



**Lessons from Finance and Governance
Reforms –
*from other countries that have faced rapidly
declining student populations***

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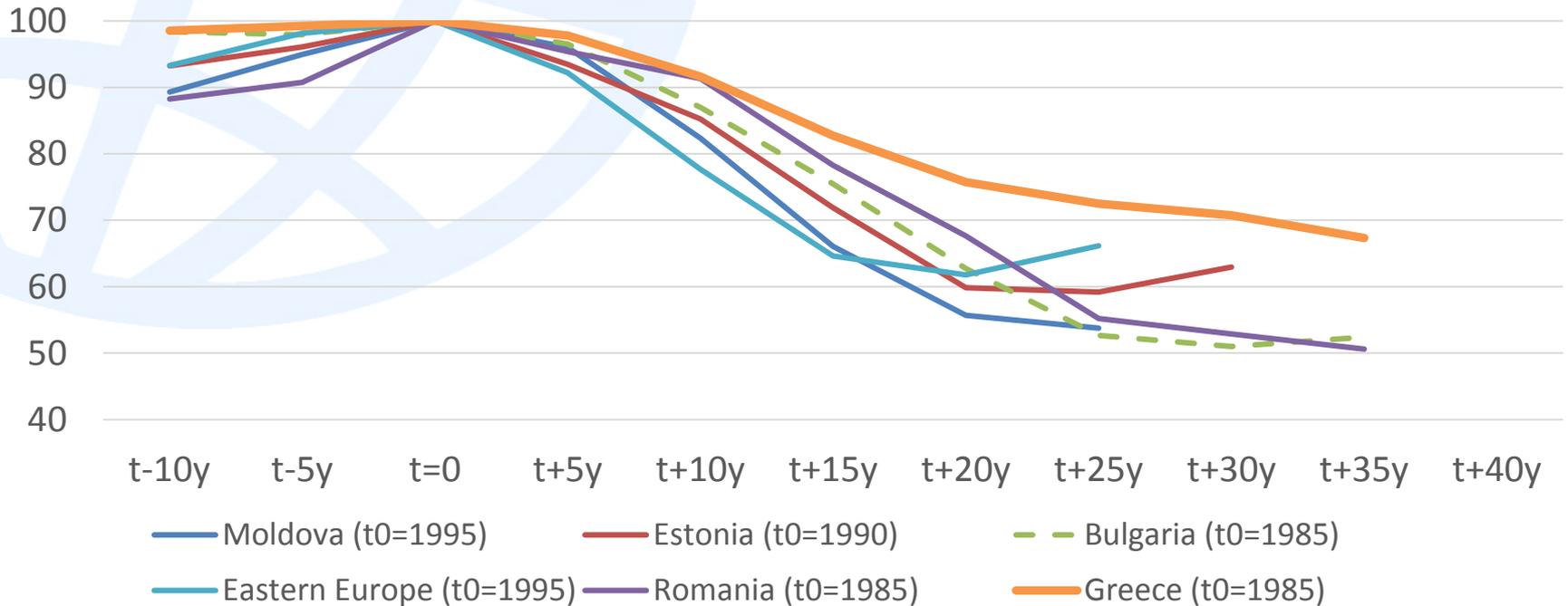
Questions which this presentation seeks to answer

- 1 What are the common challenges faced by countries with rapidly declining student numbers?
- 2 What underlying problems are these countries facing that make it difficult to respond to this decline?
- 3 Country examples: What have other countries done to address these challenges?
- 4 What are some key lessons from these experiences?

1

Across the region, student numbers have declined rapidly (as a result of falling fertility rates)

Population age 5-19 in select European countries
index =100 in peak population year (since 1975)

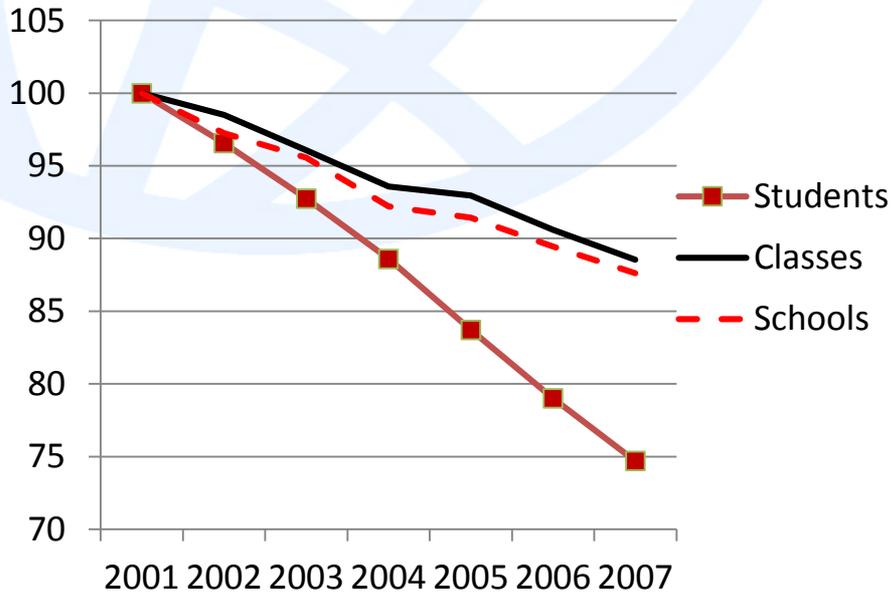


Source: United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019, Online Edition. Rev. 1. For each country, year 0 is the year (since 1975) where the number of individuals age 5-19 peaked. E.g. for Bulgaria that year is 1985.

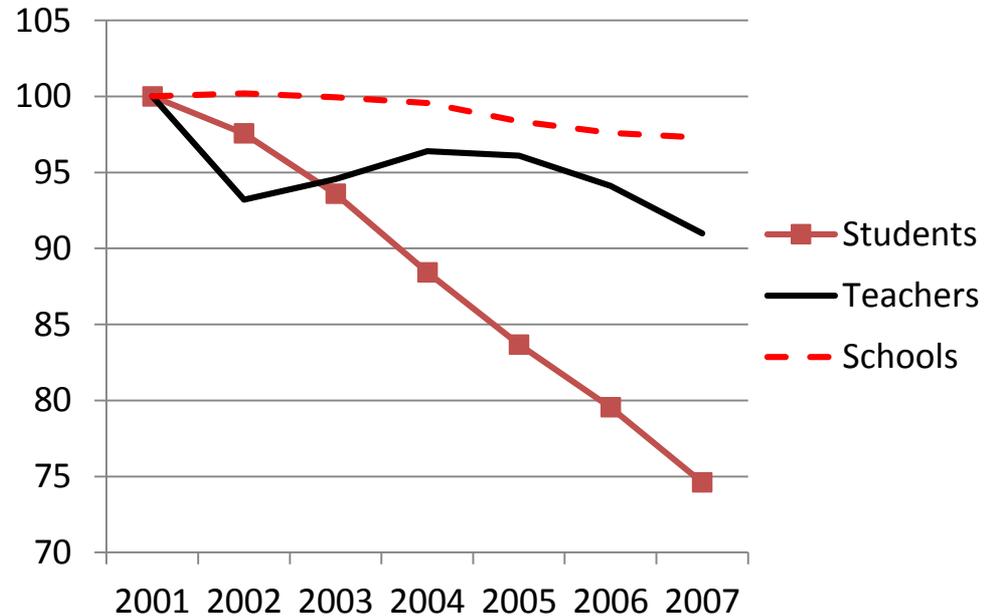
1

In most cases, education systems have struggled to downward adjust the number of classes, teachers and schools in response to that decline

Estonia, students, teachers and schools



Moldova, students, teachers and schools



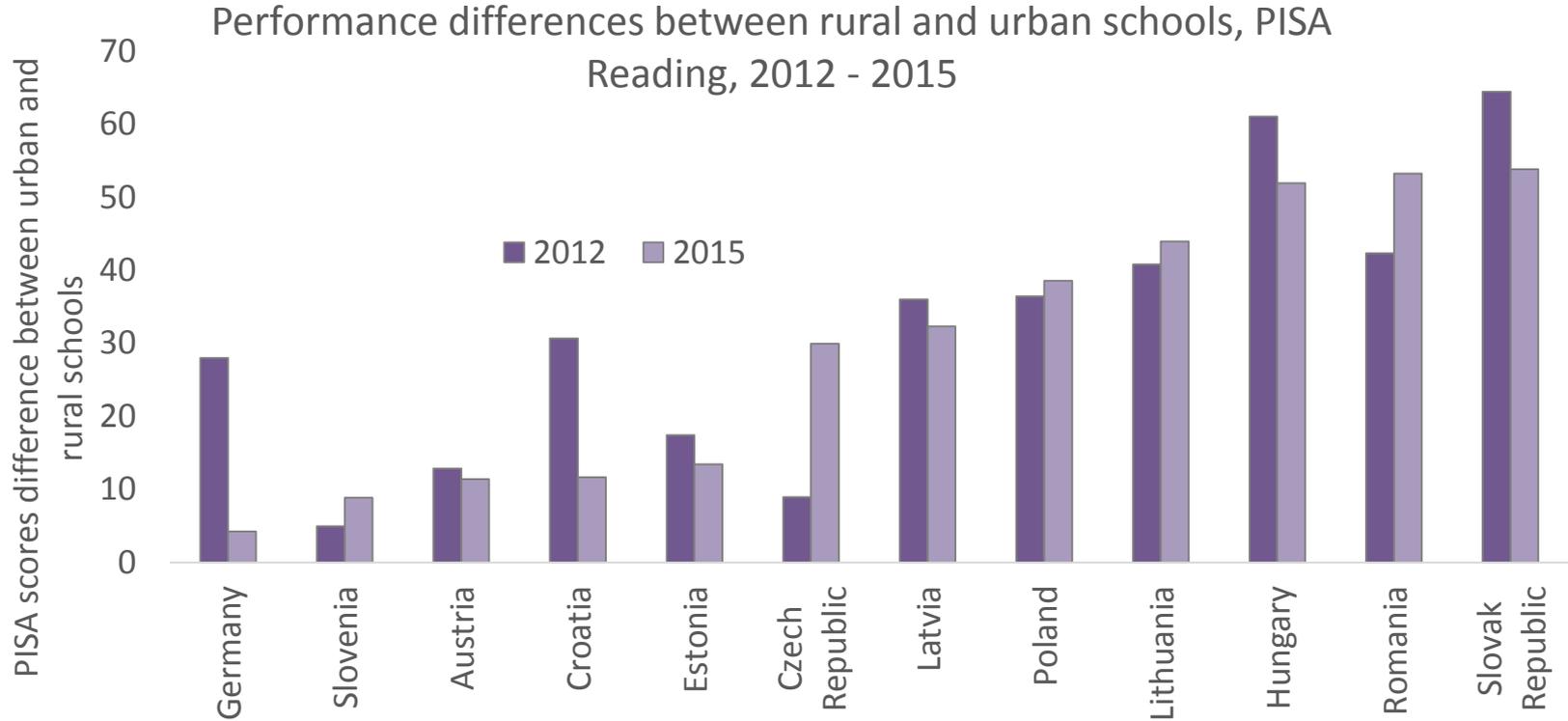
1

Classes becoming smaller and smaller and schools stand half-empty. This is **costly**...



1

... and, in many countries, **we see inequality remaining large** – and even increasing



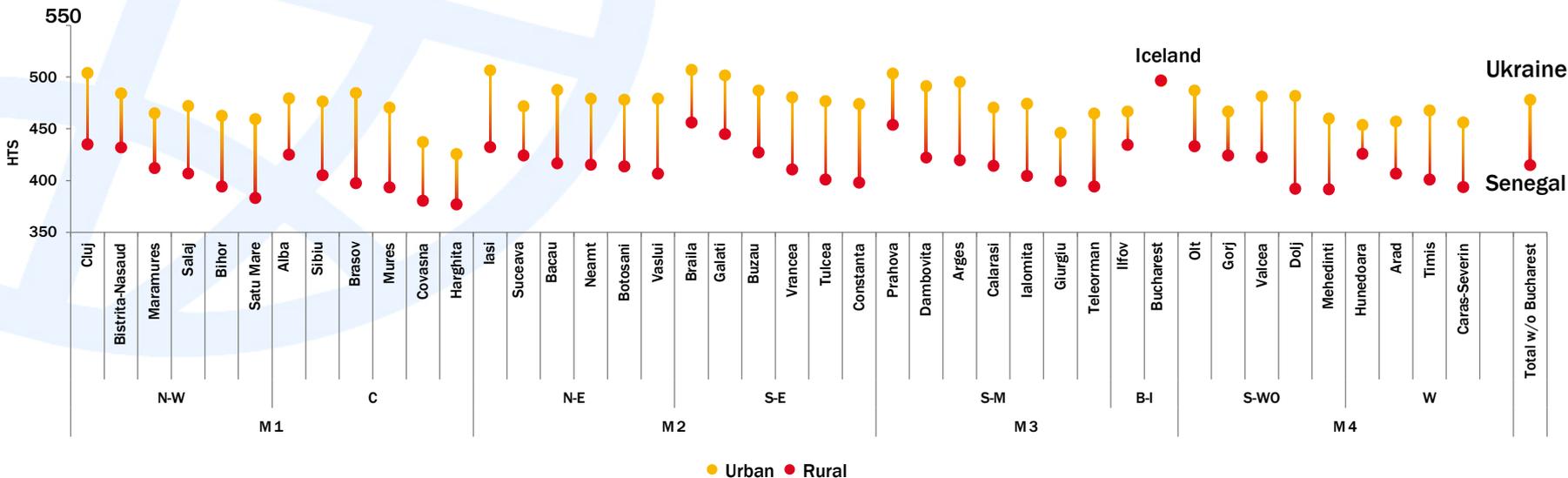
Source: OECD PISA 2015

1

Moreover, we observe massive variations within countries



Tests scores by areas and counties, 2017 (Romania)



The lowest rural value in Harghita is equivalent to Tonga, while the highest urban value in Braila is equivalent to France

Source: National Institute for Statistics 2017 Tempo dataset and 2017 National Examinations dataset.

2 Problem 1: Difficult politics involved in addressing problem

Promise

Improving learning environment but in fewer classes and schools

More attractive teaching profession but reduced size of the workforce

More flexibility and autonomy to school directors and local authorities

Concerns

Loss of nearby school

Loss of jobs

Weak capacity at local level?
Corruption?

Why do I need to travel longer?

What's wrong with my current school?

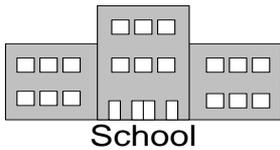
What will happen to my job? How will you make it more attractive?

2

Problem 2: The way schools are financed does not provide incentives to think about costs



KEY QUESTION: WHERE DO THE SAVINGS GO WHEN A CLASS IS REDUCED (and a teacher is re-assigned)?



2

Summary of problems with input-based financing system

Input-based or incremental financing system

Equitable ? It depends...

Transparent? It depends...

Incentives for efficiency? None

Incentives to focus on learning? None

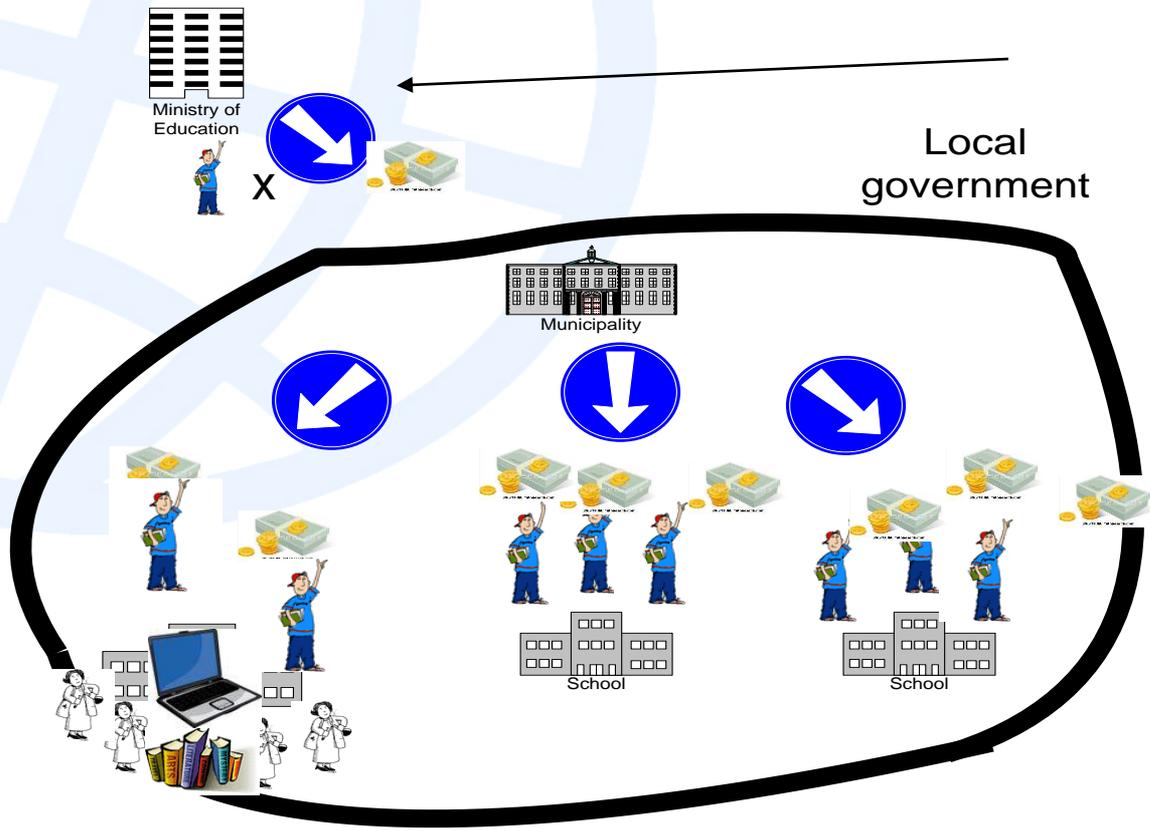
Incentives to focus on enrolling and retaining students? None

Empower local actors to take decisions? None

Protect teacher's jobs and schools ★ ★ ★

2

A financing system that ties money to students enrolled provides better incentives



One block of money based **primarily (but not exclusively)** on how many students are located in municipality

MUNICIPALITY GETS TO KEEP SAVINGS!

2

Problem 3: A management system that focuses on compliance with norms, not results



Number of cleaning ladies per sq. meter of school

Compliance with norms

Number of children per class (min and max)

Managing for results



Are students learning?

2

Problem 4: managing the system with the lights off

Relative to Latin America, countries in this region have had a slow start in setting up **national assessment centers**: e.g. **how are students' numeracy and reading skills at the end of grade 4? Analytical reasoning and problem-solving skills at the end of grade 8?**

Data on adult education focus on participation, not the equality of education provided

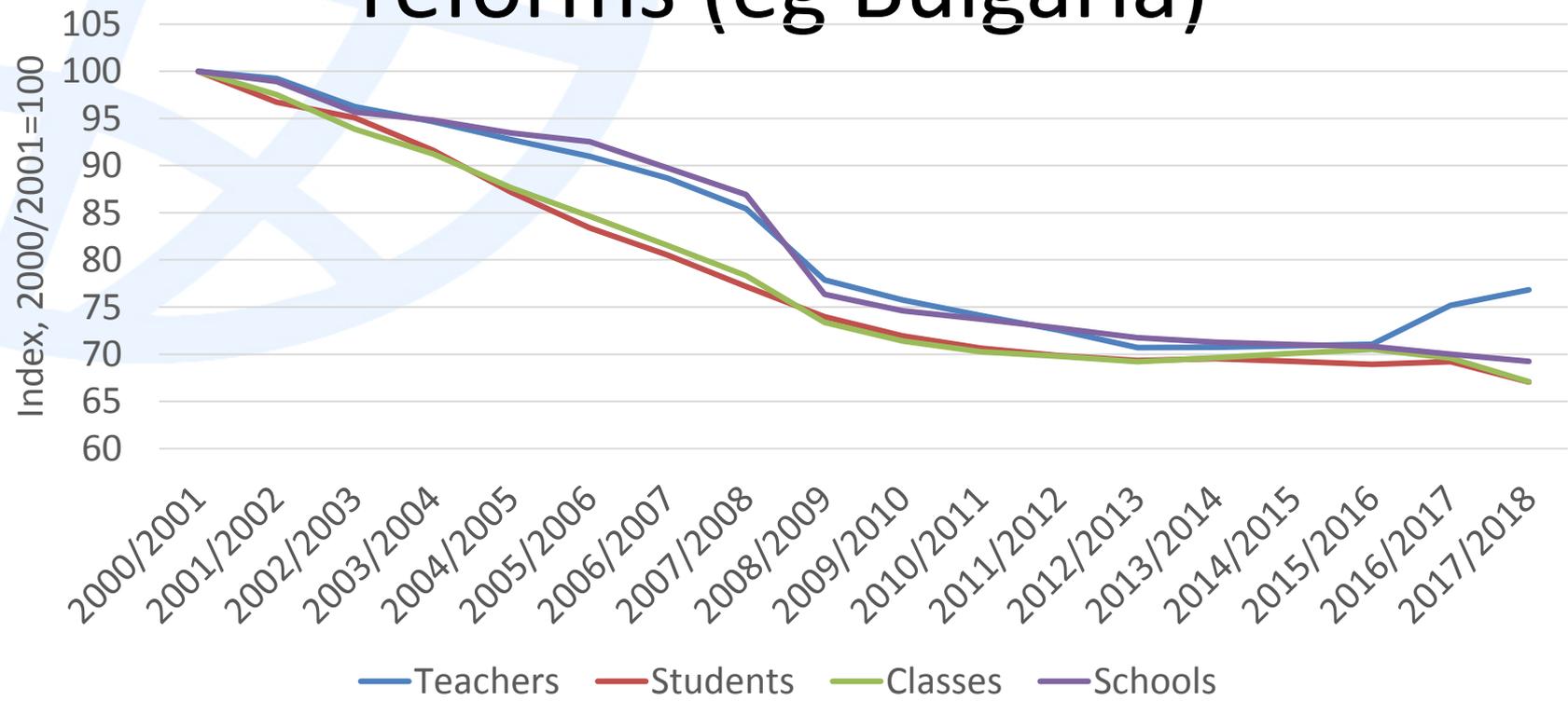
Data on tertiary education focus on participation, or research quality, not the skills acquired by students

Very few countries track graduates' employment outcomes



3

Difficult problems and, yet, some countries have managed to undertake reforms (eg Bulgaria)



3

Most countries facing declining student numbers have changed *the way they finance education*

Very few countries still stuck with input-based financing

Not started/very early stages in discussions

Greece
Portugal

Per student financing under discussion

Croatia (2018)

Piloting of per student financing

Per student financing widely introduced

Austria
Belgium
Bulgaria (2008)
Czech Republic (1992)
Denmark
Estonia (2001)
Finland
Hungary (1990)
Latvia (2016)
Lithuania (2001)
Poland (2000)
Romania (2010)
Slovak Republic (2004)
Slovenia (2015)
Sweden
United Kingdom

Source: Authors' update of "World Bank (2011) Skills, Not Just Diplomas" and OECD 2017: The Funding of School Education, Table 3.A1.1

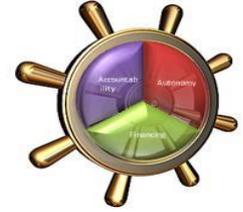
3 Bulgaria's reforms in 2007-2008 are a nice example of reforming key building blocks of the “finance and governance system”



Moving from
“rowing the boat” to
“steering the boat”

3

Tie financing to students, not inputs



Money follows the student

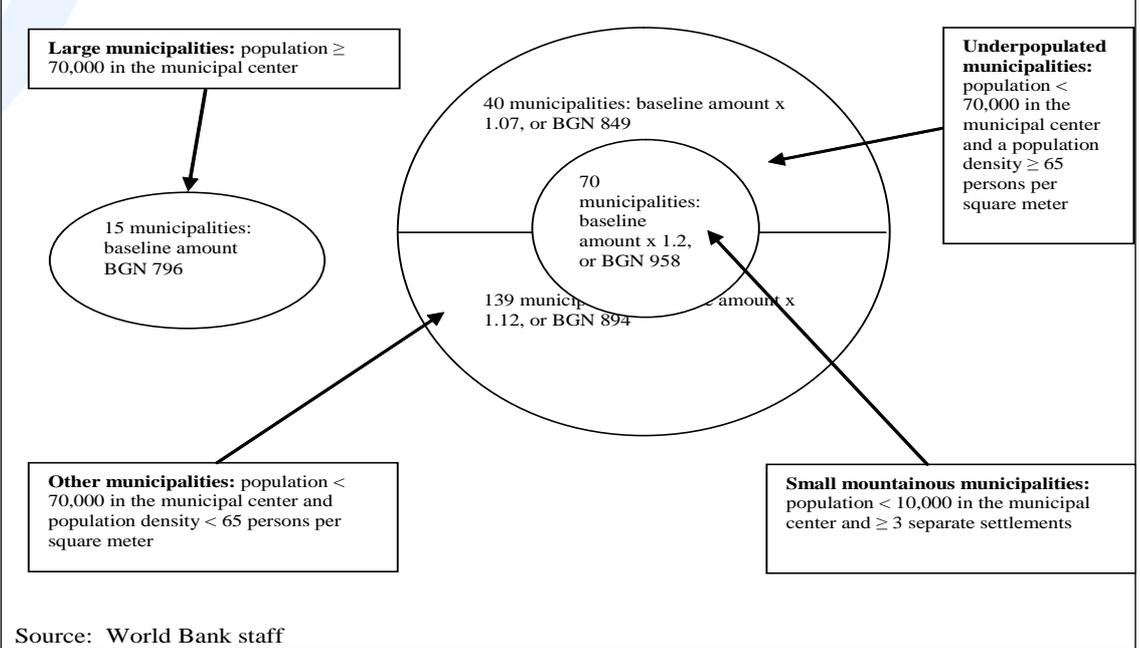


- Principals receive the bulk of their resources in a block grant calculated as: number of students enrolled x per student amount.
- The “per student amount” varies across the country (and types of schools)

3 Per student amount varies, depending on “structural” features to increase the cost of providing education

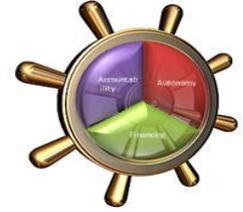
	Per student amounts		Number of municipalities
	BGB	USD	
Large urban areas	796	510	15
Group 2	849	544	40
Group 3	894	573	139
Small mountainous municipalities	958	614	70

Figure 1: Groupings of municipalities, along with baseline amounts and adjustment coefficients for 2007



Source: World Bank staff

More school level autonomy



- Schools are given the ability to raise and retain earnings
- Prepare and executive the **entire** budget for non-capital spending (**a “unified standard”**)
- Determine teachers’ salary (within overall pay scale)
- Determine teachers’ workload (subject to labor laws)
- Determine class size (with min/max norms)
- Schools given freedom to hire and fire staff

3

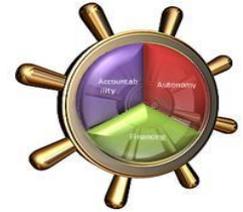
Can they really determine class sizes, teacher workload etc?

Ministry has increased the max to give principals more room to operate, e.g. increase in class sizes in 2009

- From 22 to 24 in primary
- From 26 to 29 in secondary

(and schools are allowed to have classes above these threshold but this requires a permission from Ministry)

Accountability for results?



Introducing a national assessment system

4th graders tested for the first time in 2007, and 4th, 5th and 6th graders in 2008.

School-leaving examination (Matura) re-introduced in May 2008

Participating in PISA, TIMSS, TALIS

... but who is using those results to inform decision-making?

... and hold actors in the system to account for poor performance?

... is there capacity to analyze results and draw conclusions?

3

Accountability for results

- How is information on students' learning driving school improvement?
 - NL: Assessment used to do “Early warning analysis” (and direct support and focus)
 - UK: Office for Standards in Education, Children's Services and Skills. School league tables



School name	Type of school	Number of pupils at end of key stage 4	Progress 8 score & description	Entering EBacc	Staying in education or entering employment (2015 leavers)	Grade 5 or above in English & maths GCSEs	Attainment 8 score	EBacc average point score
Tauheedul Islam Girls' High School	Academy	120	Well above average 1.9	91%	99% (125 of 126 pupils)	84%	67.5	6.49
Wembley High Technology College	Academy	205	Well above average 1.9	90%	94% (195 of 207 pupils)	82%	67.1	6.34
Dixons Trinity Academy	Academy	109	Well above average 1.55	86%	=	71%	63.2	5.84



Reflections on Bulgaria's reforms

- Efficiency of spending improved
 - Quality of education?
- “Lights on” with new tests
 - But tests underutilized to drive improvements in learning
- Big bang reforms
 - Little time to adjust

3

Reminder: Don't waste time talking about the wrong things

- “Our roads are very bad”
- “We must provide education to all our children”
- “You cannot close down a school if there are no nearby schools for a child to go to”
- “Our country is very mountainous and this means we need a lot of small schools”
- “We have a lot of islands which is why we need so many small schools”

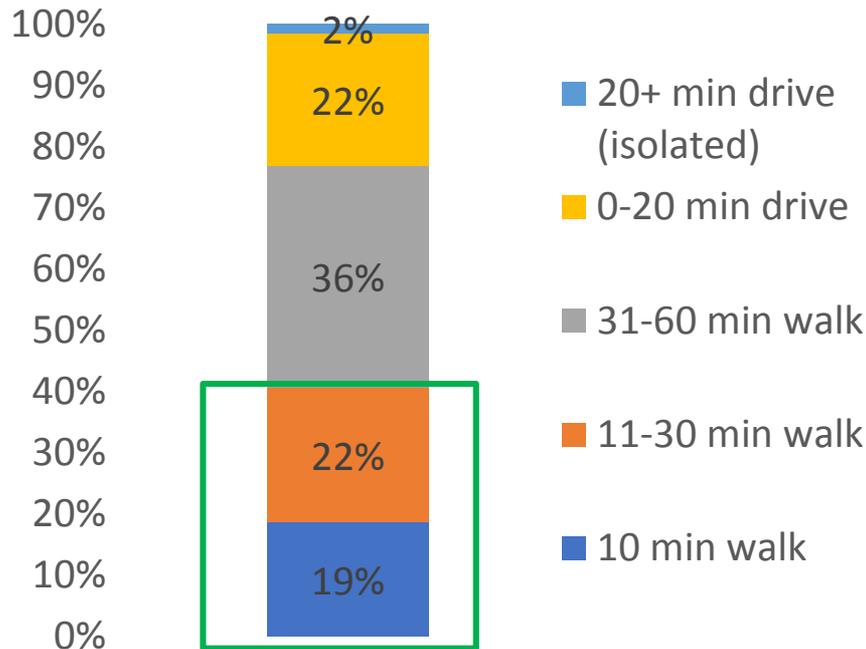


YES! We all agree! Let's focus on what we can do something about

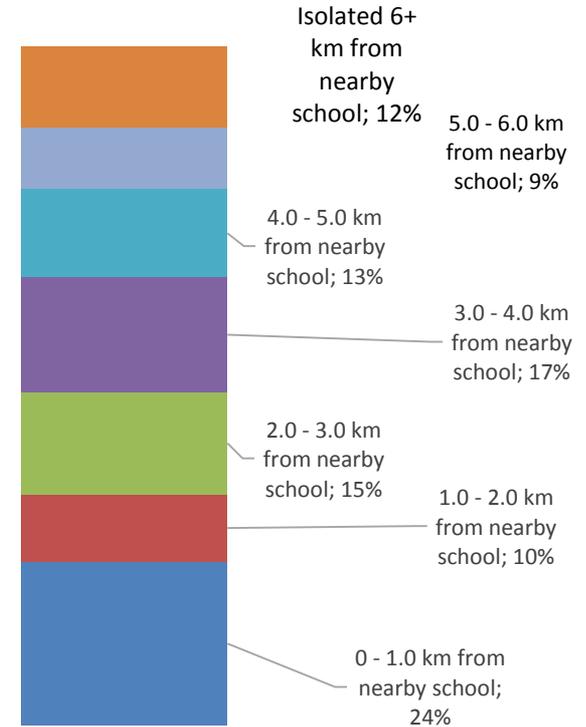
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The isolated schools are usually only a small fraction of all schools

Duration to closest school (school level)



100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%



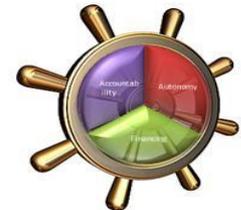
Detailed school mapping analysis of Croatia's schools

and Ukraine's schools

4

Key lessons to undertake reforms in this area

1. Focus reforms on delivering a better more inclusive education, not on the savings it will generate.
 - What will be the “driver” of those quality improvements?
2. If reforming the way schools are financed, reforms will be needed on autonomy and accountability as well

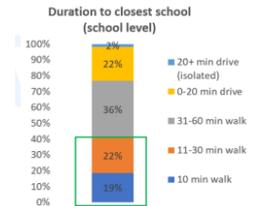


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Key lessons to undertake reforms in this area (continued)



3. These reforms require government-level decision and support, not just the Ministry of Education
4. Detailed school mapping can provide invaluable information on what is possible in terms of school network optimization
5. Lots of global experiences from which to learn.



Want more information on finance and governance reforms?

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Annex slides

Bulgaria: Workload and teacher pay

- ❑ New ordinance on salaries at schools sets out **only** the general salary structure rules and minimum salaries by position; principals determine the rest
- ❑ Mechanisms applied to determine individual teacher salaries are negotiated in collective labor contracts and/or in internal salary rules
- ❑ School principals determine individual salaries
- ❑ Mechanisms have been set up to pay for additional teaching loads above the maximum workload norms

Persuade, promote and monitor quality and access

- Upgrade education management information system to:
 - Monitor class and school size
 - Develop a “registrar”: be able to track individual students
- Use national and international assessments of student learning outcomes to track quality of students moved as a result of optimization
- Put in place “communication strategy” that focuses on why the reforms are needed; and how the quality of education will be improved.

Using the power of the purse

- Provide incentives to local authorities: e.g. offer expansion of school hours; after school programs; refurbish central/hub schools; offer to convert schools into kindergartens etc
- Introduce per student financing to provide incentives to consolidate
- Squeeze budgets: force districts to consolidate
 - Wage ceilings
 - Head count ceilings
- Make education allocation “ear-marked”
- Create “performance-oriented” programs where distribution of funds are conditional on making progress on consolidation

3

Remove
constraints

Identify and remove district's constraints to optimize

- Transportation: provide solutions (e.g. procure busses, provide funds for renting busses, road repairs)
- Refurbishing costs for receiving schools
- After school program for kids having to wait for busses
- Costs of eliminating staff positions (e.g. severance payments, unused vacation time, etc)

3

Re-write
norms
and laws

Improve legal and regulatory environment

- Change class size norms (Out of education laws -> Ministerial order; No or high maximums; higher minimums)
- Provide legal framework for per student financing
- Eliminate norms on non-didactical staff
- Introduce notion of hub school, and “satellite school” (ie., a small school which is “subordinate” to a bigger school)
- Make schools subordinate to districts, not villages
- Introduce term contracts for teachers; specify what happens at retirement age

3

Experience with funding formulas in Europe (covered in recent OECD review)

Formula financing for Primary and/or secondary education	Input-based/historical, incremental budgeting
Austria	Portugal
Belgium	<i>Greece?</i>
Czech Republic	
Denmark	
Estonia	
Lithuania	
Slovak Republic	
Slovenia	
Sweden	

Many others, incl. Finland, UK, Australia, New Zealand

Source: OECD 2017: The Funding of School Education, Table 3.A1.1

OECD Reviews of School Resources

The Funding of School Education

CONNECTING RESOURCES AND LEARNING



School Resources Review - Reports for Participating Countries

[School Resources Review Home](#)

Reports for Participating Countries

See which countries are taking part in the School Resources Review in the table below. There are two modes of participation for countries: Country Background Review.

Reports will be added when available and this information will be updated as and when the visits and reviews are completed.

Full Country Review

Austria*

Review Visit Dates: 23-30 June 2015

Country Review ([English](#))

Country Review Summary ([English](#), [German](#))

Country Background Report ([English](#))

Chile

Review Visit Dates: 22-30 September 2015

Country Review ([English](#), [Spanish](#))

Country Review Summary ([English](#), [Spanish](#))

Country Background Report ([English](#), [Spanish](#))

Czech Republic*

Review Visit Dates: 26 May - 2 June 2015

Country Review ([English](#))

Country Review Summary ([English](#))

Country Background Report ([English](#))

Estonia*

Review Visit Dates: 20-27 October 2014

Country Review ([English](#))

Belgium (Flemish Community)*

Review Visit Dates: 3-10 November 2014

Country Review ([English](#))

Country Review Summary ([English](#))

Country Background Report ([English](#))

Colombia

Review Visit Dates: 5-13 December 2017

Country Review ([English](#))

Country Review Summary ([English](#), [Spanish](#))

Presentation ([English](#), [Spanish](#))

Denmark*

Review Visit Dates: 21-29 April 2015

Country Review ([English](#))

Country Review Summary ([English](#), [Danish](#))

Country Background Report ([English](#))

Kazakhstan**

Review Visit Dates: 31 March - 8 April 2014

Country Review ([English](#), [Russian](#), [Kazakh](#))

3

Lots of differences in how the formulas are designed and what they cover

Table 3.A1.1. Funding formulas: different criteria used for allocation of current expenditure among OECD review countries (ISCED 1-3), 2016

		Allocation mechanism	Funding allocation		Level of education (ISCED)		Basic unit	School characteristics				Curriculum					Student characteristics			
			From	To				L	S	SES	Other	Lvl	SY	EdT	Pg	WbP	SES	SEN	Min/Imm	Other
Austria	DG	Teacher salaries	CA	St	2	3	S/C													
	EG	Teaching students with SEN	CA	Sc	1	2	3	T/S											✓	
Belgium (Fl. and Fr.)	BG	Operational budget (inc. maintenance staff)	SA	SP	1	2	3	S	✓	✓			✓	✓	✓	✓		✓	✓	
	RBG	Disadvantaged students; immigrants; refugees	SA	SP	1	2	3	S	✓				✓	✓				✓	✓	
	DG	Staff salaries (teachers, management, admin)	SA	St	1	2	3	T/S	✓	✓			✓	✓	✓	✓		✓	✓	
Chile	BG	General and pro-retention subsidies	CA	SP	1	2	3	At/S	✓				✓					✓		
	EG	Complement for teacher salaries	CA	SP	1	2	3	T	✓		✓									
	EG	Students with SEN; disadvantaged students	CA	SP	1	2	3	T			✓	✓								
	EG	Staff salary incentives in top performing schools	CA	SP	1	2	3	At/S											✓	
Czech Republic	EG	Direct costs of school education	CA	RA	1	2	3	S					✓	✓						
	RBG	Direct costs (inc. salaries)	RA	Sc	1	2	3	S	✓	✓			✓	✓	✓				✓	
Denmark	BG	For current expenditure	CA	Sc		3	S						✓	✓		✓				
Estonia	EG	General education (inc. salaries)	CA	SP	1	2	3	S	✓	✓				✓				✓		
	EG	Policy priorities (specialised provision)	CA	SP	1	2	3								✓			✓		
	RBG	Schools owned by CA	CA	Sc	1	2	3	S	✓	✓				✓				✓		
	EG	State commissioned VET study place	CA	LA		2	3	Study place										✓		
	EG	Study allowances (VET) to 3 municipalities	CA	LA		2	3	Study place						✓			✓			
Iceland	BG	Any type of expenditure	CA	Sc		3	S	✓	✓				✓	✓				✓		
	BG/EG	Equalise differences in LA income/expenditure needs	CA	LA	1	2		S										✓	✓	
Israel	EG	Non-teacher salaries and operational costs	CA	LA	1	2	3	S		✓			✓					✓		
	EG	Teacher salaries	CA	LA		3												✓	✓	
	DG	Teacher salaries	CA	St	1	2		S	✓				✓					✓	✓	