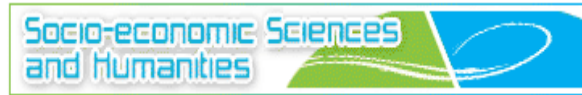


Main outcomes of ServPPIN and the contribution of private and public services to growth and welfare

ServPPIN Policy Workshop, 26th January 2011

Prof. Luis Rubalcaba, University of Alcalá, Madrid (coordinator)

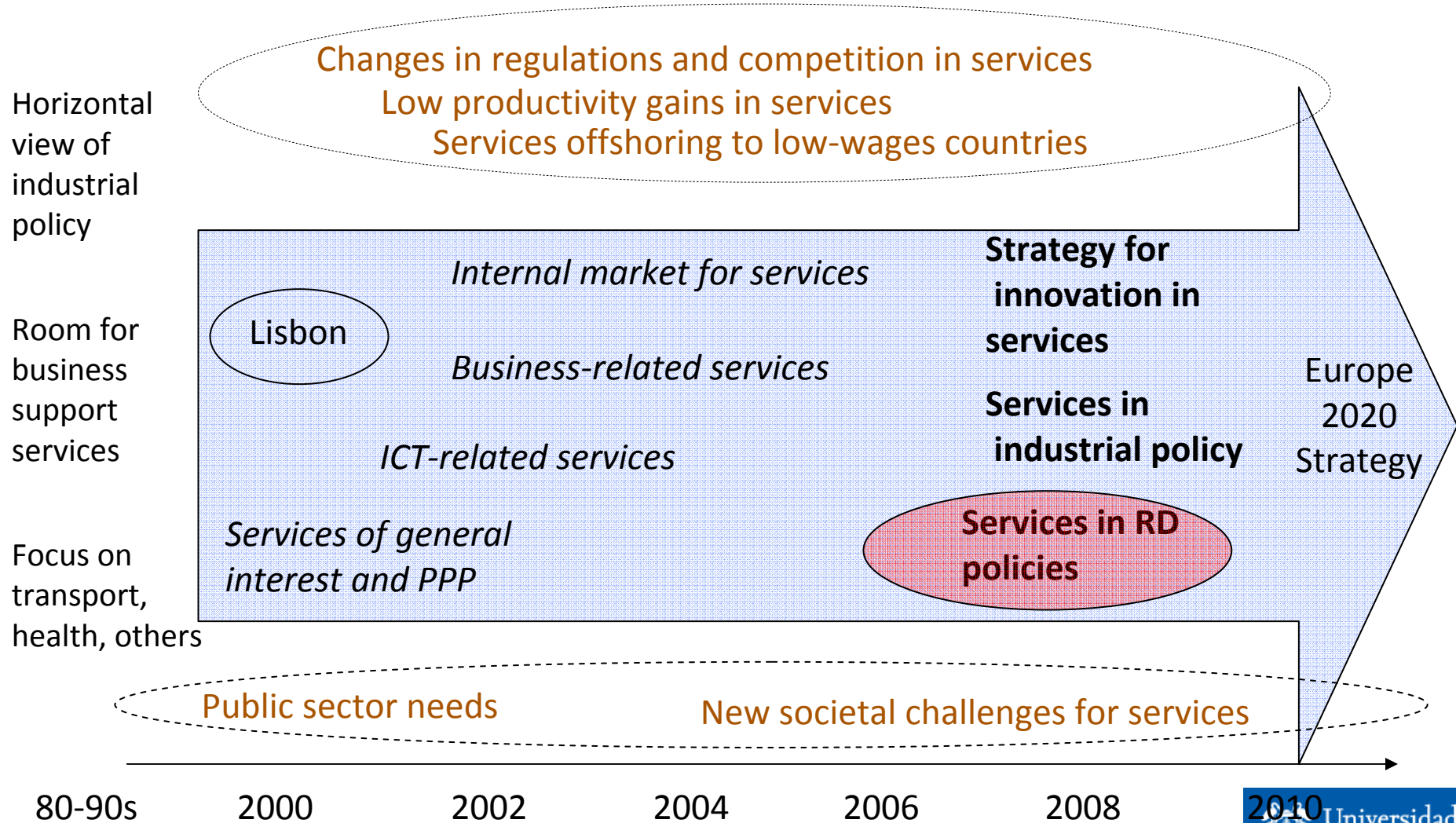




Contents of the presentation

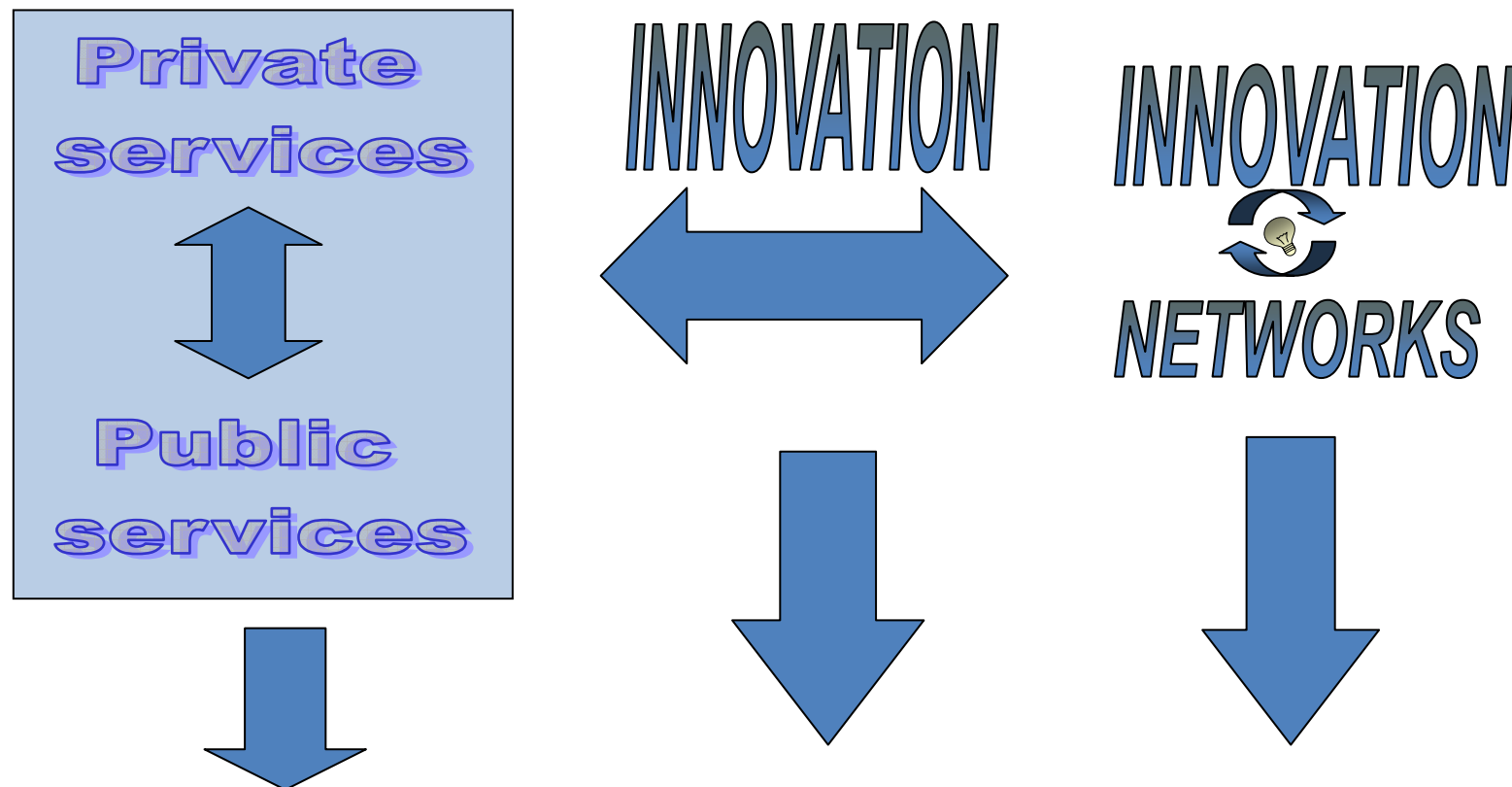
- Links with the EU policy context
- The ServPPIN project
- Main outcomes:
 1. Macro level
 2. Meso level
 3. Micro level
 4. Policy level
- Concluding remarks
- ServPPIN recent publications

Links with the EU policy context

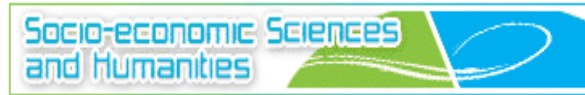


The ServPPIN project

What is about



Impacts on EU growth and welfare



The ServPPIN project

Full title:

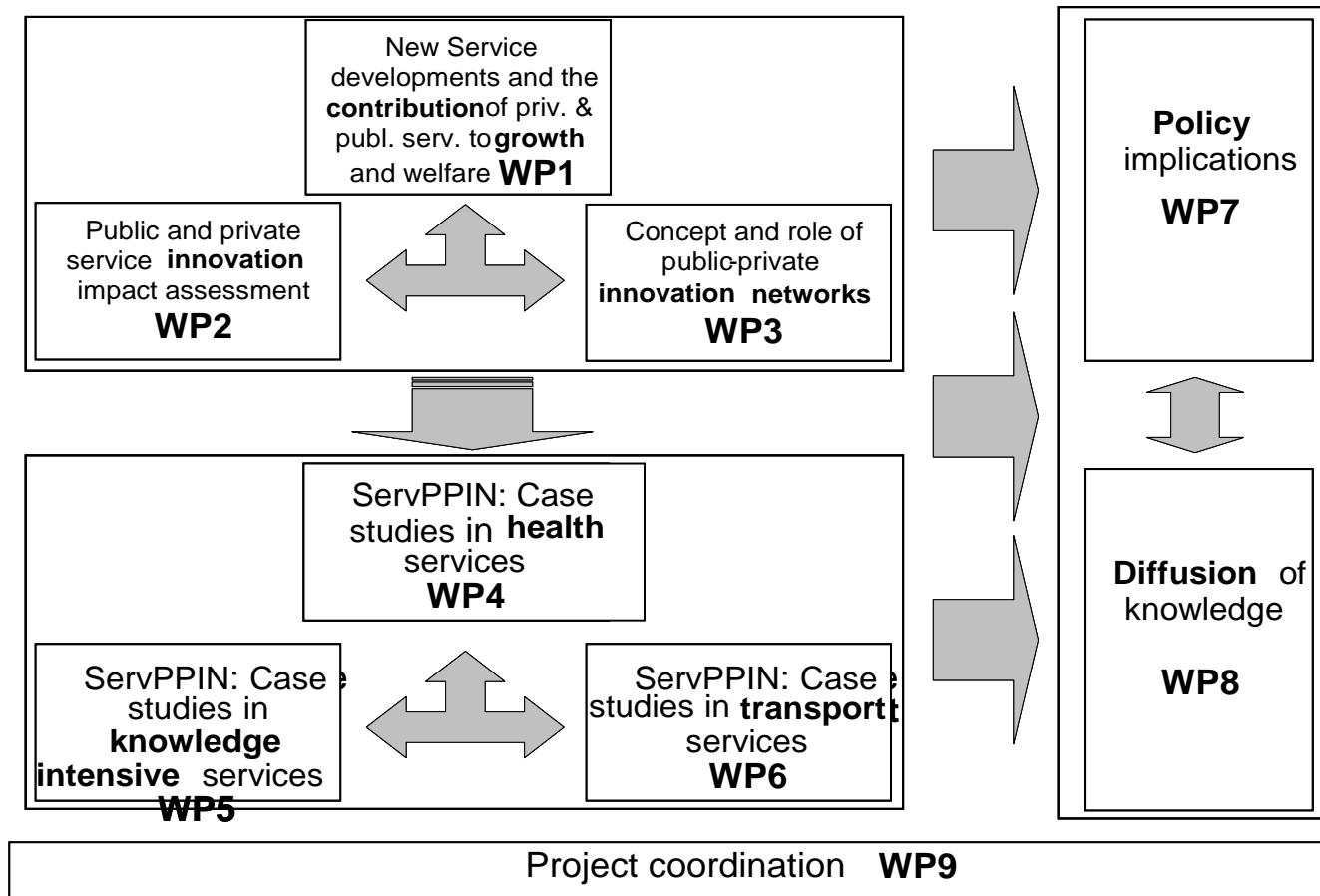
The Contribution of Public and Private Services to European Growth and Welfare, and the Role of Public-Private Innovation Networks

Type of funding scheme: **Collaborative projects; Small focused research project;**

Work programme topics addressed: **Topic SSH-2007-1.2.2. The implications of developments in the service economy for the European economy**

The ServPPIN project

What is about



The ServPPIN project

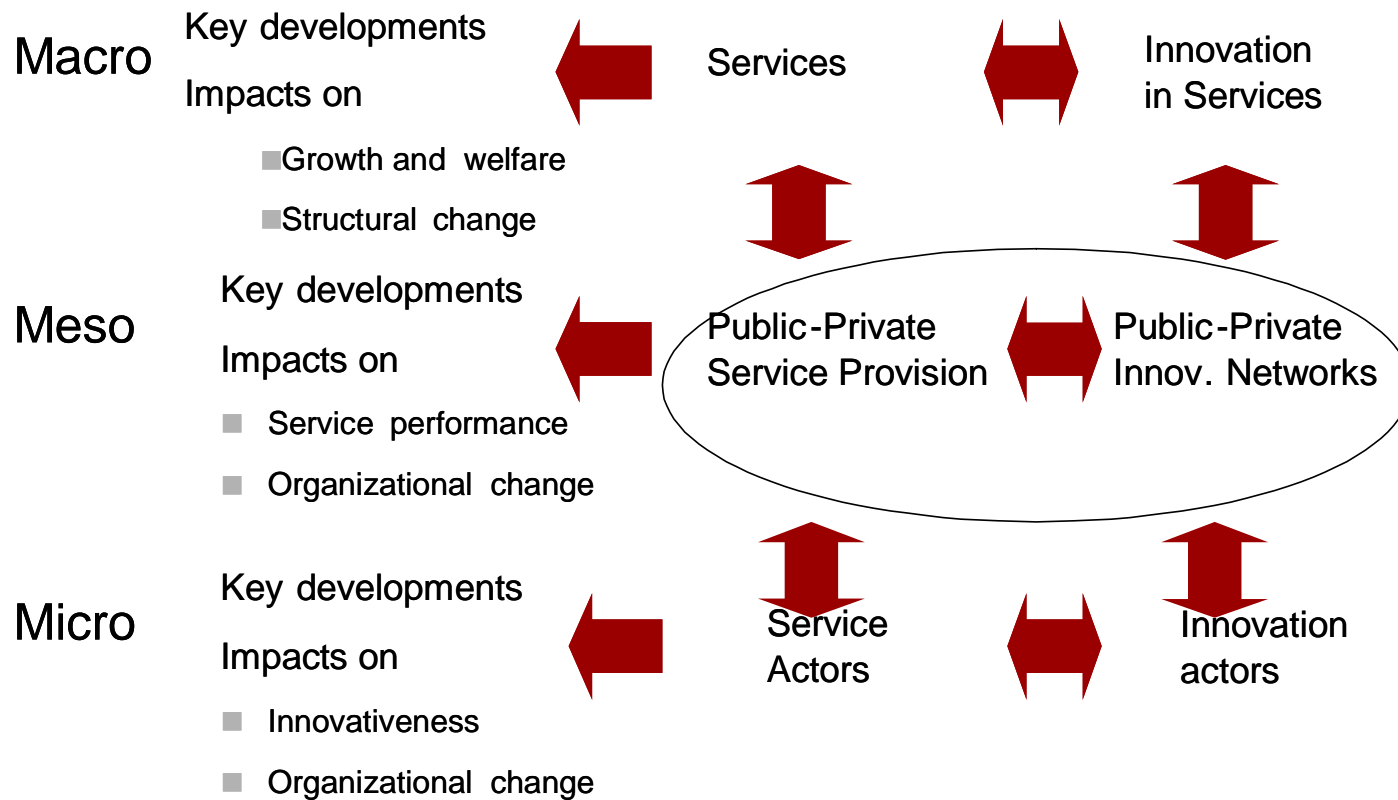
The consortium

Beneficiary Number	Beneficiary name	Beneficiary short name	Country	Date enter project	Date exit project
1(coordinator)	Universidad de Alcalá	UAH	Spain	01	36
2	Austrian Institute of Technology	ARC	Austria	01	36
3	University of Roskilde	RUC	Denmark	01	36
4	University of Lille	USTL LILLE1	France	01	36
5	University of Bremen	Uni-HB/Uni-HO	Germany	01	16
6	Utrecht University	UU	Netherlands	01	36
7	Lillehammer University College	LUC	Norway	01	36
8	University of Ljubljana	UL	Slovenia	01	36
9	Universidad Complutense Madrid	UCM	Spain	01	36
10	Manchester Metropolitan University	MMU	United Kingdom	01	36
11	Kopint-Tárki	KOP	Hungary	01	36
12	University of Hohenheim	Uni-HO	Germany	17	36
13	University of Nottingham	UON	United Kingdom	19	36



The ServPPIN project

What is about



Main outcomes

1. Macro level

Stylized facts on public, private and mixed services

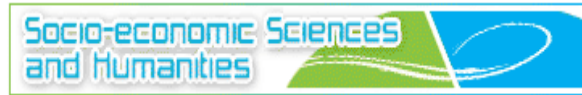
- The dominant trend is towards the increasing participation of private services in total employment

Similarities and dissimilarities across the enlarged EU

- There is not a single model of service economies in Europe.
- Service economies models are closely correlated with social and institutional models.
- Dynamic role of knowledge and innovation.

New developments and challenges

- Sources of structural change,
- Patterns of transition economies,
- Environmental issues,
- Social considerations
- Internationalization of service activities



Main outcomes

1. Macro level

Explanatory factors of public, private and mixed services growth

➤ Different roles played by factors such as: the state, social and demographical changes, labour market institutions and previous developments in the evolution of public, private and mixed services.

Assessment of performance and efficiency

➤ Private and public services have made significant contributions to aggregated employment and value added growth in the EU in recent years.

➤ Their impacts should also be assessed on the basis of a multidimensional approach which takes into account outcomes and quality aspects.

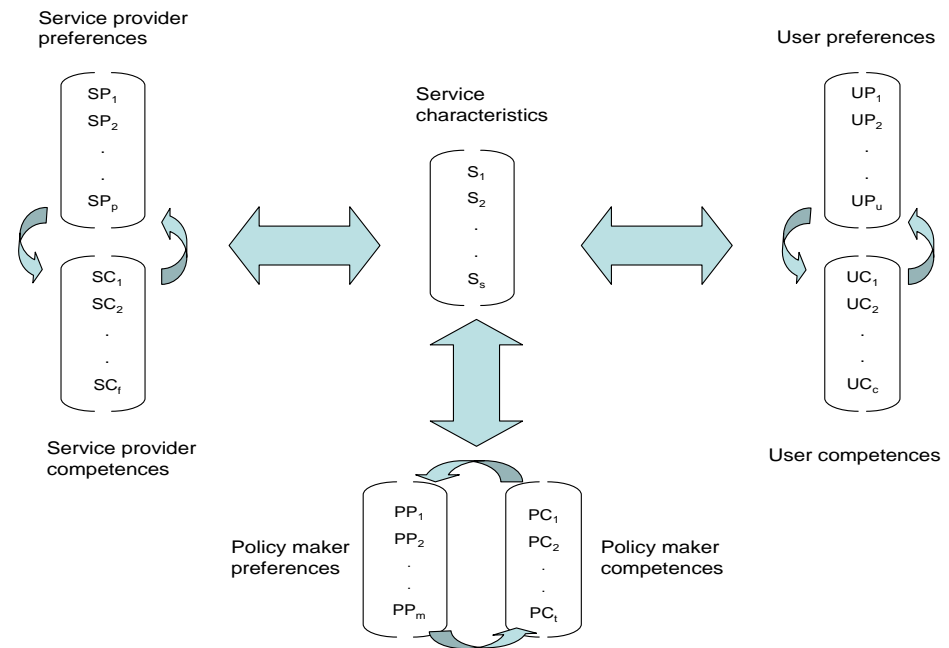
The performance gap and the innovation gap

Main outcomes

2. Meso level

Theory developments under multi-institutional frameworks

- Innovation network life cycle
- Evolutionary inefficiencies



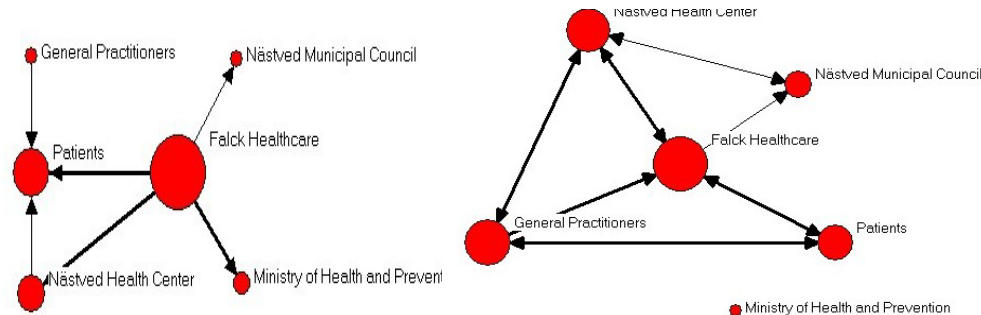
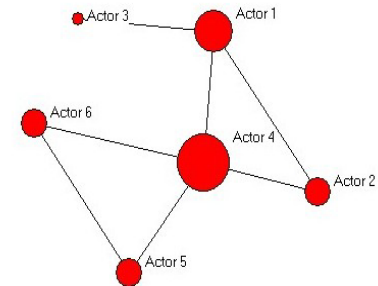
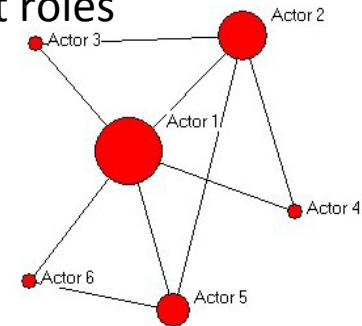
Main outcomes

2. Meso level

Social network analysis

➤ Acknowledge for the heterogeneity of actors and their different roles

	Formal	Informal	Frequency	Importance	Content
Degree Centrality					
Closeness Centrality					
Betweenness Centrality					
Density					
Distance					
Degree Distribution					



2. Meso level

Cooperation between public and private sectors – cross sector perspective

➤ Less than 15% of innovative private firms cooperate with public bodies...however, innovative performance may increase when cooperation is produced

Share of enterprises engaging in cooperation arrangements for innovation with public entities, ranked by cooperation with universities and other higher education institutions

Sector NACE	NACE Rev. 1.1 Codes	University or other higher education institutions	Public research institutes
Research and development	K(73)	62.87	52.82
Manufacture of chemicals	DG(24)	26.03	17.07
Manufacture of basic metals	DJ(27)	23.98	16.77
Manufacture of other transport equipment	DM(35)	23.89	18.92
Manufacture of communication equipment	DL(32)	23.04	13.34
Manufacture of medical instruments	DL(33)	21.18	12.56
Manufacture of office machinery	DL(30)	17.81	12.17
Manufacture of electrical machinery	DL(31)	16.34	9.16
Computer and related activities	K(72)	15.23	11.21
Manufacture of machinery and equipment	DK(29)	15.15	12.09
Post and telecommunications	I(64)	14.90	9.95
Manufacture of motor vehicles	DM(34)	14.89	8.92
Other business activities	K(74)	14.71	11.02
Manufacture of pulp and paper	DE(21)	14.39	12.83
Water transport	I(61)	11.40	4.76
Manufacture of textiles	DB(17)	11.39	7.26
Manufacture of food products and beverages	DA(15)	9.79	7.90
Manufacture of fabricated metal products	DJ(28)	9.23	6.43
Supporting and auxiliary transport activities	I(63)	8.52	7.39
Manufacture of wearing apparel	DB(18)	8.49	7.95
Financial intermediation	J(65)	7.85	4.04
Insurance and pension funding	J(66)	7.72	6.19
Wholesale trade and commission trade	G(51)	7.66	5.47
Manufacture of wood	DD(20)	7.54	5.04
Activities auxiliary to financial intermediation	J(67)	5.76	5.06
Air transport	I(62)	5.74	3.35
Land transport; transport via pipelines	I(60)	5.73	5.96
Retail trade	G(52)	4.27	3.16
Hotels and restaurants	H(55)	2.18	2.67
Sector average		14.36	10.38

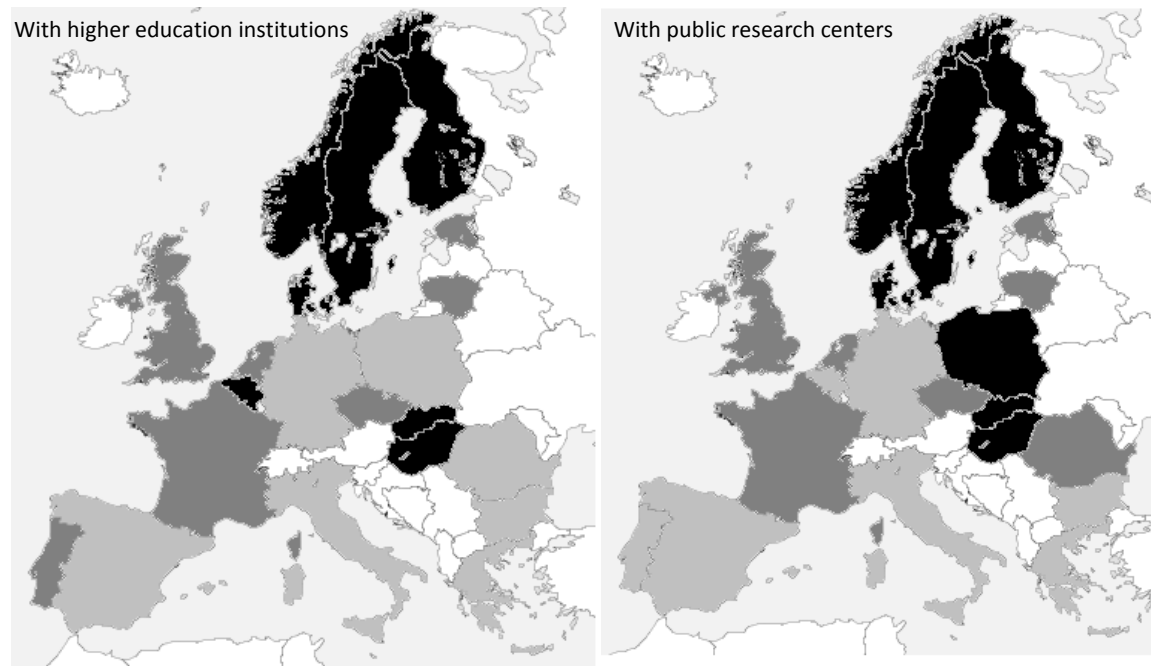
Main outcomes

2. Meso level

Cooperation between public and private sectors – cross country perspective

- More cooperation is given in very innovative systems (Nordic countries) and countries with high presence of public institutions (CEEC)

Enterprise engaging in cooperation arrangements with public entities, country averages



Source: CIS4 database, Eurostat

Main outcomes

2. Micro level

Case study approach

- Case studies provide a micro-perspective on the emergence of innovation networks over their life cycle and can give insight in drivers, actor configurations and critical events of their evolution over time.

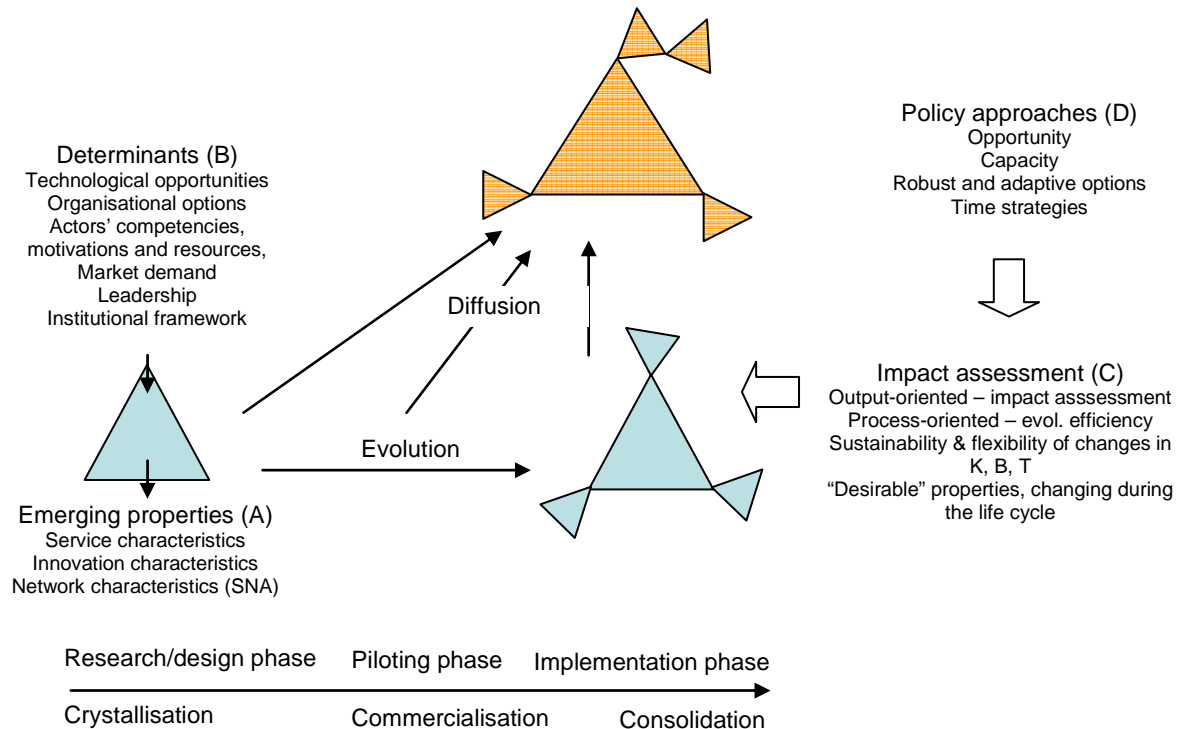
- In 2008/2009, the project teams studied around **40 cases** in the following services sectors:
 - transport;
 - health services and
 - in knowledge-intensive services and tourism.

- The case studies were carried on in seven different countries.

Main outcomes

2. Micro level

Blocs of research questions for ServPPIN case studies (WPs 4, 5, and 6)



Source: Weber, Windrum, and Sundbo (2008)

Main outcomes

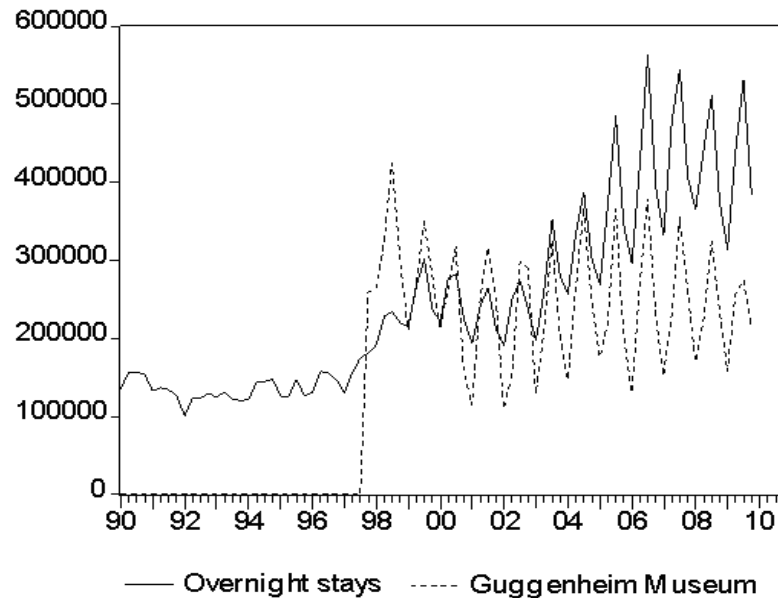
2. Micro level

Social network analysis applied to case studies in health

Innovation	Country	Category	Third Sector	Central Role
Diabetes Education	UK	Intangible service	Yes	Yes
Capacity Planning	UK	Organizational /Process	No	
Health school for illness prevention	Denmark	Intangible service	No	
Public-private network for elderly care innovations	Denmark	Network	Yes	Yes
IT risk adjustment software tool	Spain	Technology mediated serv.	No	
Social network site for health professionals	Spain	Network	Yes	Yes
Handheld defibrillators	Austria	Network & Technology mediated service	Yes	Yes
Virtual reality rehabilitation therapies	France	Technology mediated serv.	No	
Supersonic imaging	France	Technology mediated serv.	No	
Public-private partnership for research	France	Organizational /Process	No	

Some impacts from case studies

Number of overnight stays in the province of Biscay, 1990-2010



	<i>Public-private innovation</i>	<i>Impact</i>
Transport	Electronic displays at bus & tram stops and train stations that show time of arrival of next bus, tram or train. Based on a sophisticated real-time fleet management information system using GPS, GSM, Wi-Fi and WLAN Norway	SIS has contributed considerably to the goal of a 20% reduction of travel time for passengers.
	Integration of traffic data from all modes in an online traffic information system. Dynamical mapping of the traffic situation; route planning Austria	New service widely accepted: 15,000 calculated routes in the first month
KIS	Training specialisation in strategic and innovation management for local tourist board managers Denmark	1/3 of Danish local tourism managers have been trained
	New entrepreneurship support centre, small business' network, career centre, high-tech innovation promotion centre Slovenia	22 start-up assisted and expanded their consultancy services for SMEs with 5 partner support firms
	Training specialisation in industrial technologies to enforce the acquisition of skills in high technology processes and, thus, to foster competitiveness of industrial sectors in the region of Valencia Spain	Close to 100 technicians stood in 91 research centres in 20 countries, 37 innovative projects have been developed by private agents and 13 research fields have been developed and implemented in traditional industries
Health	New training for physicians for diabetes treatment Austria	Patients with HbA1c levels below 7% increased from 43% to 49% (benefit in terms of a reduction of diabetes related complications). Patients with HbA1c levels higher than 9% (poorly controlled) decreased from 17% to 9%.
	Introducing automated external defibrillators AED Austria	1865 devices were installed. 62 AED deployments by non-medical personnel were recorded in 2 years, 15 patients survived in good neurological condition; 2 suffered from severe neurological deficit and 45 people died.
	Introduction of Capacity Planning processes to monitor resource use and ensure that practitioner priorities are reflected in health delivery systems UK	Savings of €2.4 achieved in first round application of Capacity Planning system – allowed re-allocation of resources to areas of priority need
	Adapting information technology in the provision of health care and in the allocation of resources Spain	Although there are other factors influencing in pharmaceutical expenditures, since more regulation and incentives have been applied in prescription, pharmaceutical expenditures have decreased in Spain from a 23.2% of the total health expenditures in 2003 to a 20.5% in 2008

Main outcomes

2. Micro level

Cooperation, interaction and networking in innovation between public and private agents

- Allow to exploit potential complementarities and synergies: Credibility, dissemination, speeding up the process of agenda setting and decision making, more comprehensive view of the problems, legitimacy, resources, efficiency, flexibility, public research more efficient, learning capacity, knowledge transfer
- Beyond PPP, diverse organisational arrangements exist

Drivers of ServPPINs

- Definition of joint business case. Entrepreneurial fit. Flexibility. Benchmarking. Third sector role. Integration in local community. Individual networks and systemic networks

Barriers to ServPPINs

- Rigidity of public administrations. Mistrust and expectations mismatch. Different interests and incentive systems. Free riders. Asymmetric information.

Main outcomes

3. Micro level

Services and organizational innovation

- Services are major originators of organizational improvements
- Organizational innovation increases progressively with the size of enterprises
- Even if small firms are less engaged in organizational innovation, in relative terms, their role and impact can be higher in terms of driving innovation outputs (econometric modelling)

Organisational innovation arranged by size and sector

	Small	Medium	Large
Manufacturing	50%	61%	72%
Services	58%	66%	75%
Transport and communication	57%	59%	77%
Financial intermediation	65%	78%	83%
Technical business services	66%	76%	81%

Source: CIS4, Eurostat.

Main outcomes

4. Policy level

Four broad objectives of possible **policy intervention** to overcome market and systemic failures and increase the contribution of ServPPINs to growth and welfare:

- **Strengthening service-specific innovation** and innovation capabilities of firms, users and other agents involved in innovation
- **Facilitating co-operation** and networks involving service and social innovation
- **Empowering the public sector** and the **third sector** for co-operation: role of civil society
- **Reinforcing social innovation**

Main outcomes

4. Policy level (policy areas)

The promotion of ServPPINs may be based on the enhancement and application of a **full range of policies such as:**

➤ **R&D policies:**

Joint participation of public & private partners

Promotion of engagement in R&D activities vs. diffusion of knowledge

Projects for further research on services, public-private interactions, innovation networks and social innovation

➤ **Innovation policies**

Support to public-private innovative networks beyond PPP

Support to service innovation, clusters and innovative industrial policies

➤ **Public procurement**

Promotion of innovation and quality

Promotion of networking between public and private

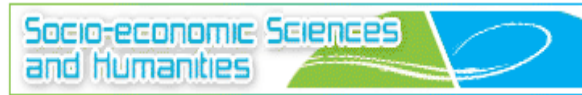
➤ **Standards** in services as instruments for public-private cooperation

➤ **Regional policies** for innovation

➤ Impacts on **other** policies:

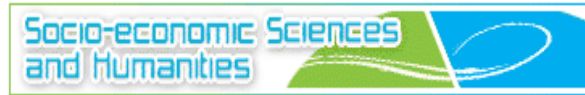
Horizontal: employment & skills, internal market, competition

Vertical: health, transport, tourism, etc.



Concluding remarks

- The different service economies models are related to social and institutional models in Europe.
- Organization innovation in services is particularly important once this is used as complement for product and process innovation and opens a door to social innovation.
- ServPPINs are a new phenomenon that differs to previous trends, such as the privatisation and outsourcing of public service provision, and contractual public-private partnerships (PPPs).
- ServPPINs are collaborative alliances between public and private sector organisations; alliances which bring together and develop complementarities and synergies between the different knowledge, competences, and services that each partner specialises in.



Concluding remarks

- 'Third Sector' organisations (charities, non-government organisations NGOs, not-for-profit businesses) can be key players in ServPPINs. Room for social innovation.
- Public-private networks provide a huge opportunity to improve innovation in services, both economic and social innovation: need to go beyond the traditional funding or tax-deduction schemes.

Recent ServPPIN publications

- Burger, A. and Stare, M. (2010), 'Public and Private Services Transformation in the CEECs', Service Industries Journal, Vol. 30, No. 3/4.
- Djellal F., Gallouj F. (2010) 'Services, innovation and performance: general presentation', Journal of Innovation Economics, N°5.
- Djellal F., Gallouj F. (2010), 'Beyond productivity strategies in services', Journal of Innovation Economics, N°5.
- Djellal F., Gallouj F. (2010), 'Innovation gap, performance gap and policy gap in the service economies', in: Gallouj and Djellal (eds), The Handbook of Innovation and Services, Edward Elgar.
- Djellal F., Gallouj F. (2010), 'Innovation in services and sustainable development', in: Kieliszewski, Maglio and Spohrer (eds), The Handbook of Service Science, Springer.
- Frenken, Ponds, Oort (2010). The citation impact of research collaboration in science-based industries : a spatial-institutional analysis. Papers in Regional Science, 89(2), 351-371.
- Fuglsang, L. (2010), 'Bricolage and invisible innovation in public service innovation', Journal of Innovation Economics 2010, 5:67-87.
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- Gadrey J. (2010), 'The environmental crisis ant the economics of services: the need for revolution', in: Gallouj and Djellal (eds), The Handbook of Innovation and Services, Edward Elgar.

Recent ServPPIN publications

- Gallouj F. (2010), 'Services innovation: assimilation, differentiation, inversion and integration', chapter 75, in: Bidgoli H. (ed), The Handbook of Technology Management, John Wiley and Sons.
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- García-Goñi, M., and Windrum, P. (2009), 'New approaches to health care innovation: information for chronic patients', in: Font, J-C.; Courbage, C.; McGuire, A. (ed) The Economics of New Health Technologies: Incentives, Organisation and Financing, pp. 159-192, Oxford: Oxford University Press.
- Labarthe P., 2010. Services immatériels et verrouillage technologique. Le cas du conseil technique aux agriculteurs, Economies et Sociétés, Série Economie et Gestion des Services, n°11, 2/2010, pp. 173-196.
- Maroto, A. (2010), "Productivity in European private and public services: a growth accounting exercise", Journal of Service Science, Vol 2, N°1, June.
- Maroto, A. (2010), "Productivity in the service sector: Conventional and current explanations", Service Industries Journal, forthcoming.
- Merlin-Brogniart C., Moursli-Provost Ac., (2010), 'Les dynamiques de l'innovation au sein des maisons de repos: le cas d'un établissement associatif', Économies et Sociétés (série EGS), 44(2):197-230.
- Merlin-Brogniart C., Provost-Moursli A-C., (2010), 'Les trajectoires d'innovation dans le secteur des maisons de repos'. In Transformations et innovations économiques et sociales en Europe : quelles sorties de crise ? Regards interdisciplinaires, Ed. by Degrave, F., Desmette, D., Mangez, É., Nyssens, M., Reman, P., XXXes journées de l'Association d'Économie Sociale, Presses universitaires de Louvain, Vol. 2:149-168.



Recent ServPPIN publications

- Ponds, Oort, Frenken, K. (2010). Innovation, spillovers and university-industry collaboration : an extended knowledge production function approach. *Journal of Economic Geography*, 10(2), 231-255.
- Rubalcaba, L., Gallego, J. and Gago, D. (2010), 'On the differences between goods and services innovation', *Journal of Innovation Economics*, vol. n° 5, issue 1, pages 17-40.
- Stare, M., Jaklic, A. and Burger, A. (2010), *Catching-up and determinants of services growth in new member states*, Electronic book series *Analyze CMO / CIR Analyses*, Publisher: Faculty of Social Sciences, Založba FDV.
- Windrum, P., Ciarli, T., Birchenhall, C. (2009), 'Consumer heterogeneity and the development of environmentally friendly technologies', *Technological Forecasting & Social Change*, 76 (2009) 533–551.
- Windrum, P., Ciarli, T., Birchenhall, C. (2009), 'Environmental impact, quality, and price: Consumer trade-offs and the development of environmentally friendly technologie', *Technological Forecasting & Social Change*, 76 (2009) 552–566

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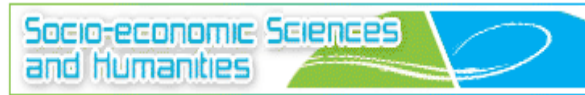


WP1: New service developments and the contribution of private and public services to growth and welfare

ServPPIN Policy Workshop, 26th January 2011

Gisela Di Meglio, PhD, University of Alcalá, Madrid





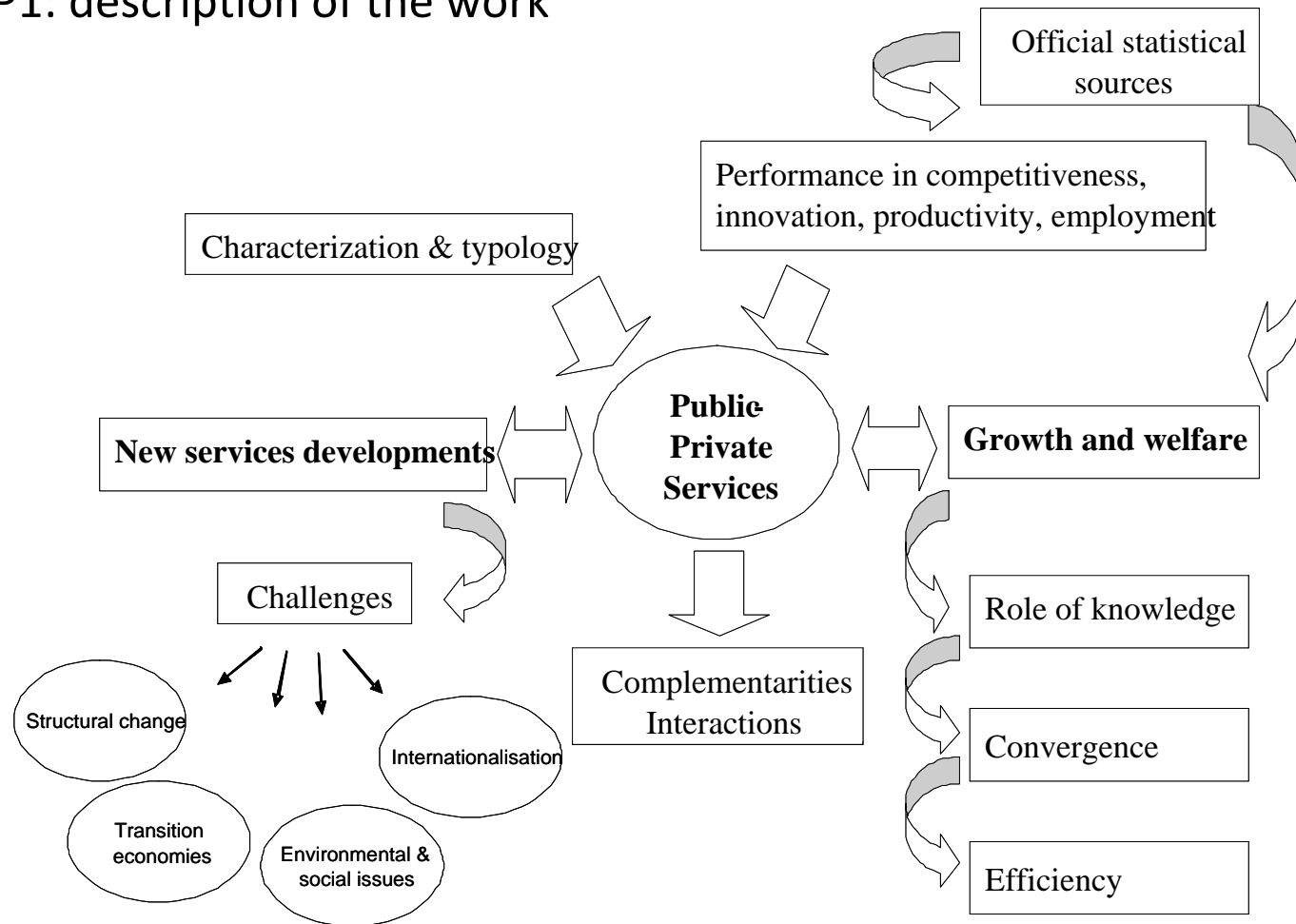
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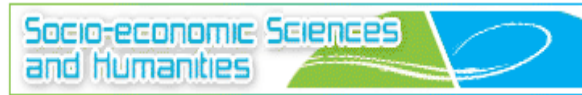
University of Alcalá; University of Lille; University of Ljubljana; Universidad Complutense de Madrid; Kopint-Tárki; Austrian Institute of Technology, University of Hohenheim

Objectives

- To analyse new developments in the services economy, and to research the relationship between services and growth.
- A systematic comparison between private and public services as well as comparisons across European countries will be made.

WP1: description of the work





WP1 deliverables

- *The four 'worlds' of developed service economies: social inequalities make the difference* by Jean Gadrey (University of Lille 1)
- *The new service economy in Europe: evidence and challenges* by Luis Rubalcaba and Gisela Di Meglio (University of Alcalá).
- *State of the art paper on the relationship between services and growth and welfare* by Andrés Maroto (University of Alcalá)
- *Demand and Technology Contribution to Structural Change and Tertiarisation: An Input-Output Structural Decomposition Analysis* by Maria Savona and André Lorentz (University of Lille 1 and SPRU, University of Sussex, Evolutionary Economics Group, Max Planck Institute of Economics, Jena)
- *Public and Private Services Transformation in the CEECs* by Metka Stare and Anže Burger (University of Ljubljana).
- *Innovation in services and entrepreneurship: beyond industrialist and technologist concepts of sustainable development* by Faridah Djellal and Faïz Gallouj (University François Rabelais of Tours, Université of Lille 1)
- *The environmental crisis and the economics of services: the need for revolution* by Jean Gadrey (University of Lille)
- *Crossing borders: exploring the relationships between different modes of international provision of services* by Stefano Visintin (University of Alcalá)
- *Impact assessment of private and public services in Europe* by G. Di Meglio, M. Stare, A. Maroto and L. Rubalcaba (University of Alcalá and University of Ljubljana)
- *Statistical leaflet on key indicators for understanding services in the global economy* by Gisela Di Meglio (University of Alcalá)
- *Varieties of service economies in Europe*, by Gisela Di Meglio, Andreas Pyka and Luis Rubalcaba (University of Alcalá and University of Hohenheim)
- *Towards Explaining Growth of Private and Public Services in the Emerging Market Economies* by Andreja Jaklič and Metka Stare (University of Ljubljana)

WP1 deliverables

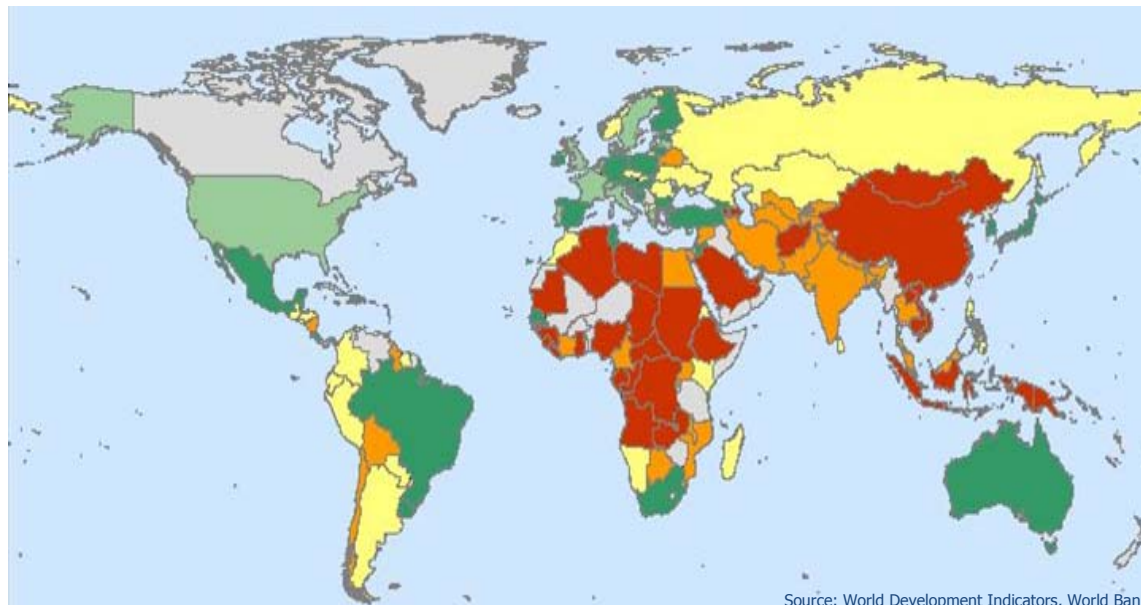
- *Explaining services growth in the enlarged EU* by Gisela Di Meglio, Andreja Jaklič and Metka Stare (University of Alcalá and University of Ljubljana)
- *Public and private services: complementary or substitutes?* by Gisela Di Meglio and Luis Rubalcaba (University of Alcalá)
- *The relative price and the importance of private and public services in the new member states of the EU – a statistical analysis* by Éva Palócz and Gábor Oblath (Kopint-Tárki Zrt.)
- *Productivity in European private and public services: a growth accounting exercise* by Andrés Maroto (University of Alcalá)
- Burger, A. and Stare, M. (2010), 'Public and Private Services Transformation in the CEECs', *Service Industries Journal*, Vol. 30, No. 3/4.
- Djellal F., Gallouj F. (2010), 'Innovation in services and sustainable development', in: Kieliszewski, Maglio et Spohrer (eds), *The Handbook of Service Science*, Springer.
- Djellal F., Gallouj F. (2010), 'Beyond productivity strategies in services', *Journal of Innovation Economics*, N°5.
- Djellal F., Gallouj F. (2010) 'Services, innovation and performance: general presentation', *Journal of Innovation Economics*, N°5.
- Gadrey J. (2010), The environmental crisis and the economics of services: the need for revolution, in: Gallouj and Djellal (eds), the *Handbook of Innovation and Services*, Edward Elgar
- Maroto, A. (2010), "Productivity in European private and public services: a growth accounting exercise", *Journal of Service Science*, Vol 2, N°1, June.
- Maroto, A. (2010), "Productivity in the service sector: Conventional and current explanations", *Service Industries Journal*, forthcoming.
- Stare, M., Jaklič, A. and Burger, A. (2010), *Catching-up and determinants of services growth in new member states*, Electronic book series Analyze CMO / CIR Analyses, Publisher: Faculty of Social Sciences, Založba FDV.

The new service economy

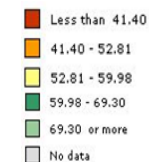
D1.1: The service economy and the contribution to growth and welfare

State of the art review of the EU service economy

- ✓ It is possible to talk about a **new service economy** that places services at the centre of any economic and social activity.
- ✓ The **changes in inputs, in productive systems and in markets** can explain the increased participation of services in modern economies. Moreover, the new service economy is a **reaction to new challenges**.



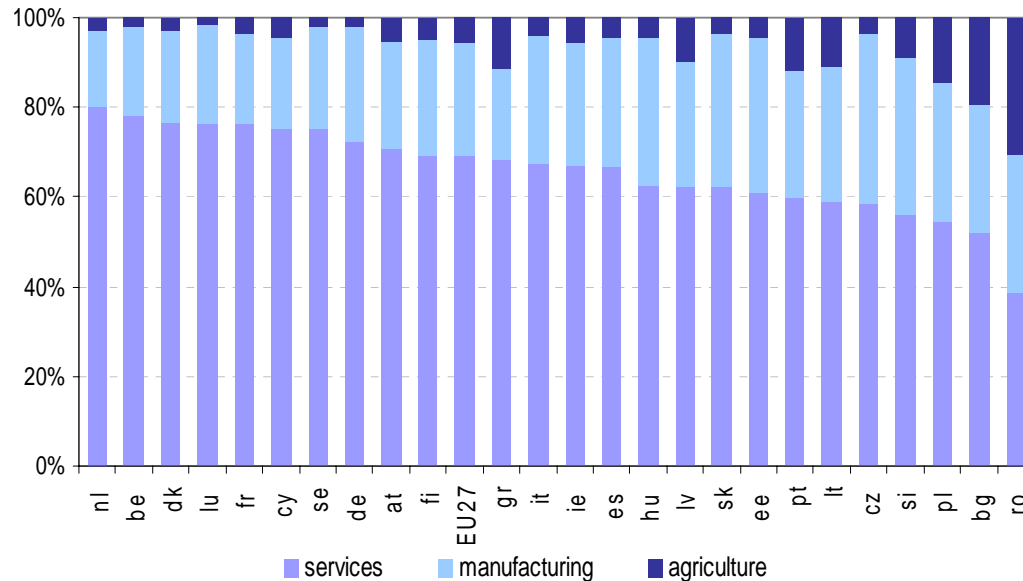
A perspective of services in the world, % of GDP, 2007



The growing and dynamic role of EU services

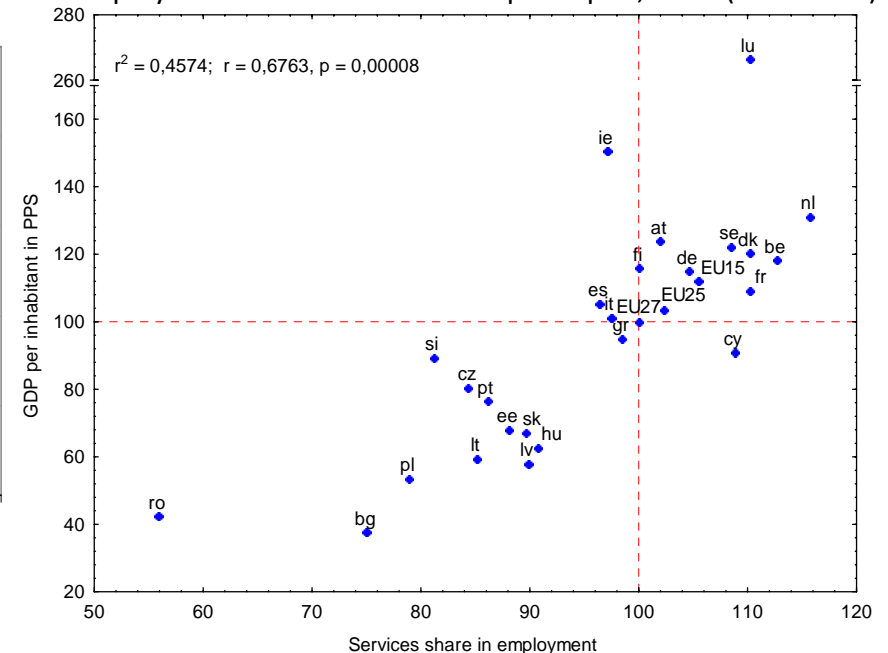
- ✓ The **European economy** is a **service-based** economy. Service activities accounted for **71.6%** of **gross value added** generated by EU27 in 2007 and **69.2%** of total **employment**.
- ✓ Despite services dominate the sectoral structure of the enlarged EU, the **role of the tertiarization** process is revealed as **dynamic, heterogeneous and diverse across economies and sectors**.

Share of services in employment, EU27 countries, 2007



Source: Based on Eurostat.

Employment in services and GDP per capita, 2007 (EU27=100)



The growing and dynamic role of EU services

- ✓ A **single model** of structural change in employment **cannot be deduced** from an exploratory **sigma and beta convergence** analysis.
- ✓ Countries do not seem to follow a common trajectory in the case of **financial services**, **knowledge-intensive services**, **other business services** and **health**.

The EU service economy: new developments and challenges

Structural change

- ✓ The **growth of services** stems mainly from changes in the **(domestic) final demand**, whereas the role of **foreign trade remains marginal** even in the last decade.
- ✓ Changes in the **sectoral intermediate linkages** have instead been the main responsible for the **growth of KIBS**, along with a sustained contribution of final consumption.
- ✓ The role of **(domestic) demand constraints** might affect the degree of exploitation of **technological opportunities** and the **patterns of growth**, even in the case of the most technologically advanced service sectors.

The challenges of the EU service economy

Environmental and social issues

- ✓ A **service-based approach to sustainable development** should be adopted. In this way, a **loosening of the various biases** that characterize the notion of sustainable development (industrialist, technologist, environmentalist and defensive) would be achieved.
- ✓ **Non-technological (particularly social) innovation** occupies an essential place in a sustainable service society.
- ✓ The **environmental and social crisis** demands a **revolution in the economics of services**. It is going to give rise to a powerful wave of **innovations** in services, manufacturing and agriculture.

Impact assessment on service contribution to growth and welfare

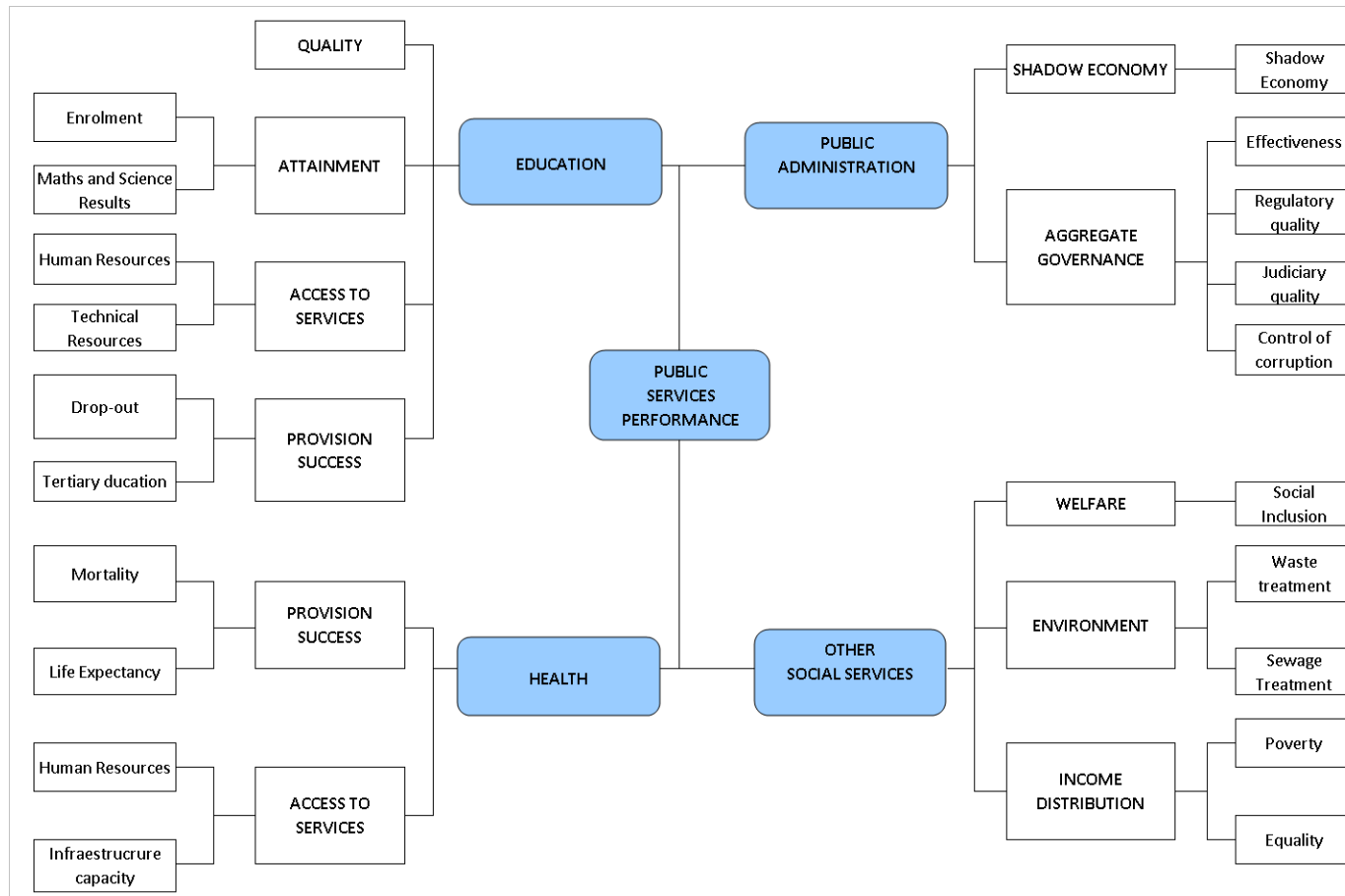
- ✓ **Services** have accounted for **78.5%** of economic growth in the enlarged Europe during 1995-2007. **Private services**, in particular the category 'other business activities', have made a large **contribution to value added (50%)** and **employment (74.6%) growth** in the enlarged EU between 1995 and 2007.

The impact of services

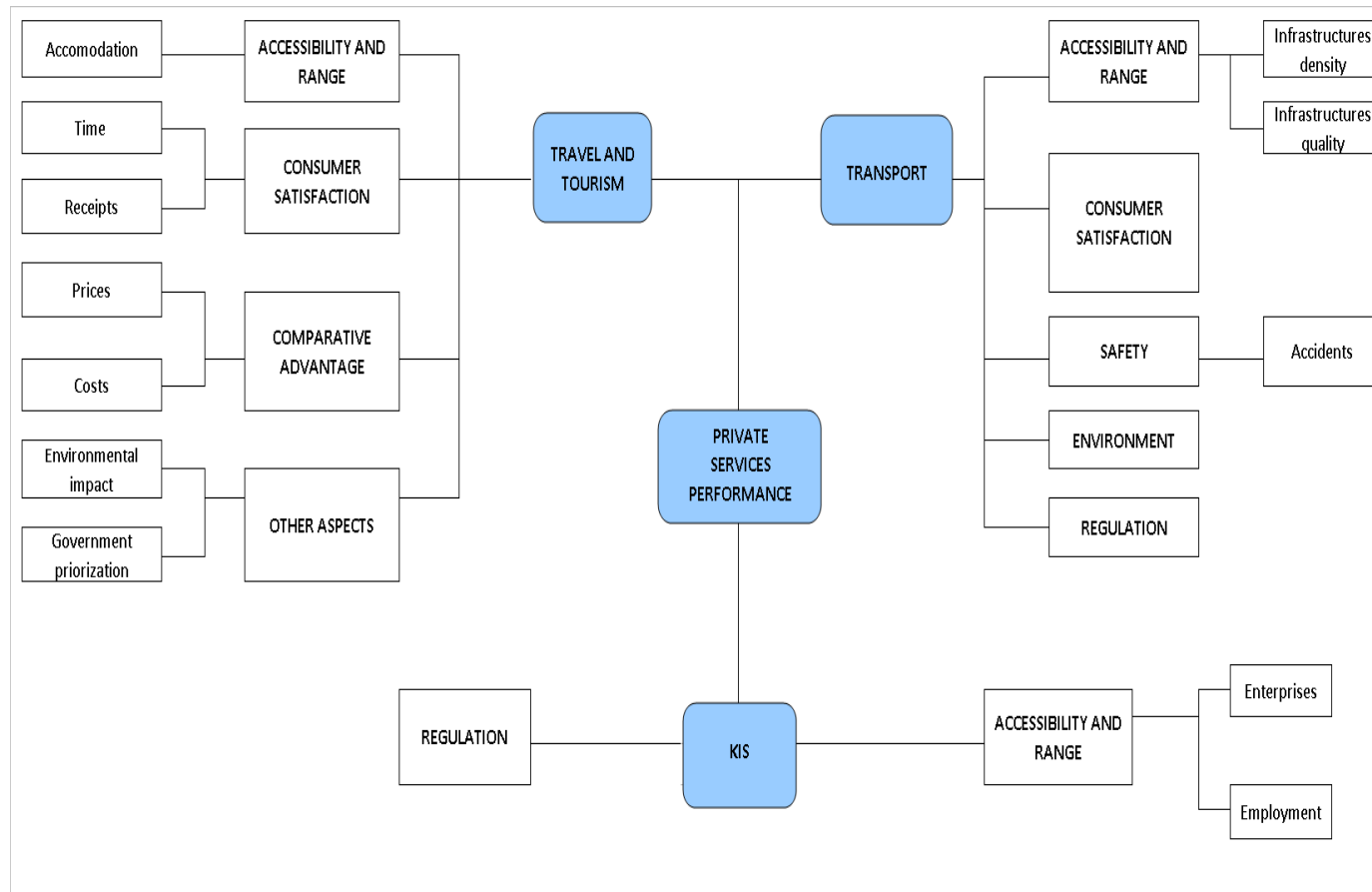
- ✓ The situation in **NMS** is to some extent **different to EU15**, mainly due to the process of catching up that is taking place in those economies after the implementation of market reforms. **Distributive trades** and **public administration** accounted for a **larger part of employment and productivity growth in NMS** during the period under analysis.
- ✓ The measurement of the **performance** of public and private services should be assessed from an **extended approach**, taking into account the **outcomes** for the end users and **quality** and **welfare considerations** in line with new approaches suggested in other research areas, such as in the overall economic performance analysis (Stiglitz et al., 2009; European Commission, 2009), or in the latest theoretical discussions related to service innovation (Djellal and Gallouj, 2009).
- ✓ While the **outputs** relate to the immediate impact of a service provision while the **outcomes** refer to its effects in the **medium/long term**; influenced by **external factors** such as lifestyle or socio-economic background

The impact of services

- ✓ The use of **composite indicators** enables the adoption of a **multi-criteria or multi-dimensional framework** for measuring *extended* performance and efficiency in public and private services.

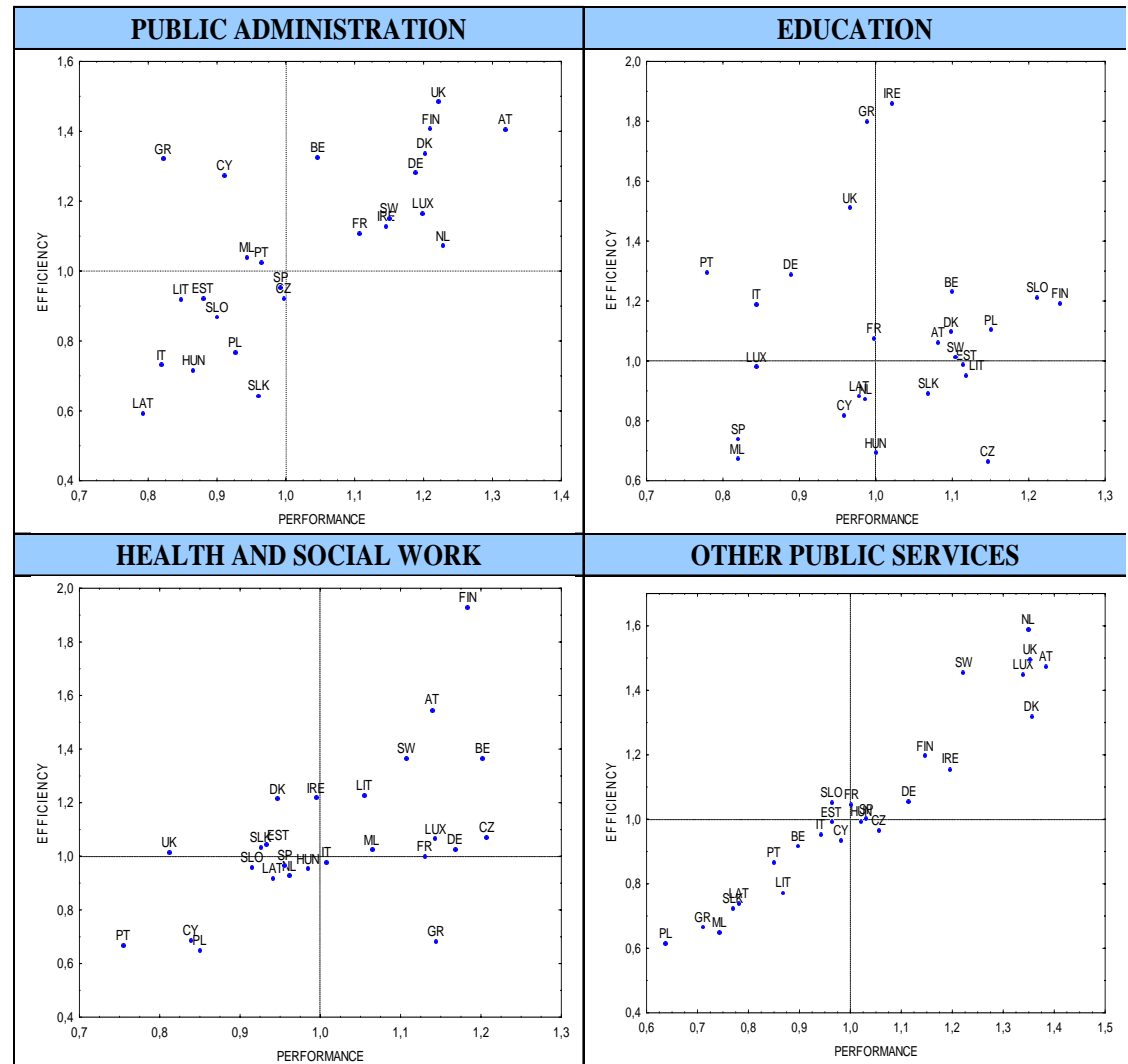


The impacts of services



The impact of services

- ✓ **Efficiency scores are much more diverse** across the enlarged EU **than performance** ones in public and private services
- ✓ EU15 excluding Mediterranean countries are those achieving **higher performance and efficiency scores in total public services.**
- ✓ Nevertheless, behind the behaviour of public services as an aggregated category, **different sectoral patterns can be found.**



The nature of public and private services

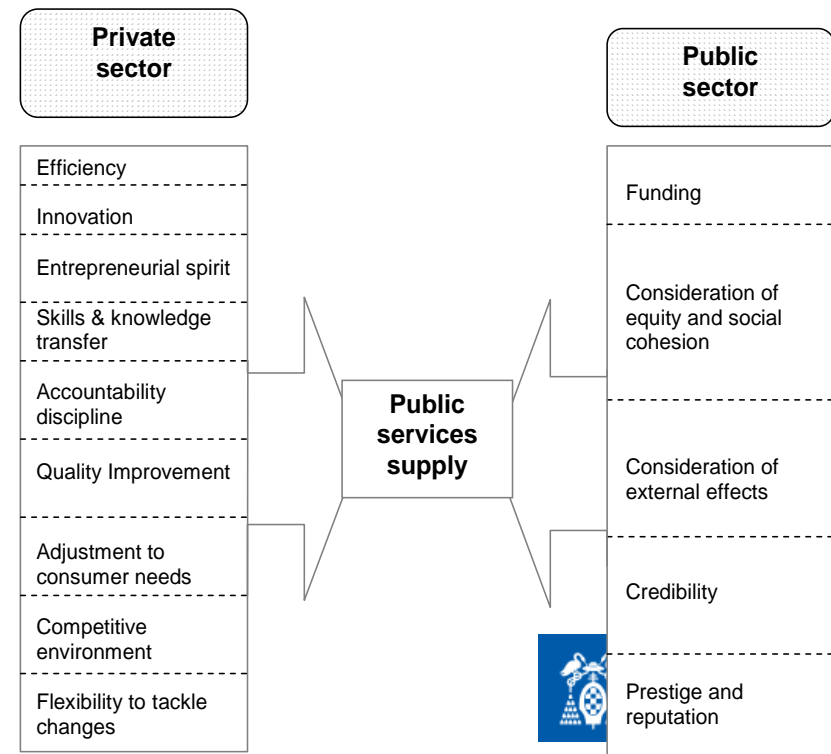
D1.2: Public and Private Services and the future of EU tertiary activities

Characteristics, similarities and dissimilarities of public, private and mixed services and impacts on growth

✓ Different **arguments** confer the nature of **public** to certain goods or services: their characteristics concerning **rivalry and excludability**, the presence of **market failures** and **equity** considerations.

✓ The distinction between the **provision** and the **production** of public services puts the role played by the government in perspective. Even when the **public sector** provides public services it does not have to produce them. **Private firms, non-profit organizations, voluntary associations of citizens** may also be involved in the process of production.

Potential complementarities between public and private sectors



The diversity of organisational arrangements

- ✓ A large **variety of organizational arrangements** for delivering services has emerged in recent years.
- ✓ **PPP** seems to have emerged as a dominant (but not exclusive) form of arrangement in both policy making and the academic literature.

Varieties of organizational arrangements for services provision

Organizational mode	Services involved	Potential benefits	Potential risks
Pure public provision	National defence, public education, public health	Universal access, facilitates redistribution, consideration of externalities	Inadequate to adapt to individual needs
Contract out	Construction, building cleaning, catering, professional services, financial services, prisons	Potential cost saving, quality enhancement, fosters good management if costs are clearly specified in contracts, creates opportunities to entrepreneurs	Resistance from public employees and unions, dependency on private contractor, diminishing capacity of public sector for delivering the service in the future, loss of accountability and control if inadequate contracts are written
Concessions/ franchise License of monopolies Selling of state owned-enterprises	Public utilities	Potential cost saving, quality enhancement, responsive to consumer	Lack of capacity to guarantee a mid-term investment commitment, inadequate supply in less profitable areas, lack of consideration of externalities, lack of public sector capacity to monitor agreements
Public private partnerships (PPP)	Health, education, air transport, inland transport, railways	Improved efficiency in the design-build-maintenance and operation of infrastructure	Inadequate risk transfer between sectors involved
Competitive licence between suppliers	Local transport	Equitable access promotion	Lack of capacity of public sector to maintain competitive conditions
Vouchers	Primary and secondary education, child and elderly care	More choices for final users, better service differentiation, responsive to consumer	Shortage of attractive suppliers, establishment of rigid service standards, inadequate information about the service cost and quality
Tradable or transferable permits	Airport slots and radio spectrum	Competition enhancement	Prevalence of the main operator rights in the initial allocation of permits
Pure community or user provision	Local public services of small scale (drainage and paths)	Proximity to final user, responsive to consumer	Market fragmentation

The role of public and private services in the EU

- ✓ In 2007, **private, public and mixed services explained**, respectively, **37.1%, 6.5% and 27%** of the **total employment in the enlarged EU**. These figures are higher for the EU15 and lower for the EU10.
- ✓ The New Member States (**NMS**) recorded the **largest gap in private services employment** compared with the EU15, due mainly to the low employment share in **business services categories**. Despite fast growth during 1995–2007 (4.5%) there is still **substantial scope for catch-up**.

Share of services in employment, 2007 and annual growth rate (AGR), 1995–2007 (%)

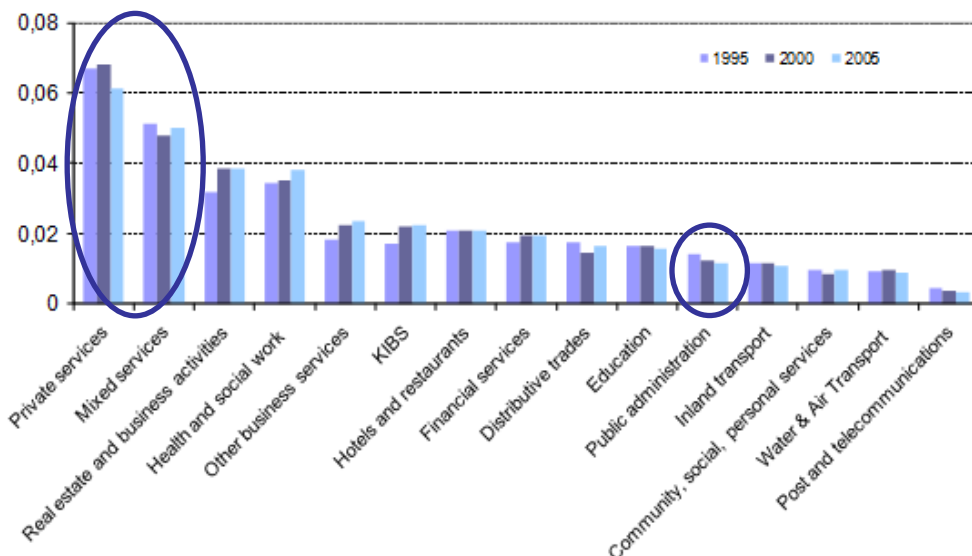
	Share in 2007, %			AGR 1995-2007		
	EU25	EU15	EU10	EU25	EU15	EU10
Private services	37.1	38.3	30.0	1.3	1.1	2.1
Distributive trades	15.1	15.0	15.9	0.1	-0.1	1.3
Hotels and restaurants	4.7	5.0	2.8	1.5	1.4	2.0
Water and air transport, other supporting activities.	1.6	1.7	1.1	1.7	1.7	1.5
Financial services	2.8	2.9	2.2	-0.4	-0.6	1.4
Real estate, renting and business activities	12.9	13.7	8.0	3.2	3.1	4.5
Public services	6.5	6.6	6.4	-0.8	-1.1	0.9
Mixed services	27.0	27.9	21.8	0.4	0.5	-0.3
Education	6.8	6.7	7.2	0.2	0.3	0.1
Health and social work	9.2	9.8	5.6	0.6	0.8	-1.3
Other community, social and personal services	4.7	4.9	3.6	1.1	1.1	0.8
Private households with employed persons	2.2	2.5	0.1	1.5	1.4	5.4
Post and telecommunications	1.4	1.4	1.4	-0.8	-0.8	-0.8
Other inland transport	2.7	2.5	3.8	-0.8	-0.8	-0.7

Source: Based on EUKLEMS Database and Eurostat.

Convergence patterns across countries

- ✓ **Public, private and mixed services employment shares dispersions across EU25 and the United States have reduced during 1995–2005 and this has occurred together with a process of catching up of the least advanced economies. Behind this aggregated pattern diverse sectoral behaviours may be found.**

Sigma convergence in public, private and mixed services, EU25-US



Source: Based on EU KLEMS Database.

Beta convergence in public, private and mixed services

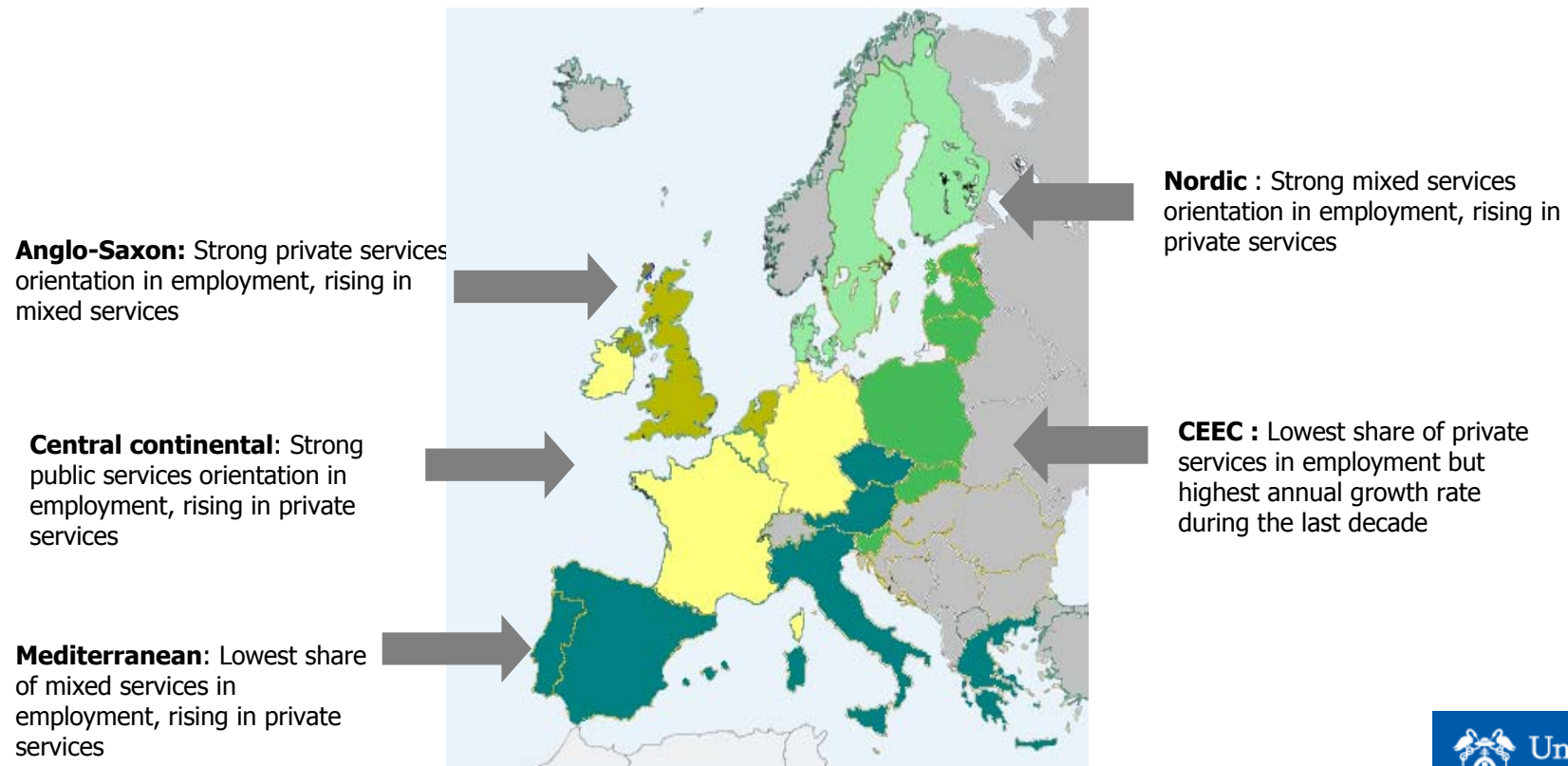
	EU15 1977–2005		EU15 1995–2005		EU10 1995–2005		EU25 1995–2005	
	β	R ²	B	R ²	β	R ²	β	R ²
Private services	-0.015**	0.386	-0.013**	0.253	-0.030**	0.514	-0.025***	0.473
Distributive trades	-0.029***	0.653	-0.020	0.150	-0.077**	0.489	-0.055***	0.365
Hotels and restaurants	-0.005	0.041	-0.005	0.021	-0.015***	0.554	-0.015***	0.345
Water and air transport	-0.030***	0.749	-0.051***	0.543	-0.013	0.240	-0.020***	0.272
Financial services	-0.009	0.106	0.016	0.173	-0.011	0.045	-0.004	0.010
Real estate, renting and business activities	-0.015***	0.635	-0.016	0.173	-0.026	0.278	-0.015**	0.178
KIBS	-0.030***	0.948	-0.008	0.047	-0.003	0.007	-0.004	0.025
Other business services	-0.032**	0.947	-0.026**	0.326	-0.005	0.033	-0.006	0.050
Public services	-0.026***	0.532	-0.009	0.034	-0.051***	0.889	-0.041***	0.417
Mixed services	-0.009***	0.599	-0.004	0.066	-0.033**	0.478	-0.014**	0.187
Education	-0.017***	0.473	-0.003	0.009	-0.034**	0.465	-0.016	0.137
Health and social work	-0.009**	0.578	-0.007*	0.194	-0.019	0.137	-0.002	0.003
Other community, social and personal services	-0.011***	0.390	-0.004	0.019	-0.034**	0.425	-0.021**	0.231
Post and telecommunications	-0.008	0.133	-0.010	0.038	-0.050***	0.737	-0.030***	0.294
Inland transport	0.000	0.000	-0.013	0.121	-0.007	0.085	-0.009	0.090
N	16		16		11		26	

Note: *, **, *** denote the significance at 10%, 5% and 1%, respectively

Varieties of service economies in Europe

- ✓ Based on **macro indicators**, **five service economy models** are identified in the enlarged EU. This mapping correlates closely with different **social and institutional models**.

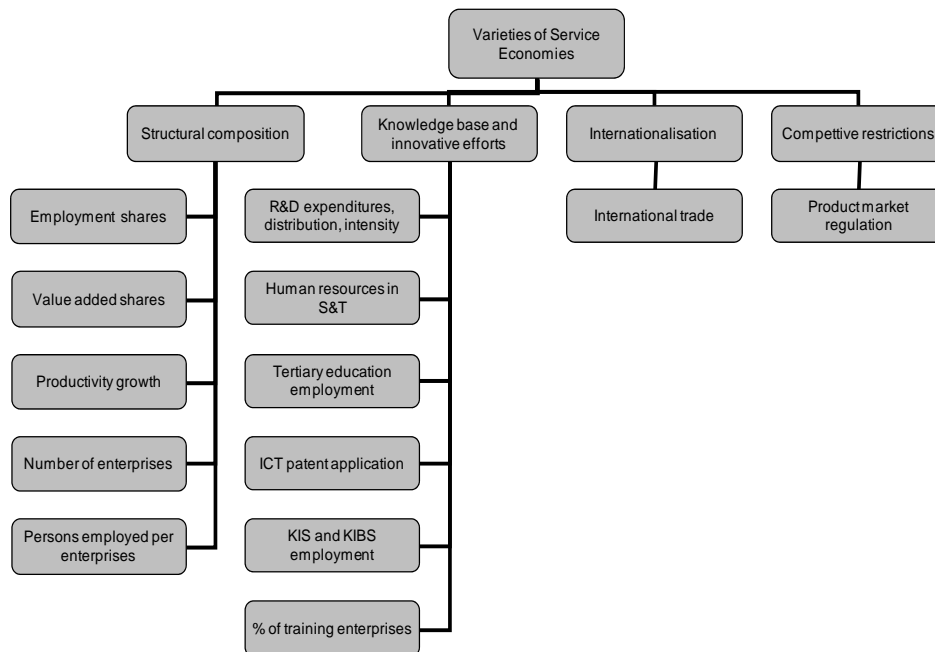
EU service economies based on aggregated indicators



Varieties of service economies in Europe

- ✓ Based on a **comprehensive set of indicators at disaggregated level**, these models are only partially confirmed. The **structural composition** of countries emerges as the key dimension that shapes the varieties of EU services models. **Knowledge base and innovative efforts** in services show a relatively dynamic and uneven pattern across the clusters identified.

Sectoral specific dimensions considered in the analysis



Composition of country clusters by dimensions

		Dimensions and Countries												
Overall		CZ	DK	ES	FI	FR	DE	IRE	IT	NL	PL	SW	UK	
1995		1	2	2	2	2	2	3	2	2	1	2	2	
2000		1	2	3	2	4	4	5	3	4	1	2	4	
2005		1	2	3	2	4	4	5	3	2	1	2	4	
Structural composition		1995	1	2	2	2	2	3	2	2	1	2	2	
2000		1	2	3	2	4	4	5	3	4	1	2	4	
2005		1	2	3	2	4	4	5	3	4	1	2	4	
Knowledge base and innovative efforts		1995	1	2	1	3	3	4	1	1	3	1	3	5
2000		1	2	1	2	3	3	1	1	2	1	2	3	
2005		1	1	2	3	3	4	1	5	3	2	3	3	
Internationalisation		1995	1	2	3	1	4	4	1	3	5	6	1	4
2000		1	2	3	1	4	4	5	3	4	1	1	6	
2005		1	2	4	3	4	4	5	4	3	1	3	6	
Competition restrictions		2000	1	2	3	2	4	2	4	3	2	1	2	5
2005		1	2	1	2	3	4	5	1	4	1	4	6	

Explanatory factors

- ✓ The analysis of the **determinants of services employment growth** in the enlarged EU clearly reveals **different impacts** for service subgroups that reflect the properties and the patterns of transformation in **private/public services** on one hand, and in **private/public/mixed services**, on the other hand.

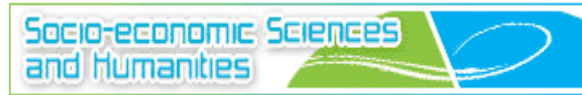
Determinants of employment in service categories, EU27 countries, 1995-2007. Panel data estimations

	Total services	Private services	Public services	Private 1 services	Public1 services	Mixed services
GDP	0.156***	0.393***	0.0131	0.433***	-0.538**	0.077
Cycle	-0.174*	0.236	-0.853***	0.346	-10.06**	-0.645*
Productivity gap	-0.0457**	0.0644*	-0.0616	0.0464**	-0.227***	0.0383
Gov cons	-0.0173	-0.0162	-0.0194	0.0963***	-0.0659	-0.197***
Urbanization	0.344***	0.311***	0.332***	0.277***	0.518***	0.339***
Female part	0.274***	0.0565	0.648***	-0.185***	-0.0287	0.875***
House cons	0.0648	0.259***	-0.106	0.361***	0.0403	-0.314***
Trade spec	-0.0137	-0.0341**	0.0021	-0.0448**	-0.137***	0.0487*
FDI	-0.00074	-0.00044	-0.00105	0.00012	-0.00293	-0.00243
Human capital	0.00485	0.00499	0.0133	-0.0218*	0.0606*	0.0215
Tax revenue	0.0593*	-0.169***	0.255***	-0.176***	0.22*	0.319***
EPL	-0.0157**	-0.0301***	-0.00396	-0.0549***	0.0684***	-0.0139
Union density	-0.0248**	0.0396**	-0.00599	0.0614**	0.0623*	-0.00124
EU15 membership	0.117***	-0.0449	0.248***	-0.0239	0.448***	0.143*
Constant	10.02**	10.02**	-0.947	0.877*	10.69	-10.5
chi2	1781	1781	431	3216	100	613
N	127	127	127	127	127	127
Hausman (P > X2)	0.9991	0.0004	0.9980	0.0000	0.0002	0.0417

- ✓ **Income per capita, relative productivity, social and demographical changes and labour market institutions** are not neutral for services employment shares.
- ✓ Belonging to **EU15 'club'** positively affects total, public and mixed services employment. **'History matters'** in explaining the dynamics of services employment shares across the enlarged EU.

Explanatory factors

- ✓ While **income per capita** turns out to be a key determinant for explaining employment growth in private services, this effect is not verified in public or mixed categories. Negative impact on public administration services.
- ✓ **Relative lag in services productivity** explains total services and public administration employment share, but this is not confirmed in private services. Role played by some capital intensive service sectors where productivity growth is fairly dynamic (e.g. logistic, financial and transport services).
- ✓ **Role of the state:** The explanatory power of **government consumption** seems to be somewhat blurred by the changing role of the State, which particularly affected the provision of mixed services. **Tax revenue** deters employment in private services, but fosters employment shares in public services, public administration and mixed services.
- ✓ **Social and demographic changes: urbanization** positively influences employment in every service category analysed. **Female participation** in labour market is important for total, public and mixed services employment growth. **Households consumption** positively affects employment in private services
- ✓ **Institutions of labour market** (EPL and union density) **are not neutral** for services employment shares. Barrier in the case of total and private categories. No effect in mixed services: employment protection plus sensitiveness of population.
- ✓ Belonging to **EU15 'club'** positively affects total, public and mixed services employment. **'History matters'** in explaining the dynamics of services employment shares across the enlarged EU.



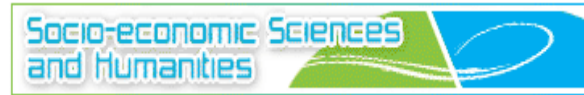
Conclusions

The ever-increasing and dynamic **role of services** in modern societies has led to increasing levels of **interaction between public and private services** and to the development of **mixed** forms.

Moreover, across the enlarged EU, the dominant trend is towards the increasing participation of private services in total employment, but a **diverse macro and meso mapping of service economies** in close **correlation** with **social and institutional models** can also be found.

Furthermore, the variety of service economies in the EU can be explained on the basis of the **different roles played by** factors such as the **state, social changes, labour market institutions** and **previous developments** in the evolution of public, private and mixed services.

Although private and public services have made **significant contributions** to aggregated growth in the EU in recent years, their **impacts** should also be assessed on the basis of a **multidimensional approach** which takes into account **outcomes** and **quality** aspects.



Thanks for your attention

