

# Are Government Effective in Promoting Human Capital?: The case of Macedonia

# Motivation

“Greater human capital is key to higher productivity and growth (Burdia and Moro-Egido, 2009; Sondergaard et al., 2012)”

- Aim: to assess the effectiveness of the government policy in Macedonia in promoting greater human capital, as well as to draw recommendations
- How much HC do we have? Is learning taking place within the education?
- Assess HC through the commonly used measures

# Education outputs

“The level of human capital is still low.”

“The low level of education and ... contribute to a low general level of productivity” (EC, Progress Report, p.28)

Without well educated workforce Macedonia cannot become a modern, innovation-driven, export-oriented economy

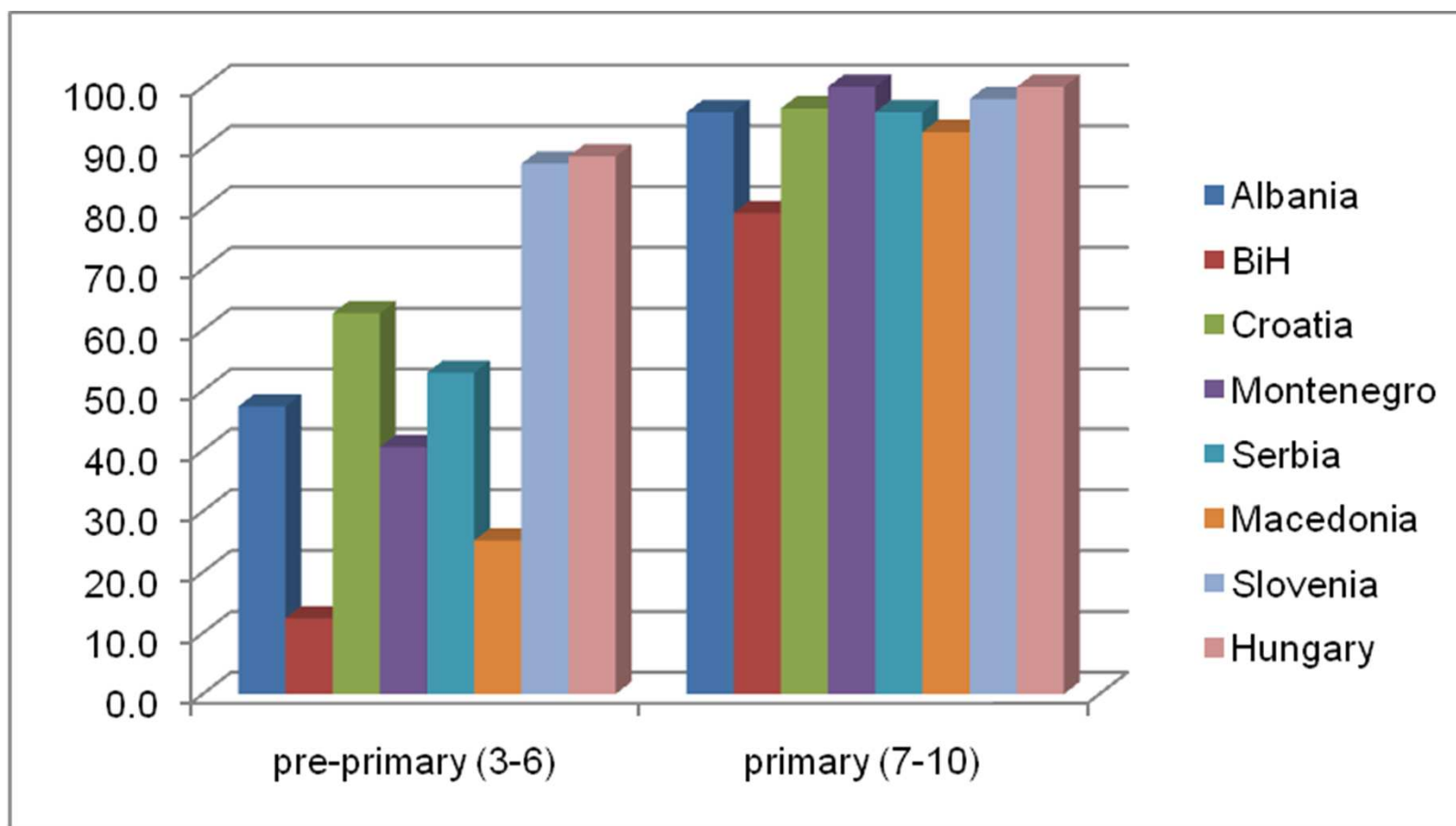
# Education outputs (2)

- Lower than predicted pre-primary enrollments based on GDP per capita (lowest in the region, BiH)
- Lowest gross enrollments into primary education in the region after BiH
- High share of early school leavers (1.4 p.p. higher than in the EU-27, 5.4 p.p. for females)

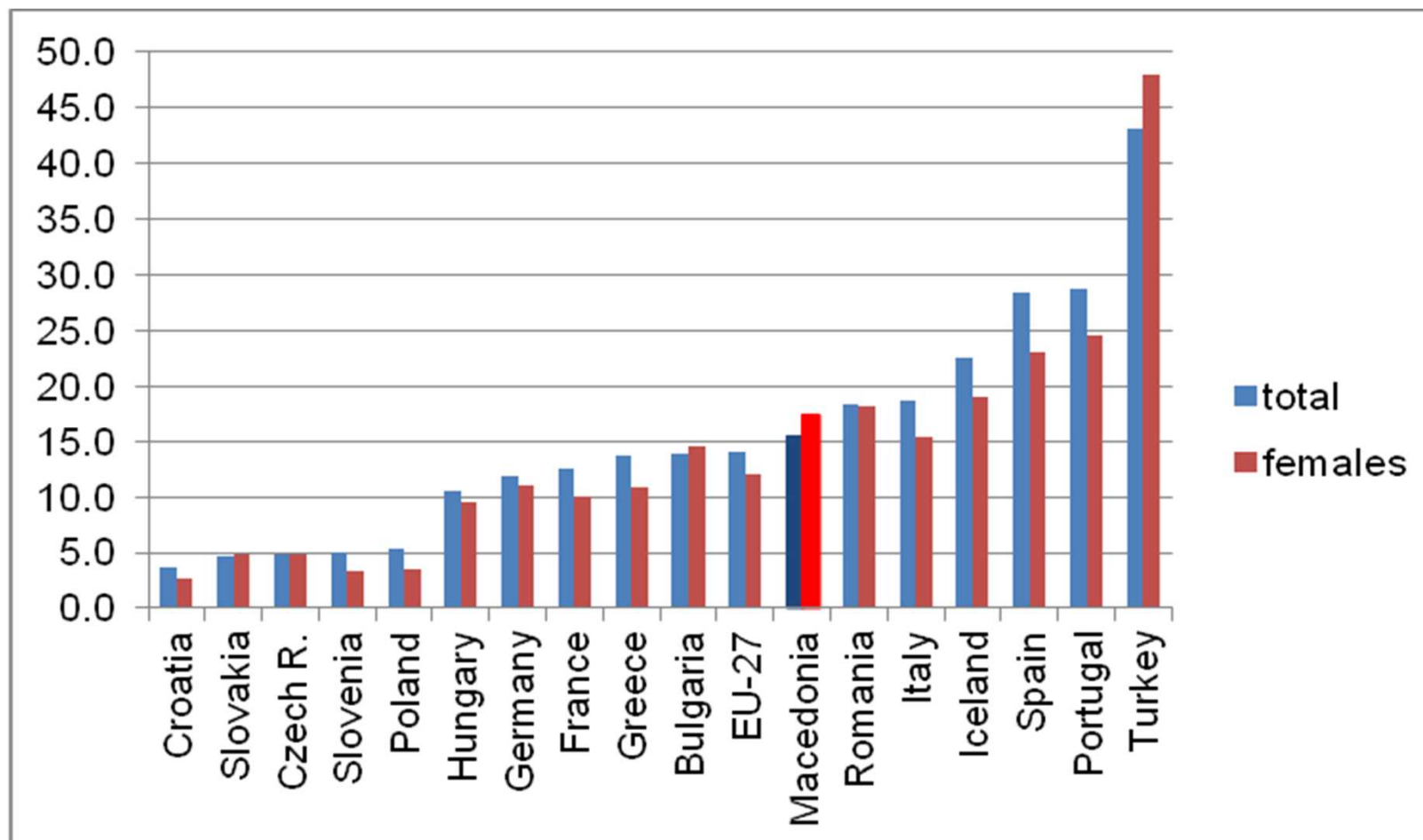
*All contributing to large failures at early ages*

- Low share of tertiary educated population
- Poor achievements on international assessment – worst in the region after Albania

# Enrollments in pre-primary and primary, 2010/2011



# Share of early school-leavers, 2010



# Educational reforms

- Long period of underinvestment and focus on inputs rather than the outputs; recent reforms focused:
- Focused mainly on *quantity*:
  - introduction of nine-year primary education,
  - compulsory secondary education,
  - expansion and subsidies to higher education, etc.
- *Quality*:
  - revised curriculums which promote outcome oriented and interactive teaching and learning,
  - reform of 4-year VET,
  - early learning of English language and ICT skills,
  - implementation of Bologna declaration, etc.

# Assessing the labour demand

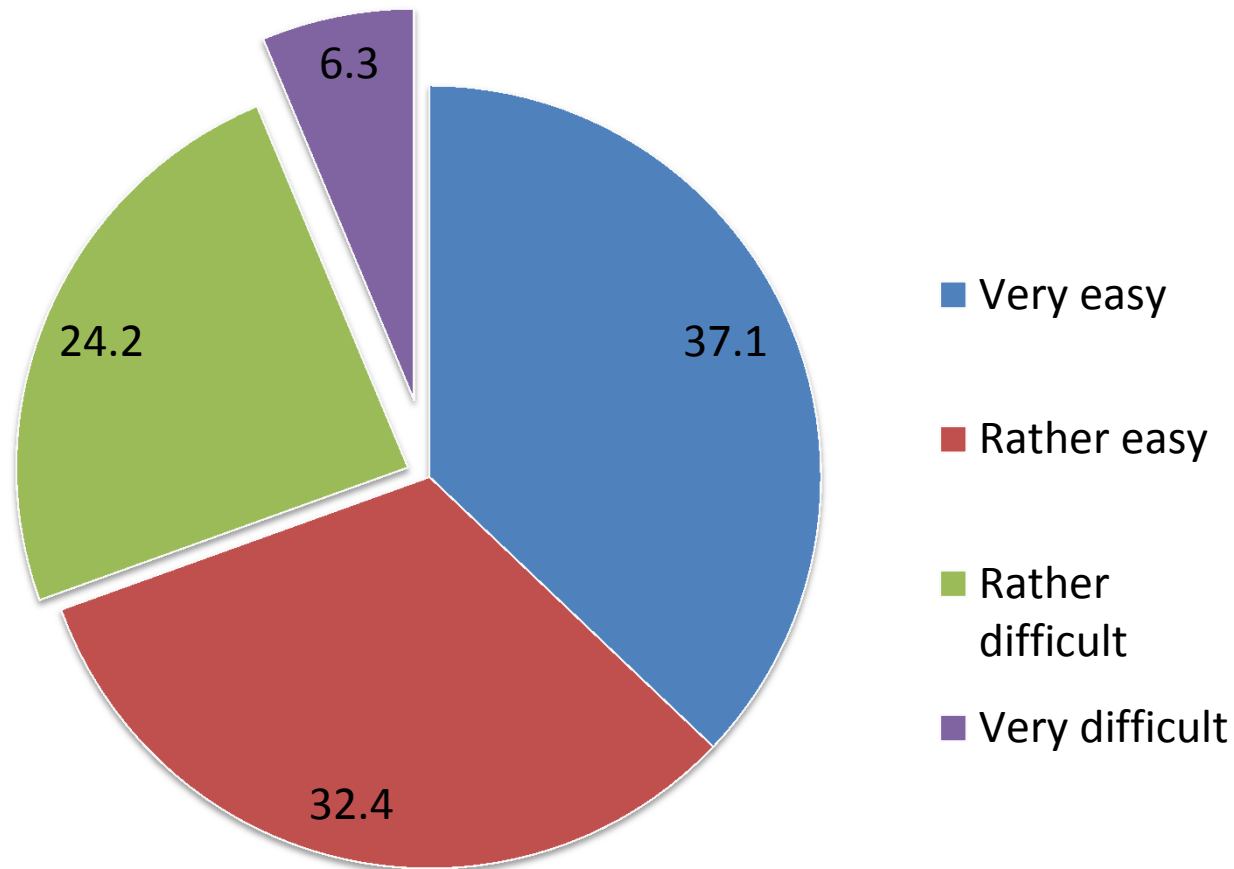
- Are there skills gaps? In what areas? How can the education system address those gaps?
- No systematic information of types of workers and skills in demand
- Combining data from the:
  - Employment Service Agency (ESA)
  - World Bank' labour demand study from 2009
  - Employment structure

# ESA – Skill Needs Analysis

- Planned demand in the next 6-12 months is 11,438 workers, which is 1.8% of total employment
- By industry: manufacturing (45.2%), trade (22.3%),
- Highest demand for secondary educated workers (67% of total demand)
- About 10% of total demand for workers with tertiary education
- Focus on experienced workers, foreign languages, IT, and soft skills
- One fifth of companies report difficulty in hiring workers

# Skill Demand Survey - WB

About 30 percent of employers claim that hiring a worker with required skills is difficult



Skills and Labour Markets in Western  
Balkans, 11 May, 2012

# Skill Demand Survey – WB (2)

- Modern and dynamic firms are more seriously harmed by skill shortages – potential constrain to growth
- Newly created jobs differ in the skill content from old destructed jobs: high professional skills, or medium-level non-manual skills
- Demand for advanced technical and professional skills

# Skill Demand Survey – WB (3)

Top 5 most important skills for employers:

1. Sense of work ethics,
2. Overall literacy,
3. Communication skills,
4. Customer care,
5. Motivation.

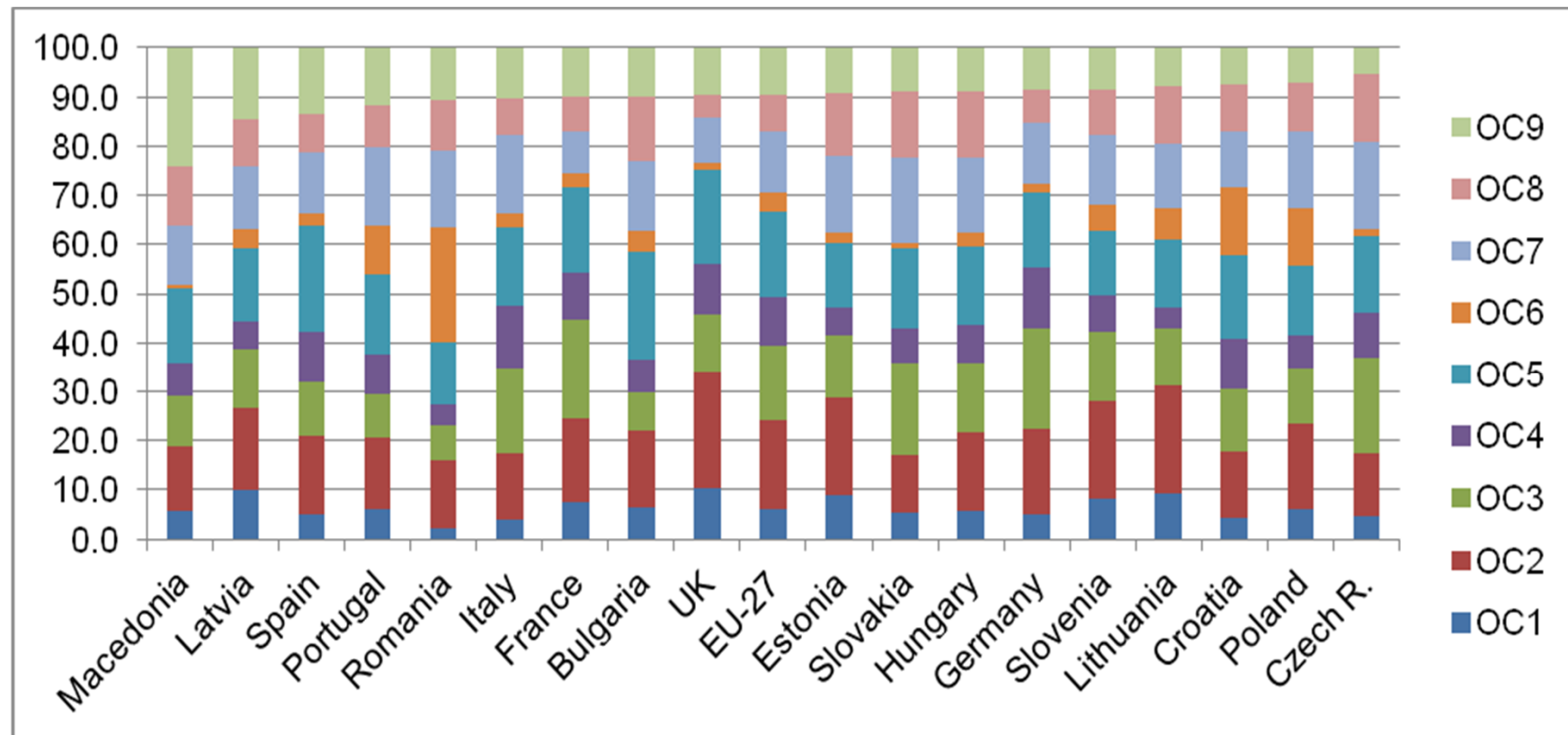
Top 5 skills that applicants lack:

1. Responsibility and reliability,
2. Motivation and commitment,
3. Communication skills,
4. Customer care,
5. General literacy skills.

Unemployment seems more related to work ethics and key competencies than with technical/vocational and job specific-skills

# Occupation structure of employed workers (proxy for demand for occupations)

In Macedonia elementary occupations dominate in the employment (highest share relative to each EU country)



## Occup. structure of employed workers (2), Are labor market reward educated?

- Macedonian labour market rewards the educated individuals:
  - Much higher employment and participation rates and lower unemployment rate for highly educated persons
  - Wage premiums comparable to those in other countries
- This precludes large public investments into tertiary (post-compulsory education)

## Occup. structure of employed workers (3), Over-education?

- Increasingly higher proportion of tertiary educated workers perform jobs that require lower skills and knowledge; 4.8% in 2011

Occupation / Education	Primary or less (ISCED, levels 0 to 2)	Secondary (levels 3 and 4)	Tertiary (levels 5 and 6)
ISCO, 1 to 3	0.5	9.7	16.7
ISCO, 4 to 8	8.6	34.0	4.2
ISCO, 9	15.7	9.7	0.6

- Increased educational attainment of the employed workers (and overall population) brings lower than the expected economic and social benefits
- Should redirect subsidies from post-compulsory education to a more productive use elsewhere

# Lessons learned?!

- Human capital can be increased by **quality** education
- The returns to post-compulsory education accrue mainly to individuals, hence there is no justification for large government involvement and high expenditures on tertiary education
- Focus on young children at early stages of life when abilities can be influenced and lifetime chances improved

# Lessons learned?!

- Education system and curricula should be made more responsive to labour market needs – engage employers
- Incorporate learning of basic soft skills and possibly higher-order skills into curricula; focus on key competencies