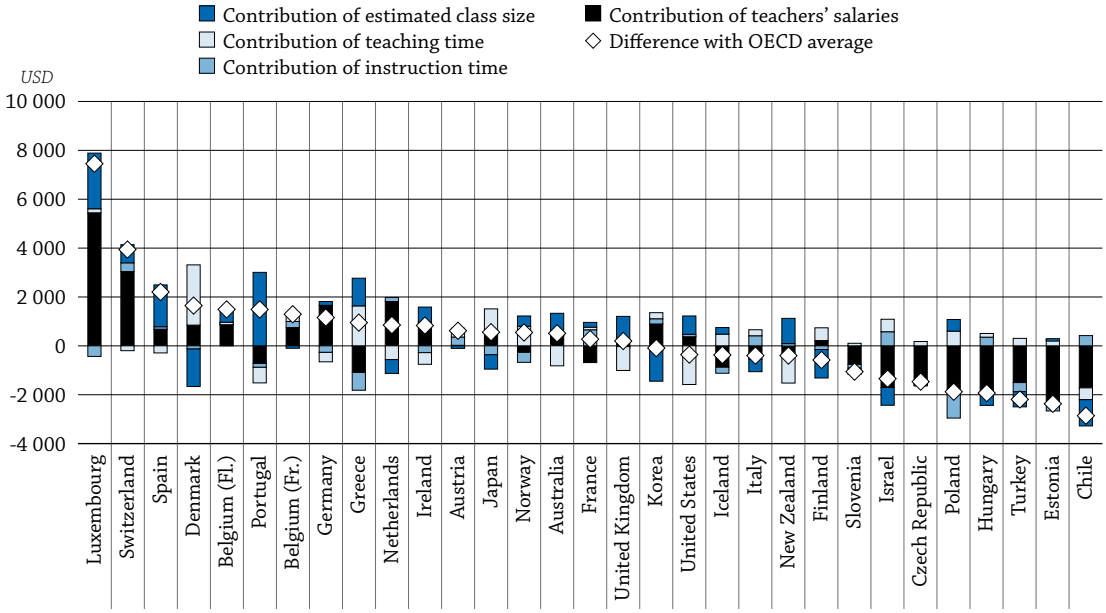
WHICH FACTORS INFLUENCE THE LEVEL OF EXPENDITURE?

- Four factors (instruction time of students, teaching time of teachers, teachers' salaries and class size) influence salary cost per student; consequently, a given level of salary cost per student can result from many different combinations of these factors. Salary cost per student at the upper secondary level varies significantly among OECD countries: from USD 539 in Chile to more than ten times that amount in Luxembourg, Spain and Switzerland.
- Teachers' salaries and class size are usually the main drivers of the difference from the average salary cost per student at the primary, lower secondary and upper secondary levels. However, class size is less often the main factor when the level of education increases.

Chart B7.1. Contribution (in USD) of various factors to salary cost per student, at the upper secondary level of education (2008)



Countries are ranked in descending order of the difference between the salary cost and the OECD average.
Source: OECD. Table B7.3. See Annex 3 for notes (*www.oecd.org/edu/eag2011*).
StatLink http://dx.doi.org/10.1787/888932461313

How to read this chart
The chart shows the extent to which various factors associated with salary cost contribute to the difference, in US dollars, between a country's salary cost per student and that of the OECD average. For example, in Spain, the salary cost per student is USD 2 201 higher than the OECD average. This is because Spain has higher teachers' salaries (+USD 686) than the OECD average, annual instruction time for students close to the OECD average (+USD 94) and above-average teaching time for teachers (-USD 291) compared to the OECD average. However, Spain also has significantly smaller-than-average class size (+USD 1 711).

Context

The relationship between the resources devoted to education and the outcomes achieved has been the focus of much education policy debate in recent years as governments seek to provide more and better education for the entire population. At the same time, given the increasing pressure on public budgets, there is intense interest in ensuring that funding – public funding, in particular – is directed so as to achieve the desired outcomes as efficiently as possible.

Many factors affect the relationship between spending per student and student performance. They include the organisation and management of schooling within the system (e.g. layers of management and the distribution of decision making, the geographic dispersion of the population),

the organisation of the immediate learning environment of students (e.g. class size, hours of instruction), the quality of the teaching workforce, and characteristics of the students themselves, most notably their socio-economic backgrounds.

Teachers' compensation is usually the largest part of expenditure on education and thus of expenditure per student. It is a function of instruction time of students, teaching time of teachers, teachers' salaries and the number of teachers needed to teach students, which depends on class size (Box B7.1). Differences among countries in these four factors may explain differences in the level of expenditure per student. In the same way, a given level of expenditure may result from a different combination of these factors.

Other findings

- **Similar levels of expenditure among countries in primary and secondary education can mask a variety of contrasting policy choices**. This helps to explain why there is no simple relationship between overall spending on education and the level of student performance. High spending per student cannot automatically be equated with strong performance by education systems and only 17% of the variation in 2009 PISA performance in reading results from the variation in cumulative expenditure per student aged 6 to 15.

- **In most countries, salary cost per student differs more from the OECD average as the level of education increases.** These costs are usually largest at the upper secondary level of education (in 15 of 31 OECD countries) and smallest at the primary level of education (in 20 of 31 OECD countries). This trend is most obvious in countries where the salary cost per student is furthest from the OECD average.

- Comparing salary cost to GDP per capita is a way of accounting for differences in countries' wealth. **Teachers' salaries (as a percentage of GDP per capita) are less often the main driver of the difference from the average salary cost per student when that cost is compared to GDP per capita.** In countries that show high levels of salaries and GDP per capita, such as Luxembourg and Switzerland, and in countries that show low salaries and low GDP per capita, such as the Czech Republic and Turkey, teachers' salaries are not the main driver of the difference from the average relative salary cost per student.

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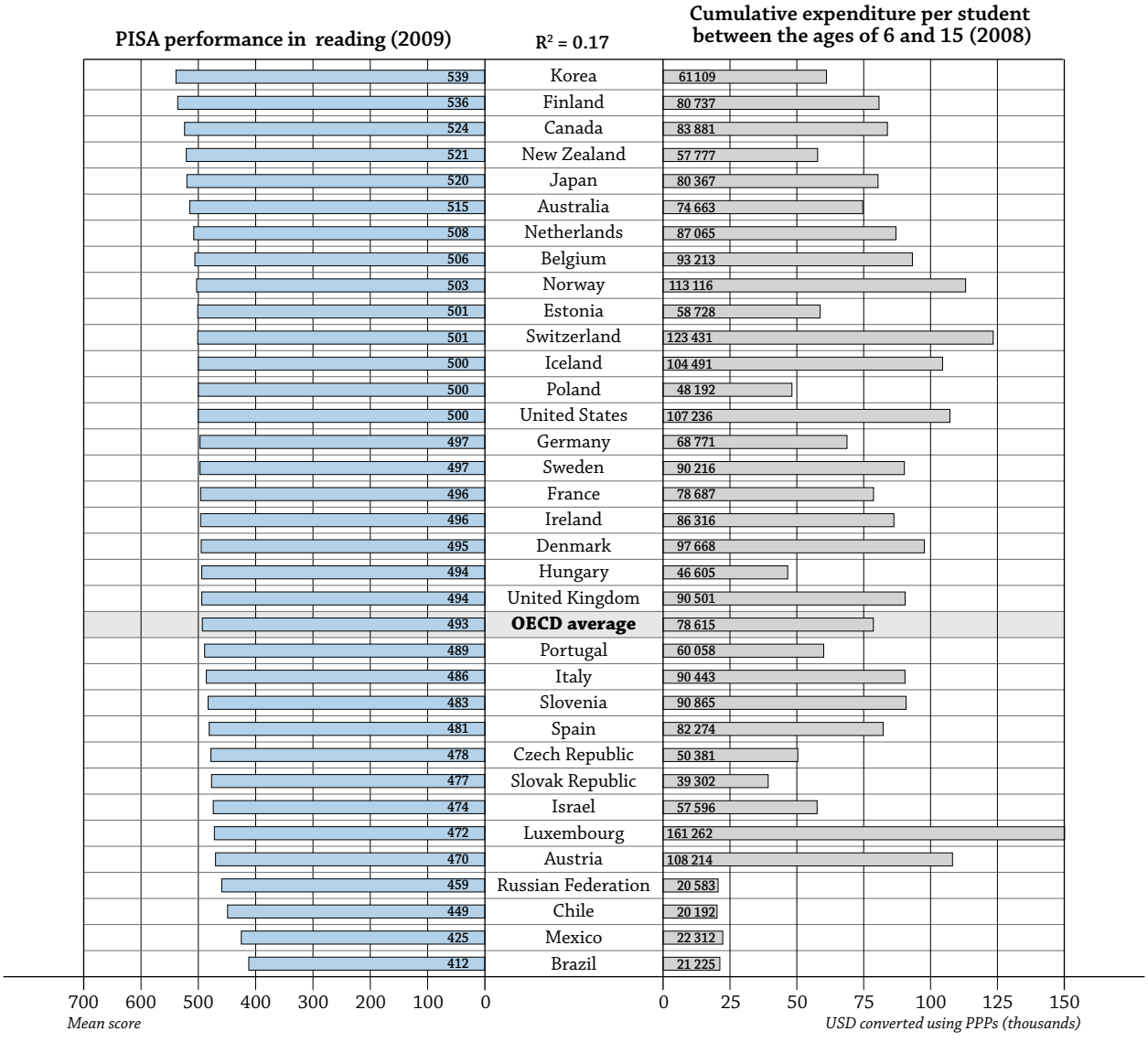
Analysis

Student performance and spending per student

High spending per student cannot automatically be equated with strong performance by education systems, as shown when comparing average student performance on the reading literacy scale of PISA 2009 with the cumulative spending per student between the ages of 6 and 15 in 2008 (Chart B7.2). This is not surprising, as countries might spend similar amounts on education, but not necessarily on similar policies and practices. This helps to explain why there is no simple relationship between overall spending on education and the level of student performance. However, it does not mean that the relationship would be weak if all the determinants of educational spending were analysed separately and by level of education.

Chart B7.2. Relationship between PISA performance in reading at age 15 and cumulative expenditure per student between the ages of 6 and 15 (2008, 2009)



Countries are ranked in descending order of the PISA perfomance in reading of 15-year-olds.
Source: OECD, *PISA 2009 Database.* Table B1.1a. See Annex 3 for notes (*www.oecd.org/edu/eag2011*).
StatLink http://dx.doi.org/10.1787/888932461332

Globally, only 17% of the variation in 2009 PISA performance in reading literacy results from the difference in cumulative expenditure per student between the ages of 6 and 15 (Chart B7.2). Whereas the four countries with the lowest average scores in reading literacy (Brazil, Chile, Mexico and the Russian Federation) also have the lowest levels of cumulative expenditure per student, the four top-performing countries (Canada, Finland, Korea and New Zealand) are not among countries with the highest levels of cumulative expenditure per student between the ages of 6 and 15. On the contrary, the four countries with the highest levels of cumulative expenditure per student between those ages (Austria, Luxembourg, Norway and Switzerland) have an average score in reading literacy varying from slightly above the OECD average (Norway and Switzerland) to well below the OECD average (Austria and Luxembourg).

Differences in the combination of factors at the upper secondary level of education

Since four factors (instruction time of students, teaching time of teachers, teachers' salaries and class size) influence salary cost per student, a given level of salary cost per student can result from many different combinations of these factors.

For example, in both Denmark and Portugal salary costs per student at the upper secondary level are close to and well above the OECD average (USD 5 044 and USD 4 886, respectively), but these countries combine instruction time, teaching time, class size and teachers' salaries in very different ways. In Denmark, relatively large class size and, to a lesser extent, below-average instruction time reduce salary cost per student relative to the OECD average. These effects are more than counterbalanced by relatively high teachers' salaries and, most notably, below-average teaching time. Together these factors result in above-average salary cost per student. In contrast, higher-than-average salary cost per student in Portugal is almost entirely attributable to below-average class size. The impact of small class size largely outweighs the influence of below-average salaries, above-average teaching time, and below-average instruction time for students (Table B7.3 and Chart B7.1).

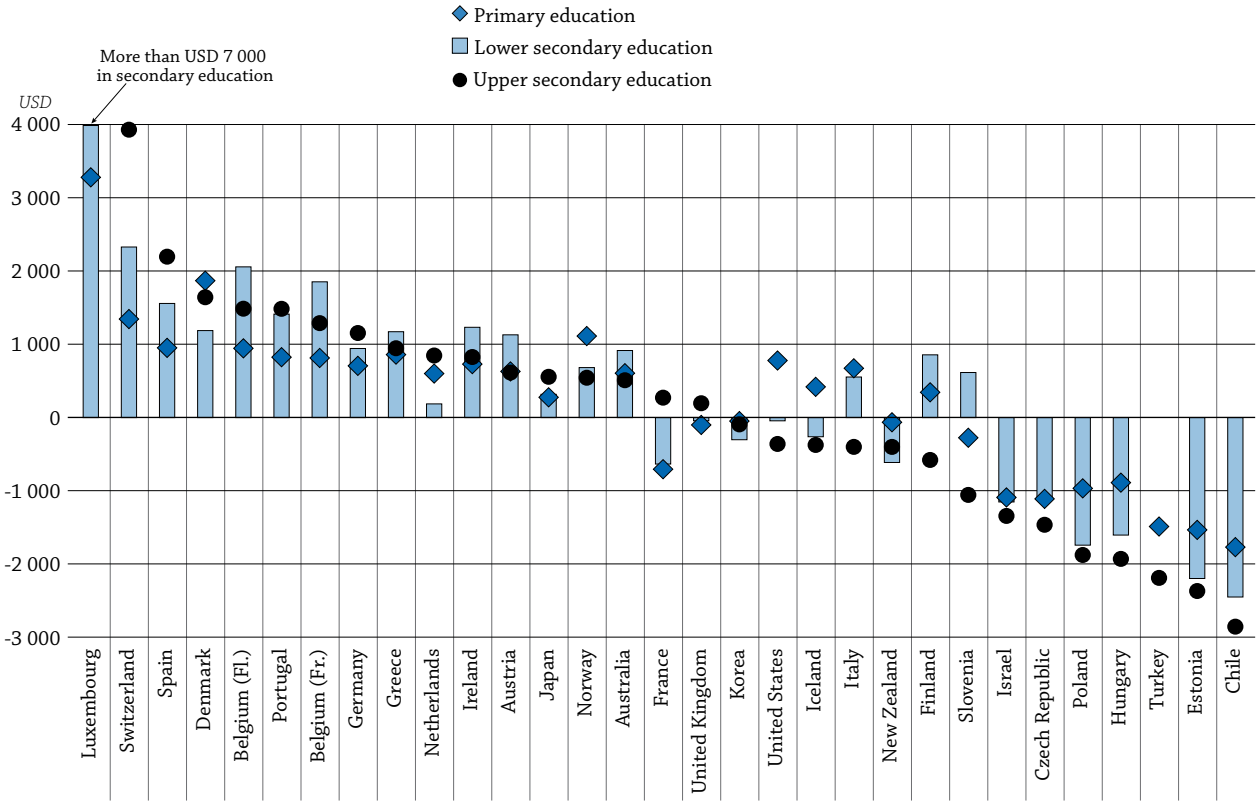
However, alongside such contrasts, there are also striking similarities in countries' policy choices, even if these similarities can have more or less impact compared to the OECD average and result in different levels of salary cost per student. For example, in Australia, New Zealand, the United Kingdom and the United States, salary cost per student at the upper secondary level is the result of balancing two opposing effects: above-average teaching time acts to reduce salary cost per student relative to the OECD average, and relatively small class size increases salary cost per student relative to the OECD average. However, salary cost per student resulting from this combination is above the OECD average in Australia and the United Kingdom, but below the average in New Zealand and the United States, where teaching time and class size are closer to the OECD averages than in the former two countries (Table B7.3).

Salary cost per student in primary and secondary education

Comparisons of the various levels of education show that differences in salary cost per student compared with the OECD average are largest at the upper secondary level of education in 15 of 31 OECD countries and smallest at the primary level of education in 20 of the 31 OECD countries with available data (Chart B7.3). This trend is most obvious in countries where salary cost per student is furthest from the OECD average. For example, Spain and Switzerland have two of the three highest levels of salary cost per student at the upper secondary level of education while the salary cost per student at the primary and lower secondary levels is at least USD 1 000 lower than at the upper secondary level.

At the **upper secondary level** of education, salary cost per student varies from USD 539 in Chile to around three times the OECD average (USD 3 398) in Luxembourg (USD 10 847). Teachers' salaries account for most of this difference (USD 5 440), as teachers' salaries in Luxembourg are much higher than the OECD average. In Chile, teachers' salaries also account for the large difference from the OECD average salary cost per student, although in the opposite direction (Table B7.3 and Chart B7.1).

Chart B7.3. Difference between the salary cost per student and the OECD average (in USD), by level of education (2008)



Countries are ranked in descending order of the difference between the salary cost per student and the OECD average in upper secondary education.
Source: OECD. Tables B7.1, B7.2 and B7.3. See Annex 3 for notes (*www.oecd.org/edu/eag2011*).
StatLink http://dx.doi.org/10.1787/888932461351

At the **lower secondary level** of education, salary cost per student is the highest in Luxembourg (USD 10 847, more than three times the OECD average of USD 2 991) and Switzerland (USD 5 325), but is below USD 1 500 only in Chile (USD 538, less than one-fifth of the OECD average), Estonia (USD 791), Hungary (USD 1 385), Mexico (USD 716) and Poland (USD 1 247). The differences among these countries, except for Mexico, are mostly influenced by the level of teachers' salaries (Table B7.2).

At the **primary level** of education, salary cost per student varies from less than USD 550 in Chile (USD 538) to USD 5 595 in Luxembourg, or more than twice the OECD average of USD 2 309. These differences in salary costs per student are mostly influenced by the level of teachers' salaries in these countries (Table B7.1). Teachers' salaries in Luxembourg account for more than USD 2 297 of the difference from the OECD average salary cost per student, as teachers' salaries in Luxembourg are much higher than the OECD average (USD 67 723 compared to the OECD average of USD 36 228). In contrast, in Chile, teachers' salaries account for USD 1 257 of the difference from the OECD average salary cost per student (at USD 12 976, teachers' salaries are much lower than the OECD average of USD 36 228).

Main drivers of the difference from the OECD average salary cost per student

At the **primary** level, of the four factors contributing to the salary cost per student, salary of teachers is most often the main driver of the difference from the OECD average salary cost per student (in 15 of the 32 OECD countries with available data). This is true both in countries with the highest levels of salary cost and the lowest levels of salary cost per student: below-average salaries are the main driver of the difference

in seven of the eight countries with the lowest salary costs per student, and above-average salaries are the main driver in two of the three countries with the highest salary costs per student. The main driver of the difference from the OECD average varies more among countries whose salary cost per student is closer to the OECD average (Box B7.2 and Table B7.1). At this level, the second main driver of the difference is class size (in ten countries).

Box B7.1. Relationship between salary cost per student and instruction time of students, teaching time of teachers, teachers' salaries and class size

One way to analyse the factors that have an impact on expenditure per student and to measure the extent of their effects is to compare the differences between national figures and the OECD average. This analysis computes the differences in expenditure per student among countries and the OECD average, and then calculates the contribution of these different factors to the variation from the OECD average.

This exercise is based on a mathematical relationship between the different factors and follows the method presented in the Canadian publication *Education Statistics Bulletin* (2005) (see explanation in Annex 3). Educational expenditure is mathematically linked to factors related to a country's school context (number of hours of instruction time for students, number of teaching hours for teachers, estimated class size) and one factor relating to teachers (statutory salary).

Expenditure is broken down into compensation of teachers and other expenditure (defined as all expenditure other than compensation of teachers). Compensation of teachers divided by the number of students, or "the salary cost per student" (CCS), is estimated through:

$$CCS = SAL \times instT \times \frac{1}{teachT} \times \frac{1}{ClassSize} = \frac{SAL}{Ratiostud/teacher}$$

SAL: teachers' salaries (estimated by statutory salary after 15 years of experience)
instT: instruction time of students (estimated as the annual intended instruction time, in hours, for students)
teachT: teaching time of teachers (estimated as the annual number of teaching hours for teachers)
ClassSize: a proxy for class size
Ratiostud/teacher: the ratio of students to teaching staff

With the exception of class size (which is not computed at the upper secondary level, as class size is difficult to define and compare because students at this level may attend several classes depending on the subject area), values for the different variables can be obtained from the indicators published in *Education at a Glance* (Chapter D). However, for the purpose of the analysis, a "theoretical" class size or proxy class size is estimated based on the ratio of students to teaching staff and the number of teaching hours and instruction hours (Box D2.1). As a proxy, this estimated class size should be interpreted with caution. To facilitate reading, the "estimated class size" is referred to as "class size" in the text.

Using this mathematical relationship and comparing a country's values for the four factors to the OECD averages makes it possible to measure both the direct and indirect contribution of each of these four factors to the variation in salary cost per student between that country and the OECD average (for more details see Annex 3). For example, in the case where only two factors interact, if a worker receives a 10% increase in the hourly wage and increases the number of hours of work by 20%, his/her earnings will increase by 32% as a result of the direct contribution of each of these variations (0.1 + 0.2) and the indirect contribution of these variations due to the combination of the two factors (0.1 * 0.2).

To account for differences in the countries' level of wealth when comparing salary costs per student, salary cost per student, as well as teachers' salaries, can be divided by GDP per capita (on the assumption that GDP per capita is an estimate of countries' level of wealth). This makes it possible to compare countries' "relative" salary cost per student (see *Education at a Glance 2011* tables available on line).

Box B7.2. Main driver of salary cost per student, by level of education (2008)

	Primary education	Lower secondary education	Upper secondary education
Teachers' salary	**15 countries** AUS(+), CHL(-), CZE(-), EST(-), DEU(+), HUN(-), IRL(+), ISR(-), JPN(+), KOR(+), LUX(+), MEX(-), NLD(+), POL(-), CHE(+)	**15 countries** AUS(+), CHL(-), CZE(-), EST(-), DEU(+), HUN(-), ISL(-), IRL(+), ISR(-), JPN(+), LUX(+), NLD(+), POL(-), ESP(+), CHE(+)	**18 countries** BFL(+), BFR(+), CHL(-), CZE(-), EST(-), FRA(-), DEU(+), HUN(-), ISL(-), IRL(+), ISR(-), ITA(-), LUX(+), NLD(+), POL(-), SVN(-), CHE(+), TUR(-)
Instruction time	**4 countries** BFR(+), FIN(-), ITA(+), SVN(-)		
Teaching time	**3 countries** GRC(+), NZL(-), USA(-)	**7 countries** AUT(+), FIN(+), GRC(+), ITA(+), NZL(-), UKM(-), USA(-)	**8 countries** AUS(-), AUT(+), DNK(+), GRC(+), JPN(+), NZL(-), NOR(+), USA(-)
Estimated class size	**10 countries** AUT(+), BFL(+), DNK(+), FRA(-), ISL(+), NOR(+), PRT(+), ESP(+), TUR(-), UKM(-)	**9 countries** BFL(+), BFR(+), DNK(+), FRA(-), KOR(-), MEX(-), NOR(+), PRT(+), SVN(+)	**5 countries** FIN(-), KOR(-), PRT(+), ESP(+), UKM(+)

Note: The positive or negative signs show whether the factor increases or decreases the salary cost per student.
Source: OECD. Tables B7.1, B7.2 and B7.3. See Annex 3 for notes *(www.oecd.org/edu/eag2011)*.
Please refer to the Reader's Guide for the list of country codes used in this table.
StatLink http://dx.doi.org/10.1787/888932461370

At the **lower secondary** level, the main drivers of the difference with the OECD averages salary cost per student are more similar to the upper secondary level. At the **upper secondary** level, teachers' salaries are the main driver of the difference from the OECD average salary cost per student in 18 of the 31 OECD countries for which data are available. In eight countries with the lowest salary costs per student at this level of education, below-average teachers' salaries are the main driver (Chart B7.1); but above-average teachers' salaries are also the main driver in the two countries with the highest salary cost per student. Teaching time or class size are the main drivers of the difference from the OECD average salary cost per student in eight and five countries, respectively (Box B7.2 and Table B7.3). The higher the level of education, the greater the impact of teachers' salaries and the lower the impact of class size on the difference from the OECD average salary cost per student. For example, in Belgium (Flemish Community), France, Iceland and Turkey, the main driver of the difference from the OECD average salary cost per student is teachers' salaries at the upper secondary level and estimated class size at the primary level (Box B7.2).

When differences in countries' wealth are accounted for, comparing relative salary cost per student shows the same picture at the upper secondary level of education (Tables B7.1 continued, B7.2 continued and B7.3 continued, available on line); but relative teachers' salaries are less often the main driver of the difference from the average salary cost per student at the lowest levels, and the main driver is most often class size at each level of education (Box B7.2 continued, available on line). This is especially true in countries that have both high teachers' salaries and high GDP per capita compared to other countries, such as Luxembourg and Switzerland, and in countries that have both low teachers' salaries and low GDP per capita compared to other countries, such as Chile, the Czech Republic and Turkey.

Methodology

Cumulative spending per student is approximated by multiplying public and private expenditure on educational institutions per student in 2008 at each level of education by the theoretical duration of education at these levels between the ages of 6 and 15 in each of the countries. The results are expressed in USD using purchasing power parities.

Salary cost per student is calculated based on teachers' salaries, the number of hours of instruction for students, the number of hours of teaching for teachers and a proxy class size (see Box D2.1). In most cases, the values for these variables are derived from *Education at a Glance 2010*, and refer to the school year 2007-08 and the calendar year 2007 for indicators related to finance. However, in order to compensate for missing

values for some variables, some data have been estimated on the basis of data published in previous editions of *Education at a Glance*. When it was not possible to make estimates or proxy figures were not available, the missing values have been replaced by the average for all OECD countries. Teachers' salaries in national currency are converted into equivalent USD by dividing the national currency figure by the purchasing power parity (PPP) index for GDP, so that salary cost per student is expressed in equivalent USD. Further details on the analysis of these factors are available in Annex 3 at *www.oecd.org/edu/eag2011*.

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

References

Education Statistics Bulletin, Ministère de l'Éducation, du Loisir et du Sport du Québec (2005), "Educational Spending Relative to the GDP in 2001: A Comparison of Quebec and the OECD Countries", *www.mels.gouv.qc.ca/stat/bulletin/bulletin_31an.pdf*.

OECD (2010h), *Education at a Glance 2010: OECD Indicators*, OECD, Paris.

The following additional material relevant to this indicator is available on line:

- ***Table B7.1. (continued) Contribution, in percentage points of GDP per capita, of various factors to salary cost per student at primary level of education (2008)***
  StatLink http://dx.doi.org/10.1787/888932464163
- ***Table B7.2. (continued) Contribution, in percentage points of GDP per capita, of various factors to salary cost per student at lower secondary level of education (2008)***
  StatLink http://dx.doi.org/10.1787/888932464201
- ***Table B7.3. (continued) Contribution, in percentage points of GDP per capita, of various factors to salary cost per student at upper secondary level of education (2008)***
  StatLink http://dx.doi.org/10.1787/888932464239
- ***Box B7.2. (continued) Main driver of salary cost per student as a percentage of GDP per capita, by level of education (2008)***
  StatLink http://dx.doi.org/10.1787/888932461389

B7

Table B7.1. Contribution, in USD, of various factors to salary cost per student at the primary level of education (2008)

Contribution (in USD) of school factors to salary cost per student

How to read this table: In Australia, at USD 2 917, the salary cost per student exceeds the OECD average by USD 608. Above-average salaries and above-average instruction time increase the difference from the OECD average by USD 629 and USD 485, respectively, whereas above-average teaching time and above-average estimated class size decrease the difference from the average by USD 290 and USD 218, respectively. The sum of these effects results in a positive difference from the OECD average of USD 608.

		Salary cost per student	Difference from the OECD average of **USD 2 309**	Contribution of the underlying factors to the difference from the OECD average			
				Effect (in USD) of **teachers' salaries** below/above the OECD average of **USD 36 228**	Effect (in USD) of **instruction time** (for students) below/above the OECD average of **797 hours**	Effect (in USD) of **teaching time** (for teachers) below/above the OECD average of **782 hours**	Effect (in USD) of **estimated class size** below/above the OECD average of **16 students per class**
		(1)	(2) = (3) + (4) + (5) + (6)	(3)	(4)	(5)	(6)
OECD	**Australia**	2 917	**608**	629	485	-290	-218
OECD	**Austria**	2 940	**631**	120	-213	7	718
OECD	**Belgium (Fl.)**	3 256	**948**	348	145	-99	554
OECD	**Belgium (Fr.)**	3 125	**816**	229	416	206	-35
OECD	**Canada**	m	**m**	m	m	m	m
OECD	**Chile**	538	**-1 771**	-1 257	443	-130	-827
OECD	**Czech Republic**	1 198	**-1 111**	-873	-414	-144	320
OECD	**Denmark**	4 182	**1 873**	494	-413	596	1 196
OECD	**Estonia**	773	**-1 536**	-1 484	-441	339	50
OECD	**Finland**	2 655	**346**	134	-679	360	531
OECD	**France**	1 603	**-706**	-246	294	-329	-424
OECD	**Germany**	3 017	**708**	1 076	-618	-79	329
OECD	**Greece**	3 170	**862**	-348	-281	757	733
OECD	**Hungary**	1 420	**-889**	-1 694	-516	497	823
OECD	**Iceland**	2 730	**421**	-738	-262	390	1 030
OECD	**Ireland**	3 041	**732**	1 075	373	-428	-288
OECD	**Israel**	1 217	**-1 092**	-1 034	400	62	-519
OECD	**Italy**	2 984	**675**	-370	572	163	309
OECD	**Japan**	2 587	**278**	727	-291	242	-401
OECD	**Korea**	2 262	**-47**	956	-616	-169	-218
OECD	**Luxembourg**	5 595	**3 286**	2 297	562	213	214
OECD	**Mexico**	681	**-1 628**	-851	5	-33	-750
OECD	**Netherlands**	2 911	**602**	619	432	-458	10
OECD	**New Zealand**	2 245	**-64**	134	487	-531	-154
OECD	**Norway**	3 424	**1 115**	63	-569	154	1 467
OECD	**Poland**	1 342	**-967**	-1 832	-980	866	978
OECD	**Portugal**	3 135	**826**	-56	298	-246	831
OECD	**Slovak Republic**	m	**m**	m	m	m	m
OECD	**Slovenia**	2 033	**-276**	-266	-546	297	239
OECD	**Spain**	3 263	**954**	462	124	-331	700
OECD	**Sweden**	m	**m**	m	m	m	m
OECD	**Switzerland**	3 657	**1 348**	1 312	-338	-372	746
OECD	**Turkey**	820	**-1 489**	-876	126	317	-1 056
OECD	**United Kingdom**	2 209	**-100**	477	260	-205	-632
OECD	**United States**	3 090	**781**	540	563	-935	613

Source: OECD. Data from *Education at a Glance 2010 (www.oecd.org/edu/eag2010)*. See Annex 3 for notes *(www.oecd.org/edu/eag2011)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932464144

Table B7.2. Contribution, in USD, of various factors to salary cost per student at the lower secondary level of education (2008)

Contribution (in USD) of school factors to salary cost per student

		Salary cost per student	Difference from the OECD average of **USD 2 991**	Contribution of the underlying factors to the difference from the OECD average			
				Effect (in USD) of **teachers' salaries** below/above the OECD average of **USD 39 146**	Effect (in USD) of **instruction time** (for students) below/above the OECD average of **933 hours**	Effect (in USD) of **teaching time** (for teachers) below/above the OECD average of **707 hours**	Effect (in USD) of **estimated class size** below/above the OECD average of **17.3 students per class**
		(1)	(2) = (3) + (4) + (5) + (6)	(3)	(4)	(5)	(6)
OECD	**Australia**	3 909	**918**	622	279	-481	498
OECD	**Austria**	4 123	**1 132**	163	95	537	337
	Belgium (Fl.)	5 053	**2 062**	193	137	65	1 666
	Belgium (Fr.)	4 848	**1 857**	28	346	249	1 234
	Canada	m	**m**	m	m	m	m
	Chile	538	**-2 453**	-1 544	254	-309	-854
	Czech Republic	1 869	**-1 122**	-1 375	-155	256	152
	Denmark	4 182	**1 190**	277	-128	308	734
	Estonia	791	**-2 200**	-1 839	-273	212	-301
	Finland	3 850	**859**	154	-405	602	508
	France	2 356	**-635**	-354	376	249	-905
	Germany	3 937	**945**	1 429	-176	-239	-69
	Greece	4 166	**1 175**	-745	-466	1 797	588
	Hungary	1 385	**-1 606**	-2 029	-117	332	209
	Iceland	2 730	**-262**	-1 054	-196	148	841
	Ireland	4 227	**1 235**	1 156	-99	-142	320
	Israel	1 838	**-1 154**	-1 342	495	413	-718
	Italy	3 547	**555**	-431	507	528	-48
	Japan	3 310	**319**	690	-229	503	-646
	Korea	2 689	**-302**	969	-214	400	-1 457
	Luxembourg	10 847	**7 855**	5 538	-177	707	1 787
	Mexico	716	**-2 275**	-784	396	-650	-1 237
	Netherlands	3 179	**188**	775	216	-186	-618
	New Zealand	2 378	**-614**	-51	147	-843	133
	Norway	3 676	**684**	-187	-407	261	1 018
	Poland	1 247	**-1 744**	-1 804	-782	708	133
	Portugal	4 407	**1 416**	-370	-112	-237	2 135
	Slovak Republic	m	**m**	m	m	m	m
	Slovenia	3 608	**617**	-676	-558	117	1 733
	Spain	4 553	**1 561**	663	316	-33	616
	Sweden	m	**m**	m	m	m	m
	Switzerland	5 325	**2 333**	2 040	-94	-823	1 210
	Turkey	a	**a**	a	a	a	a
	United Kingdom	2 981	**-10**	393	-26	-572	195
	United States	2 982	**-9**	356	150	-1 259	743

Source: OECD. Data from *Education at a Glance 2010 (www.oecd.org/edu/eag2010)*. See Annex 3 for notes *(www.oecd.org/edu/eag2011)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
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B7

Table B7.3. Contribution, in USD, of various factors to salary cost per student at the upper secondary level of education (2008)

Contribution (in USD) of school factors to salary cost per student

		Salary cost per student	Difference from the OECD average of **USD 3 398**	Contribution of the underlying factors to the difference from the OECD average			
				Effect (in USD) of **teachers' salaries** below/above the OECD average of **USD 41 944**	Effect (in USD) of **instruction time** (for students) below/above the OECD average of **958 hours**	Effect (in USD) of **teaching time** (for teachers) below/above the OECD average of **649 hours**	Effect (in USD) of **estimated class size** below/above the OECD average of **18.2 students per class**
		(1)	(2) = (3) + (4) + (5) + (6)	(3)	(4)	(5)	(6)
OECD	**Australia**	3 909	**511**	411	128	-819	791
OECD	**Austria**	4 014	**616**	21	338	362	-104
	Belgium (Fl.)	4 887	**1 489**	932	30	3	525
	Belgium (Fr.)	4 690	**1 292**	747	250	298	-2
	Canada	m	**m**	m	m	m	m
	Chile	539	**-2 859**	-1 720	418	-483	-1 074
	Czech Republic	1 932	**-1 466**	-1 502	-9	175	-131
	Denmark	5 044	**1 646**	846	-131	2 464	-1 534
	Estonia	1 026	**-2 371**	-2 375	-289	262	30
	Finland	2 819	**-579**	216	-151	522	-1 166
	France	3 671	**273**	-686	656	106	197
	Germany	4 555	**1 157**	1 655	-268	-386	157
	Greece	4 347	**949**	-1 087	-730	1 634	1 132
	Hungary	1 466	**-1 932**	-1 945	354	151	-492
	Iceland	3 024	**-374**	-875	-247	479	269
	Ireland	4 227	**829**	971	-280	-476	614
	Israel	2 053	**-1 345**	-1 704	576	511	-727
	Italy	2 998	**-400**	-554	411	247	-504
	Japan	3 956	**558**	549	-366	962	-587
	Korea	3 305	**-93**	893	213	249	-1 448
	Luxembourg	10 847	**7 449**	5 440	-434	166	2 277
	Mexico	m	**m**	m	m	m	m
	Netherlands	4 247	**849**	1 813	165	-564	-565
	New Zealand	2 997	**-401**	-287	89	-1 237	1 034
	Norway	3 943	**545**	-267	-408	798	423
	Poland	1 519	**-1 879**	-1 947	-1 008	601	476
	Portugal	4 886	**1 488**	-721	-160	-636	3 005
	Slovak Republic	m	**m**	m	m	m	m
	Slovenia	2 341	**-1 057**	-760	-155	103	-245
	Spain	5 599	**2 201**	686	94	-291	1 711
	Sweden	m	**m**	m	m	m	m
	Switzerland	7 336	**3 938**	3 036	358	-199	742
	Turkey	1 206	**-2 192**	-1 504	-370	305	-623
	United Kingdom	3 594	**197**	220	-31	-977	985
	United States	3 038	**-360**	398	74	-1 581	750

Source: OECD. Data from *Education at a Glance 2010 (www.oecd.org/edu/eag2010)*. See Annex 3 for notes *(www.oecd.org/edu/eag2011)*.
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