

## ANNEX C – STANDARD ERRORS OF MEANS, SAMPLE SIZES, SCHOOL VARIANCE ESTIMATES, AND OTHER SAMPLING OUTCOMES

Table C.1 Standard errors of the student performance mean estimate by country and by domain

	Science	Mathematics	Reading	Collaborative problem solving	Financial literacy	
OECD	Australia	1.54	1.61	1.69	1.91	1.91
	Austria	2.44	2.86	2.84	2.56	
	Belgium	2.29	2.35	2.42	2.39	2.88
	Canada	2.08	2.31	2.30	2.27	3.75
	Chile	2.38	2.54	2.58	2.69	3.17
	Czech Republic	2.27	2.40	2.60	2.20	
	Denmark	2.38	2.17	2.54	2.53	
	Estonia	2.09	2.04	2.22	2.47	
	Finland	2.39	2.31	2.55	2.55	
	France	2.06	2.10	2.51	2.42	
	Germany	2.69	2.89	3.01	2.85	
	Greece	3.92	3.75	4.34	3.60	
	Hungary	2.42	2.53	2.66	2.35	
	Iceland	1.68	1.99	1.98	2.26	
	Ireland	2.39	2.05	2.47		
	Israel	3.44	3.63	3.78	3.62	
	Italy	2.52	2.85	2.68	2.53	2.57
	Japan	2.97	3.00	3.20	2.68	
	Korea	3.13	3.71	3.50	2.53	
	Latvia	1.56	1.87	1.80	2.26	
	Luxembourg	1.12	1.27	1.44	1.50	
	Mexico	2.13	2.24	2.58	2.46	
	Netherlands	2.26	2.21	2.41	2.39	2.77
	New Zealand	2.38	2.27	2.40	2.45	
	Norway	2.26	2.23	2.51	2.52	
	Poland	2.51	2.39	2.48		2.89
	Portugal	2.43	2.49	2.69	2.64	
	Puerto Rico (United States) <sup>1</sup>	6.09	5.55	7.11		
	Slovak Republic	2.59	2.66	2.83	2.38	3.77
	Slovenia	1.32	1.26	1.47	1.75	
	Spain	2.07	2.15	2.36	2.15	2.88
	Sweden	3.60	3.17	3.48	3.44	
Switzerland	2.90	2.92	3.03			
Turkey	3.93	4.13	3.96	3.45		
United Kingdom	2.56	2.50	2.77	2.68		
United States	3.18	3.17	3.41	3.64	3.53	
Partners	Albania	3.28	3.45	4.13		
	Algeria	2.64	2.95	3.00		
	Argentina	2.87	3.05	3.22		
	Brazil	2.30	2.86	2.75	2.30	3.36
	B-S-J-G (China)	4.64	4.89	5.13	3.97	5.54
	Bulgaria	4.35	3.95	5.00	3.85	
	Colombia	2.36	2.29	2.94	2.30	
	Costa Rica	2.07	2.47	2.63	2.42	
	Croatia	2.45	2.77	2.68	2.52	
	Cyprus*	1.38	1.72	1.66	1.71	
	Dominican Republic	2.58	2.69	3.05		
	FYROM	1.25	1.28	1.41		
	Georgia	2.42	2.78	2.96		
	Hong Kong (China)	2.55	2.98	2.69	2.95	
	Indonesia	2.57	3.08	2.87		
	Jordan	2.67	2.65	2.93		
	Kazakhstan	3.67	4.28	3.42		
	Kosovo	1.70	1.63	1.57		
	Lebanon	3.40	3.69	4.41		
	Lithuania	2.65	2.33	2.74	2.46	2.97
	Macao (China)	1.06	1.11	1.25	1.24	
	Malaysia	3.00	3.25	3.48	3.29	
	Malta	1.64	1.72	1.78		
	Moldova	1.97	2.47	2.52		
	Montenegro	1.03	1.46	1.58	1.27	
	Peru	2.36	2.71	2.89	2.50	3.23
	Qatar	1.00	1.27	1.02		
	Romania	3.23	3.79	4.07		
	Russia	2.91	3.11	3.08	3.42	3.19
	Singapore	1.20	1.47	1.63	1.21	
	Chinese Taipei	2.69	3.03	2.50	2.47	
	Thailand	2.83	3.03	3.35	3.50	
Trinidad and Tobago	1.41	1.41	1.49			
Tunisia	2.10	2.95	3.06	1.94		
United Arab Emirates	2.42	2.41	2.87	2.43		
Uruguay	2.20	2.50	2.55	2.29		
Viet Nam	3.91	4.46	3.73			

1. Puerto Rico is an unincorporated territory of the United States. As such, PISA results for the United States do not include Puerto Rico.

\* Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.



[Part 1/2]

Table C.2 Sample sizes by country and by domain

	Science			Mathematics			Reading		
	Overall student sample size	School sample size	Average within-school sample size	Overall student sample size	School sample size	Reading	Overall student sample size	School sample size	Average within-school sample size
<b>OECD</b>									
Australia	14 530	758	19.17	14 530	758	19.17	14 530	758	19.17
Austria	7 007	269	26.05	7 007	269	26.05	7 007	269	26.05
Belgium	9 651	288	33.51	9 651	288	33.51	9 651	288	33.51
Canada	20 058	759	26.43	20 058	759	26.43	20 058	759	26.43
Chile	7 053	227	31.07	7 053	227	31.07	7 053	227	31.07
Czech Republic	6 894	344	20.04	6 894	344	20.04	6 894	344	20.04
Denmark	7 161	333	21.50	7 161	333	21.50	7 161	333	21.50
Estonia	5 587	206	27.12	5 587	206	27.12	5 587	206	27.12
Finland	5 882	168	35.01	5 882	168	35.01	5 882	168	35.01
France	6 108	252	24.24	6 108	252	24.24	6 108	252	24.24
Germany	6 522	256	25.48	6 522	256	25.48	6 522	256	25.48
Greece	5 532	211	26.22	5 532	211	26.22	5 532	211	26.22
Hungary	5 658	245	23.09	5 658	245	23.09	5 658	245	23.09
Iceland	3 371	124	27.19	3 371	124	27.19	3 371	124	27.19
Ireland	5 741	167	34.38	5 741	167	34.38	5 741	167	34.38
Israel	6 598	173	38.14	6 598	173	38.14	6 598	173	38.14
Italy	11 583	474	24.44	11 583	474	24.44	11 583	474	24.44
Japan	6 647	198	33.57	6 647	198	33.57	6 647	198	33.57
Korea	5 581	168	33.22	5 581	168	33.22	5 581	168	33.22
Latvia	4 869	250	19.48	4 869	250	19.48	4 869	250	19.48
Luxembourg	5 299	44	120.43	5 299	44	120.43	5 299	44	120.43
Mexico	7 568	275	27.52	7 568	275	27.52	7 568	275	27.52
Netherlands	5 385	187	28.80	5 385	187	28.80	5 385	187	28.80
New Zealand	4 520	183	24.70	4 520	183	24.70	4 520	183	24.70
Norway	5 456	229	23.83	5 456	229	23.83	5 456	229	23.83
Poland	4 478	169	26.50	4 478	169	26.50	4 478	169	26.50
Portugal	7 325	246	29.78	7 325	246	29.78	7 325	246	29.78
Puerto Rico (United States) <sup>1</sup>	1 398	47	29.74	1 398	47	29.74	1 398	47	29.74
Slovak Republic	6 350	290	21.90	6 350	290	21.90	6 350	290	21.90
Slovenia	6 406	333	19.24	6 406	333	19.24	6 406	333	19.24
Spain	6 736	201	33.51	6 736	201	33.51	6 736	201	33.51
Sweden	5 458	202	27.02	5 458	202	27.02	5 458	202	27.02
Switzerland	5 860	227	25.81	5 860	227	25.81	5 860	227	25.81
Turkey	5 895	187	31.52	5 895	187	31.52	5 895	187	31.52
United Kingdom	14 157	550	25.74	14 157	550	25.74	14 157	550	25.74
United States	5 712	177	32.27	5 712	177	32.27	5 712	177	32.27
<b>Partners</b>									
Albania	5 215	230	22.67	5 215	230	22.67	5 215	230	22.67
Algeria	5 519	161	34.28	5 519	161	34.28	5 519	161	34.28
Argentina	6 349	234	27.13	6 349	234	27.13	6 349	234	27.13
Brazil	23 141	841	27.52	23 141	841	27.52	23 141	841	27.52
B-S-J-G (China)	9 841	268	36.72	9 841	268	36.72	9 841	268	36.72
Bulgaria	5 928	180	32.93	5 928	180	32.93	5 928	180	32.93
Colombia	11 795	372	31.71	11 795	372	31.71	11 795	372	31.71
Costa Rica	6 866	205	33.49	6 866	205	33.49	6 866	205	33.49
Croatia	5 809	160	36.31	5 809	160	36.31	5 809	160	36.31
Cyprus*	5 571	126	44.21	5 571	126	44.21	5 571	126	44.21
Dominican Republic	4 740	194	24.43	4 740	194	24.43	4 740	194	24.43
FYROM	5 324	106	50.23	5 324	106	50.23	5 324	106	50.23
Georgia	5 316	262	20.29	5 316	262	20.29	5 316	262	20.29
Hong Kong (China)	5 359	138	38.83	5 359	138	38.83	5 359	138	38.83
Indonesia	6 513	236	27.60	6 513	236	27.60	6 513	236	27.60
Jordan	7 267	250	29.07	7 267	250	29.07	7 267	250	29.07
Kazakhstan	4 826	224	21.54	4 826	224	21.54	4 826	224	21.54
Kosovo	7 841	232	33.80	7 841	232	33.80	7 841	232	33.80
Lebanon	4 546	270	16.84	4 546	270	16.84	4 546	270	16.84
Lithuania	6 525	311	20.98	6 525	311	20.98	6 525	311	20.98
Macao (China)	4 476	45	99.47	4 476	45	99.47	4 476	45	99.47
Malaysia	8 861	225	39.38	8 861	225	39.38	8 861	225	39.38
Malta	3 634	59	61.59	3 634	59	61.59	3 634	59	61.59
Moldova	5 325	229	23.25	5 325	229	23.25	5 325	229	23.25
Montenegro	5 665	64	88.52	5 665	64	88.52	5 665	64	88.52
Peru	6 971	281	24.81	6 971	281	24.81	6 971	281	24.81
Qatar	12 083	167	72.35	12 083	167	72.35	12 083	167	72.35
Romania	4 876	182	26.79	4 876	182	26.79	4 876	182	26.79
Russia	6 036	210	28.74	6 036	210	28.74	6 036	210	28.74
Singapore	6 115	177	34.55	6 115	177	34.55	6 115	177	34.55
Chinese Taipei	7 708	214	36.02	7 708	214	36.02	7 708	214	36.02
Thailand	8 249	273	30.22	8 249	273	30.22	8 249	273	30.22
Trinidad and Tobago	4 692	149	31.49	4 692	149	31.49	4 692	149	31.49
Tunisia	5 375	165	32.58	5 375	165	32.58	5 375	165	32.58
United Arab Emirates	14 167	473	29.95	14 167	473	29.95	14 167	473	29.95
Uruguay	6 062	220	27.55	6 062	220	27.55	6 062	220	27.55
Viet Nam	5 826	188	30.99	5 826	188	30.99	5 826	188	30.99

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\* See note 1 under Table C.1.

[Part 2/2]

Table C.2 Sample sizes by country and by domain

	Collaborative problem solving			Financial literacy		
	Overall student sample size	School sample size	Average within-school sample size	Overall student sample size	School sample size	Average within-school sample size
<b>OECD</b>						
Australia	14 530	758	19.17	14 530	758	19.17
Austria	7 007	269	26.05			
Belgium	9 651	288	33.51	5 675	175	32.43
Canada	20 058	759	26.43	13 082	487	26.86
Chile	7 053	227	31.07	7 053	227	31.07
Czech Republic	6 894	344	20.04			
Denmark	7 161	333	21.50			
Estonia	5 587	206	27.12			
Finland	5 882	168	35.01			
France	6 108	252	24.24			
Germany	6 522	256	25.48			
Greece	5 532	211	26.22			
Hungary	5 658	245	23.09			
Iceland	3 371	124	27.19			
Ireland						
Israel	5 988	154	38.88			
Italy	11 583	474	24.44	11 583	474	24.44
Japan	6 647	198	33.57			
Korea	5 581	168	33.22			
Latvia	4 869	250	19.48			
Luxembourg	5 299	44	120.43			
Mexico	7 568	275	27.52			
Netherlands	5 385	187	28.80	5 385	187	28.80
New Zealand	4 520	183	24.70			
Norway	5 456	229	23.83			
Poland				4 478	169	26.50
Portugal	7 325	246	29.78			
Puerto Rico (United States) <sup>1</sup>						
Slovak Republic	6 350	290	21.90	6 350	290	21.90
Slovenia	6 406	333	19.24			
Spain	6 736	201	33.51	6 736	201	33.51
Sweden	5 458	202	27.02			
Switzerland						
Turkey	5 895	187	31.52			
United Kingdom	14 157	550	25.74			
United States	5 712	177	32.27	5 712	177	32.27
<b>Partners</b>						
Albania						
Algeria						
Argentina						
Brazil	23 141	841	27.52	23 141	841	27.52
B-S-J-G (China)	9 841	268	36.72	9 841	268	36.72
Bulgaria	5 928	180	32.93			
Colombia	11 795	372	31.71			
Costa Rica	6 866	205	33.49			
Croatia	5 809	160	36.31			
Cyprus*	5 571	126	44.21			
Dominican Republic						
FYROM						
Georgia						
Hong Kong (China)	5 359	138	38.83			
Indonesia						
Jordan						
Kazakhstan						
Kosovo						
Lebanon						
Lithuania	6 525	311	20.98	6 525	311	20.98
Macao (China)	4 476	45	99.47			
Malaysia	8 861	225	39.38			
Malta						
Moldova						
Montenegro	5 665	64	88.52			
Peru	6 971	281	24.81	6 971	281	24.81
Qatar						
Romania						
Russia	6 036	210	28.74	6 036	210	28.74
Singapore	6 115	177	34.55			
Chinese Taipei	7 708	214	36.02			
Thailand	8 249	273	30.22			
Trinidad and Tobago						
Tunisia	5 375	165	32.58			
United Arab Emirates	14 167	473	29.95			
Uruguay	6 062	220	27.55			
Viet Nam						

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\* See note 1 under Table C.1.



Table C.3 School variance estimate by country and by domain

	Reading	Mathematics	Science
	Variance	Variance	Variance
<b>OECD</b>			
Australia	10 544.7	8 660.5	10 465.0
Austria	10 229.4	9 052.2	9 475.9
Belgium	10 043.9	9 478.8	10 037.2
Canada	8 610.8	7 698.4	8 531.7
Chile	7 770.3	7 300.1	7 399.2
Czech Republic	10 091.8	8 224.3	9 075.4
Denmark	7 621.4	6 491.9	8 153.0
Estonia	7 655.2	6 467.4	7 903.6
Finland	8 812.8	6 749.4	9 249.6
France	12 552.5	9 056.1	10 396.6
Germany	10 024.2	7 919.8	9 866.4
Greece	9 643.1	7 987.9	8 450.1
Hungary	9 415.6	8 798.4	9 280.9
Iceland	9 874.2	8 634.1	8 318.8
Ireland	7 428.5	6 364.4	7 902.9
Israel	12 794.3	10 684.4	11 313.5
Italy	8 796.5	8 755.2	8 361.3
Japan	8 545.3	7 784.3	8 737.1
Korea	9 416.1	9 945.0	9 059.2
Latvia	7 188.5	6 012.3	6 758.5
Luxembourg	11 371.4	8 752.8	10 080.6
Mexico	6 088.9	5 626.6	5 098.9
Netherlands	10 198.8	8 376.8	10 189.3
New Zealand	11 035.1	8 485.6	10 836.0
Norway	9 759.7	7 208.7	9 262.6
Poland	8 025.2	7 681.5	8 243.6
Portugal	8 455.1	9 167.8	8 431.4
Slovak Republic	10 865.0	9 106.1	9 787.5
Slovenia	8 420.4	7 715.9	9 061.2
Spain	7 629.6	7 177.1	7 745.7
Sweden	10 360.0	8 114.1	10 502.1
Switzerland	9 579.8	9 168.1	9 905.3
Turkey	6 789.7	6 711.1	6 282.6
United Kingdom	9 349.1	8 568.6	9 930.5
United States	9 970.4	7 826.5	9 726.5
OECD average	9 284.5	8 050.1	8 966.3
<b>Partners</b>			
Albania	9 337.2	7 436.8	6 159.1
Algeria	5 284.9	5 060.5	4 800.1
Brazil	10 038.1	7 952.6	7 948.0
B-S-J-G (China)	11 864.2	11 246.5	10 688.8
Bulgaria	13 134.3	9 445.6	10 307.3
CABA (Argentina)	8 190.6	7 836.0	7 356.3
Colombia	8 072.9	5 956.4	6 460.0
Costa Rica	6 279.6	4 683.8	4 903.3
Croatia	8 234.8	7 796.4	7 977.9
Cyprus*	10 464.7	8 540.9	8 617.6
Dominican Republic	7 207.0	4 697.2	5 251.7
FYROM	9 839.8	9 204.6	7 188.0
Georgia	10 742.4	8 816.7	8 207.8
Hong Kong (China)	7 365.2	8 126.4	6 492.1
Indonesia	5 780.1	6 372.5	4 674.6
Jordan	8 853.5	7 369.4	7 121.2
Kosovo	6 132.7	5 675.6	5 082.1
Lebanon	13 331.8	10 227.5	8 173.6
Lithuania	8 911.2	7 482.3	8 266.6
Macao (China)	6 744.6	6 385.4	6 622.0
Malta	14 533.3	12 162.2	13 839.4
Moldova	9 572.8	8 126.9	7 402.7
Montenegro	8 850.5	7 506.8	7 268.5
Peru	7 946.5	6 822.8	5 882.7
Qatar	12 240.1	9 760.4	9 749.1
Romania	9 037.7	7 444.6	6 258.7
Russia	7 641.6	6 907.6	6 792.2
Singapore	9 745.6	9 104.7	10 733.7
Chinese Taipei	8 687.2	10 596.2	9 911.2
Thailand	6 372.7	6 643.0	6 160.1
Trinidad and Tobago	10 831.1	9 212.8	8 797.9
Tunisia	6 657.7	7 092.5	4 206.1
United Arab Emirates	11 179.1	9 318.9	9 828.4
Uruguay	9 330.2	7 498.0	7 490.1
Viet Nam	5 271.0	7 011.4	5 867.6
Argentina	7 890.9	6 497.4	6 496.4
Kazakhstan	6 473.7	6 790.3	5 841.5
Malaysia	6 555.6	6 415.8	5 734.8

\* See note 1 under Table C.1.

Table C.4 Intraclass correlation by country and by domain

	Reading	Mathematics	Science	
	Rho	Rho	Rho	
<b>OECD</b>	Australia	0.22	0.22	0.22
	Austria	0.47	0.45	0.44
	Belgium	0.46	0.46	0.45
	Canada	0.18	0.21	0.16
	Chile	0.38	0.39	0.39
	Czech Republic	0.45	0.46	0.45
	Denmark	0.16	0.13	0.14
	Estonia	0.19	0.18	0.19
	Finland	0.10	0.09	0.08
	France	0.52	0.50	0.50
	Germany	0.46	0.43	0.45
	Greece	0.39	0.32	0.36
	Hungary	0.57	0.53	0.55
	Iceland	0.05	0.05	0.04
	Ireland	0.13	0.15	0.13
	Israel	0.43	0.41	0.37
	Italy	0.43	0.41	0.43
	Japan	0.43	0.47	0.44
	Korea	0.27	0.27	0.25
	Latvia	0.18	0.16	0.17
	Luxembourg	0.31	0.31	0.34
	Mexico	0.34	0.29	0.30
	Netherlands	0.58	0.58	0.58
	New Zealand	0.18	0.19	0.18
	Norway	0.10	0.09	0.08
	Poland	0.14	0.13	0.14
	Portugal	0.25	0.24	0.23
	Slovak Republic	0.49	0.42	0.45
	Slovenia	0.50	0.46	0.48
	Spain	0.15	0.14	0.13
Sweden	0.16	0.17	0.16	
Switzerland	0.37	0.34	0.38	
Turkey	0.52	0.50	0.53	
United Kingdom	0.21	0.23	0.22	
United States	0.19	0.21	0.19	
OECD average	0.31	0.30	0.30	
<b>Partners</b>	Albania	0.25	0.24	0.24
	Algeria	0.33	0.31	0.31
	Brazil	0.38	0.42	0.39
	B-S-J-G (China)	0.54	0.52	0.53
	Bulgaria	0.52	0.47	0.52
	CABA (Argentina)	0.34	0.43	0.35
	Colombia	0.35	0.30	0.33
	Costa Rica	0.32	0.29	0.29
	Croatia	0.41	0.37	0.37
	Cyprus*	0.26	0.27	0.24
	Dominican Republic	0.41	0.37	0.37
	FYROM	0.31	0.29	0.28
	Georgia	0.26	0.28	0.23
	Hong Kong (China)	0.32	0.31	0.31
	Indonesia	0.40	0.45	0.42
	Jordan	0.34	0.27	0.27
	Kosovo	0.34	0.30	0.30
	Lebanon	0.52	0.48	0.48
	Lithuania	0.36	0.29	0.34
	Macao (China)	0.26	0.19	0.23
	Malta	0.33	0.30	0.30
	Moldova	0.22	0.21	0.20
	Montenegro	0.29	0.26	0.26
	Peru	0.46	0.36	0.36
	Qatar	0.45	0.42	0.40
	Romania	0.41	0.40	0.39
	Russia	0.20	0.20	0.19
	Singapore	0.35	0.34	0.35
	Chinese Taipei	0.33	0.36	0.36
	Thailand	0.37	0.31	0.34
	Trinidad and Tobago	0.53	0.57	0.54
	Tunisia	0.40	0.35	0.37
	United Arab Emirates	0.46	0.43	0.42
Uruguay	0.38	0.36	0.36	
Viet Nam	0.48	0.43	0.40	
Argentina	0.32	0.33	0.30	
Kazakhstan	0.39	0.48	0.46	
Malaysia	0.30	0.30	0.27	

\* See note 1 under Table C.1.

Note: The intraclass correlation measures the variation in student performance accounted for by clustering, i.e. is the ratio of the between-school variance and the sum of the between-school and within-school variance. For further details on how multilevel models are calibrated in PISA, please refer to Annex 3 of OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing, Paris.



Table C.5 Within explicit strata intraclass correlation by country and by domain

	Reading		Mathematics		Science	
	Rho	S.E.	Rho	S.E.	Rho	S.E.
<b>OECD</b>						
Australia	0.20	(0.02)	0.20	(0.02)	0.19	(0.02)
Austria	0.12	(0.02)	0.18	(0.02)	0.14	(0.02)
Belgium	0.21	(0.02)	0.22	(0.02)	0.22	(0.02)
Canada	0.17	(0.01)	0.18	(0.01)	0.14	(0.00)
Chile	0.22	(0.02)	0.23	(0.02)	0.22	(0.02)
Czech Republic	0.14	(0.02)	0.14	(0.02)	0.16	(0.02)
Denmark	0.13	(0.01)	0.10	(0.01)	0.11	(0.01)
Estonia	0.17	(0.02)	0.15	(0.02)	0.15	(0.02)
Finland	0.10	(0.02)	0.10	(0.02)	0.08	(0.02)
France	0.19	(0.03)	0.21	(0.03)	0.19	(0.03)
Germany	0.42	(0.03)	0.42	(0.03)	0.42	(0.02)
Greece	0.40	(0.03)	0.36	(0.03)	0.39	(0.03)
Hungary	0.31	(0.03)	0.30	(0.03)	0.33	(0.03)
Iceland	0.04	(0.01)	0.04	(0.01)	0.03	(0.01)
Ireland	0.09	(0.01)	0.11	(0.02)	0.09	(0.01)
Israel	0.25	(0.04)	0.24	(0.03)	0.24	(0.04)
Italy	0.23	(0.01)	0.29	(0.01)	0.29	(0.01)
Japan	0.44	(0.03)	0.47	(0.03)	0.44	(0.03)
Korea	0.19	(0.02)	0.19	(0.02)	0.17	(0.02)
Latvia	0.14	(0.02)	0.14	(0.02)	0.14	(0.02)
Luxembourg	0.24	(0.04)	0.24	(0.04)	0.24	(0.04)
Mexico	0.27	(0.03)	0.23	(0.02)	0.25	(0.03)
Netherlands	0.28	(0.04)	0.29	(0.04)	0.24	(0.02)
New Zealand	0.19	(0.02)	0.18	(0.02)	0.18	(0.02)
Norway	0.10	(0.01)	0.09	(0.01)	0.08	(0.01)
Poland	0.14	(0.02)	0.13	(0.02)	0.15	(0.02)
Portugal	0.18	(0.02)	0.19	(0.02)	0.17	(0.01)
Slovak Republic	0.31	(0.03)	0.27	(0.03)	0.27	(0.02)
Slovenia	0.17	(0.01)	0.20	(0.02)	0.20	(0.02)
Spain	0.09	(0.01)	0.08	(0.02)	0.08	(0.02)
Sweden	0.14	(0.02)	0.15	(0.02)	0.14	(0.02)
Switzerland	0.19	(0.01)	0.19	(0.01)	0.20	(0.02)
Turkey	0.33	(0.03)	0.36	(0.03)	0.35	(0.03)
United Kingdom	0.15	(0.01)	0.15	(0.01)	0.15	(0.00)
United States	0.19	(0.02)	0.20	(0.02)	0.18	(0.02)
OECD average	0.20	(0.00)	0.21	(0.00)	0.20	(0.00)
<b>Partners</b>						
Albania	0.19	(0.02)	0.21	(0.02)	0.20	(0.02)
Algeria	0.35	(0.03)	0.30	(0.04)	0.34	(0.03)
Brazil	0.31	(0.03)	0.37	(0.04)	0.34	(0.03)
B-S-J-G (China)	0.31	(0.01)	0.29	(0.01)	0.29	(0.01)
Bulgaria	0.52	(0.03)	0.47	(0.03)	0.51	(0.03)
CABA (Argentina)	0.38	(0.05)	0.44	(0.04)	0.38	(0.04)
Colombia	0.25	(0.03)	0.19	(0.02)	0.22	(0.02)
Costa Rica	0.18	(0.02)	0.19	(0.02)	0.15	(0.02)
Croatia	0.21	(0.02)	0.19	(0.02)	0.19	(0.02)
Cyprus*	0.24	(0.03)	0.23	(0.03)	0.19	(0.02)
Dominican Republic	0.20	(0.03)	0.18	(0.03)	0.18	(0.03)
FYROM	0.25	(0.03)	0.24	(0.03)	0.21	(0.03)
Georgia	0.18	(0.03)	0.22	(0.03)	0.17	(0.02)
Hong Kong (China)	0.33	(0.03)	0.31	(0.03)	0.32	(0.03)
Indonesia	0.34	(0.03)	0.38	(0.03)	0.36	(0.03)
Jordan	0.32	(0.03)	0.23	(0.03)	0.25	(0.03)
Kosovo	0.27	(0.03)	0.27	(0.03)	0.23	(0.03)
Lebanon	0.40	(0.03)	0.35	(0.04)	0.34	(0.03)
Lithuania	0.18	(0.02)	0.15	(0.02)	0.18	(0.02)
Macao (China)	0.27	(0.03)	0.25	(0.04)	0.28	(0.03)
Malta	0.13	(0.02)	0.12	(0.02)	0.12	(0.02)
Moldova	0.08	(0.01)	0.12	(0.02)	0.09	(0.01)
Montenegro	0.23	(0.05)	0.22	(0.05)	0.20	(0.04)
Peru	0.32	(0.02)	0.23	(0.02)	0.23	(0.02)
Qatar	0.30	(0.01)	0.24	(0.02)	0.25	(0.02)
Romania	0.41	(0.03)	0.41	(0.03)	0.40	(0.03)
Russia	0.13	(0.02)	0.14	(0.02)	0.13	(0.02)
Singapore	0.31	(0.03)	0.31	(0.03)	0.32	(0.03)
Chinese Taipei	0.15	(0.02)	0.15	(0.02)	0.15	(0.02)
Thailand	0.29	(0.03)	0.22	(0.02)	0.24	(0.03)
Trinidad and Tobago	0.43	(0.03)	0.45	(0.02)	0.42	(0.02)
Tunisia	0.37	(0.04)	0.33	(0.04)	0.35	(0.04)
United Arab Emirates	0.33	(0.02)	0.24	(0.02)	0.25	(0.02)
Uruguay	0.14	(0.02)	0.15	(0.02)	0.13	(0.01)
Viet Nam	0.45	(0.03)	0.40	(0.03)	0.37	(0.03)
Argentina	0.30	(0.02)	0.29	(0.03)	0.28	(0.02)
Kazakhstan	0.26	(0.03)	0.39	(0.04)	0.33	(0.04)
Malaysia	0.23	(0.03)	0.23	(0.03)	0.19	(0.02)

\* See note 1 under Table C.1.

Note: The within explicit strata intraclass correlation has been computed from a multilevel model where Level 2 (i.e., school) weights correspond to the sum of final student weights (W\_FSTUWT) within each stratum. For further details on how multilevel models are calibrated in PISA, please refer to Annex 3 of OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing, Paris.

[Part 1/1]

Table C.6 Percentage of school variance explained by explicit stratification variables by country and by domain

	Reading	Mathematics	Science
	% Variance	% Variance	% Variance
<b>OECD</b>			
Australia	15.84	16.54	16.14
Austria	84.77	74.96	80.37
Belgium	62.27	62.83	62.10
Canada	5.51	15.15	8.20
Chile	49.71	54.09	53.08
Czech Republic	79.80	78.20	73.84
Denmark	17.29	22.45	23.60
Estonia	6.01	6.19	11.16
Finland	10.63	11.24	12.26
France	53.49	47.32	50.63
Germany	23.95	19.00	19.30
Greece	1.58	0.90	1.20
Hungary	58.96	55.18	53.28
Iceland	9.43	10.73	9.66
Ireland	16.81	14.09	15.95
Israel	56.30	55.53	42.16
Italy	59.60	43.95	46.14
Japan	3.61	5.13	4.27
Korea	25.03	26.50	26.10
Latvia	22.84	14.93	18.50
Luxembourg	19.19	19.33	22.14
Mexico	22.73	23.09	20.32
Netherlands	71.97	71.46	76.89
New Zealand	5.39	8.77	6.90
Norway	0.00	0.01	0.01
Poland	0.00	0.01	0.00
Portugal	24.53	19.02	24.21
Slovak Republic	40.99	37.03	41.63
Slovenia	75.10	64.41	69.88
Spain	41.80	47.31	45.71
Sweden	9.34	8.22	9.37
Switzerland	36.93	33.05	38.43
Turkey	46.80	40.24	46.47
United Kingdom	13.88	17.10	19.43
United States	4.76	5.11	5.74
OECD average	30.77	29.40	30.14
<b>Partners</b>			
Albania	21.59	12.37	15.53
Algeria	5.19	7.46	6.07
Brazil	13.42	11.50	12.71
B-S-J-G (China)	52.35	51.82	54.68
Bulgaria	13.44	14.87	15.42
CABA (Argentina)	0.00	0.00	0.00
Colombia	12.08	12.61	13.01
Costa Rica	32.93	27.43	35.79
Croatia	53.79	53.54	52.19
Cyprus*	30.85	37.29	44.05
Dominican Republic	55.62	51.00	47.11
FYROM	11.01	16.12	23.93
Georgia	32.82	25.69	29.59
Hong Kong (China)	0.08	0.18	0.14
Indonesia	7.84	9.63	8.98
Jordan	6.29	9.43	8.26
Kosovo	7.25	5.78	7.08
Lebanon	42.81	45.24	45.66
Lithuania	47.27	40.61	41.88
Macao (China)	3.56	2.14	2.92
Malta	63.65	64.88	65.56
Moldova	47.91	30.33	39.84
Montenegro	23.94	19.17	24.55
Peru	25.19	24.84	27.65
Qatar	50.98	60.52	53.86
Romania	1.29	0.51	0.65
Russia	42.20	31.93	40.08
Singapore	14.67	11.88	12.79
Chinese Taipei	59.36	63.90	63.27
Thailand	52.42	60.05	60.90
Trinidad and Tobago	42.19	42.77	43.04
Tunisia	13.41	15.94	13.80
United Arab Emirates	45.34	58.94	56.04
Uruguay	67.02	64.87	67.06
Viet Nam	13.68	9.00	9.96
Argentina	9.29	8.72	8.23
Kazakhstan	45.82	29.42	39.34
Malaysia	6.28	6.25	8.58

\* See note 1 under Table C.1.

Note: The percentage of school variance explained by explicit stratification variables has been computed from a multilevel model where Level 2 (i.e. school) weights correspond to the sum of final student weights ( $W_{FSTUWT}$ ) within each stratum. This percentage corresponds to the ratio of 1. the difference of the between-school variance from an "empty" model and the between-school variance from the "full" model with dummy variables for the STRATUM variable and 2. the between-school variance from this "full" model. It thus represents the reduction in between-school variation accounted for by explicit stratification variables. For further details on how multilevel models are calibrated in PISA, please refer to Annex 3 of OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing, Paris.