WORLD BANK GROUP

Learning from PISA

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PISA for Development

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What can PISA for Development learn from PISA?

Six Questions

A. Which low and middle income countries have participated in PISA and other ILSAs?
B. Why have countries participated in PISA?
C. What are challenges for participating in PISA?
D. What capacities are built from participating in PISA?
E. How have PISA results informed education policy?
F. What do PISA data tell us about education in low and middle income countries?

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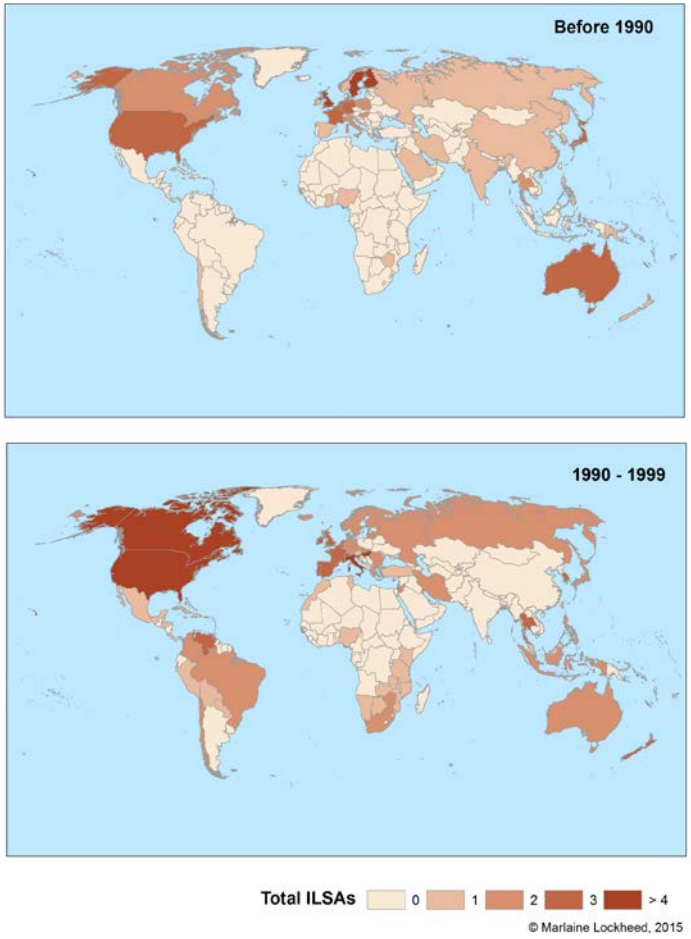
A. Which countries participate in PISA and other international large-scale assessments (ILSAs)?

World-wide expansion of international large-scale assessments, 1965-2014, including PISA

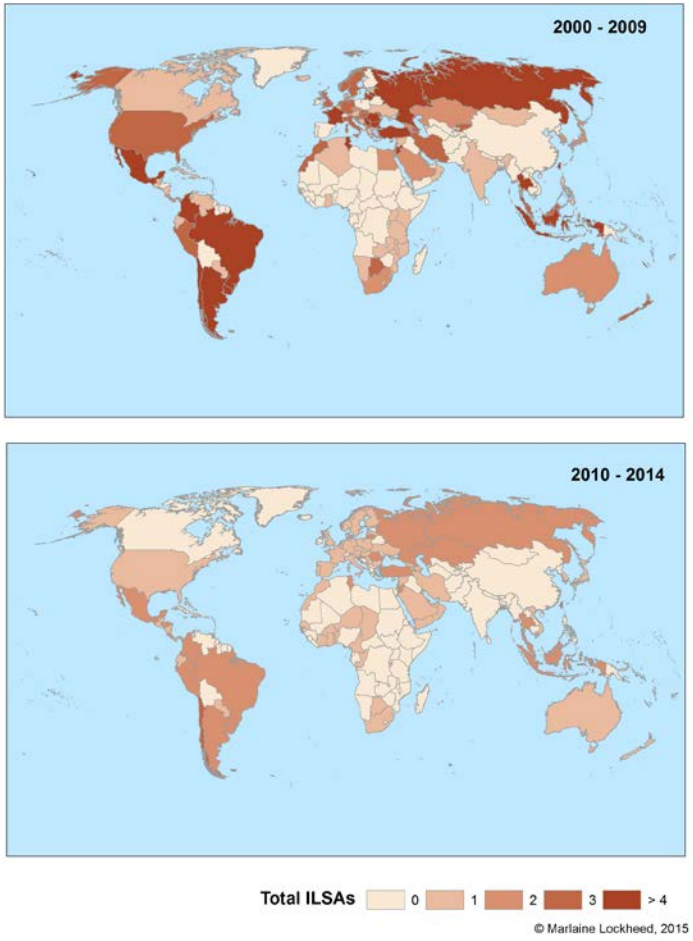
PISA

- Who “drops in” to PISA?
- Who “drops out” of PISA?
- Who returns to PISA?

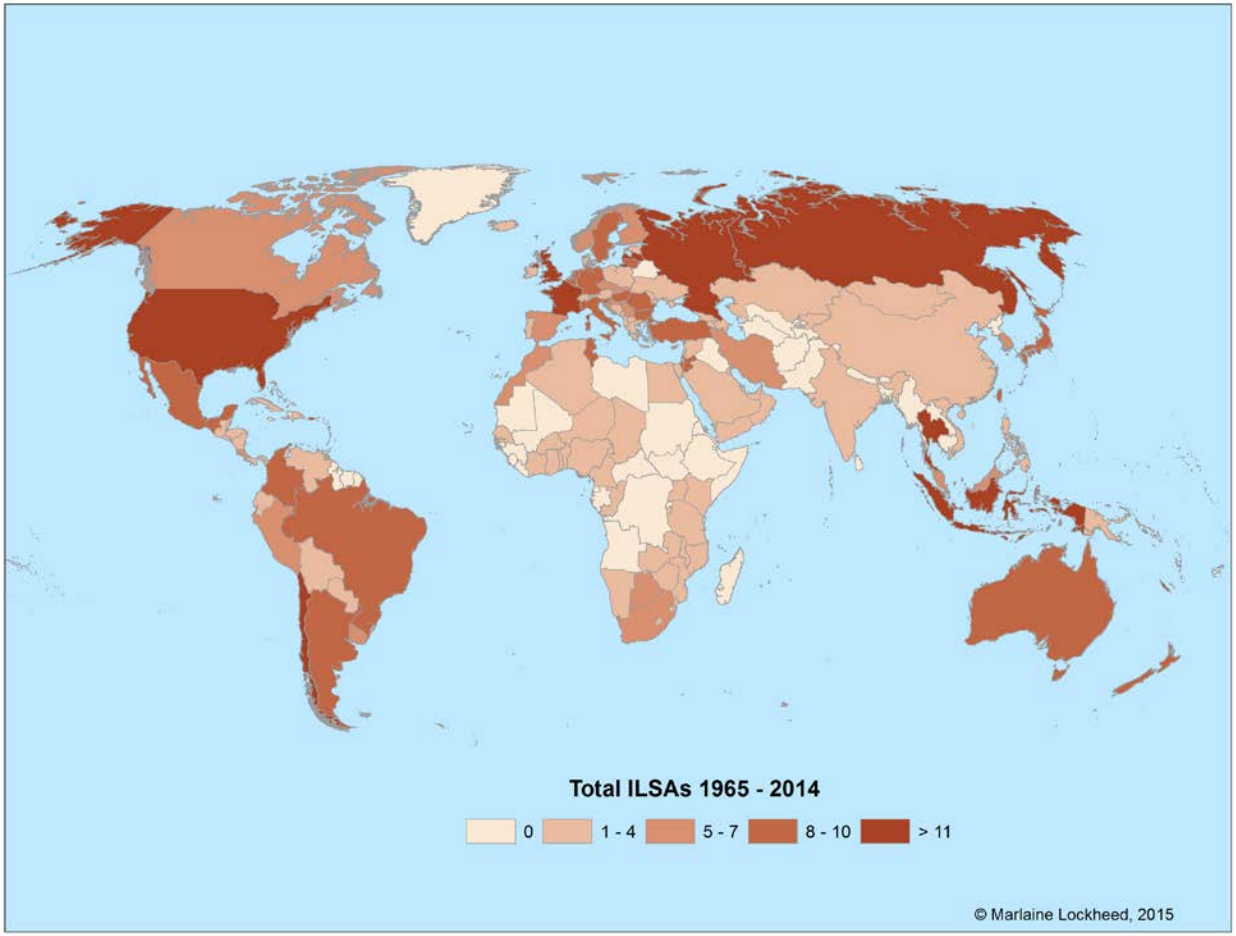
Few countries participated in any ILSA,1965-1989; participation grew, 1990-1999



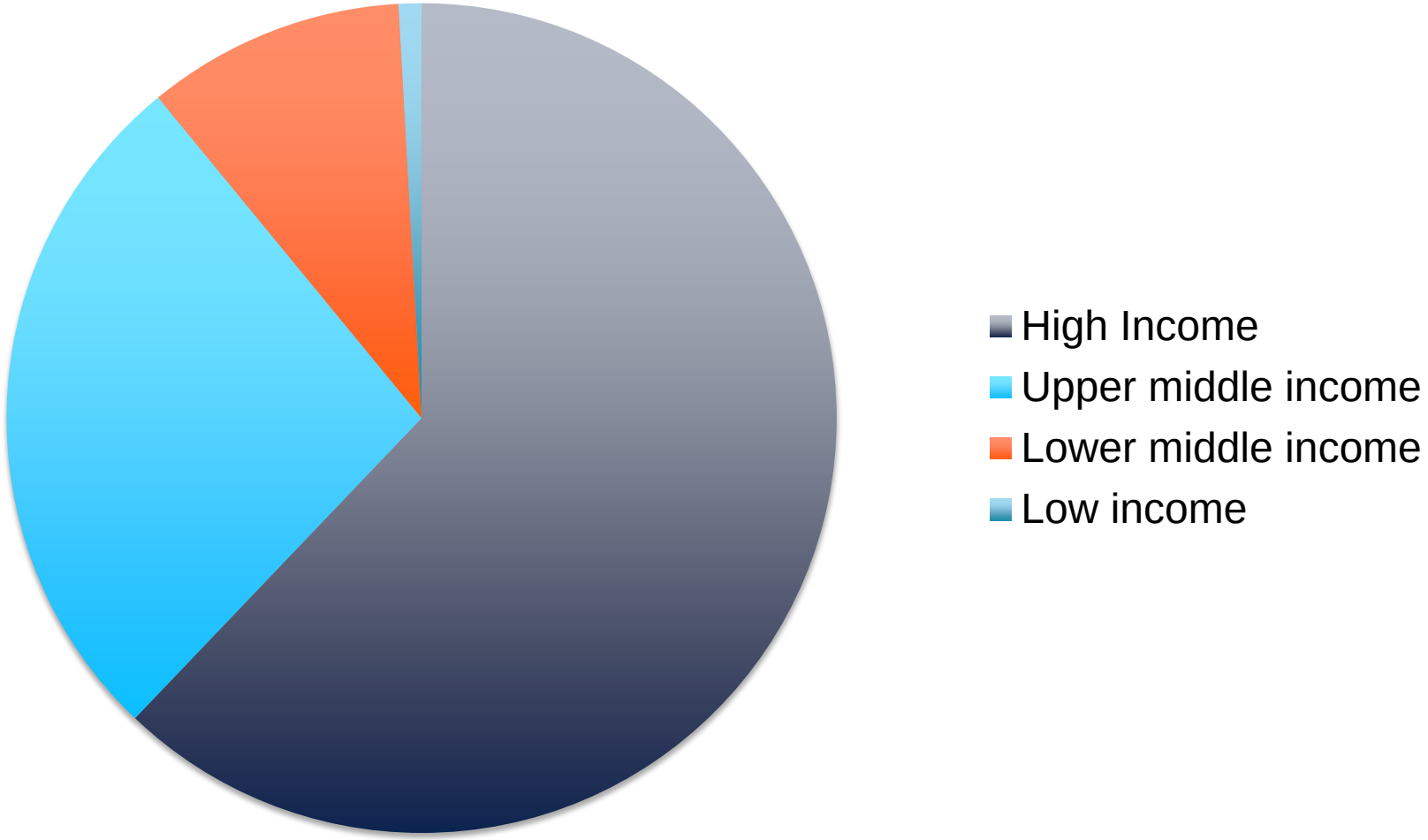
Growth in ILSA participation, 2000-2009, stabilizing from 2010-2014



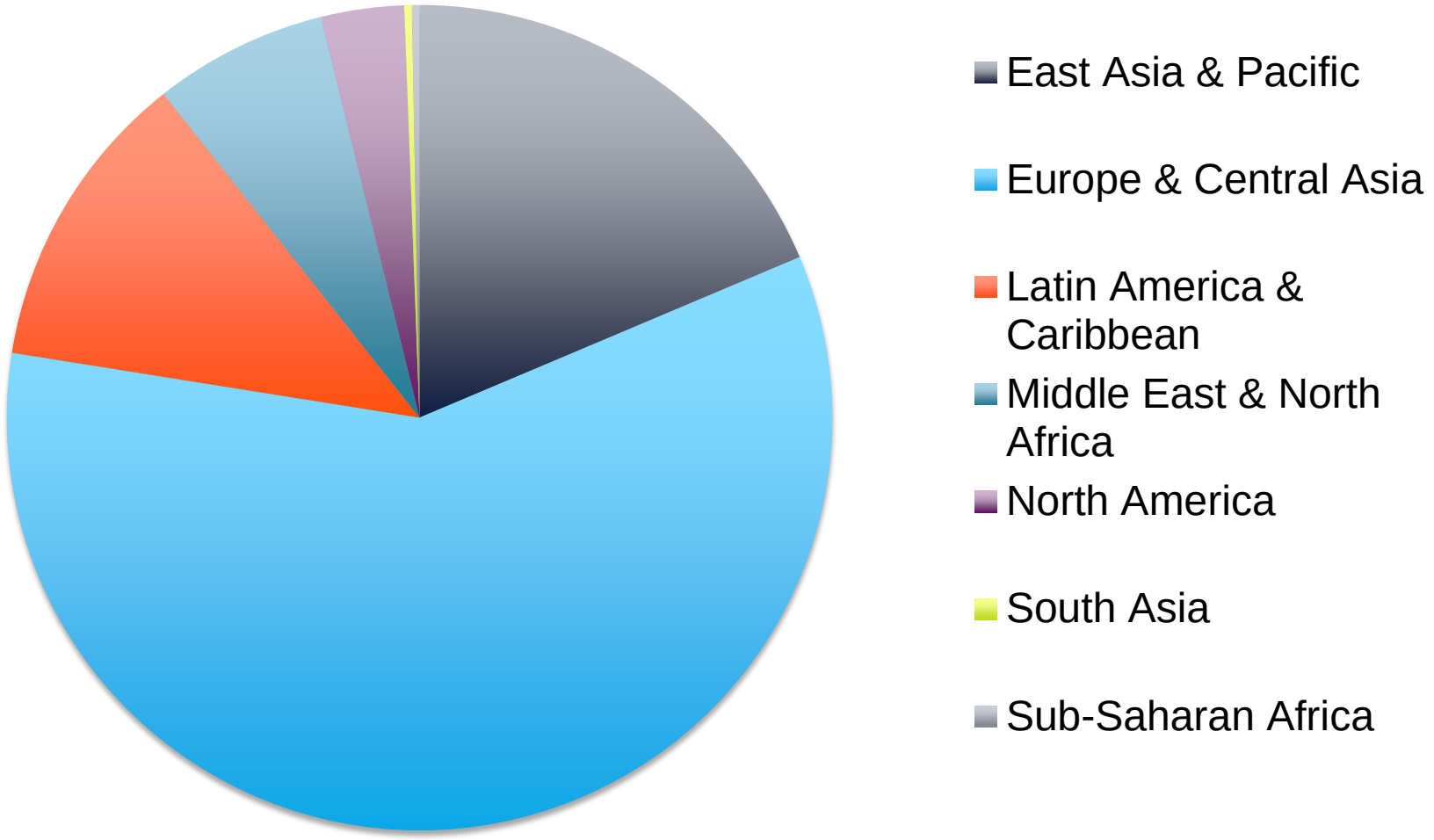
As of 2014, 68% of all countries have participated in at least one ILSA since 1965, including PISA



High and upper-middle income countries account for 90% of all PISA participations, 2000-2015



Countries in Europe and Central Asia account for 60% of all PISA participations, 2000-2015



A few countries have “dropped out” of PISA

Country	PISA Cycle Country Dropped Out After	PISA Math Score Prior to Dropout
Azerbaijan	2009	431
Kyrgyz Republic	2009	331
Mauritius	2009	420
Panama	2009	360
Serbia	2012	449

Several countries have “dropped back” into PISA

Country	PISA Cycle Country Dropped Out From	PISA Math Score (PISA Cycle) Prior to Dropout	PISA Cycle of Return
Argentina	2003	388 (2000)	2006
Bulgaria	2003	430 (2000)	2006
Chile	2003	384 (2000)	2006
Israel	2003	433 (2000)	2006
Albania	2003, 2006	381 (2000)	2009
Peru	2003, 2006	292 (2000)	2009
Georgia	2012	379 (2009)	2015
Malta	2012	463 (2009)	2015
Trinidad and Tobago	2012	414 (2009)	2015

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B. Why do countries participate in PISA?

An analysis of country participations:

- Defined as the number of cycles a country has participated in PISA, 0-6

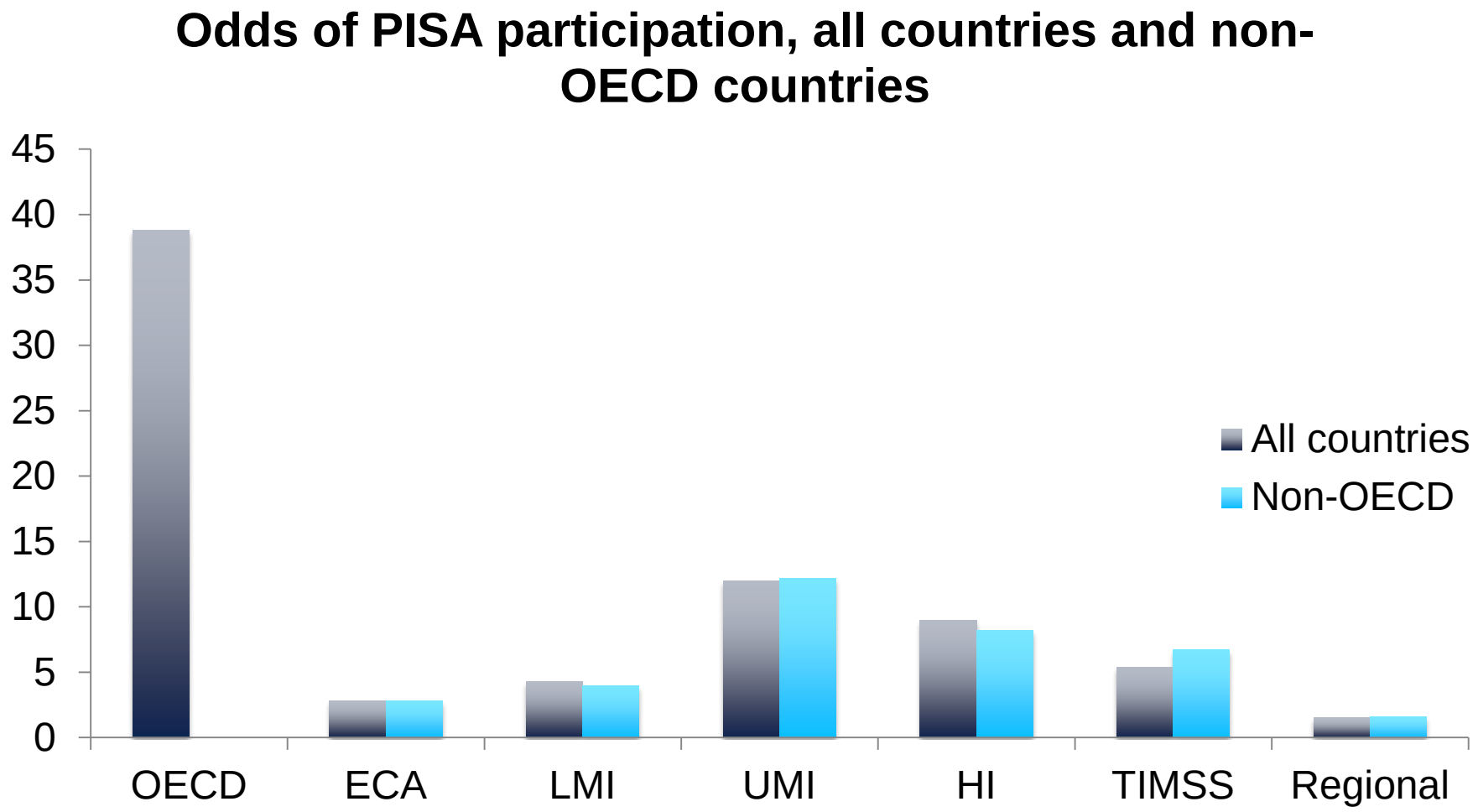
Factors that affect participation

- OECD membership
- Geographical location
- Level of economic development (lagged)
- Participation in TIMSS (lagged)

Odds of participating in PISA, 2000 to 2015

Dependent variable: In PISA	(1)	(2)	(3)	(4)	(5)	(5)	(6)	(7)
OECD	135.44***					83.07***	60.75***	38.80***
	(48.82)					(30.93)	(23.52)	(15.53)
ECA		8.37***				3.90***	2.99***	2.83***
		(1.21)				(0.72)	(0.59)	(0.59)
LMI (lagged)			7.80***					4.32**
			(3.46)					(1.97)
UMI (lagged)			27.89***					12.01***
			(12.07)					(5.40)
HI (lagged)			60.03***					8.97***
			(25.51)					(4.07)
Previously in TIMSS				9.87***			6.56***	5.41***
				(1.49)			(1.25)	(1.07)
In regional assessment					0.58*			1.53
					(0.15)			(0.53)
Constant	0.17***	.17***	0.02***	0.18***	.38***	0.12***	0.08***	0.01***
	(0.01)	(0.02)	(.008)	(.016)	(0.025)	(0.01)	(0.01)	(0.006)
N	1269	1269	1269	1269	1269	1269	1269	1269
LR chi2(4)	505.47	232.73	315.15	252.30	4.84	562.76	649.6	709.11
DF	1	1	3	1	1	2	4	7
Pseudo R2	.34	.16	.21	.17	.003	.38	.44	.48
Standard error in parentheses, *** p < .000, ** p < .01								
Source: Authors analysis based on data from World Bank and OECD								

What factors increase the odds of participation?



To summarize: factors that increase a country's odds of participating in PISA

Higher odds of participating for

- OECD countries
- Countries in Europe and Central Asia
- Wealthier countries
- Countries that had recently participated in TIMSS
- Countries that had recently participated in a regional assessment

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E. How have PISA results informed education policy?

F. What do PISA data tell us about education in low and middle income countries?

C. What challenges face low and middle-income countries participating in PISA?

Three types of challenges

- Financial Challenges
- Technical Challenges
  - Operational Challenges
  - Research and Development challenges
- Cultural Challenges

Case study country ILSA participation,1990-2015

	Lower Middle Income				Upper Middle Income				
ILSA	**Georgia**	**Indonesia**	**Vietnam**	**Kyrgyz Republic**	**Bulgaria**	**Brazil**	**Colombia**	**Jordan**	**Turkey**
IAEP 1990	-	-	-	-	-	yes	-	yes	-
TIMSS 1995	-	yes	-	-	yes	-	yes	-	-
TIMSS 1999	-	yes	-	-	yes	-	-	yes	yes
PISA 2000	-	yes	-	-	yes	yes	-	-	-
PIRLS 2001	-	-	-	-	yes	-	yes	-	yes
TIMSS 2003	-	yes	-	-	yes	-	-	yes	-
PISA 2003	-	yes	-	-		yes	-	-	yes
PISA 2006	-	yes	-	yes	yes	yes	yes	yes	yes
PIRLS 2006	yes	yes	-	-	yes	-	-	-	-
TIMSS 2007	yes	yes	-	-	yes	-	yes	yes	yes
PISA 2009	yes	yes	-	yes	yes	yes	yes	yes	yes
PIRLS 2011	yes	yes	-	-	-	-	yes	-	yes
TIMSS 2011	yes	yes	-	-	-	-	-	yes	-
PISA 2012	-	yes	yes	-	yes	yes	yes	yes	yes
TIMSS 2015	-	-		-	-	-	-	yes	yes
PISA 2015	yes	yes	yes		yes	yes	yes	yes	yes
Total ILSAs	6	13	2	2	11	7	8	10	10

Nine case study countries

	Lower Middle Income				Upper Middle Income				
	Georgia	**Indonesia**	**Vietnam**	**Kyrgyz Republic**	**Bulgaria**	**Brazil**	**Colombia**	**Jordan**	**Turkey**
GDP (US$ billions)	16.14	868.35	171.39	7.23	54.48	2245.67	378.42	33.68	822.14
GNI-PPP (US$ billions)	31.52	2315.07	454.98	17.64	110.51	2955.98	577.82	75.35	1409.02
Population (millions)	4.48	246.9	89.7	5.7	7.3	198.6	48.3	6.46	74.9
Public expenditure on education									
As % of total gov. exp.	6.7	18.1	20.9	18.6	11.2	14.6	15.8	--	--
As % of GDP	1.99	3.6	6.3	6.8	4.1	5.8	4.4	--	--
Net enrollment rate									
Primary	98.6	92.2	98.1	90.5	94.9	--	83.9	97.1	94.0
Secondary	--	76.1	--	80.4	85.3	--	73.6	87.9	82.1
Source: World Bank EdStats									

C.1 Financial challenges: Low costs for PISA

Table 3.1 Direct costs for PISA implementation, selected countries (case study countries in bold)

Country	Cost of Field Trial	Cost of Main Data Collection	Cost of Reporting	Total Cost	As % of annual expenditures on secondary education
Bulgaria	--	$22,040	--	--	.007
Indonesia	$80,000	$200,000	$30,000	$310,000	.025
Costa Rica	$98,000	--	--	--	--
Thailand	--	--	--	$979,600	0.40
Kosovo	$90,000	--	--	--	--
Brazil	--	--	--	$2,000,000	.008
Jordan	--	--	--	$141,000	--
Peru	--	$500,000	--	$2,000,000	--

Source: Author's interviews and World Bank data

But still most countries face financial challenges

	Lower Middle Income			Upper Middle Income			
Financial Challenges	**Georgia**	**Indonesia**	**Vietnam**	**Bulgaria**	**Brazil**	**Colombia**	**Jordan**
Salaries (FT & PT)	-	yes	yes	-	yes	-	-
Office space	-	-	yes	-	-	-	-
Office supplies	-	yes	yes	-	yes	-	-
Travel (Int'l & local)	-	yes	yes	-	-	-	yes
PISA fees	yes	yes	yes	yes	-	-	yes
Reporting/dissemin.	-	yes	yes	-	-	-	-
Research	yes	yes	yes	yes	yes	-	yes
Printing	-	-	yes	-	-	-	-
Data processing	-	-	yes	yes	-	-	-

But still most countries face financial challenges

	Lower Middle Income			Upper Middle Income			
Financial Challenges	Georgia	Indonesia	Vietnam	Bulgaria	Brazil	Colombia	Jordan
Salaries (FT & PT)	-	yes	yes	-	yes	-	-
Office space	-	-	yes	-	-	-	-
Office supplies	-	yes	yes	-	yes	-	-
Travel (Int'l & local)	-	yes	yes	-	-	-	yes
PISA fees	yes	yes	yes	yes	-	-	yes
Reporting/dissemin.	-	yes	yes	-	-	-	-
Research	yes	yes	yes	yes	yes	-	yes
Printing	-	-	yes	-	-	-	-
Data processing	-	-	yes	yes	-	-	-

C.2 LMI countries also face technical challenges

	Lower Middle Income			Upper Middle Income			
Technical Challenges	**Georgia**	**Indonesia**	**Vietnam**	**Bulgaria**	**Brazil**	**Colombia**	**Jordan**
Item writing	-	-	yes	-	-	-	-
Translation	yes	-	yes	-	-	-	-
Sampling	yes	yes	-	-	yes	-	-
Access to schools	-	-	-	-	yes	-	-
Platform for CBA	-	-	-	yes	-		
Administering PISA	yes	yes	-	-	yes	-	-
Training coders	yes	yes	-	-	-	-	-
Coding	yes	-	yes	-	-	-	-
Submitting data	-	-		-	yes	-	-
National report	-	yes	yes	-	-	-	-

LMI countries also face technical challenges

	Lower Middle Income			Upper Middle Income			
Technical Challenges	**Georgia**	**Indonesia**	**Vietnam**	**Bulgaria**	**Brazil**	**Colombia**	**Jordan**
Item writing	-	-	yes	-	-	-	-
Translation	yes	-	yes	-	-	-	-
Sampling	yes	yes	-	-	yes	-	-
Access to schools	-	-	-	-	yes	-	-
Platform for CBA	-	-	-	yes	-		
Administering PISA	yes	yes	-	-	yes	-	-
Training coders	yes	yes	-	-	-	-	-
Coding	yes	-	yes	-	-	-	-
Submitting data	-	-		-	yes	-	-
National report	-	yes	yes	-	-	-	-

C.3 Cultural challenges may affect implementation and use of PISA results

Ease of doing business

- Regulatory climate

Cultural values dimensions

- Power distance
- Uncertainty avoidance
- Long-term orientation
- Collectivism

Dimensions of “cultural values” (Hofstede)

Power distance

- the extent to which the less powerful members of institutions and organizations expect and accept that power is distributed unequally.

Uncertainty avoidance

- the extent to which the members of a culture feel threatened by ambiguous or unknown situations.

Long-term (vs. short term) orientation

- fosters virtues oriented toward future rewards, whereas short-term orientation fosters virtues related to the past and present: respect for tradition, preservation of “face” and fulfilling social obligations

Collectivism

- pertains to societies in which people are integrated into strong, cohesive in-groups where shame is a powerful social force.

How do these differences in value systems affect organizational behavior?

- Power distance ➔ expectation for explicit directions
- Uncertainty avoidance ➔creation of many rules to reduce uncertainty (leads to bureaucratic red tape)
- Long-term orientation ➔ avoid losing “face”
- Collectivism ➔ avoid public “shame”

Conclusions regarding challenges for PISA-D

Main financial

- Adequate and sustained financing for units responsible for PISA (more transparency regarding costs)
- Financing for Research and Development

Main technical

- Operational: translation, sampling and administration

Main cultural

- Ease of doing business: more regulatory constraints
- Cross-cultural differences in some values

Implications of challenges for PISA-D

Financial

- Help estimate total costs of implementing PISA
- Examine context for sub-contracts, part-time staff

Technical

- Provide “source documents” in more languages
- Regular follow-up with explicit directions for tasks

Cultural

- Be aware of how dimensions of culture may be affecting implementation processes and discussion of results

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E. How have PISA results informed education policy?

F. What do PISA data tell us about education in low and middle income countries?

E. What are the policy outcomes from PISA?

Public dialogue

- Does the incidence of education policy terms in media rise and fall with PISA cycles?

Private consultations and dialogue

- Is PISA used to support need for donor projects?
- IS PISA used to measure outcomes of projects?

Evidence of policy reform

- Public vs. private dialogue?

E.1 Policy outcomes: Media searched, case study countries, 2000-2014

Country	Publication (transliteration as relevant)	Dates of archives (varies by publication)	Number of terms found
Brazil	Folha de S. Paulo, Oestadao de S. Paulo, Veja	2000-2014	16
Bulgaria	Dnevnik, Dneven Trud	2000-2014	19
Colombia	El Tiempo, El Espectador	2000-2014	16
Georgia	Civil.ge, Georgian Times, newsgeorgir.ru	No education terms found	0
Indonesia	Koran Tempo, Tempo, Kompas	2000-2014	18
Jordan	Al Ghad, Ad-Dustour, Al Rai	2000-2014	27
Kyrgyzstan	Delo, Radio Azattyk	2008-2014	14
Turkey	Zaman, Sabah, Haberturk, Hurriyet	2000-2014	13
Vietnam	Five websites	Excluded for methodological reasons	0
Source: Shadrova 2015			

Searches found very few policy words

Selecting and grouping students	Resources invested in education (non-teacher)	Resources invested in instructional staff	School governance, assessments, accountability	Curriculum and instruction (not in PISA report)	Student outcomes
Compulsory education	Public expenditures on education (budget for education)	Teachers' starting salaries	School autonomy	Curriculum reform	Educational achievement
Mandatory schooling	Non-salary expenditures on education	Teacher salary increases	Appointing teachers (selecting teachers)	Student-centered teaching	Academic performance
Gifted education	Private expenditures on education	Pre-service teacher training	Dismissing teachers (firing teachers)	Textbook selection	Math achievement
At-risk students	School infrastructure	Requirements to enter the teaching profession	Formulating school budgets	Course offerings	***Math literacy***
Age at school entry	Instructional materials	Student-teacher ratio	Allocating budget resources within school	Duration of compulsory schooling	***Reading achievement***
Grade repetition	Textbook availability	Teacher professional development	School choice	Duration of pre-tertiary schooling	***Reading literacy***
Academic tracking	Computers/IT availability	School head professional development (principal, headmaster, etc)	Private schools	Course content	***Scientific literacy***
Vocational programs	Instructional time	Female teachers	Management training	Opportunity to learn	***Competencies***
Ability grouping	Length of school year	Teacher unions	Parental involvement	Inquiry-based learning	Skills
Elite secondary schools	Length of school day		National assessments		Knowledge and understanding
Equality of opportunity	Class size		Examinations		Equality of outcomes
	After-school tutoring		Standardized tests		Benchmarks
	After-school lessons		Classroom assessments		***Proficiency levels***
	Pre-primary education		Teacher assessments		***Reading proficiency***
					Math proficiency
					Science proficiency
					Student performance

Public dialogue: three indicators

Relative frequencies of individual terms

- Relative to a common word in the language, how often do specific terms appear?

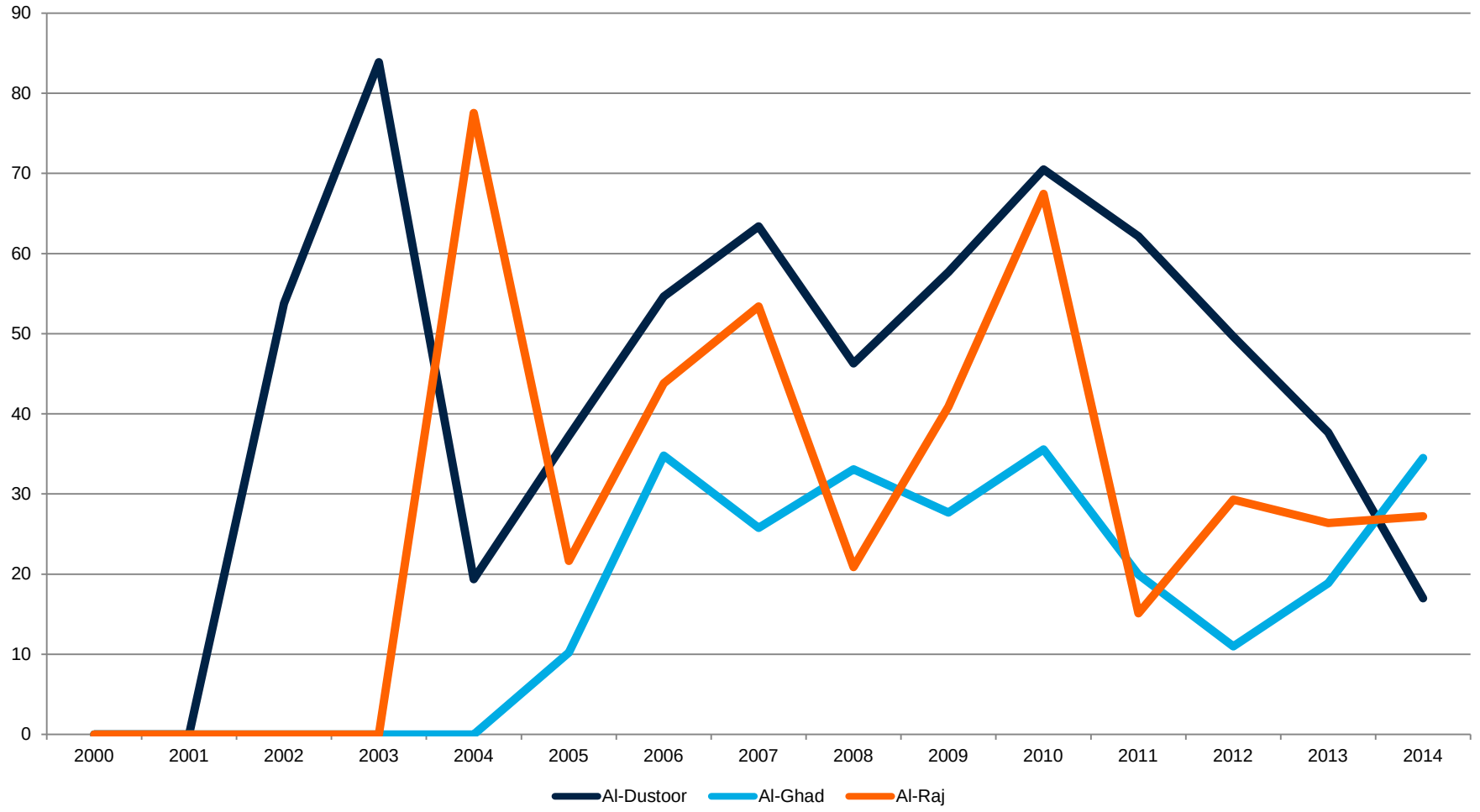
Peaks in the occurrence of terms

- For all publications searched in each country, how many times did terms “peak” in a given year?

Correlation among terms

- Do terms “cluster”, indicating related dialogue?

Jordan: “Science proficiency” in 3 publications



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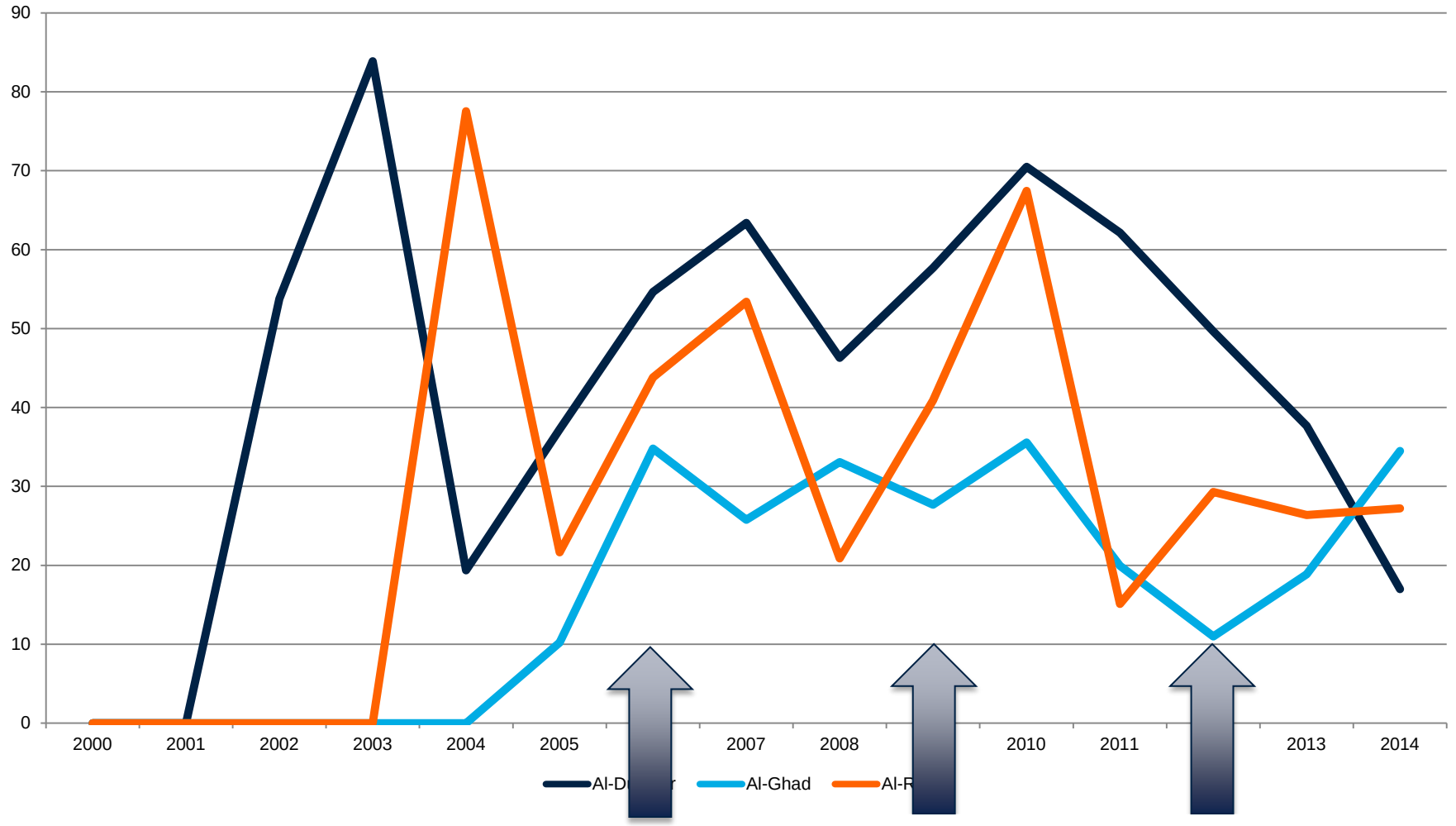
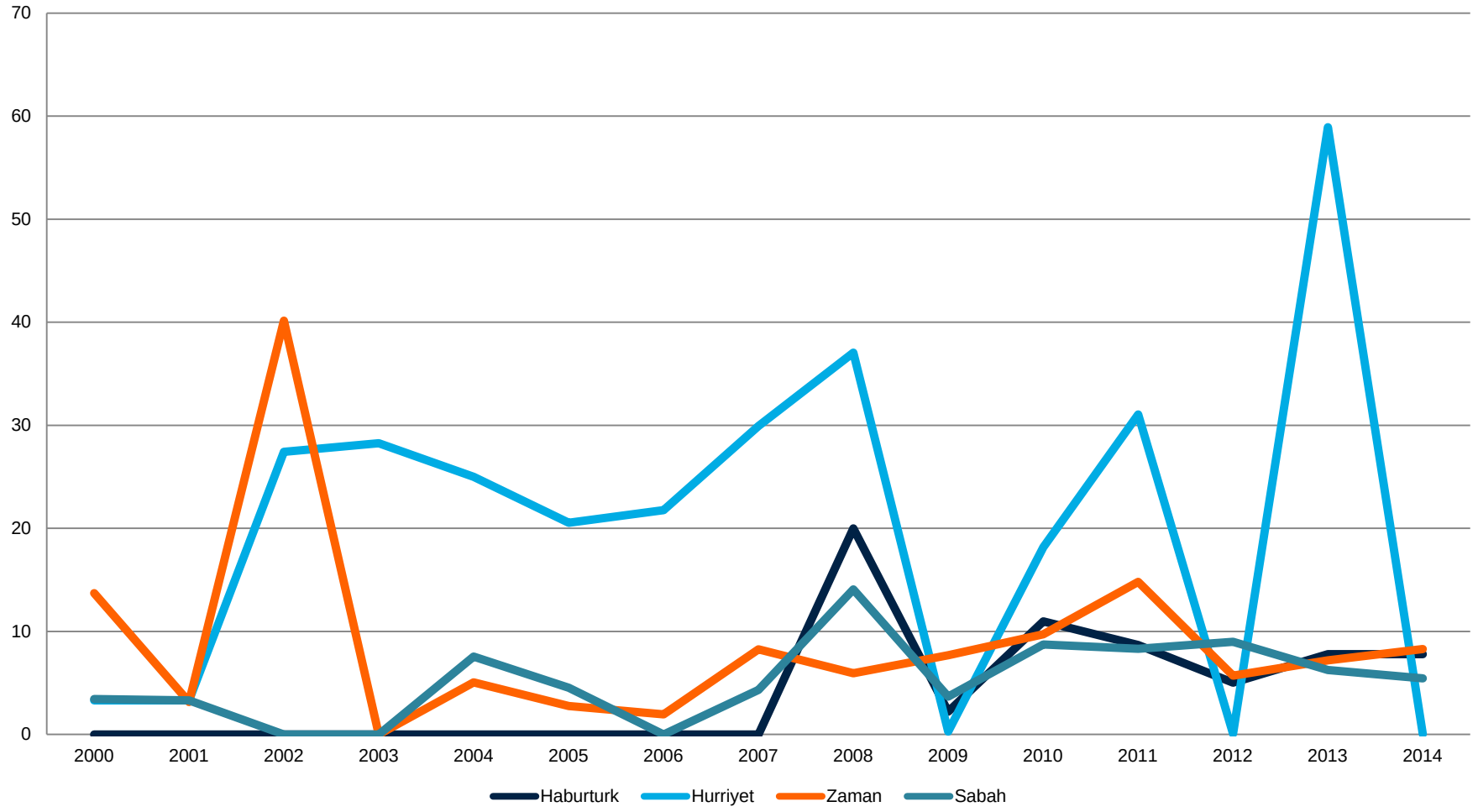


Turkey: “Equality of opportunity” in 4 publications



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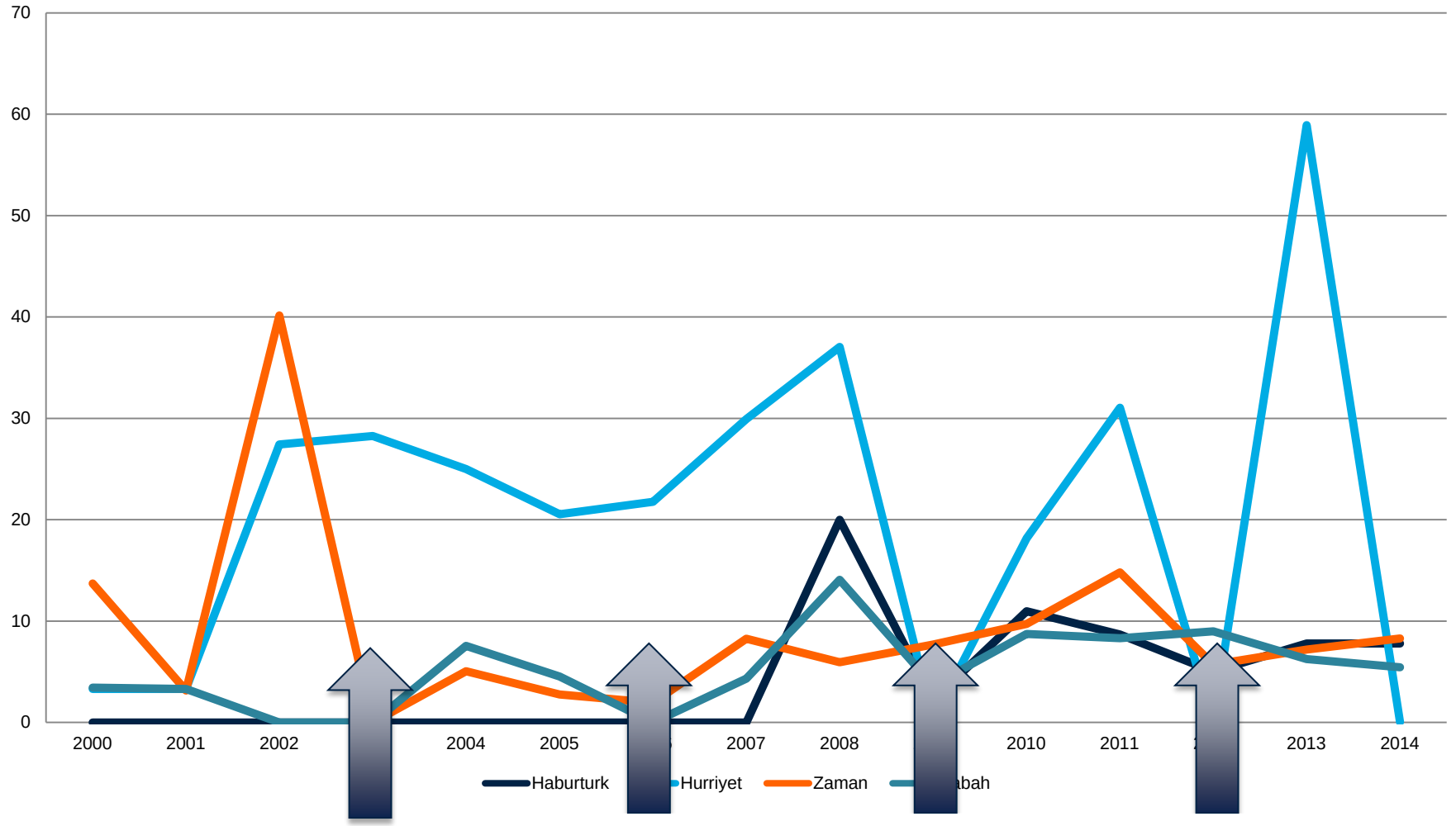
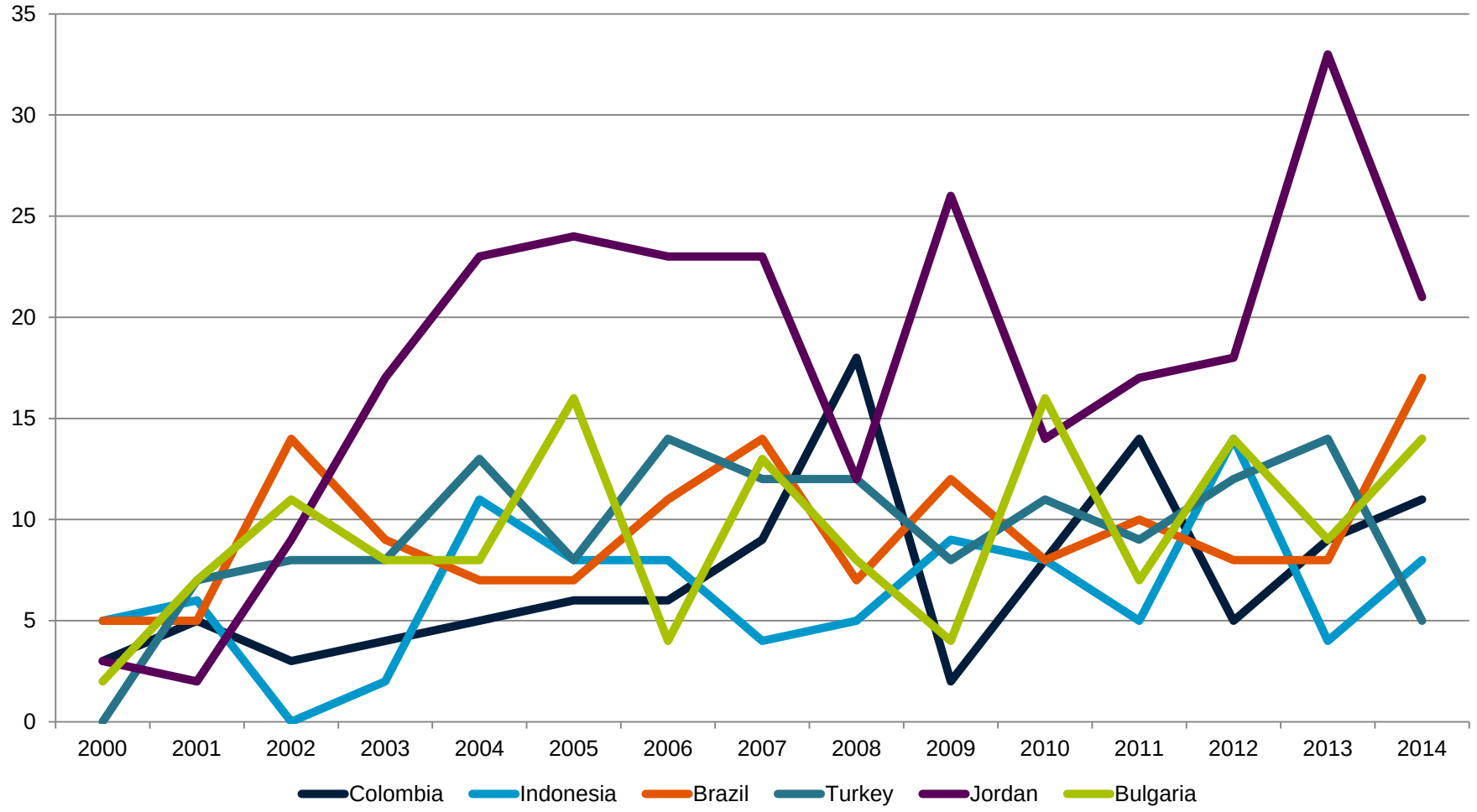


Number of “Peaks” in Education Policy Terms, 2000-2014



Correlation among terms, Colombia

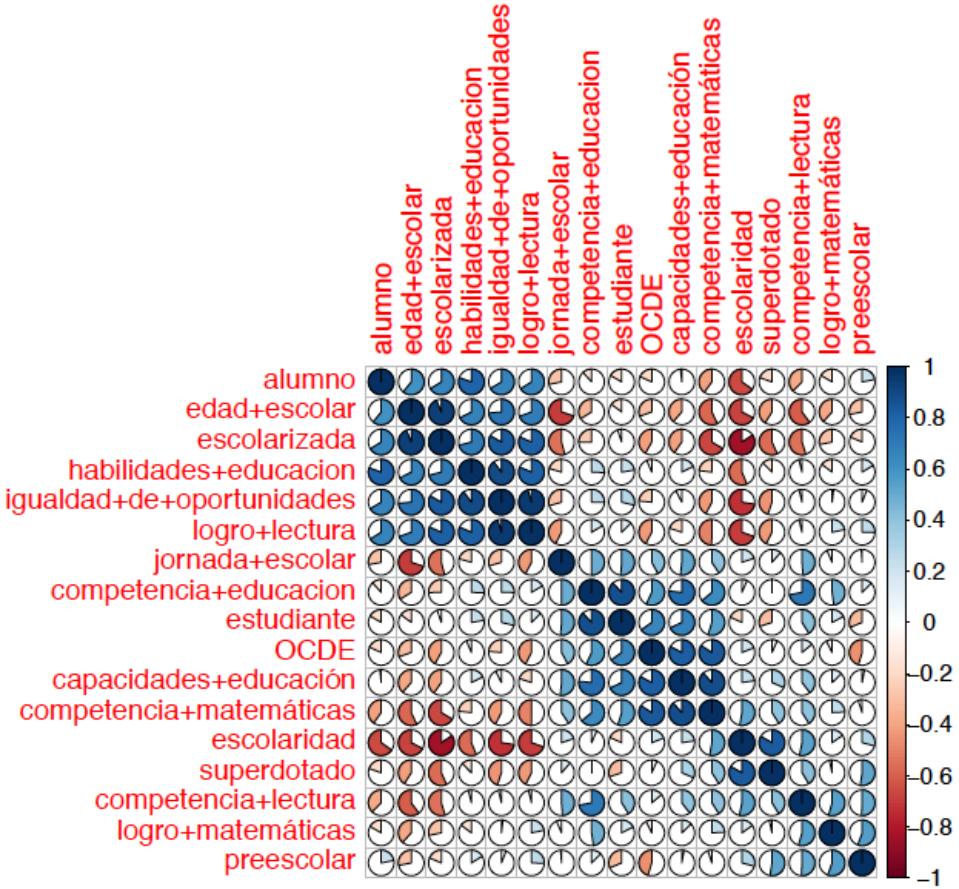


Figure 13: El Espectador: correlation matrix

Correlation among terms, Indonesia

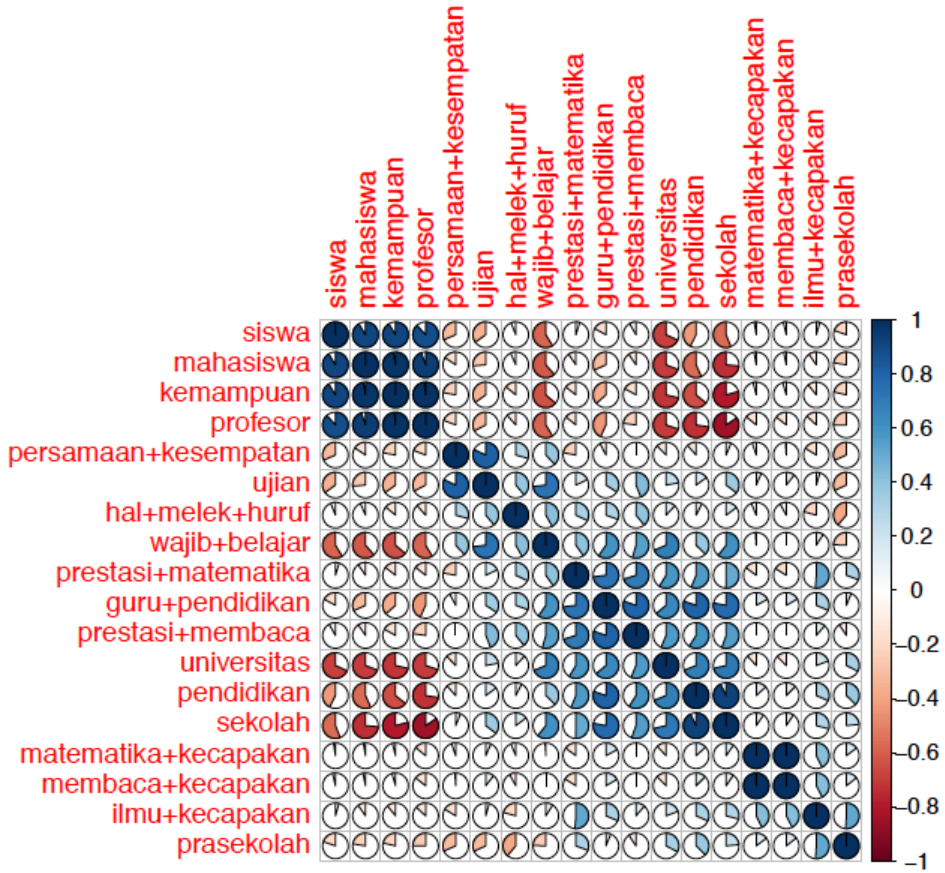


Figure 18: Tempo: correlation matrix

Evidence from public dialogue?

Public discussions of education topics in UMI countries: Brazil, Colombia, Turkey and Jordan

Little discussion in LMI countries other than Indonesia

Little opportunity for public discussions to influence policy in LMIs

E.2 Policy outcomes: private dialogue

Searches

- World Bank policy papers
- World Bank projects

Private dialogue: Recent World Bank projects utilizing ILSAs

Country and Project	Year	Project/program justification	Development objective	Supports ILSA participation
Kyrgyz Republic Sector Support for Education Reform	2013	PISA 2006 and 2009: low achievement, geographical inequities	National assessment	no
Senegal Quality and Equity of Basic Education	2013	PASEQ: low achievement	EGRA-type assessment	PISA PIRLS TIMSS
Peru Basic Education	2012	no	no	TERCE PISA
Moldova Education Reform	2012	PISA 2009+: low performance	Participation in PISA 2015	PISA
Sri Lanka Transforming the school education system as the foundation of a knowledge hub	2011	no	National assessment	PISA TIMSS
Nicaragua Second support to the education sector	2011	EGRA, SERCE: low achievement and regional inequities	National assessment	TERCE
Lebanon: Second Education Development	2010	yes	no	TIMSS PISA
Jordan Second Education Reform for the Knowledge Economy	2009	yes	National assessment	TIMSS PISA
Source: World Bank				

Evidence from private dialogue?

In LMIs, discussions regarding policy reform occur in private, rather than public, spaces

PISA and other ILSAs used to identify issues of quality and equity

Donor support for policies and assessment systems

E.3 Impact of PISA on education policy?

Documenting evidence of determinants of education policy is difficult in any country, as many factors affect change, but

- Brazil used PISA to benchmark its national assessment system
- Other countries may have used the results of PISA in internal policy discussions regarding curriculum change, targeted education programs, and resource allocations.

There is more evidence on policy effects in high income OECD countries than in low and middle-income countries.

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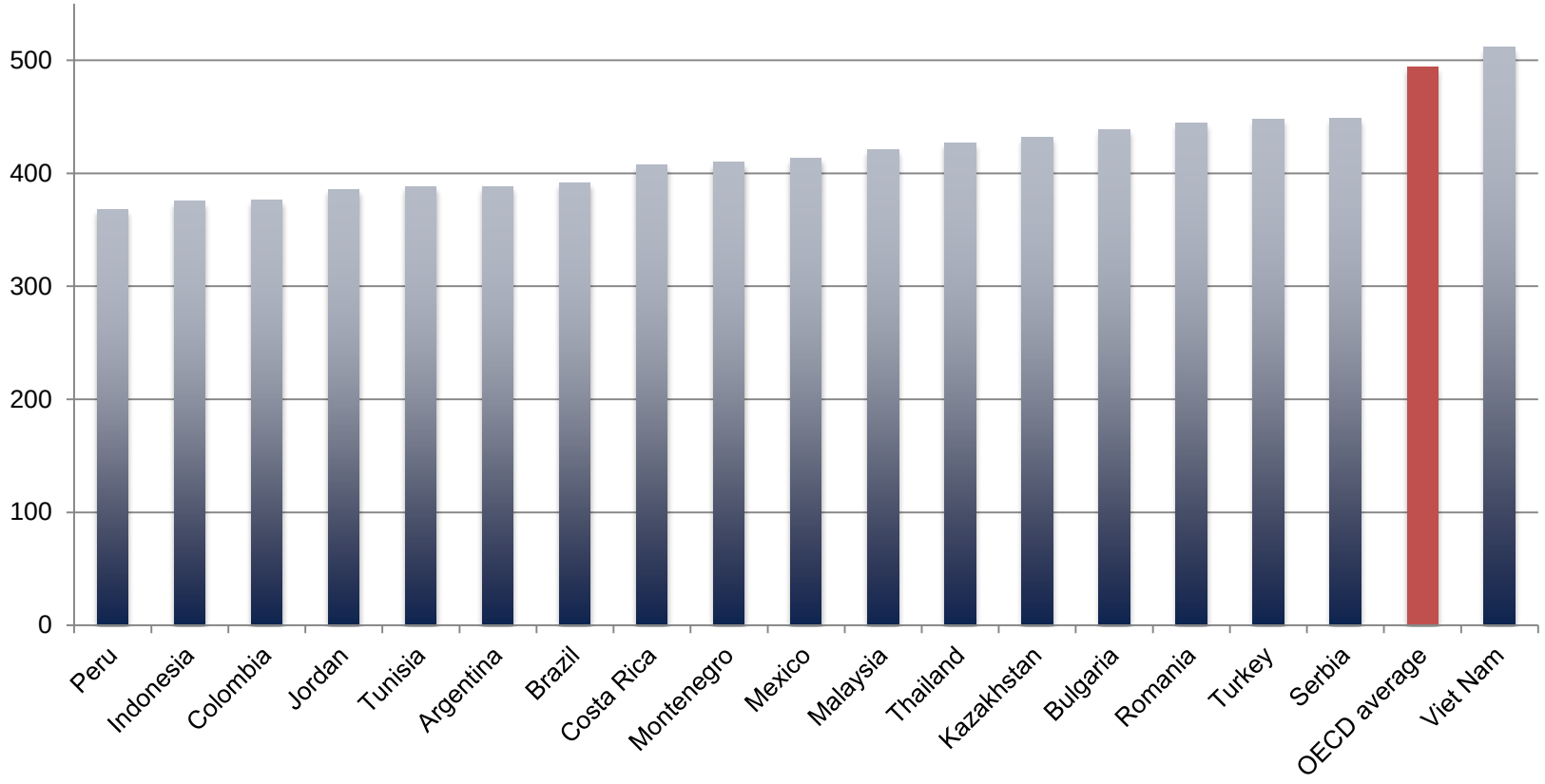
Quality

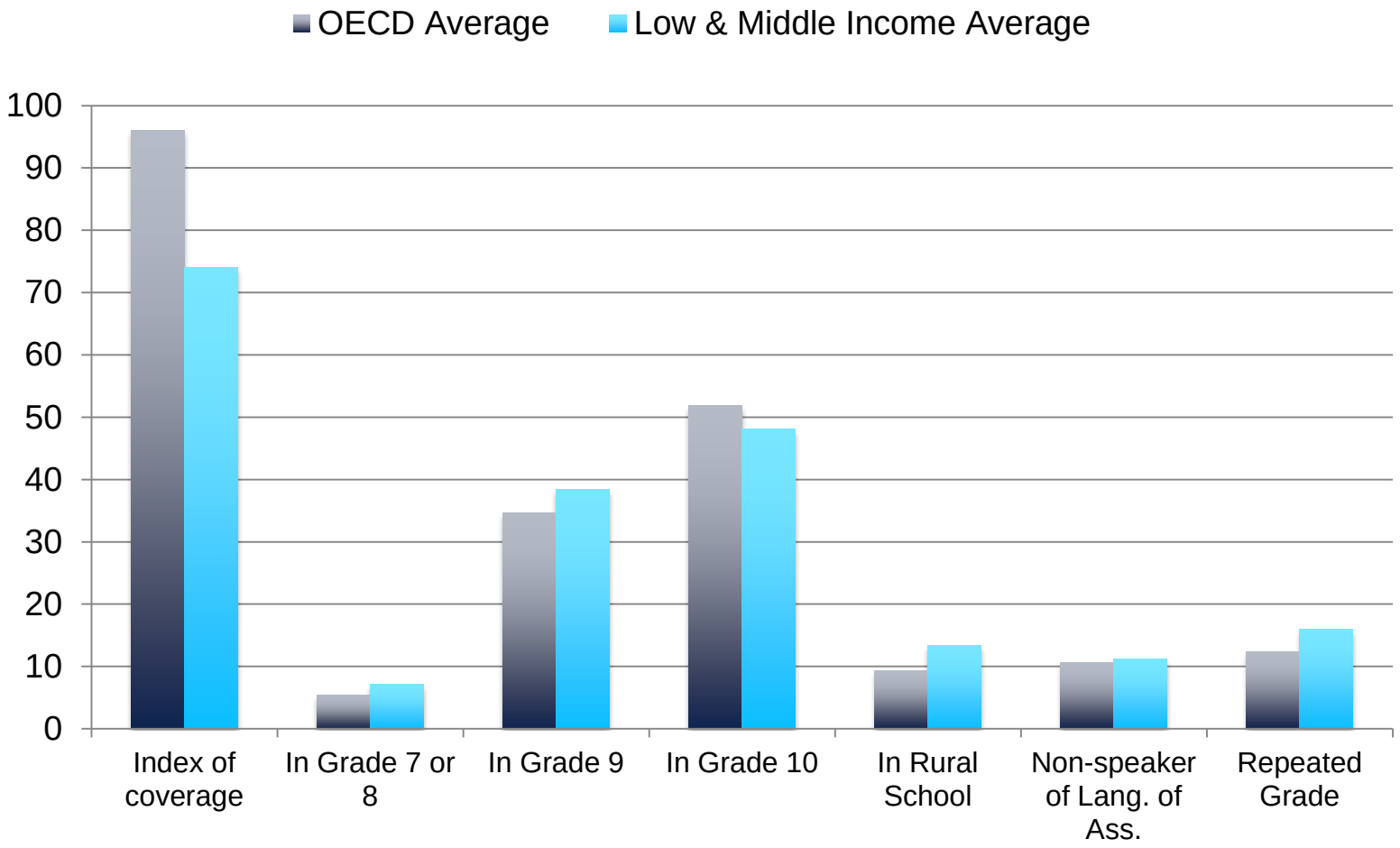
Equity

Determinants of quality

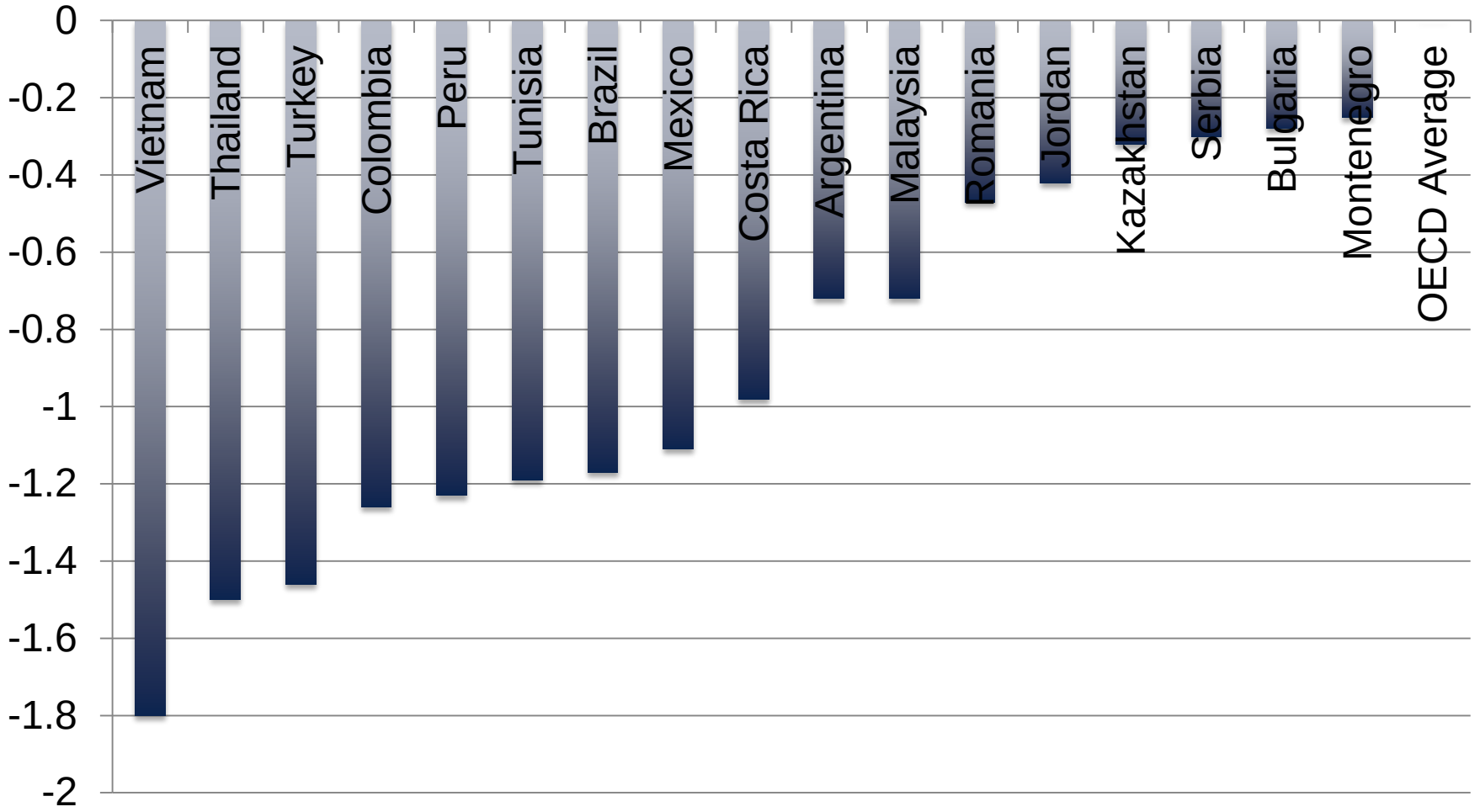
Average PISA 2012 math scores in LI and LMI countries lower than OECD average



Differences between OECD students and students in low and middle-income countries



Lower ESCS than the OECD average



Some interesting differences between LICs and LMICs and OECD

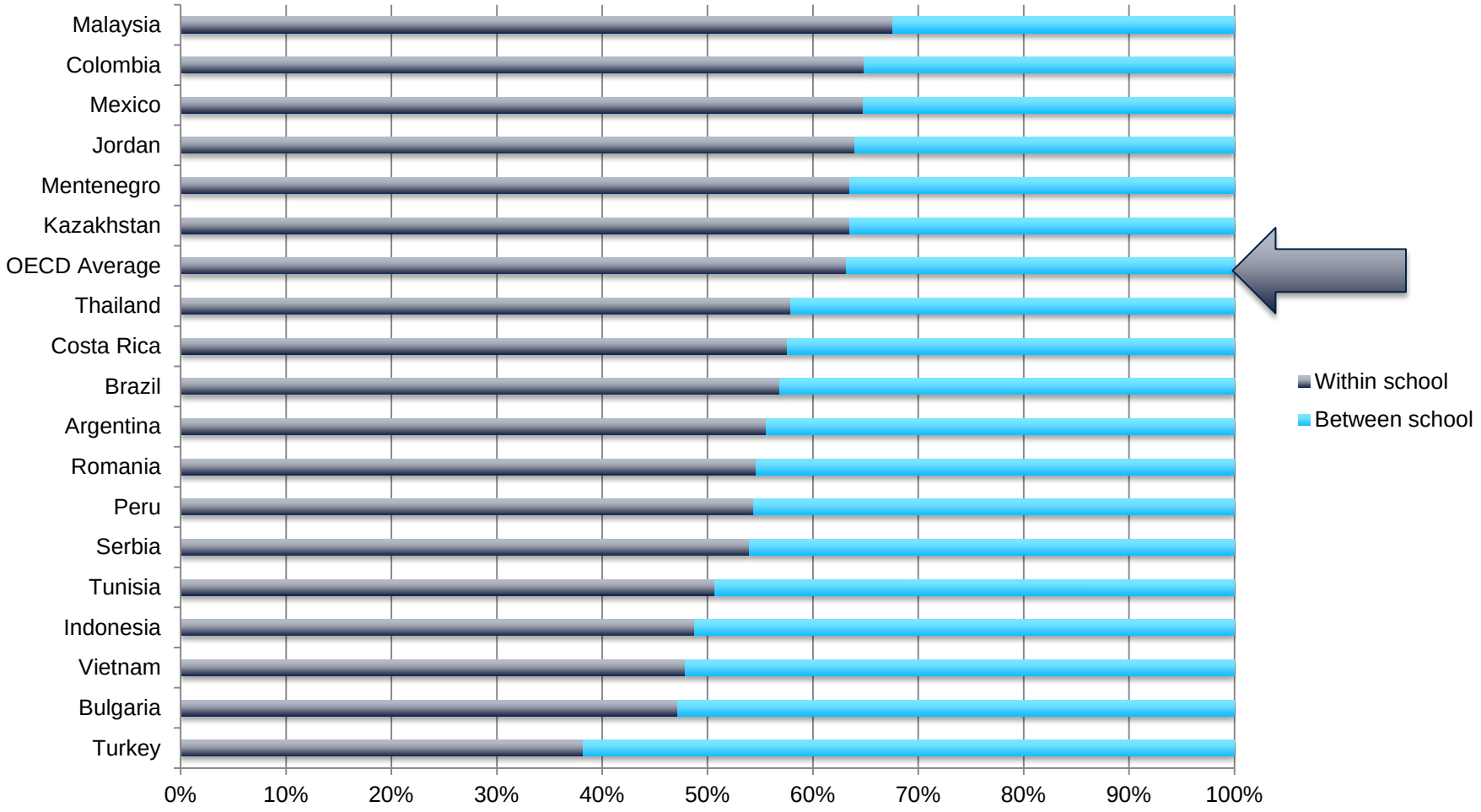
Share of total variation in performance that is between-school is higher in most LICs and LMICs than in the OECD

- Large variation among countries

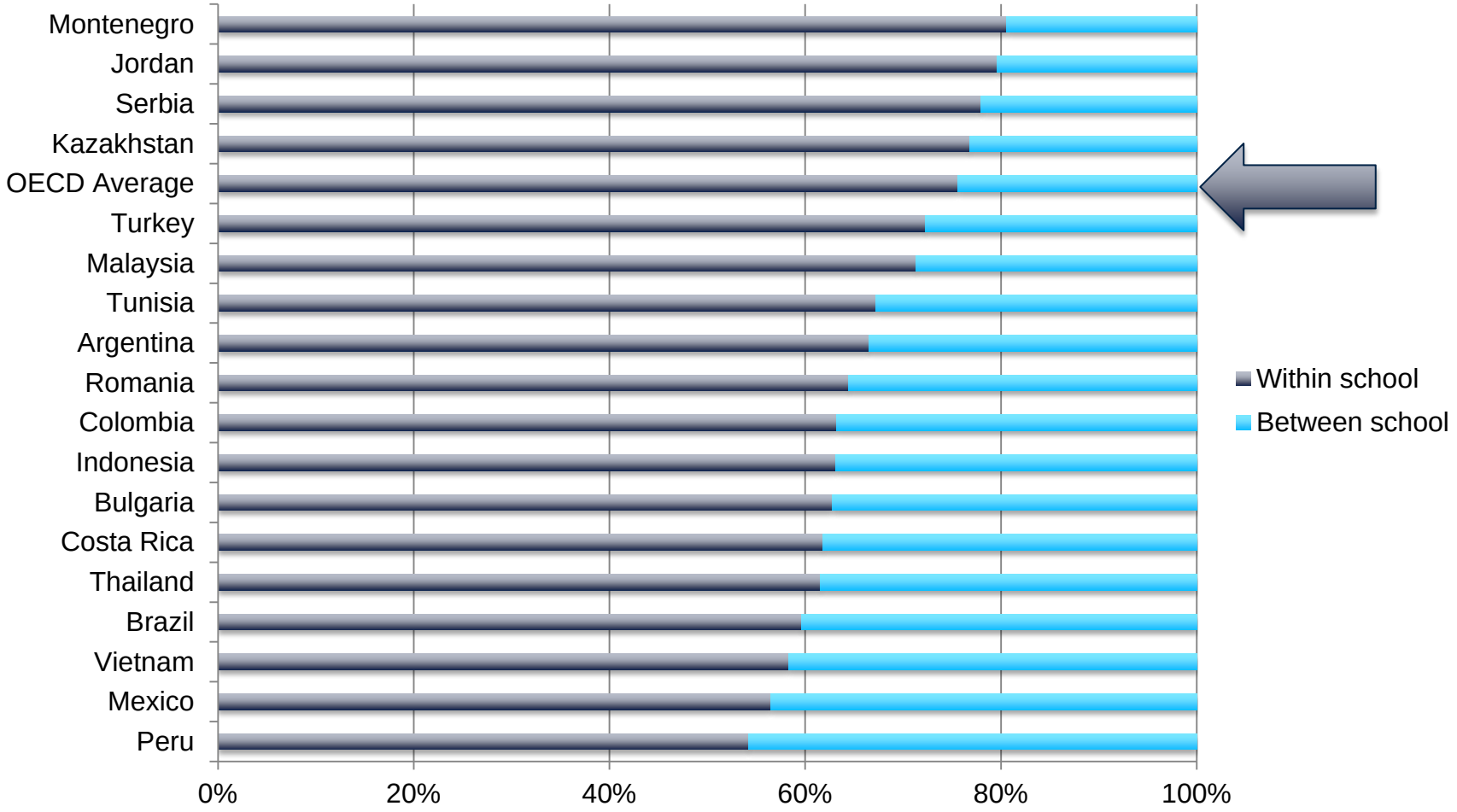
Share of total variation in ESCS that is between-school is also higher in most LICS and LMICs than in the OECD

- Also with large variation

Larger share of total variation in performance that is between school in LICs and MICs, compared with OECD average

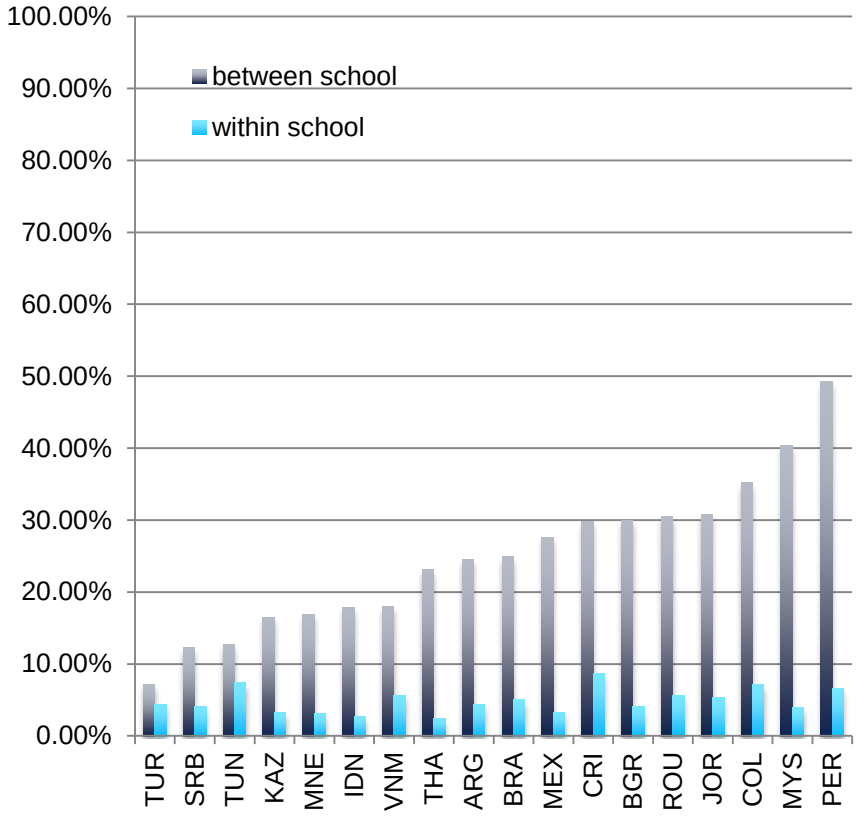


Also larger share of total variation in ESCS that is between schools in LICs and MICs, compared with OECD average

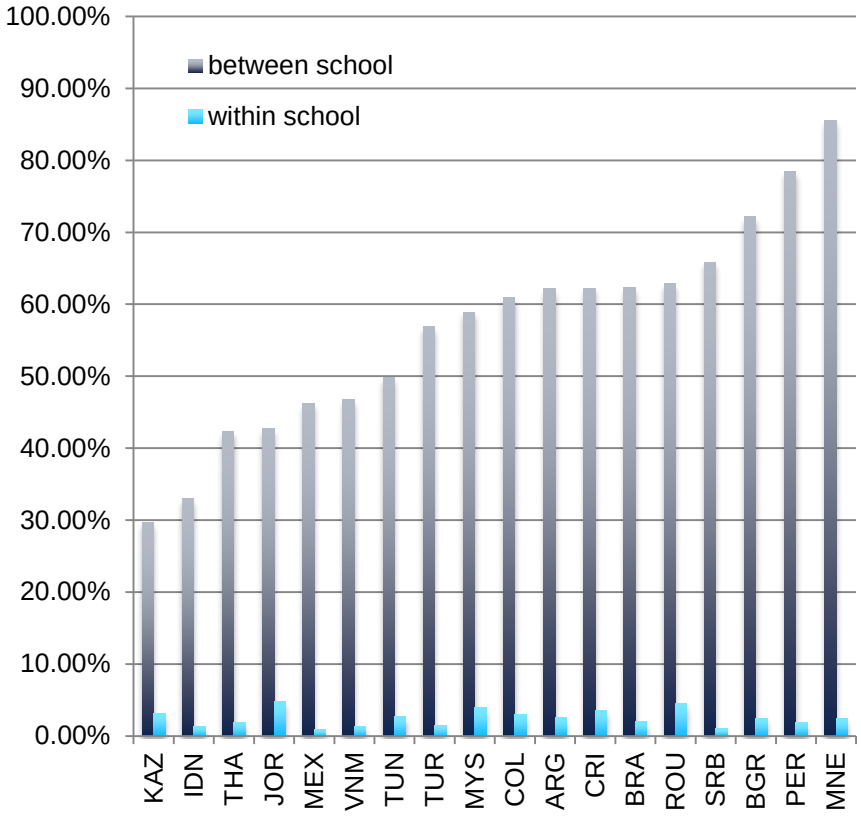


What accounts for variance in learning outcomes?

Student gender, language, location, ESCS



Student and school average ESCS



Multi-level analyses: determinants of math performance, PISA 2012, 18 countries

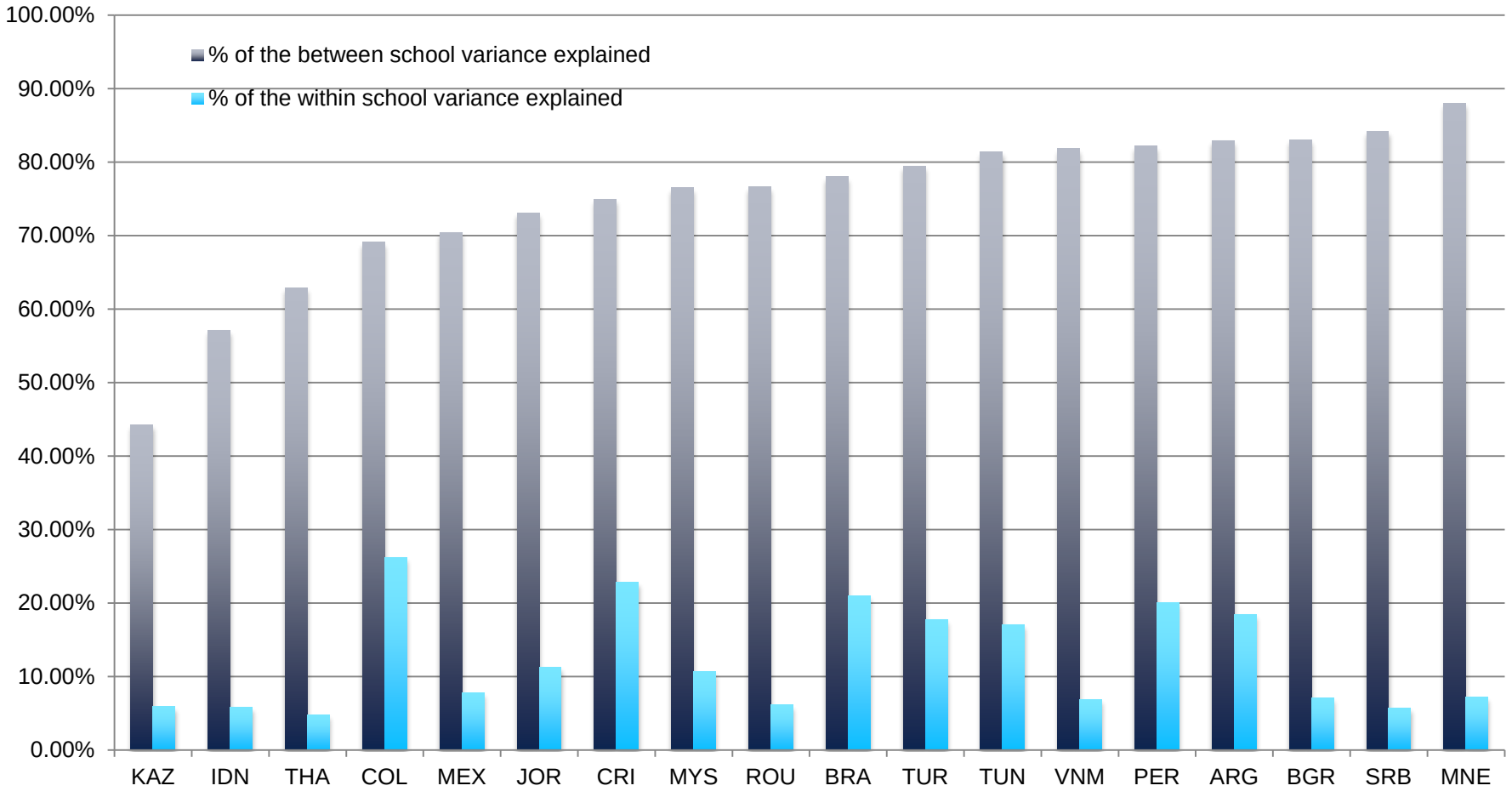
Student background variables:

- ESCS, gender, language, location, grade, repeater, vocational track, preschool

School-level variables:

- School average ESCS, teacher absenteeism, teacher shortage, % teachers with professional development, learning time, infrastructure, educational resources, disciplinary climate, average student absenteeism,% girls in school, private school, size of school

What else matters?



What PISA shows about what matters

Student-level

- Gender, ESCS, pre-school attendance, grade, language, study program, opportunity to learn

School-level

- Positive disciplinary climate (13 countries)
- Lower pupil absenteeism (9 countries)
- More learning time (8 countries)
- Better educational resources (3 countries)

PISA also suggests what does not matter in these countries

What did not work at all

- School policies on selecting and grouping students
- School governance
- Assessment and accountability policies

Conclusions: What is learned from PISA?

Growth in ILSAs?

- Yes, but LICs generally not involved

Why countries join PISA?

- National wealth, prior ILSA experience

Challenges?

- Financial-yes, technical-less so, cultural—probably

Policy impact in LICs and MICs?

- Yes, but mostly from private dialogue, not public discourse

PISA informs about education?

- Yes, about quality and equity, but less about mechanisms in LICs and MICs

What can PISA-D learn from PISA?

- Adjust the PISA scale to better measure and discriminate at lower levels of proficiency
- Make the contextual instruments more relevant to country contexts and policy issues
- Measure the performance of 15-year-olds, regardless of their grade or enrollment in school
- Consider the cultural context when preparing and disseminating national reports
- Tackle financial and technical challenges through partnerships with donors and through capacity building

WORLD BANK GROUP

Thank You

World Bank Group
Education
1818 H Street, NW
Washington, DC

PISA for Development

System level data

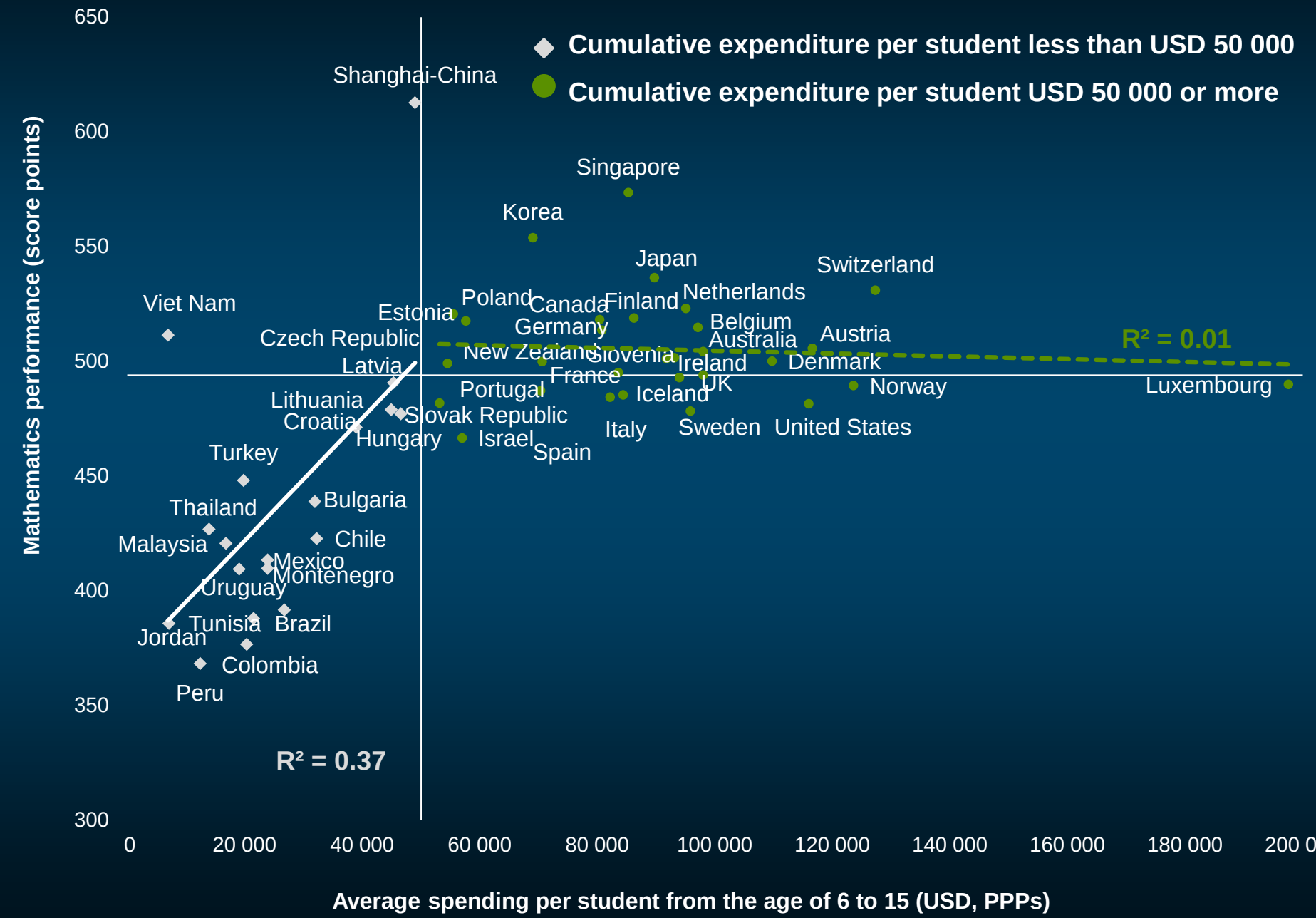
2nd meeting of the International Advisory Group
OECD Conference Centre, Paris (France)
11-13 March 2015

Expert paper on system level data

- Context to analyse PISA data and results
  - **Characteristics of the educational system**
  - **Economic and social context**

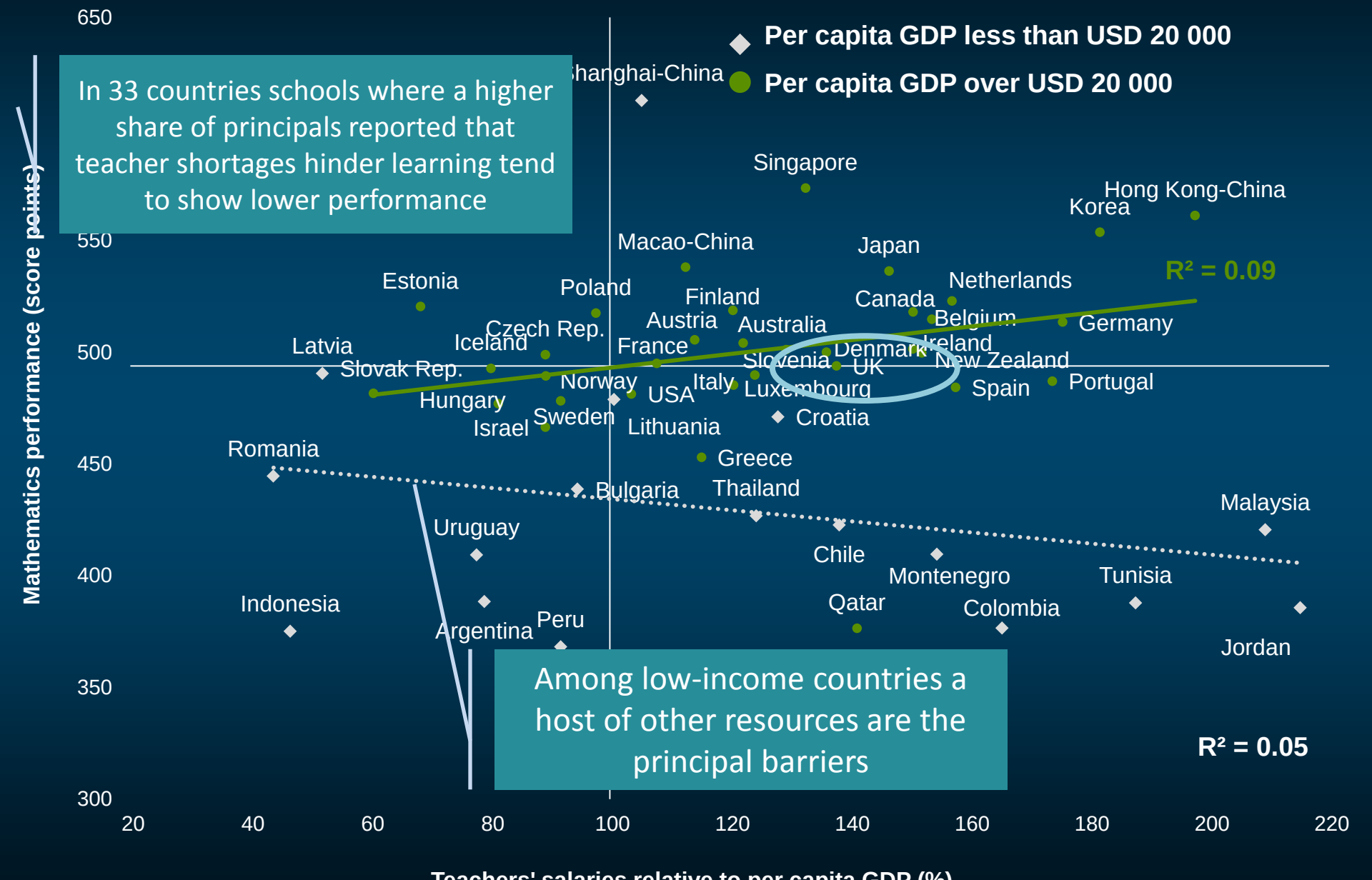
Spending per student from the age of 6 to 15 and mathematics performance in PISA 2012

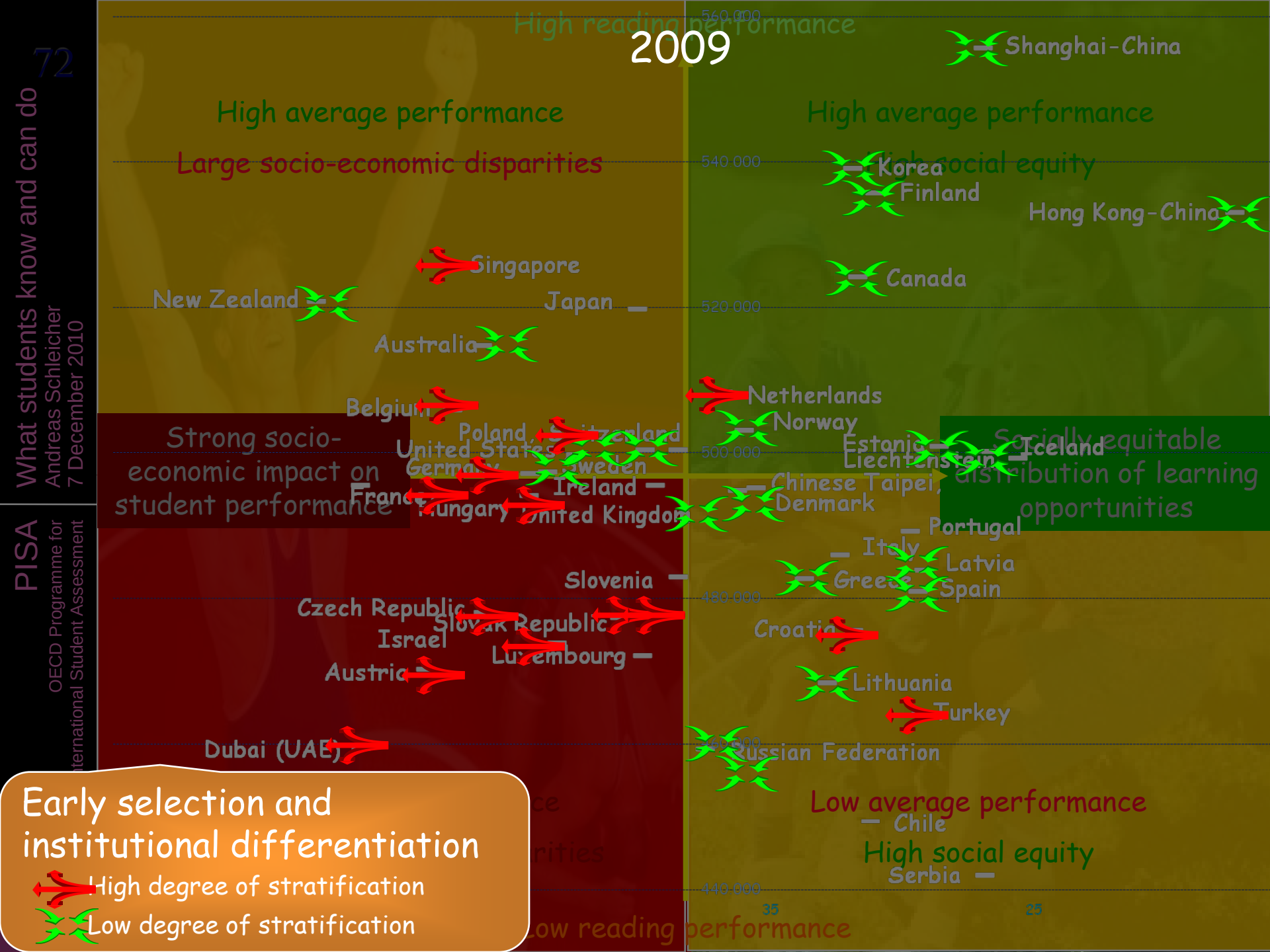
Fig IV.1.8



Among high-income countries high-performers pay teachers more

Fig IV.1.10




2009
High reading performance
Low reading performance
560 000
540 000
520 000
500 000
480 000
460 000
440 000
35
25
High average performance
Large socio-economic disparities
High average performance
High social equity
Low average performance
High social equity
Strong socio-economic impact on student performance
Socially equitable distribution of learning opportunities
Shanghai-China
Korea
Finland
Hong Kong-China
Canada
Singapore
New Zealand
Japan
Australia
Netherlands
Norway
Iceland
Estonia
Liechtenstein
Chinese Taipei
Denmark
Ireland
Belgium
Poland
United States
Sweden
Germany
France
Hungary
United Kingdom
Portugal
Italy
Latvia
Greece
Spain
Slovenia
Czech Republic
Slovak Republic
Israel
Luxembourg
Austria
Croatia
Lithuania
Turkey
Dubai (UAE)
Russian Federation
Chile
Serbia
Early selection and institutional differentiation
High degree of stratification
Low degree of stratification

IAG Agenda

- The International Advisory Group is invited to
  - Discuss the implications of the approach presented for collecting system level data in PISA-D
  - Explore uses of system level data

System-level indicators and PISA for Development

Albert Motivans, Amelie Gagnon
UNESCO Institute for Statistics

v3

System level indicators in PISA

- Robust system-level indicators used to interpret policy context in relation to assessment results, used in global and country reports
- Data collection includes 9 tables in Excel workbook
- Covering thematic areas:
  - Education pathways/stratification
  - Assessments and public examinations in lower, upper secondary, and entry exams to tertiary
  - Instruction time
  - Teacher salaries and training and recruitment
  - National accounts, Educational expenditures
  - Enrolment

Purpose of the assignment

- Apply system-level indicators framework in PISA for Development countries
- Consult national authorities in order to assess:
  - Availability of system-level indicators
  - Quality of system-level indicators
- Identify data gaps and make recommendations for improving data coverage and quality
- Most of the items are part of ongoing or new UIS data collection activities

Policy themes and UIS data collections

- Education pathways/stratification (ISCED mappings)
- Assessments and public examinations in lower secondary (OLO Catalogue)
- Instruction time (UIS questionnaire D)
- Teacher salaries and training (UIS questionnaire D)
- Educational expenditures (UIS questionnaire B)
- Enrolment (UIS questionnaires A and C)

Timetable for the assignment

- Start of work: 16 February 2015
- Report writing: 16 February to 31 May
  - Site visits: from 2 March to end of April
  - With iterative feedback following site visit
- Global report completed by 31 May
- Final discussions with the OECD by 31 July

Planned site visits

Organising the site visits

1. The NPM and the UIS agree on a date for the site visit
2. Drawing upon documentation provided by the UIS, the NPM contacts national actors to schedule meetings for site visit
3. During the site visit, the NPM and the UIS meet with different actors, collect data, assess availability and quality for reporting

Using an assessment matrix

- Why?
  - To more systematically assess data coverage and quality
  - To target key improvements/interventions
  - To enable use of existing international frameworks (e.g., SABER)

- How?
  - The matrix is composed of broad categories and sub-categories
  - Assessment “rating” for each individual data source
    - latent, emerging, advanced

Evaluation matrix - quality

- 3 categories, 5 sub- categories:
  - Coverage
    - Statistical units covered
  - Timeliness
    - Periodicity of production
    - Timeliness (gap between event and publication)
  - Ownership of the information
    - Legal framework
    - Responsibility of teams

Summary: data quality

	Coverage	Time sensitiveness		Ownership of the information	
	Statistical units covered	Periodicity of production	Timeliness	Framework for action	Responsibility of teams
Description	*The scope of education statistics is broader than and not limited to a small number of indicators, nor to some sectors of the education system (e.g. general programmes, public sector, etc.)*	*The production of reports and other outputs from the data warehouse occur in accordance with cycles in the education system.*	*Final documents, statistics and financial data are disseminated in a timely manner.*	*Defining, collecting and managing information is an integral part of the educational system and the government.*	*Responsibility for collecting , processing, and disseminating educational information is given to a clearly designated institution*
Latent	General programmes in the public sector are covered, for primary and secondary	The system produces data and statistics neither periodically.	The system does not produce information, data and statistics in a timely manner.	There is no framework in place	Specific teams are not identified
Emerging	Initial education system is covered, as well as the technical and professional programmes, in both public and private sector.	The system produces some data and statistics periodically.	The system produces some information, data and statistics in a timely manner.	Basic components of a framework or informal mechanisms are in place	Some specific teams are identified, but no platform for collaboration
Advanced	All the sectors of the education system are covered, including second	The system produces all data and statistics	The system produces all information, data	Most elements of a framework are in place	Specific teams are identified, collaborative

Evaluation matrix – data availability

- 3 categories, 4 sub- categories:
  - To the internal user / officer of the ministry
    - Is the information available at the ministry?
    - Is the ministry using the information?
  - To the external user
    - Can the information be found on the web or through public platform?
  - To the international organisations
    - Has information been transmitted officially to the UIS or other UN entity through its regular activities?

Summary: data availability

	Inside officers		Outside users	International organisations
Description	*Officers are aware of information available, and know how to access it (i.e. institutional/organizational structure).*	*Information- and Data-driven culture: information and data are disseminated and used for policy-making.*	*Users outside of the ministry have access to the information, either online, or through public-access platforms (phone, documentation centre, etc.).*	*Information has been shared with international organisations (e.g. the UIS) through its regular activities.*
Latent	Officers are more or less aware of the information available, and rely on personal connections to find it.	There are no mechanisms to disseminate the documents or results, in order to improve the system.	Information is available through personal contact.	No data has recently been shared with the UIS/UN and to other international partners.
Emerging	There are some official channels through which national officers can access the information.	There are some mechanisms in place in order to make sure the documents or results are used in order to improve the system.	Some information is publicly available, either online, at documentation centre, or other ways.	Some information in some areas is sent to the UIS/UN, some gaps in data and timeline.
Advanced	Information is organized in a coherent and accessible manner, for example through a specific office or data warehouse.	There is a communication strategy to make sure the documents or results are disseminated and used in order to improve the system.	All the information is organized in a coherent manner and available in a single place (e.g. website, information centre, etc.).	Relevant information is regularly shared with the UIS/UN through its regular activities, and then relayed to other partner agencies.

The case of Senegal

- Summary of the meetings
- Applying the framework to Senegal
- Results regarding the system-level information and data
- Successes and challenges

Senegal: summary of the meetings

- Meetings held from 2 to 4 March, with a final debriefing on 5 March 2015
- National officers from 13 different teams were involved
- Discussions around the items collected in the system-level questionnaire
- UIS will now be applying the framework

Senegal: quality (examples)

	Coverage (education)	Time sensitiveness		Ownership of the information	
	Statistical units covered	Periodicity of production	Timeliness	Framework for action	Responsibility of teams
Description	*The scope of education statistics is broader than and not limited to a small number of indicators, nor to some sectors of the education system (e.g. general programmes, public sector, etc.)*	*The production of reports and other outputs from the data warehouse occur in accordance with cycles in the education system.*	*Final documents, statistics and financial data are disseminated in a timely manner.*	*Defining, collecting and managing information is an integral part of the educational system and the government.*	*Responsibility for collecting , processing, and disseminating educational information is given to a clearly designated institution*
Latent	General programmes in the public sector are covered, for primary and secondary	The system produces data and statistics neither periodically.	The system does not produce information, data and statistics in a timely manner.	There is no framework in place	Specific teams are not identified
Emerging	Initial education system is covered, including technical and professional programmes, in both public and private sector.	The system produces some data and statistics periodically.	The system produces some information, data and statistics in a timely manner.	Basic components of a framework or informal mechanisms are in place	Some specific teams are identified, but no platforms for collaboration
Advanced	All the sectors of the education system are covered, including pre-primary, second chance programmes and literacy.	The system produces all data and statistics periodically.	The system produces all information, data and statistics in a timely manner.	Most elements of a framework are in place	Specific teams are identified, collaborative platforms are in place

Secondary enrolment data

Secondary enrolment data

Secondary enrolment data

Secondary enrolment data

National

Senegal: availability (examples)

	Inside officers		Outside users	International organisations
Description	*Officers are aware of information available, and know how to access it (i.e. institutional/organizational structure).*	*Information- and Data-driven culture: information and data are disseminated and used for policy-making.*	*Users outside of the ministry have access to the information, either online, or through public-access platforms (phone, documentation centre, etc.).*	*Information has been shared with international organisations (e.g. the UIS) through its regular activities.*
Latent	Officers are more or less aware of the information available, and rely on personal connections to find it.	There are no mechanisms to disseminate the documents or results, in order to improve the system.	Information is available through personal contact.	No data has recently been shared with the UIS and to other international partners.
Emerging	There are some official channels through which national officers can access the information.	There are some mechanisms in place in order to make sure the documents or results are used in order to improve the system.	Some information is publicly available, either online, at documentation centre, or other ways.	Some information in some areas is sent to the UIS, some gaps in data and timeline.
Advanced	Information is organized in a coherent and accessible manner for example through a specific office or data warehouse.	There is a communication strategy to make sure the documents or results are disseminated and used in order to improve the system.	All the information is organized in a coherent manner and available in a single place (e.g. website, information centre, etc.).	Relevant information is regularly shared with the UIS through its regular activities, and then relayed to other partner agencies.

Secondary enrolment data

Secondary enrolment data

Secondary enrolment data

Secondary enrolment data

National accounts

Senegal: results on system-level

- For each sheet of the system-level questionnaire, items are evaluated through both assessment matrices.
- Results are documented in the global expert report

Senegal: successes and challenges

- Effective agenda and meetings, strong contributions from the NPM
- We covered all of the topics within the allocated time (3 days)
- Information and data basically there or seemingly not difficult to reach within the ministry but less available for external/international users
- Challenges include organizational structure of the government, working in silos, no information/ data architecture or warehouse

UIS next steps

- Next steps with Senegal
  - Validating inputs in system-level questionnaire
  - Review and comment the report section on Senegal
- Next steps with other participants
  - Finalize agendas of site visits
  - Conduct the site visit
  - Write up and validate results with countries

PISA for Development

Review of Component Skills, Contextual Data and Implementation Procedures in International Assessments

Dr John Cresswell
Dr Ursula Schwantner
Ms Charlotte Waters

Paris, March, 2015

ACER

Who are the main clients for PISA-D?

- Perhaps it's a grade 5 student in a developing country.
- When this student is 15 he should have benefited from educational improvements undertaken as a result of PISA-D

Assessment is just one part of the process of educational improvement.

Simply doing more assessment will not, by itself, improve educational outcomes of students.

Reform cycle

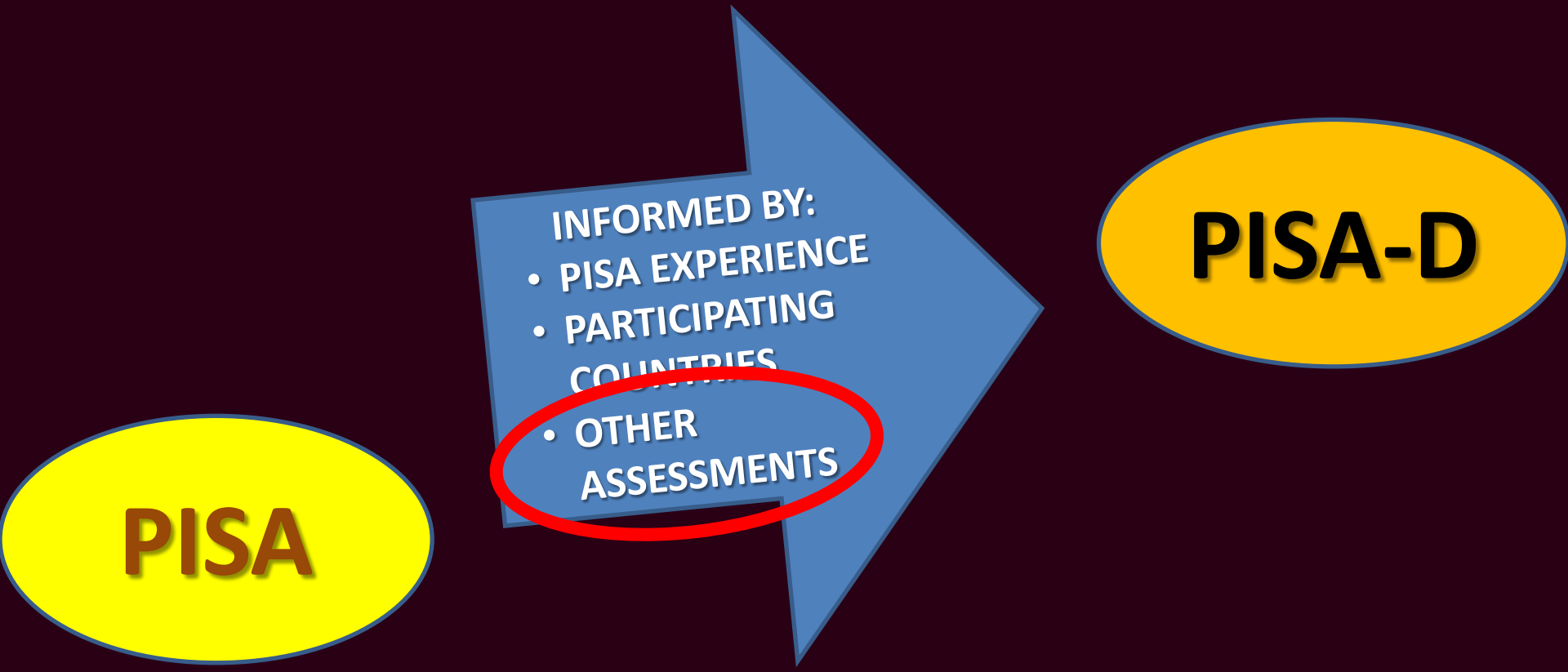
Education reform is not a straight line activity

Overview

- The assessments reviewed
- Approaches in collecting cognitive data
- Contextual information
- Implementation procedures
- Possible implications for PISA-D

International Educational Assessments

- In 1964, the International Association for the Evaluation of Educational Achievement (IEA) conducted the first internationally comparative study in mathematics; 12 countries participated.
- By 2010 about 70 per cent of the countries in the world participated in some form of regional or international assessment program.


PISA
INFORMED BY:
• PISA EXPERIENCE
• PARTICIPATING
• OTHER
ASSESSMENTS
PISA-D

Assessments reviewed

Large-scale international surveys	PISA
	PIRLS
	Pre-PIRLS
	TIMSS
	SACMEQ
	PASEC
	LLECE
	WEI-SPS
School-based surveys	EGRA
	EGMA
Household-based surveys	PIAAC
	STEP
	LAMP
	ASER
	UWEZO

ACER

PISA – Programme for International Student Assessment

- Organisation for Economic Cooperation and Development (OECD)
- Reading, mathematics, science
- Also problem solving, financial literacy
- Student and school questionnaires
- Parent and teacher questionnaires optional
- Sample is 15-year-olds
- 72 systems in PISA 2015
- Focus on preparedness for the future.

PIRLS (Progress in Reading Literacy Study)

- International Association for the Evaluation of Educational Achievement (IEA)
- Sample – grade 4.
- Subject – reading.
- Focus – curriculum.
- Other – student, parent, teacher and school questionnaires.

TIMSS (Trends in Mathematics and Science Study)

- International Association for the Evaluation of Educational Achievement (IEA)
- Sample – grade 4 and grade 8.
- Subjects – mathematics and science.
- Focus – curriculum.
- Other – student, teacher and school questionnaires.

SACMEQ - Southern and Eastern African Consortium for Monitoring Educational Quality

- 15 countries; since 1995.
- SACMEQ aims to assess the conditions of schooling and performance levels of students and teachers in the areas of literacy and numeracy in Southern and Eastern Africa.
- Target population is grade 6.
- Has been implemented in three phases – Phase III had 2800 schools, 61 000 students, 8000 teachers
- Compares student performance, and the factors associated with that performance.
- Capacity building has been a major focus of SACMEQ

PASEC - Programme for the Analysis of Educational Systems of CONFEMEN

- The Conference of Education Ministers of Countries which include French as a Language of Communication (CONFEMEN)
- First assessment 1991; 24 participating countries in a series of assessments.
- The first phase of PASEC had tests at the beginning and end of grades 2 and 5, but is now moving into a new phase with just one test in each of grades 2 and 6.

ACER

LLECE – Latin American Laboratory for the Evaluation of Quality in Education

- UNESCO Santiago.
- First implemented in 13 countries in 1997 (PERCE), followed by SERCE in 2006 and TERCE in 2013.
- Curriculum-based assessment in reading, mathematics, science and writing. Contextual information is collected from students, teachers, school principals and parents.
- Target population are students in Grade 3 (reading, mathematics and writing) and in Grade 6 (reading, mathematics, writing, and science).

EGRA/EGMA - Early Grade Reading/Mathematics Assessment

- Created by US AID/Research Triangle Institute (RTI).
- Assess children's acquisition of basic literacy and numeracy skills in developing countries.
- Target population is students in Grades 1 to 3.
- Implemented in over 70 countries in 100 languages.
- Tests are adapted to the individual settings so comparability between countries is not a priority.

ASER and Uwezo

- The Annual Status of Education Report (ASER): implemented annually in India for the last ten years, 600,000 out-of-school children.
- Uwezo: an ASER based assessment in Africa. Kenya, Tanzania, Uganda.

LAMP – Literacy Assessment and Monitoring Programme: a household-based assessment of adults' reading and numeracy skills

- UNESCO Institute for Statistics-UIS
- 2003
- Whole population of adults aged 15 and over residing in a particular country
- Reading, numeracy
- Participant questionnaire

The Skills Towards Employability and Productivity (STEP) Skills Measurement Survey

World Bank, Human Development Network

- **STEP has been implemented in two waves. Wave 1 countries started implementation in 2011 and wave 2 countries started in 2012.**
- Consists of two parts: Household Survey and Employer Survey.

Wave 1

- Both the household and employer surveys implemented – Lao PDR, Sri Lanka, Ukraine, Vietnam and Yunnan (province of China)
- Only the household survey – Bolivia, Colombia

Wave 2

- Both the household and employer surveys implemented – Armenia, Georgia, Macedonia
- Only the household survey – Ghana, Kenya
- Only the employer survey – Azerbaijan

ACER

The Skills Towards Employability and Productivity (STEP) Skills Measurement Survey

Target population

- All non-institutionalized persons aged 15 – 64 (inclusive) living in private dwellings in the urban areas of the country at the time of the data collection. This includes all residents, except foreign diplomats and non-national working for international organizations.
- A sample of at least 6,000 households

PIAAC: Programme for the International Assessment of Adult Competencies

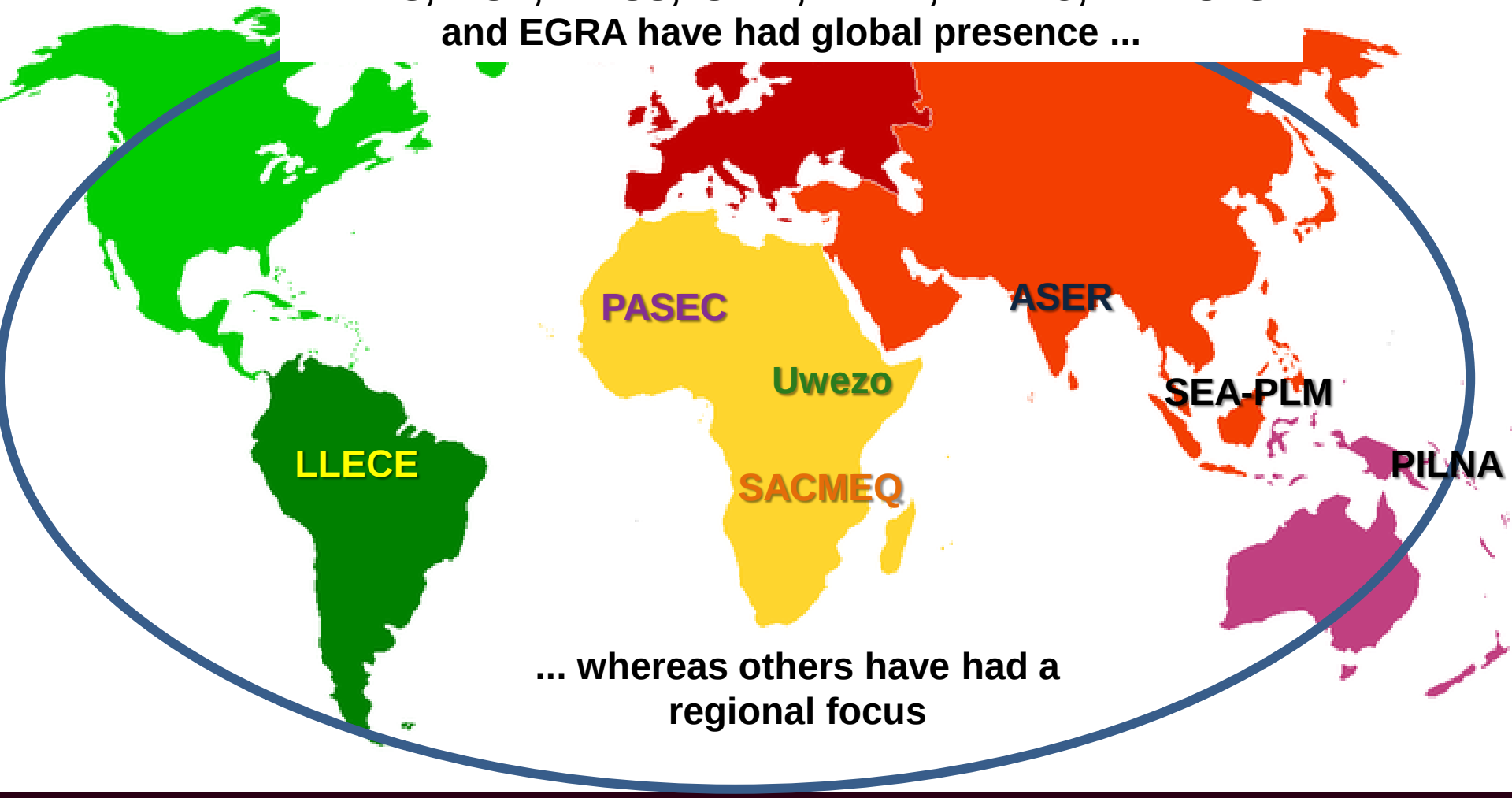
- OECD
- Literacy (including reading components),Numeracy
- Problem solving in technology-rich environments
- Target population is all non-institutionalized adults between age 16 and 65 (inclusive) who reside in the country at the time of data collection. Adults were to be included regardless of citizenship, nationality or language .
- The minimum sample size requirement for the main study is 5,000 completed cases per reporting language.

World Education Indicators - Survey of Primary Schools (WEI-SPS)

- The survey was designed and implemented jointly by the OECD and the UIS, aided by a network of consultants and international experts.
- 11 WEI countries (Argentina , Brazil , Chile, India, Malaysia, Paraguay, Peru , Philippines, Sri Lanka , Tunisia , Uruguay) participated in WEI-SPS over 2005 and 2006.
- A sample of primary schools was drawn for each country, to be nationally representative. Within each school, principals were surveyed and questions in the principal questionnaire refer to all grades/year levels in the sampled school. Additionally, all Year 4 teachers within the school who taught mathematics/arithmetic and reading were surveyed and questions in the Teacher questionnaire refer to the instructional environment in year 4 classrooms

Coverage

PIRLS, PISA, TIMSS, STEP, LAMP, PIAAC, WEI-SPS and EGRA have had global presence ...



... whereas others have had a regional focus

Collection of cognitive data

Assessment frameworks

- A collaborative approach to the development of the assessment frameworks is a characteristic of many of the assessments and this approach will lead to a more relevant assessment and encourage better engagement of countries. It is also the basis of more informed cross-country comparisons.
- Currently, the majority of the global school-based assessments have a curricular focus compared to the PISA approach of preparedness for the future.
- The majority of assessments include components of language and mathematics and some such as PISA and TIMSS include science.

Collection of cognitive data

Item Development

- There is a diverse range of approaches to item development among the assessments. Some like PASEC are fairly centralised whereas others like SACMEQ have country representatives in a team.
- The procedure for the creation of new items generally follows the steps of *Item generation, Item Panelling, Cognitive trialling, Field trial, Main study selection*. It is recommended that the process adopted for PISA for Development, if items are created, should follow this process.
- While there may be items which can be imported from other assessments, it is important to realise that the characteristics of items can only by assessed by testing them with the specific target populations for which they are intended. An item that is suitable in one context is not necessarily going to be suitable in another context.

Collection of cognitive data

Item Development

- The collaborative item development process undertaken by most assessments leads to a more relevant assessment.
- In some assessments such as Uwezo each item is developed to address some competence which is found in the curriculum, whereas others like PISA are constructed with a view to assessing the student's preparedness for the future – the assessment framework will define this orientation.

Collection of cognitive data

Test design and mode of delivery

- To cover the full range of an assessment framework it will be necessary to incorporate a test design which has each student being assessed on part of that framework.
- While paper and pencil tests are more widely accepted and easily administered, consideration could be given to test delivery by electronic means. Experience has shown that "tablets" can be used in populations totally unfamiliar with this technology. It has the advantages of increasing student interest and eliminating expensive data entry procedures.


Students in Afghanistan using tablets to do their national assessment – these students had never seen tablets before

Collection of cognitive data

Test design and mode of delivery

LAMP is one of the few assessments that includes an adaptive process – that filters students on the basis of previous responses. This process takes place as follows:

- Filter test: This intended to establish if the respondent would most likely possess lower or higher levels of literacy skills.
- Module for those with lower performance: This module is composed of two instruments. One instrument supplements the information produced by the filter test with more detail and establishes more precisely where the respondent stands in relation to the lower skill levels. The other enables an in-depth exploration of the operations (reading components) that might be preventing a better performance.
- Module for those with higher performance: This module comprises one booklet (in two versions) that supplements the information produced by the filter test with more detail and establishes more precisely where the respondent stands in relation to the higher skill levels.

Collection of cognitive data

Psychometric analysis and scaling

- The majority of assessments employ Item Response Theory to analyse student responses. PASEC has modified its procedures from Classical Test Theory to Item Response Theory for its most recent round of assessments.
- Item Response Theory, built on the Rasch Model, allows a clear picture of student capacity to be drawn.
- The number of parameters used varies - originally PISA employed a one parameter model and TIMSS a three parameter model. It would be advantageous if the parameters used in regular PISA are adopted for PISA for Development - this will allow better opportunities for countries to compare their own results with regular PISA.

Collection of cognitive data

Cross country comparability

- While most of the assessments aim to have some form of cross-country comparisons it should be noted that for EGRA and EGMA this is not the case.
- Item analysis at the field trial should identify any item-by-country interactions - items which are behaving in a manner to advantage or disadvantage a particular country.

Collection of cognitive data

Proficiency levels

- Student results reported as a single number or grade do little to describe the capacity of the students.
- By examining closely the items which a student can do will provide a much more accurate and useful measure of their capacity giving policy makers the opportunity to design appropriate interventions.
- For some of the assessments reviewed proficiency levels were not considered appropriate or manageable - eg ASER and EGRA.

Collection of cognitive data

Translation

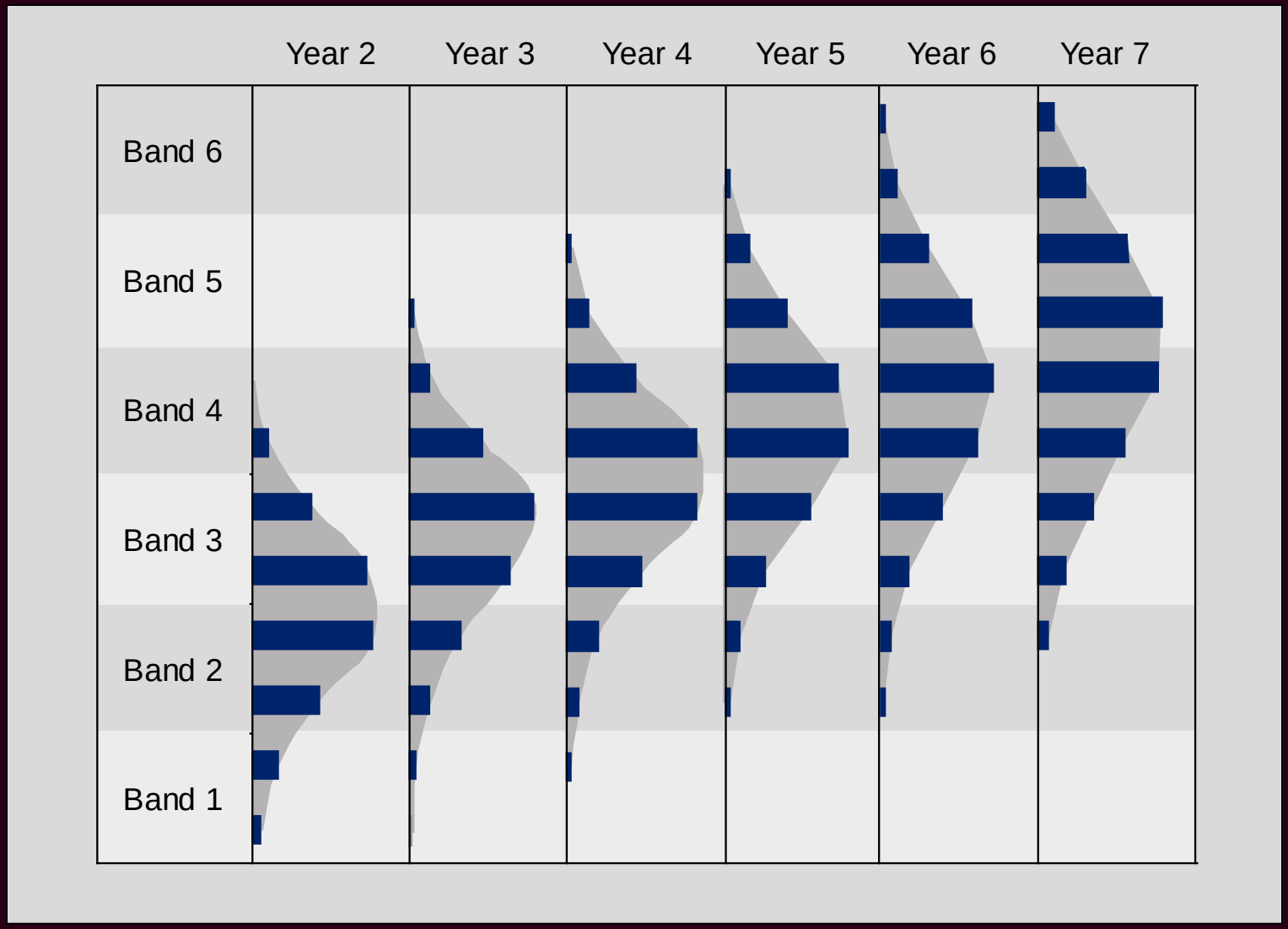
- To maintain the highest standards for translation it is recommended that the PISA for Development project adopts the highest standards now operating in global assessments. This means that two source versions of the test in two languages will firstly be separately translated within country, then those versions reconciled and the resulting version verified by an independent international expert language organisation. This process will also give better comparability with results from existing PISA surveys.

Collection of cognitive data

Trends

- Countries are interested in change over time.
- To do this it is necessary to include a proportion of the same items from one survey administration to the next .
- Growth is measured when the same cohort is measured at different stages of their educational career.
- Improvement is indicated when there is an increase in student capacity at the same level in successive administrations of the survey. Some surveys can achieve this with regular implementation of the assessment (eg PISA, PIRLS, TIMSS) whereas for others with less regular implementation, it hasn't been a priority.

Tracking Progress Over Time



Collection of cognitive data

Field trial

A field trial should take place before implementation of a main survey to test:

- the suitability of the items for the target sample. It is normal that a large number of items will be discarded following the field trial.
- if the participating country has the capacity to implement the assessment

Collection of contextual data

Questionnaire types

- In regard to the questionnaire type, it is important to discern the best informants for measuring the relevant constructs.
- Student and principal questionnaires are administered in most assessments and now a teacher questionnaire is implemented in all large-scale international surveys as well as in EGRA and EGMA, regardless of whether students are sampled from intact classes in schools (PIRLS, TIMSS, LLECE) or randomly within schools (PISA, SACMEQ).

Collection of contextual data

Questionnaire types

- Consideration needs to be given to the possible benefits of a teacher questionnaire, compared to collecting the more aggregated school level data through the principal questionnaire especially because performance in PISA is seen as an accumulation of the student's educational experience and that the students' are not from intact classes.

Collection of contextual data

Questionnaire types

- Interaction with system-level data collection as well as the use of administrative data or agency collected data should be considered, with the aim of limiting contextual data collection through principals (and teachers) to the most essential factors.

Collection of contextual data

Development

- It is considered crucial to involve PISA-D participating countries in all phases of the contextual questionnaire development.
- Country participation is necessary to identify the topics most relevant to developing country contexts (as part of the framework development), as well as to ensure best fit of the questionnaire instruments.
- Active involvement of participating countries is an important component of capacity building.

Collection of contextual data

Languages and translation

- It is important to consider which languages are the most appropriate ones for the different groups of respondents – specifically for parents as they may not speak the defined 'language of assessment'.
- Translation, adaptation and verification procedures are highly elaborated for PISA and for other multi-lingual assessments – it is expected that PISA-D would follow these procedures.

Collection of contextual data

Main factors and variables

- *Early learning opportunities:* The PIRLS and TIMSS *Learning to Read Survey*, questions in LLECE about early reading, and the questions about out-of-school status from ASER and Uwezo may be relevant.
- *Language of home and school:* Frequency of speaking the language of test at home and before enrolled in school (PIRLS and TIMSS). Consideration should be given to the language spoken by the teacher (PASEC).

Collection of contextual data

Main factors and variables

- *Socio-economic measures:* Factors that relate to SES as well as to poverty may be considered important. SACMEQ, PASEC, LLECE, EGRA/EGMA, ASER, Uwezo, STEP and LAMP all include indicators relevant to children living in poverty.
- *Quality of instruction:* For example pedagogical practices, limitations, assessing and monitoring academic progress, classroom organisation) and domain-related aspects (eg strategies for reading instruction, training for specific subject teaching).

Collection of contextual data

Main factors and variables

- *Learning time*: Questions about working outside of school (eg as included in PASEC and LLECE) should be considered in PISA-D.
- *School resources*: Relevant factors related to 1) basic services, 2) didactic facilities and 3) didactic resources are captured in SACMEQ, PASEC, EGRA/EGMA, ASER and Uwezo. Other relevant topics found in international surveys are school safety, teacher satisfaction, staff stability, and issues regarding funding and grants.

Inclusion of data about school resources will provide valuable information to policy makers

Collection of contextual data

Main factors and variables

- *Family and community support:* Information about parental involvement that is relevant for PISA-D is captured in PIRLS/TIMSS, SACMEQ, LEECE, WEI-SPS and EGRA/ EGMA on all levels (student, parent, teacher and school). Information about community support is mainly captured through the principal in SACMEQ, WEI-SPS, PIRLS/TIMSS and PASEC.
- *Health and wellbeing:* This topic has been added to the key areas for PISA-D as it was considered important from the review of international surveys.

Collection of contextual data

Cross-cultural comparability

Three aspects have been identified as crucial:

- Country involvement in review of context framework and questionnaires contributes to the face-validity and cultural appropriateness of the content and issues with translation.
- Analyses to examine the extent of different patterns of response styles in the countries participating in PISA-D is important.
- Data analyses after field trial and main study needs to capture validity of questionnaire items across countries and that items work in the same way in all countries (cognitive as well as contextual items). Also in this regard country involvement is significant.

Implementation issues

Sampling

- Subnational participation arrangements should be considered so that, at least beyond the pilot, countries with stable and unstable areas might be able to participate in PISA for Development.
- Consideration should be given to how a school sampling frame that satisfies PISA's technical standards will be constructed in countries where a complete list of school is not maintained.
- If up-to-date and complete lists of students are difficult to obtain from schools in advance, consideration should be given to alternatives methods for sampling students (eg the SACMEQ approach of sampling children on the day of testing).

Implementation issues

Data collection

While traditional data collection procedures can be followed, other methods may be considered:

- Interview sessions to collect contextual data from respondents such as principals, teachers or parents.
- Using tablet-based data collection methods.
- Having test administration over multiple days.
- Permitting extra time to complete cognitive assessments.
- Establishing on-site test administrator checks of student booklets to reduce the incidence of missing/discrepant data.
- Sourcing test administrators who are local to the sites of test administration as a means of securing community engagement and buy-in.

Implementation issues

Data processing

- With respect to coding, response databases such as those used by the IEA studies PIRLS and TIMSS and the Coder Enquiry Service used by PISA will be equally valuable for PISA for Development.
- With respect to data cleaning, consideration should be given to whether PISA for Development might include validation steps that are undertaken before the test administrators leave the schools (as is done in SACMEQ).

Implementation issues

Standardisation of implementation

- Standards should be included in a project implementation plan as well as in a dedicated standards document. Including the standards in documents that are specific to each participating country rather than general may be effective as a means of ensuring that each country is fully aware of its responsibilities with respect to the standards.
- Countries should be involved in the discussion about standards.
- There can be some difficulty in establishing and maintaining standards across a diverse range of countries.
- With respect to training and quality assurance, measures can be taken to ensure the quality of test administration through the production of comprehensive manuals.

Implementation issues

Out-of-school children

- The processes adopted by ASER and Uwezo should be examined, especially how they deal with issues such as outdated sampling frames for households or sampling units above the households (eg villages, in the case of ASER), multiple-occupancy households, and how to approach children who cannot read. The ways ASER and Uwezo obtain local buy-in to the survey should also be considered. An adaptive design could be pursued for testing out-of-school children.

Implementation issues

Reporting

- Through consultation, steps should be taken to ensure that questionnaire scales developed and used in reporting are considered relevant to policy in the participating countries.
- Consideration should be given to whether a presentation of participating country contexts such as that given by the TIMSS and PIRLS encyclopaedias may be valuable for PISA for Development.
- Countries may need considerable support in preparing dissemination plans and national reports. Without the preparation and dissemination of national-level material that is judged by decision-makers as useful and relevant, a survey will have limited impact.

Final thoughts

- Each of the assessments reviewed has been created, relatively independently of the others, to answer the needs of its own constituents.
- The assessments share more in common in the procedures they use than they do with content.
- The procedures which are easily transferable include those for creating frameworks, item development, sampling, scaling, analysis and reporting.

Final thoughts

- The content most easily transferable is that contained in the contextual questionnaires – there are certain contextual characteristics needed across most countries.
- The least transferable content between assessments is the cognitive component – the test questions usually reflect very specific needs of the constituents, the curricula upon which they are based and the population at whom they are targeted.

Thank you

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PISA for Development

ToR for an Independent Review

2nd meeting of the International Advisory Group
OECD Conference Centre, Paris (France)
11-13 March 2015

PISA for Development: Independent Review

Scope and purpose of the review

- Focused on the progress of the project in relation to its five main outputs and extent to which the delivery of these will achieve the project's purpose

- Purpose of review is to help understand what has been achieved against the OECD's original plans, how practicable those plans were as well as how relevant and valuable the project's work is to developing countries' and development partners' evolving education policies.

Project's Outputs

- Contextual questionnaires and data-collection instruments enhanced;
- Descriptive power of cognitive assessments enhanced
- Analytical framework and methodological approach for including out-of-school 15-year-olds in assessments developed;
- Country capacity in assessment and analysis strengthened
- Engagement established with developing countries and partners for peer-to-peer analysis and learning opportunities to support the UN-led post-2015 process

Main Issues to be Reviewed

- Impact of the project
- Relevance of the project
- Sustainability of project achievements
- Management and partnership arrangements

Impact of the project

- Achievement of outputs and the purpose of the project
- Expected impact on policy makers and the education systems in the participating countries
- Evidence that PISA results will be used in policy-making and/or sector work
- Dissemination and use of project deliverables
- Enhancement of main PISA

Relevance of the Project

- Key lessons from the project to inform work on improving education quality and improved student learning outcomes
- The role of the project in informing discussions of education quality and learning outcomes
- Promotion of evidence-based policy making

Sustainability of Project Achievements

- Achievement of capacity building outputs and objectives
- Lessons from capacity building
- Success of peer-to-peer learning strategies
- Likely transition of countries from PISA for Development to main PISA
- Spill-over benefits of the project for student assessment as a whole
- Resource implications of implementation

Management and Partnership Arrangements

- Effectiveness of the governance and management structures for the project
- Effectiveness of project management systems and processes
- Roles of PISA GB, the DAC and IAG and TAG
- Particular successes and challenges in implementing the project

Methodology

- Selection of experts
- Experts to propose a design, plan and methodology in accordance with ToR
- Collection and analysis of documents, data and information, interviews with stakeholders and review of documents produced by the project
- Possible use of surveys

Schedule

Inception Report by	January 2018
Presentation of initial findings and recommendations to IAG	March 2018
Draft Report	April 2018
Final Report	May 2018

Deliverables

- Presentation to IAG
- Final report of 50 pages
- IAG and TAG will have opportunity to comment on Inception report and Draft report
- Final report will inform OECD's final report on the results of the project

IAG Decision

- The IAG is invited to confirm its approval of the ToR for an independent review of the project to be conducted in 2017-18

PISA for Development

Engagement and Communication Strategy

2nd meeting of the International Advisory Group
OECD Conference Centre, Paris (France)
11-13 March 2015

PISA for Development
Engagement and Communication Strategy

- Purpose: guide the engagement and communication activities of the project, supporting the achievement of its objectives, particularly the 5th output:
  - *engagement established with developing countries and partners for peer-to-peer analysis and learning opportunities to support the UN-led post-2015 process*.

Engagement activities

The engagement, in-reach & outreach, activities planned under the project include:

- Key messaging to ensure people (including media) understand what PISA is & how PISA results can be used to improve learning, and change behaviour and perceptions where necessary.
- Tools to engage effectively with stakeholders (online effective communications presence, visibility tools, networking, meetings, workshops, quarterly newsletter circulated to countries participating in the project, peer-to-peer learning opportunities & an international seminar scheduled for the 3rd project year.)
- Continued feedback & analytics to demonstrate the impact of the project.

Partners and approaches

Types of partners:

- Countries participating in PISA for Development
- Non-OECD countries already participating in PISA
- Other countries not yet participating in PISA
- Development partners
- International organisations
- Civil society organisations

Approaches:

- Highest priority given to participating countries & partner countries engaged in peer-to-peer learning as well as development partners that support the project & organisations involved in technical partnerships.
- After field trials, focus will be on other partner countries in terms of readiness to participate in future PISA cycles
- Attention will also be given to other development partners as potential supporters of developing countries looking to take part in future PISA cycles

Communication methods

- **Written**: report on non-OECD members' experiences participating in PISA; press releases; fact sheets; brochures; quarterly newsletter for participating countries; final project report; etc.
- **Oral**: speeches and public presentations to key groups of stakeholders; lesson learning international seminars
- **Direct interaction**: interviews with press, TV and radio in partner countries and developing countries
- **Internet**: PISA for Development website, websites of partner countries, social media

Increasing developing country participation in PISA

Upon completion of the PISA for Development project, the range of partnership options for developing countries can be expanded to include the following:

- Participation in future cycles of computerised PISA;
- Participation in future cycles of pencil-and-paper PISA;
- Participation in a 2nd PISA for Development project;
- Participation in specially designed PISA-related capacity building activities, based on the results of the project and the materials produced by the project

IAG Decision

- The IAG is invited to confirm its approval of the PISA-D engagement and communication strategy
- Participating countries to provide the Secretariat with contact details of their communication focal points to facilitate strategy implementation

Instituto Nacional de Evaluación Educativa

Ecuador in Pisa-D

Project Implementation Plan

Por un Ecuador sobresaliente

Instituto Nacional de Evaluación Educativa

Communication strategy for Pisa-D

- ✓ Pisa **launch**
- ✓ Radio and Tv coverage
- ✓ **Targeted products** (flayer, reports, web page, etc)
- ✓ IAG **meeting**
- ✓ Briefing on Pisa progress
- ✓ Implication for **policy**

New coverages

https://www.youtube.com/watch?v=uACdLhej0V4

https://www.youtube.com/watch?v=am9oQbbfbeE

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Communication strategy

- ✓ **Quality of information**
- ✓ Short period of time
- ✓ For all the people
- ✓ For the students, teachers, authorities, media and others
- ✓ Different products

https://www.youtube.com/watch?v=yThRh0wqvUs

Instituto Nacional de Evaluación Educativa

Serce - Terce

TERCE (Llece-Unesco)

Third Regional Comparative and Explanatory Study

http://www.ineval.gob.ec/index.php/Terce

Instituto Nacional de Evaluación Educativa

Communication strategy for Pisa-D

- ✓ Organize information
- ✓ **Private and public options**
- ✓ All the documents
- ✓ **Time line**
- ✓ Pisa progress
- ✓ News
- ✓ **Forum**

http://www.ineval.gob.ec/index.php/PISA

Instituto Nacional de **Evaluación Educativa**

Thanks!

Por un Ecuador sobresaliente

PISA FOR DEVELOPMENT

International Advisory Group Meeting

Closing Session

11-13 March 2015

OECD Secretariat

BETTER POLICIES FOR BETTER LIVES

PISA FOR DEVELOPMENT

Conclusions

OECD
BETTER POLICIES FOR BETTER LIVES

Conclusions from Day 1

PISA for Development
International Advisory Group - Conclusions

Strong representation at the meeting from:

- Countries signed up or committed to participation in PISA for Development (Ecuador, Guatemala, Paraguay, Senegal, and Zambia),
- Development partners (France, Germany (BMZ/GIZ), IADB, Ireland (Irish Aid), Japan(JICA), Norway, UK (DFID), World Bank,
- International agencies (UNESCO, UIS, EFA GMR, CONFEMEN and PASEC)
- International contractors, and
- Independent technicians in the field.

PISA for Development
International Advisory Group - Conclusions

- Formally Adopted the ToR for the IAG with amendment for rotating co-chair
- Agreed co-chairs
- Discussed the next meeting of the IAG scheduled for March 2016, and Secretariat to follow up with countries about venue
- Formally adopted the ToR for the TAG and noted Secretariat to supplement membership
- Discussed and Approved the Annual Report

PISA for Development
International Advisory Group - Conclusions

- Reconfirmed unanimous support for the **PISA for Development** project.
- Acknowledged again the unique value that PISA has as an international benchmarking tool for quality and equity in schooling and for guiding policies for system improvement.
- Appreciated the actions taken since May 2014
- Approved the implementation schedule for the project and the statements of work for the international contractors but noted that this is subject to change as country schedules are established and need to integrate Strand C

PISA for Development
International Advisory Group - Conclusions

- Asked that context measures are comparable with PISA and across participating countries.
- Asked the conceptual frameworks and materials developed by Strand B are shared to inform stakeholder management in the participating countries.
- Noted the importance of translating key materials, such as manuals, into French and Spanish; Secretariat to follow up

PISA for Development
International Advisory Group - Conclusions

- Agreed the importance of seeking approaches for including out of school 15-year-olds in the study and recognised the significant challenges involved and the possible options for addressing these.
- Welcomed the finalisation Strand C ToRs.
- Recognised this as a distinct strand of the project and asked that the timeline for Strand C is integrated with that of Strands A and B.

PISA for Development
International Advisory Group - Conclusions

- Noted the important role that PISA for Development is going to play in building capacity in the participating countries, including
  - for developing and conducting national and international large scale assessments, and
  - for using performance data to diagnose strengths and weaknesses in the education system, and for supporting school improvement efforts.

PISA for Development
International Advisory Group - Conclusions

- Appreciated how the Secretariat and its consultants have prepared the countries for implementing PISA for Development, including:
  - Facilitating capacity building plans, and
  - Helping countries to prepare Project Implementation Plans and aligning these to the overall project implementation schedule.

PISA for Development
International Advisory Group - Conclusions

- Noted and supported the plans for peer-to-peer learning, especially NPM mentoring
- Noted the important role that PISA for Development and PISA can play in contributing to and measuring post-2015 global educational targets that are focussed on learning.

Conclusions from Day 2

PISA for Development
International Advisory Group - Conclusions

- Noted and welcomed the findings of the high-level strategic report on the experiences of countries already participating in PISA
- Noted the key lessons emerging from the report for PISA for Development
- Requested that the next draft of the report brings out particular examples of those middle income countries that have made the fullest use of their experience in PISA; i.e., successful implementation, effective dissemination and use of results, informing dialogue and national policy
- Supported the plans for presenting the high-level report at the World Education Forum in Korea and for using the report to inform the implementation of PISA for Development

PISA for Development
International Advisory Group - Conclusions

- Noted and endorsed the plans for completing the expert paper on system level data in the participating countries
- Participating countries agreed the timeline for site visits
- Acknowledged the need to integrate the work of UIS on system-level data and the International Contractors for Strands A, B & C and to bring together one single PISA-D database

PISA for Development
International Advisory Group - Conclusions

- Noted and endorsed the findings and recommendations of the expert paper on the review of other assessment programmes
- Endorsed the suggestions for collaboration between PISA-D and the other assessment programmes, particularly in the area of capacity building
- Noted and endorsed the plans for completing the expert paper, incorporating feedback from the IAG and the other assessment programmes

PISA for Development
International Advisory Group - Conclusions

- Discussed and approved the ToR for an independent review of the project in 2017-18
- Discussed and approved the draft engagement and communication strategy
- Noted the plans for linking the communication focal points in each National Centre with the OECD Secretariat to facilitate the implementation of the engagement and communication strategy

PISA FOR DEVELOPMENT

Next Steps

BETTER POLICIES FOR BETTER LIVES

Next Steps

- OECD to complete the remaining planned expert papers and to make all documentation available on web-site
- OECD to finalise ToR and tendering documents for international contractor(s) for Strand C
- OECD and international contractors for Strand A and B to integrate the Strand C plan once it is clarified
- OECD to sign participation agreements with all the remaining countries participating in the project – Paraguay and Cambodia
- Participating countries to finalise Project Implementation Plans

Next steps continued

- Participating countries finalise outstanding agreements with development partners regarding contributions and support (e.g., international costs, in-country costs and activities)
- OECD to complete the design of capacity-building plans for all participating countries
- OECD to finalise with development partners outstanding agreements for support to the project – general contributions and country-specific contributions
- First meeting of Technical Advisory Group in August (webinar)

Next steps continued

- Complete tendering process to commission international contractor (s) for Strand C by OECD
- Project implementation: Strands A and B -- Technical development

  - First international/NPM meeting (September 2015)

  - Second international/NPM meeting (January 2016)

Next steps continued

- OECD Secretariat with International Contractors to facilitate translation of key materials, such as manuals, into French and Spanish
- Participating countries to link the communication focal points in each National Centre with the OECD Secretariat to facilitate the implementation of the engagement and communication strategy
- Third meeting of IAG in March 2016 in ....