



Service innovation in relation to a region's socio-economic challenges:
Four approaches for developing systemic policy mixes

Context

1. Rising attention for service innovation:

- Pure services do innovate (Gallouj & Djellal, 2010)
- Services as drivers of innovation (Muller & Zenker, 2001)
- Servitization (Howells, 2006; Vargo & Lusch, 2004)

Policy interest: service-friendly innovation policy

2. Attention for societal and region-specific issues

Policy interest: meeting 'societal challenges' (Rodriguez, 2013)

**How to develop service-sensitive innovation policy
in accordance with socio-economic goals?**

Service innovation policy

Different accounts of 'service innovation' (Coombs & Miles 2000)

Different types of (experimental) interventions (Den Hertog et al. 2010)

Existing literature focused on rationales (Rubalcaba 2006, 2010; Van Cruysen & Hollanders, 2008)

Scarce attention for *how* to formulate/align policy measures

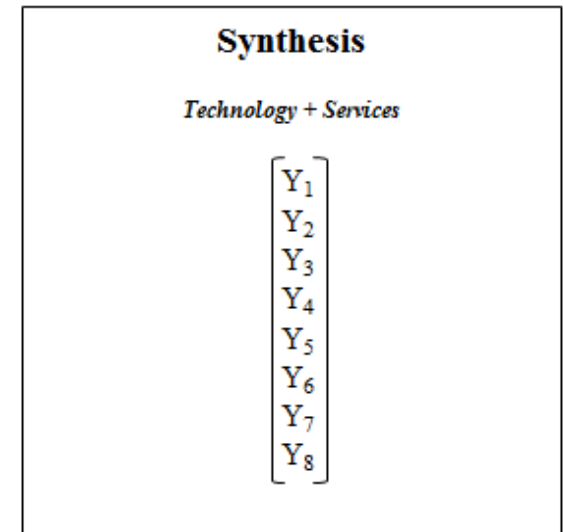
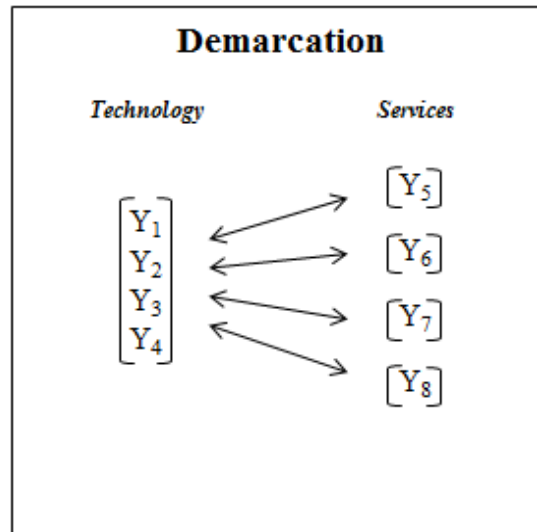
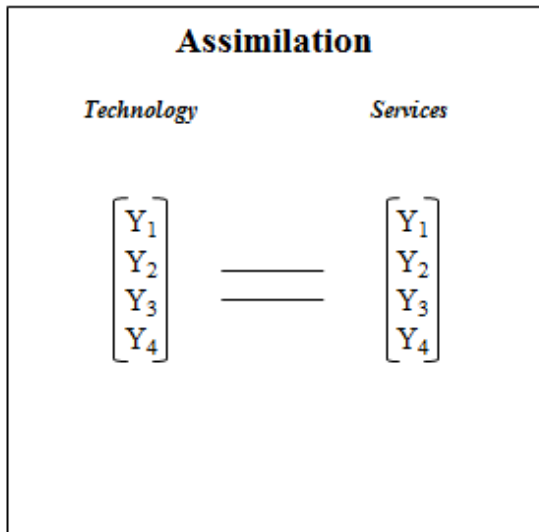
Lack of structured approach for service innovation policy formulation!

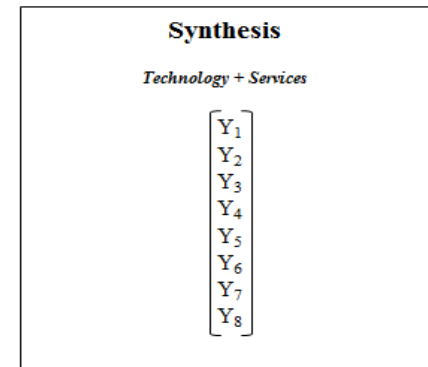
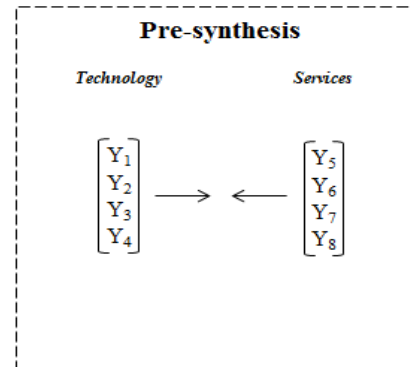
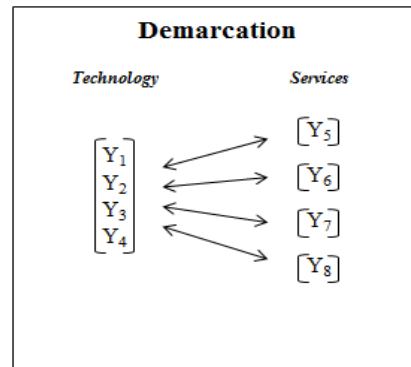
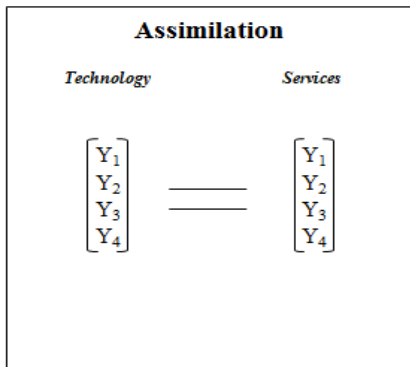
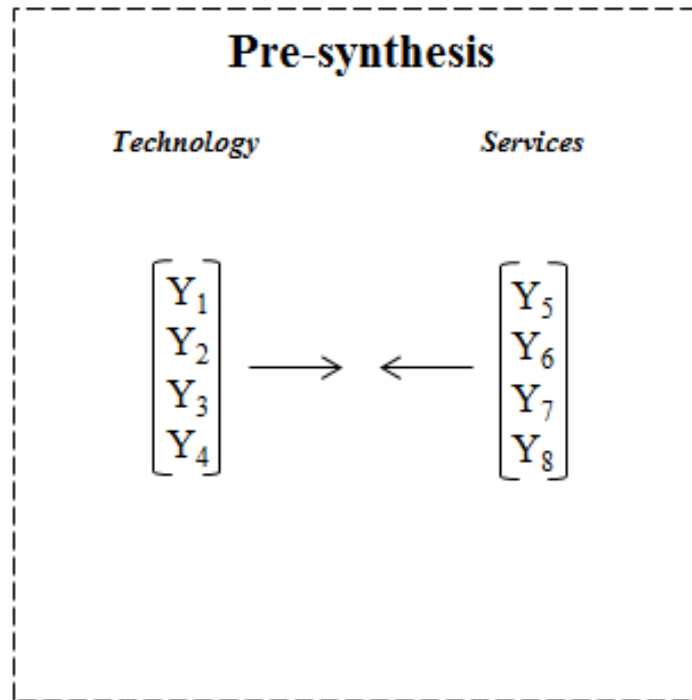
Designing policy mixes

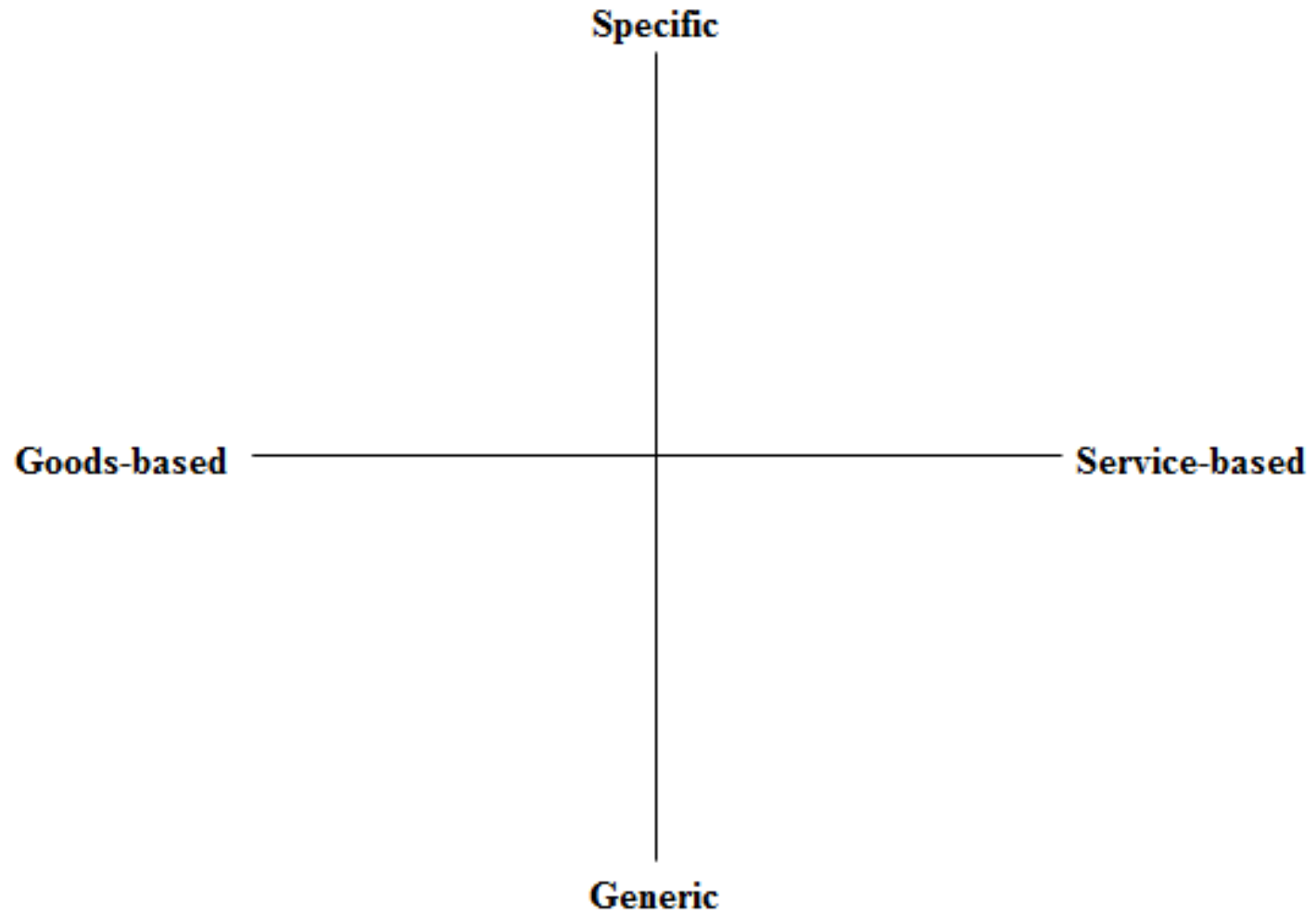
“The choice of innovation policy” (Borrás & Edquist, 2013)

- Innovation systems / holistic perspective (Flanagan et al., 2011)
 - Policy mixes
- Functional perspective (Hekkert et al., 2007)
 - Identifying weaknesses

Schools of thought on service innovation





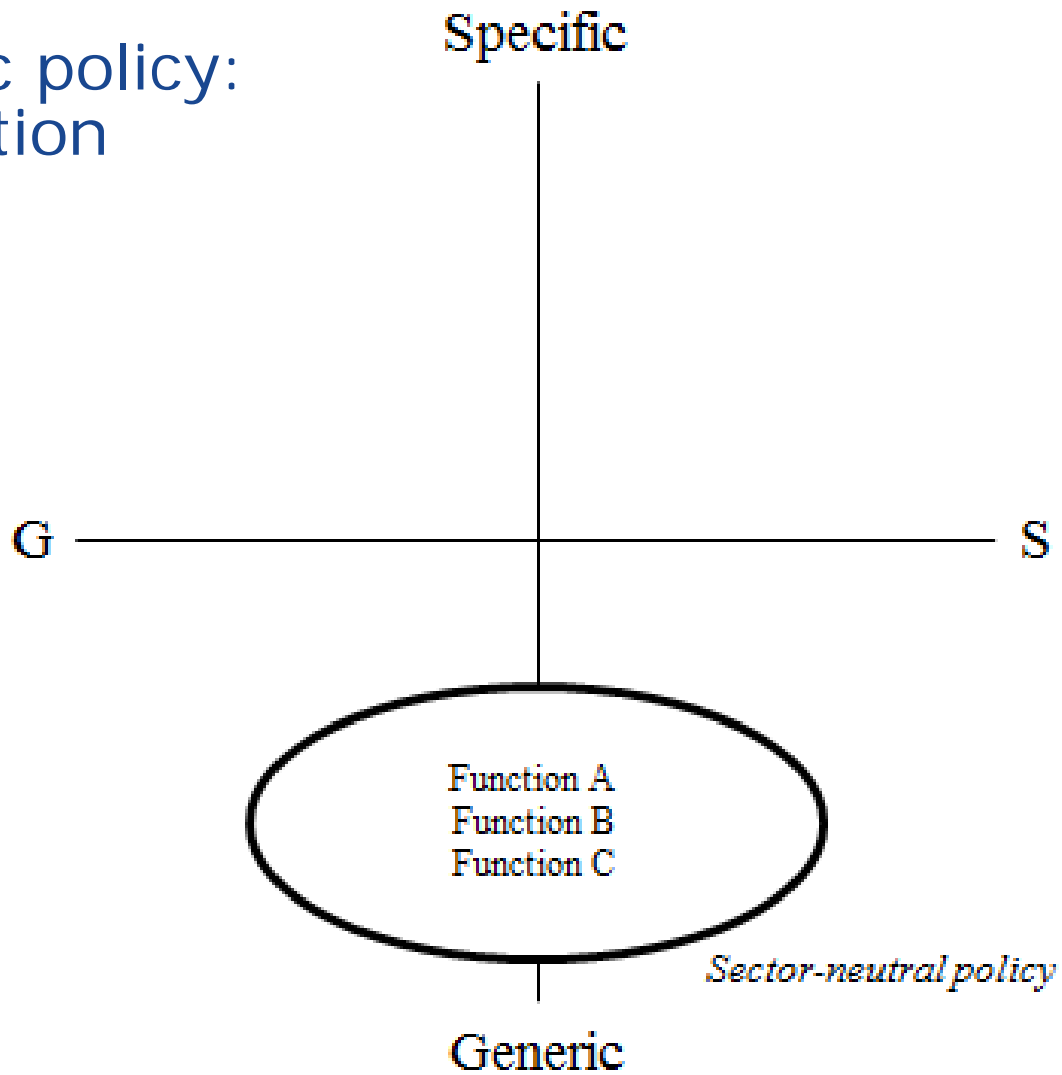




European
Commission

ESIC European Service Innovation Centre

Systemic policy: Assimilation

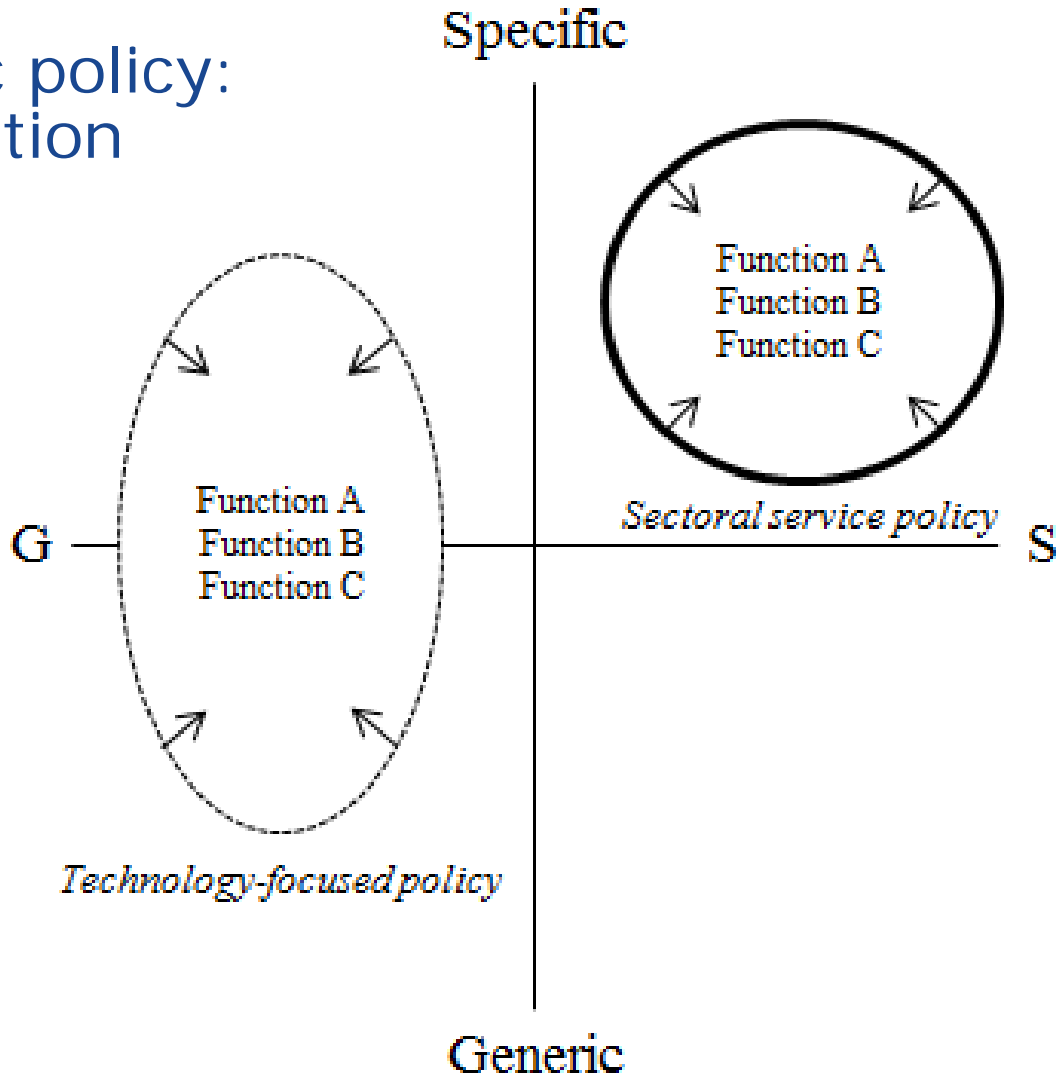




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Systemic policy: Demarcation

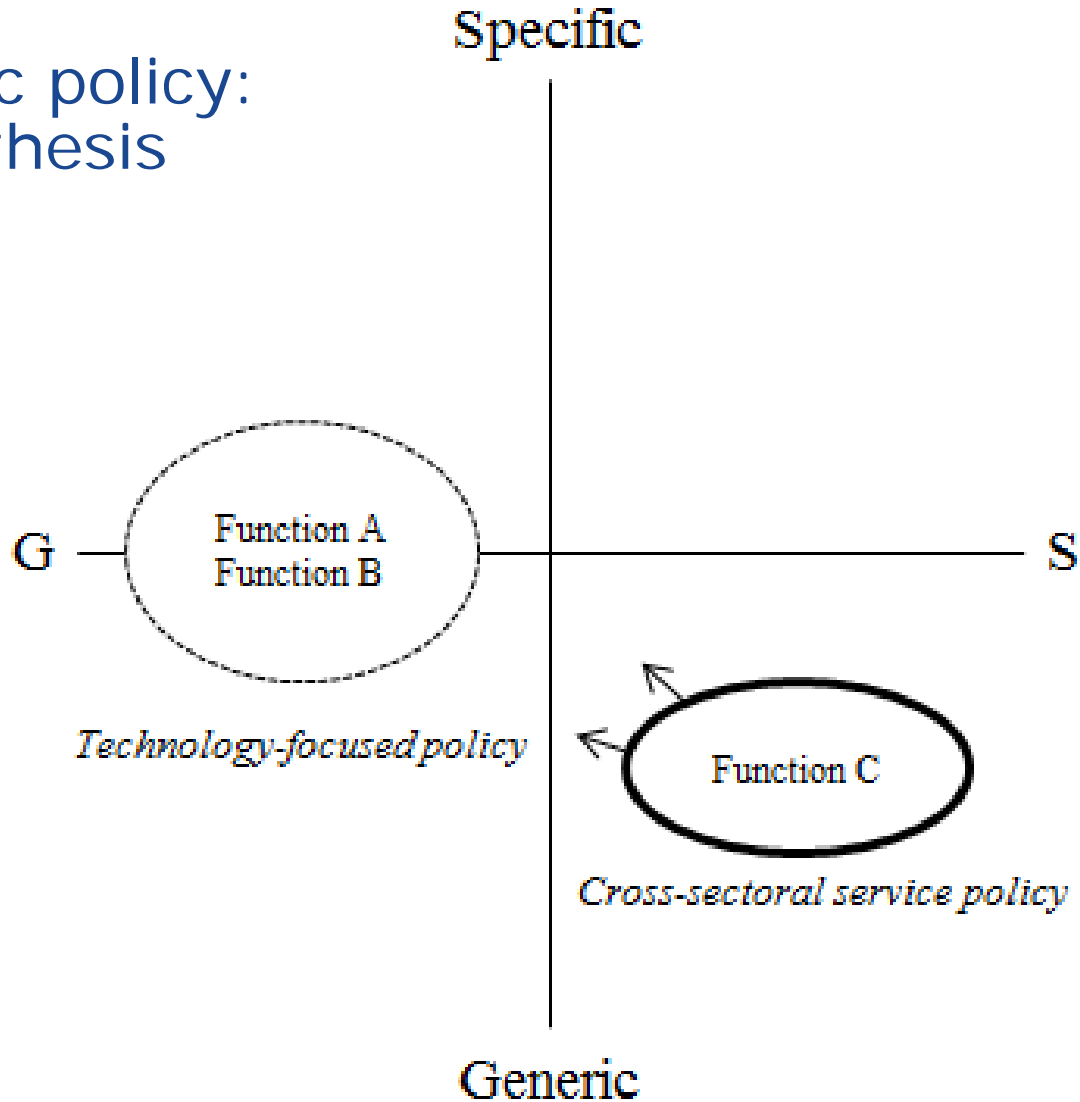




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Systemic policy: Pre-synthesis

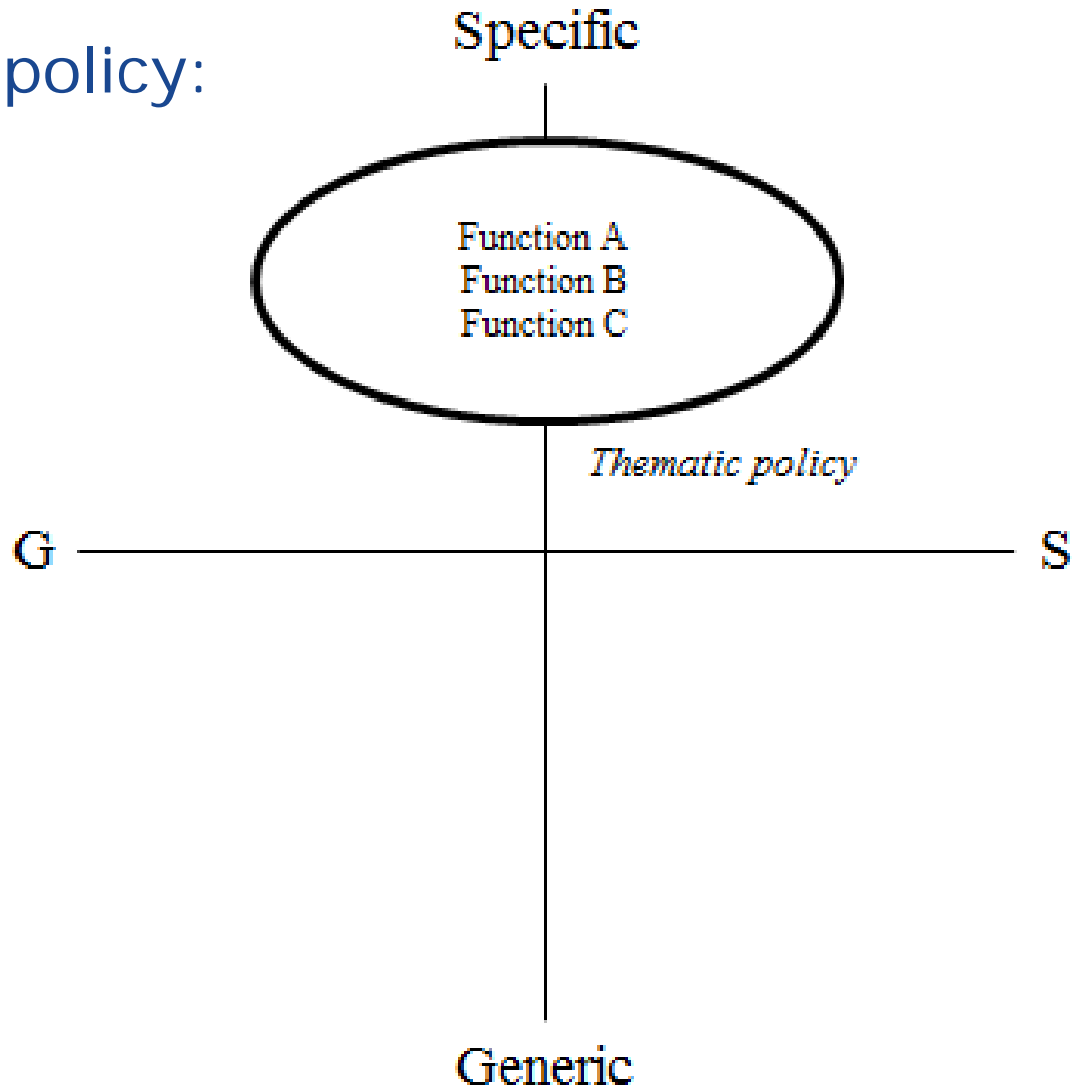




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Systemic policy: Synthesis

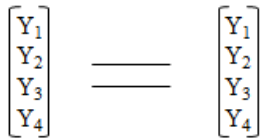




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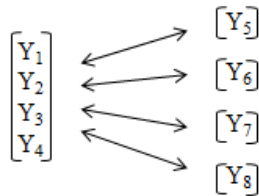
Assimilation

Technology Services



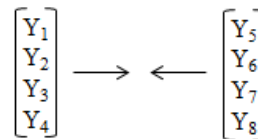
Demarcation

Technology Services



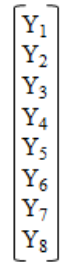
Pre-synthesis

Technology Services

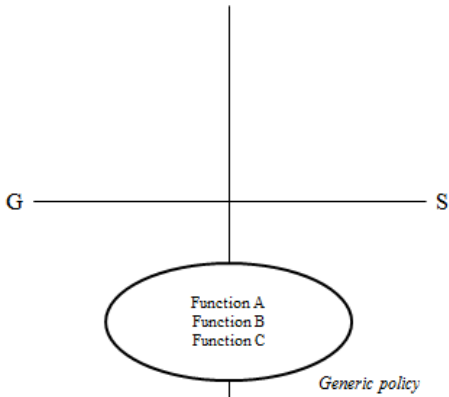


Synthesis

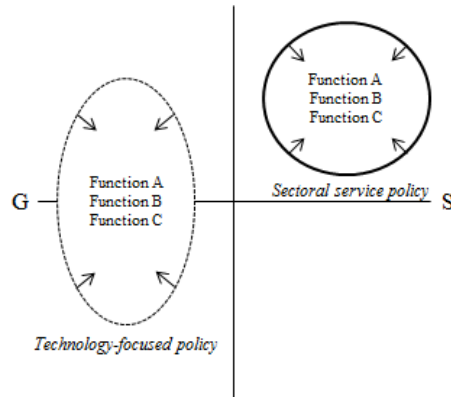
Technology + Services



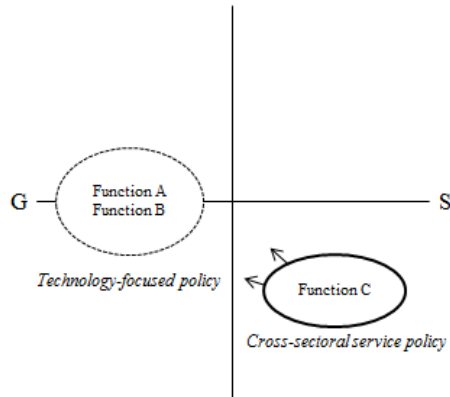
Specific



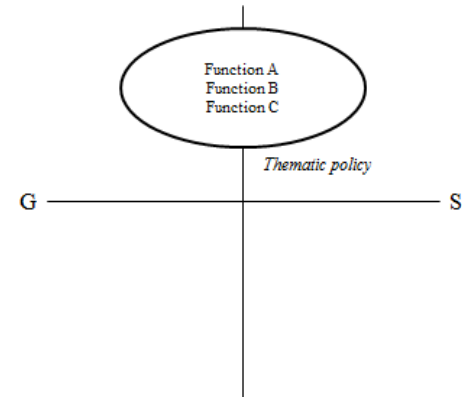
Specific



Specific



Specific



Comparative case study

Context:

- European Service Innovation Centre (ESIC)
- Regional assessment and advise

Method:

- Desk research
- Scoreboard
- Site visit: 10 interviews
- Peer review

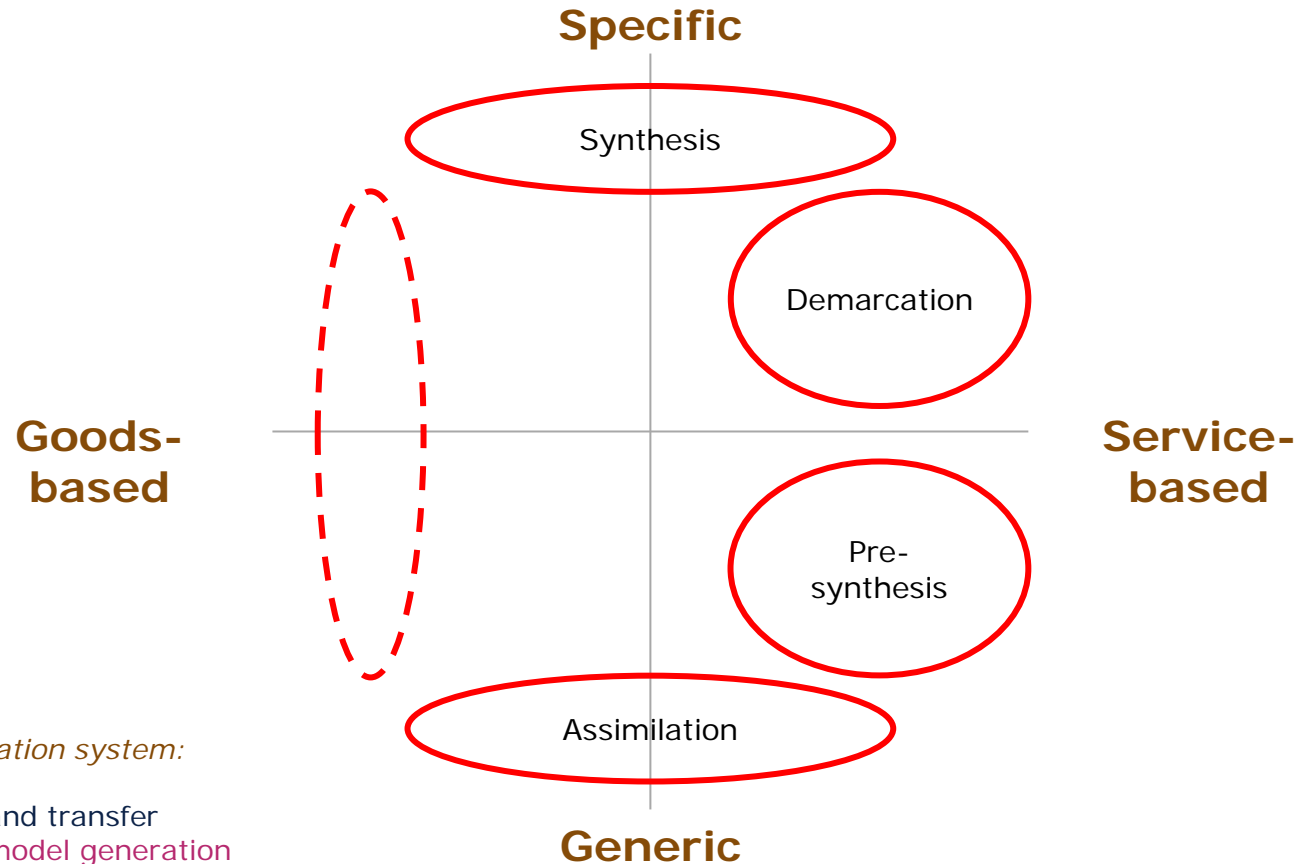
Upper Austria: background

The nations' most competitive and export-oriented region: "The industrial motor of Austria"

Policy issues:

- New business models, labour market
- Meeting grand challenges in new strategic program

Policy mix (service-inclusiveness)



Affected function of innovation system:

Entrepreneurial activities

Knowledge development and transfer

Innovation and business model generation

Financing innovation and growth

Collaboration and networking

Specific

Clusterland (networks)

Logistics network

Clusterland (clusters)

Tourism Initiative (innovation cooperation)
Tourism Initiative (innovation funding)

TMG Impulse / Technology Centers

Business start-up
(tourism & transport)

Energy contracting program UA
Green Energy and Environmental Technology
Energy Technology Programme UA
High Tech Incubator

Local supply program

Goods-based

Service-based

Innovation Network
UA Research Funding
CATT + TIM

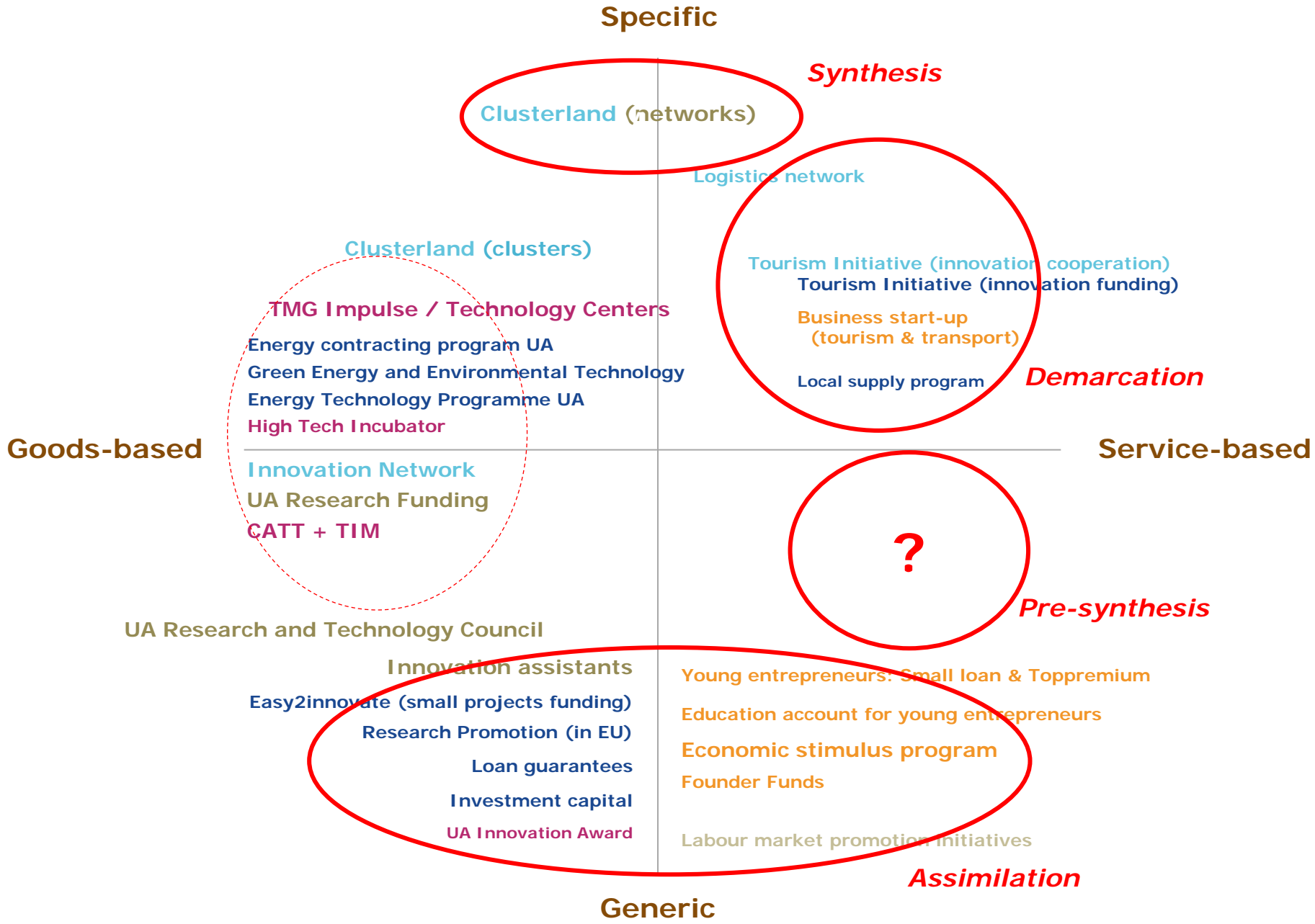
UA Research and Technology Council

Innovation assistants
Easy2innovate (small projects funding)
Research Promotion (in EU)
Loan guarantees
Investment capital
UA Innovation Award

Young entrepreneurs: Small loan & Toppremium
Education account for young entrepreneurs
Economic stimulus program
Founder Funds

Labour market promotion initiatives

Generic

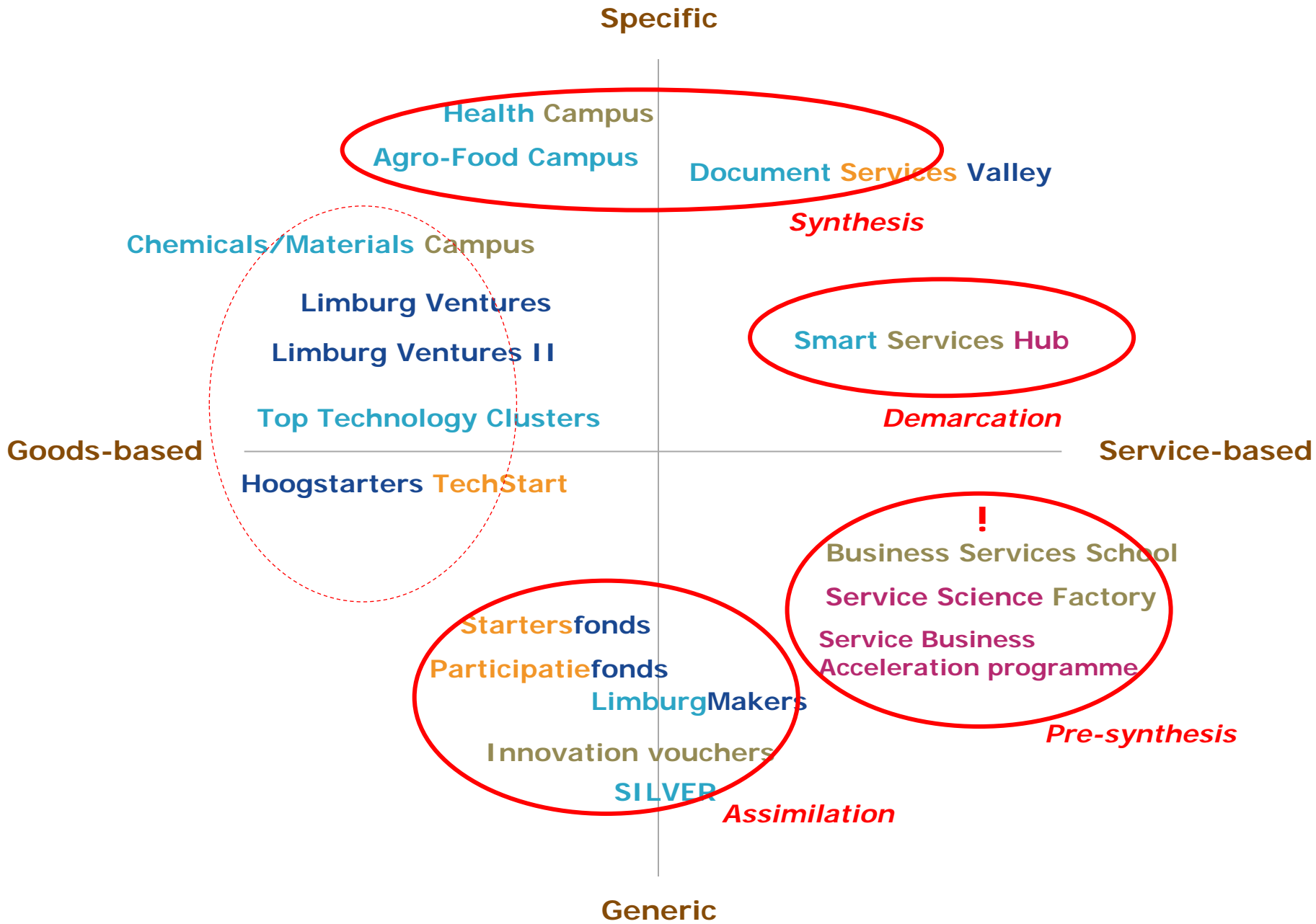


Limburg: background

Closure of mines → industrial orientation → services

Policy issues:

- Connecting service (innovation) initiatives
- Meeting societal challenges



Policy mix: Upper Austria

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Service innovation approach	Examples	System function				
		E	K	I	F	C
1. Assimilation Neutral measures that cover technological and service innovation on an equal basis	Innovation assistants		X			
	Research promotion				X	
	Loan guarantees				X	
	Investment capital				X	
	Innovation award			X		
	Education account for young entrepreneurs	X				
	Economic stimulus program	X				
Founder Funds	X					
Technology-focused	Research and technology council		X			
	Innovation Network					X
	High Tech Incubator	X		X		
	Energy Technology Programme				X	
	Green Energy & Environ. Technology Technology Centres			X	X	
2. Demarcation Sectoral (vertical) programmes for services	Tourism initiative 1				X	
	Business start-up (tourism & transport)	X				
	Local supply program				X	
3. Presynthesis						
4. Synthesis Thematic programs integrating opportunities from goods and services	Clusterland (networks)	X	X	X		X

Policy mix: Limburg

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Service innovation approach	Examples	System function				
		E	K	I	F	C
1. Assimilation Neutral measures that cover technological and service innovation on an equal basis	Innovation vouchers		X			
	Startersfonds	X			X	
	Participatiefonds SILVER	X			X	X
Technology-focused	Hoogstarters TechStart	X			X	
	Top Technology Clusters Limburg Ventures				X	X
	Chemicals / Materials Campus	X				X
2. Demarcation: Sectoral (vertical) programmes for services	Smart Services Hub	X	X	X		X
3. Pre-synthesis Cross-sectoral measures focused on the link between services and manufacturing	LimburgMakers (Servitization part)	X		X		
	Service Science Factory		X	X		
	Service Business Acceleration Programme	X		X		
	Business Services School		X	X		
4. Synthesis Thematic programs integrating opportunities from goods and services	Document Services Valley	X		X	X	X
	Health Campus	X	X			X
	Agro-Food Campus					X

Comparison and mutual policy learning

Upper Austria:

- Innovation system lacks business model renewal. Policy support could take form of pre-synthesis; see measures in Limburg.
- Integrating service innovation in measures for societal challenges. E.g. Health-campus or Agro-food campus.
- Reducing complexity of policy mix

Limburg:

- Further on its way towards service-inclusive policy mix.
- Suggestion for assimilation: innovation awards (= meets lack of business model generation in generic innovation policy)
- Upper Austria is example for clusters that address variety of system functions and that are linked to each other

Both:

- From demarcation to (pre-) synthesis: both regions have vertical measures they want to develop further. Logistics (UA) and Smart Services (Limburg)

Conclusion

1. Set policy goals. Which problem: which kind of knowledge or activity is needed?
2. Understanding of opportunities of service innovation (incl. pre-synthesis)
3. Identifying appropriate modification of policy mix (by engaging in mutual policy learning)
 - Approaches as alternatives

Further research

Extend research on integrative approaches

- Cluster policy: Demarcation vs. (pre-)synthesis
 - Infusing: Chemelot (L), ClusterLand (UA)
 - Thematic: Health Campus (L), ClusterLand Networks (UA)
- Smart specialization:
 - “integrative and knowledge-based perspective on transforming economic structures”
 - “national or regional priorities and challenges, exploitation and further development of local strengths, and support for diverse forms of innovation”
 - Identifying and contextualizing synthesis measures