

13 February 2014

Original: English

Economic Commission for Europe

Conference of European Statisticians

Group of Experts on Gender Statistics

Work Session on Gender Statistics

Geneva, 19-21 March 2014

Item 4 of the provisional agenda

Gender segregation in education and employment and its relationship with the gender pay gap

Gender Pay Gap and segregation in education, occupation and industry – evidence from Ireland

Note by the Central Statistics Office, Ireland¹

Summary

Gender disparities in subject choices in education at second level and third level in Ireland have an effect on occupational and industry segregation between women and men in the labour force. This paper explores how the gender pay gap (GPG) may be influenced by this segregation and how the greater take up of part-time employment by females and their lower labour force participation rates may also be influencing the GPG.

I. Leaving Cert – final school examination in Ireland

1. In Ireland the final examination taken on leaving second-level school at about age 19 is the Leaving Cert. In 2013 it was taken by 52,767 students – 26,620 males and 26,147 females. All subjects are available at two levels – higher and ordinary. The table below shows the total number who sat certain subjects in 2013, along with the percentage of females taking the subject. Also shown in the last two columns are the percentage of total male and female students who took the particular subject.

¹ Prepared by Helen Cahill

Table 1: 2013 Leaving Cert

	Total students	% female students	Higher paper students		% female students who take higher paper	% male or female students taking subject	
			male	female		male	female
Engineering	4,881	4.8	3,586	156	0.6	17.5	0.9
Construction	8,113	6.4	6,180	392	1.5	28.5	2.0
Design & Communication	5,351	11.3	3,537	480	1.8	17.8	2.3
Technology	1,074	16.9	786	158	0.6	3.4	0.7
Applied maths	1,599	23.0	1,133	337	1.3	4.6	1.4
Physics	6,448	23.6	3,589	1,243	4.8	18.5	5.8
Economics	4,632	34.6	2,431	1,326	5.1	11.4	6.1
History	11,822	42.0	4,296	3,489	13.3	25.8	19.0
Geography	25,294	44.5	10,758	9,003	34.4	52.7	43.0
Accountancy	5,673	48.8	2,062	1,871	7.2	10.9	10.6
Maths	50,856	49.2	6,945	6,069	23.2	97.0	95.8
English	50,814	49.5	15,108	18,167	69.5	96.4	96.2
Business	16,932	50.4	5,612	5,961	22.8	31.6	32.6
Irish	43,647	51.2	6,108	10,557	40.4	80.0	85.5
Chemistry	8,156	53.1	3,099	3,658	14.0	14.4	16.6
French	25,514	56.4	5,577	8,608	32.9	41.8	55.1
Biology	31,497	59.2	9,251	14,182	54.2	48.2	71.4
Art	10,296	63.6	2,491	5,375	20.6	14.1	25.0
Music	6,220	67.4	1,834	3,879	14.8	7.6	16.0
Home economics	12,046	88.3	721	8,179	31.3	5.3	40.7

2. The data in Table 1 shows clear differences in subject choices between males and females. Only one in twenty (4.8%) students studying Engineering are female, 6.4% of Construction students are female and just over one in ten (11.3%) Design and Communication students are female. Physics and Biology show clear differences by sex. Less than a quarter (23.6%) of Physics students are female while more than half (59.2%) of Biology students are female. At the other end of the scale nearly nine of out of ten (88.3%) of Home Economics students are female while close to two-thirds of Music (67.4%) and Art (63.6%) students are female.

3. As in most European countries today, the numbers of students who stay at school until the completion of second level education is high in Ireland. Back in the 1960's the situation was very different and far fewer students stayed on at school until the final school leaving examination. I have estimated the total number of Leaving cert candidates in 1968 at 14,700 (7,200 males and 7,500 females). The 1966 Census of Population counted 28,885 males and 26,686 females aged 16 years who would have been 18 years old in 1968, thus 24.9% of males and 28.1% of females in the age cohort took the examination. The retention rate to the Leaving cert in 2012 or 2013 for the 2007 intake to second level schools was 88.4% for males and 91.9% for females. This huge increase in the numbers completing

second level education in Ireland between the 1960's and today is related in part to the decision of the Irish Government to make second-level education freely available to all citizens in 1967. This decision was taken relatively late in the context of Western European social policy – in neighbouring countries the introduction of free second-level education was a post-World War II initiative.

4. The table below shows results from the 1968 Leaving Cert when I have estimated the total number of candidates at 14,700 (7,200 males and 7,500 females).

Table 2: 1968 Leaving Cert

	Total students	% female students	Higher paper students		% female students who take higher paper	% male or female students taking subject	
			male	female		male	female
Applied Maths	798	2.1	532	11	0.1	10.8	0.2
Physics	2,355	5.5	1,452	91	1.2	30.9	1.7
Chemistry	2,625	15.2	1,501	275	3.7	30.9	5.3
Latin	6,910	26.9	2,108	877	11.7	70.2	24.8
Maths	12,451	42.6	1,915	161	2.1	99.2	70.8
Commerce	3,763	43.5	1,684	1,289	17.2	29.5	21.8
History	7,238	49.3	2,411	2,577	34.4	51.0	47.5
English	14,627	51.1	4,537	5,144	68.6	99.4	99.6
Irish	14,514	51.1	3,453	3,761	50.1	98.6	98.9
Geography	11,487	51.5	4,398	4,671	62.3	77.3	78.9
French	5,872	69.8	1,025	2,096	27.9	24.7	54.6
Botany	1,393	79.6	233	1,012	13.5	3.9	14.8
Physiology & Hygiene	4,158	94.2	156	3,497	46.6	3.3	52.2
Domestic Science	5,230	99.7	12	5,071	67.6	0.3	69.5

5. This data from 1968 shows very clear differences in subject choice by sex. Just one in 50 (2.1%) students who studied Applied Maths was female, while one in twenty (5.5%) Physics students and 15.2% of Chemistry students were female. At the other end of the scale, almost all (99.7%) Domestic Science and Physiology & Hygiene (94.2%) students were female while four out of five (79.6%) of Botany students and over two-thirds (69.8%) of French students were female.

6. There are two striking things about Maths at Leaving cert level in 1968. Firstly, three out of every ten female students (29.2%) did not do maths. Secondly, only 2.1% of female students took higher-level maths compared with 26.6% of males.

7. Prevailing social expectations for females as well as the law of the land in 1968 in Ireland, and in many other countries, restricted choices in life for women. For example, there was a marriage bar in the Civil Service whereby female employees had to resign on marriage, a married woman needed her husband's permission to take out a loan and women were not allowed to serve as jurors until the 1970's. At school level there was a strong belief that subjects such as Applied Maths, Physics,

Chemistry and Latin and higher-level maths were not suited to females. For example, in the state exam aimed at 16 year olds (the Intermediate Cert) there was a subject called “elementary mathematics (for girls only)”. The clear implication of having this subject was that girls were unsuitable for higher-level mathematics and for most female pupils at second level, higher-level mathematics was simply not an option that they were offered at school.

8. The huge changes in attitudes to female education in Ireland since 1968 are illustrated starkly in the next table and graph, which shows the percentage of students who were female in certain subjects in the 1968 and 2013 Leaving Cert examinations.

Table 3: 1968 and 2013 Leaving Cert

	% students who are female		% total female students taking higher level	
	1968	2013	1968	2013
Engineering	:	4.8	:	0.6
Construction	:	6.4	:	1.5
Design and Communication	:	11.3	:	1.8
Technology	:	16.9	:	0.6
Applied Maths	2.1	23.0	0.1	1.3
Physics	5.5	23.6	1.2	4.8
History	49.3	42.0	34.4	13.3
Geography	51.5	44.5	62.3	34.4
Maths	42.6	49.2	2.1	23.2
English	51.1	49.5	68.6	69.5
Commerce	43.5	50.4	17.2	22.8
Irish	51.1	51.2	50.1	40.4
Chemistry	15.2	53.1	3.7	14.0
French	69.8	56.4	27.9	32.9
Botany	79.6	59.2	13.5	54.2
Domestic Science	99.7	88.3	67.6	31.3

(Note that Botany was replaced by Biology during the 1970’s and Domestic Science was renamed as Home Economics. Results for the subject Business in 2013 have been used for comparison with Commerce results for 1968.)

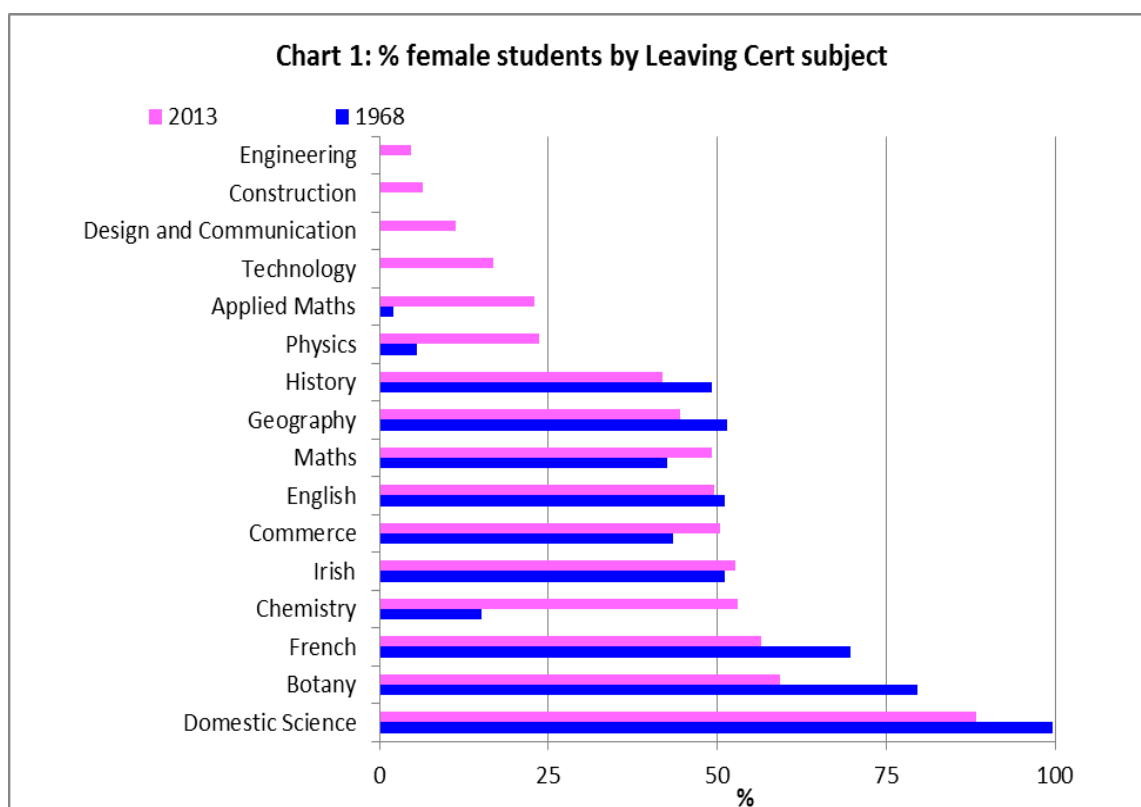
9. Applied Maths and Physics have made large gains among female students however the percentage of female students taking these subjects was still less than a quarter in 2013. There has been a large change also in Chemistry, from 15.2% female to over half (53.1%). Domestic Science was almost exclusively female in 1968 but in 2013 nearly one in eight (11.7%) students were male. One in five (20.4%) of Botany/Biology students were male in 1968 but this had increased to two out of five (40.8%) by 2013.

10. Engineering, Construction, Design & Communication and Technology are four new subjects which were not available in 1968. Table 1 illustrates that the proportion of these students who are female in 2013 is very low. Only about one in

twenty students of Engineering (4.8%) and Construction (6.4%) were female, while 11.3% of Design & Communication students and 16.9% of Technology students were female. Two other subjects are predominantly studied by females in 2013, namely Art (63.6%) and Music (67.4%).

11. What has happened with Maths between 1968 and 2013 is intriguing when compared to the slow pace of change with other subjects. In 1968 70.8% of female students took maths as a subject compared to 99.2% of males. By 2013 95.8% of female students took maths, compared to 97% of males. In 1968 just 2.1% of all females studied maths at higher level whereas by 2013 23.2% of females took higher level maths. The proportions for male students taking higher level maths have remained remarkably consistent over the last 45 years – 26.6% took the higher level maths option in 1968 and 26.1% in 2013. There are clearly many varied and diverse reasons for this change in attitude among girls to maths and in particular to higher level maths. One of the reasons is likely to be that bonus points for entrance to third level courses were available for higher level maths during the 1970's and 1980's and were re-introduced again in 2012. (Entrance to third-level institutions in Ireland is competitive and based on the results in the Leaving Cert.) A question to be considered by policy makers in the Education arena is how likely it is that bonus points for other subjects such as Chemistry and Physics would produce similar changes among female students?

12. Chart 1 below shows the percentage of students who are female in certain subjects for the 1968 and 2013 Leaving Cert examinations.



13. How do we explain these gender disparities in education choices? The changes over the last 45 years, in particular the changes for maths, illustrate how gender stereotypes can be successfully challenged. In Ireland, the proportion of girls attending a girls only school (41% in 2013) has had and will continue to have an impact on the numbers of females taking subjects such as applied maths, engineering, construction, design and communication and technology because these subjects are simply not offered in the vast majority of girls only schools.

II. Third level subject choices

14. There were 60,466 third level qualifications awarded in Ireland in 2012, a large increase on 1993 when 27,899 were awarded. The classification system used for third level qualifications by subject has changed between 1993 and 2012 but an attempt to match data on numbers of graduates by subjects has been made in Table 4 below. Note that the number of graduates covered in this table is slightly fewer than the total number of graduates.

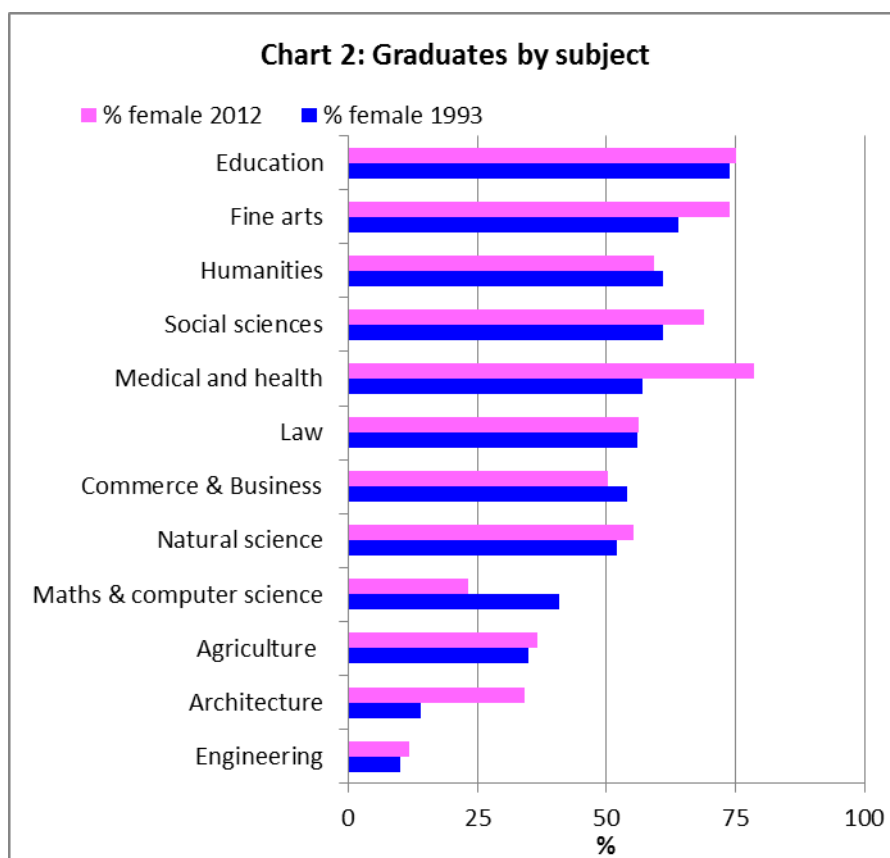
Table 4: Third level graduates by subject area

	1993 data			2012 data		
	% male	% female	Total number	% male	% female	Total number
Education	26	74	1,520	25	75	4,893
Fine arts	36	64	767	26	74	825
Social sciences	39	61	1,529	31	69	3,331
Humanities	39	61	4,159	41	59	6,914
Medical and health	43	57	1,088	21	79	9,865
Law	44	56	1,051	44	56	1,592
Commerce & Business	46	54	6,093	50	50	13,126
Natural science	48	52	3,384	46	55	3,502
Maths & computer science	59	41	1,699	76	23	3,662
Agriculture	65	35	416	63	37	958
Architecture	86	14	1,050	66	34	1,044
Engineering	90	10	3,939	88	12	6,229
Total covered in Table	52	48	26,695	46	54	55,941
<i>Overall total</i>	<i>51</i>	<i>49</i>	<i>27,899</i>	<i>46</i>	<i>54</i>	<i>60,646</i>

15. Table 4 shows that the systematic gender differences in subjects studied at second level continue into third level education in Ireland. In 2012 around seven out of every ten graduates in the fields of Education (75%), Fine arts (74%) and Social Sciences (69%) are female while four out of five (79%) in Medical and Health fields are female. Just one in eight (12%) of Engineering graduates are female while less than a quarter of Maths & Computer Science (23%) graduates are female. Architecture and Agriculture remain male dominated while Law,

Commerce and Business and Natural Science are the most gender balanced subject areas at third level.

16. Note that while 41% of Maths & Computer Science graduates were female in 1993 this proportion had dropped to just 23% by 2013. One of the main drivers behind this change is that Computer Science degrees have grown hugely in popularity but the majority of students are male - of the 2,380 degrees in this subject in 2012, just 451 were awarded to females (i.e., 19%).



III. Labour Force by Occupation and Industry

17. It is difficult to compare the occupations of those in the Labour Force in the 1971 and 2011 Census of Population as the classifications used have changed but an attempt has been in table 5 below.

Table 5: Labour force by occupation in Census of Population

	1971		2011	
	total	% female	total	% female
Army	8,797	0.1	8,183	6.2
Police	6,089	0.5	13,797	23.7
Building and Construction	134,977	1.6	139,842	2.6
Engineering and related workers	48,188	2.5	72,076	2.0

Managers and executives	14,888	4.6	148,316	42.1
Agriculture, forestry and fishing	288,753	8.8	94,367	11.2
Other occupations	9,864	10.6	269,633	44.5
Communication, warehouse and transport	83,828	13.9	118,671	10.5
Electrical trades workers	21,399	14.3	33,059	4.1
Business and commerce	59,102	16.5	90,500	49.4
Other Professional	51,988	32.7	194,140	35.1
Manufacturing	110,101	35.2	99,435	27.7
Central and Local govt. workers	30,089	46.2	66,813	61.9
Sales assistants	49,618	52.1	235,181	55.8
Teachers	24,960	59.6	97,954	74.3
Personal services	74,369	67.6	240,065	68.5
Clerical workers	76,153	70.2	167,344	81.9
Health care	26,368	71.4	108,661	79.0
Total	1,119,531	25.7	2,198,037	45.0

18. Notwithstanding the caution which should be exercised when looking at the comparisons of the labour force in Table 5, (because of changes in classifications), certain trends can be seen clearly. Teaching, Health care and clerical workers were highly feminised occupations in 1971 and this has become even more pronounced in 2011. Other occupations remain overwhelmingly male, such as Engineering and related workers, Construction, Electrical trades workers and Communication, warehouse and transport workers. The majority of workers in the Police and Army remain male in 2011 but some progress has been made since 1971 – over this time period the proportion of females in the Police force has grown from just 0.5% to nearly a quarter while the proportion in the Army has increased from 0.1% to 6.2%. There was a large shift between 1971 and 2011 in the female proportion of Managers and executives from just one in twenty to 42.1%.

19. Table 5 above clearly illustrates how gender segregation at second and third level in certain subjects (for example Engineering, Education, Medical and Health at third level) does lead to gender segregation of these occupational areas. Only 2% of Engineering and related workers were female in 2011 and just 35.1% of other

Professional were female (which includes computer software engineers and programmers and civil/mechanical/electrical engineers). Teachers and Health care workers remain predominantly female, accounting for about three-quarters of the workers in these occupations.

IV. Unadjusted Gender Pay Gap

20. Table 6 below shows the number of persons at work in the 2011 Census of Population (for Industry NACE Rev.2 sectors B to S) along with the female proportion of those at work and also the unadjusted Gender Pay Gap (GPG)² for the year 2009 calculated by the CSO³.

Table 6: Persons at work in the 2011 Census of Population and the 2009 GPG

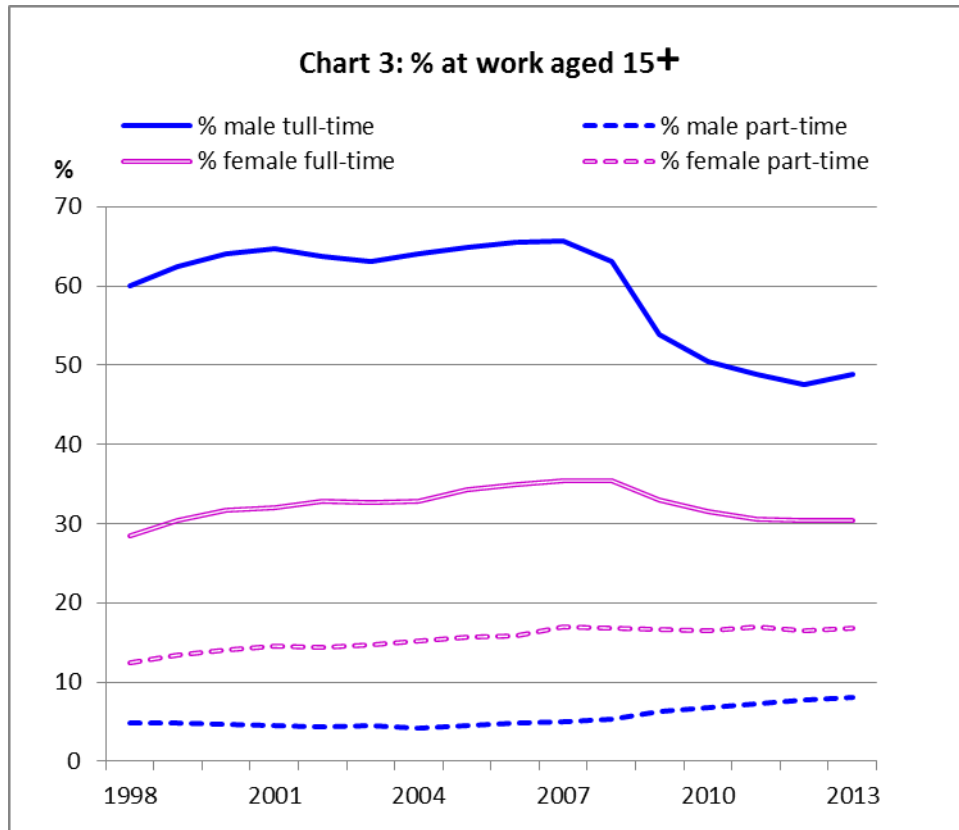
Industry NACE Rev.2	Total	% female	Average hourly earnings €			GPG
			Male	Female	Total	
B-E Industry	207,088	29.5	22.22	18.52	21.14	16.7
F Construction	85,982	8.2	20.79	17.98	20.50	13.5
G Wholesale and retail trade	260,257	48.7	18.51	15.07	16.58	18.6
H Transportation and Storage	76,962	19.8	19.20	17.32	18.78	9.8
I Accommodation and Food Services	102,533	53.7	14.70	13.15	13.83	10.5
J Information and communication	66,854	33.3	26.17	19.44	24.01	25.7
K-L Financial, Insurance etc.	99,590	55.3	34.31	24.22	28.68	29.4
M Professional, scientific & technical	90,858	48.0	26.81	18.12	22.75	32.4
N Administrative and support services	59,926	44.1	18.71	15.85	17.12	15.3
O Public administration and defence	111,533	47.3	27.29	24.92	26.06	8.7
P Education	163,675	75.0	42.99	31.56	34.55	26.6
Q Health & social work	194,916	80.9	28.19	21.72	22.81	23.0
R-S Arts, entertainment, other services	68,743	61.3	20.56	16.32	17.86	20.6
Total B to S	1,588,917	49.6	23.63	20.61	22.05	12.8

21. The lowest GPG in 2009 was in the sector Public administration and defence at 8.7% followed by Transportation & Storage at 9.8% while the largest was 32.4% in Professional, scientific & technical followed by 29.4% in Financial, Insurance, etc. The Education and Health & social work sectors, where about three-quarters of those at work are female, had GPGs of 26.6% and 23% respectively. In Primary Education in Ireland, 85% of teachers are female but only 53% of school principals are female while at second level 63% of teachers are female but only 41% of principals are female. A similar situation exists in the Health sector, where 47% of hospital doctors are female but just 36% of consultants are female. In these sectors women would appear to be 'self-selecting' themselves out of promotional opportunities and this obviously has a knock-on effect on average hourly earnings.

² The unadjusted GPG is defined as the difference between male and female average gross hourly earnings as a percentage of male average gross hourly earnings.

³ Based on the results of the 2009 National Employment Survey, CSO.

22. Women are much more likely to work part time then men as Chart 3 below shows. The numbers of persons aged 15 and over at work as a percentage of all those aged 15 and over is graphed for males and for females, broken down into full-time and part-time work.



Source: Quarterly National Household Survey, (QNHS), CSO

23. The impact of the recession in Ireland can be seen clearly in Chart 3. The numbers of males and females working full-time peaked in 2007 and have decreased over the last six years while part-time working has risen for males over the last six years.

24. In considering the impact of differences in employment across economic sectors on the unadjusted GPG it is useful to consider full-time employment separately so as to remove the known effect of differences in the numbers of males and females working part-time. The level of the GPG for full-time employees was higher than the overall average of 9.1% in all sectors except for Public administration and defence. In all sectors female full-time employees earned less than male employees with the largest GPG of 29.8% in the Professional, Scientific and Technical sector followed by 28.6% in the sector Financial, Insurance and Real Estate. The lowest level of difference was recorded in the Public Administration and Defence sector where female full-time employees earned 8.2% less than male full-time employees

Table 7: Average full-time hourly earnings and unadjusted GPG 2009

Industry (NACE Rev.2)	Average full-time hourly earnings			Unadjusted GPG		
	Male	Female	Total	Full-time	Part-time	Total
	€	€	€	%	%	%
B-E Industry	22.57	19.10	21.67	15.4	-5.0	16.7
F Construction	21.39	18.86	21.18	11.8	-1.7	13.5
G Wholesale and retail trade	19.64	16.58	18.23	15.6	4.6	18.6
H Transportation and Storage	19.75	17.72	19.38	10.3	-13.7	9.8
I Accommodation and food services	15.84	14.15	14.98	10.7	0.5	10.5
J Information and Communication	26.65	20.57	24.92	22.8	7.9	25.7
K-L Financial, insurance, etc.	34.55	24.68	29.50	28.6	4.8	29.4
M Professional, scientific, technical	27.53	19.33	24.24	29.8	22.0	32.4
N Administrative and support services	19.52	17.42	18.54	10.8	5.9	15.3
O Public Administration and defence	27.53	25.28	26.49	8.2	-10.7	8.7
P Education	44.95	33.69	36.93	25.1	18.5	26.6
Q Health and Social work	29.76	23.20	24.68	22.0	-0.4	23.0
R-S Arts, entertainment, other services	21.99	17.59	19.43	20.0	12.8	20.6
Total	24.59	22.35	23.59	9.1	-7.3	12.8

Source: National Employment Survey 2009, CSO

25. Given that the level of difference by sector was higher in all but one sector than the overall average, this shows that the differential distribution of male and female full-time employees by sector actually reduced the GPG, all other things being held equal. Specifically, the higher proportion of female full-time employees in sectors with higher hourly earnings (such as Education) caused overall mean hourly earnings for female full-time employees to be higher than they would have been, if female full-time employees had been distributed in the same pattern across the sectors as male full-time employees.

26. Table 8 below shows the unadjusted GPG by occupation. In all occupations full-time females earned less than their male counterparts with the largest gap of 23.8% recorded for Sales occupations, while the next largest was 23% for Managers and senior administrators. The full-time GPG was lowest at 4.9% among Clerical and secretarial staff followed by Professionals at 6.1% but for all occupational groups, full-time males earned more than full-time females.

Table 8: Average full-time hourly earnings and unadjusted GPG by occupation, 2009

Occupation	Average full-time hourly earnings			Unadjusted GPG		
	Male	Female	Total	Full-time	Part-time	Total
	€	€	€	%	%	%
Managers and senior administrators	35.07	27.00	31.69	23.0	11.0	24.3
Professionals	38.11	35.78	36.94	6.1	12.6	8.3
Associate professional and technical	25.47	23.49	24.37	7.8	-2.1	8.6
Clerical and secretarial	19.08	18.14	18.42	4.9	-12.9	4.6
Craft and related trades	20.33	18.08	20.23	11.1	-8.0	12.2
Personal and protective services	18.63	16.62	17.55	10.8	-10.1	10.4
Sales	18.60	14.18	16.27	23.8	7.0	22.7
Plant and machine operatives	17.40	14.31	16.89	17.8	1.8	16.8
Other	17.10	13.52	15.89	20.9	-0.9	17.9
Total	24.59	22.35	23.59	9.1	-7.3	12.8

27. While earnings levels increase with the highest level of educational attainment, there is a clear gap between the earnings of full-time persons with a third level degree or above (€32.22) and all other levels, as Table 9 below shows. Average hourly earnings for full-time females are lower than for males at all levels of education, with the highest level of difference recorded at the post-Leaving certificate level (20.2%).

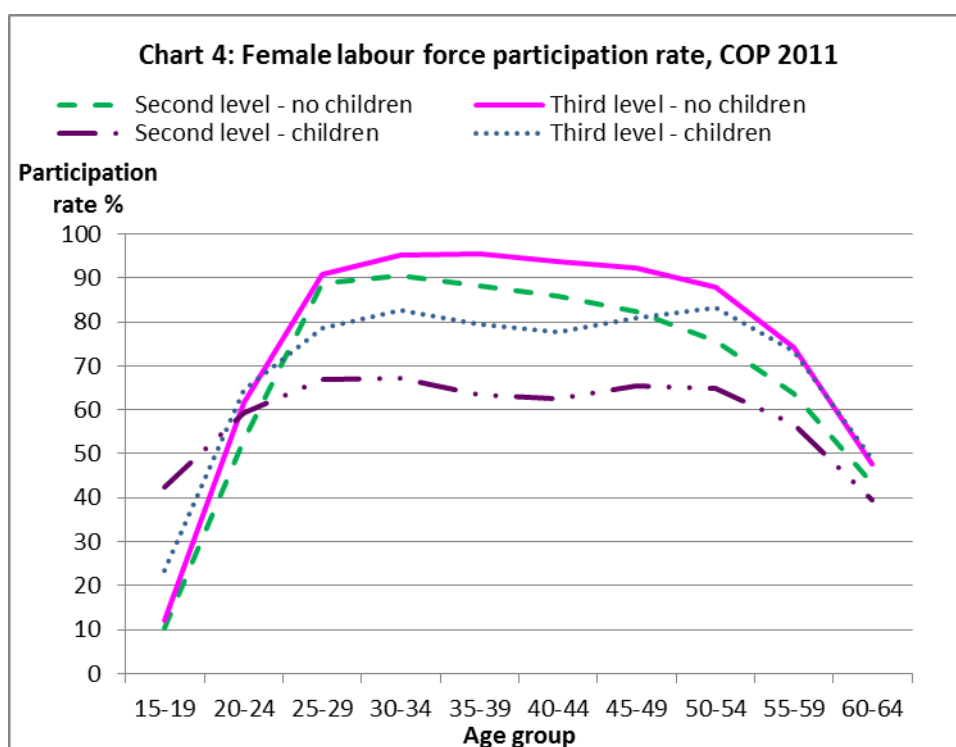
Table 9: Average full-time hourly earnings and unadjusted GPG by educational attainment, 2009

Highest level of education attained	Average full-time hourly earnings			Unadjusted GPG		
	Male	Female	Total	Full-time	Part-time	Total
	€	€	€	%	%	%
Primary or lower secondary	19.05	16.42	18.23	13.8	-3.4	16.0
Higher secondary	20.41	18.75	19.65	8.1	-8.0	10.2
Post Leaving certificate	21.04	16.79	19.62	20.2	1.2	21.3
Third level non degree	24.25	19.96	22.08	17.7	-8.6	17.3
Third level degree or above	35.29	29.51	32.22	16.4	-9.7	16.6
Total	24.59	22.35	23.59	9.1	-7.3	12.8

28. Therefore, neither sector, occupation nor educational attainment level alone can fully explain levels of difference in pay between male and female full-time employees although the overall unadjusted GPG is at least partially explained by the heavier representation of part-time employment among the female work force. Further analysis by cross-tabulating these elements (e.g., sector by occupation, or sector by educational attainment level, etc.) may aid a deeper understanding but this type of analysis is limited by the sample size of the National Employment

Survey. The Economic, Social and Research Institute (ESRI⁴) conducted an econometric analysis of the data from the 2003 National Employment Survey, (using the Oaxaca/Blinder decomposition method), and found that approximately two thirds of the difference in average pay levels between male and female employees in 2003 could be accounted for by available information on the differences in years of work experience, length of tenure with the employer etc. while one third could not be explained.

29. Chart 4 below shows female labour force participation rates based on data from the 2011 Census of Population and illustrates clearly how participation rates are lower for females with children than those without. Participation rates are above 90% for women aged 25 to 49 who have third level education but no children while rates for women with second level education and no children in this age group are close to 85%. Participation rates for women aged 25 to 49 with children are lower – for those with third level education the rates are between 78% and 83%, falling to between 63% and 67% for those with second level education.



30. The analysis above of the full-time GPG includes women who have taken time out of the workforce for child care reasons and who therefore will have lower earning potential than colleagues (male and female) who have stayed at work. Currently in Ireland paid maternity leave for six months is available for mothers but there is no paternity leave at all. Parental leave is available for both parents but is unpaid. It is often argued that improvements in access to flexible working and to good quality and affordable childcare and ensuring that a portion of paid maternity leave can be accessed by fathers would encourage mothers to remain in the labour force. However the challenge for policy makers who wish to reduce the GPG is to

⁴ 'The Gender Wage Gap in Ireland- Evidence from the National Employment Survey 2003', ESRI, 2003

establish if these policy changes would increase female labour force participation rates or if it is the case that a significant cohort of mothers want either to stay at home or work part-time for a period of time.

V. Concluding comments

31. There are clear gender disparities in subject choices in second and third level education in Ireland although a comparison of the gender breakdown of Leaving cert subjects between 1968 and 2013 does show some increases in the proportions of females studying subjects traditionally perceived as 'male' and vice versa. A relationship can be seen between these gender differences in educational choices and patterns of occupation and industry segregation of the labour force in Ireland. However the GPG cannot be fully explained by occupation or sector of employment, nor by full-time/part-time status or educational attainment and thus further more detailed analysis will needed to fully explain the GPG in Ireland.
