

Challenges for smart specialisation in the South-East Europe

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S3 approach to technology upgrading of SEE: key argument

- If designed and implemented in an imitative way by blind copying of the best practice developed for other contexts it can fail miserably.
- The key is to adapt it to the nature of innovation processes and to the institutional context in the SEE
- It should addresses country and region specific obstacles to improved productivity and technology upgrading



Outline

- 1. Specificities of the SEE economies
- 2. S3 requirements
- 3. Gap between 1 and 2
- 4. S3 approach to technology upgrading of SEE
- 5. Conclusions



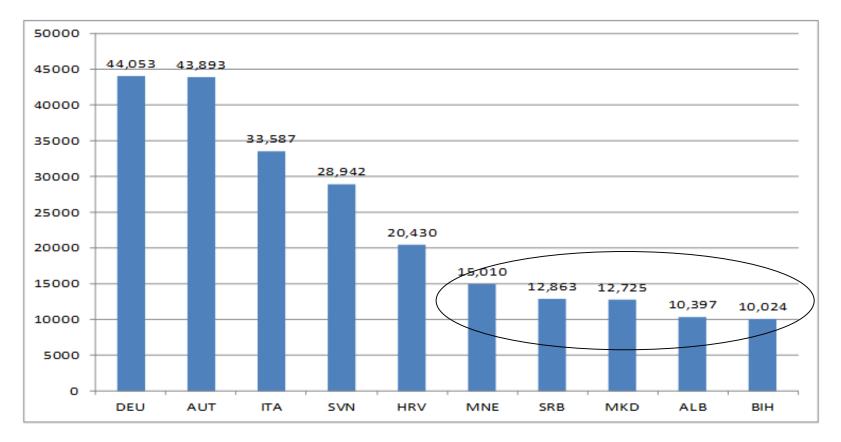
Specificities of the SEE economies

- Technological structural
 - Different nature of innovation process
 - De-industrialisation
 - Outside of global value chains
- Institutional policy
 - Transition > horizontal ('agencification') 'vertical' (S3)
 - Structural reforms fatigue
 - Low institutional capacities for S3 policies



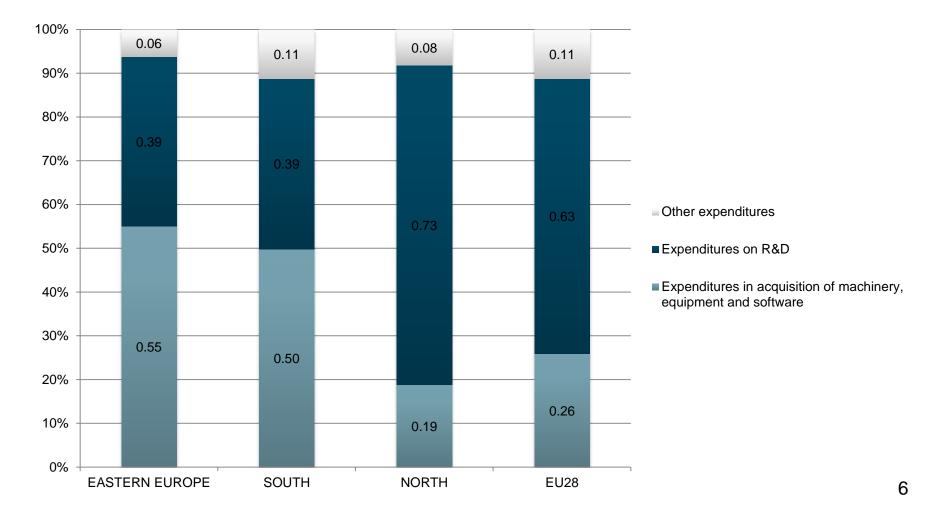
Homogenous group at the low income level SEE5 - 22- 34% of German GDPpc

GDP per capita 2015, PPP (constant 2011 international \$)





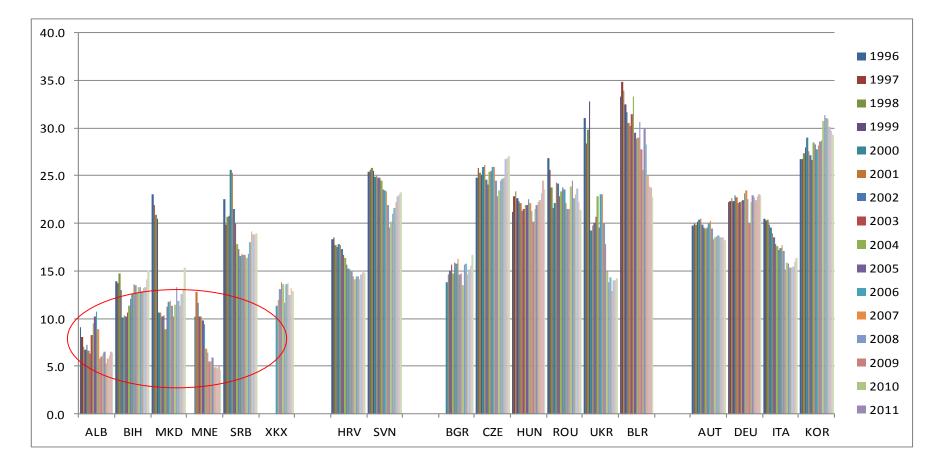
Different nature of innovation activities between the EU core and periphery ... (SEE as the low end of the EE scale) Structure of innovation expenditures 2010-2012 in EU28 regions





A protracted 'deindustrialisation' of SEE5 and some recovery

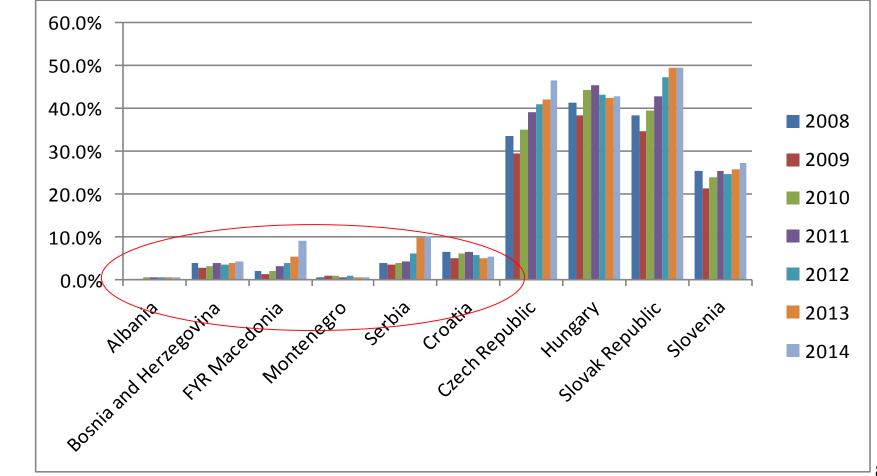
Share of manufacturing value added in GDP





Exports of machinery and transport equipment (in % GDP)(current prices), 2008-2014

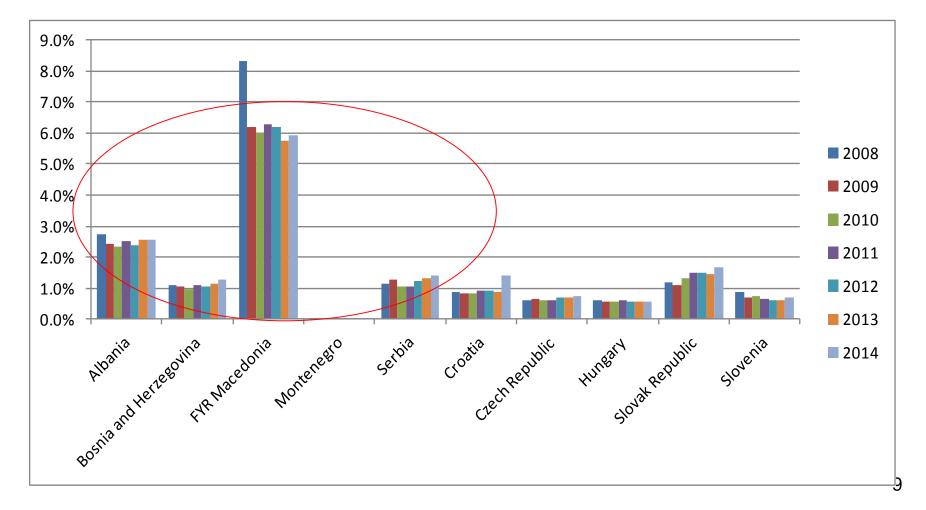
A huge gap in the degree to which Central Europe is involved in technology-intensive industries when compared to the SEE-5 group which is outside these networks





Exports of clothing (in % GDP)(current prices), 2008-2014

SEE-5 shows some advantages in labour-intensive industries like clothing esp. North Macedonia and Albania





The essential pre-condition for initiating robust and sustainable S3 process

Effective, consensus-building political leadership in three domains (universities, the private sector, and political authorities) willing to embark on the process of technological upgrading and modernisation and perceives S3 as viable and necessary approach

The institutional capacity for S3 seriously lacks in SEE countries

- S3 requires developed public private and mezzo (sector) level coordination mechanisms.
- A reminder: 1990s (transition); 2000s (horizontal/'agencification'); 2014 ('vertical'/S3)
- S3 assumes that there is sector and technology-specific policy expertise and that there are institutional and financial conditions for experimentation.
- As these preconditions are absent the EU SEE policy should strongly support capacity- building measures in research and innovation policy including monitoring and evaluation (M&E) capacity



Current factors of SEE competitive advantage ...

Proximity to EU markets

12-14 hours from WE; apparel- 22% cheaper than Chinese; 'nearshoring' (language capability and cultural understanding)

Costs of labour

15-50% of Hungarian wages; except HR Flexible labour force as the (only) region-wide advantage

... can they alone reignite growth ? unlikely...

Focus of current R&D, innovation and industrial policies in the SEE

- Upstream (R&D)
 - Increased scientific quality
 - Commercialization of public R&D sector results
- Downstream (innovation)
 - SMEs and start-up support
 - FDI support/ investment incentives
 - But very specific country approaches and levels of development of ind/inov policy
- Missing focus on production capability (quality, skills, productivity, export requirements) and technology upgrading (by linking FDI and innovation policy) > FDI employment subsidies that are not necessary contributing to technology upgrading

Current R&D and innovation policies reflect the needs of neither business nor scientific sector

- The lack of transparency, lack of evaluation procedures, and are not appropriate given financial and political constraints.
- The main weaknesses of R&D policy instruments:
 - limited funding,
 - the lack of feedback,
 - poor management (implementation),
 - poor design of instruments, and
 - poor local relevance of instruments

Source:

Zoran Aralica, Slavo Radosevic, Josip Raos (2017) Assessing research and policy support needs for innovation in the South East Europe. Key findings based on SmartEIZ Questionnaire report http://www.smarteiz.eu/system/wp-content/uploads/2017/09/SmartEIZ_online-survey.pdf

The most important priority areas for R&D and innovation spending in SEE.... reflects deindustrialized economies

- ICT
- energy
- digital services
- healthcare
- food
- environment and
- biosciences and biotechnology

Enhance modernisation in SEE by integrating region into EU-wide supply (subcontracting) chains

- Integrating SEE into EU industrial networks!
- Enhance linkages with CEE industry networks !
 > leveraging pan-European networks > multitiering > 'tandem growth'
 - (cf. Automotive components : SEE only 4% customers in CEE)

Patterns of industrial upgrading in SEE in selected industries ... do not require technology frontier R&D

- Apparel: from only CTM (42%) services to gradual introduction of Value Added services (OEM/OBM) + beyond imitation (design schools)
- Automotive suppliers: to move out of subcontracting 'cost trap' towards improved quality standards, design and supply chain management skills
- Business Process IT Outsourcing: from fragmented, diversified and local market-oriented firms towards focus on core competencies (specialisation) and creation of BPITO champions

Based on OECD (2009) Sector Specific Sources of Competitiveness in the Western Balkans, OECD, Paris CTM: Cut – trim – make OEM/OBM: original equipment manufacturer/own brand manufacturer

LLL weaknesses in SEE-5 automotive components sector

- example -

Linkage

(B2B/16% on line procurement, links with FDI; skills gaps in supply chain management; sectoral linkage programmes)

Leverage

(partnerships with 2nd tier suppliers; collaborative innovation FDI/SME/RDI)

Learning

(ISO9001 75% /TS16949 standards 12% – quality at source; ERP; Skills gaps in design and engineering)

Based on OECD (2009) Sector Specific Sources of Competitiveness in the Western Balkans, OECD, Paris

Making S3 relevant: Beyond policy silos mentality

- Industrial upgrading and sector specific regulatory reforms should go together > regional cooperation (cf. competition policy)
- International value chains and S3 should be integrated – intra-and inter-regional supply chains
- 'Big push' inter- and intra-regional projects should be linked to 3S priorities

Concluding point

- SEE countries need to support integration in downstream areas of the innovation value chain (subcontracting, supply agreements,...) by promoting access to international supply chains of local firms as well as their upgrading within these networks > twinning and linkages initiatives with the EU partners
- Only R&D or upstream focus will not suffice
- It is essential that countries gradually develop local policy capability (start from M&E)

 South-East Europe between the urgent need for economic transformation and the requirements for innovation paradigm shift Sceptics view on RDI policy support to SEE

- WIIW study on Western Balkans (see Gabrisch et al., 2016) explicitly states:
- 'Thus, for the time being, a country like Serbia, where only a few research institutions or larger companies implementing those research results exist, should refrain from costly public investments in research and development for now. These include support for start-up companies aimed at financing innovations or the establishment of support funds for outstanding research'.
- Instead, authors give much higher priority to investments in transport infrastructure, investments in a dual system of vocational training, improve absorption capacity of EU funds, reduced share of non-performing loans, and fiscal devaluation.

Seeking for viable approach to RDI support policy in SEE

- RDI policies are conventionally not seen as an immediate priority in the SEE-5 context.
- Indeed if conventionally designed and implemented RDI policy makers will have a difficult time to put RDI policy on the top of government's policy agenda.
- However, if conceived in a way that they go beyond a sole focus on R&D and address the issue of sectoral technology upgrading, demand-led innovation, non-RD drivers of growth related to quality, productivity, engineering and software they have much better chances to generate medium-term results.
- Moreover, in comparative terms, they can be less expensive than alternatives.

Prioritising structural reforms or industrial policy? Industrial upgrading and regulatory reforms should go together

- To increase their impact, regulatory reforms should be inextricably **linked to** potential areas and sources of growth
- Areas of potential medium and long term growth should be exactly those areas where regulatory reforms should be prioritized.
- Regulatory reforms are not only about the removal of general obstacles for doing business but equally very sector-specific obstacles which are most often the major barriers.
- This would require addressing failures in inadequate training and investment in human capital in these areas as well as designing technology-, sector- or area-specific investment promotion packages

So far, the policy focus has been on quadrants 1 and 2 i.e. on market enhancing governance reforms and on horizontal or generic innovation policy measures

Policy choices for industrial upgrading

	Structural reforms	Innovation policy measures
Horizontal (generic)	Market enhancing	<u>Horizontal (generic)</u>
	governance reforms (1)	innovation policy measures
	(Property Rights; Rule of	<u>(2)</u>
	Law and Effective Contract	(Generic innovation
	Enforcement; Minimizing	infrastructure; Innovation
	Rent Seeking and	vouchers; Cooperative R&D
	Corruption, and Transparent	programs; RTD tax
	and Accountable Provision of	measures)
	Public Goods)	
Vertical (sector/technology	Sector specific regulatory	Sector or technology specific
specific)	<u>regimes (sectoral</u>	innovation policy measures
	governance) (3)	<u>(4)</u>
	(Sector-specific privatisation	(Sector or technology
	rules; Sector-specific price	specific infrastructure;
	subsides; Sector-specific	Thematic R&D programs;
	regimes of licences; Sector-	Technology platforms
	specific local content	Technology or sector specific
	requirements; Sector-specific	vocational training programs)
	FDI promotion programs)	