PISA FOR DEVELOPMENT

Annex C

PISA 2012 mathematics performance and books in the home

Table C.1 PISA 2012 mathematics performance by students' reports of number of books at home

	Number of books				Average score difference (Group 4 – Group 1)
	0-25 (Group 1)	26-100 (Group 2)	101-200 (Group 3)	>201 (Group 4)	
Argentina	372	411	428	436	64
Bulgaria	398	461	483	498	101
Brazil	380	412	426	431	51
Colombia	365	402	415	440	75
Costa Rica	396	431	451	474	78
Indonesia	366	391	393	395	29
Jordan	378	404	419	408	30
Kazakhstan	415	443	455	456	40
Mexico	406	434	441	452	46
Montenegro	374	420	441	455	81
Malaysia	395	432	440	454	59
Peru	351	399	429	417	66
Romania	414	457	481	500	86
Serbia	417	469	486	506	89
Thailand	413	438	452	488	75
Tunisia	380	414	426	428	48
Turkey	421	473	487	513	92
Viet Nam	503	519	534	541	38

Source: Authors' calculations based on PISA 2012 Database.
StatLink http://dx.doi.org/10.1787/888933294103

One indicator of student disadvantage is the number of books in the home, one of the OECD measures of student socio-economic background, as it indicates home support for learning (Carnoy and Rothstein, 2013). Students that come from homes with fewer books have lower levels of performance than that of students who come from homes with more books. The differences in performance between students from homes with fewer than 25 books compared with those from homes with more than 200 books is striking, in some cases close to a full standard deviation on the mathematics scale (for Bulgaria, Montenegro, Romania, Serbia and Turkey) and equivalent to a proficiency level or more. The size of these differences is comparable for the OECD countries examined by Carnoy and Rothstein (2013). Other middle-income countries also show substantial differences (Colombia, Costa Rica and Thailand stand out in this regard). For many other middle-income countries (Indonesia, Jordan, Kazakhstan, and Viet Nam), the difference is lower.

References

Carnoy, M. and **R. Rothstein** (2013), "What do international tests really show about US student performance", Economic Policy Institute, www.epi.org/publication/us-student-performance-testing/.