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Wealth, social status and inequalities in well-being

This chapter examines how parents' occupation, income and wealth are related to students' performance, satisfaction with life, and their expectations of further education and a career later on. It also shows how the socio-economic composition of schools is related to disadvantaged students' evaluations of the quality of their life and their expectations for their future.



Money is an obvious enabler of education opportunities: cash buys books, high-quality pre-schooling and daycare, enrichment activities, and access to private tutoring if needed. Low income adversely affects parents' ability to nurture and provide for their children's needs, so that poverty during childhood and adolescence is often associated with slower cognitive development and poorer health (Case et al., 2001; Currie et al., 2012). Wealth and social status can influence well-being at school, because the family background is often related to the type of school children attend and to how students evaluate themselves in comparison with their peers (Pajares and Urda, 2006).

What the data tell us

- Family wealth is more strongly related to student performance in countries with relatively high income inequality than in countries with relatively low income inequality.
- The concentration of students in schools according to their parents' occupation is related to characteristics of education systems, such as differences between private and public schools or between vocational and academic schools.
- Life satisfaction is associated with a student's relative status at school, as measured by the difference between his or her wealth and the wealth of the other students in the school.
- Children of blue-collar workers reported holding higher education and career expectations when they attend schools with a large proportion of children of white-collar workers.

This chapter examines how parents' occupation, income and wealth are related to the socio-economic composition of the schools that students attend and to students' performance, life satisfaction and expectations. *PISA 2015 Results, Volume I* documented a strong link between academic performance and socio-economic status, as measured by a summary index of parents' education, occupation, assets and cultural resources (the PISA index of economic, social and cultural status; see OECD, 2016a). This relationship varies greatly across countries, and school systems can become more equitable over a relatively short time (OECD, 2017). The chapter extends this analysis by looking at relationships between multiple measures of students' well-being and inequalities in different types of household resources, thus peeking inside the black box of socio-economic status. Disentangling the different sources of the strong relationship between socio-economic status and students' well-being is important, because the policy responses to inequalities depend on the ways through which socio-economic advantage gets transmitted from one generation to the next. Understanding the implications of socio-economic inequalities on different aspects of students' well-being can also inform the design of policies for equal opportunities at the system level and guide school-level practices for creating equitable learning spaces.

SOCIO-ECONOMIC INEQUALITIES, SOCIAL SEGREGATION AT SCHOOL AND PERFORMANCE

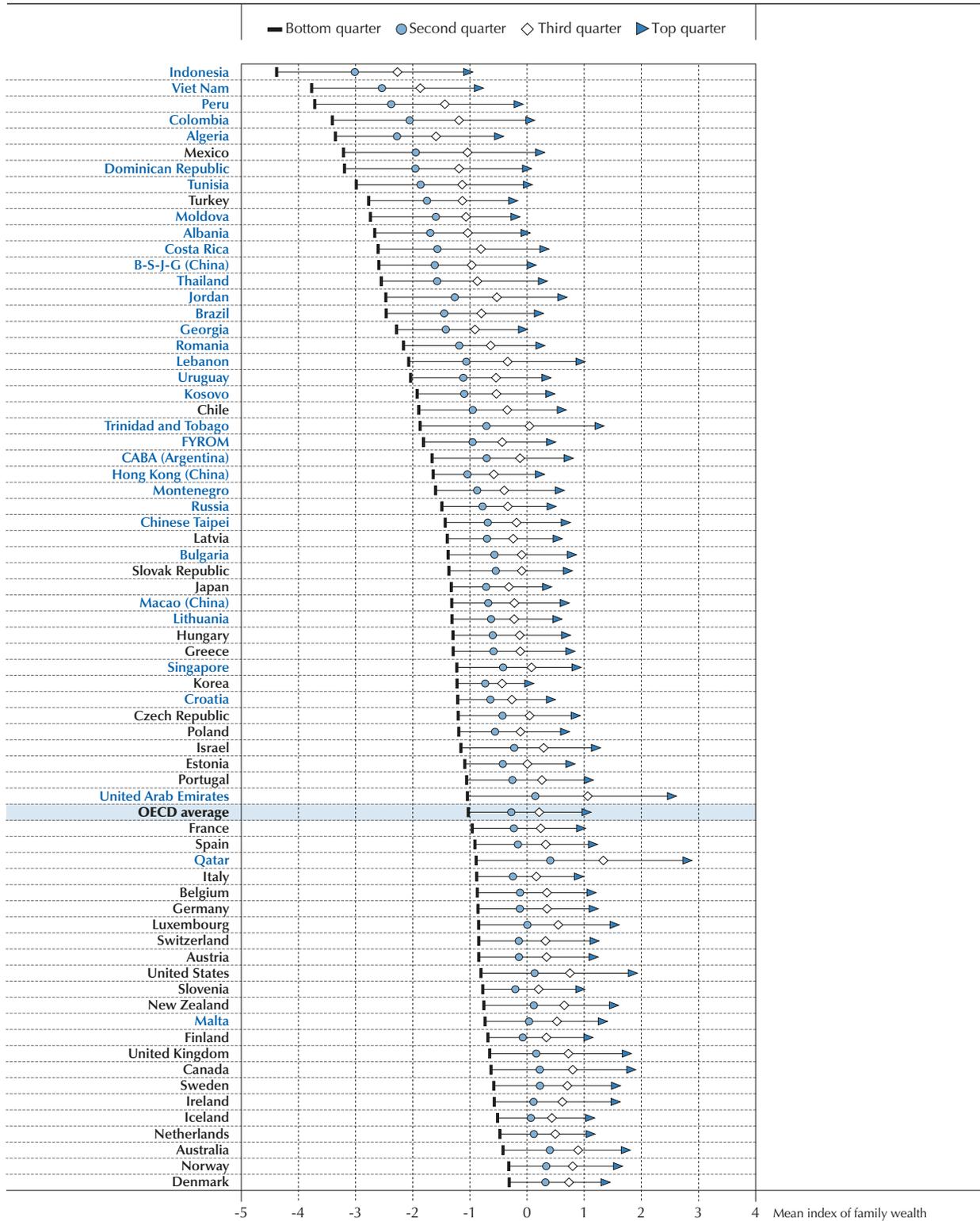
Recent trends in income distribution in OECD countries show signs of "polarisation": more families fall into either extreme end of the distribution, and fewer are in the middle (OECD, 2015). Income inequality is less of a concern if children in low-income families have a good chance of climbing up the income ladder when they grow up. However, income inequality tends to reproduce itself generation after generation (Corak, 2013).

PISA data on household possessions and family income can describe inequalities in the material conditions of students. The PISA index of family wealth is based on the number and type of home possessions, such as cell phones, computers, cars and rooms with a bath or shower. Figure III.10.1 shows that the values of this index vary greatly both between and within countries. Disparities in wealth, as measured by the difference between students in the top quarter and in the bottom quarter of the index, were relatively large (3.5 units or more) in Peru, Qatar and the United Arab Emirates (Table III.10.6). In general, inequalities in household possessions, as reported by students, were high in countries with a relatively low per capita income.

In 16 countries and economies where the parent questionnaire was distributed, parents also provided information on their household income. This information was coded into six categories (e.g. below "X" dollars; above "X" dollars and below "XX" dollars, etc.), defined at the national level by the participating countries. Figure III.10.2 shows that students are not equally distributed across the six income categories in the countries with available data. The Dominican Republic and Mexico are the two countries with the highest percentages of tested students with relatively low income (in the bottom two categories of family income). In the Dominican Republic, for example, 74% of students live in low-income families where parents reported an annual family income below USD 1 110 (in purchasing power parities), and 12% live in high-income families where the annual family income, as reported by parents, was above USD 1 860.



Figure III.10.1 ■ **Index of family wealth, by quarters of this index**
Results based on students' self-reports



Notes: The index of family wealth is based on the number and type of home possessions, such as cell phones, computers, cars and rooms with a bath or shower reported by the student.

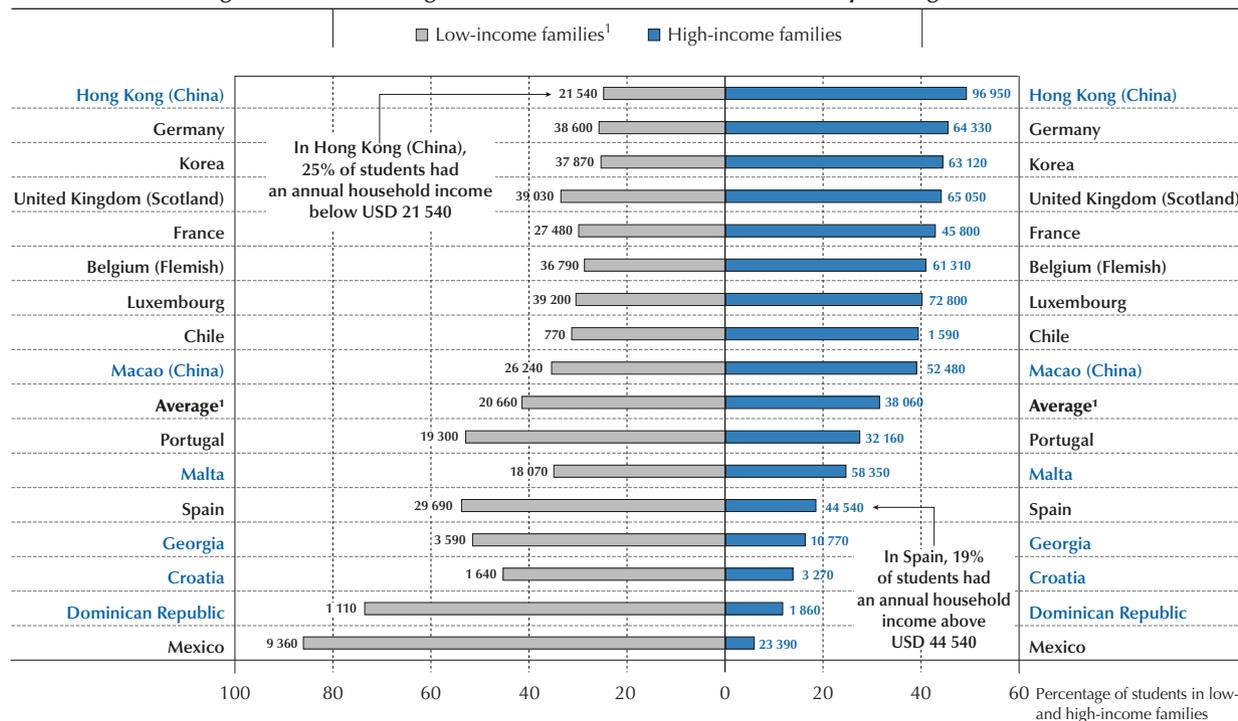
Countries and economies are ranked in ascending order of the mean index of family wealth for students in the bottom quarter of this index.

Source: OECD, PISA 2015 Database, Table III.10.6.

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Figure III.10.2 ■ **Distribution of students, by family income**
 Percentage of students in high- and low-income families and corresponding income (in USD)



1. "Average" includes all countries and economies with available data.

Notes: Students' parents were asked to report their family income before taxes. Their answers were coded in six income categories, defined independently by each country. Low(high)-income students are students in the bottom(top) two categories of family income.

The income level (USD) corresponding to the top two and bottom two income categories are shown next to the corresponding percentage bar.

Countries and economies are ranked in descending order of the percentage of students in high-income families.

Source: OECD, PISA 2015 Database, Table III.10.10.

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By contrast, Belgium, France, Germany, Hong Kong (China), Korea, Luxembourg and Scotland (United Kingdom) show relatively large shares (40% or higher) of high-income students, and the threshold defining these students was also high in those countries (from USD 45 800 in France to USD 96 950 in Hong Kong [China]). Differences in the income available to individual children might be higher than what is shown in the figure if low-income families have more household members than high-income families.

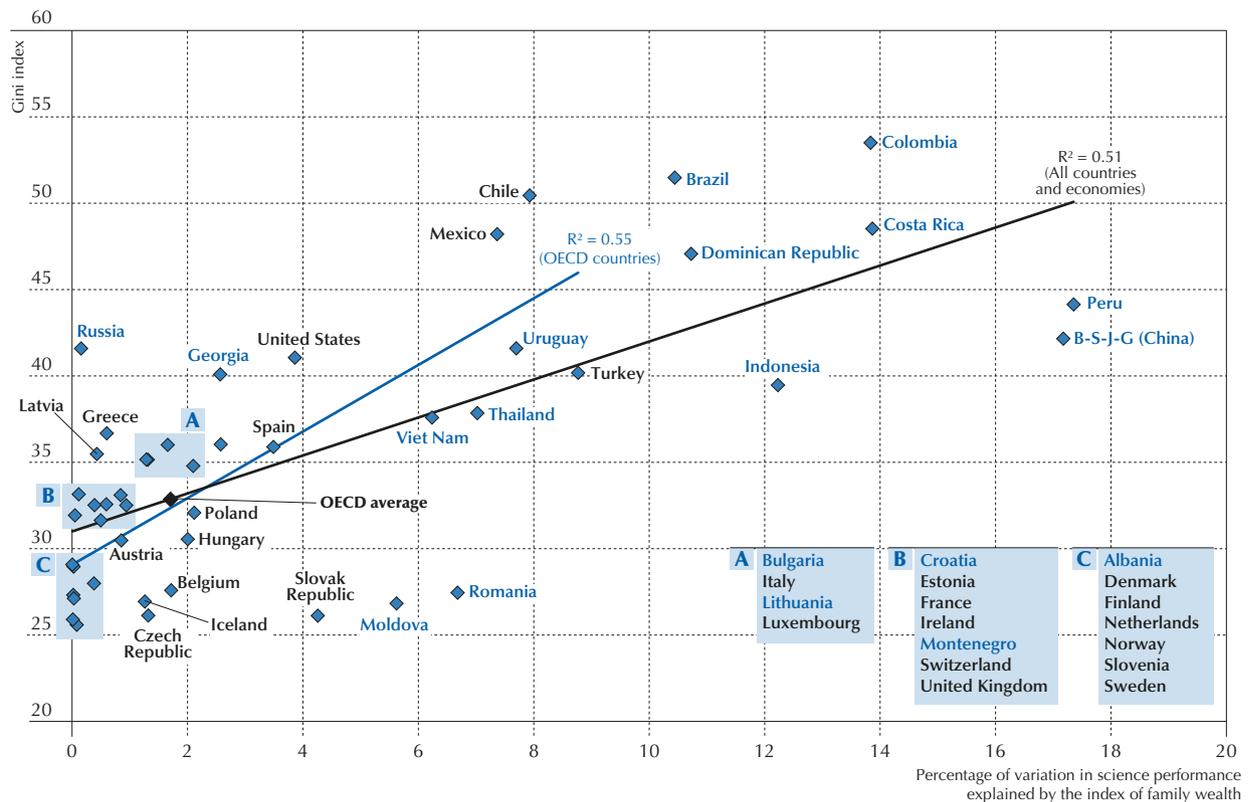
The most visible and well-documented impact of wealth and income inequalities on students' well-being is the relatively low performance of students at the bottom of the socio-economic ladder. PISA consistently finds that disadvantaged students perform worse than advantaged students, even if the strength of the relationship varies greatly across countries (OECD, 2016a). On average across OECD countries, a one-unit change in the index of family wealth corresponds to an increase of 10 points in a student's science score, before accounting for differences in parents' education, and an increase of 4 points after accounting for parents' education (Table III.10.7). Similarly, students in high-income families perform better in science than students in low-income families (Table III.10.11).

Does family wealth matter more for education success in more unequal societies? The fraction of the variation in performance in PISA that is explained by the wealth index is a measure of the relevance of the material resources of one generation for the education success of the next generation (Sandefur, 2015). Figure III.10.3 shows a strong relationship between the variation in science performance related to family wealth and the overall income inequality of countries. Among OECD countries, the level of income inequality (as measured by the Gini Index) is not as high as in several partner countries, on average, and the index of wealth accounts for only 2% of the variation in performance (Table III.10.7). Countries with high income inequality, such as Brazil, Colombia, the Dominican Republic and Uruguay also show a strong relationship between the wealth index and science performance. For example, in Colombia, income inequalities are high (the Gini index is 54 out of 100) and household possessions account for around 14% of the variation in performance.



This association suggests that the inequalities observed more broadly in a country are reflected in student performance. In other words, in all systems, rich parents may use their wealth to provide better education for their children, but in more unequal societies, wealthy parents pass on more of that advantage to their children (Sandefur, 2015). This finding confirms the negative relationship between income inequality and intergenerational mobility that has been called the *Great Gatsby Curve* (Corak, 2013). It suggests that education is an important mediator of the relationship between social mobility and income inequality (Jerrim and Macmillan, 2015).

Figure III.10.3 ■ **Family wealth, performance and income inequality**
Association between the Gini index and the percentage of variation in science performance explained by family wealth



Notes: The index of family wealth is based on the number and type of home possessions, such as cell phones, computers, cars and rooms with a bath or shower reported by the student. The percentage of variation in performance in PISA that is explained by the index of family wealth is a measure of the relevance of material resources for the education success of the next generation.

The Gini index measures the extent to which the distribution of income among households within an economy deviates from a perfectly equal distribution. A Gini index of zero represents perfect equality and an index of 100 represents perfect inequality.

Source: OECD, PISA 2015 Database, Table III.10.7.

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The strength of the link between inequality in society and inequalities in academic outcomes should not lead to the wrong conclusion that education policies cannot influence opportunities for upward mobility. The design of education systems, in fact, mediates the relationship between parents' resources and learning outcomes by influencing, for example, the level of resources available to public and private schools, or to urban schools and schools in remote rural areas (Greenwald, Hedges and Laine, 1996; OECD, 2016b; Rivkin, Hanushek and Kain, 2005).

Differences in the social composition of schools are often related to structural characteristics of education systems. For example, a large country with a clear rural-urban divide is likely to show, all else being equal, more polarisation in the social composition of schools than a small, homogenous economy. But education policies can play an important role too. The social mix of schools can be analysed by looking at the concentration of students in schools according



to their parents' occupation, where occupation is classified in the two categories of blue-collar or white-collar jobs¹ (Figure III.10.4). This concentration is measured by a social segregation index ranging from 0 to 100, with values close to 0 indicating that children of blue-collar and white-collar workers are distributed evenly across schools, and values closer to 100 indicating that children of blue-collar and white-collar workers are likely to attend different schools² (Hutchens, 2004; Hutchens, 2001; Jenkins et al., 2008). The three countries where children of white-collar workers and children of blue-collar workers are more likely to mix in the same school are Algeria, the Former Yugoslav Republic of Macedonia (hereafter "FYROM") and Montenegro. The countries and economies with more pronounced segregation at school (above 25), based on parents' occupation, are Australia, Bulgaria, Chile, Ciudad Autonoma de Buenos Aires (Argentina) (hereafter "CABA [Argentina]"), Hungary, Indonesia, Israel, Norway, Peru, Qatar and the United Arab Emirates (Figure III.10.4).

Box III.10.1 The value of a quiet space for learning

The family and the household are the first social system where students begin to acquire the fundamental cognitive and social skills necessary for school and for life (Machida et al., 2002; OECD, 2012). The material resources available in the household where students live can influence their cognitive and psychological development; but some resources matter more than others.

Living in a home where children have a quiet space to study or to engage in other activities is particularly important for students' learning. Across OECD countries, around 92% of students reported that they have a desk to study at and a quiet place to concentrate. But in Colombia, Indonesia, Mexico, Thailand, and Trinidad and Tobago, at least one in four students reported that they do not have a quiet place to study at home (Table III.10.1).

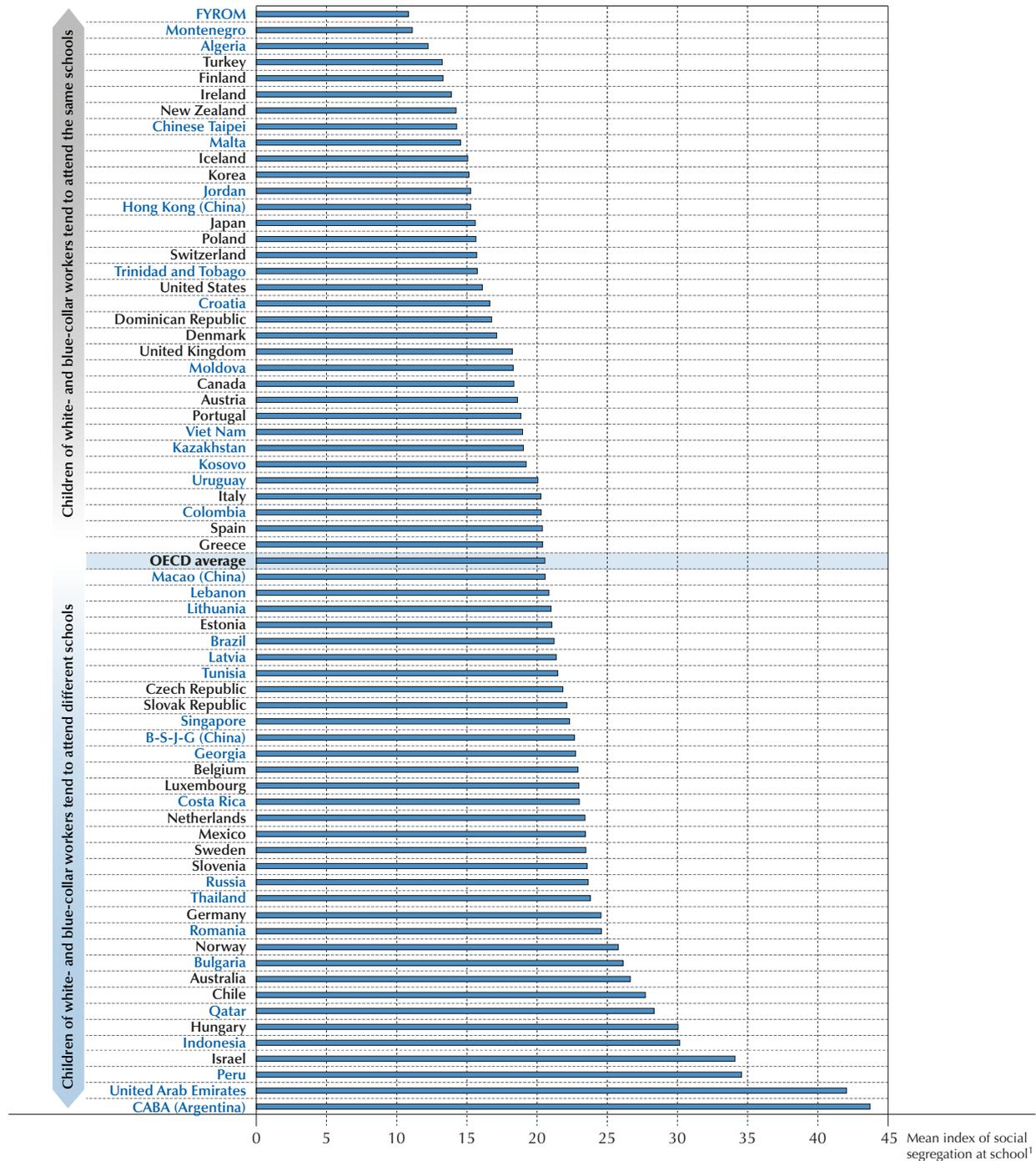
Students in poorer families are more likely to share a room and to live in more crowded conditions, where it is more difficult to concentrate. A crowded space might also make it harder for parents to maintain a calm, orderly home. It is thus not surprising that, across OECD countries, students who reported that they have a quiet place to study at home score roughly 30 points higher in science (the equivalent of one year of schooling; see Box I.2.1 in OECD, 2016a) than students who do not have such a place (Table III.10.2). The performance advantage of students with a quiet place to study remains significant after accounting for parents' education and is the largest in Beijing-Shanghai-Jiangsu-Guangdong (China) (hereafter "B-S-J-G [China]"), one of the few economies where the study time spent out of school is positively related to PISA scores. In B-S-J-G (China), 61% of students in advantaged schools have access to a room in their school where they can do their homework, while only 14% of students in disadvantaged schools have access to such a room (OECD, 2016b, Table II.6.43). In Japan, 96% of students have access to a quiet place to study at school, and there is no difference in access between advantaged and disadvantaged schools.

In Belgium, France, Germany and Luxembourg, the score-point difference in science performance between children who reported that they have a quiet place to study and other children is between 46 and 61 points (Table III.10.2). In these countries, the shares of students who reported that they do not have a quiet place to study are well below the OECD average of 8% (Table III.10.1). These disadvantaged students probably suffer from other forms of material deprivation and benefit less from a protective family environment. PISA cannot prove that there is a causal relationship between overcrowding or disorder at home and academic performance. But an analysis based on random variations in overcrowding (based on the fact that same-sex siblings are more likely to share a room) shows that the relationship between disadvantaged living conditions and academic failure is plausibly one of cause and effect (Goux and Maurin, 2005). The negative association between the availability of a quiet space for learning and academic achievement originates in early childhood and may build over time.

While financial and social aid to the poorest families can improve their children's performance in school, interventions at the school level can also help reduce unequal education opportunities. Whole-school strategies involving administrators, teachers, counsellors, parents, and public and civic-society organisations are necessary to identify the resources that low-performing children lack and the type of support that schools can provide. But even small and relatively easy-to-implement interventions, such as giving students access to a quiet place to study in the afternoon, can make a difference to materially deprived children.



Figure III.10.4 ■ Social segregation at school, by parents' occupation



1. The index of social segregation at school measures the concentration of students in different schools according to their parents' occupation (Jenkins et al., 2008; Hutchens, 2001 and 2004). It has values between 0 and 100, with values closer to 100 indicating that children of blue-collar and white-collar workers are distributed unevenly across schools.

White-collar workers are defined as managers (ISCO-08 category 1), professionals (ISCO-08 category 2) and technicians and associate professionals (ISCO-08 category 3).

Blue-collar workers are defined as skilled agricultural, forestry and fishery workers (ISCO-08 category 6), craft and related trades workers (ISCO-08 category 7), plant and machine operators and assemblers (ISCO-08 category 8) and workers in elementary occupations (ISCO-08 category 9).

Countries and economies are ranked in ascending order of the index of social segregation at school.

Source: OECD, PISA 2015 Database, Table III.10.14.

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In Brazil, CABA (Argentina), Colombia, the Dominican Republic, Malta, Peru, Spain and Uruguay (all economies with relatively high income inequality), more than 20% of the index of segregation is explained by differences in the social composition of students attending private and public schools (Table III.10.13). In other words, much of the uneven distribution of children across schools reflects the fact that children of white-collar workers are more likely to study in private schools than the children of blue-collar workers. Highly selective private education is thus a potential source of socio-economic segregation across an education system, and private schools are more exclusive in some countries than in others (Jenkins et al., 2008).

In several European countries, a large fraction of social segregation at school is related to the fact that children of white-collar workers tend to be enrolled in school programmes that prepare them for university and children of blue-collar workers tend to attend vocational schools. Table III.10.14 shows that, in Croatia, 45% of the index of segregation is explained by differences in social background between the students enrolled in academic tracks and those enrolled in vocational tracks (in Montenegro, 33% of the index of segregation is so explained; in Italy, 31%; in Slovenia, 29%; and in the Netherlands, 27% of the index is so explained). Education policies can thus have an impact on the polarisation found in the social composition of schools, together with structural factors, such as rural-urban and residential inequalities.

SOCIAL COMPOSITION OF SCHOOLS, LIFE SATISFACTION AND EXPECTATIONS

Family affluence and social status are not only related to academic performance but can also affect adolescents' satisfaction with life, their perceptions about themselves and their aspirations for the future. Economic conditions can affect adolescents' well-being by limiting their consumption and leisure opportunities. Adolescents from disadvantaged families may have to go without things perceived as important for them to participate in mainstream society and to conform with their peers (Becchetti and Pisani, 2014). Research has shown that measures of objective socio-economic status – like family or neighbourhood wealth – are related to students' subjective social status at school, where students place themselves on a ladder where the highest rung represents the people in their school with the most respect and the highest standing (Goodman et al., 2001). These perceived placements in the group may contribute to students' evaluation of their satisfaction with their own life (Sweeting and Hunt, 2014).

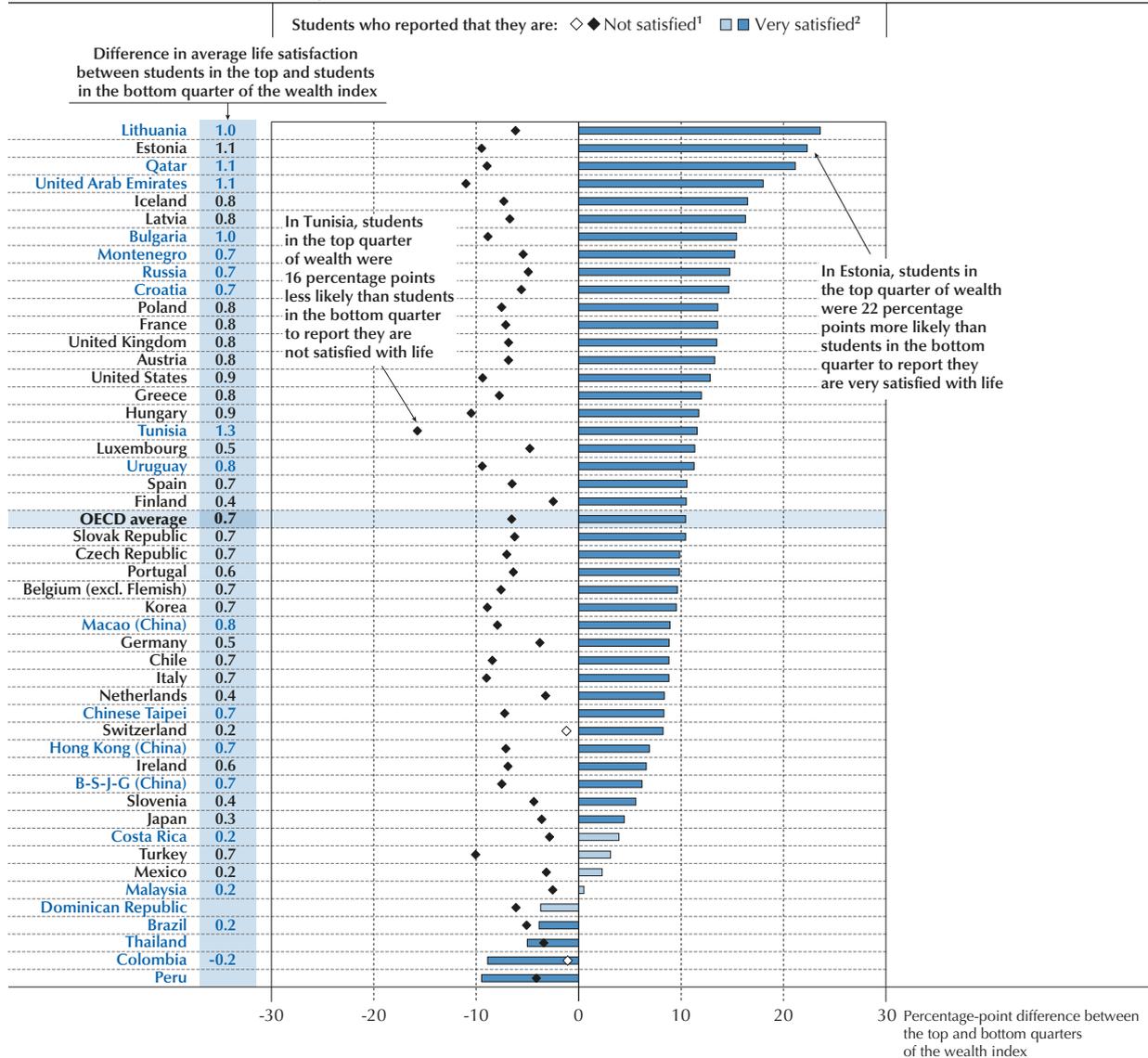
Figure III.10.5 shows how students' reports of life satisfaction vary according to their family's wealth. The right side of the graph (positive values) shows that, in most countries, a greater proportion of wealthy students (those at the top quarter of the wealth index) reported being "very satisfied" with their life compared to the share of students at the low end of the index (bottom quarter of the wealth index) who reported the same. This difference corresponds to 10 percentage points, on average, across OECD countries, but is at least twice as large in Estonia, Lithuania and Qatar. Wealthy students were also less likely than their less-privileged peers to report "low levels of life satisfaction", as seen on the left side of the graph (negative values). On average across OECD countries, the share of students who reported "low life satisfaction" is about 7 percentage points larger among students in the bottom quarter of the wealth index than among those at the top quarter of the index. This gap ranges between 10 and 16 percentage points in Hungary, Tunisia, Turkey and the United Arab Emirates, and is negligible in Colombia and Switzerland.

In a few countries, however, wealthy students are less likely to be very satisfied with their life than less-privileged students are. In Brazil, Colombia, Peru and Thailand, students at the lower end of the wealth index were between 4 and 10 percentage points more likely to report high life satisfaction than those at the top of the index. One possible explanation for this finding points to the role of social capital in relatively deprived communities (Woolcock and Narayan, 2000). When income and wealth are insufficient to buy comfort, safety, and a number of social and cultural goods, people may be more inclined to rely on each other and build nets of solidarity around practical matters (e.g. childcare, transportation, social life), which can help boost their sense of social integration and life satisfaction (Saegert et al., 2001). Other explanations for these results are plausible, too. For example, the factors students take into account when assessing their own life satisfaction may themselves be dependent on the students' socio-economic status (Diener et al., 2003; Neff, 2007; Tucker et al., 2006). Even in those countries where the difference in favour of the poorest students is largest, a substantial proportion of wealthy students (38% in Peru, 39% in Thailand, 43% in Brazil and 47% in Colombia) reported high levels of life satisfaction (Table III.10.8)

Figure III.10.6 shows the relationship between a student's life satisfaction and the wealth of his or her schoolmates. In most countries, students reported less life satisfaction if they are not as wealthy as the other students in their school (their relative wealth is lower), after accounting for students' index of family wealth (their absolute level of wealth). This relationship is most prominent in Croatia, Montenegro and the Russian Federation (hereafter "Russia"). Both absolute and relative wealth can thus have an influence on students' life satisfaction (Hudson, 2013).



Figure III.10.5 ■ Family wealth and life satisfaction



1. A student is classified as “not satisfied” with life if he or she reported between 0 and 4 on the life-satisfaction scale. The life-satisfaction scale ranges from 0 to 10.

2. A student is classified as “very satisfied” with life if he or she reported between 9 to 10 on the life-satisfaction scale. The life-satisfaction scale ranges from 0 to 10.

Notes: The index of family wealth is based on the number and type of home possessions, such as cell phones, computers, cars and rooms with a bath or shower, as reported by the student.

Statistically significant values are marked in a darker tone (see Annex A3).

Countries and economies are ranked in descending order of the difference in the percentage of students who reported feeling very satisfied with their life, between students in the top quarter and students in the bottom quarter of the index of wealth.

Source: OECD, PISA 2015 Database, Tables III.10.8 and III.10.9.

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Adolescents form opinions about themselves based on comparisons with their schoolmates. Disadvantaged students who attend advantaged schools may suffer from social isolation or even feelings of discrimination if they are not prepared to be a member of a disadvantaged minority in the school. For example, many disadvantaged students in the United States dropped out of integration programmes (Carter, 2007; Davis, 2014). Poor students in Chile have also had problems integrating socially in prestigious schools (Montt, 2012).

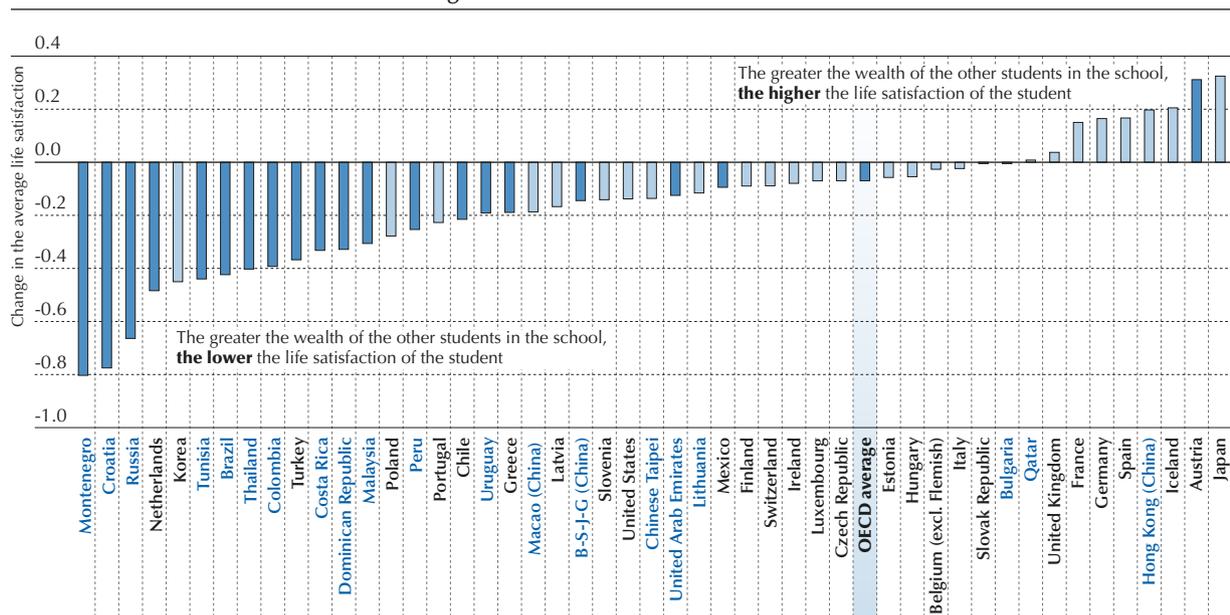
Does this mean that disadvantaged students are better off when they attend disadvantaged schools? On the one hand, comparing oneself with advantaged peers can undermine the self-belief and life satisfaction of a disadvantaged student.



On the other hand, disadvantaged students who attend the same school and learn in the same classroom as their advantaged peers might absorb the attitudes of their schoolmates and develop high aspirations and expectations for themselves.

Students' aspirations for further education and their career later on are shaped by family wealth, social status and neighbourhood characteristics (Stewart et al., 2007). Table III.10.15 shows that, on average across OECD countries, 29% of the children of blue-collar workers and 55% of the children of white-collar workers reported that they expect to complete a university education. Children of blue-collar workers were also much less likely to expect to work as managers or professionals than children of white-collar workers (with an average difference of 21 percentage points across OECD countries).

Figure III.10.6 ■ **Relative wealth at school and life satisfaction**
Change in a student's life satisfaction associated with a one-unit increase in the average wealth of the other students in the school



Notes: The index of family wealth is based on the number and type of home possessions, such as cell phones, computers, cars and rooms with a bath or shower, as reported by the student. The life-satisfaction scale ranges from 0 to 10.

Statistically significant values are marked in a darker tone (see Annex A3).

Countries and economies are ranked in ascending order of the change in life satisfaction associated with a one-unit change in the average index of family wealth of the other students of the school.

Source: OECD, PISA 2015 Database, Table III.10.9.

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Box III.10.2 Do students expect the same career as their parents?

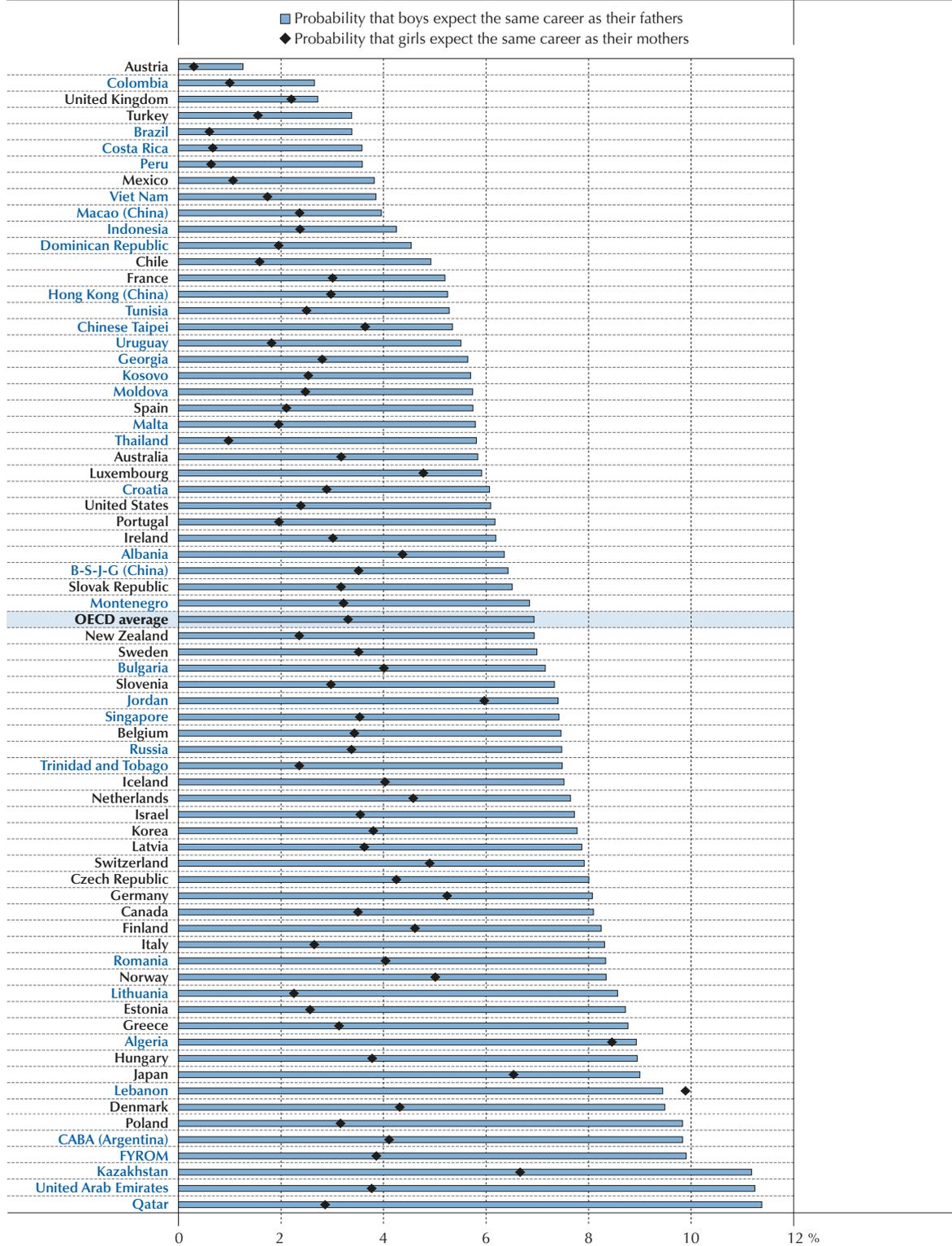
In his research linking a father's earnings to a son's adult earnings, Miles Corak has shown that more unequal economies tend to have less fluid societies (Corak, 2013). According to Corak's findings, in some places, like the United Kingdom and United States, around 50% of income differences in one generation are attributable to differences in the previous generation, while in some of the more egalitarian countries in Northern Europe, less than 30% of income differences in one generation are so attributable. But according to other research that examines the over-representation of aristocratic names in elite positions, much of a family's social status is transmitted from generation to generation across a span of centuries – even in Sweden (Clark, 2012).

Some of the persistence of socio-economic advantage stems from adolescents' expectations to pursue the same career as their parents. Parents are key role models who set an example, provide opportunities, and give advice to either aim for or steer clear of their own lines of work. Some parents want their children to follow their footsteps, while others encourage their children to explore other avenues and realise their own ambitions.

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Figure III.10.7 ■ Percentage of students who expect the same career as their parents, by gender



Note: Students reported their expected occupation when they are 30 years old. Students' expected occupation and parents' current occupation are coded according to the International Standard Classification of Occupations, 2008 edition (ISCO-08), at the 3 digit level (e.g., 111 ISCO code: Senior officials and legislators).

Countries and economies are ranked in ascending order of the percentage of boys who expect to have the same career as their father.

Source: OECD, PISA 2015 Database, Table III.10.16.

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PISA 2015 asked students what occupation they expect to be working in when they are 30 years old. Students could enter any job title or description in an open-entry field; their answers were classified according to the International Standard Classification of Occupations, 2008 edition (ISCO-08). Across OECD countries and economies, around 7% of students expect to do the same job as their parents when they are 30 (Table III.10.16). This percentage ranges from around 1% in Indonesia, Peru, Turkey and Viet Nam, to more than 10% in Algeria and Lebanon (this analysis defines a job as a three-digit ISCO group: for example, Nursing and Midwifery Professionals [code 222] form one job).

A comparison of boys and girls adds interesting nuances to these data. In theory, virtually all careers should be available to both men and women, but this availability is not always perceived by adolescents as realistic. This perception arises, in part, from the influence of gender stereotypes in occupational choices. On average across OECD countries, 7% of boys expect to be working in the same occupation as their fathers, while only 3% of girls expect the same job as their mothers (Figure III.10.7). On average, around 2% of boys expect to be working in the same occupation as their mothers, and 2% of girls in the same occupation as their fathers. In Qatar and the United Arab Emirates, more than 10% of boys expect to be working in the same occupation as their fathers. In Algeria, Germany, Japan, Jordan and Lebanon, at least 5% of girls to follow in their mothers' footsteps, whereas less than 1% of girls in Austria, Brazil, Costa Rica and Peru reported so. In Albania, Denmark, Germany and Lebanon more than 15% of girls expect to work in the same job as their mothers (Table III.10.16).

Gender differences partly stem from the fact that girls' career expectations are concentrated in a more limited number of jobs that do not generally correspond to those of their fathers or mothers. On average across OECD countries, around 35% of boys expect to work in one of the five most popular occupations for male students in their countries, while around 38% of girls have this expectation (Table III.10.16). On average across OECD countries, over 9% of girls expect to work as medical doctors when they are 30 years old (Table III.10.17). In Algeria, Colombia, Costa Rica, the Dominican Republic, Lebanon, Qatar and Tunisia more than one in five girls aspire to become a doctor. Other popular occupations among girls are social scientists and social sector occupations (7% on average across OECD countries), and legal professionals (5%). On average across OECD countries, about 7% of boys aspire to work as engineers, 5% as sports and fitness workers, 4% as mechanics and 4% as medical doctors. Around 6% of boys and 5% of girls reported that they do not know what occupations they will work in when they are about 30 years old.

More analyses of adolescents' career expectations might shed more light on socio-economic and gender inequalities in positions of power, leadership and prestige. They could also reveal more about how social mobility and children's well-being are shaped by parents' attitudes and social norms.

Figure III.10.8 shows that, on average across OECD countries with available data, the children of blue-collar workers who attend schools where students have parents with white-collar occupations were around twice as likely to expect to earn a university degree and work in a management or professional occupation than children of blue-collar workers who perform similarly but who attend other schools. In other words, the education and occupation expectations of disadvantaged students are related to the socio-economic profile and composition of their school. This result suggests that in schools with a high concentration of optimistic students with pro-school attitudes and high expectations, students of all social status tend to develop greater ambitions for their future. Social segregation that clusters poor students in poor schools might, instead, tamp down students' expectations for, and beliefs in, themselves. The relationship shown in Figure III.10.8 might also reflect the likelihood that disadvantaged students who attend advantaged schools are a group of select students who not only perform better than other disadvantaged students but also hold higher expectations for their future.

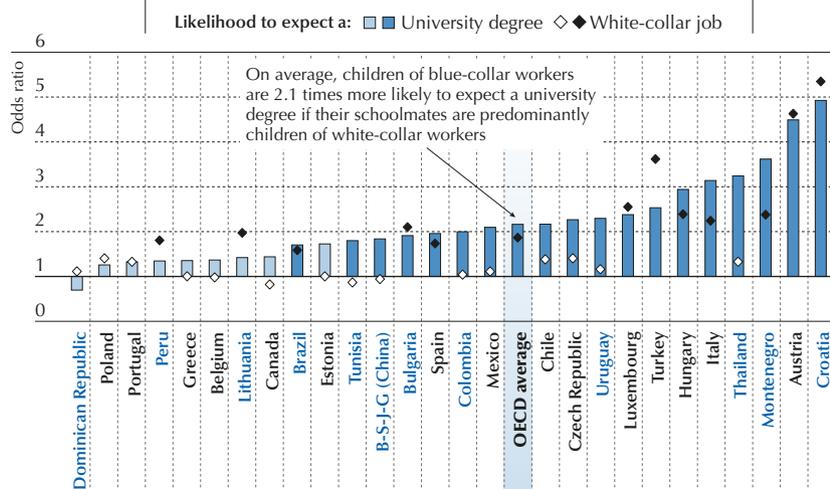
These results show that students are affected not only by the socio-economic background of their parents, but also by that of the other students around them – and in ways that go well beyond academic achievement. In schools with a diverse student body, those at the bottom of the socio-economic hierarchy are more at risk of being less satisfied with their life than those from a more advantaged background. In systems and contexts with more homogeneous but socially segregated schools, disadvantaged students might be less likely to develop higher expectations for their education and career because their peers at school have low motivation and aspirations.

The complex interplay between harmful and benevolent peer influences on the well-being of disadvantaged students can be an opportunity to be seized by teachers and schools in every country. Teachers can be trained to better understand the dynamics of diversity – social, economic and cultural – and work with all students to reduce some of their negative effects on the most vulnerable students. Teacher training that includes a focus on equity, cultural and social diversity can give



teachers some practical tools on how to counter the negative effects of social comparison that may lower adolescents' self-esteem and life satisfaction (Gorski, 2013). Skilful interventions by teachers can also make peer influences work towards a positive end, especially during adolescence, helping to raise the expectations of disadvantaged students about what they can accomplish, with hard work and dedication, in school and in life.

Figure III.10.8 ■ **Students' expectations and social composition of their school**
Education and career expectations of children of blue-collar workers in schools where the other students are predominantly children of white-collar workers



Notes: Workers in white-collar occupations are defined as managers (ISCO-08 category 1), professionals (ISCO-08 category 2) and technicians and associate professionals (ISCO-08 category 3).

Workers in blue-collar occupations are defined as skilled agricultural, forestry and fishery workers (ISCO-08 category 6), craft and related trades workers (ISCO-08 category 7), plant and machine operators and assemblers (ISCO-08 category 8) and workers in elementary occupations (ISCO-08 category 9).

Schools with students mostly from a white-collar background are schools where the percentage of children of white-collar workers is statistically significantly above the country/economy average.

Statistically significant values are marked in a darker tone (see Annex A3).

In order to increase international comparability, odds ratios are reported only for countries with at least fifty children of blue-collar workers in white-collar schools.

Countries and economies are ranked in ascending order of the likelihood that children of blue-collar workers expect to complete a university degree if their schoolmates' parents are predominantly white-collar workers.

Source: OECD, PISA 2015 Database, Table III.10.15.

StatLink  <http://dx.doi.org/10.1787/888933472516>

PISA 2015 data show that there are large differences across countries in the strength of the relationship between socio-economic advantage and students' well-being outcomes, suggesting that policies and school practices can help level the playing field and increase social mobility (OECD, 2016b). Upward social mobility is possible only if disadvantaged students hold high aspirations for their future (Pajares and Urda, 2006). Schools can promote social mobility if they help all students develop a positive view of themselves and their future.

What these results mean for policy

- Providing sufficient funding to public schools so that they can attain the quality standards of selective private schools, delaying early tracking, and improving the quality and image of vocational schools could reduce social segregation at school and boost upward social mobility.
- Schools should work in partnership with the wider community and other institutions to identify the resources that disadvantaged children might lack at home, and the support that they can provide.
- School leaders need to embrace social and economic diversity in their school and work to understand the challenges and opportunities of educating mixed groups of students. Schools may indeed reflect existing inequalities in the broader society, but school leaders can work to reduce the impact of these inequalities on students' lives by creating a school environment that is welcoming, stimulating and inclusive for teachers, staff members and students from all walks of life.

...



- Rather than ignoring the role of socio-economic differences between students, teachers should pay close attention to what aspects of these differences may be harming the well-being of the most vulnerable students. They can work with all students to reduce the negative effects of social comparisons and encourage the beneficial effects of peer influences by valuing students' achievements and effort, treating all students with the same level of attention and respect, showing interest in the various cultural traditions represented in the student body, and having high expectations for all students.
- Providing high-quality and personalised career guidance might be particularly valuable in disadvantaged schools, where peer pressure can negatively affect students' aspirations and expectations.

Notes

1. White-collar occupations include managers (ISCO-08 category 1), professionals (ISCO-08 category 2) and technicians and associate professionals (ISCO-08 category 3). Blue-collar occupations are defined as occupations as skilled agricultural, forestry and fishery workers (ISCO-08 category 6), craft and related trades workers (ISCO-08 category 7), plant and machine operators and assemblers (ISCO-08 category 8), and elementary occupations (ISCO-08 category 9).

2. The index of social segregation, as defined in Jenkins et al. (2008) and originally in Hutchens (2001, 2004), can be expressed as follows: where $i = 1, \dots, S$ is the number of students per school, the share of students with a low (high) social position is denoted by p and r and P and R are the number of students in the country with a low and high social position, respectively. Then H is the sum, over all schools, of each school's shortfall from distributional evenness of the two groups. In order to understand how much of the measured segregation is associated with the type of schools children attend, the index can be split into two components: a part that is related to differences in the social composition *between* different types of schools (for example between private and public schools, or between vocational and general schools), and a part that is explained by differences across schools *within* each type: $H = \sum_t w_t (H_t - H)$ where $w_t = \frac{N_t}{N}$ and $H_t = \frac{p_t P_t + r_t R_t}{N_t}$. This is with school types (e.g. private and public schools), the weight of the school type t , and the number of students in school type t with respectively a low and high social position.



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