Inequality of opportunity – education dimension

Technical documentation sheet

Indicator	Indicator of inequality of opportunity – education dimension
JAF dimension	PA11a (as sub-indicator)
Policy relevance	Relevant to combatting poverty and social exclusion The gap indicator is a proxy measure of inequality of opportunity for the education dimension. It measures the extent to which low education achievement is related to socio-economic status. The advantage of this indicator is that it clearly captures both the youth and the intergenerational aspects of the educational dimension.
Agreed definition	The indicator measures the gap (in pps) in the percentage of PISA [1] low achievers for 15-year-olds by socio-economic status (bottom versus top socio-economic quartile). The gap indicator is computed as follows: (Percentage of 15-years-olds students that are PISA low achievers in the bottom quartile of the index of economic, social and cultural status) – (Percentage of 15-years-olds students that are PISA low achievers in the top quartile of the index of economic, social and cultural status) Notes: -For a given PISA core domain: PISA defines as low achievers those students who score below the baseline level of proficiency (i.e. below level 2 out of the 6 possible) in this core domain. -In PISA, a student's socio-economic status is estimated by the index of economic, social and cultural status (ESCS). "The PISA index of economic, social and cultural status was created on the basis of the following variables: the International Socio-Economic Index of Occupational Status (ISEI); the highest level of education of the student's parents, converted into years of schooling; the PISA index of family wealth; the PISA index of home educational resources; and the PISA index of possessions related to "classical" culture in the family home." [2]
Calculation method (incl. practical implementation, e.g. question in surveys)	-As regards the PISA core domain taken into consideration: There are three core domains for which PISA tests the students' literacy: reading, mathematics and science. These core domains are alternatively – in the succession of PISA rounds every three years - the main tested core domain in the considered PISA round; i.e. in each round of PISA (every three years), one of the core domains is tested in details (e.g. in the PISA round 2015, the main core domain was science literacy; in the PISA round 2018, the main cores domain was reading literacy). For the computation of the gap indicator, the PISA scores taken into consideration for determining the percentage of low achievers are those relating to the main tested core domain in the considered PISA round. -As regards the computation of the EU weighted average: The gap indicator for the EU is computed as the weighted average of the respective gap indicators of the Member States, using as weights their

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[1] OECD Programme for International Student Assessment

[2] https://stats.oecd.org/glossary/detail.asp?ID=5401

	respective SILC populations.
Major breakdowns	none
Data source(s)	PISA (OECD)
Data periodicity	Every three years
Data availability (countries * time, incl. EU aggregates)	2000, 2003, 2006, 2009, 2012: for most of the EU27 Member States with some exceptions 2015, 2018[3]: for all EU 27 Member States
Time Changes	
Sustainability of the data collection	
Methodological issues (including comparability across countries and over time)	The methodology underpinning the rankings produced through the PISA tests has received attention, notably in terms of the item-response model used to calibrate the sample of test questions each student receives. However, recent validation work show that changes to the model specification have only a trivial impact on the comparisons within a given PISA round. This holds true across the range of domains examined.

Conformity with the SPC-ISG guiding principles for the selection of indicators and statistics

SCP-ISG Methodological criteria	
The indicator captures the essence of the problem (policy relevance) and has a clear and accepted normative interpretation	Yes
The indicator is robust and statistically validated.	Yes
The indicator provides sufficient level of cross countries comparability.	Yes
The indicator is built on available underlying data. It is timely and susceptible to revision.	Yes
The indicator is responsive to policy interventions but not domain to manipulation.	Yes
EU/NAT classification	

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[3] As mentioned by the OECD regarding ES data (PISA 2018) : "In 2018, some regions in Spain conducted their high-stakes exams for tenth-grade students earlier in the year than in the past, which resulted in the testing period for these exams coinciding with the end of the PISA testing window. Because of this overlap, a number of students were negatively disposed towards the PISA test and did not try their best to demonstrate their proficiency. Although the data of only a minority of students show clear signs of lack of engagement, the comparability of PISA 2018 data for Spain with those from earlier PISA assessments cannot be fully ensured." (http://www.oecd.org/pisa/PISA2018-AnnexA9-Spain.pdf)