

EMPLOYMENT IN PRIVATE AND PUBLIC SERVICES: A COMPARATIVE ANALYSIS OF COMMERCIAL, BUSINESS AND SOCIAL SERVICES IN SPAIN, FRANCE, ITALY, GERMANY, UK AND USA

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Abstract

The European Union (EU) present lower average rates of employment and lower average wages than the United States of America, due to the lack of enough economic policies addressed to foster employment in private and public services in all their countries and regions, with a few positive exceptions of some small countries which present a very good behaviour of those variables. Although many EU countries have now a common currency they do not have, for the moment, enough common space for economic policy debates, which is of uppermost importance to advice improvements of decisions of EU Parliament and European Commission policies and to foster employment. EU Politicians, with a few worthy exceptions, usually do not show enough interest in advising by economic researchers and in several cases they prefer to follow erratic measures, introduced by non expert groups in the public debate, which they deem may alleviate the social pressure on politicians in the short term, without little attention to the interrelations among economic variables and the full effects not only in the medium and long term but even in the short term. The main aim of this study is to contribute to foster industrial development, with their positive effects on services, and other measures which might contribute to increase the rates of employment in private and public sectors, as well as real wages, of the European Union as a whole to converge with the levels of the USA.

JEL Codes: C51, H5, J2, J45, O51, O52, O57

Keywords: Employment policies, Social Services, European Union, United States

1. Introduction

The main aim of this study is to present a comparison of several European Union with the United States regarding the degree of industrial development and their positive effects on real Value-Added per capita and Employment in Services. European economic policies in many countries should be addressed to reach a higher degree of convergence with the highest rates of employment and real wages of the USA.

We analyze the particular case of Spain addressed to avoid wrong economic policies which could lead to diminutions of rates of employment in social services. Spain presents very low rates of employment in those services (education, health and other ones), as well as low real wages in comparison with other countries of this study. We recommend better policies addressed to increase both real wages and rates of employment in services with particular focus on social services.

This study includes five sections and one Annex.

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2. Effects of Industry on real valued added and employment in Services

Table 1 present a comparison of real value-added per inhabitant of Agriculture, Industry, Building and Services in the set of 6 more populated EU countries: Germany, UK, France, Italy, Spain and Poland, in comparison with the United States in the period 2000-2005.

Table 1. Real Value-Added per capita by sector at \$2000 PPPs

	EU6 2000	EU6 2005	USA 2000	USA 2005
Agriculture	494	479	397	368
Industry	4706	4748	6289	6396
Building	1194	1248	1527	1473
Services	14810	16081	24067	26192

Source: Guisan and Aguayo(2006). Elaboration from OECD Statistics. Data in Dollars at 2000 prices and Purchasing Power Parities (PPPs). EU6 is the average of 6 European Union countries: Germany, UK, France, Italy, Spain and Poland.

Table 2 shows the evolution of real Value-Added per capita, of Industry and Services, in each of those 7 OECD countries for the period 1996-2005, as well the rate of employment in Services.

Table 2. Real Value-Added per capita in Services and Industry and Rate of Employment in Services (RES) : 7 OECD countries 1996-2005

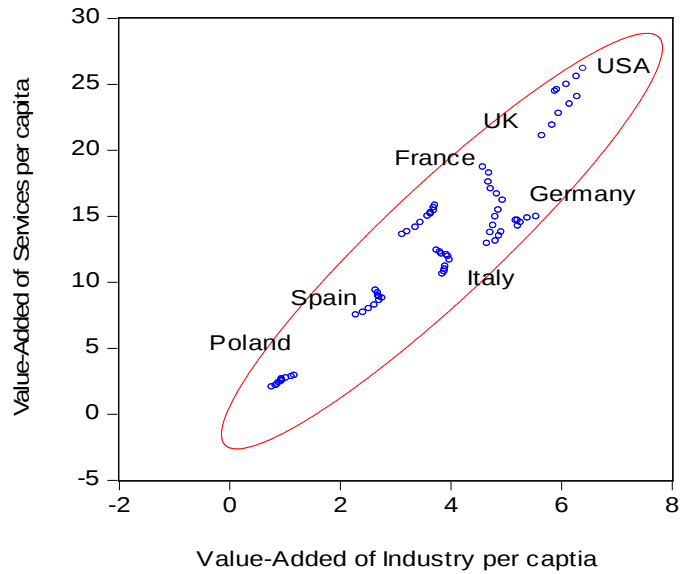
Country	Value-Added Services 1996	Value-Added Industry 1996	Value-Added Services 2005	Value-Added Industry 2005	RES 1996	RES 2005
USA	21.104	5.653	26.192	6.396	345	377
UK	13.766	4.717	18.728	4.585	363	415
France	13.609	3.122	15.829	3.716	283	314
Germany	12.942	4.657	14.977	5.551	301	339
Italy	10.611	3.848	12.424	3.745	247	279
Spain	7.517	2.288	9.390	2.644	199	274
Poland	2.061	0.761	2.934	1.171	179	198

Source: Elaborated from OECD National Accounts Statistics. Real Value-Added per capita in Dollars at 2000 prices and Purchasing Power Parities (PPPs). Rate of Employment (number of employed people per one thousand inhabitants). Countries descending order of Services 2005.

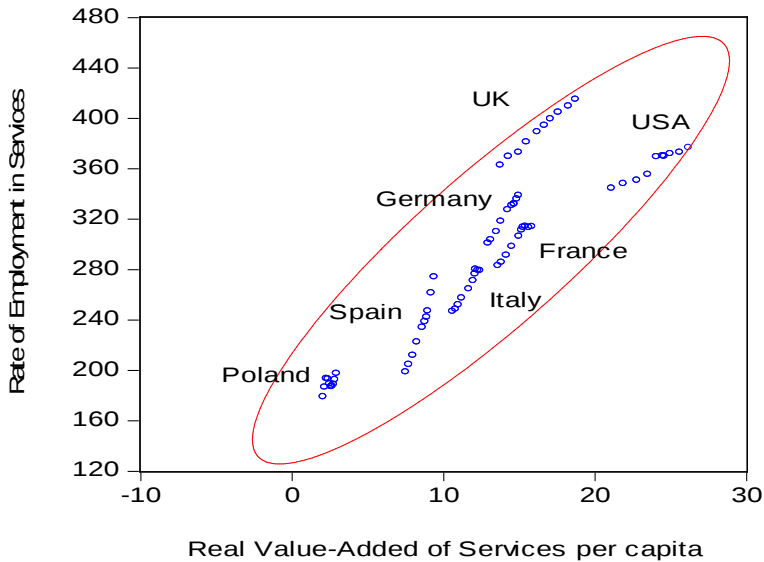
Graph1 and 2 show, respectively, the positive relationship between real Value-Added per capita of Services and Industry and the positive relationship between real Value-Added per capita and rate of employment in Services.

Although other factors analyzed in the bibliography, like tourism and foreign trade of goods and services, have a positive impact on the increase of real Value-Added per capita of Services, generally the most important variable that leads to high levels of development in Services is the degree of industrialization.

Graph 1. Real Value-Added of Services and Industry, 1996-2005
(thousand Dollars at 2000 prices and exchange rates)



Graph 2. Rate of Employment in Services and Real Value-Added of Services 1996-2005
(number of employment per one thousand people and thousand Dollars at 2000 prices)



Graph 3 shows the positive correlation between real GDP per capita and real Wages in the 7 OECD countries of this section.

Graph 3. Relationship between Real Wages and Real GDP per capita
(thousand Dollars at 2000 prices and exchange rates)

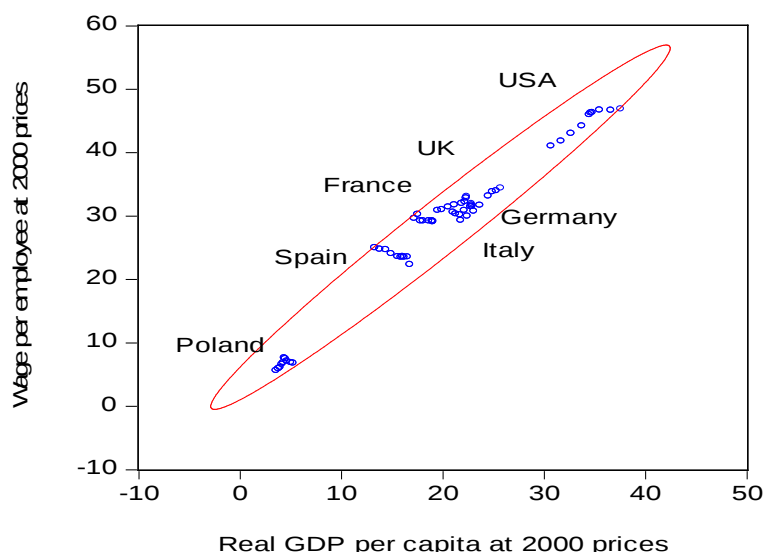


Table 4 presents the estimation of a relationship between real Value-Added of Services per capita, its lagged value and the increase of real Value-Added of Industry per capita with a pooled sample of 7 countries: USA, UK, Germany, France, Italy, Spain and Poland. The coefficient of industry is positive and significant.

Table 4. Relationship between real Value-Added per capita of Services and Industry in 7 OECD countries

Dependent Variable: QS00?H. Method: Pooled Least Squares. Sample: 1996 2005.				
Cross-sections included: 7. Total pool (balanced) observations: 70				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
QS00?H(-1)	1.021878	0.002610	391.5068	0.0000
D(QI00?H)	0.298353	0.144354	2.066812	0.0426
AR(1)	0.615282	0.093609	6.572920	0.0000
R-squared	0.999628	Mean dependent var		13.12514
Adjusted R-squared	0.999617	S.D. dependent var		6.292136
S.E. of regression	0.123090	Akaike info criterion		-1.309889
Sum squared resid	1.015129	Schwarz criterion		-1.213524
Log likelihood	48.84610	Hannan-Quinn criter.		-1.271612
Durbin-Watson stat	1.917607			

Table 5 presents the estimation of a relationship between RES (the rate of employment in Services) and real Value-Added per capita in this sector and shows the positive impact of the increase of real Value-Added on the rate of employment. Although there are other variables that also have an impact on the evolution of real Value-Added and Employment of Services, as seen in the studies cited in the bibliography and in other documents, usually the most important effects come from the combination of a good

educational level and the increase in industrial production and investment in industry and services. A high degree of industrial development usually leads also to increase real Wages in Services and other beneficial socio-economic effects.

Table 5. Relationship between Rate of Employment and real Value-added per capita in Services in 7 OECD countries

Dependent Variable: LHS?. Method: Pooled Least Squares				
Sample (adjusted): 1997 2005. Cross-sections included: 7 Total observations: 63				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LHS?(-1)	0.976974	0.011784	82.90714	0.0000
D(QS00?H)	10.46195	3.238772	3.230220	0.0020
TI	0.190453	0.071441	2.665864	0.0099
AR(1)	0.225766	0.086271	2.616934	0.0113
AR(2)	0.031349	0.050535	0.620345	0.5375
R-squared	0.997620	Mean dependent var		297.8395
Adjusted R-squared	0.997456	S.D. dependent var		67.73223
S.E. of regression	3.416388	Akaike info criterion		5.371083
Sum squared resid	676.9590	Schwarz criterion		5.541173
Log likelihood	-164.1891	Hannan-Quinn criter.		5.437981
Durbin-Watson stat	1.410455			

Guisan and Aguayo(2007) analyse production by sector in the European Union and recommend to foster economic policies addressed to increase industrial production per inhabitant particularly in countries with the lowest levels among EU countries. This advice would be very helpful to avoid economic crisis that have arisen in the period 2008-2010 in Greece, Spain and other EU countries without enough industrial policies.

Guisan(2009) presents an interesting survey of quantitative economic studies related with education, health and economic development, where we point to the important effects that improvements in the educational level of population have on economic development and on the increase of resources devoted to social services.

Guisan(2006) and (2007) points to the importance of intersectoral relationships in Europe, America, Africa and Asia Pacific, which show the positive impact of manufacturing on the development of real value-added and employment in services sectors

The higher level of industrial real value-added in the United States has favoured higher levels of development of real value-added and employment in services. It should be of great interest for European citizens to reach a higher degree of convergence with the levels of the USA.

3. Employment in 3 groups of Services in 5 EU countries and the USA, 1996-2005.

Table 6 and graph 4 present a comparison of the rates of employment in three groups of services in year 2005:

- 1) *Commercial* (whole sale and retail trade, repairs, hotels, restaurants and transport),
- 2) *Financial and Business* (financial, real estate, renting and business services),
- 3) *Social and Personal* (education, health, public administration, other social services y personal services).

Countries with the highest levels of real Gross Domestic Product per capita have usually highest rates than those with lower levels, although other factors related with labour policies also explains the differences among countries: for example legislation favouring partial time employment, low taxes on employment and public policies focused on fostering employment in education, health and other social services.

In table 6 we may notices that the lowest rates of employment of Social services and Total Services correspond to Spain and Italy and the highest to the United Kingdom and the USA, with France and Germany in an intermediate position.

Table 6. Rates of Employment in Services, year 2005: Employed persons per 1000 inhabitants

Country	LHS1 Commercial	LHS2 Financial & Business	LHS3 Social & Personal	LHS Total Services
France	94	74	143	311
Germany	118	78	143	339
Italy	101	59	119	279
Spain	123	48	118	288
UK	153	104	162	420
USA	130	83	164	377

Graph 4. Rates of Employment in Services, year 2005

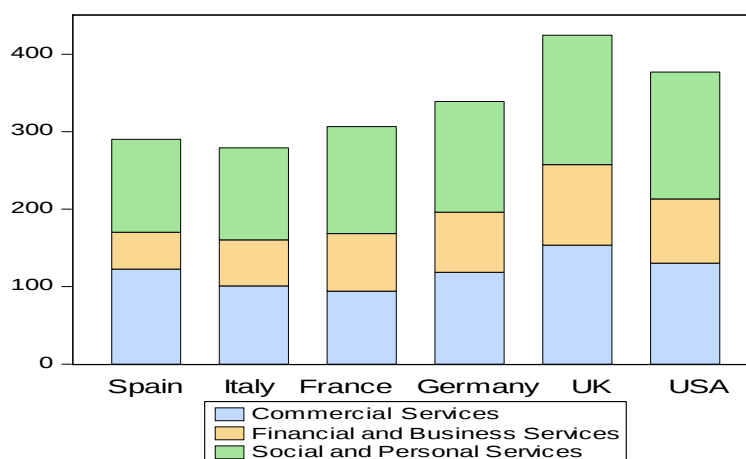


Table 7 presents the evolution of employment in the three groups of Services for the period 1996-2005. Total employment in services in the group of 5 European Union countries (France, Germany, Italy, Spain and the United Kingdom) increased from 85 to 101 million in that period, and in the USA from 99.9 to 111.6 million.

First of all we notice that EU5 countries, with 306 million inhabitants in year 2005 have low levels of employment in comparison with the USA with 296 inhabitants. The lower levels of tax burden on employment in the USA and other factors explain the higher capacity to create employment in the USA in comparison with Europe.

Secondly we may notice that Spain has experienced a high increase in total employment in services during the period 1996-2005 but the Spanish rate of employment in services in 2005 was yet lower than in the other countries of the table. Besides there was a problem because economic policies of that period increase employment in Services to the cost of low wages and without enough development of Industry to get a sustainable level of employment in Services, and the consequence was a clear diminution of employment as consequence of the economic crises of years 2008 to 2010.

Table 7. Employment in 3 groups of Services, 1996-2005 (thousand persons)

	LS1 Commercial		LS2 Financial & Business		LS3 Social & Personal		LS Total Services		
	1996	2005	1996	2005	1996	2005	1996	2005	%Δ
France	5169	5894	3471	4525	7788	8664	16428	19083	16.2
Germany	9300	9765	4610	6402	10731	11780	24641	27947	13.4
Italy	5346	5917	2375	3479	6315	6953	14036	16349	16.5
Spain	3779	5315	1199	2099	3832	5200	8810	12614	43.2
UK	7996	8963	4831	6287	8291	9801	21118	25051	18.6
Total EU5	31590	35854	16486	22792	36957	42398	85033	101044	18.8
USA	38762	38607	19710	24574	41442	48508	99914	111689	11.8
Total	70352	74461	36196	47366	78399	90906	184947	212733	15.0

Note. Elaborated from OECD National Account Statistics. The last column is the percentage of increase in the period 1996-2005.

The Spanish policies of the period 1994-2009, mainly addressed to avoid increases of real wages, had led to foster those activities in building and services with low levels of productivity and low wages in comparison with other OECD countries. These particular measures, and in our view wrong policies, have included stagnation of industrial production per capita and high levels of deficit in the foreign trade balance and they are among the main causes of the Spanish economic crisis of 2009-2010. As a consequence of the wrong measures Spain has the highest levels of unemployment and the lowest wages among the six countries of the tables.

Thirdly we may notice that Spain and Italy have low rates of employment in social services and it is important to point out that the diminution of those rates of employment is not positive, but usually negative, to foster economic development and to increase employment rates. The solution to the economic crisis of 2008-2010 is not to diminish social services but to increase industrial development in order to get a sustainable development of services and socio-economic well-being.

4. Employment and Rates of Employment in Sub-groups of Services.

4.1. Three sub-groups of Commercial Services

Tables 8 and 9 present the level of employment (thousand persons) and the rates of employment (employment per one thousand inhabitants) in EU5 and the USA, in the following commercial services subsectors:

- A. Trade.
- B. Hotel and Restaurants.
- C. Transport and Communications.

Table 8. Employment in Commercial Services: Subsectors A,B,C
(employment: thousand persons)

Country	LS1A Trade	LS1B Hotel and Rest.	LS1C Transport and Comm.
France	3411	950	1547
Germany	5899	1758	2108
Italy	3567	1135	1213
Spain	2917	1293	1111
UK	5331	2091	1821
Total EU5	21125	7227	7800
USA	21404	9306	7897

Source: Elaborate from OECD(2008)

Table 9, Rates of Employment in Commercial Services, 2005: Subsectors A, B, C
(employed persons per one thousand inhabitants)

Country	1A Trade	1B Hotels and Rest.	1C Transport and Comm.	Total 1: Commercial
France	54	15	25	94
Germany	72	21	26	119
Italy	61	19	21	101
Spain	67	30	26	123
UK	89	35	30	154
USA	72	31	27	130

Source: Elaborate from OECD(2008)

The highest rates of employment in Trade correspond to the United Kingdom (89), USA(72) and Germany (72) and the lowest to France (54).

In Hotels and Restaurants the highest rates correspond to the UK (35 employment per one thousand people), the USA (31) and Spain (30). The figure for France in Services of Hotels and Restaurants seems very low having into account the high development of this sector in that country.

In Transport and Communications the highest rates correspond to the UK (30) and the USA (27), and the lowest one to Italy (21).

4.2. Four sub-groups of Social and Personal Services

Table 10 presents rates of employment in 4 subgroups of Social and Personal Services in five UE countries and the USA in year 2005.

Table 10. Employment in Public Administration and Social Services, year 2005

Country	3A Public Adm.	3B Education	3C Health	3D Other	Total 3: Social and Personal
France	38	30	47	28	143
Germany	32	28	49	34	143
Italy	24	27	27	41	119
Spain	31	24	30	33	118
UK	33	45	63	22	162
USA	30	41	57	36	164

We notice that the lowest rates of employment in Social and Personal Services correspond to Spain (118) and Italy (119) and the highest to the USA (164) and the UK (162), with Germany and France in an intermediate position (143 in both countries).

5. Conclusions and policy recommendations in Spain and other countries.

The main aim of this study was to present a comparison of Spain with the 4 biggest economies of the European Union and the USA, regarding employment in Services with particular focus on social services, where Spain has not yet reached convergence with more advanced countries.

One of the most important conclusions is the important positive role of industrial development to explain, through intersectoral relationships the evolution of real Value-Added and Employment in Services. The USA has reached highest rates of employment and wages in Services, in comparison with European Union mainly thanks to their higher level of real Value-Added per capita in Industry.

Increase in real Value-Added of Industry per capita generally has a positive impact on real Value-Added of Services and also on real Gross Domestic Product (GDP) per capita, the rate of employment in Services and real wages.

Many politicians and journalists in Spain are wrong, in our view, when recommending diminutions of employment in public services, as a measure to increase savings in public expenditure, what they think would contribute to solve the economic crisis, but this is not a good measure for several reasons:

1) Compensation of employees is only a small part of total public expenditure, accordingly to OECD data and the study by Pilichowski and Turkish(2008): the percentage of compensation of employees only represents 10% of GDP in Spain, 11% in Italy and 10.6% the average of OECD countries, while total Government expenditure (including production of goods and services, transfers and investment) amount to 38.1% of real GDP in Spain, 48.3% in Italy and 42.7 as average of OECD countries.

2) Diminution of employment in public services, and lack of support to social activities in the private services, would lead to increase unemployment expenditure by Government (without diminution in total public expenditure), increase the supply of workers in commercial and business services (likely with diminution of average income

of workers in those sectors), diminish the supply of public social services (education, health, security and other social services), increase private expenses of consumers on social services and likely to a diminution of whole supply of social services. The consequence would be lower wages for employees, lower employment rates, lower rates of employment in social services and to worsen socio-economic well-being

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¹ Available at <http://ideas.repec.org> and at <http://www.usc.es/economet/eea.htm>

Annex 1. A comparison of Spain with the USA and Germany

Table A1. % of Real Value-Added and Employment by sector: USA

Sector	% of Real Value-Added			% of Employment		
	1995	2000	2005	1995	2000	2005
Agricultura	0.99	1.23	1.07		1.77	1.53
Industria	20.18	19.48	18.58		16.04	13.13
Construcción	4.85	4.73	4.28		7.14	7.78
Servicios Comerciales	17.83	19.71	20.47		26.42	26.81
Servicios Fin y Emp	29.59	31.61	32.50		16.76	17.07
Servicios Sociales y Personales	26.57	23.23	23.10		31.86	33.69

Table A2. . % of Real Value-Added and Employment by sector: Spain.

Sector	% of Real Value-Added			% of Employment		
	1995	2000	2005	1995	2000	2005
Agricultura	3.75	4.38	3.38		5.87	4.83
Industria	20.40	20.89	19.11		18.73	15.99
Construcción	8.11	8.34	9.65		10.80	12.61
Servicios Comerciales	27.69	26.14	25.63		27.57	28.05
Servicios Fin y Emp	18.27	19.46	21.02		10.12	11.08
Servicios Sociales y Personales	21.77	20.79	21.22		26.91	27.44

Tabla A3. Rates of Employment in Social Services in Germany, Spain and USA
(employments per one thousand inhabitants)

	1970			1980			1990		
	Private	Public	Total	Private	Public	Total	Private	Public	Total
Germany	34	49	83	40	64	104	55	68	123
Spain	23	30	53	20	36	56	25	50	75
USA	46	64	110	58	65	123	73	67	140

Source: Guisan et al(2001): elaborate from OECD National Account Statistics

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