



Hourly Earnings Inequality in high-income EU countries and the UK

Evidence from the Structure of Earnings Survey

Ciarán Nugent

NERI Labour Market Conference 2021

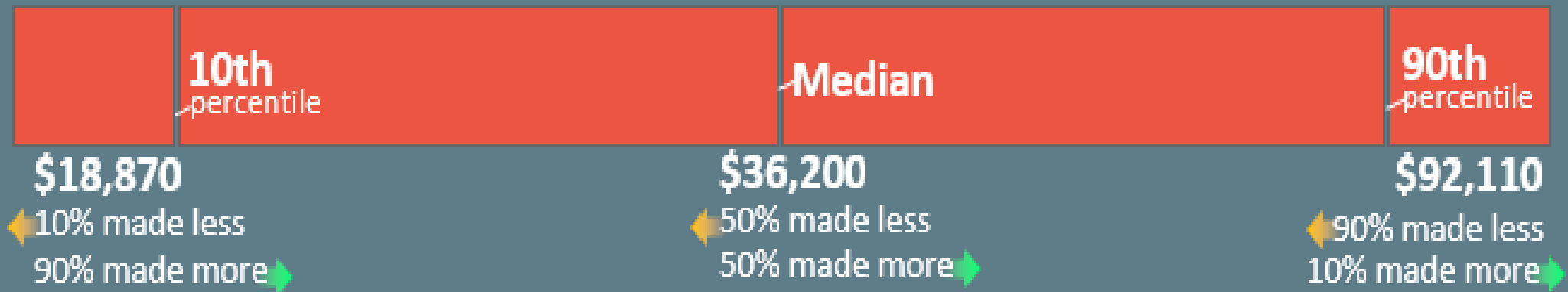
ciaran.nugent@nerinstitute.net

Data

- Structure of earnings survey
 - Excludes microenterprises
 - Survey every 4 years (this paper looks at 4 rounds, 2006-2018)
 - Hourly earnings (p10, p50 (median), p90 and mean (average))
(monthly, annual also available)
 - Breakdown by gender, by age group, by occupation (9 groups), by wide sector (Business economy/services/manufacturing etc.), by full-time/part-time
 - Indicators also available in PPS
 - Data also available on rates of low-pay (2/3's the median)
 - Some issues regarding time-series; absolute estimates to be 'interpreted with care', though internal consistency within survey rounds should mean that relationships within surveys are comparable over time (percentile ratios, gender pay gap, intergenerational pay gaps etc.)

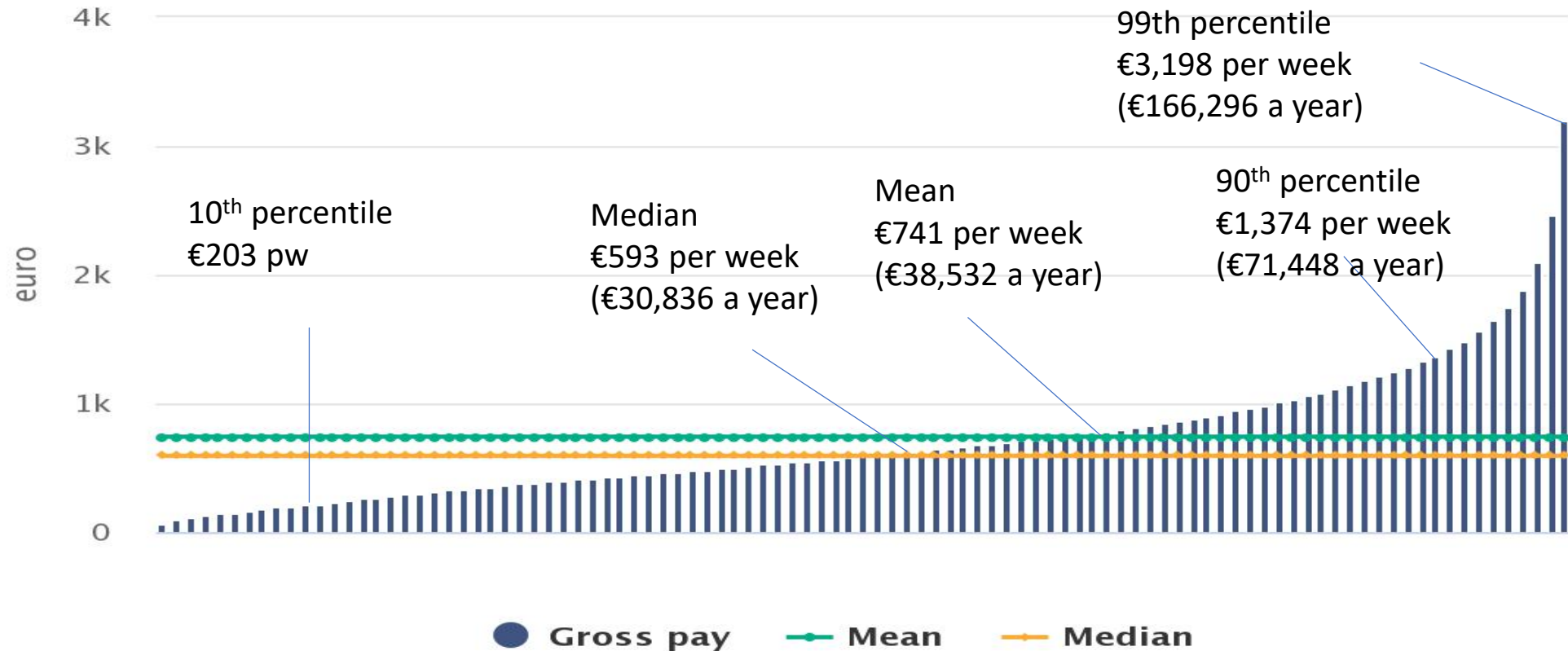


Percentile wages for all workers, May 2015



Source: bureau of labor statistics (US)

Figure 3.1 Distribution of weekly earnings by percentile 2018



Source: CSO Ireland

Mean * 3.5 = €134,862 (maximum mortgage)

90th percentile * 3.5 = €250,068 (maximum mortgage)

Table 3 Hourly Earnings, 2018 (Full-time, euro)

	Mean	Median	p10	p90	p90/p10
EU-28	16.42	:	:	:	
EU-19	17.65	15.08	6.63	30.47	4.60
Belgium	21.46	19.32	12.49	33.49	2.68
Denmark	31.71	28.75	20.13	46.57	2.31
Germany	21.82	18.89	10.36	36.24	3.50
Ireland	24.3	18.98	10.92	43.27	3.96
France	18.42	15.61	10.6	28.06	2.65
Italy	16.53	13.39	9.04	27.22	3.01
Netherlands	21.58	18.51	11.56	34.26	2.96
Austria	18.34	15.85	9.51	29.64	3.12
Finland	20.65	18.12	13.02	30.67	2.35
Sweden	21.05	18.9	14.05	29.86	2.12
UK	20.9	16.88	10.01	35.37	3.53

Industry, construction and services (except public administration, defense, compulsory social security)

Note: Estimates are for firms with 10 or more employees (about 70 percent of Irish employment)

Table 4 Hourly Earnings, 2018 (Full-time, PPS)

	Mean	Median	p10	p90	p90/p10
EU-28	15.92	:	:	:	
EU-19	16.68	14.25	6.26	28.79	4.60
Belgium	18.69	16.83	10.88	29.18	2.68
Denmark	22.4	20.31	14.22	32.9	2.31
Germany	20.42	17.68	9.7	33.93	3.50
Ireland	18.31	14.3	8.23	32.61	3.96
France	16.21	13.74	9.33	24.7	2.65
Italy	15.97	12.94	8.73	26.3	3.01
Netherlands	18.69	16.03	10.01	29.66	2.96
Austria	16.38	14.15	8.49	26.47	3.12
Finland	16.39	14.39	10.34	24.35	2.35
Sweden	17.03	15.29	11.37	24.16	2.12
UK	17.4	14.05	8.34	29.45	3.53

Industry, construction and services (except public administration, defense, compulsory social security)

Note: Estimates are for firms with 10 or more employees (about 70 percent of Irish employment)

Table 5 Hourly Earnings, 2018, Business Economy (euro)					
	Mean	Median	p10	p90	p90/p10
EU-28	15.69	:	:	:	
EU-19	16.63	13.78	6.73	28.99	4.31
Belgium	19.71	18.06	11.56	30.36	2.63
Denmark	30.61	27.49	17.88	47.06	2.63
Germany	19.65	16.36	9.28	34.21	3.69
Ireland	21.60	16.26	10.21	38.23	3.74
France	18.57	15.42	10.37	28.81	2.78
Italy	14.37	11.7	8.35	22.45	2.69
Netherlands	17.62	14.99	7.82	29.76	3.81
Austria	17.37	14.92	9.16	28.2	3.08
Finland	20.64	18.01	12.6	31.2	2.48
Sweden	21.23	18.89	13.86	30.72	2.22
UK	19.59	14.71	9.34	34.73	3.72
Business economy Estimates are for firms with 10 or more employees (about 70 percent of Irish employment)					

Table 7 The gap between the top and the bottom, Hourly Earnings, 2006-2018 (euro), p90/p10				
	2006	2010	2014	2018
EU-28	9.46	7.26	7.24	-
EU-19	-	4.32	4.23	-
Belgium	2.67	2.55	2.38	2.83
Denmark	2.29	2.32	2.37	2.37
Germany	3.84	4.06	3.78	3.49
Ireland	4.02	4.06	4.10	3.98
France	2.63	2.67	2.69	2.71
Italy	3.17	3.30	3.16	3.04
Netherlands	3.38	3.14	3.34	3.21
Austria	3.16	3.17	3.09	3.06
Finland	2.30	2.37	2.36	2.37
Sweden	2.04	2.01	2.06	2.09
UK	4.03	4.07	3.83	3.53
Industry, construction and services (except public administration, defense, compulsory social security)				
Note: Estimates are for firms with 10 or more employees (about 70 percent of Irish employment)				

Table 8 The gap between the top and the middle, Hourly Earnings, 2006-2018 (euro), p90/50

	2006	2010	2014	2018
EU-28	2.19	2.16	2.14	-
EU-19	-	1.98	1.99	-
Belgium	1.86	1.78	1.76	1.79
Denmark	1.55	1.57	1.59	1.60
Germany	1.85	1.92	1.97	1.95
Ireland	2.17	2.16	2.16	2.32
France	1.81	1.85	1.81	1.83
Italy	2.10	2.11	2.13	2.08
Netherlands	1.81	1.79	2.02	1.79
Austria	1.89	1.89	1.86	1.87
Finland	1.68	1.69	1.69	1.71
Sweden	1.57	1.55	1.57	1.56
UK	2.29	2.29	2.22	2.21

Industry, construction and services (except public administration, defense, compulsory social security)

Note: Estimates are for firms with 10 or more employees (about 70 percent of Irish employment)

Table 9 The gap between the middle and the bottom, Hourly Earnings (euro), 2006-2018, p50/p10

	2006	2010	2014	2018
EU-28	4.33	3.36	3.38	-
EU-19	-	2.18	2.13	-
Belgium	1.43	1.43	1.36	1.58
Denmark	1.48	1.48	1.48	1.48
Germany	2.07	2.11	1.92	1.79
Ireland	1.85	1.88	1.90	1.72
France	1.45	1.44	1.49	1.49
Italy	1.51	1.56	1.48	1.46
Netherlands	1.87	1.76	1.66	1.79
Austria	1.67	1.68	1.66	1.63
Finland	1.37	1.40	1.40	1.39
Sweden	1.30	1.30	1.31	1.34
UK	1.76	1.77	1.73	1.60

Industry, construction and services (except public administration, defense, compulsory social security)

Note: Estimates are for firms with 10 or more employees (about 70 percent of Irish employment)

Table 10 Hourly Earnings distribution by Occupation (euro, ISCO), Managers, 2018					
	Mean	Median	p10	p90	p90/10
EU-28	29.8	:	:	:	-
EU-19	33.48	:	:	:	-
Belgium	39.59	40.82	22.79	52.65	2.31
Denmark	50.87	43.17	26.82	81.83	3.05
Germany	46.73	39.61	21.36	75.09	3.52
Ireland	33.92	25.3	12.81	63.72	4.97
France	31.51	24.78	15.9	49.59	3.12
Italy	42.59	37.33	13.06	72.13	5.52
Netherlands	34.35	30.1	15.28	56.04	3.67
Austria	36.58	31.12	16.88	59.52	3.53
Finland	43.67	38.8	22.34	67.48	3.02
Sweden	34.15	29.28	20.5	50.89	2.48
UK	32.29	25.4	12	58.12	4.84
Industry, construction and services (except public administration, defense, compulsory social security)					
Note: Estimates are for firms with 10 or more employees (about 70 percent of Irish employment)					

Table 11 Hourly Earnings distribution by Occupation (euro, ISCO), Professionals, 2018					
	Mean	Median	p10	p90	p90/10
EU-28	22.41	:	:	:	-
EU-19	23.95	:	:	:	-
Belgium	30.86	29.68	21.27	42.46	2.00
Denmark	34.48	31.65	23.3	50.45	2.17
Germany	29.17	27.07	15.36	44.67	2.91
Ireland	32.54	27.75	15.11	54.63	3.62
France	23.65	20.73	12.23	36.21	2.96
Italy	24.28	23.47	13.11	35.18	2.68
Netherlands	25.56	23.81	15.17	36.73	2.42
Austria	24.8	21.87	13.77	38.77	2.82
Finland	25.99	23.91	16.39	37.42	2.28
Sweden	23.24	21.12	16.24	32.95	2.03
UK	26.03	23.22	14.17	39.29	2.77
Industry, construction and services (except public administration, defense, compulsory social security)					
Note: Estimates are for firms with 10 or more employees (about 70 percent of Irish employment)					

Table 22 Intergenerational Hourly Earnings Inequality, 2006- 2018, (under 30 average/average)				
	2006	2010	2014	2018
EU-28	0.73	0.72	0.73	0.76
EU-19	-	0.69	0.71	0.72
Belgium	0.79	0.76	0.75	0.74
Denmark	0.76	0.74	0.72	0.74
Germany	0.63	0.63	0.67	0.69
Ireland	0.73	0.68	0.76	0.68
France	0.74	0.72	0.73	0.74
Italy	0.69	0.68	0.68	0.70
Netherlands	0.64	0.65	0.63	0.63
Austria	0.72	0.71	0.71	0.72
Finland	0.82	0.79	0.78	0.78
Sweden	0.81	0.80	0.80	0.80
UK	0.72	0.69	0.71	0.73
Industry, construction and services (except public administration, defense, compulsory social security)				
Note: Estimates are for firms with 10 or more employees (about 70 percent of Irish employment)				

Table 23 Intergenerational Hourly Earnings Inequality, Full-Time, 2006- 2018, (under 30 average/average)				
	2006	2010	2014	2018
EU-28	0.71	0.70	0.72	0.75
EU-19	-	0.68	0.69	0.72
Belgium	0.79	0.75	0.75	0.73
Denmark	0.75	0.72	0.70	0.73
Germany	0.60	0.60	0.63	0.66
Ireland	0.72	0.67	0.69	0.65
France	0.73	0.71	0.72	0.73
Italy	0.68	0.67	0.66	0.68
Netherlands	0.66	0.66	0.62	0.65
Austria	0.69	0.68	0.69	0.70
Finland	0.82	0.80	0.78	0.78
Sweden	0.80	0.79	0.78	0.80
UK	0.72	0.70	0.71	0.73
Industry, construction and services (except public administration, defense, compulsory social security)				
Note: Estimates are for firms with 10 or more employees (about 70 percent of Irish employment)				

**Table 25 Intergenerational Hourly Earnings Inequality by Occupation, Managers, Full-Time, 2006- 2018,
(under 30 average/average)**

	2006	2010	2014	2018
EU-28	0.63	0.56	0.57	0.58
EU-19	-	0.56	0.57	0.55
Belgium	0.54	0.58	0.56	0.35
Denmark	0.61	0.56	0.53	0.53
Germany	0.47	0.58	0.52	0.53
Ireland	0.61	0.53	0.49	0.50
France	0.64	0.62	0.66	0.62
Italy	-	0.32	0.41	0.43
Netherlands	0.53	0.49	0.50	0.46
Austria	0.52	0.52	0.50	0.52
Finland	0.58	0.56	0.61	0.55
Sweden	0.65	0.59	0.57	0.59
UK	0.62	0.57	0.56	0.60

Industry, construction and services (except public administration, defense, compulsory social security)

Table 27 Intergenerational Hourly Earnings Inequality by Occupation, Professionals, Full-Time, 2006- 2018, (under 30 average/average)

	2006	2010	2014	2018
EU-28	0.71	0.70	0.72	0.73
EU-19	-	0.65	0.66	0.68
Belgium	0.70	0.70	0.70	0.73
Denmark	0.74	0.76	0.72	0.73
Germany	0.63	0.66	0.64	0.66
Ireland	0.67	0.69	0.76	0.62
France	0.69	0.64	0.66	0.65
Italy	0.51	0.56	0.49	0.56
Netherlands	0.68	0.67	0.64	0.65
Austria	0.66	0.67	0.67	0.68
Finland	0.76	0.76	0.75	0.76
Sweden	0.78	0.78	0.77	0.77
UK	0.76	0.74	0.75	0.75

Industry, construction and services (except public administration, defense, compulsory social security)
Estimates are for firms with 10 or more employees (about 70 percent of Irish employment)

Table 41 Intergenerational Hourly Earnings Inequality by Occupation, Elementary occupations, Full-Time, 2006- 2018, (under 30 average/average)

	2006	2010	2014	2018
EU-28	0.87	0.91	0.93	0.98
EU-19	-	0.87	0.88	0.93
Belgium	0.92	0.93	0.90	0.94
Denmark	0.94	0.91	0.91	0.92
Germany	0.71	0.79	0.80	0.83
Ireland	0.86	0.79	0.84	0.77
France	0.84	0.84	0.83	0.90
Italy	0.89	0.84	0.90	0.91
Netherlands	0.79	0.78	0.74	0.78
Austria	0.94	0.95	0.94	0.97
Finland	0.94	0.95	0.95	0.97
Sweden	0.95	0.93	0.95	0.96
UK	0.87	0.87	0.89	0.92

Industry, construction and services (except public administration, defense, compulsory social security)
Estimates are for firms with 10 or more employees (about 70 percent of Irish employment)

Table 42 Low-wage earners, 2006-2018				
	2006	2010	2014	2018
EU-28	:	17.0	17.2	:
EU-19	:	:	15.9	15.0
Belgium	6.8	6.4	3.8	13.7
Denmark	8.3	8.2	8.6	8.7
Germany	20.3	22.2	22.5	20.7
Ireland	21.4	20.7	21.6	19.8
France	7.1	6.1	8.8	8.6
Italy	10.3	12.4	9.4	8.5
Netherlands	17.7	17.5	18.0	18.2
Austria	14.2	15.0	14.8	14.8
Finland	4.8	5.9	5.3	5.0
Sweden	1.8	2.5	2.6	3.6
UK	21.8	22.1	21.3	17.0
Industry, construction and services (except public administration, defense, compulsory social security) Estimates are for firms with 10 or more employees (about 70 percent of Irish employment)				

OECD (2017), Low pay (2/3 of full-time median earnings) => Ireland 23 percent (3rd highest), Germany (18), UK (19), US (24)

Table 43 Low-wage earners, under 30, 2006-2018				
	2006	2010	2014	2018
EU-28	:	30.5	30.1	:
EU-19	:	:	28.8	28.1
Belgium	12.4	15.3	12.9	35.5
Denmark	22.0	24.6	25.8	25.3
Germany	37.7	38.1	35.0	33.0
Ireland	36.1	39.4	34.1	33.9
France	13.5	12.4	16.7	15.9
Italy	21.2	25.0	19.9	15.9
Netherlands	43.5	44.1	46.5	45.7
Austria	23.6	24.3	24.8	24.5
Finland	10.0	13.2	12.6	10.7
Sweden	7.2	9.5	9.5	11.0
UK	38.4	40.6	37.8	30.0
Industry, construction and services (except public administration, defense, compulsory social security) Estimates are for firms with 10 or more employees (about 70 percent of Irish employment)				

Table 44 Low-wage earners, tertiary education, 2006-2018

	2006	2010	2014	2018
EU-28	:	5.8	6.4	:
EU-19	:	:	5.5	4.7
Belgium	1.2	0.2	0.2	0.8
Denmark	3.2	2.6	2.1	2.7
Germany	3.8	2.1	6.0	5.7
Ireland	12.9	12.9	13.2	13.0
France	2.4	2.8	3.6	4.0
Italy	3.6	2.6	2.8	2.8
Netherlands	3.9	3.5	4.8	4.3
Austria	3.5	3.2	5.6	5.3
Finland	1.4	1.7	1.6	1.5
Sweden	0.8	2.1	1.2	1.5
UK	6.0	11.4	10.3	7.9
Industry, construction and services (except public administration, defense, compulsory social security) Estimates are for firms with 10 or more employees (about 70 percent of Irish employment)				



Thank you!