

# Value for Money Division

## Expenditure Review for Education: Interim Report Discussion

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Bratislava, May 24, 2017



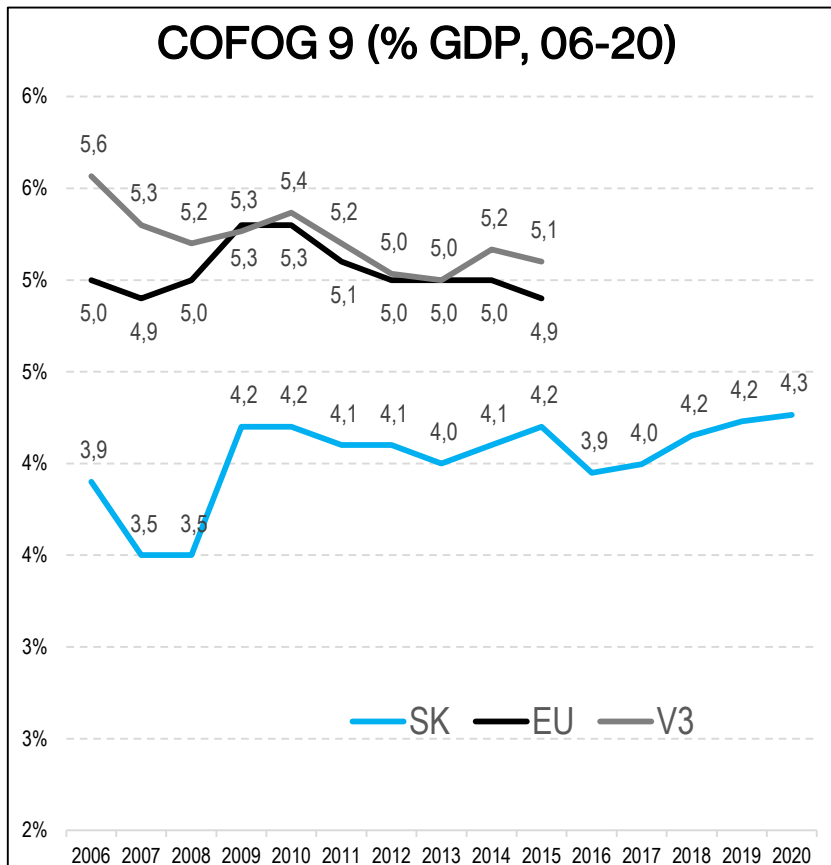
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This project is supported by the European Social Fund

# I Preliminary report

- No “big” answers – OPEX spending, quality or equity (special revision)
- Forthcoming chapter on Labour Market/Graduate Tracking
- Reiterated potential savings related to lower-secondary education – reduction of smaller schools & busing
- Offered tweaks in regional schools financing formula
- Reiterated spending gaps, especially for younger teachers
- Found tools rewarding teachers’ quality formalistic and underfunded
- Estimated potential fiscal space gains by realignment of tertiary students’ structure
- Observed drawbacks in accreditation procedure and research assessment process

# Money: projected expenditure rise should close aggregate spending gap by 2020, but ...



## Numbers bit “funny”:

- Government manifesto – additional 2bn. over the term
- Directly identifiable measures – less than 1.2bn (wages)
- 2020/16 COFOG 9 estimated aggregate gains 3.2bn EUR
- Stakeholders’ political economy – what are we getting besides better paid teachers?
- Especially when no direct “quality ” indicator available & funding/quality link quite weak across all education

# Education: Magnitudes & identified preliminary measures

## ToR Scope 2,2 bn. eur (2016)

- Regional schools 1,5 bn. eur
  - of which salaries 50%
- Universities 0,5 bn. eur
  - of which salaries 60%
  
- 6% salary increase cost- ~100 mil. eur yearly

## Major value areas – measures in making

- establishing teaching quality / compensations link (abolish credit scheme, teaching skills evaluation)
- establish financing formula/quality link (tertiary, research) – mostly accreditation

## Fiscal measures quantification:

- +15m – regional schools optimization
- -1 bn. – salary increases, especially for younger teachers (political bottleneck)
- +50 m – tertiary students structure re-alignment

# Result and Output Indicators

Type of indicator		2009	2010	2011	2012	2013	2014	2015	Objective 2020
<b>Regional Education</b>									
Result	<b>PISA</b>	<b>SR</b>	488		472			463	505
	(average score)	<b>OECD</b>	497		497			492	—
Output	<b>High School Graduates</b>	<b>SR</b>		93	93	93	91	91	91
	(% of those aged 20-24 years)	<b>EU</b>		79	80	80	81	82	83
Output	<b>Early school leaving</b>	<b>SR</b>	4,9	4,7	5,1	5,3	6,4	6,7	6,9
	(% of those aged 18-24 years)	<b>EU</b>	14,2	13,9	13,4	12,7	11,9	11,2	11
<b>Higher education and science</b>									
Result	<b>PIAAC score</b>	<b>SR</b>						278,5	
	The average score (25-34)	<b>OECD</b>						276,5	
Result	<b>Number of citations</b>	<b>SR</b>	35	34	35	45	47	44	50
	% (EU average = 100)	<b>EU</b>	—	—	—	—	—	—	—
Result	<b>University success in attracting foreign research grants (EUR million)</b>	<b>SR</b>	6	6,2	6,1	5	5,9	5,7	6,5
Output	<b>Tertiary Education Graduates</b>	<b>SR</b>	17,6	22,1	23,2	23,7	26,9	27	28,4
	(% of those aged 30-34 years)	<b>EU</b>	32,3	33,8	34,8	36	37,1	37,9	38,7

Source: THE MINISTRY OF FINANCE SR, OECD, MESRS

# Background slides

# I Main conclusions

- Review of the regional and higher education expenditure assesses annual expenditure at 3% GDP.
- At a total of 4% GDP spent on education, Slovakia's education spending (=COFOG9) is 1% lower than that of the EU average but continues to rise and is expected to reach the EU average by 2017-2019.
- The share of public and private funding of education is similar to that of the OECD average.
- PISA results of 15-year old Slovak students are below the EU average and have been worsening since 2009. Student's socioeconomic status is a strong determinant of test results.
- Proxy measures of tertiary education indicate under-average quality.
- The share of population with tertiary education is below the EU average, but continues to increase.
- Compared with the university graduates in the OECD, Slovakia has a large number of master's or equivalent graduates and a small number of bachelor's graduates.



# Effective school network



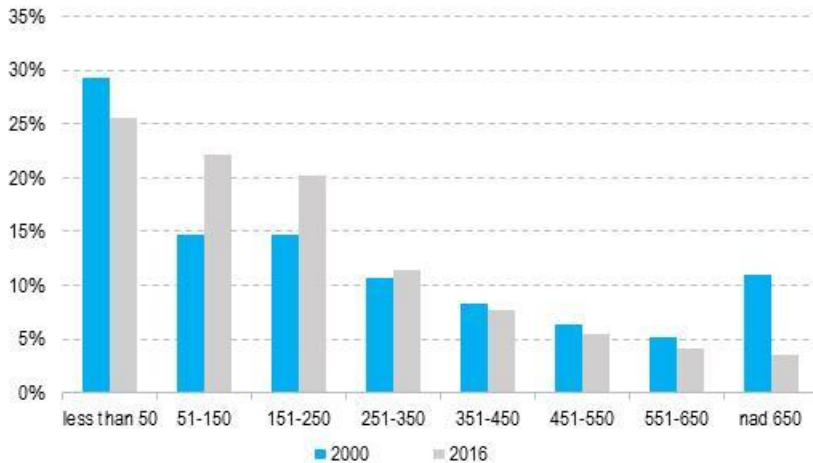


# I Main conclusions

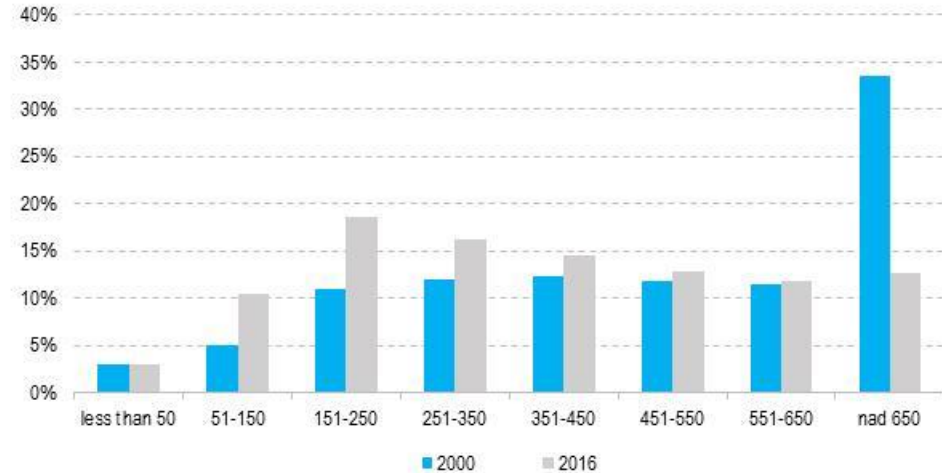
- There is room for school consolidation. State financially supports small schools which provide ISCED 1+2 education (potential quality issues and efficiency), schools of different founders in one municipality and small schools which are close to other schools.
- Minimum school and class size rules are rather formal.
- There is lack of systematic support of alternative access to schooling (school buses, free bus tickets).
- Rationalization should not negatively affect access to education, quality and inclusion.
- Collaboration with stakeholders has potential to reach more acceptable and balanced outcomes.

# I Rationalization: Options menu

Distribution of basic schools by size (2000-2016)



Distribution of pupils by school size (2000-2016)



**Financial impact:** Financial protection of only ISCED 1 level would bring potential savings of around 15 mil. eur. Elimination of protection of different school founders could potentially save 6,7 mil. eur. Closure of schools smaller than 50 students and provision of free school buses could bring about 12 mil. eur.

# | Preliminary measures for Action plan

- Take regional approach to school rationalization - cooperate with local authorities taking into account centrally defined criteria.
- Support rationalization by providing free school buses to pupils.
- Analyze minimal class size rules in the second year of implementation.
- Define criteria which reflect need to establish a new school in a given locality.



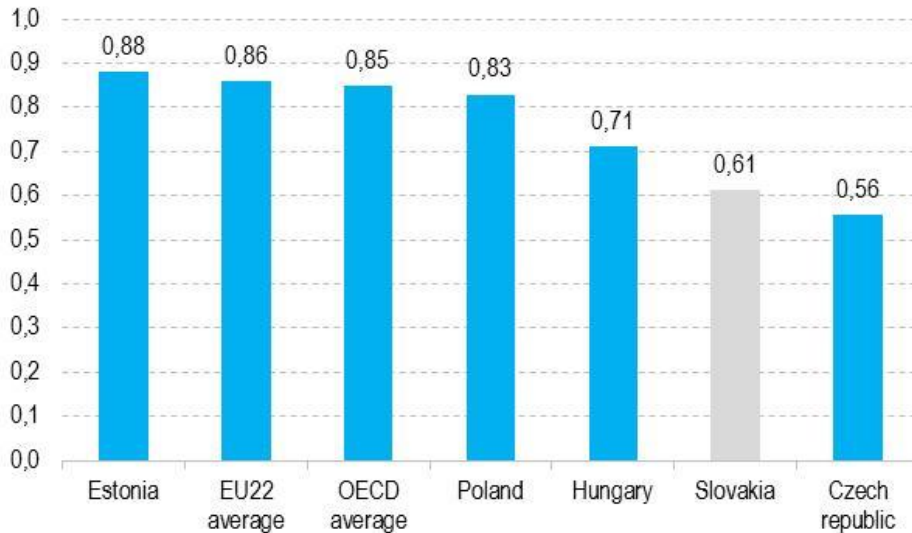
# Teacher salaries and compensation scheme

# Main conclusions

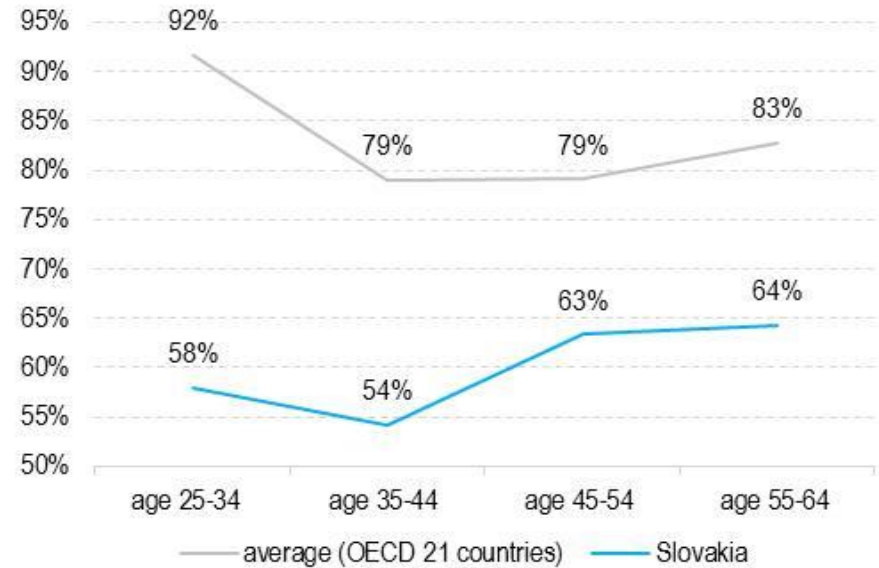
- Good compensation scheme is crucial to maintain high quality teachers (attractiveness + rewarding quality).
- Teachers' salaries remain low despite recent increases (SK 61 % vs. OECD 85 % of tertiary educated workers). Planned increases in 2016-2020 should raise teacher salaries to 67 %.
- Salaries of young teachers are lagging behind more.
- Link of compensation to quality is insufficient:
  - Career growth does not reflect teacher skills and competences.
  - Teacher motivation to participate in CPD is primarily higher pay (allowance for accomplishing CPD programs).
  - There is no dedicated budget for personal allowance (high variance), transparent teacher evaluation criteria are missing.

# Teacher salaries

## Ratio of teacher salary to salary of tertiary educated workers (2013)



## Ratio of teacher salary to salary of tertiary educated workers by age (2013)



# | Preliminary measures for Action plan

- Faster increase of salaries for young teachers.
- Identify criteria assessing teachers' skills in practical environment to inform teacher certification.
- Abolish salary allowance for CPD programs, leave the freed resources for teacher compensation.
- Analyze the possibility of introducing claimable personal bonuses based on complex teachers' evaluations.



# Funding of primary and secondary schools

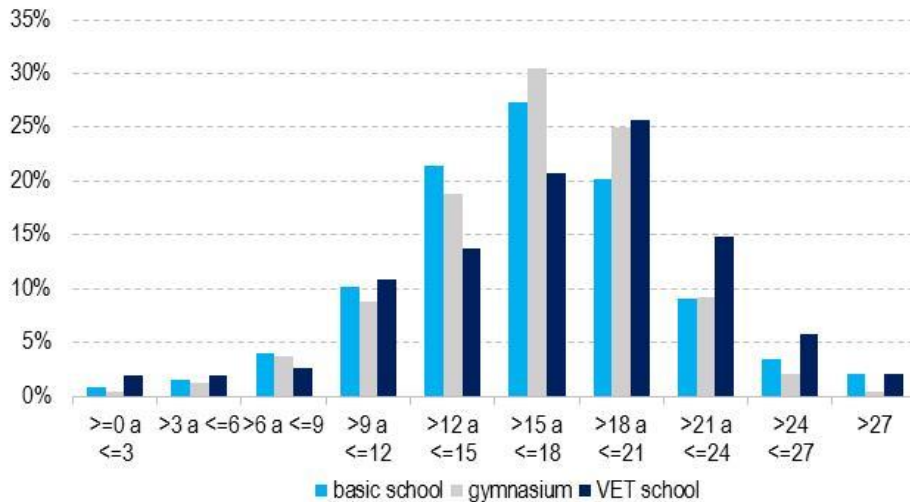


# | Main conclusions

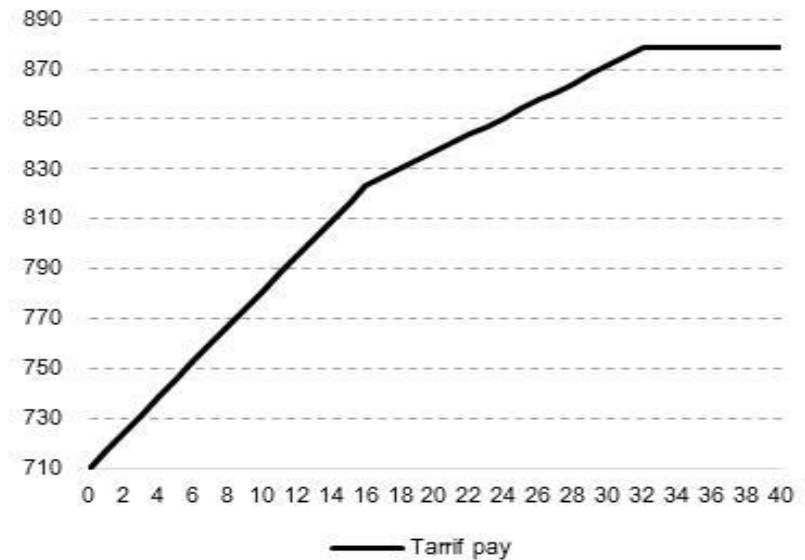
- The funding formula does not sufficiently take into account different cost of educational provision at individual schools.
  - Funding does not reflect length of teacher experience at individual schools, which determines teachers salaries.
  - Funding does not distinguish between ISCED 1 and ISCED 2, although the personal cost of provision is different.
  - There are indications that some types of schools and programs receive relatively more or less than needed (gymnasium vs. conservatory, VET study fields).
- There is scope for a more efficient spending.
  - Stricter rules for funding of emergency situations, capital investments, students studying abroad etc.

# Length of pedagogical experience and compensation

Share of schools by average experience of teachers (2016)



Teacher tariff pay by years of service (2017)



# I Preliminary measures for Action plan

- Adjust the funding formula to reflect the length of teachers' pedagogical experience.
- Consider adjusting the funding formula to distinguish between different cost of educational provision at level ISCED 1 and level ISCED 2.
- Analyze different cost of educational provision at individual school types and among different study programs.
- Adopt measures to increase the efficiency of spending.



# University Education and Research

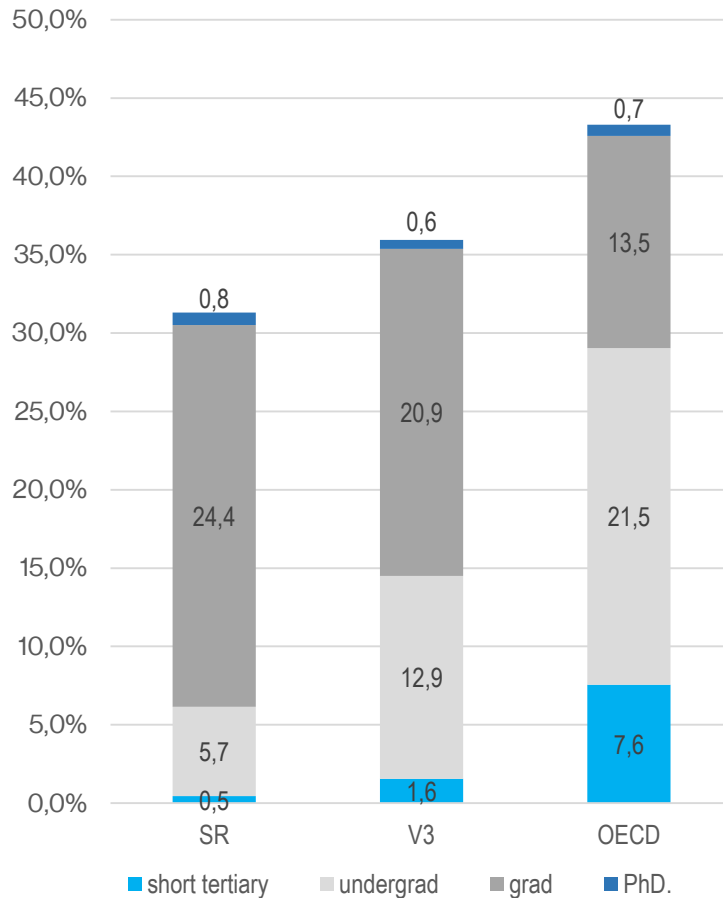


# I Higher education & Research: Main conclusions

- Compared to other OECD countries, Slovakia has high share of graduate students, low share of undergraduate students.
- Financing formula does not discriminate on teaching quality. Universities compete by volume of students educated.
- The accreditation and assessment of academic research do not meet international standards, problem being the institutional set up, transparency of the rules and independence of the board members.
- The research evaluation process is not based on an informed peer review in accordance with the best practice.
- Competitive grants constitute less than 20% of science funding. Block grants have a weak link between quality and financing due to poorly set-up research evaluation.

# 80% Slovak students continue in graduate studies, only 40% OECD students do so.

Tertiary students structure (25-34 yo)



Annual fiscal space induced by a change in the structure of graduates

	current ratio of M.A./Bc.	OECD avg. ratio
current number of students	0	+42 mil. eur
number of students equal to OECD average (+ 4p.p)	-16 mil. eur	+30 mil. eur

# Competitive grants constitute less than 20% of the total university science spending (some 200 mil.)

## University science funding breakdown (2017)

