

GENDER PAY GAP AND EMPLOYERS' POLICIES. A SECTORAL APPROACH IN THE SPANISH ECONOMY

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Gender pay gap

	Spain		EU-28	
	Hourly earnings	Annual earnings	Hourly earnings	Annual earnings
2010	16,2	22,5	16,1	
2014	18,8	30,2	16,1	

- ✓ Persistent problem everywhere
- ✓ Increasing in the last years
- ✓ Measurement problems (with indicator, wage level, gender pay gap, etc.)
- ✓ Several explanations (from supply side and demand side)
and theoretical frameworks
- ✓ Diversity of situations by age, ethnicity , territories and sectors

▪ **TARGETS:**

- To analyse the gender pay gap taking into account the characteristics of the productive structure and the labour management practices.

SOURCES:

The study is based on quantitative analysis using data from:

Labour Force Survey (LFS)

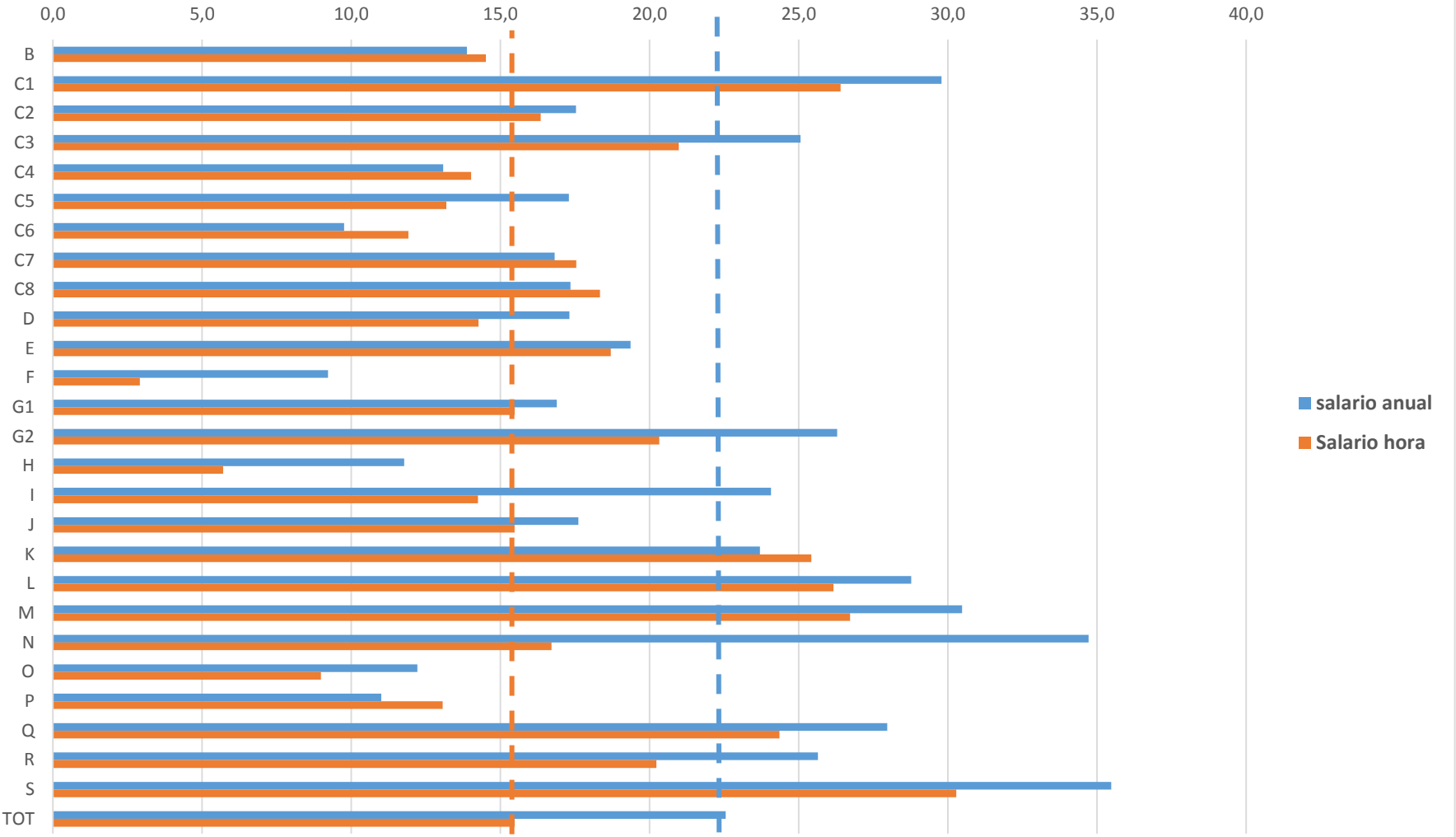
Quadrennial Wage Structure Survey (last published in 2010) (EES)

Survey on Innovation in Companies (EIE)

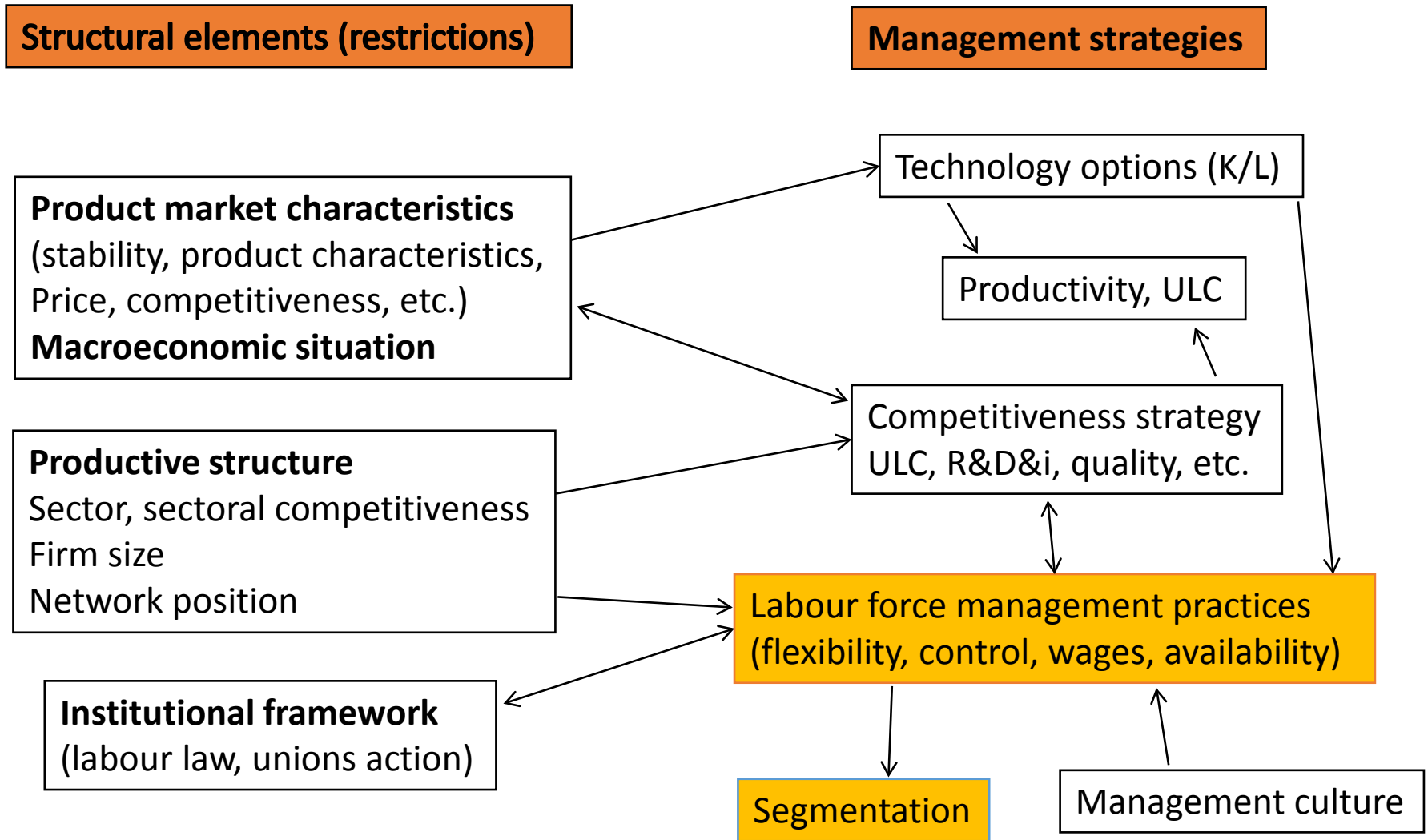
Survey of Quality of Life at Work (ECVT)

This work has been carried out in the context of the research project "Wage gap and care gap. Two factors of gender inequality ", reference number 105/2014, financed by the Spanish Institute of Women and Equal Opportunities

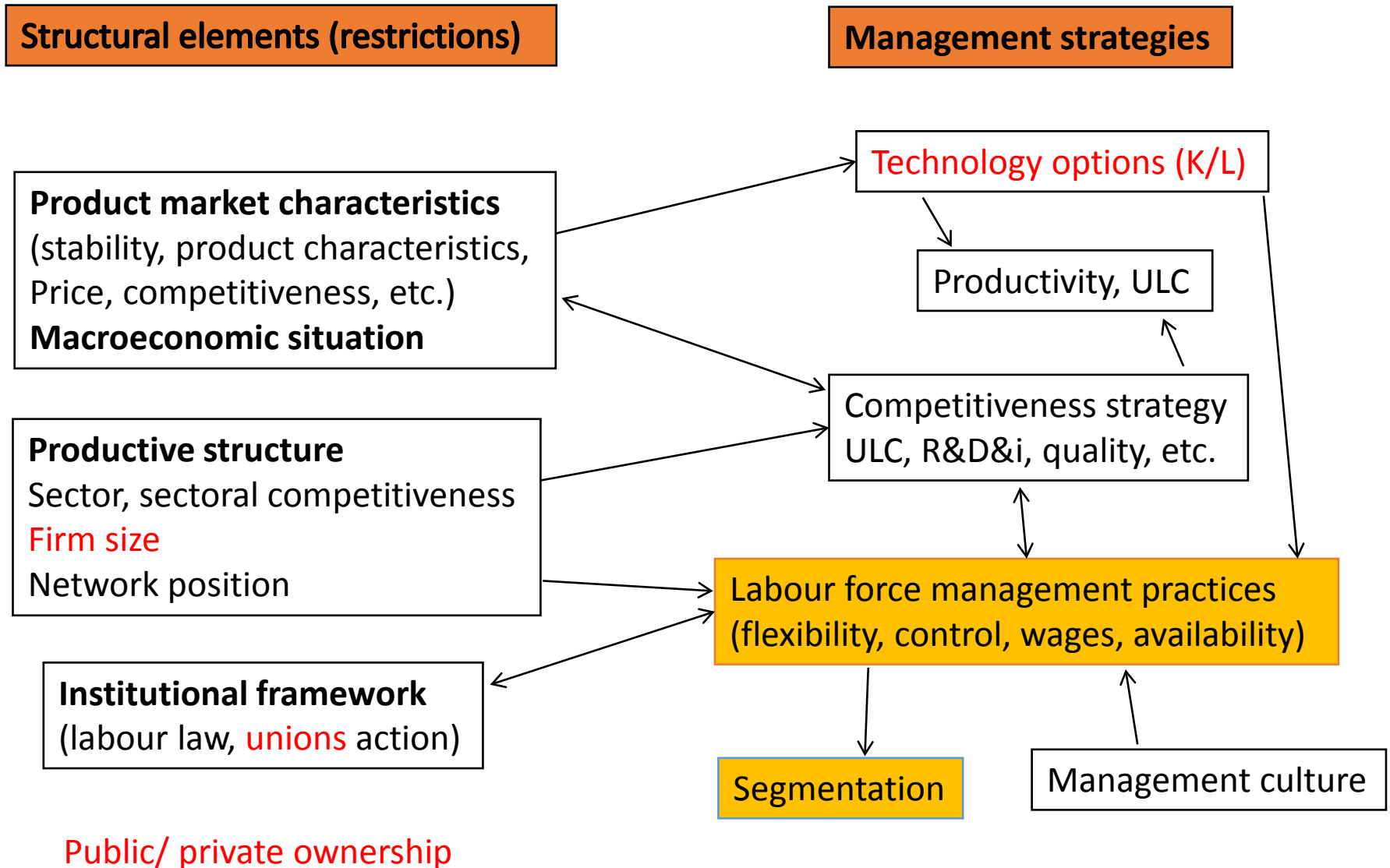
Gender pay gap and sectoral activity (Spain 2010)



Structural aspects of labour demand



Structural aspects of labour demand



Variables with incidence on wages

Area	Variable
Employment conditions	WORKING TIME: -Permanent/ Fix term contract -Full time, part time -Job license (maternity leaving, care, etc.) SALARY SUPPLEMENTS -Productivity -working shifts -Dangerous surplus -Antiquity in the firm -Weekend and special shifts Internal labour market
SECTOR ORGANIZATION	Sectoral specialization Gender presence at sector level, gender stereotypes Added value chain position Professional carrier at sector level
IIRR MODEL	Occupational structure. Gender and occupational stereotypes Social actors and strategies Union presence

Some variables analysed related with labour management practices

Fix-term, permanent contracts

No clear correlation with gender pay gap

Full time, part time

Significant relationship but high diversity

%Female employment

High level female employment (>40%) → high gender pay gap

Technological complexity

high technological complexity → higher wages

But there is not correlation with gender pay gap. Diversity of situations. It depends more on management practices that define differentially working conditions

Business size

Bigger business size is associated with higher wage levels that, in turn, are associated with an increase in the wage gap in terms of hourly wages

Presence and union activity in the company

Existence of collective agreement and workforce representatives → lower gender pay gap

Public or private enterprise

Wage conditions are better in public owned companies. But greater public sector presence in a sectoral activity is not synonymous of lower gender pay gap

Two sectoral activities

Accommodation and food service activities

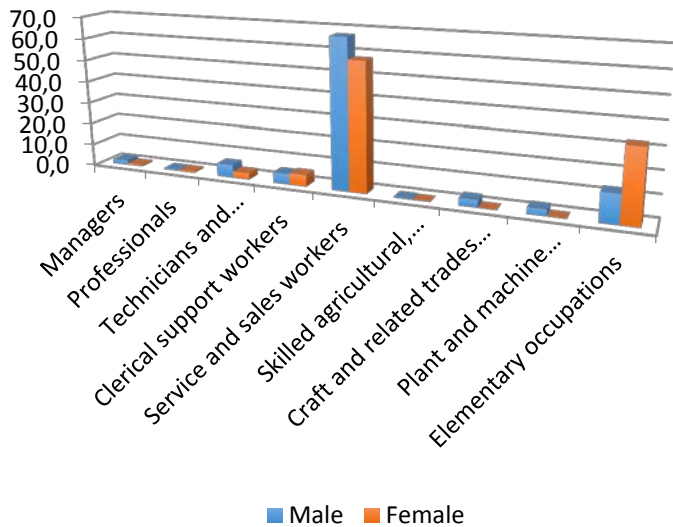
- Gender pay gap:
 - Annual 24,1% (average 22,5%)
 - Hourly 14,2% (average 15,5%)
- Female employment 55%
- Low wage sector
- Tertiary activity related with leisure and tourism. Low technological and organisational complexity

Professional, scientific and technical activities

- Gender pay gap:
 - Annual 30,5% (average 22,5%)
 - Hourly 26,7% (average 15,5%)
- Female employment 55%
- High wage sector
- Firms services, higher level of technological and organisational complexity

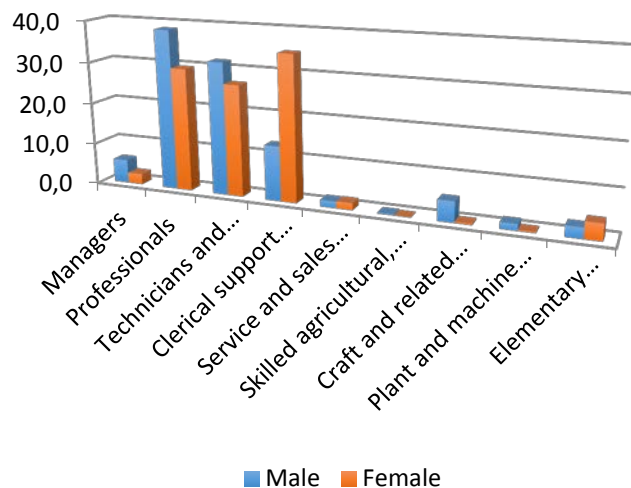
We focus on occupational structure, working time, labour contract

Accommodation. Employees by occupation (%) and wages (€)



	Wage		gender pay gap (%)	
	annual	hour	annual	hour
Service and sales workers	13760,44	7,95	23,2	9,6
Elementary occupations	12658,11	7,23	7,1	2,3
Total	14629,55	8,19	24,1	14,2

Professional, scientific and technical activities. Employees by occupation (%) and wages (€)

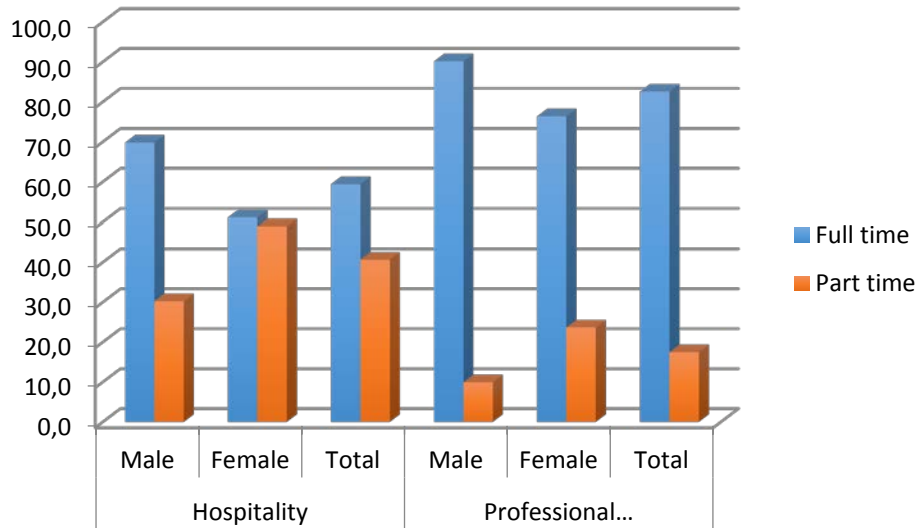


	Wage		gender pay gap (%)	
	annual	hour	annual	hour
Managers	62409,03	25,96	21,2	18,7
Professionals	32238,78	14,63	21,8	22,1
Technicians and associate professionals	24004,33	11,07	18,8	16,1
Clerical support workers	15891,83	7,89	18,1	12,9
Elementary occupations	9798,38	7,15	42,3	12,6
Total	25530,95	11,81	30,5	26,7

Occupational structure

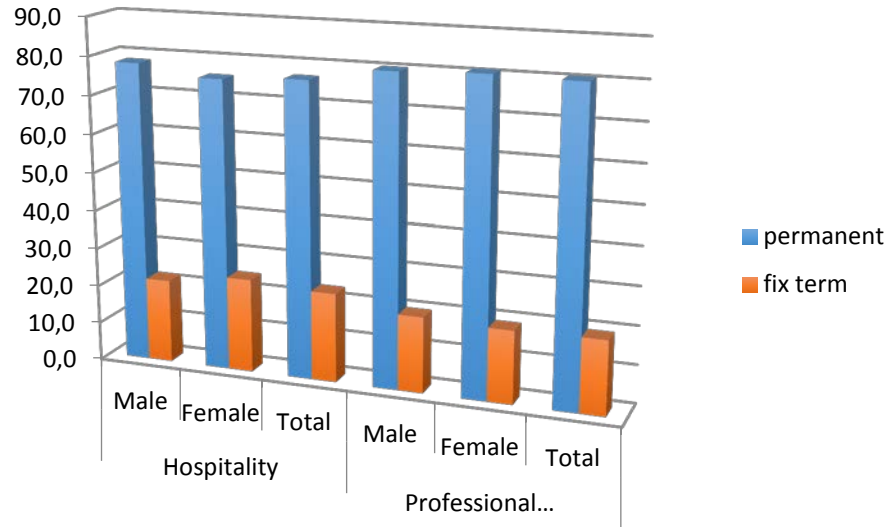
Accommodation and food service activities.									
Employees by sex and occupation	Employees by occupation			% female employment	Wage		gender pay gap (%)		
	Male	Female	Total		annual	hour	annual	hourly	
	Managers	2,0	0,7	1,3	31,0	40947,47	18,84	20,3	20,6
Professionals	0,6	0,5	0,6	53,4	29212,61	13,49	34,5	32,3	
Technicians and associate professionals	5,9	2,9	4,2	38,2	23652,96	12,21	34,7	28,0	
Clerical support workers	4,8	5,3	5,1	57,8	18940,96	8,98	18,0	15,1	
Service and sales workers	67,2	57,7	61,9	51,9	13760,44	7,95	23,2	9,6	
Craft and related trades workers	3,3	0,1	1,5	3,2	19057,77	9,00	26,9	16,9	
Plant and machine operators and assemblers	2,9	0,1	1,3	2,8	7745,98	7,30	-4,6	11,9	
Elementary occupations	12,9	32,6	23,9	76,0	12658,11	7,23	7,1	2,3	
Total	100,0	100,0	100,0	55,6	14629,55	8,19	24,1	14,2	
Professional, scientific and technical activities.									
Employees by sex and occupation									
Employees by sex and occupation	Employees by occupation			% female employment	Wage		gender pay gap (%)		
	Male	Female	Total		annual	hour	annual	hourly	
	Managers	5,7	2,5	4,0	35,1	62409,03	25,96	21,2	18,7
Professionals	38,4	29,5	33,6	48,2	32238,78	14,63	21,8	22,1	
Technicians and associate professionals	31,7	26,8	29,0	50,5	24004,33	11,07	18,8	16,1	
Clerical support workers	13,2	34,8	25,0	76,2	15891,83	7,89	18,1	12,9	
Service and sales workers	1,6	1,7	1,6	56,2	14140,78	7,51	28,4	13,0	
Craft and related trades workers	5,0	0,3	2,4	7,7	21646,65	9,57	26,9	21,5	
Plant and machine operators and assemblers	1,6	0,3	0,9	17,3	21295,65	9,42	29,0	24,5	
Elementary occupations	2,6	4,0	3,4	65,1	9798,38	7,15	42,3	12,6	
Total	100,0	100,0	100,0	54,8	25530,95	11,81	30,5	26,7	
Fuente: Own calculation from Wage Structure Survey 2010 (INE)									

Working time



Accommodation and food service activities					
	% Female employment	Wage (€)		Gender pay gap (%)	
		Annual	Hour	Annual	Hour
Full time	47,9	18.220,76	8,24	15,6	15,4
Part time	67,0	9.379,00	8,12	15,2	13,1
Total	55,6	14.629,55	8,19	24,1	14,2
Professional, scientific and technical activities					
	% Female employment	Wage (€)		Gender pay gap (%)	
		Annual	Hour	Annual	Hour
Full time	50,7	28.451,46	12,28	25,3	24,1
Part time	74,4	11.708,91	9,62	9,7	31,5
Total	54,8	25.530,95	11,81	30,5	26,7

Labour contract



Accommodation and food service activities			
	% Female employees	Gender pay gap (en %)	
		Annual	Hour
Permanent	54,8	24,4	16,1
Fix term	58,5	19,2	7,3
Total	55,6	24,1	14,2
Professional, scientific and technical activities			
	% Female employees	Gender pay gap (en %)	
		Annual	Hour
Permanent	55,0	32,3	28,3
Fix term	53,8	19,7	18,6
Total	54,8	30,5	26,7

Asalariados y salarios según sexo y tipo de jornada (año 2010)								
Hostelería								
	Distribución empleo según jornada (%)			Feminización	Salario (media en €)		Brecha género (en %)	
	Hombre	Mujer	Total	(% mujer/total)	Salario año	Salario hora	Salario año	Salario hora
Jornada completa	69,8	51,1	59,4	47,9	18.220,76	8,24	15,6	15,4
Jornada parcial	30,2	48,9	40,6	67,0	9.379,00	8,12	15,2	13,1
Total	100,0	100,0	100,0	55,6	14.629,55	8,19	24,1	14,2
Actividades profesionales, científicas y técnicas								
	Distribución empleo según jornada (%)			Feminización	Salario (media en €)		Brecha género (en %)	
	Hombre	Mujer	Total	(% mujer/total)	Salario año	Salario hora	Salario año	Salario hora
Jornada completa	90,1	76,3	82,6	50,7	28.451,46	12,28	25,3	24,1
Jornada parcial	9,9	23,7	17,4	74,4	11.708,91	9,62	9,7	31,5
Total	100,0	100,0	100,0	54,8	25.530,95	11,81	30,5	26,7
Fuente: Elaboración propia a partir de microdatos de la Encuesta de Estructura Salarial 2010 (INE)								

Asalariados y salarios según sexo y tipo de contrato (año 2010)									
Hostelería									
	Distribución empleo por contrato (%)			Salario año (media €)		Salario hora (media €)		Brecha género (en %)	
	Hombre	Mujer	Total	Hombre	Mujer	Hombre	Mujer	Salario año	Salario hora
Contrato indefinido	78,2	75,5	76,7	17.996,2	13.596,5	9,0	7,6	24,4	16,1
Contrato temporal	21,8	24,5	23,3	12.938,3	10.450,0	8,4	7,7	19,2	7,3
Total	100,0	100,0	100,0	16.891,7	12.825,5	8,9	7,6	24,1	14,2
Actividades profesionales, científicas y técnicas									
	Distribución empleo por contrato (%)			Salario año (media €)		Salario hora (media €)		Brecha género (en %)	
	Hombre	Mujer	Total	Hombre	Mujer	Hombre	Mujer	Salario año	Salario hora
Contrato indefinido	80,2	80,9	80,6	33.237,4	22.512,6	14,7	10,6	32,3	28,3
Contrato temporal	19,8	19,1	19,4	20.172,5	16.198,8	10,3	8,4	19,7	18,6
Total	100,0	100,0	100,0	30.648,8	21.309,7	13,8	10,1	30,5	26,7
Fuente: Elaboración propia a partir de microdatos de la Encuesta de Estructura Salarial 2010 (INE)									

Occupational structure

ACCOMODATION AND FOOD SERVICE ACTIVITIES

- Women presence in the job places less specialized is higher → gender pay gap related with occupational segregation of women into lower paid occupations
- Unequal wage policy against women evident in those occupations with higher professional level.

PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES

- Significant female presence in jobs classifies as "accounting, administrative and clerical employees".
- Gender bias appears when we observe that the existing feminization in professional, scientific and technical activities is higher in the lower professional levels and wage recognition.

ANOVA and Regression models show that there are different patterns in wage determination by sector and gender.

We found **parallel** models of wage determination by gender in each sector, and these models are a specific combination of variables that cannot be isolated.

Wages by gender and sector are determined by a combination of variables that are “used” in a different way by employers in order to “control” wages

Accommodation and food service activities

ANNUAL WAGE MALE = 8.513,5 + 7.676,6*FULLTIME + 28.140,3*OCUP1 + 19.746,2*OCUP2 + 12.563,1*OCUP3 + 6.093,8*OCUP4 + 1.765,1*OCUP5 + 4.671,7*OCUP7 – 1.695,9*OCUP8

$R^2 = 0,478$

ANNUAL WAGE FEMALE = 8.588,1 + 7.307,9*FULLTIME + 19.907,8*OCUP1 + 9.229,2*OCUP2 + 5.144,9*OCUP3 + 2.962,3*OCUP4 + 3,4*OCUP5 - 483,7*OCUP7 – 497,5*OCUP8

$R^2 = 0,473$

Professional, scientific and technical activities

ANNUAL WAGE MALE = 3.746,3 + 15.509,561*FULLTIME + 48.685,0*OCUP1 + 17.846,511*OCUP2 + 8.622,4*OCUP3 + 2.371,3*OCUP4 + 406,7*OCUP5 + 3.584,3*OCUP7 + 3.973,2*OCUP8

$R^2 = 0,325$

ANNUAL WAGE FEMALE = 5.038,5 + 9.340,1*FULLTIME + 39.474,3*OCUP1 + 14.915,7*OCUP2 + 9.008,7*OCUP3 + 3.635,0*OCUP4 + 2.103,7*OCUP5 + 3.583,8*OCUP7 + 3.162,3*OCUP8

$R^2 = 0,394$

ANOVA (salario anual)						
Datos eta parcial al cuadrado						
	Actividades Profesionales			Hostelería		
	Hombres	Mujeres	Diferencia	Hombres	Mujeres	Diferencia
Modelo corregido	0,398	0,475	-0,077	0,564	0,553	0,011
Interceptación	0,113	0,069	0,045	0,441	0,167	0,274
TIPOCON	0,002	0,000	0,001	0,012	0,001	0,011
OCUPACION	0,079	0,108	-0,029	0,241	0,119	0,122
ESTRAT_NOU	0,021	0,051	-0,030	0,051	0,020	0,031
ANTIG2_NOU	0,051	0,048	0,003	0,010	0,008	0,002
TIPOJOR	0,040	0,095	-0,056	0,185	0,388	-0,203
TIPOCON * OCUPACION	0,007	0,012	-0,005	0,039	0,022	0,017

ANOVA (salario hora)						
Datos eta parcial al cuadrado						
	Actividades Profesionales			Hostelería		
	Hombres	Mujeres	Diferencia	Hombres	Mujeres	Diferencia
Modelo corregido	0,279	0,375	-0,096	0,344	0,128	0,216
Interceptación	0,063	0,052	0,012	0,135	0,066	0,069
TIPOCON	0,000	0,000	0,000	0,001	0,000	0,001
OCUPACION	0,029	0,031	-0,002	0,018	0,009	0,009
ESTRAT_NOU	0,000	0,001	-0,001	0,008	0,000	0,008
ANTIG2_NOU	0,002	0,001	0,001	0,024	0,002	0,022
TIPOCON * OCUPACION	0,001	0,002	-0,002	0,002	0,000	0,001
TIPOCON * ESTRAT_NOU	0,000	0,001	-0,001	0,013	0,000	0,013
TIPOCON * ANTIG2_NOU	0,001	0,000	0,001	0,024	0,001	0,023
OCUPACION * ESTRAT_NOU	0,001	0,004	-0,003	0,041	0,002	0,040
OCUPACION * ANTIG2_NOU	0,008	0,004	0,003	0,056	0,004	0,052
ESTRAT_NOU * ANTIG2_NOU	0,000	0,001	0,000	0,017	0,002	0,015
TIPOCON * OCUPACION * ESTRAT_NOU	0,001	0,002	-0,001	0,040	0,001	0,040
TIPOCON * OCUPACION * ANTIG2_NOU	0,007	0,004	0,003	0,059	0,002	0,057
TIPOCON * ESTRAT_NOU * ANTIG2_NOU	0,001	0,001	0,000	0,015	0,001	0,015
OCUPACION * ESTRAT_NOU * ANTIG2_NOU	0,007	0,009	-0,001	0,049	0,014	0,035
TIPOCON * OCUPACION * ESTRAT_NOU * ANTIG2_NOU	0,005	0,003	0,002	0,030	0,002	0,028
TIPOCON, actividades profesionales, mujeres: no significativo						
ESTRATNOU, hostelería, mujeres: no significativo						

Coeficientes en la regresión (salario anual)						
Variables	Actividades profesionales			Hostelería		
	Hombres	Mujeres	Diferencia	Hombres	Mujeres	Diferencia
(Constante)	-2.376,6	-881,8	-1.494,8	6.181,4	6.676,9	-495,5
JORCOMPLET	11.636,8	8.037,3	3.599,6	6.904,1	7.090,2	-186,1
CONTINDEF	5.238,5	3.525,9	1.712,6	2.471,3	351,2	2.120,1
OCUP1	46.973,3	37.756,9	9.216,4	25.995,6	19.014,1	6.981,5
OCUP2	17.548,1	14.852,4	2.695,7	17.877,1	8.149,2	9.727,9
OCUP3	7.646,7	8.144,6	-497,9	10.767,8	4.433,3	6.334,5
OCUP4	2.168,8	3.559,2	-1.390,4	4.525,5	2.866,0	1.659,5
OCUP5	2.425,4	2.727,8	-302,4	1.581,9	424,6	1.157,3
OCUP7	3.815,3	4.680,3	-865,0	2.789,6	-710,8	3.500,4
OCUP8	3.964,0	3.488,1	475,9	-3.160,1	-620,0	-2.540,1
ANTIG2_1	10.693,9	6.941,6	3.752,3	3.065,1	4.542,0	-1.476,9
ANTIG2_2	3.826,5	3.097,4	729,1	813,0	1.900,2	-1.087,2
ANTIG2_3	2.084,6	2.522,5	-437,8	-97,8	1.225,5	-1.323,3
ANTIG2_4	409,3	794,4	-385,2	-511,1	1.044,3	-1.555,4
ANTIG2_5	-411,0	-286,1	-124,9	-1.204,0	-119,5	-1.084,5
ESTRATN_1	5.264,5	5.785,0	-520,6	3.353,5	681,8	2.671,7
ESTRATN_2	5.304,5	4.761,5	542,9	3.475,7	1.753,4	1.722,3
R ²	0,394	0,468		0,547	0,543	

Hospitality Pruebas de efectos inter-sujetos ^a						
Variable dependiente:	SALANUAL					
Origen	Tipo III de suma de cuadrados	gl	Cuadrático promedio	F	Sig.	Eta parcial al cuadrado
Modelo corregido	40810456144705,550 ^b	9	4534495127189,500	14642,427	0,000	,325
Interceptación	12504210768280,300	1	12504210768280,300	40377,593	0,000	,128
TIPOJOR	5588176467140,100	1	5588176467140,100	18044,890	0,000	,062
OCUPACION	31034864813540,900	8	3879358101692,610	12526,912	0,000	,268
Error	84852848123140,300	274000	309681927,457			
Total	382939746741270,000	274010				
Total corregido	125663304267846,000	274009				

a. SEXO = Hombre

b. R al cuadrado = ,325 (R al cuadrado ajustada = ,325)

Hospitality Pruebas de efectos inter-sujetos ^a						
Variable dependiente:	SALANUAL					
Origen	Tipo III de suma de cuadrados	gl	Cuadrático promedio	F	Sig.	Eta parcial al cuadrado
Modelo corregido	25338385138436,920 ^b	9	2815376126492,990	23971,023	0,000	,394
Interceptación	3406030032939,770	1	3406030032939,770	29000,042	0,000	,080
TIPOJOR	4750913189068,490	1	4750913189068,490	40450,812	0,000	,109
OCUPACION	15212564824331,300	8	1901570603041,410	16190,587	0,000	,281
Error	39014608478280,800	332183	117449142,425			
Total	215221158972444,000	332193				
Total corregido	64352993616717,700	332192				

a. SEXO = Mujer

b. R al cuadrado = ,394 (R al cuadrado ajustada = ,394)

Professional activities, Pruebas de efectos inter-sujetos^a

Variable dependiente:	SALANUAL					
Origen	Tipo III de suma de cuadrados	gl	Cuadrático promedio	F	Sig.	Eta parcial al cuadrado
Modelo corregido	16029960871536,594 ^b	9	1781106763504,070	40044,752	0,000	,478
Interceptación	18909332700051,200	1	18909332700051,200	425139,897	0,000	,520
TIPOJOR	4562413199720,100	1	4562413199720,100	102577,067	0,000	,207
OCUPACION	8944979291941,590	8	1118122411492,700	25138,827	0,000	,338
Error	17483642439484,400	393086	44477906,716			
Total	145684909975793,000	393096				
Total corregido	33513603311021,000	393095				

a. SEXO = Hombre

b. R al cuadrado = ,478 (R al cuadrado ajustada = ,478)

Pruebas de efectos inter-sujetos^a

Variable dependiente:	SALANUAL					
Origen	Tipo III de suma de cuadrados	gl	Cuadrático promedio	F	Sig.	Eta parcial al cuadrado
Modelo corregido	9545766036681,610 ^b	8	1193220754585,200	55428,049	0,000	,474
Interceptación	2908258524231,190	1	2908258524231,190	135095,786	0,000	,215
TIPOJOR	6396280611620,330	1	6396280611620,330	297123,020	0,000	,376
OCUPACION	2106600757576,660	7	300942965368,094	13979,543	0,000	,166
Error	10611750510299,400	492942	21527381,538			
Total	101256111640454,000	492951				
Total corregido	20157516546981,000	492950				

a. SEXO = Mujer

b. R al cuadrado = ,474 (R al cuadrado ajustada = ,474)

SOME CONCLUSIONS

- a) Employers' labour management practices have an important incidence on wage level and gender pay gap**
- b) There are significant differences between sectors**
- c) The dynamics and mechanism explaining how wages are fixed are different between men and women. It seems that there are two parallel (and isolated?) models**
- d) To explain gender pay gap is to explain wage policy**