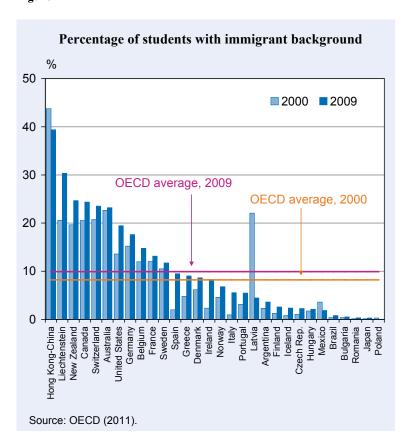
## Immigrant Arrival Age and its Influence on Reading Performance

In most OECD countries, immigrant students lag behind native students in school performance. However, results from the latest PISA<sup>1</sup> 2009 survey show that 15-year old immigrant students, who arrive after the age of 12, have poorer reading performance compared to students who arrive between the age of six and 11 or before the age of five (OECD 2013). This "late-arrival penalty" in reading performance is even more severe for children who emigrated from less-developed countries and who's mother language differs from their new language of instruction.

Between 2000 and 2009 the number of 15-year old students with an immigrant background<sup>2</sup> in the OECD countries has risen by two percent on average. Immigrant students now comprise on average five per-

<sup>1</sup> Programme for International Student Assessment, PISA.

Figure 1



cent of the 15-year old student population. In Ireland, New Zealand, Spain, and the United States, the share of student immigrants increased by at least five percent between 2000 and 2009. In these countries the share of students with an immigrant background ranges between eight and 30 percent, as can be seen in Figure 1.

Figure 2 shows the difference in reading performance by immigrant age (selected OECD countries). The performance of students who arrived at or before the age of five is normalised at the zero level on the vertical axis. The performance of students who arrived between the age of six and 11 as compared to younger than five are represented by the red bars. The performance of students who arrived after 12 as compared to younger than five are represented by the blue bars. The countries with the largest 'late-arrival penalty' in reading performance are Slovenia, Germany, and Sweden. The OECD average late-arrival penalty is -20 points, which is estimated to be a half-year of schooling (OECD 2011, 70).

One large factor affecting the late-arrival penalty is the language associated with the country of origin and the country of destination. Australia, for example, has a large immigrant population from other English speak-

ing countries. As there is no language barrier, this decreases the 'penalty' to a value of -24.1. On the other hand, most of Germany's immigrants come from the former USSR and Turkey, where German is not spoken, and thus Germany has a much larger penalty of -65.8 (OECD 2012, 179). Language acquisition is much more difficult after the age of 12, which exponetiates the penalty in reading performance for late arrivers (OECD 2013).

However, there is even a late-arrival penalty between countries that share the same language (OECD 2012, 75). This indicates another important influencing factor, which is the difference in educational standards in the country of origin and in the country of destination. If someone from a low-achieving school system immigrates to a country with a higher-achieving school system, the

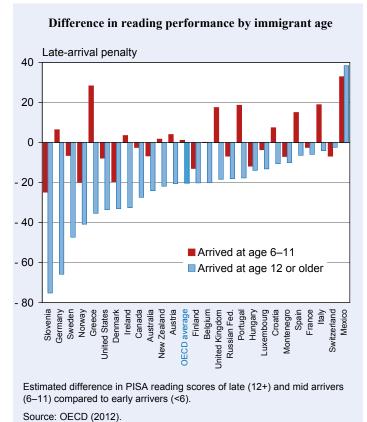
Students with immigrant backgrounds are defined as students who themselves immigrated or who have at least one parent who immigrated.

student will naturally be at a disadvantage. The same is true for the other way around, for example, immigrants from higher achieving Germany, which has a PISA 2009 score of 497, experience a late-arrival premium when moving to lower-achieving Austria, which has a PISA 2009 score of 470 (OECD 2011, 75).

One major issue of the late-arrival penalty for children migrating after the age of 12 is that the 'penalty' does not cease at the end of schooling, but also puts the affected children at a disadvantage as far as subsequent opportunities are concerned. For example, in many countries where high schools are divided by performance, such as in Germany, these students might be separated into a lower achieving group. This can then limit the type of further training that they have access to, and even their subsequent job opportunities (OECD 2011, 77).

Bearing in mind the increasing number of immigrants, the school system is a powerful lever for integration and social cohesion and it should consequently be improved to overcome language barriers and subsequent difficulties. As for mitigating the effects of the late-arrival penalty in reading performance, additional language courses could be offered to help the affected students.

Figure 2



More flexible arrangements could be created to allow a late-arrived student to delay subsequent schooling decisions. Hence it would be interesting to compare the differences between countries in flexible arrangements for late-arrivers and their impact.

It is important to note that although students who immigrate after the age of 12 are likely to experience a late-arrival penalty, students who immigrated between the ages of six and 11, as well as five or younger, also performed worse compared to non-immigrant students (OECD 2012, 70). However, some countries like Australia, Belgium, Canada, Germany, New Zealand and Switzerland have managed to decrease the gap between students with an immigrant background and native students in the last decade (OECD 2013).

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