

Benchmarking Public Expenditure Efficiency in Slovakia

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Background

- **Benchmarking exercise, using publicly available data**
- **Applying the methodology we discussed this morning**
- **Comparators: Portugal, Lithuania, Slovenia**
- **Preliminary findings, to help you identify sectors in which efficiency gains could be achieved**
- **A menu of sectors/spending to choose from**

Outline

- **Expenditure policy in Slovakia**
- **Public investment**
- **Education**
- **Health**
- **Social protection**

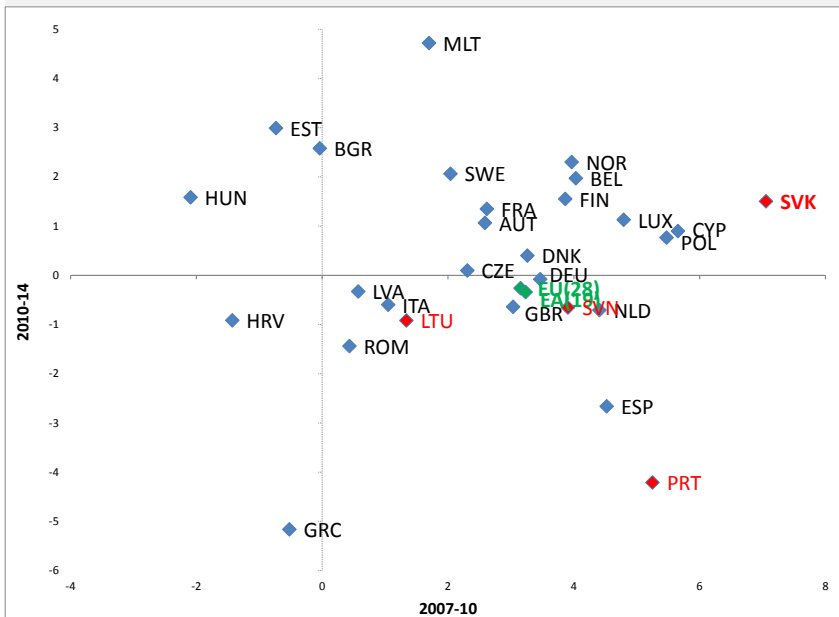
Expenditure Policy

Rising but Still Low Public Expenditure

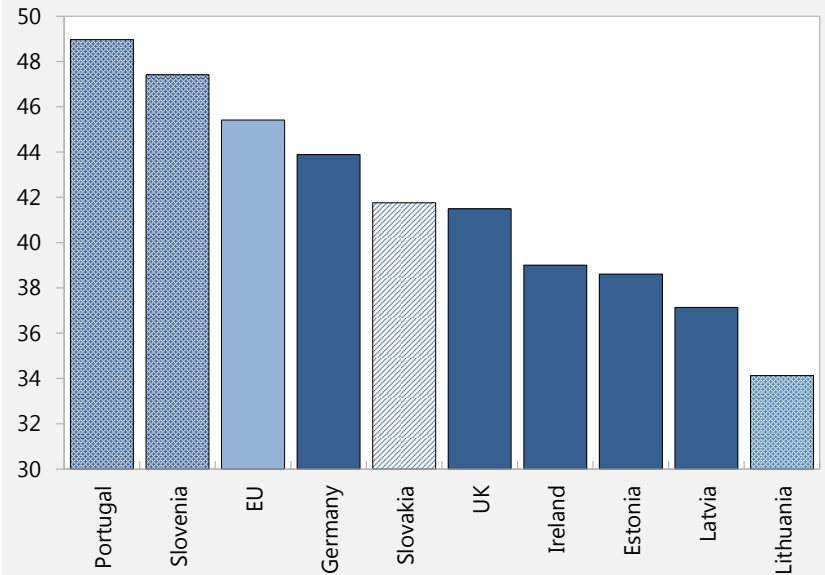
Spending increased sharply during the crisis, and has not declined since then

But public expenditure remains relatively low

Real Primary Expenditure Growth, 2007-2014
(in percent of GDP)



General Government Expenditure
(in percent of GDP)



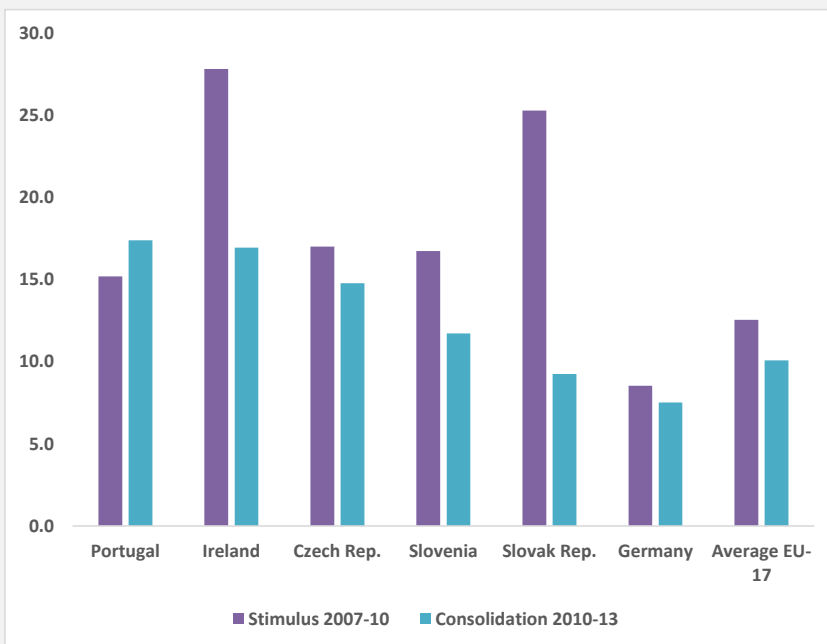
Sources: EUROSTAT and IMF staff calculation

Sources: WEO and IMF staff calculations

Small and Untargeted Cuts May Prove Insufficient to Reach Expenditure Targets

High selectivity during the crisis low selectivity afterwards

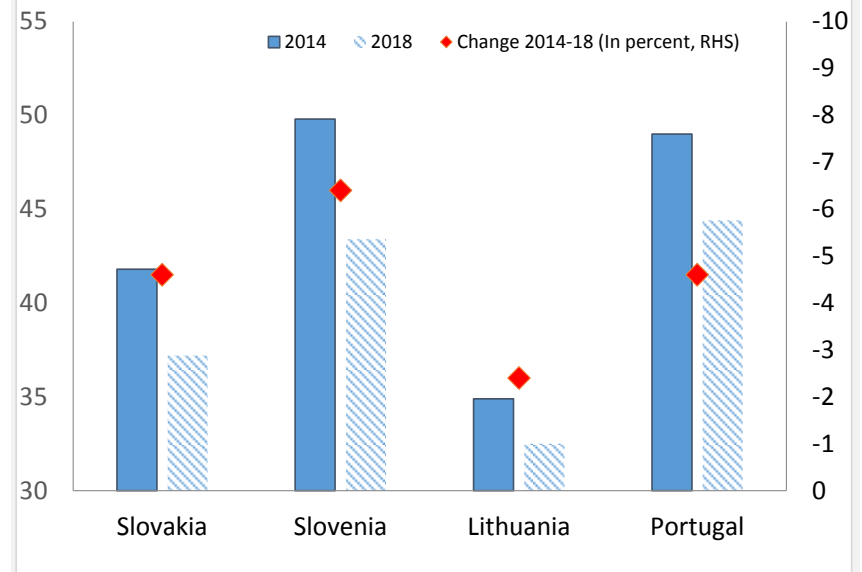
Selectivity in Spending Cuts/Increases (index)



Source: OECD and IMF staff calculations.
 Note: The indicator equals 0 when spending variations are identical for all spending categories.

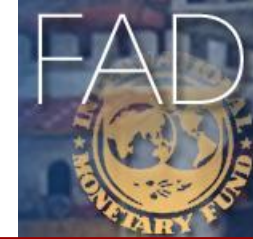
Expenditure reform will be needed to meet the 2015 Stability program targets

Expenditure targets (Change over 2014-2018, in ppts of GDP)



Source: European Commission and IMF staff calculations.

Allocation Across Sectors Differs Significantly from the EU Average



Higher spending on public safety and order, lower on economic affairs, and social protection

Economic and functional classifications' matrix, Slovakia vs. EU average
(in percent of GDP)

	Total expenditure	Current spending	Compensation of employees	Goods and services	Interest payments	Subsidies	Current transfers	Social benefits	Grossed fixed capital formation
Total expenditure	41.0	37.4	8.5	5.2	1.9	1.0	1.7	18.9	3.0
General public services	5.5	4.6	1.4	0.8	1.9	0.0	0.4	0.1	0.8
Defence	1.3	1.3	0.7	0.4	0.0	0.0	0.0	0.1	0.0
Public order and safety	3.3	2.8	1.7	0.8	0.0	0.0	0.0	0.3	0.4
Economic affairs	3.3	2.6	0.4	0.9	0.0	0.9	0.2	0.1	0.5
Environment protection	0.9	0.6	0.1	0.4	0.0	0.1	0.0	0.0	0.3
Housing and community amenities	0.7	0.4	0.0	0.2	0.0	0.0	0.1	0.1	0.4
Health	7.5	7.3	0.2	0.2	0.0	0.0	0.0	6.9	0.0
Recreation, culture and religion	1.3	1.0	0.3	0.4	0.0	0.0	0.2	0.0	0.3
Education	5.0	4.7	2.9	1.1	0.0	0.0	0.6	0.1	0.3
Social protection	12.3	12.3	0.7	0.1	0.0	0.0	0.2	11.3	0.1

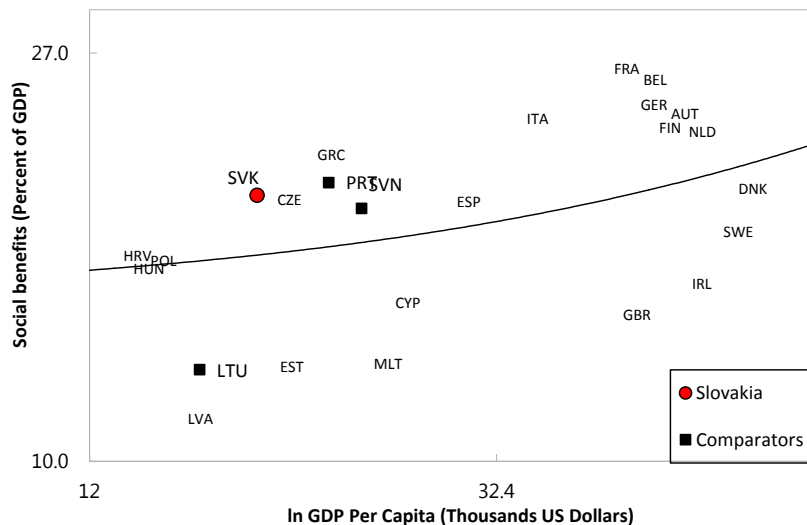
Sources: EUROSTAT and IMF staff calculations

Controlling for Income Points to Some Inefficiencies



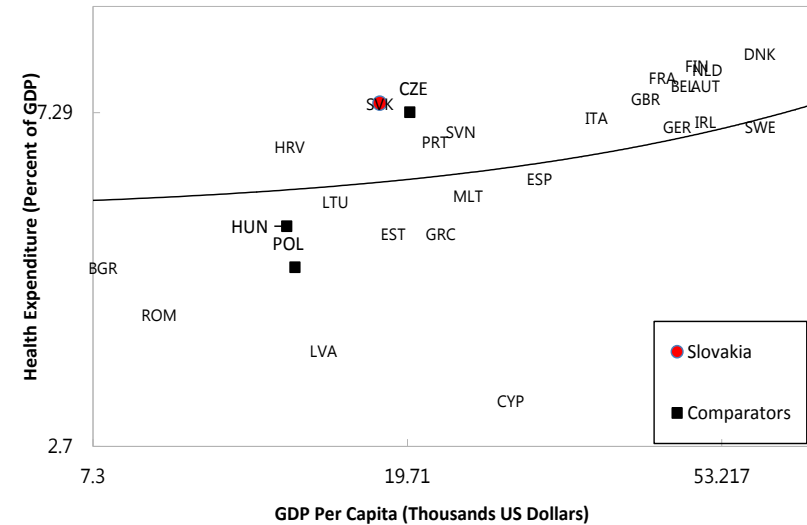
Relatively high social benefits...

Social benefits, controlling for income
(in percent of GDP, and PPP USD per capita)



And health spending

Health , controlling for income
(in percent of GDP, and PPP USD per capita)



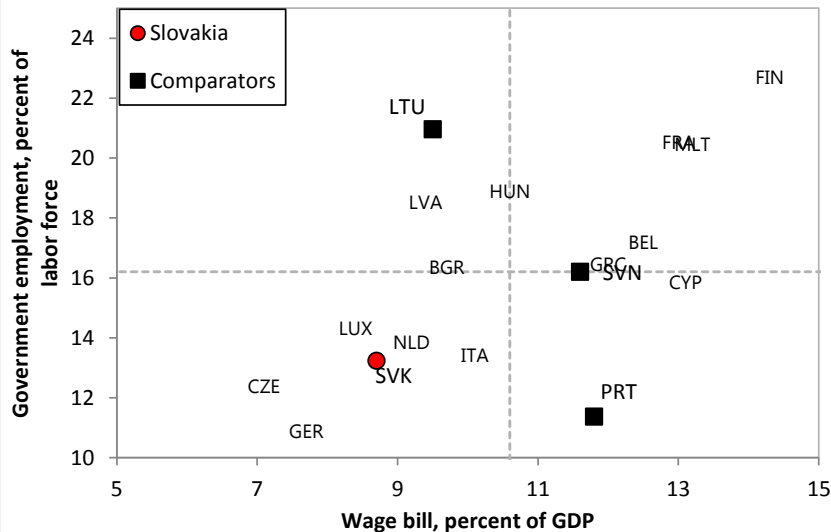
Source: EUROSTAT and IMF staff calculations.

Low Public Wage Bill and Employment, except in the Public Order Sector



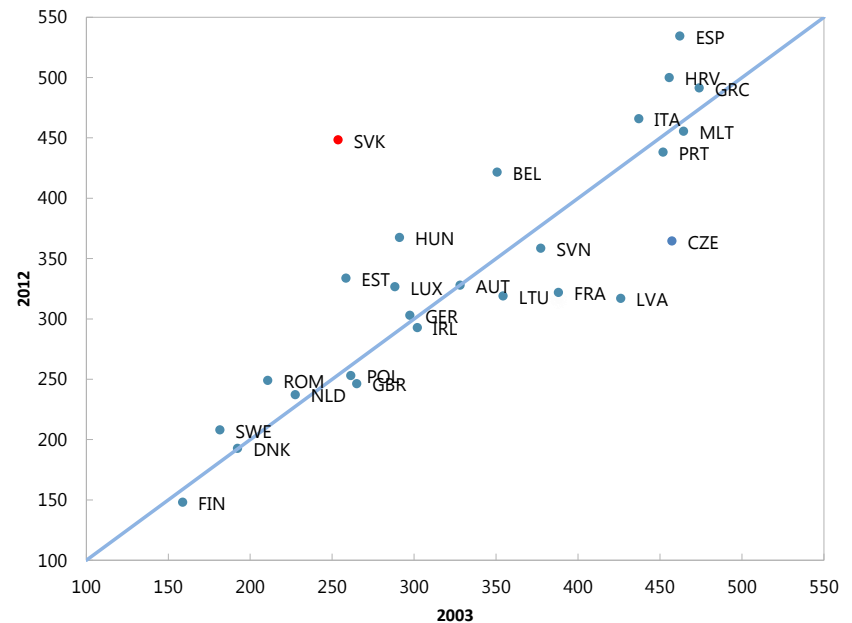
Slovakia compares favorably for public employment and wages...

General Government Wages and Employment, 2013 or most recent
(in percent of GDP and labor force)



Except for the number of police officers

Police Personnel per 100.000 inhabitants, 2003-2012



Source: EUROSTAT and IMF staff calculations.



Preliminary Conclusions

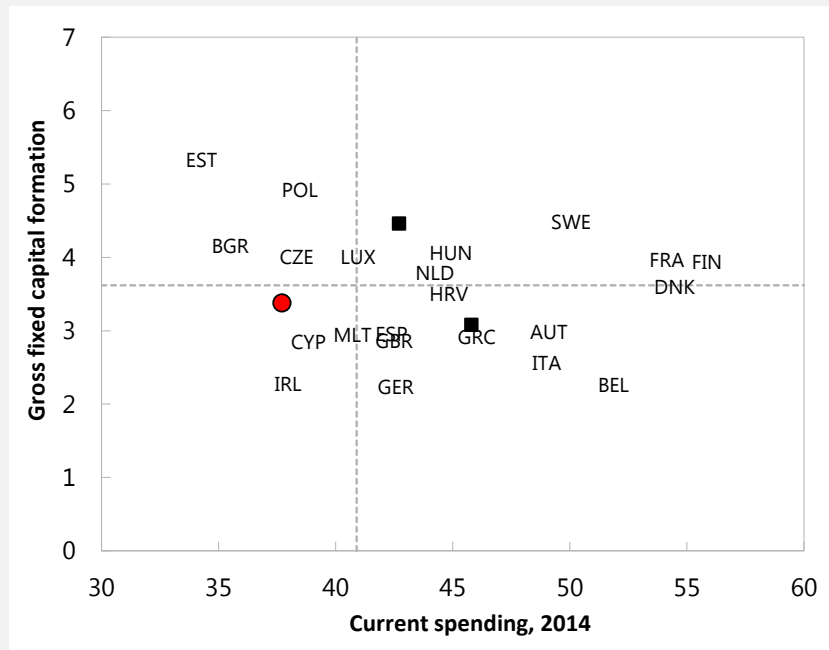
- **Slovakia does not overspend relative to peers and EU average**
- **But spending pressures due to relatively low social outcomes (education and health) and ageing**
- **Spending has proven difficult to contain since the crisis**
- **Overall, the wage bill appears reasonable, but a sectoral analysis is needed**

Public Investment

1/ Inputs: Low Capital and Current Spending

Slovakia compares favorably in terms of composition of spending

Current vs. Capital Spending
(in percent of GDP)

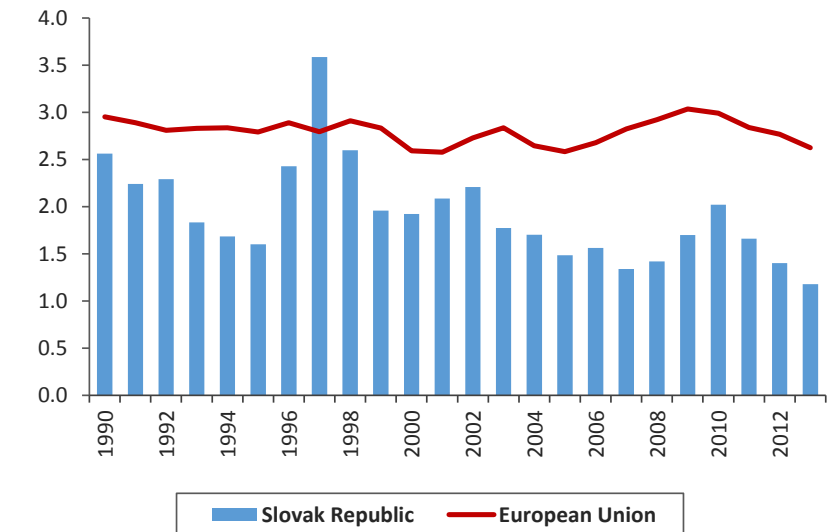


Source: EUROSTAT.

Note: Dashed lines indicate medians.

However, investment has been persistently low

General government investment, in constant 2005 international dollars
(in percent of GDP)



Source: IMF Investment and Capital Stock Dataset, 2015

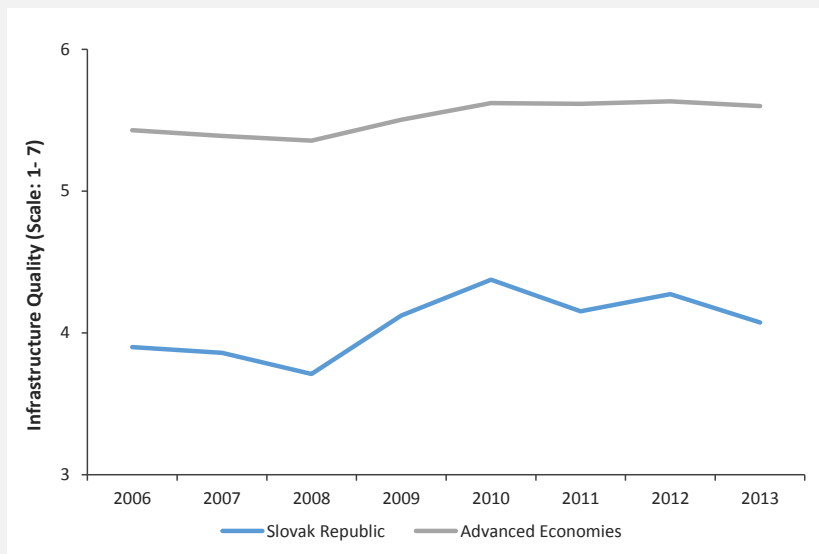
2/ Outcomes: Relatively Inefficient Public Investment



Infrastructure quality is below advanced countries' average

Perception of Infrastructure Quality, 2006-2014

(Infrastructure Quality Index, scale 1-7)

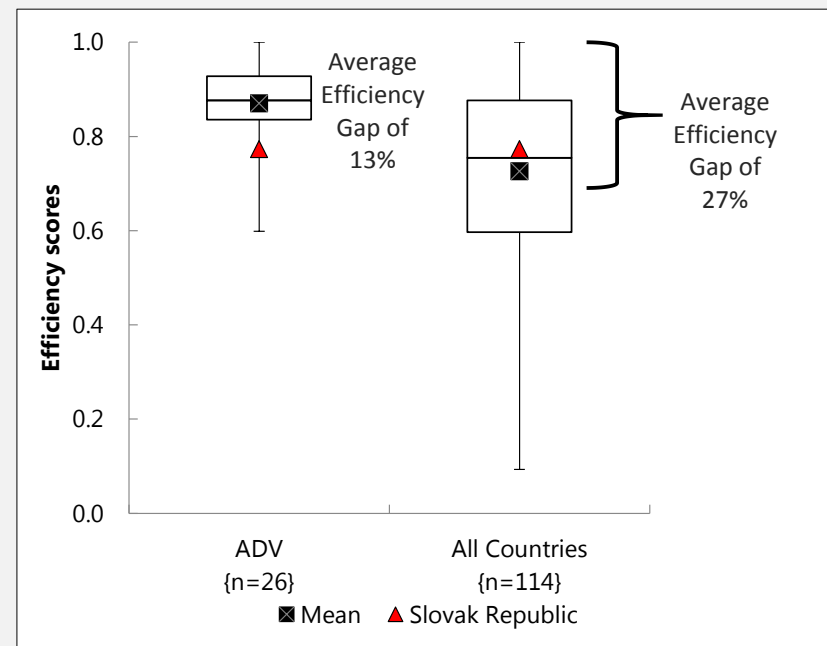


Source: World Economic Forum

As well as public investment efficiency

Public Investment Efficiency (PIE-X)

(Hybrid indicator)



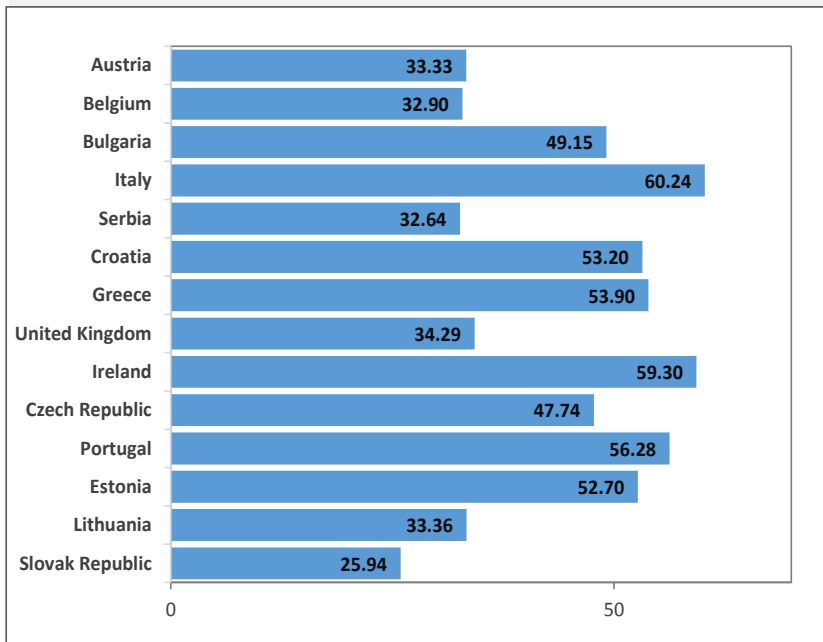
Source: Center for International comparison (2013), WEF, OECD, WDI (2014), and IMF

3/ Composition: Low Capital Stock and Poor Composition



Slovakia has a low level of public capital stock...

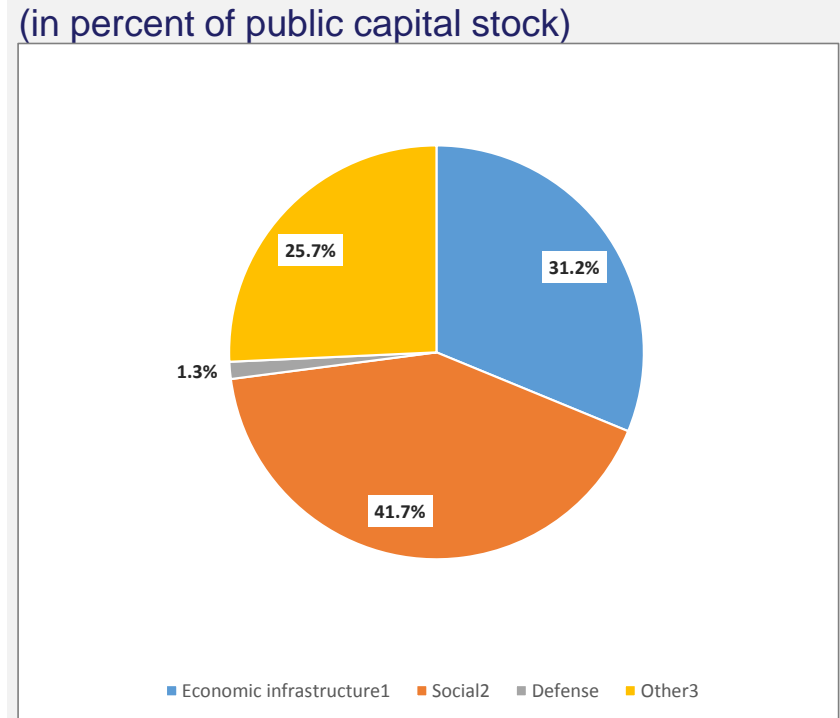
Comparison of Public Capital Stock
(in percent of GDP, PPP adjusted)



Source: IMF Investment and Capital Stock Dataset, 2015

... Which is insufficiently geared toward economic infrastructures

Public Capital Stock by Function, Average of the Last 20 years
(in percent of public capital stock)



Source: IMF Investment and Capital Stock Dataset, 2015



Preliminary Findings

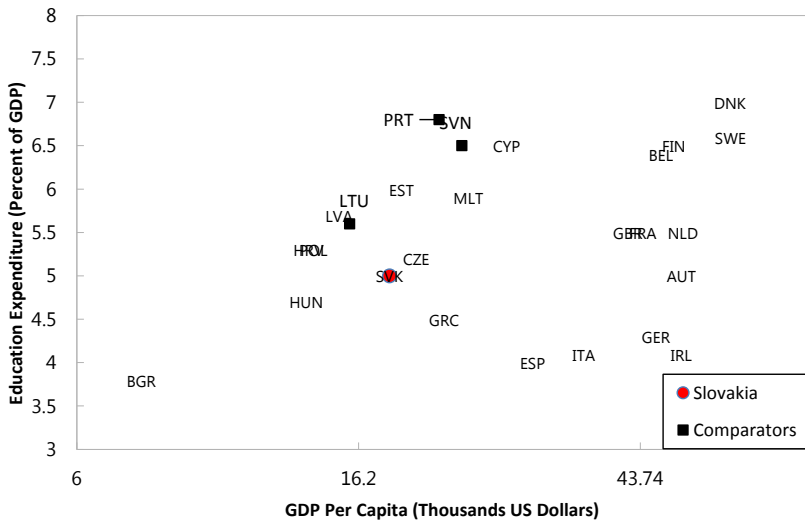
- **Low quantity of capital stock calls for additional investment spending**
- **Because low economic infrastructure may hinder output growth**
- **Any scaling up of public investment should be accompanied by improvement in PIM so that Slovakia can reap the maximum benefits from its spending**

Education

1/ Inputs: Low Public Spending

Relatively low public spending in education in percent of GDP...

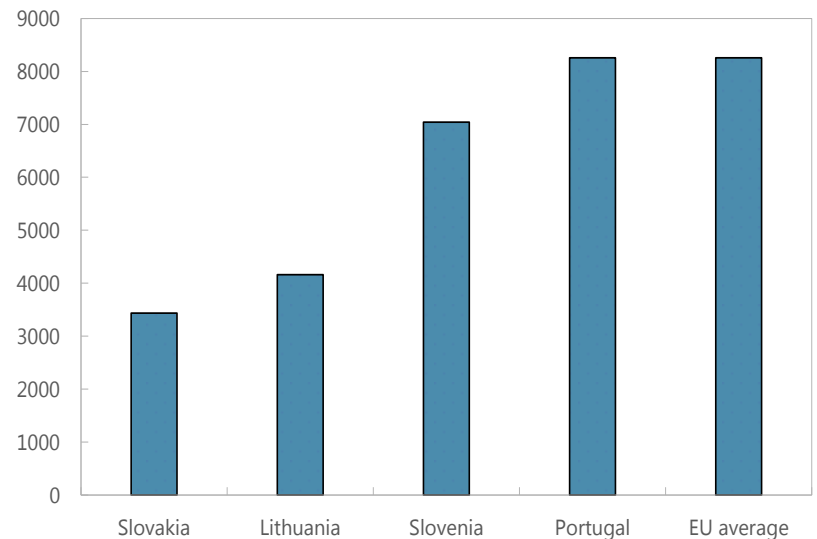
Education Spending, 2013
(in percent of GDP, and PPP USD per capita)



Source: EUROSTAT.

...And per student

Spending per Secondary Students, 2011
(in PPP USD)

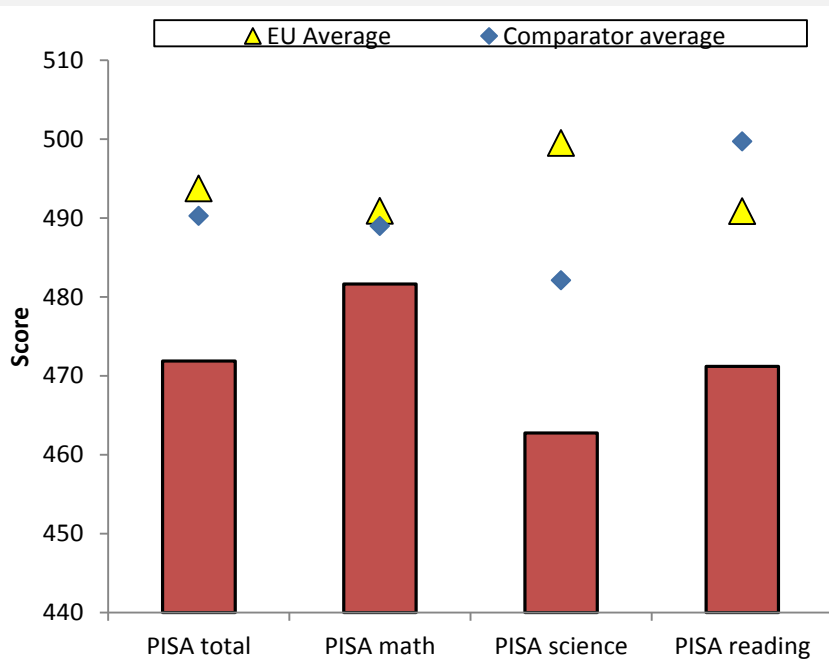


Source: UNESCO.

2/ Outputs: Low Performance and Equity

Education performance is relatively low...

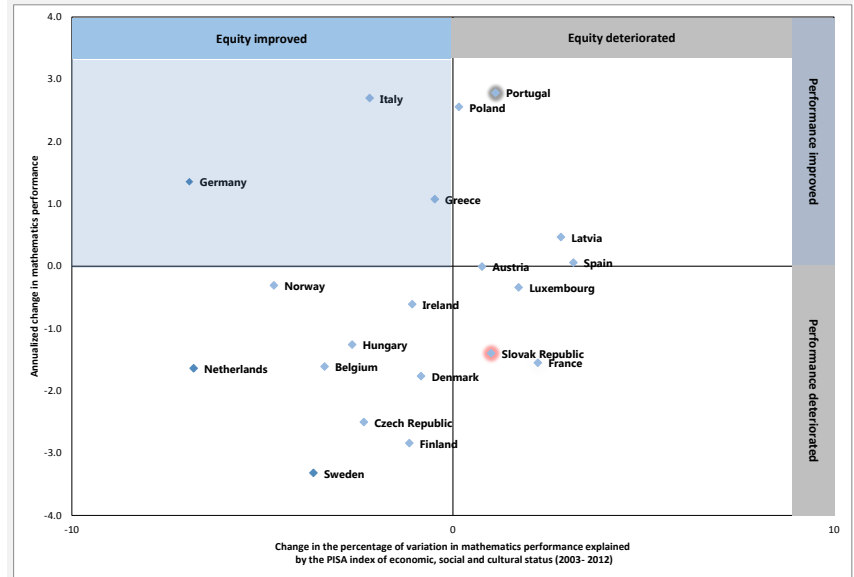
2012 PISA Scores (index)



Source: OECD

...and education outcomes are deteriorating both in quality and equity

Change in Performance and Equity (in percent)



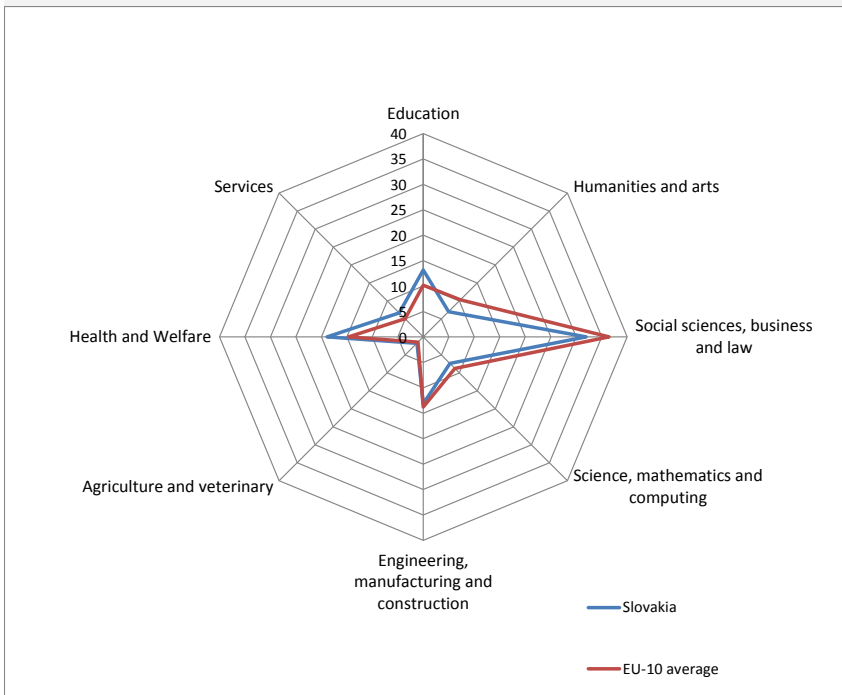
Source: OECD

2/ Outputs: Students Appear Relatively Well Prepared for Entering the Job Market



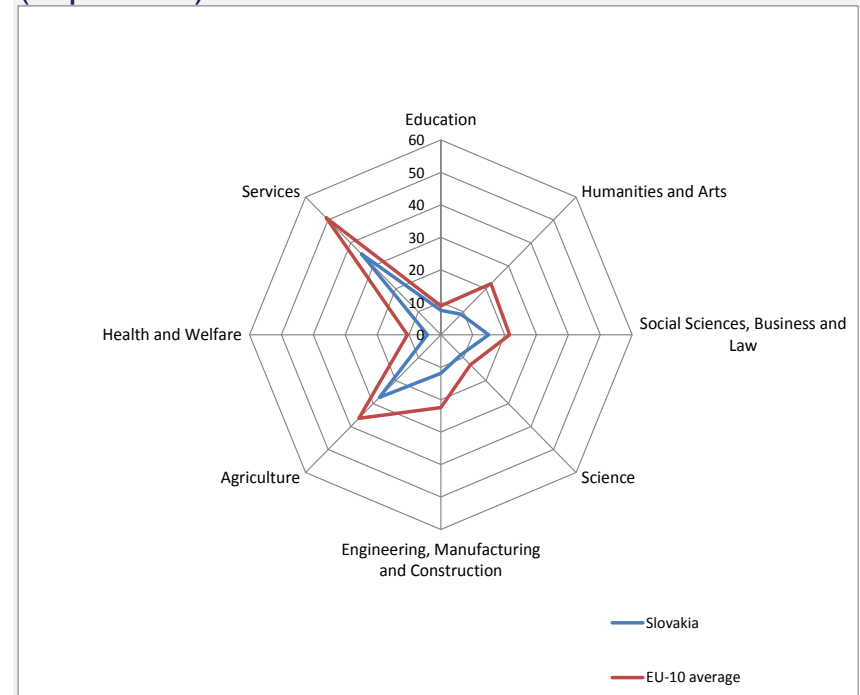
Close to EU best performers for graduates specialization...

Percentage of Graduates from tertiary programs by Study Field (in percent)



... And for matching labor market needs

Education-Occupation Mismatch of Persons aged 25-34 by Study Field (in percent)

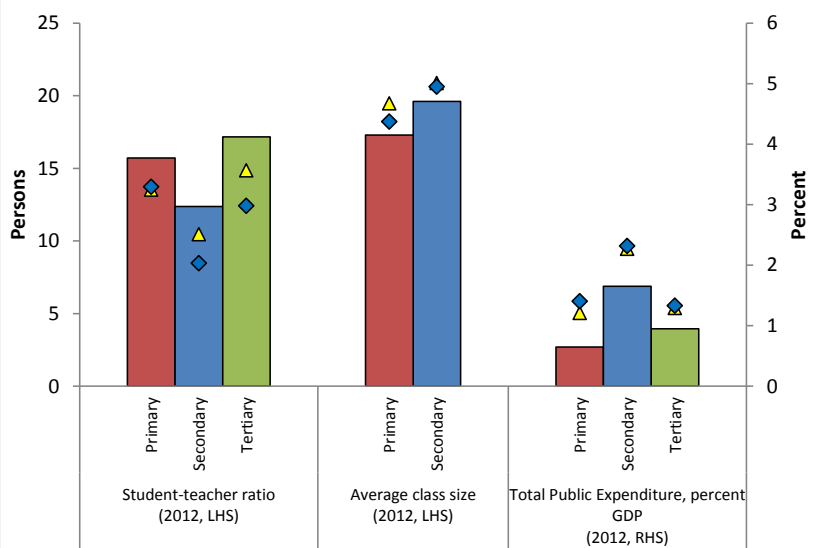


3/ Composition: Low wages and Employment, but Inefficiencies

High student-teacher ratio, but low average size class, pointing to organizational inefficiencies

Education Inputs

(in number of persons, and in percent of total expenditure)



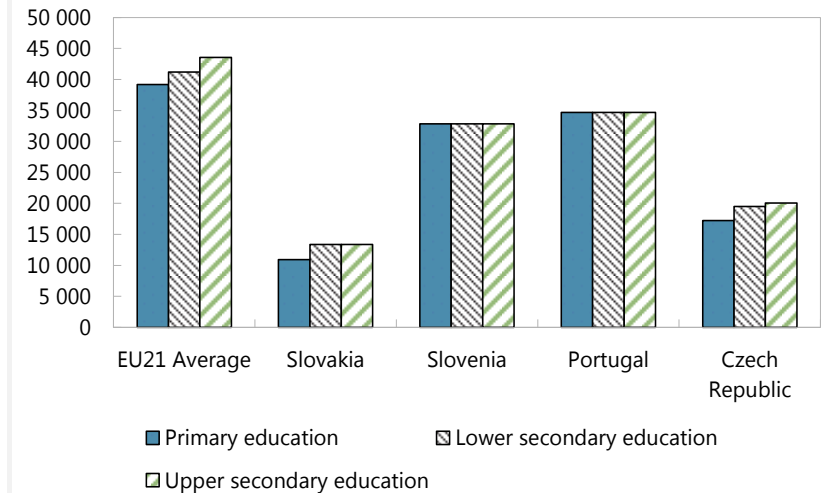
Source: UNESCO.

Source: UNESCO.

Teachers' wages are particularly low in Slovakia

Teachers' Statutory Salaries, 15 years of experience

(in PPP USD)



Source: OECD.

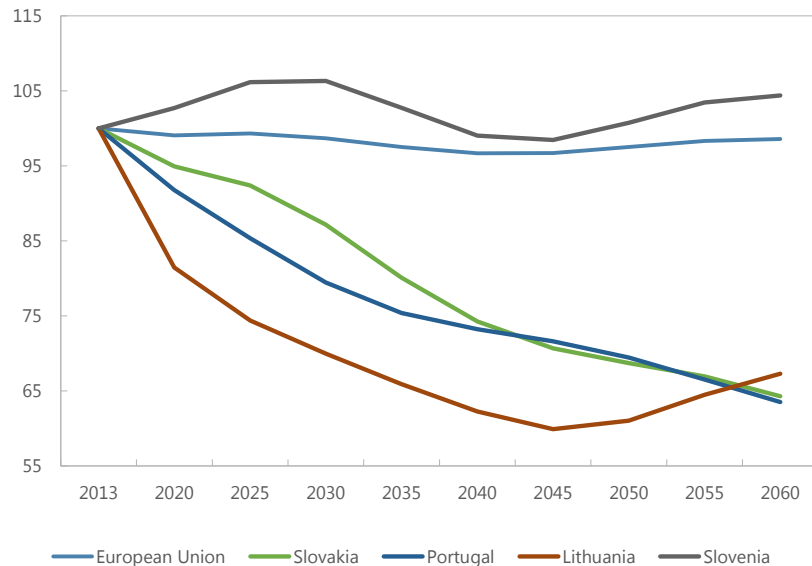
3/ School network consolidation will be needed given shrinking school-age population



Students population will decrease sharply in Slovakia

Change in the Number of Students, 2013-2060

(2013=100)





Preliminary Conclusions

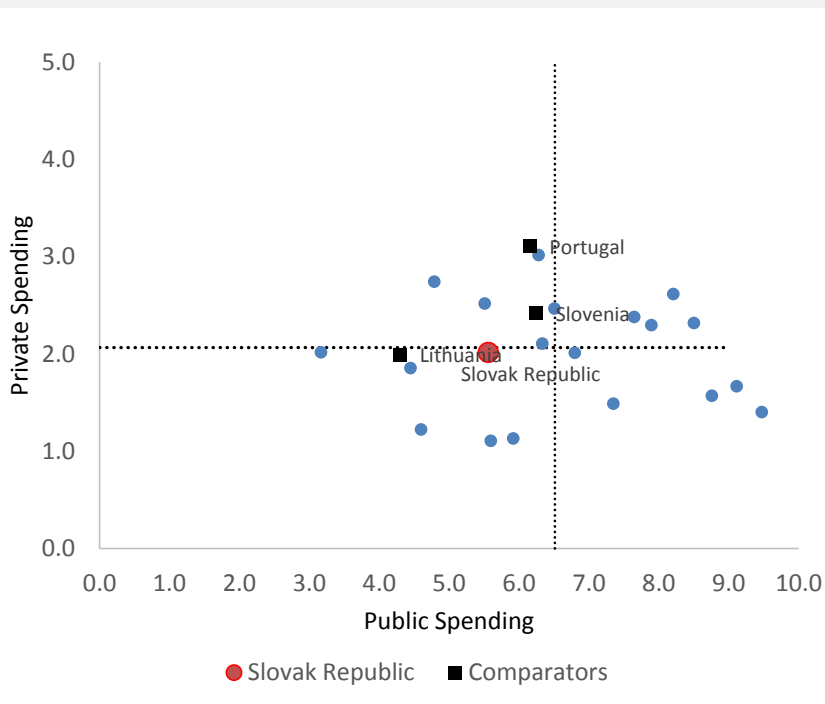
- **Slovakia spends less on education, and its outcomes are below comparators**
- **Additional spending may not be needed, given the expected shrinking of students' population**
- **Focusing on tackling inefficiencies to improve education outcomes, while gradually consolidating school network**
- **This may leave room to increase wages in order to raise teaching quality**

Health

1/ Inputs: High Private Spending, but Low Public Spending

Private spending in line with EU average, but lower public spending

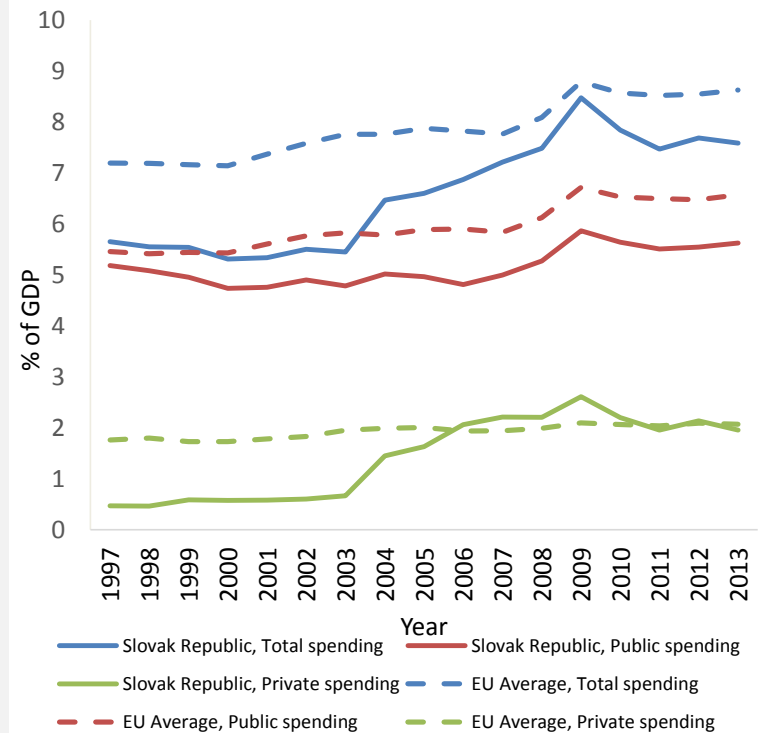
Public and Private Spending
(in percent of GDP, average of 3 latest years)



Source: OECD

Rising health spending, particularly private

Health Expenditure Trends
(in percent of GDP)



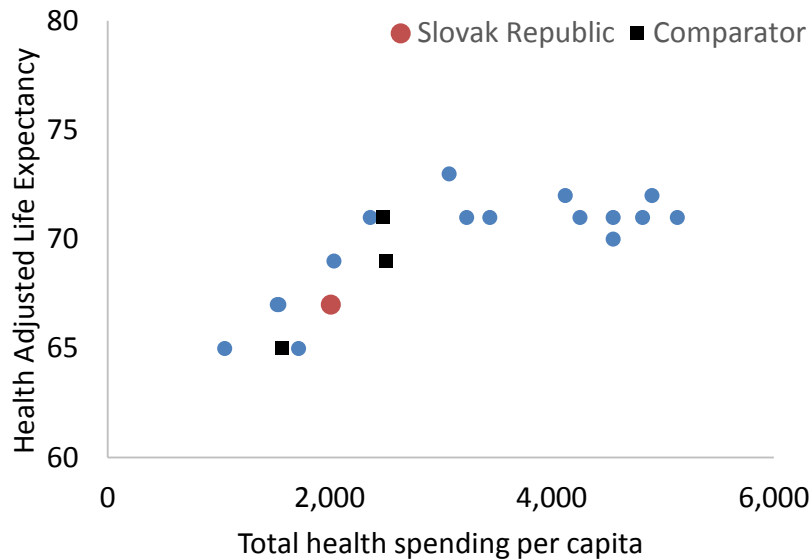
Source: OECD

2/ Outcomes: Relatively Poor Health Outcomes



Low Health Adjusted Life (HALE) relative to total health spending

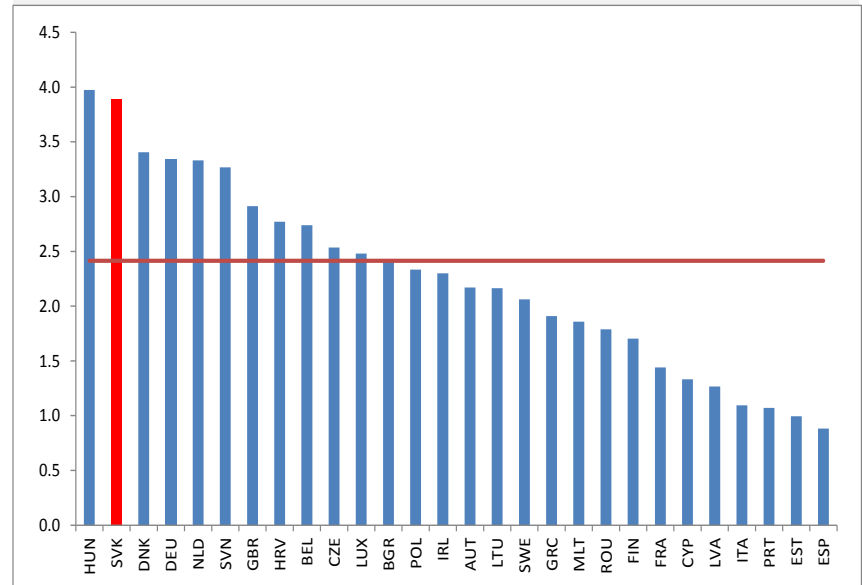
Total Health Spending and HALE, 2013
(in years, and in per-capita spending in current PPP US\$)



Source: OECD

And high loss in HALE due to inefficiencies

Public Health Spending and Health, 2013
(in years, and in per-capita spending in current PPP US\$)

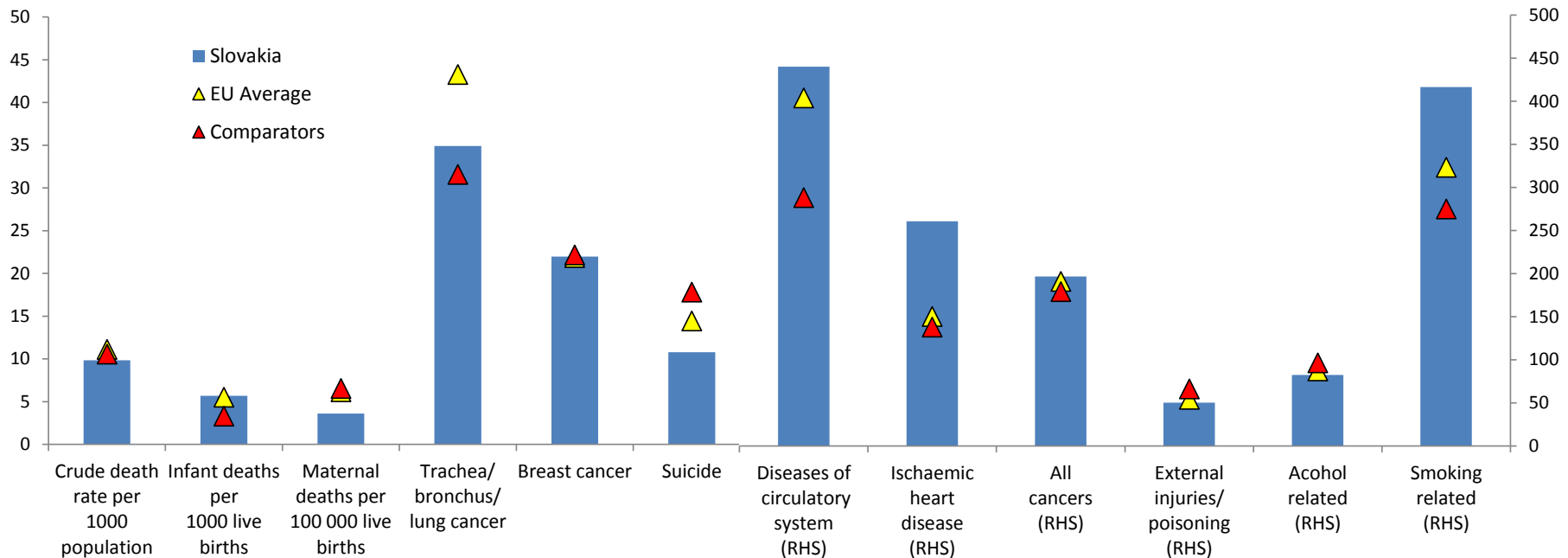


Source: OECD

2/ Outcomes: Relatively Poor Performance

Mixed Health Outcomes

Health Outcomes relative to EU and comparators averages, 2012 or most recent and (LHS: per 1000 population, RHS: Standard Death Rate, all ages, per 100,000 people)



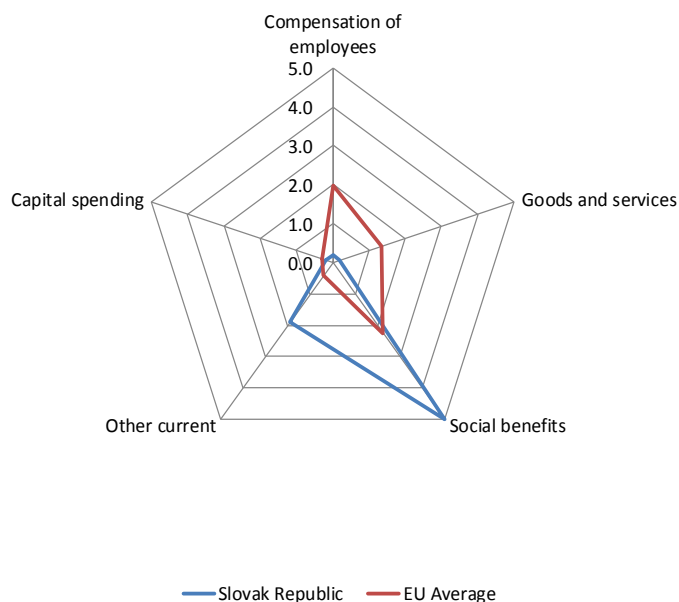
Source: WHO

3/ Composition: Both classifications of spending raise questions



Composition of spending

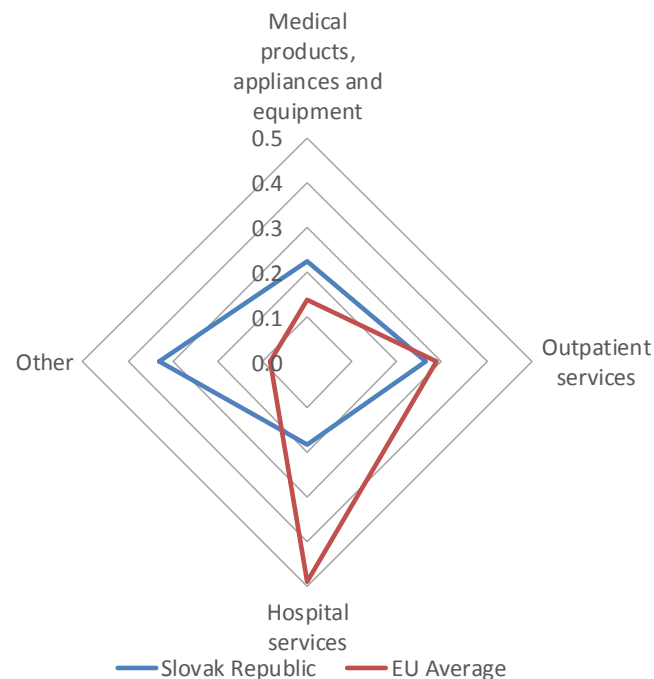
Economic Classification, 2013
(in percent of GDP)



Source: OECD

And high loss in HALE due to inefficiencies

Functional Classification, 2013
(in percent of GDP)



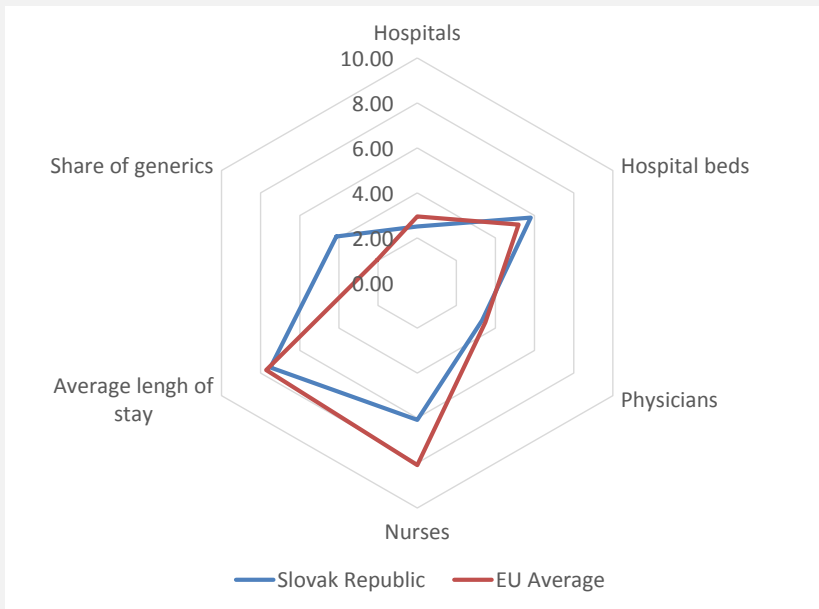
Source: OECD

3/ Composition: Efficiency may be improved, and Out-of-Pocket Spending is Large



Inputs indicators are relatively favorable, but high for hospitals

Health Inputs Indicators relative to EU average, 2013
(in percent of GDP)



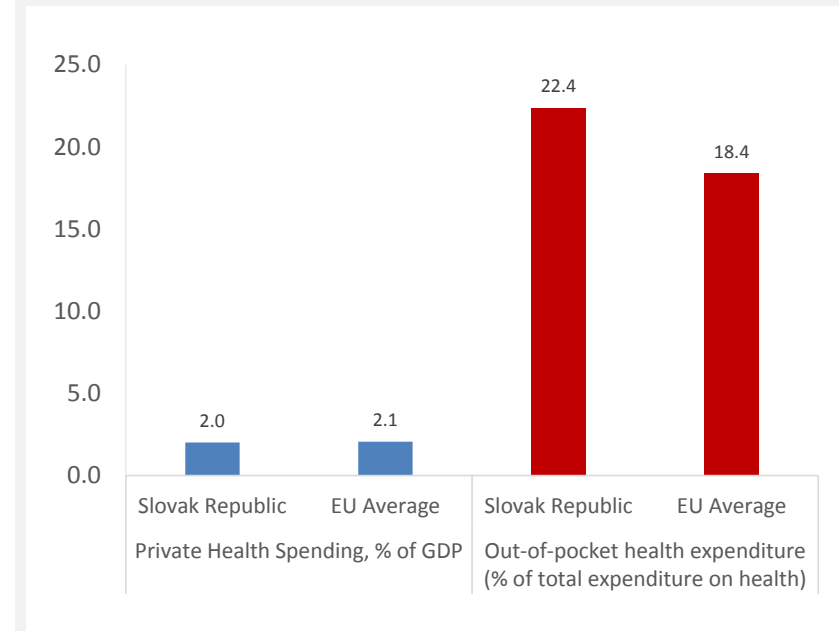
Source: WHO, OECD

Note: scales have been normalized.

... and high out-of-pocket spending

Private Health Expenditure

(in percent of GDP, and of total expenditure on health)



Source: OECD, World Bank



Preliminary Conclusions

- **Further analyze classifications of health spending**
- **Already high out-of-pocket spending calls for caution in cutting public spending**
- **Again, efforts should focus on tackling inefficiencies to improve health outcomes, and to mitigate the projected increase in health spending**

Social Protection

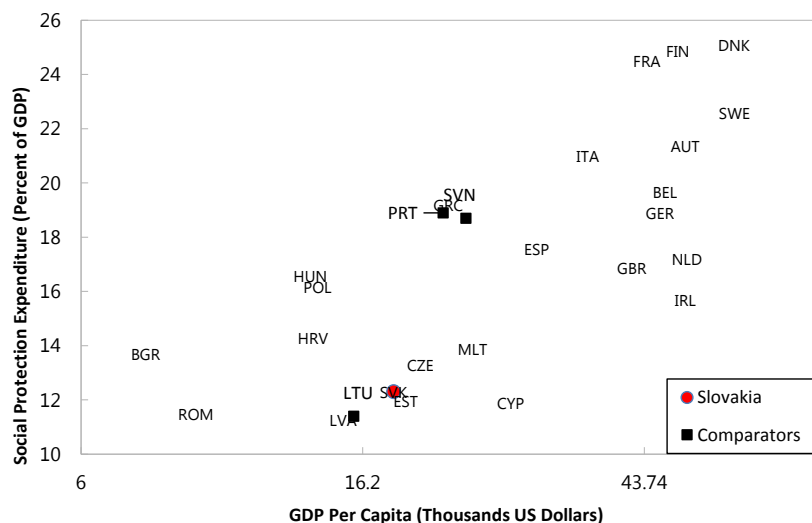
1/ Inputs: Comparatively Low Social Protection Spending



Low social protection spending

Public Social Protection Spending

(in percent of GDP, and PPP USD per capita)

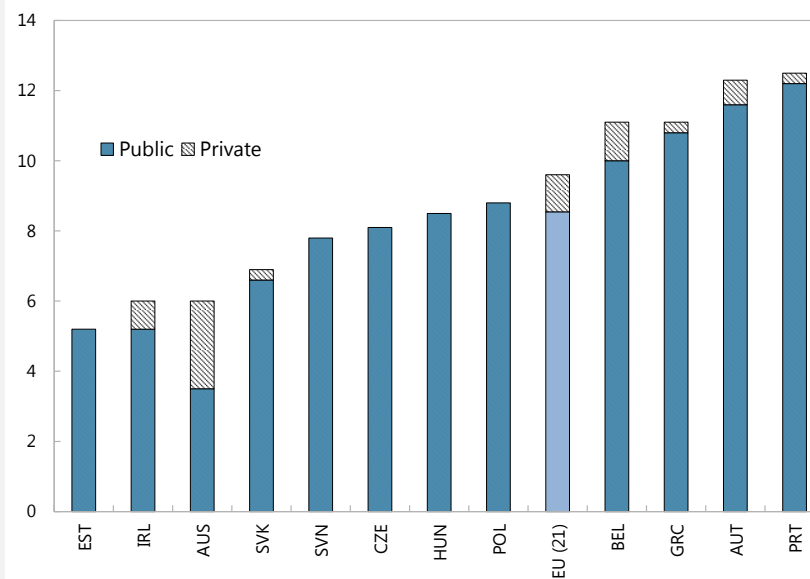


Source: EUROSTAT.

Due to low pension spending, but that is expected to rise

Public and Private Pension Expenditure, 2011

(in percent of GDP)



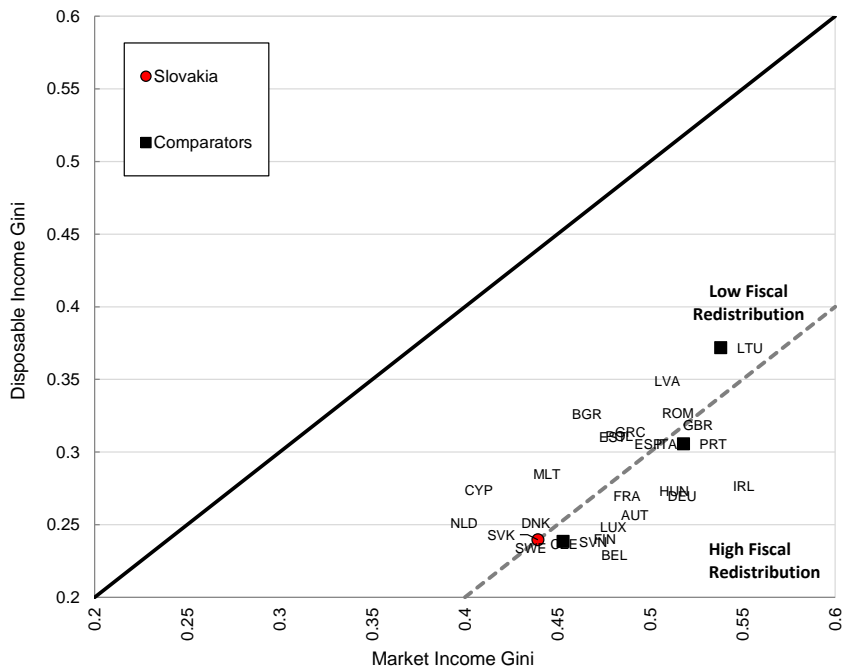
Source: OECD.

Note: Excluding disability, and early retirement.

2/ Outcomes of Income Support Programs

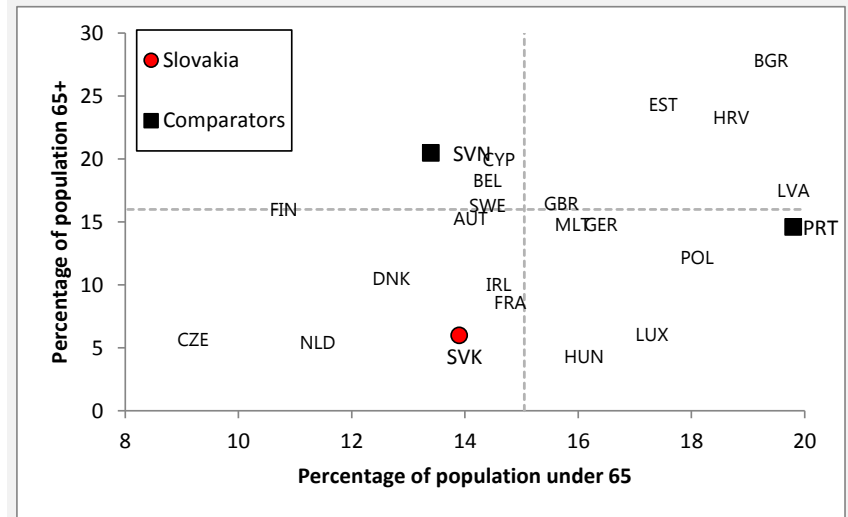
Relatively low market and disposable income inequalities

Market vs. Disposable Income Gini, 2013
(in percent)



And limited risk of poverty

Risk of Poverty rate after social transfers and pensions, 2013
(in percentage of population under 65 and over 65)



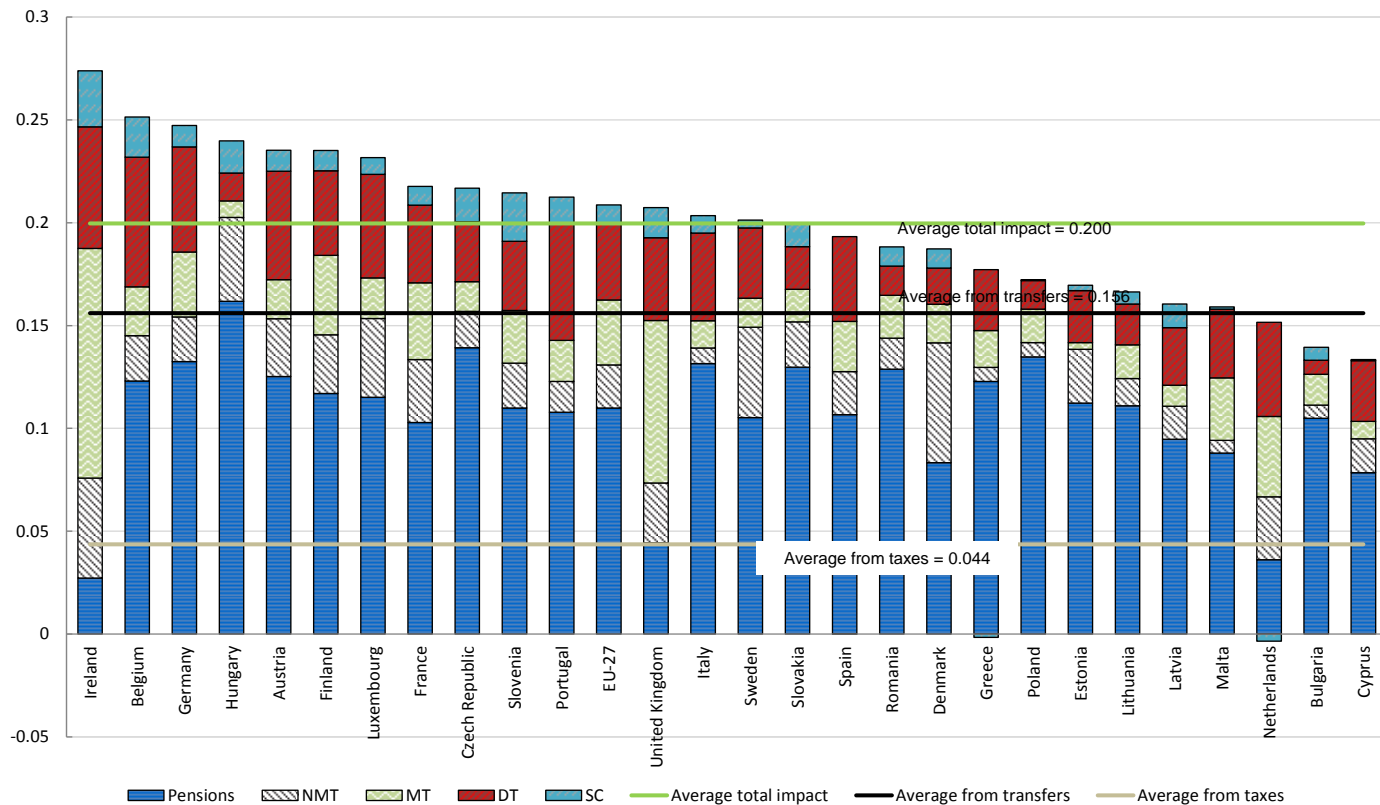
Source: EUROSTAT.

Note: Low (high) fiscal redistribution refers to the difference between market and disposable income Gini being less (greater) than 0.2. 32

3/ Fiscal Redistribution by instruments

Fiscal redistribution is mainly achieved through pension spending, while taxes play a smaller role

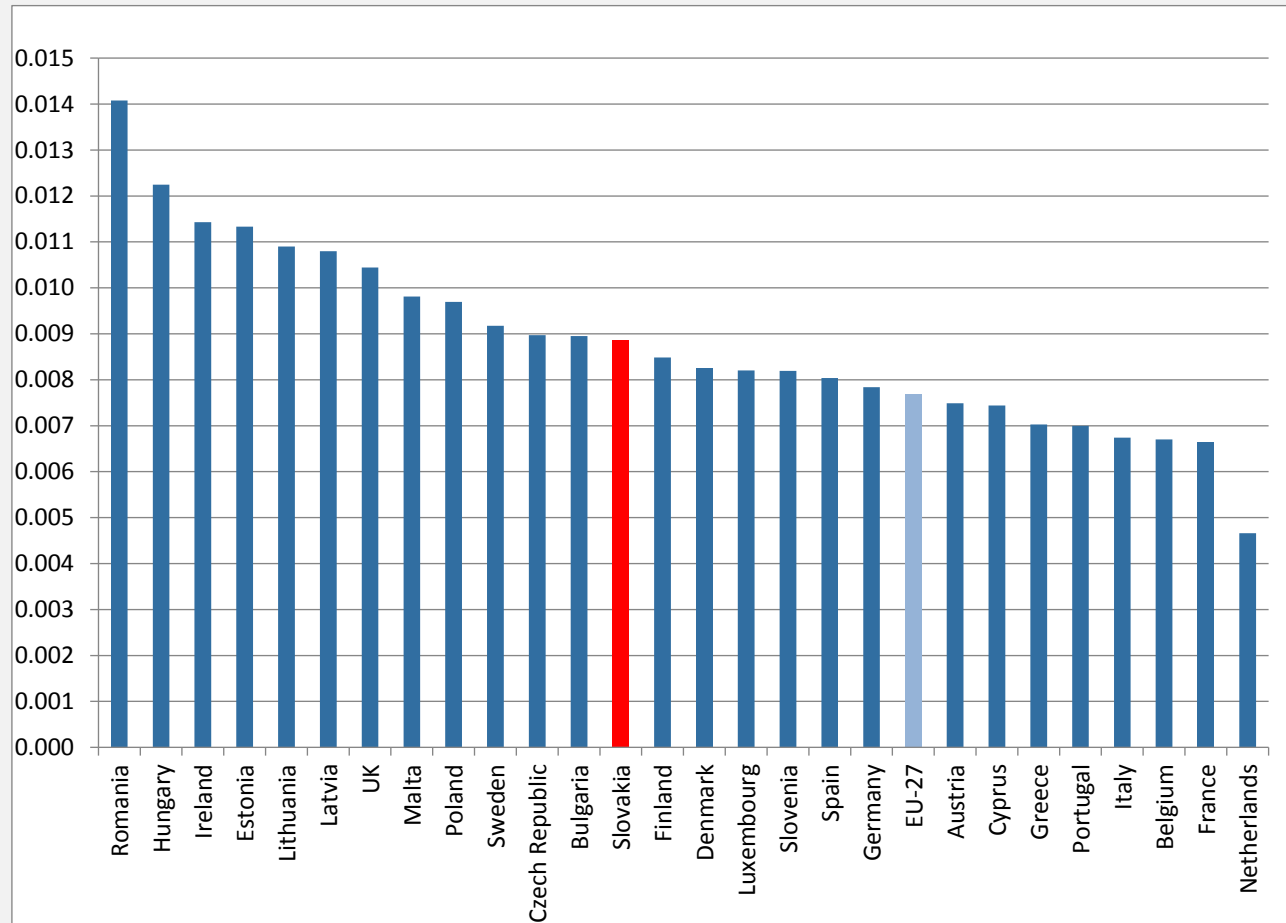
Contributions to Fiscal Redistribution in Europe, 2013
(Reduction in Gini)



3/ Fiscal Redistribution by Instruments

Fiscal redistribution is mainly achieved through pension spending, while taxes play a smaller role

The Redistributive Power of Public Spending
 (Reduction of the GINI coefficient due to 1 percent of GDP of social benefits)

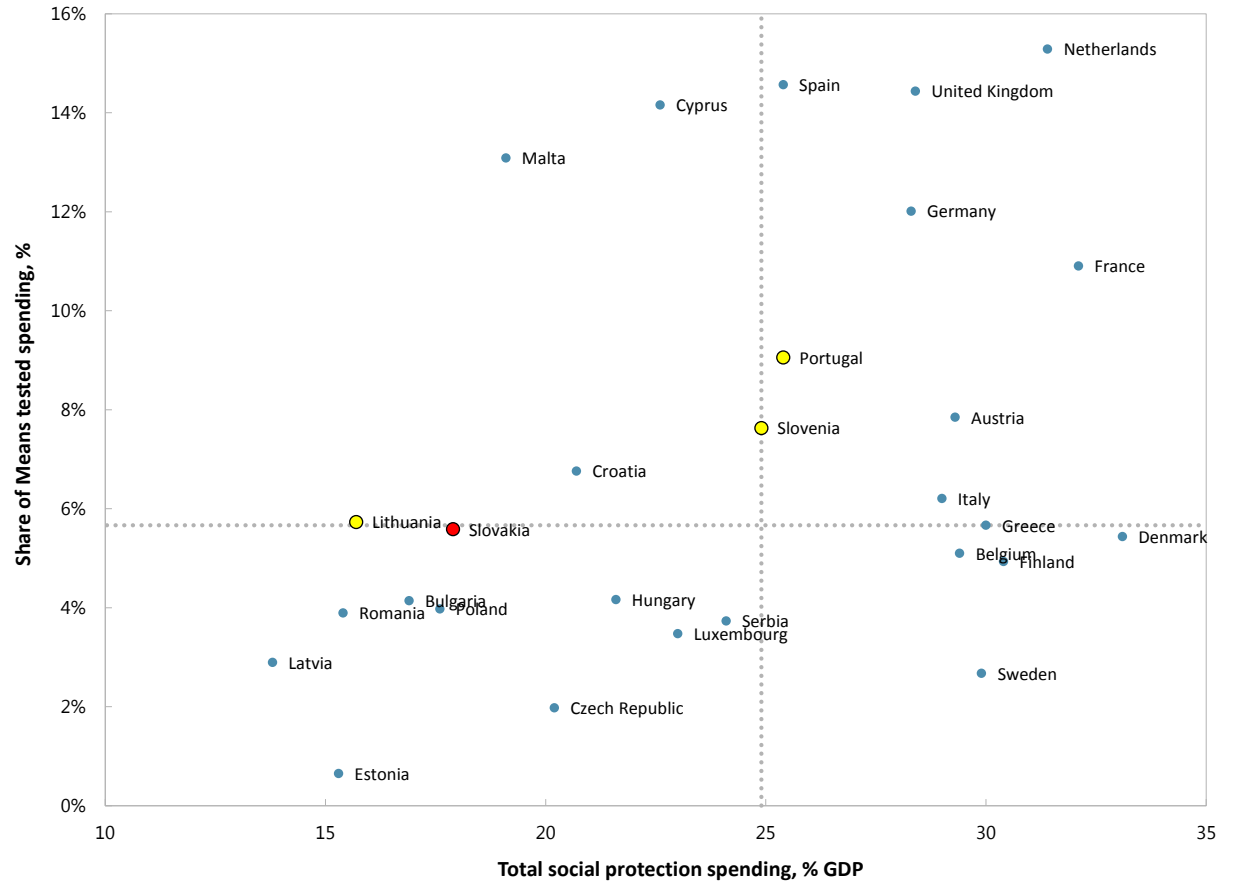


3/ Composition: Share of Means-Testing

Means-testing in social protection is comparatively low in Slovakia

Share of Means-tested Social Expenditures in Europe, 2010

(in percent of social benefits, and in percent of GDP)



Preliminary Conclusions

- **Low social protection spending, but relatively low inequalities and risk of poverty**
- **... Due to low market income inequalities, and relatively good redistributive power of social benefits**
- **However, better targeting would be needed in case of additional social assistance spending, and to make fiscal space for rising pension spending**



Thank you