as the students' own aspirations, parental attitudes towards schoolwork and academic success, and student behaviour (Kao and Thompson, 2003<sup>[7]</sup>). In the sections that follow, immigrant students' achievement in the PISA reading test is presented and discussed in the context of key student characteristics.

### Average reading performance amongst immigrant students

Figure II.9.5 shows the reading performance amongst immigrant students and that of their non-immigrant peers. As expected, the findings show that, in most countries and economies, immigrant students scored worse in PISA 2018 than non-immigrants. The average score in reading amongst immigrant students across OECD countries was 452 points; non-immigrant students averaged 42 points higher. First-generation immigrant students scored 440 points in reading, on average, while second-generation immigrant students scored 465 points, on average (Table II.B1.9.3).

Amongst those countries where, in 2018, at least 5% of students had an immigrant background, the largest differences in performance between immigrant and non-immigrant students were observed in Austria, Belgium, Denmark, Finland, Germany, Iceland, the Netherlands, Slovenia and Sweden, with a gap of more than 60 score points in favour of non-immigrant students. Most of the countries in this group are long-standing destination countries with old populations of disadvantaged and low-educated immigrants; some had more recent inflows of immigrants admitted on humanitarian grounds.

By contrast, in Australia, Brunei Darussalam, Jordan, Macao (China), Panama, Qatar, Saudi Arabia, Singapore and the United Arab Emirates, immigrant students scored higher than or at least at the same level as their native-born peers. In some of these countries/economies, immigrant students tended to be of higher socio-economic status and have better-educated parents than their non-immigrant peers. The largest differences in favour of second-generation immigrant students compared with first-generation immigrants were observed in Germany, Israel, Portugal, Slovenia and Sweden.

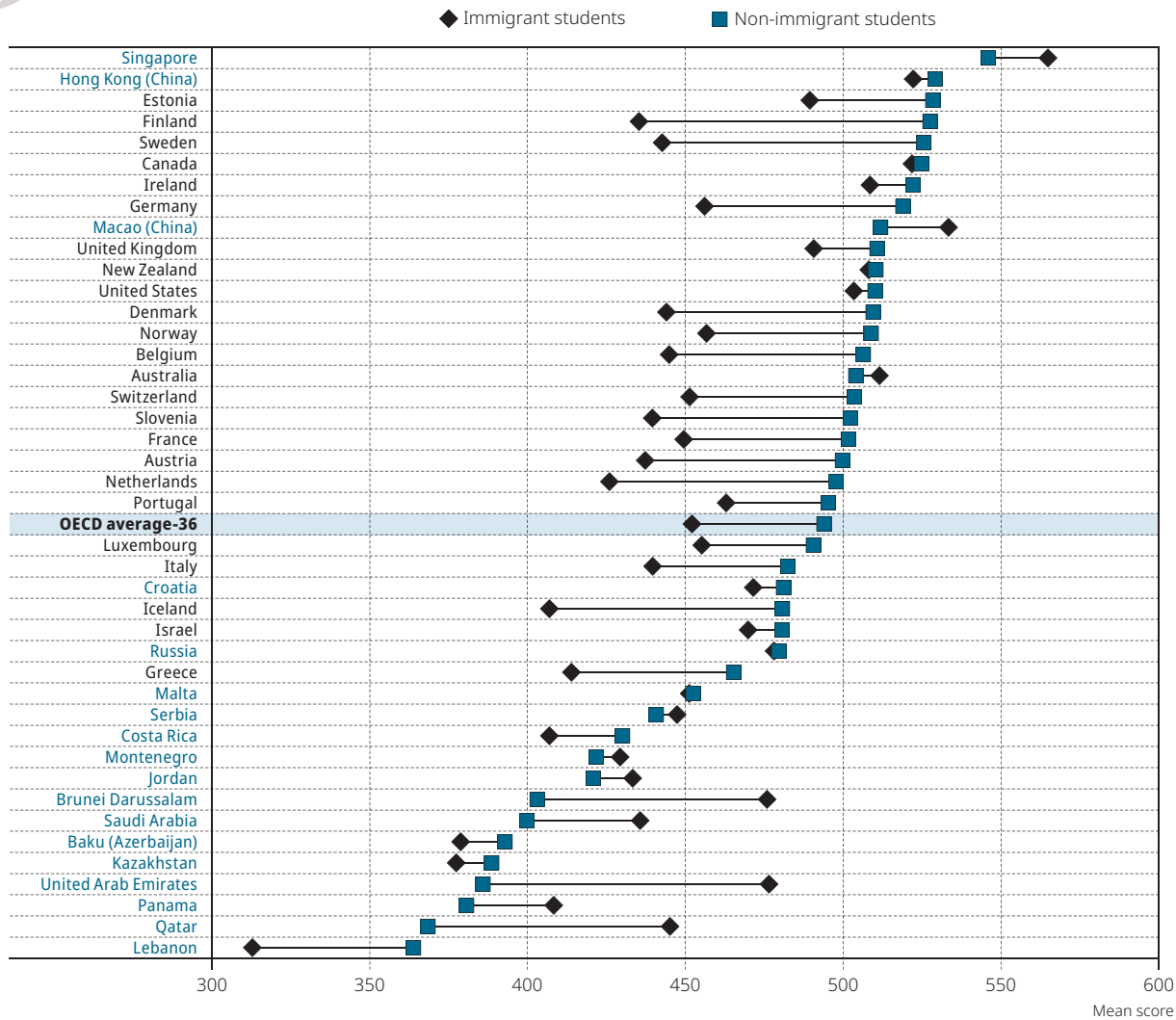
The findings also show that, even though immigrant students scored lower, in general, than students without an immigrant background, in some countries and economies their average score corresponded to high levels of proficiency. For instance, in Canada, Estonia, Hong Kong (China), Ireland, New Zealand, the United Kingdom and the United States, first- and second-generation immigrant students attained proficiency Level 3 in reading (480 score points on the reading scale), on average. This shows that in some of these high-performing education systems even disadvantaged groups exceeded minimum levels of proficiency in reading. When considering language spoken at home, the findings show that in many countries immigrant students who speak the language of instruction at home scored higher in reading than those who do not. The difference in their favour exceeds 50 score points in Brunei Darussalam, Germany, Luxembourg, Macao (China), Malta and Switzerland (Table II.B1.9.2). This indicates that not speaking the language of instruction represents an additional barrier to attaining high proficiency in reading – a challenge that would require support beyond the home environment.

Some of the differences in performance between immigrant and non-immigrant students were related to their socio-economic status. Figure II.9.6 shows that, on average across OECD countries, the difference in reading performance between immigrant and non-immigrant students – 41 score points – shrank to 24 points once students' and schools' socio-economic profile were accounted for. Differences shrank substantially in Belgium, Denmark, France, Germany, the Netherlands, Slovenia and Thailand.

However, even though socio-economic status might explain some of the difference in reading achievement, most of that difference remains unexplained. The largest differences in favour of native-born students, after accounting for students' and schools' socio-economic profile, were observed in Austria, Denmark, Estonia, Finland, Iceland, Lebanon, Norway and Sweden. In these countries the differences in reading performance in favour of non-immigrants exceeded 30 score points.

After accounting for students' and schools' socio-economic profile, in a small group of countries and economies, immigrant students outperformed their native-born peers. This was the case in Australia, Brunei Darussalam, Hong Kong (China), Jordan, Macao (China), Qatar, Saudi Arabia, the United Arab Emirates and the United States, with the largest differences observed in Qatar and the United Arab Emirates. In both of these latter countries, most immigrant students are the children of highly educated expatriates. In Canada, Croatia, Israel, Kazakhstan, Malta, Montenegro, Panama, Russia, Serbia and the United Kingdom, the difference in reading performance between immigrant and non-immigrant students was not statistically significant after accounting for students' and schools' socio-economic profile. This indicates that in this group of countries, differences in performance between immigrant and non-immigrant students were mainly related to differences in their socio-economic status.

Figure II.9.5 Average performance in reading, by immigrant background



Notes: Countries where less than 5% of students had an immigrant background are not represented in the figure.

OECD average-36 refers to the arithmetic mean across OECD countries (and Colombia), excluding Spain.

Countries and economies are ranked in descending order of the mean score in reading amongst non-immigrant students.

Source: OECD, PISA 2018 Database, Table II.B1.9.3.

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Moreover, when comparing the likelihood of students attaining the minimum level of performance in reading (Level 2), results show that, after accounting for students' and schools' socio-economic profile, immigrant students in Denmark, Estonia, Finland, Iceland, Lebanon and Sweden were more than twice as likely as their non-immigrant peers to score below proficiency Level 2 in reading, even after accounting for students' and schools' socio-economic profile. The reverse was observed only in a few countries/economies (Brunei Darussalam, Jordan, Macao (China), Qatar, Saudi Arabia, the United Arab Emirates and the United States), where immigrant students were more than 25% less likely than their non-immigrant peers to score below Level 2 in reading (Table II.B1.9.4).

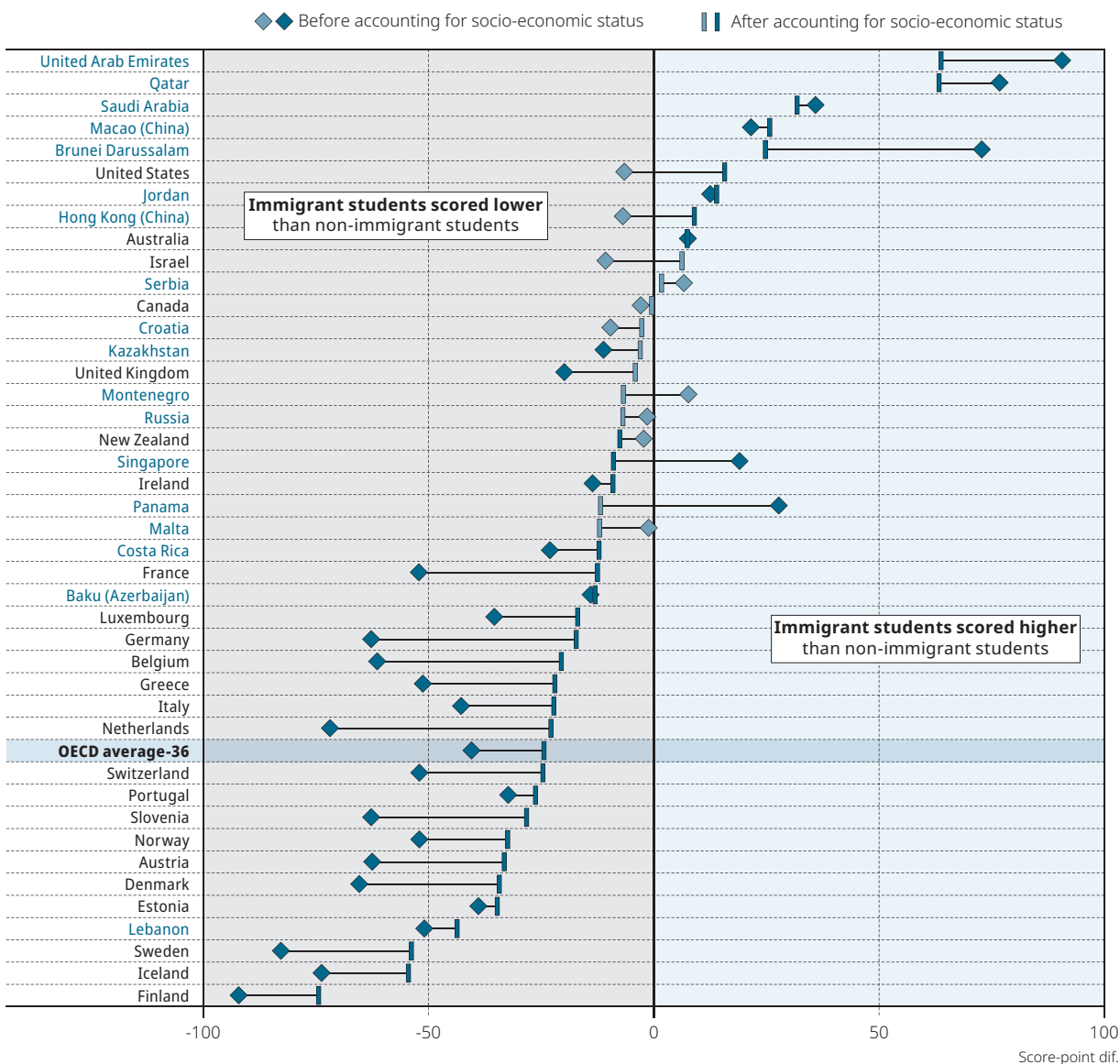
### Immigrant students' expectations of completing a tertiary degree

Students participating in PISA 2018 were asked whether they expect to pursue and complete a tertiary degree. Expectations about educational and professional goals are important because young immigrants, especially those from disadvantaged families, often hold higher educational and occupational aspirations than their native-born peers (Jonsson and Rudolphi, 2010<sup>[8]</sup>; Wicht, 2016<sup>[9]</sup>). PISA 2018 data confirmed this. Although the proportion of non-immigrant students who expect to complete a tertiary degree (69%) was slightly larger than that of immigrant students (67%), on average across OECD countries, the latter group was far more likely to expect to complete a tertiary degree (88% so reported) after accounting for students' and schools' socio-economic profile and students' performance in reading. Students' performance in reading was taken into account in order to adjust the estimate of students' expectations according to real performance (Table II.B1.9.5).



Figure II.9.6 **Difference in reading performance, by immigrant background**

Score-point difference in reading performance between immigrant and non-immigrant students, before and after accounting for socio-economic status



**Notes:** Statistically significant differences in reading performance are shown in a darker tone (see Annex A3).

Countries where less than 5% of students had an immigrant background are not represented in the figure.

OECD average-36 refers to the arithmetic mean across OECD countries (and Colombia), excluding Spain.

Countries and economies are ranked in descending order of the gap in reading performance related to immigrant background, after accounting for students' socio-economic status.

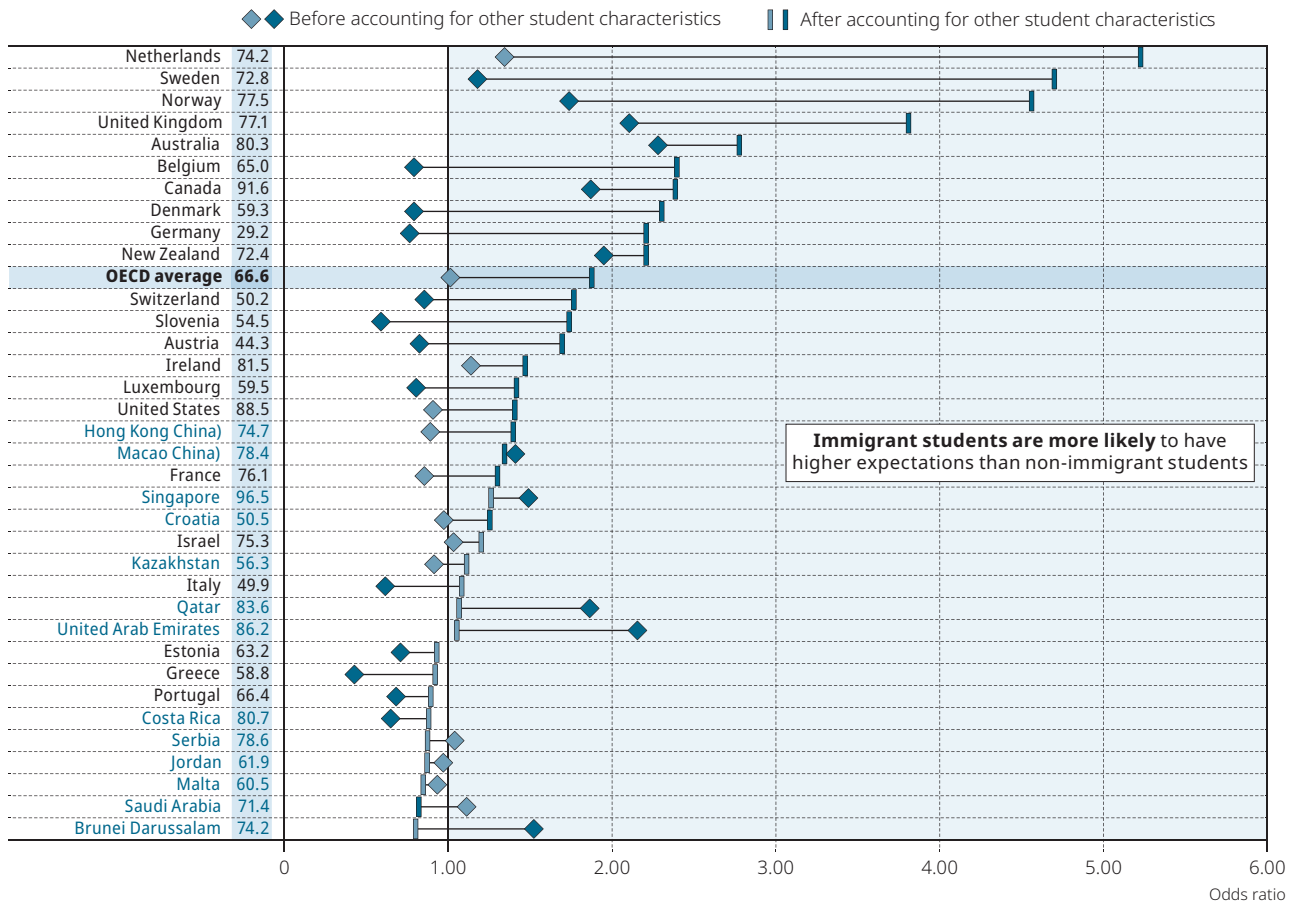
**Source:** OECD, PISA 2018 Database, Table II.B1.9.3.

**StatLink** <https://doi.org/10.1787/888934038324>

Figure II.9.7 shows that in Australia, Belgium, Canada, Denmark, Finland, Germany, the Netherlands, New Zealand, Norway, Sweden and the United Kingdom, students with an immigrant background were more than twice as likely as students without an immigrant background to expect to complete a tertiary degree, after accounting for students' and schools' socio-economic profile and students' performance in reading. This indicates that the poor performance of immigrant students and their relative socio-economic disadvantage may dampen their expectations of further education. But once performance was taken into account, immigrants were more likely than non-immigrant students to expect to complete tertiary education. These results may reflect factors other than academic performance, such as immigrant students' optimism and expectations of upward social mobility (Heath and Brinbaum, 2007<sub>[10]</sub>).

Figure II.9.7 **Students' expectations of completing tertiary education**

Likelihood that immigrant students expect to complete a tertiary degree compared to non-immigrant students, before and after accounting for students' socio-economic status and performance in reading



**Notes:** Statistically significant coefficients are marked in a darker tone (see Annex A3).  
 The percentage of immigrant students who expect to complete a tertiary degree is shown next to the country/economy name.  
 Countries where less than 5% of students had an immigrant background are not represented in the figure.  
 Countries and economies are ranked in descending order of students' expectations of completing tertiary education, after accounting for students' socio-economic status and performance in reading.  
**Source:** OECD, PISA 2018 Database, Table II.B1.9.5.  
**StatLink** <https://doi.org/10.1787/888934038343>

### SEGREGATION OF IMMIGRANT STUDENTS IN EDUCATION SYSTEMS

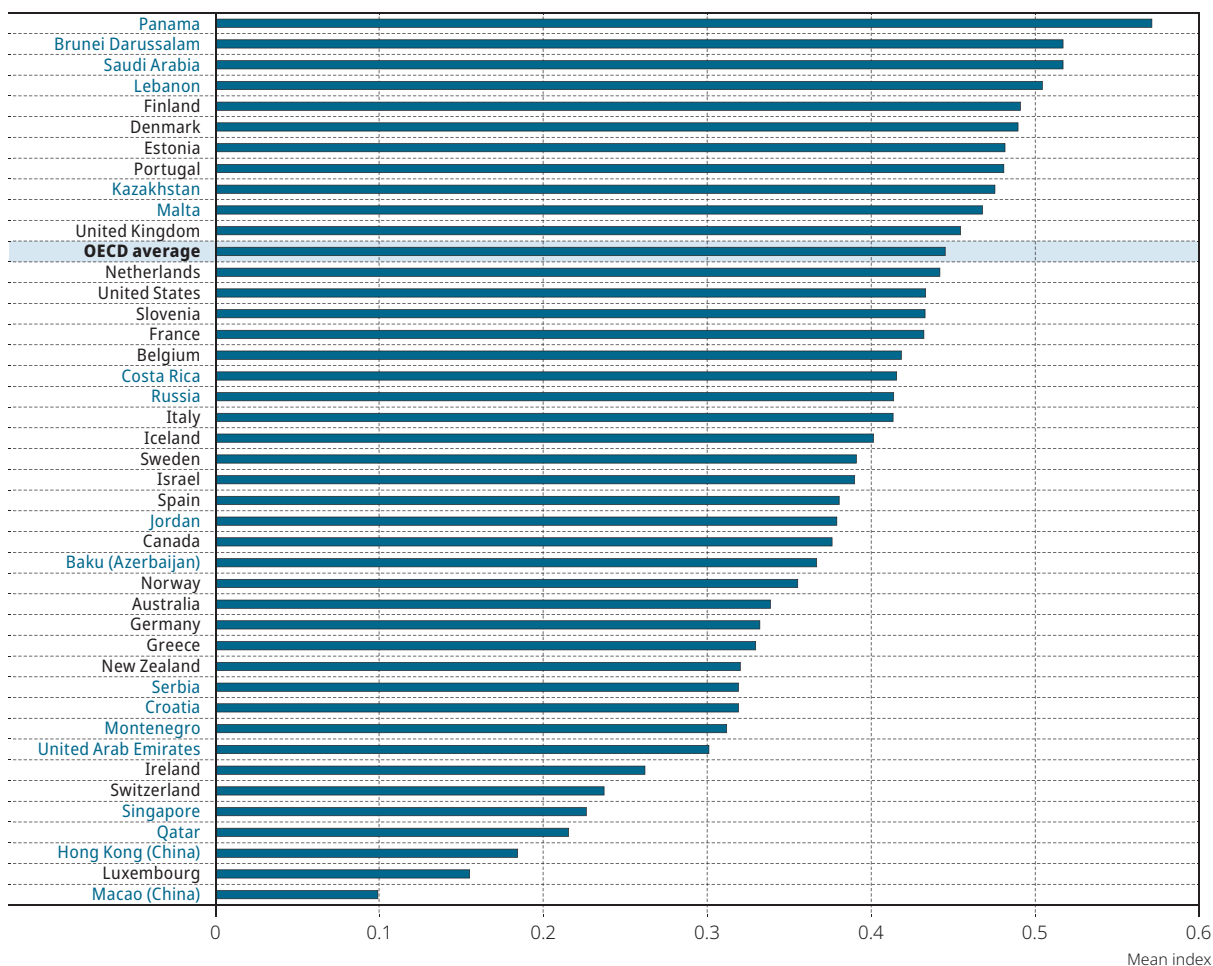
Facilitating the integration of immigrants into the economic and cultural life of their destination countries is a major focus of policy makers around the world. Education has traditionally been regarded as key to this process. However, many doubt the effectiveness of education in accomplishing this task given that education often reinforces or reproduces the prevailing social order (Corten and Dronkers, 2006<sub>[11]</sub>; Dronkers and Levels, 2007<sub>[12]</sub>). In the section that follows, segregation of immigrant students is examined across countries and economies. This subsection relies on the use of the normalised exposure index, known as the isolation index. This index is presented in detail in Chapter 4.

Figure II.9.8 illustrates the extent to which a student with an immigrant background is likely to be in contact with other immigrant students. The isolation index has a value close to 1 when immigrant students are concentrated in schools that non-immigrant students are unlikely to attend. The index was normalised to take into account the size of the population of immigrant students in each country. The analyses were also restricted to students in the modal grade for PISA.<sup>1</sup>

The index showed the largest values, exceeding 0.45, in Brunei Darussalam, Denmark, Estonia, Finland, Kazakhstan, Lebanon, Malta, Panama, Portugal, Saudi Arabia and the United Kingdom. In these countries and economies, immigrant students were likely to attend schools with other immigrant students, and thus were considered to be isolated from non-immigrant students. By contrast, in Hong Kong (China), Ireland, Luxembourg, Macao (China), Qatar, Singapore and Switzerland, the values in the index did not exceed 0.30.

Figure II.9.8 Segregation of immigrant students across countries

Index of isolation of immigrant students in school



**Notes:** Countries where less than 5% of students had an immigrant background are not represented in the figure.

The isolation index measures whether immigrant students are concentrated in some schools. The index is related to the likelihood of a representative immigrant student to be enrolled in schools that enrol not immigrant student. It ranges from 0 to 1, with 0 corresponding to no segregation and 1 to full.

Countries and economies are ranked in descending order in the index of isolation.

**Source:** OECD, PISA 2018 Database, Table II.B1.9.11.

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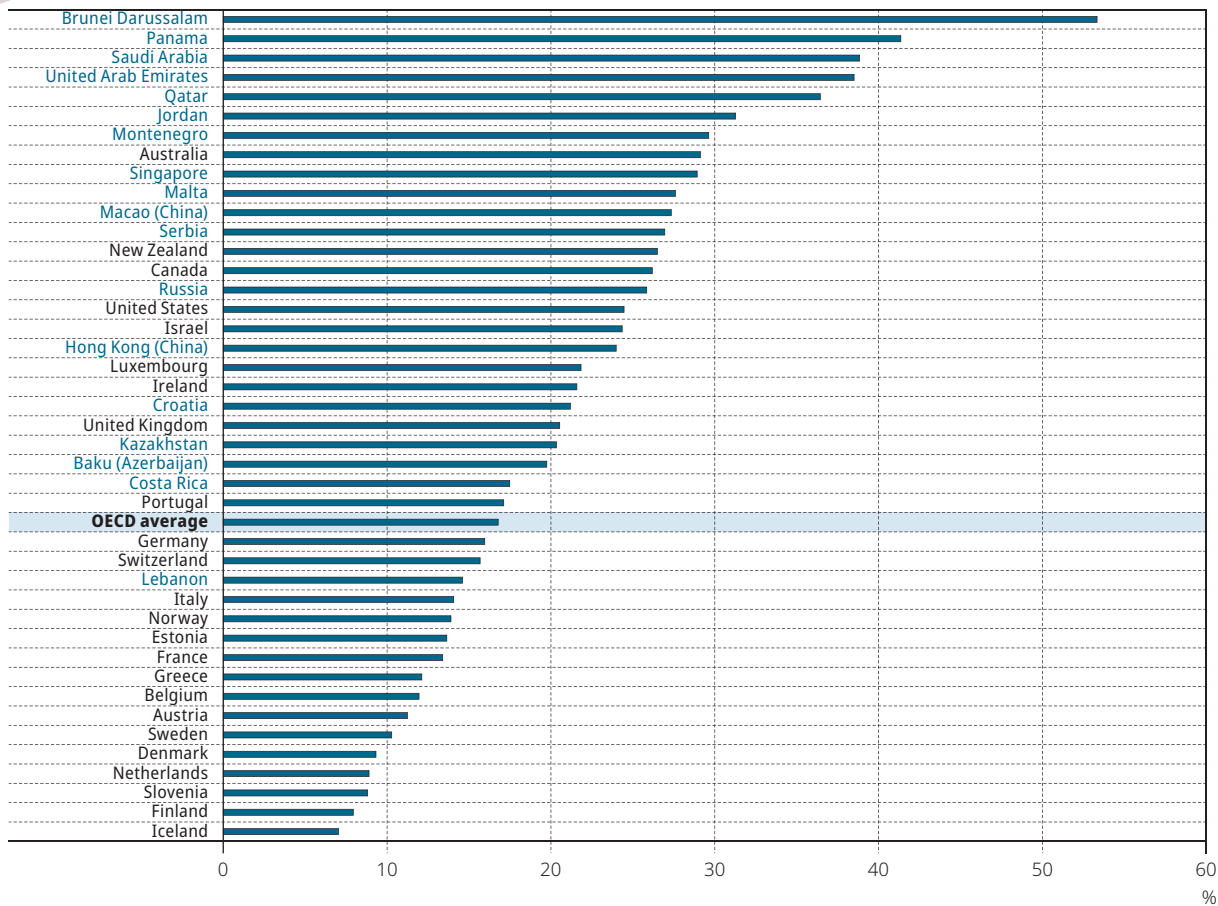
## ACADEMIC RESILIENCE AMONGST IMMIGRANT STUDENTS

The first section of this chapter highlights the gap in performance in favour of non-immigrant students. But this general finding masks an interesting anomaly. In some countries, immigrant students outperformed their native-born peers, even though many of them were socio-economically disadvantaged (Sam et al., 2008<sub>[13]</sub>; Anagnostaki et al., 2016<sub>[14]</sub>). This finding could be a reflection of a greater sense of optimism or a stronger drive amongst immigrant students to integrate quickly into their destination country and move up the social ladder (Heath and Brinbaum, 2007<sub>[10]</sub>).

This subsection examines the resilience of immigrant students. Immigrant students are considered academically resilient if they are first- or second-generation immigrants and are able to attain the top quarter of reading performance in their country. In other words, they are immigrant students who beat the odds against them and perform well in school. The threshold to attain the top quarter of performance in reading varies across countries and economies, and depends on the overall distribution of scores within that country or economy. Academic resilience in this chapter is defined in terms of students' immigrant background, not their socio-economic status.

Figure II.9.9 presents the proportion of immigrant students who were academically resilient across those countries and economies where, in 2018, more than 5% of students had an immigrant background. The findings show that the proportion of resilient immigrant students varied between 53% in Brunei Darussalam and 7% in Iceland. In Brunei Darussalam, Jordan, Panama, Qatar, Saudi Arabia and the United Arab Emirates, more than 30% of immigrant students were academically resilient. On average across OECD countries, about 17% of immigrant students attained the top quarter of performance in reading in their country and can thus be considered resilient (Table II.B1.9.3).

Figure II.9.9 Percentage of academically resilient immigrant students



**Note:** Countries where less than 5% of students had an immigrant background are not represented in the figure. Countries and economies are ranked in descending order of the percentage of resilient immigrant students.

**Source:** OECD, PISA 2018 Database, Table II.B1.9.3.

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### Contextual factors associated with academic resilience

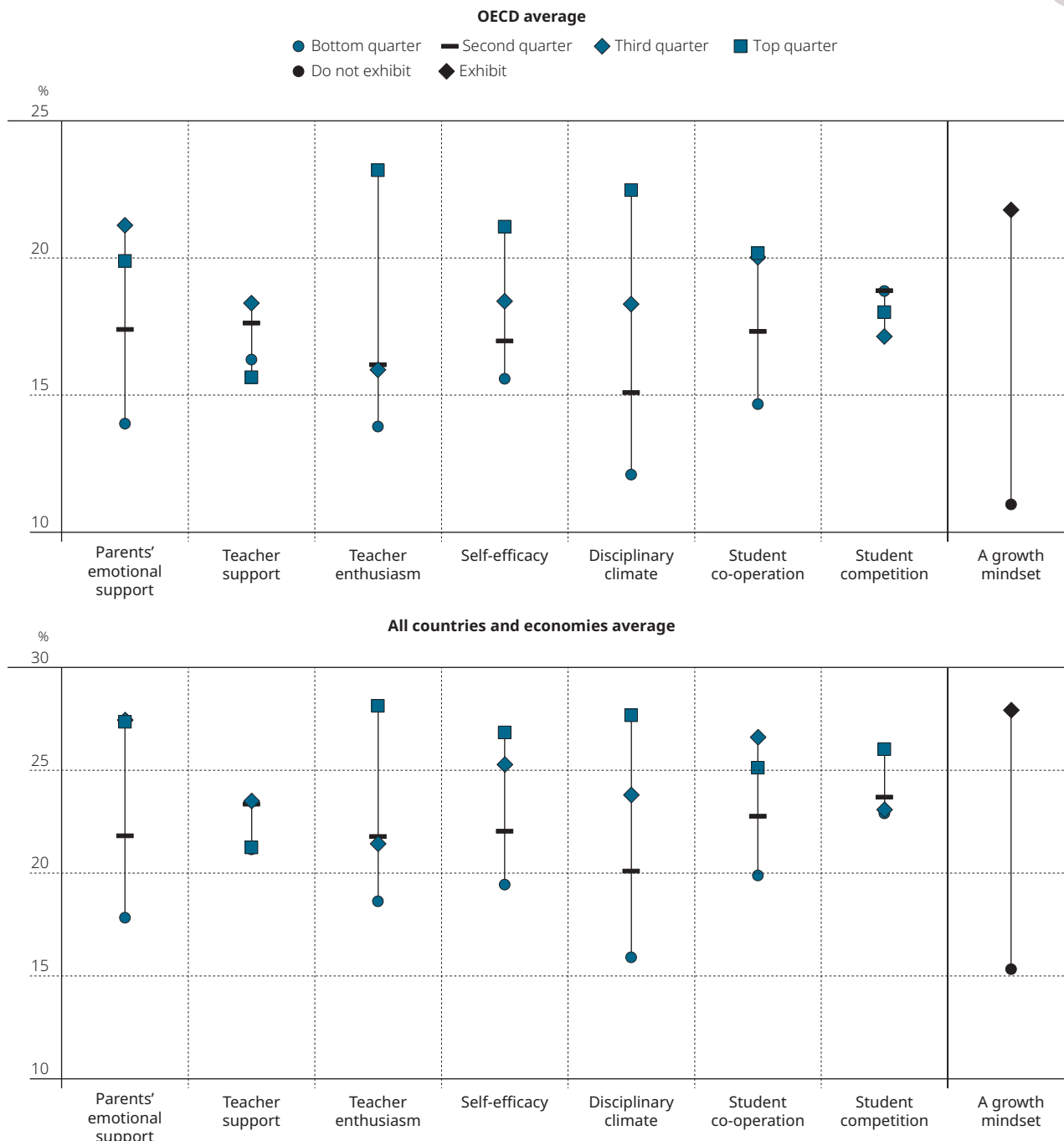
Numerous factors were found to be associated with academic resilience. For instance, a larger share of resilient immigrant students was found amongst students who reported a more positive disciplinary climate in language-of-instruction classes and greater co-operation at school (Wang et al., 2010<sub>[15]</sub>). Moreover, students who believe that ability and intelligence are not fixed and can change over time (a growth mindset) were likely to be resilient because they believe that difficulties can be overcome through effort (Yeager and Dweck, 2012<sub>[16]</sub>). This subsection examines the association between academic resilience amongst immigrant students and key contextual indicators.

Figure II.9.10 examines the school, classroom and family contexts that are related to resilience amongst immigrant students. The figure presents the proportion of immigrant students who scored at or above the 75th percentile in reading within their countries/economies, by national quarter of key indices. Those differences do not account for variation in socio-economic status amongst immigrant students. The findings show a greater percentage of resilient immigrant students amongst those who reported greater parental support, perceived teacher enthusiasm, self-efficacy, co-operation in school and a more positive disciplinary climate in language-of-instruction class (i.e. these students were in the top quarter of the indices compared with students in the bottom quarter), and amongst those who exhibited a growth mindset. All of these differences were statistically significant.

By contrast, no significant difference in the proportion of academically resilient immigrant students was found between the top and bottom quarters of the indices of perceived competition at school and perceived teacher support. The findings held true for OECD countries and for all PISA-participating countries and economies. The largest differences in the proportion of resilient immigrant students were found between the top and bottom quarters of the indices of teacher enthusiasm, disciplinary climate at school, and for students who exhibited a growth mindset. Detailed results for each country and economy are provided in Table II.B1.9.6.



Figure II.9.10 Percentage of academically resilient immigrant students, by quarter of key indicators



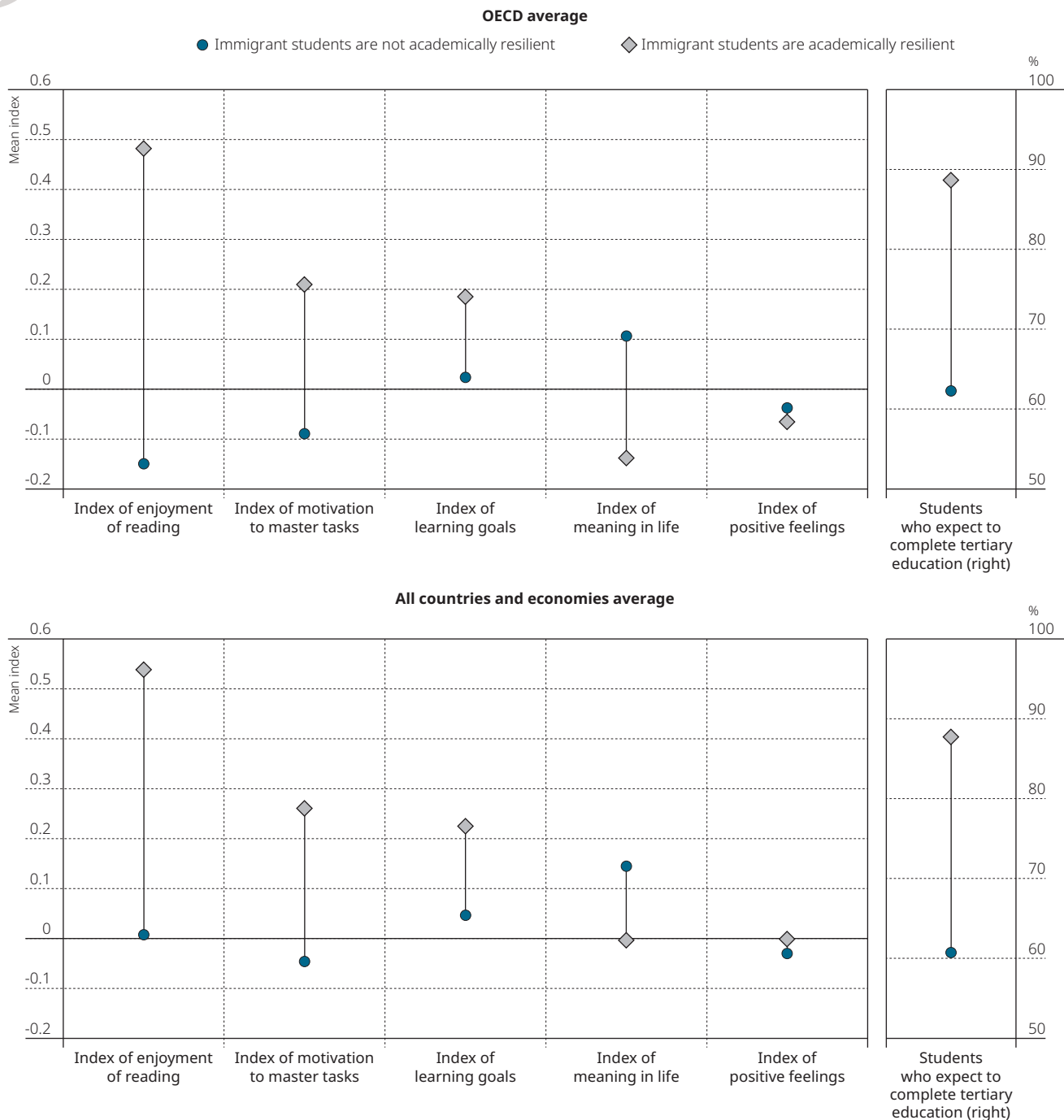
Note: For the index Self-efficacy and growth mindset, data are only available for the Flemish community in Belgium.  
 Source: OECD, PISA 2018 Database, Table II.B1.9.6

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### Student's attitudes and dispositions associated with academic resilience

Figure II.9.11 explores the attitudes and dispositions of academically resilient immigrant students. The assumption is that immigrant students who are capable of overcoming adversity are more likely to exhibit positive attitudes towards their own education. This hypothesis turns out to be true across OECD countries and across many partner countries and economies. Academically resilient students reported greater enjoyment of reading, motivation to master tasks and goal orientation than their non-resilient peers. A larger proportion of resilient immigrant students than non-resilient immigrant students (a 27 percentage-point difference between the two groups, on average across OECD countries) reported that they expect to complete a tertiary degree. The difference in favour of resilient immigrant students was particularly large when considering enjoyment of reading and expectations of completing tertiary education. Results for each country and economy are provided in Table II.B1.9.7.

Figure II.9.11 Students' attitudes and dispositions



Note: For the index Meaning in life, data are only available for the Flemish community in Belgium.

Source: OECD, PISA 2018 Database, Table II.B1.9.7.

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## WELL-BEING OF IMMIGRANT STUDENTS

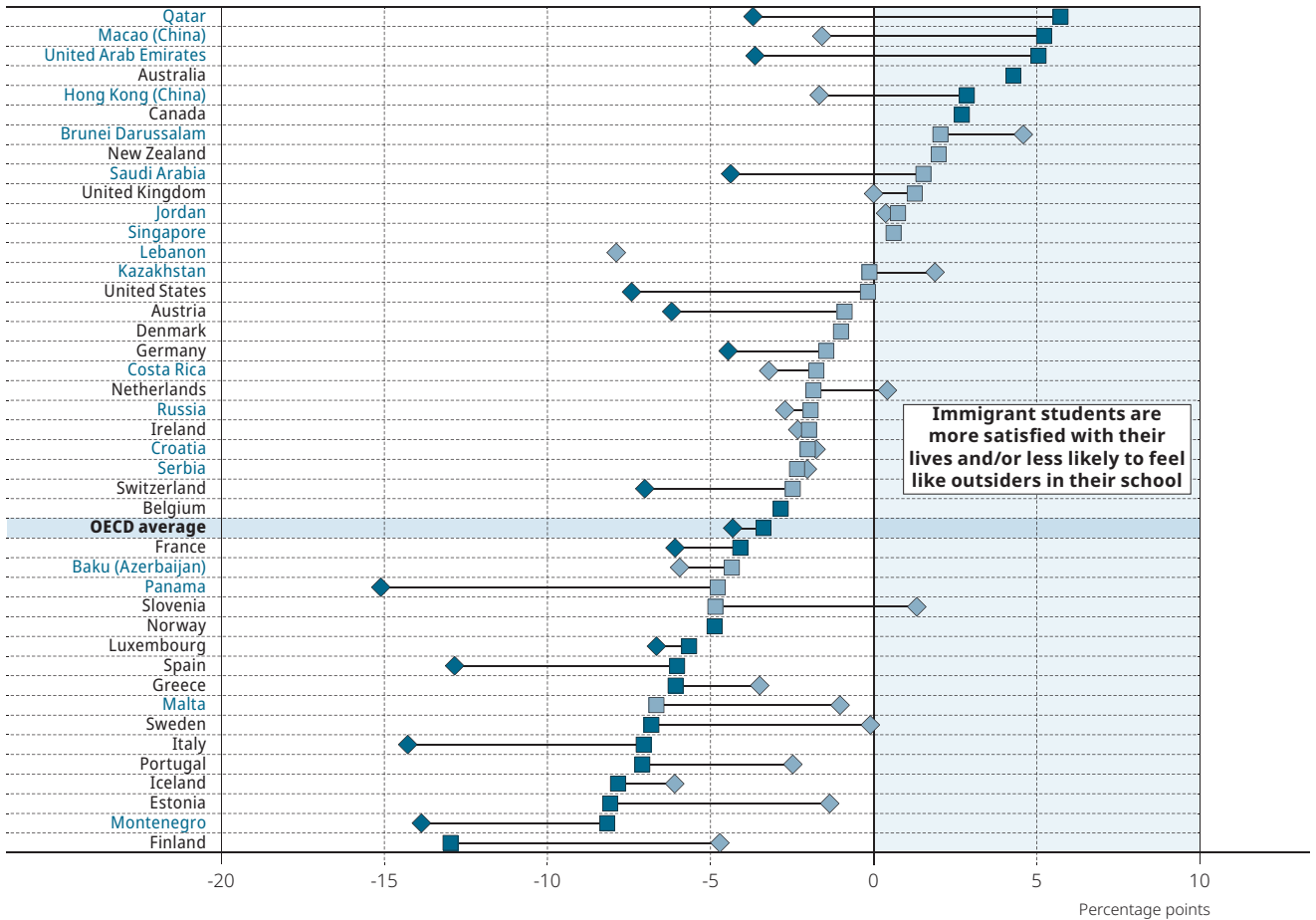
Students' well-being at school and beyond is increasingly recognised as a major area of interest for policy makers. Students spend a considerable amount of time at school learning, socialising with classmates, and interacting with teachers and staff members. Those experiences do not only affect students' academic performance, they shape students' outlook on life. This subsection explores two measures of student well-being: life satisfaction and sense of belonging at school. As in Chapter 3, students were considered to be satisfied with life if they reported a value of 7 or higher on the 10-point life-satisfaction scale, and to feel integrated at school if they disagreed with the statement: "I feel like an outsider at school".





In most countries, the results show that fewer immigrant students than non-immigrant students reported a value higher than 7 on the 10-point life-satisfaction scale. This was observed in Italy, Montenegro, Panama, Spain, Switzerland and the United States, where the differences between the two groups exceeded 7 percentage points and were statistically significant (Table II.B1.9.8). Similarly, in many countries immigrant students were more likely than their non-immigrant schoolmates to report feeling like an outsider at school. This was observed in Estonia, Finland, Iceland, Italy, Montenegro and Portugal; but the opposite was observed in Australia, Canada, Hong Kong (China), Macao (China), Qatar and the United Arab Emirates. On average across OECD countries, 64% of immigrant students reported that they are satisfied with their lives and 77% reported that they do not feel like an outsider at their school (Figure II.9.12).

Figure II.9.12 **Students' well-being and immigrant status**  
 Difference between immigrants and non-immigrant students in percentage of students who are



**Notes:** Some countries/economies did not ask their students about life satisfaction. Statistically significant coefficients are marked in a darker tone (see Annex A3). Countries where, in 2018, less than 5% of students had an immigrant background are not represented in the figure. Countries and economies are ranked in descending order of the percentage change of immigrant students who reported that they are not feeling like an outsider.

**Source:** OECD, PISA 2018 Database, TableII.B1.9.8.

**StatLink** <https://doi.org/10.1787/888934038438>

Note

1. The “modal ISCED level” is defined here as the level in which at least one-third of the PISA sample is enrolled. In Albania, Argentina, Baku (Azerbaijan), Belarus, Beijing, Shanghai, Jiangsu and Zhejiang (China), Colombia, Costa Rica, the Czech Republic, the Dominican Republic, Indonesia, Ireland, Kazakhstan, Luxembourg, Macao (China), Morocco, the Slovak Republic, Chinese Taipei and Uruguay, both lower secondary (ISCED level 2) and upper secondary (ISCED level 3) schools meet this definition. In all other countries/economies, analyses are restricted to either lower secondary or upper secondary schools (see Annex C for details). In several countries, lower and upper secondary education are provided in the same school. As the restriction is made at the school level, some students from a grade other than the modal grade in the country may also be used in the analysis.

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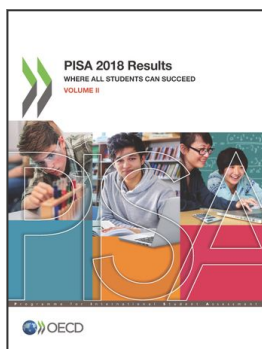
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