

Third level attainment and labour market outcomes of graduates by social class of origin in high-income EU member states; Evidence from EU SILC

NERI Wed Seminar Feb 28th, 2024

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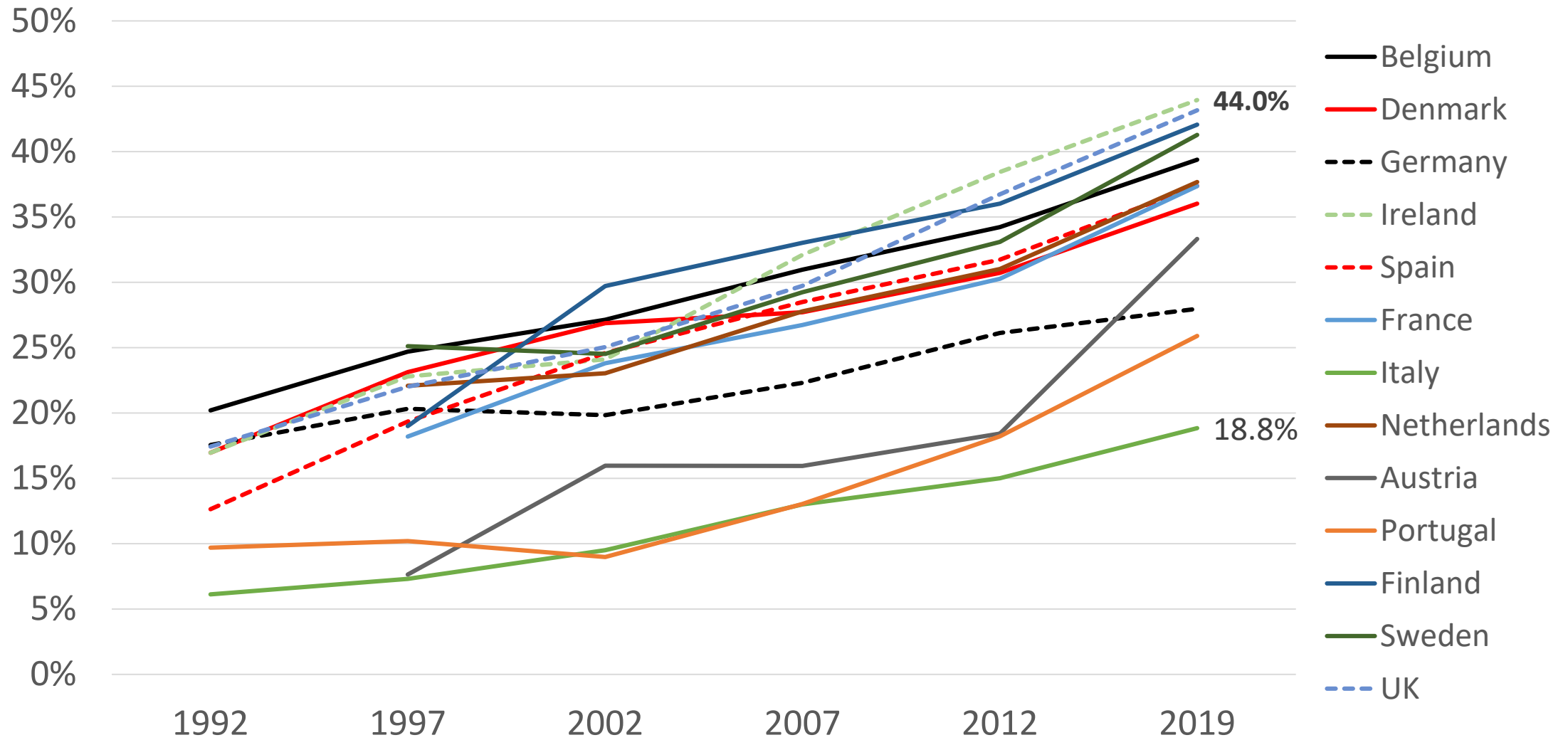
**Maynooth
University**
National University
of Ireland Maynooth



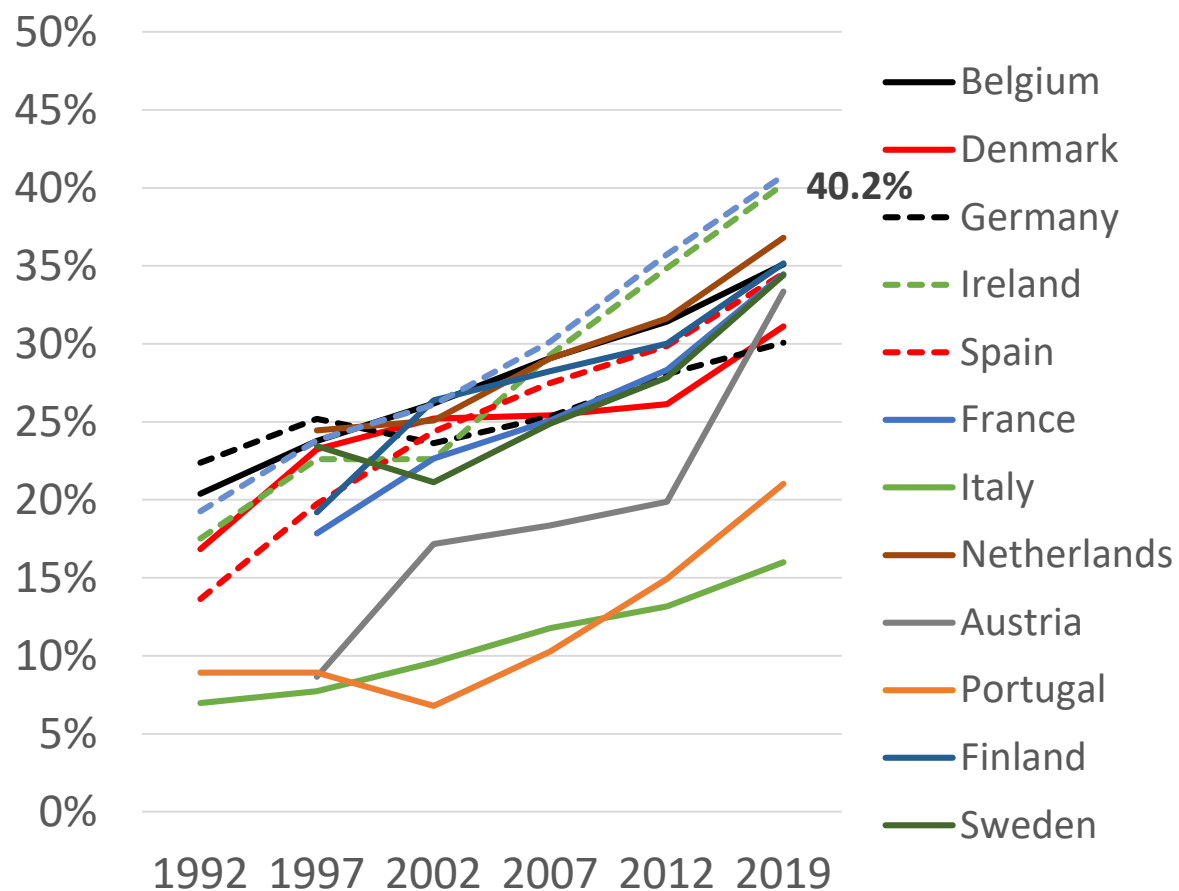
Structure

- Part 1: Expansion of third level education
- Part 2: Third level education by social origin, 2005, 2011, 2019 (father's education)
- Part3: Outcomes of graduates
(‘high-end’ employment in the labour market, overqualification)
- Part 4: Outcomes of graduates by social origin, 2005, 2011, 2019 (father's education)

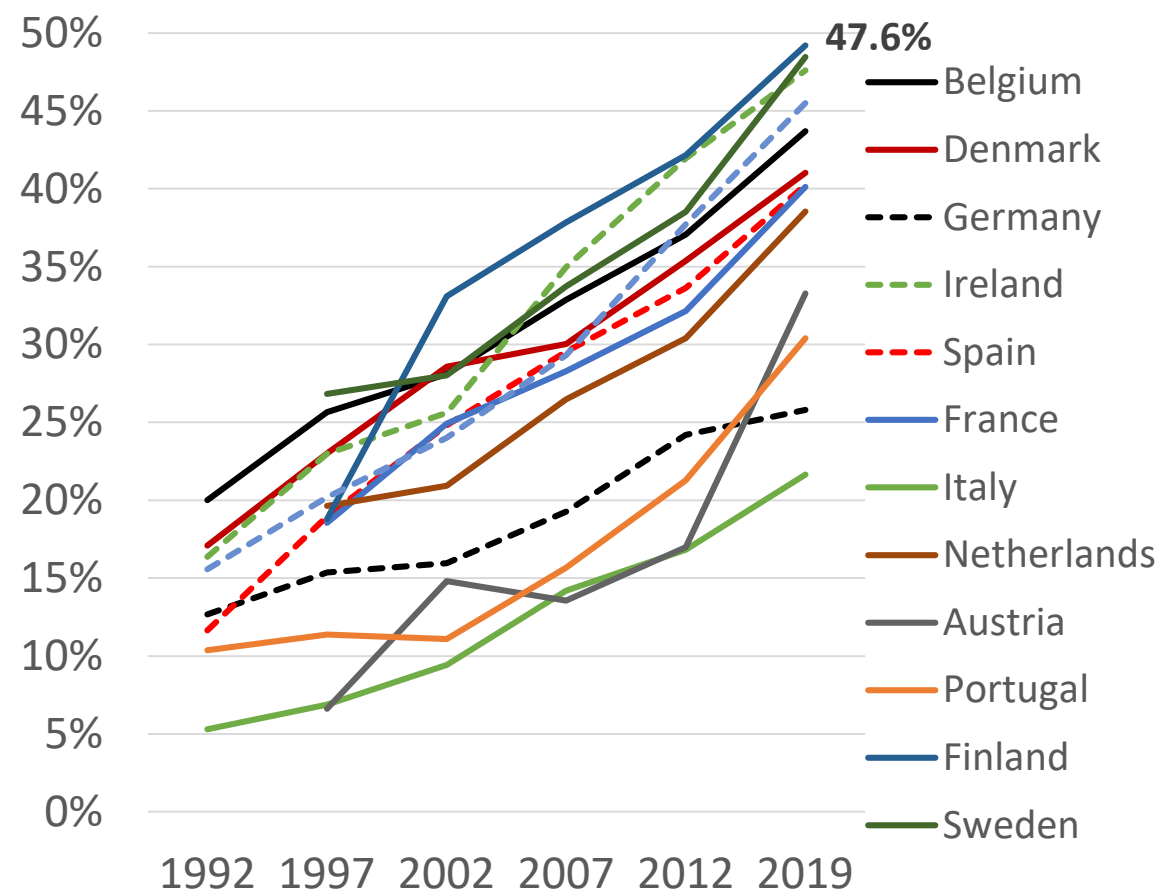
Tertiary Education (ISCED 5-8), 20-64, %



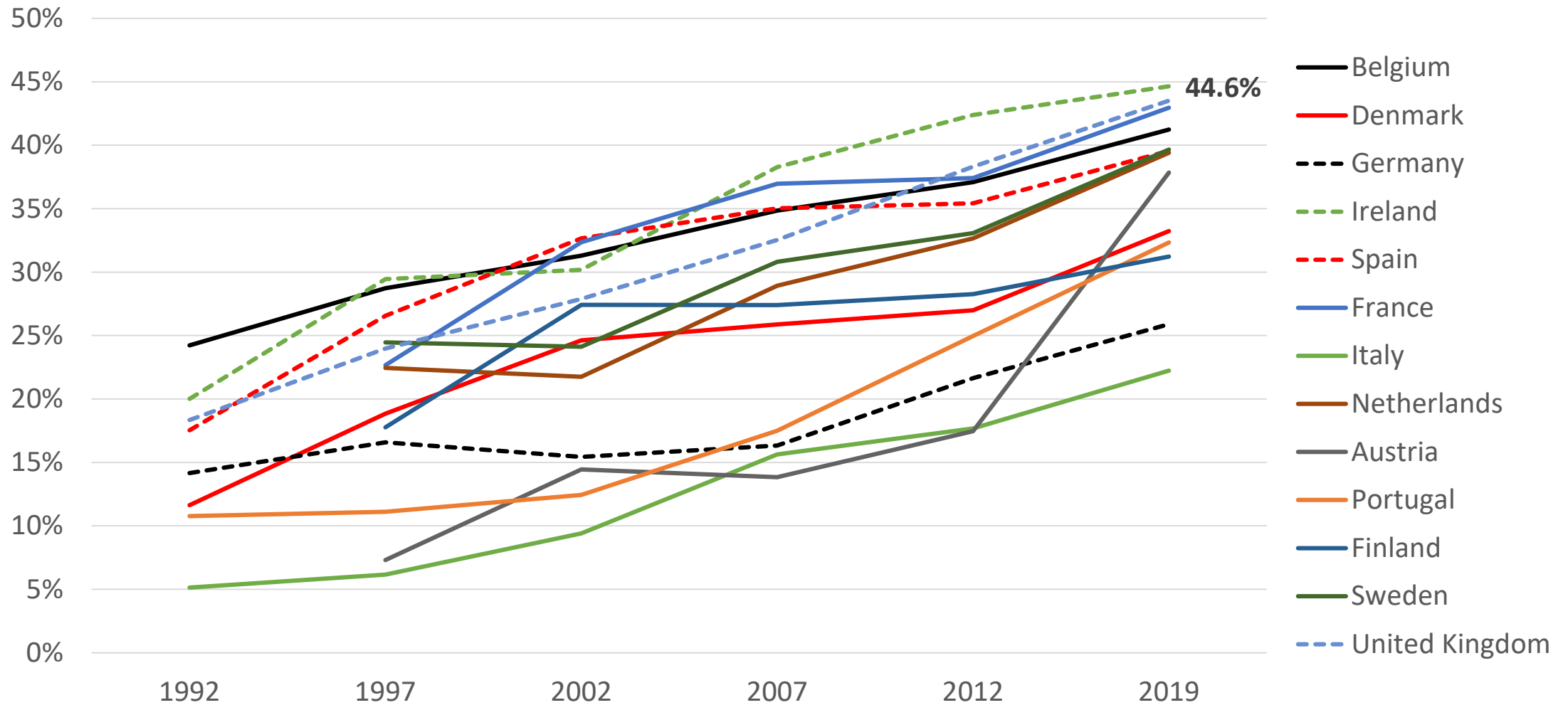
Tertiary Education (ISCED 5-8), 20-64, M, %



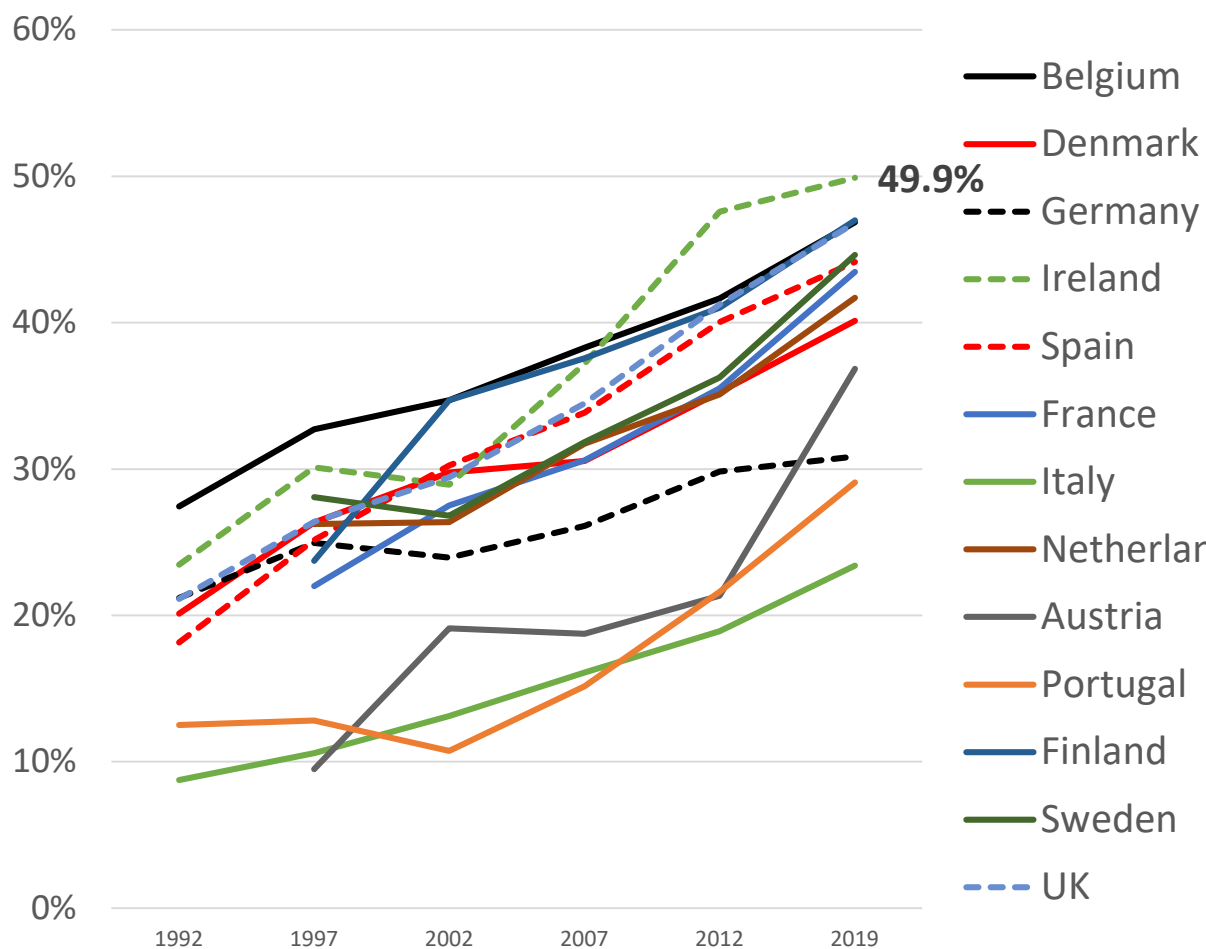
Tertiary Education (ISCED 5-8), 20-64, F, %



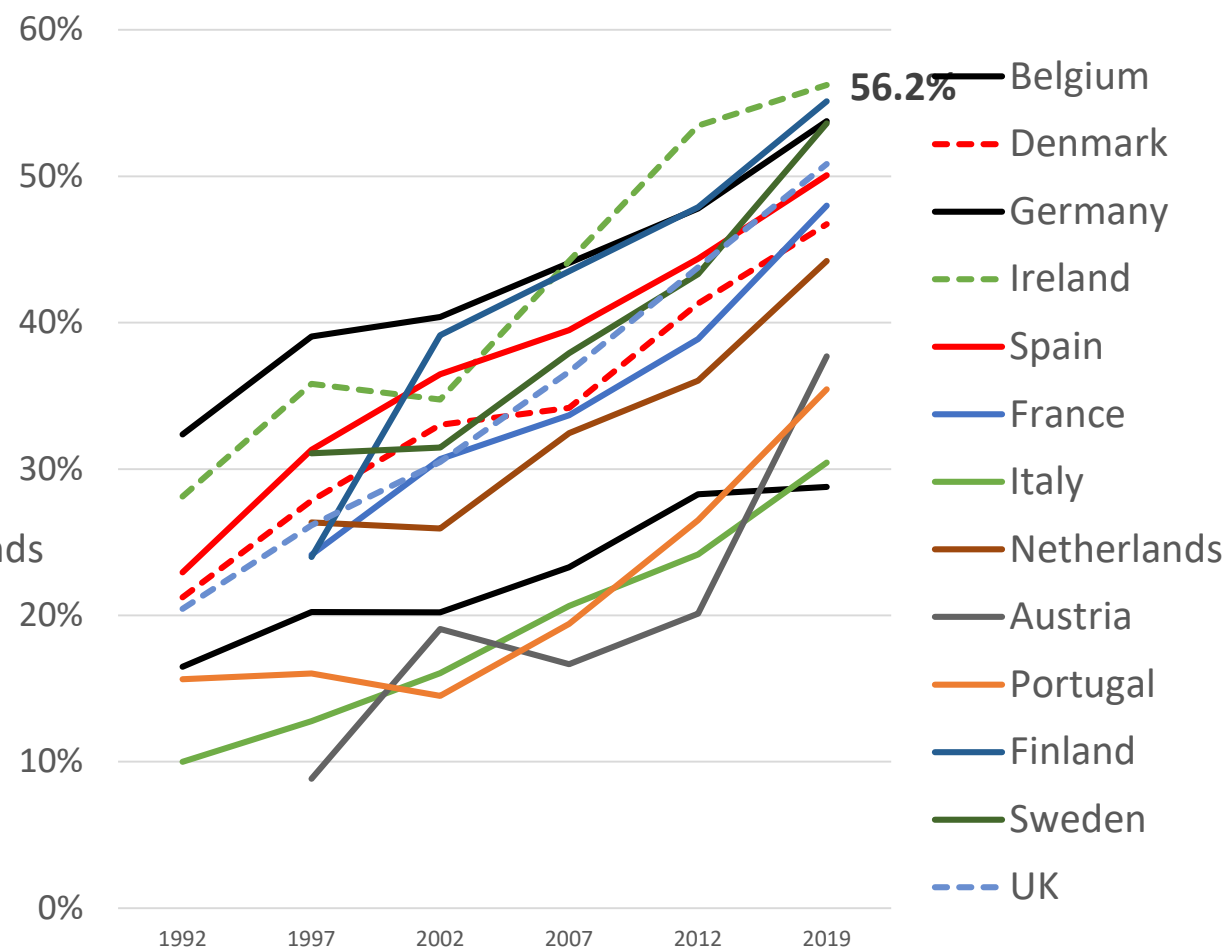
Tertiary Education (ISCED 5-8), 20-34, %



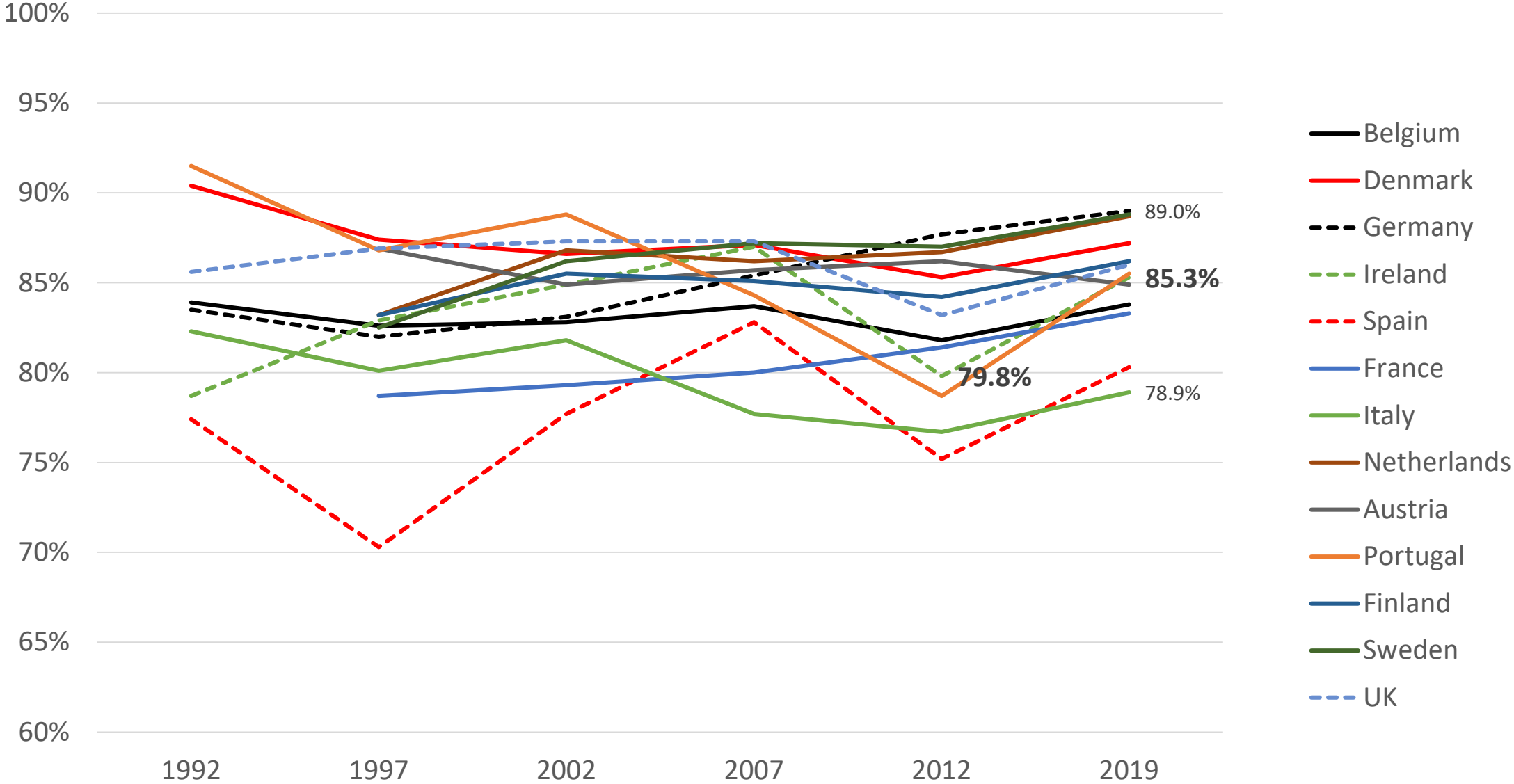
Tertiary Educated in Employment (ISCED 5-8),
20-64, %



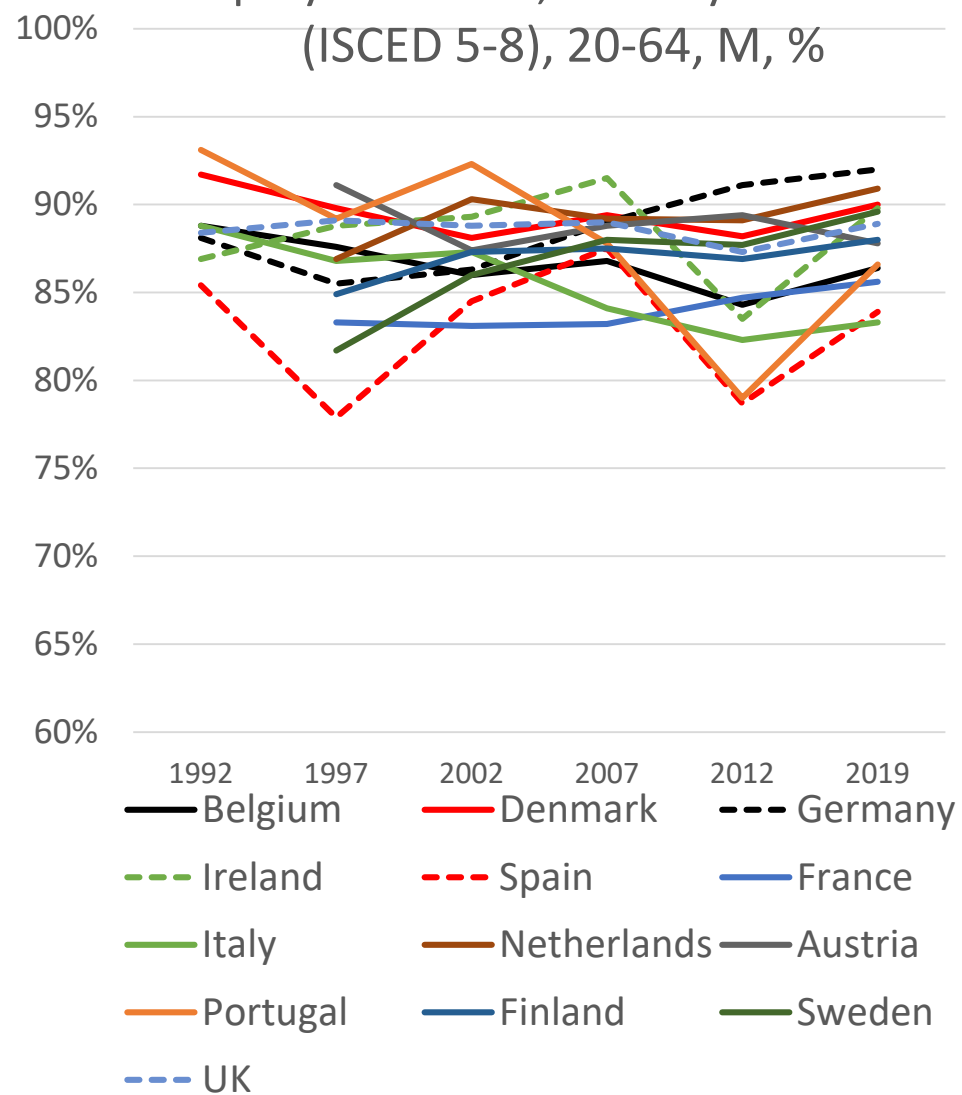
Tertiary Educated in Employment (ISCED 5-8),
20-64, F, %



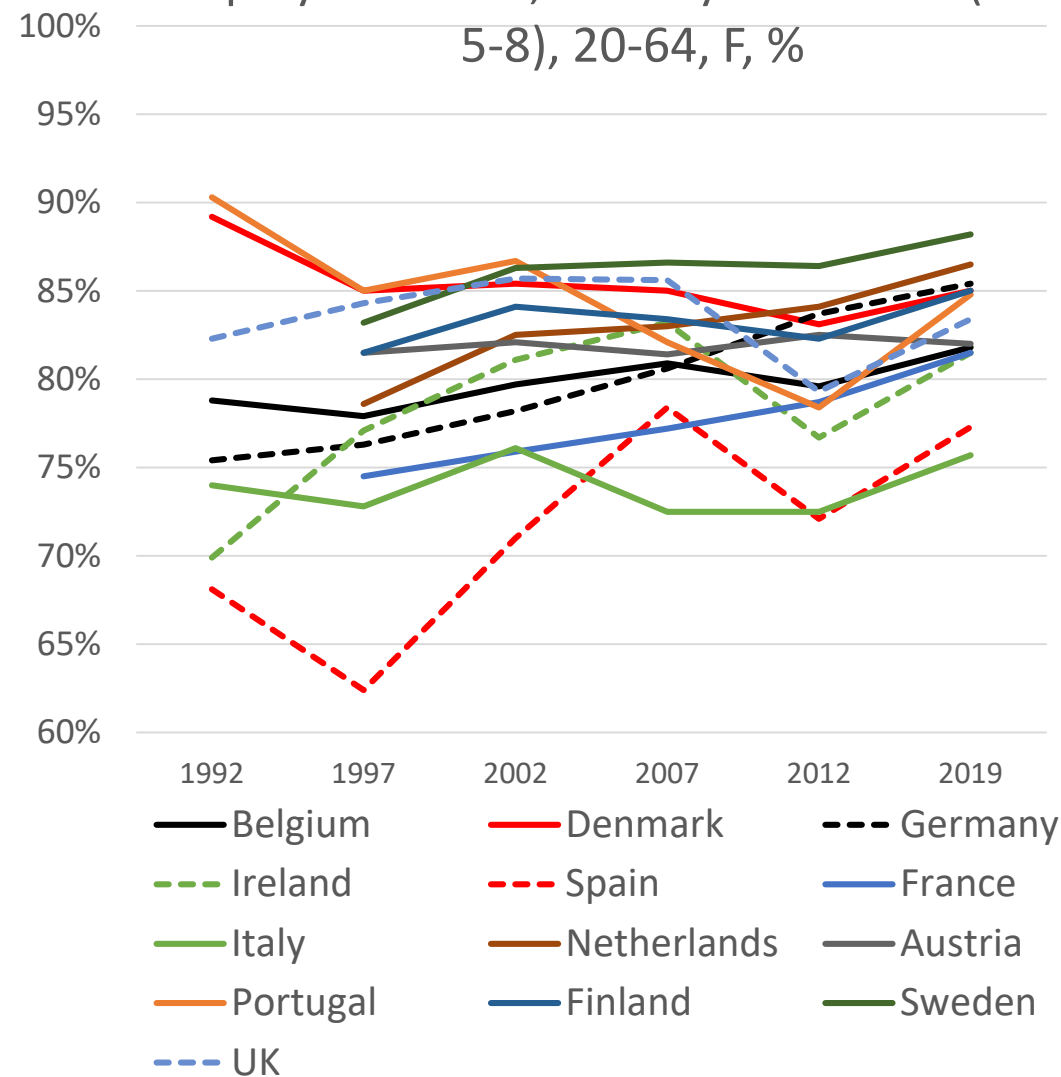
Employment rate, Tertiary Graduates (ISCED 5-8), 20-64, %



Employment rate, Tertiary Graduates
(ISCED 5-8), 20-64, M, %



Employment rate, Tertiary Graduates (ISCED
5-8), 20-64, F, %



The International Standard Classification of Education ([ISCED 2011](#)) provides a comprehensive framework for organising education programmes and qualification by applying uniform and

■ Table 1.3 ■

Comparison of levels of education between ISCED 2011 and ISCED 1997

ISCED 2011		ISCED 1997	
01	Early childhood educational development		–
02	Pre-primary education	0	Pre-primary education
1	Primary education	1	Primary education or first stage of basic education
2	Lower secondary education	2	Lower secondary education or second stage of basic education
3	Upper secondary education	3	(Upper) secondary education
4	Post-secondary non-tertiary education	4	Post-secondary non-tertiary education
5	Short-cycle tertiary education	5	First stage of tertiary education (not leading directly to an advanced research qualification) (5A, 5B)
6	Bachelor's or equivalent level		
7	Master's or equivalent level		
8	Doctoral or equivalent level	6	Second stage of tertiary education (leading to an advanced research qualification)

EU LFS 2019, % (25-59)		EU SILC 2019, % (25-59)	
Italy	20.0	Italy	21.0
Portugal	27.7	Portugal	25.8
Germany	30.1	Germany	31.5
Austria	34.5	Austria	36.7
France	39.9	Sweden	39.2
Spain	40.3	Spain	39.7
Belgium	40.6	France	41.0
Denmark	42.0	Finland	44.1
Netherlands	42.7	Belgium	46.0
Sweden	45.5	Netherlands	46.1
Finland	47.9	Denmark	46.3
Ireland	49.2	Ireland	58.6

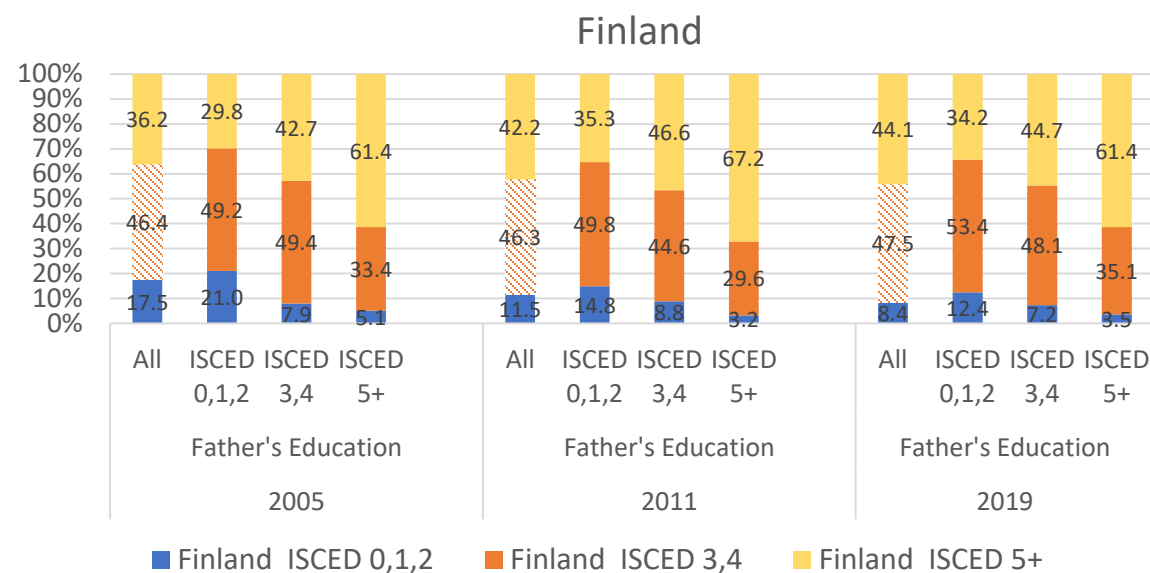
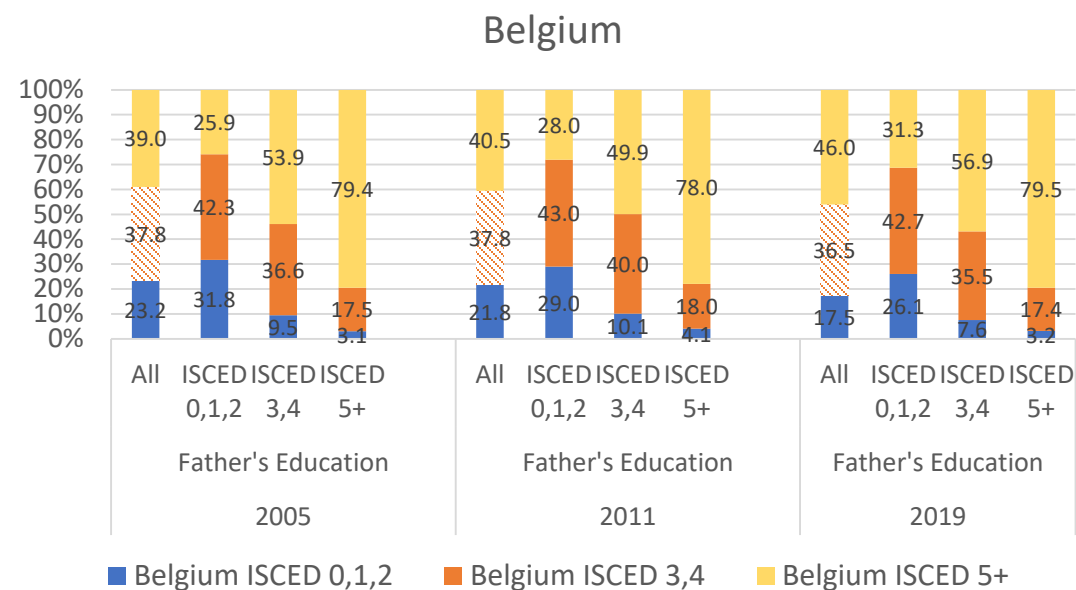
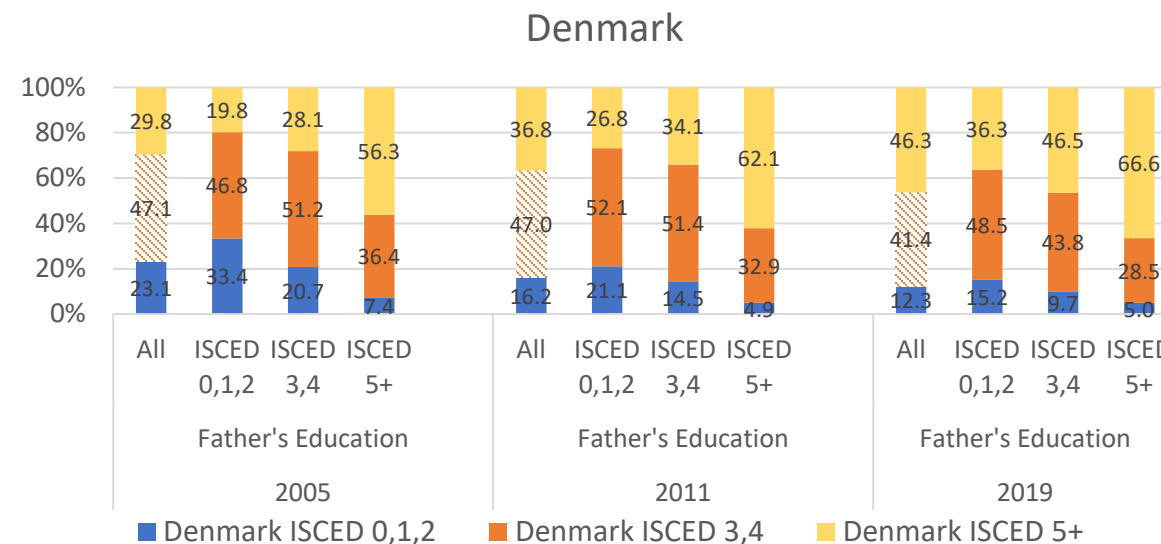
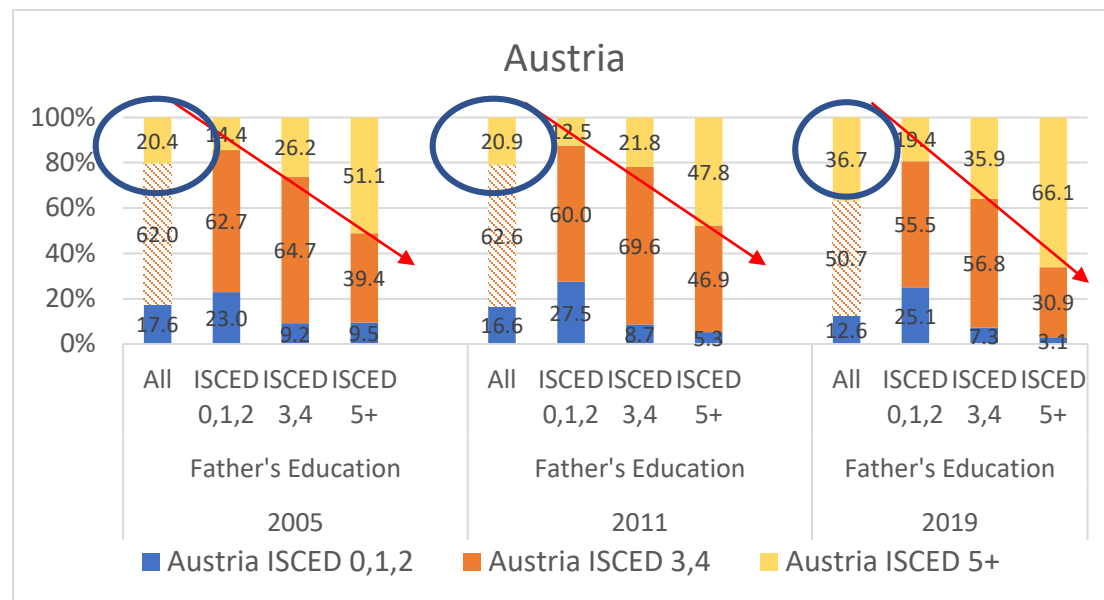
Notes:

SILC: Some differences in estimates (SILC estimates of third level attainment and of overqualification rate are higher in Ireland in 2019. Germany 2005)

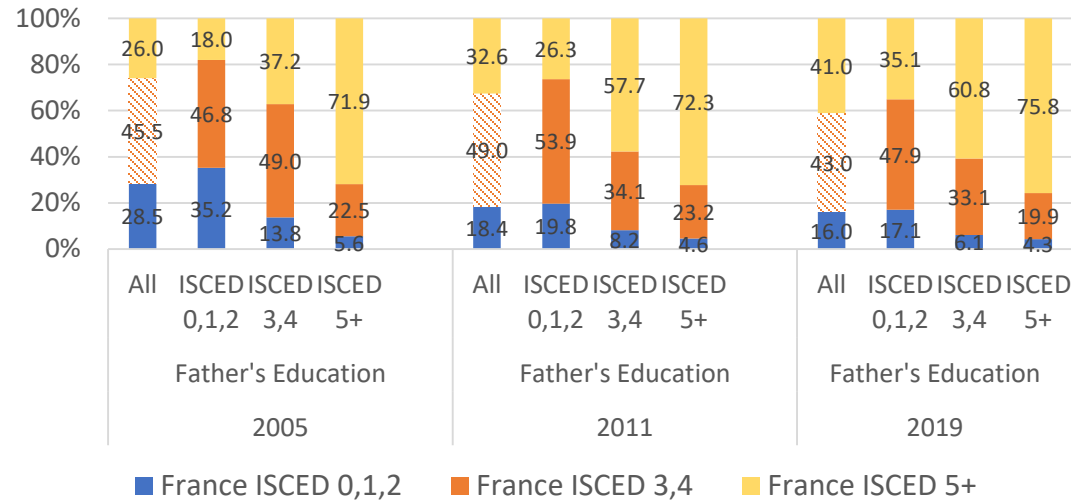
Later sections:

Overqualification rate Ireland 30.1% in LFS, 39.2% in SILC
Spain, 39% vs 41%

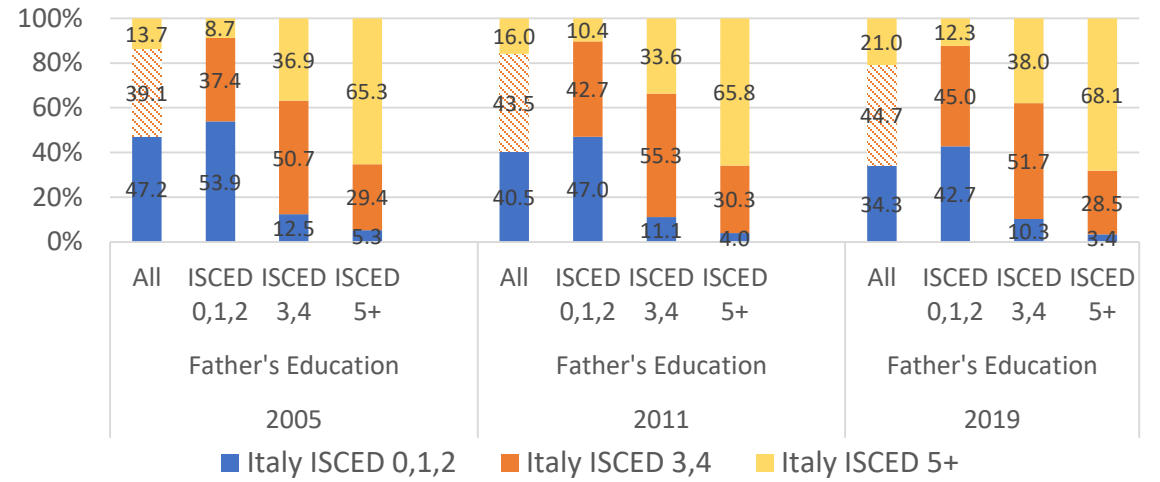
Overqualification rate doesn't control for different levels of third level education, which are likely to have a class component
(In Ireland in 2019, the rate for short term tertiary=51.7%, **for a degree =32.9%**, for a MA 14.6% and PhD 5.3% [LFS])



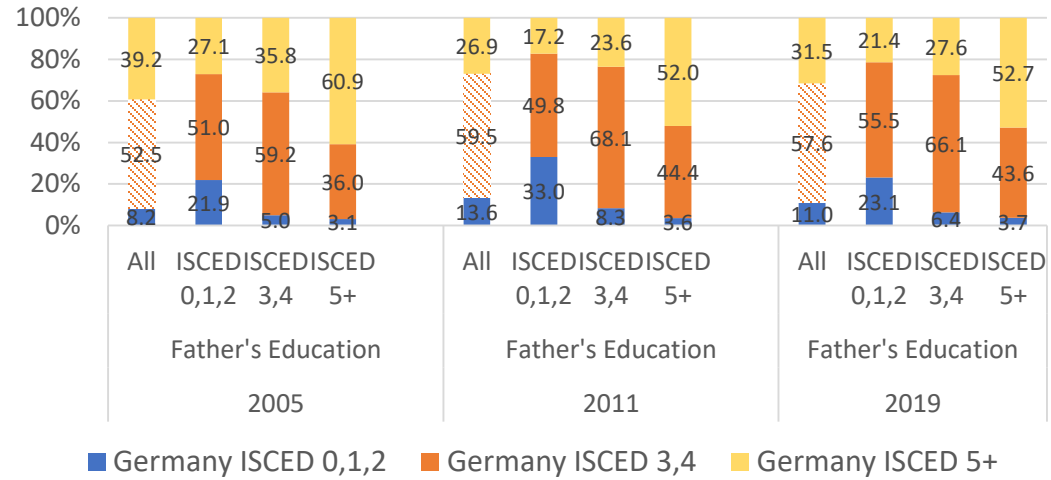
France



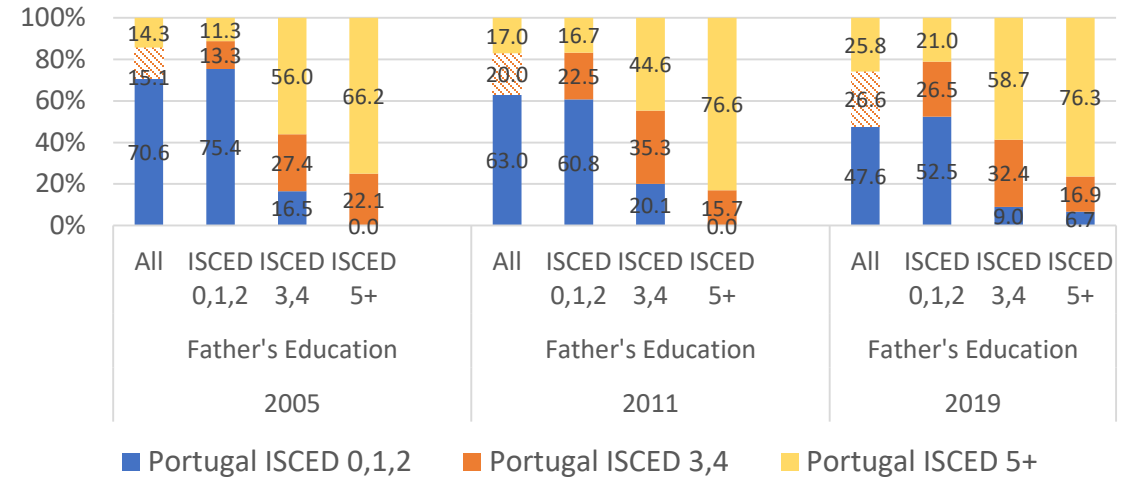
Italy



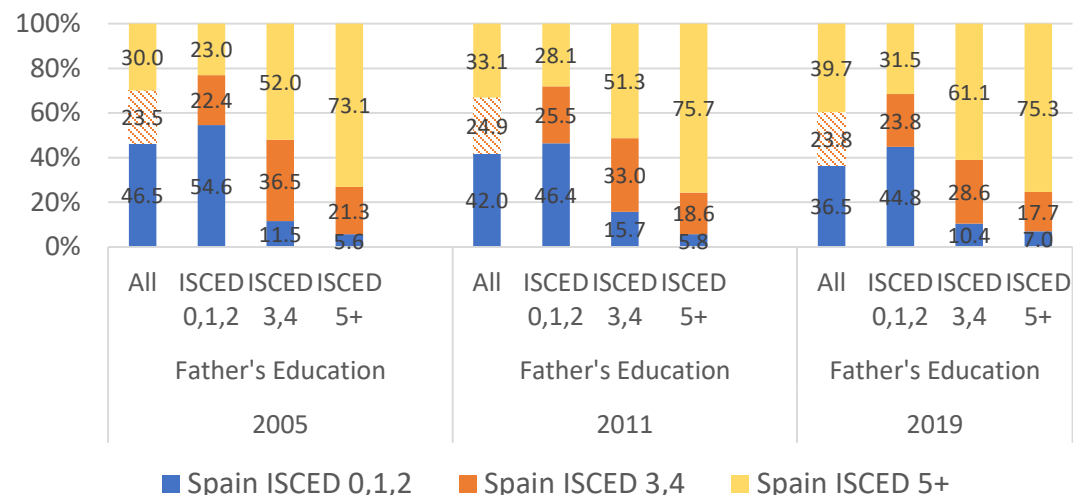
Germany



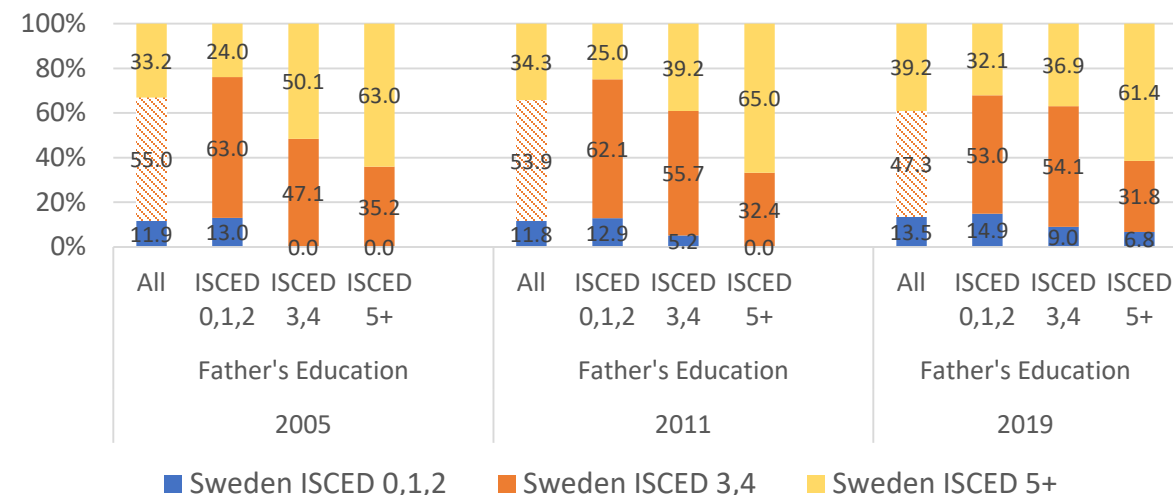
Portugal



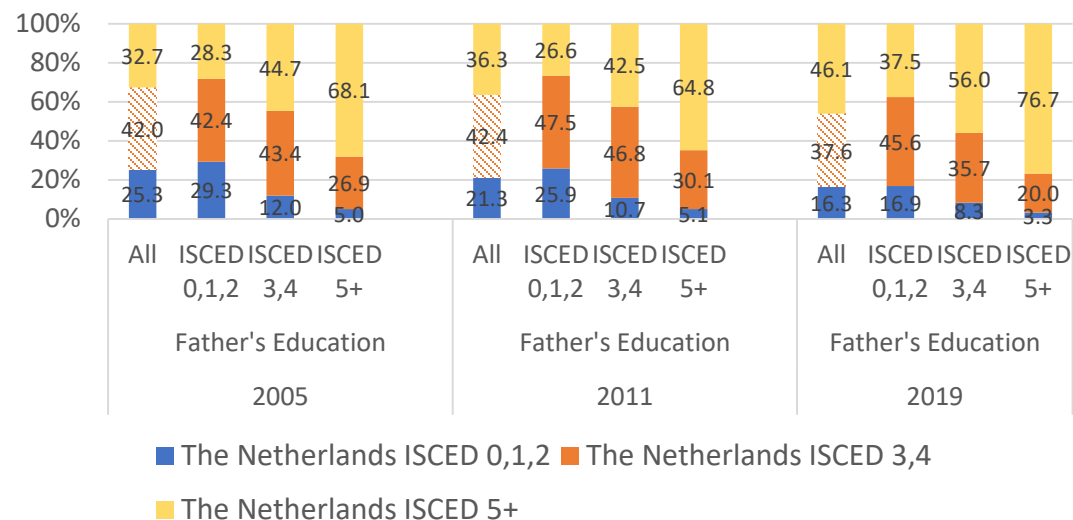
Spain



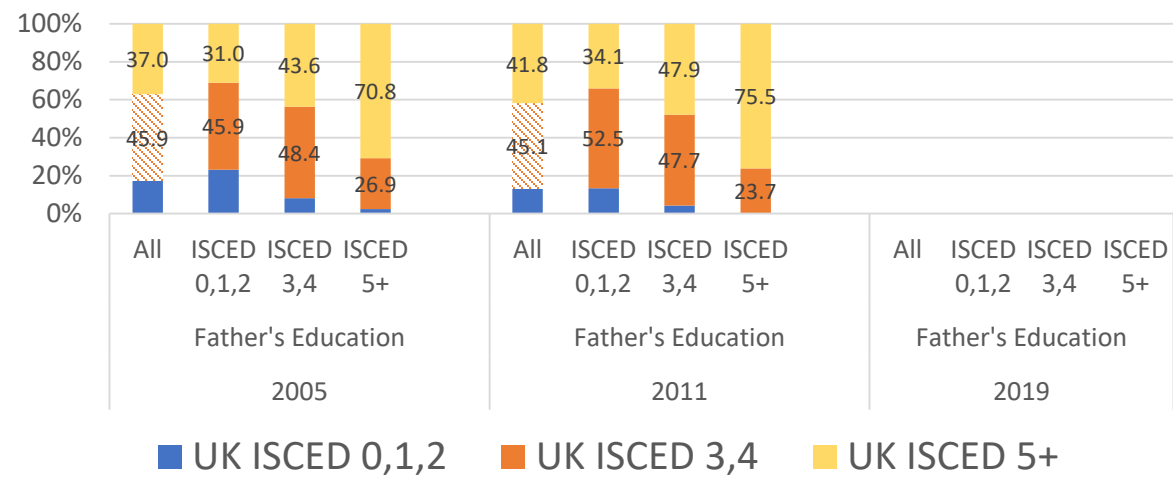
Sweden



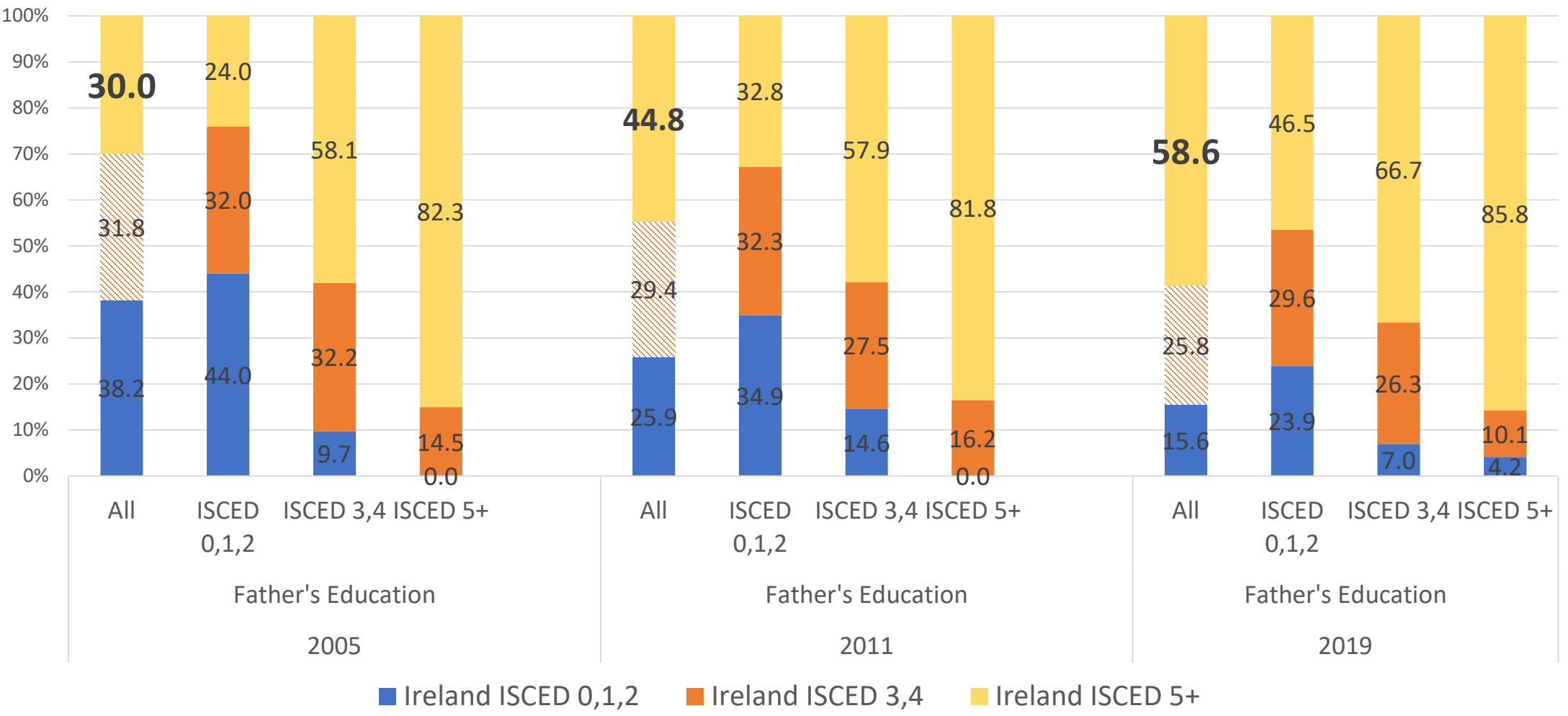
the Netherlands



UK



Ireland



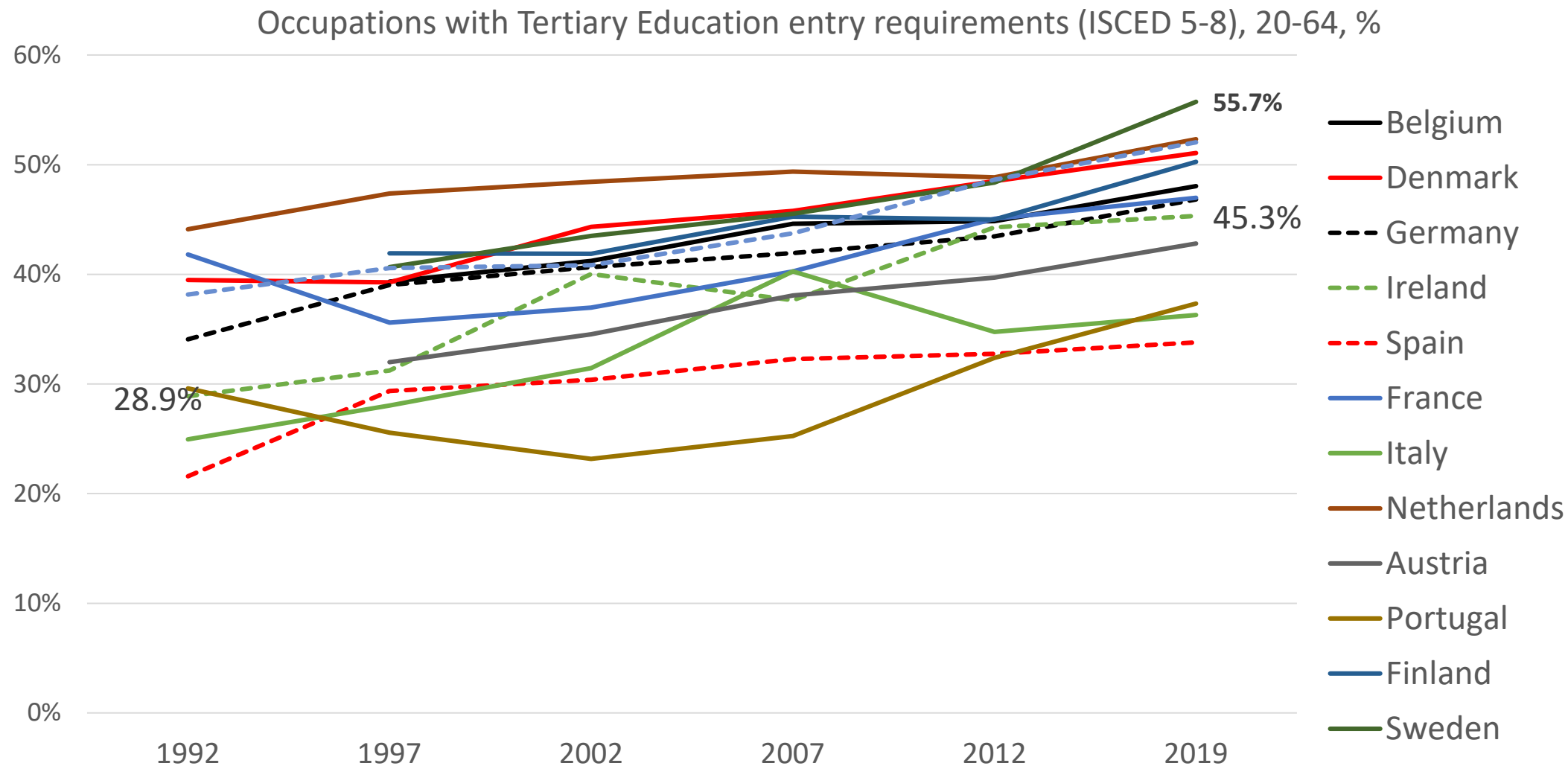
The framework used for the design and construction of the **International Standard Classification of Occupations ISCO-08** is based on two main concepts: the concept of the kind of work performed or job, and the concept of skill.

<https://www.ilo.org/public/english/bureau/stat/isco/docs/annex1.pdf>

Skill level -Skill level is defined as a function of the complexity and range of tasks and duties to be performed in an occupation. Skill level is measured operationally by considering one or more of:

- the **level of formal education** defined in terms of the **International Standard Classification of Education (ISCED)** required for competent performance of the tasks and duties involved;

ISCO-08 major groups	Skill level
Managers	3+4
Professionals	4 (ISCED level 5a or higher)
Technician and Associate Professional	3 (ISCED level 5b)
Clerical support workers	2 (ISCED level 2, 3, 4)
Service and sales workers	
Skilled agricultural, forestry, & fishery workers	
Craft and related trades workers	
Plant and machine operators, and assemblers	
Elementary occupations	1 (ISCED level 1)



International Standard Classification of Occupations (1-3)

1) Managers 2) Professionals 3) Technicians and Associate Professionals

skills mismatch

Overqualification/overeducation/vertical mismatch (this analysis-specifically, with third level qualifications)

- skill gaps, skill shortages
- field of study (horizontal) mismatch
- skill obsolescence.
- Workers, firms, wider economy

Policy relevance

Overeducation/skill underutilization/vertical mismatch can be costly for individuals, potentially undermines productivity and growth at a firm level and by extension at the macro level.

Overqualification can negatively affect workers through lower job satisfaction and is associated with lower returns to education in the form of earnings.

Lower job satisfaction in turn affects firms through staff turnover and productivity.

Third level education is an engine for social mobility specifically to high-end employment with higher earnings potential and social status

Overeducation possibly associated with lower productivity as it may represent a shortage of skills supply available for employers.

At a macroeconomic level, national welfare, potential growth and productivity are all undermined without full utilization of skills available within the economy.

From a spending perspective, revenue is potentially wasted on non-productive education with policy implications for utilising and targeting the existing skills of the labour force more efficiently (McGuinness 2006).

Job Evaluation method

‘The job evaluation method compares individual educational attainment with occupational job entry requirements, that are based on the assessments of professional job analysts in the context of drafting occupational dictionaries (such as DOT or O*NET in the United States, SOC in the UK or, more recently, ESCO, in the EU)’ (Delaney et al. 2020)

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Measurement

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Examples of occupations in ISCO categories

- within the broader Managers group include *Legislators, Chief Executive Officers* and *Product Development Managers*.
- *Teachers, Doctors, Nurses, Software Developers* and *Civil Engineers* are examples of occupations classified as Professionals (the largest occupational group)
- Information and Communications Technicians, Building Surveyors, Pilots and Radiographers are in the Associate Professionals and Technicians group.

4 Clerical Support Workers

41 General and Keyboard Clerks

411 General Office Clerks

4110 General Office Clerks

412 Secretaries (general)

4120 Secretaries (general)

413 Keyboard Operators

4131 Typists and Word Processing Operators

4132 Data Entry Clerks

42 Customer Services Clerks

421 Tellers, Money Collectors and Related Clerks

4211 Bank Tellers and Related Clerks

4212 Bookmakers, Croupiers and Related Gaming Workers

4213 Pawnbrokers and Money-lenders

4214 Debt Collectors and Related Workers

5 Services and Sales Workers

51 Personal Services Workers

511 Travel Attendants, Conductors and Guides

5111 Travel Attendants and Travel Stewards

5112 Transport Conductors

5113 Travel Guides

512 Cooks

5120 Cooks

513 Waiters and Bartenders

5131 Waiters

5132 Bartenders

514 Hairdressers, Beauticians and Related Workers

5141 Hairdressers

5142 Beauticians and Related Workers

6 Skilled Agricultural, Forestry and Fishery Workers

61 Market-oriented Skilled Agricultural Workers

611 Market Gardeners and Crop Growers

6111 Field Crop and Vegetable Growers

6112 Tree and Shrub Crop Growers

7 Craft and Related Trades Workers

71 Building and Related Trades Workers (excluding Electricians)

711 Building Frame and Related Trades Workers

7111 House Builders

7112 Bricklayers and Related Workers

7113 Stonemasons, Stone Cutters, Splitters and Carvers

7114 Concrete Placers, Concrete Finishers and Related Workers

7115 Carpenters and Joiners

7119 Building Frame and Related Trades Workers Not Elsewhere Classified

8 Plant and Machine Operators and Assemblers

81 Stationary Plant and Machine Operators

811 Mining and Mineral Processing Plant Operators

8111 Miners and Quarriers

8112 Mineral and Stone Processing Plant Operators

8113 Well Drillers and Borers and Related Workers

8114 Cement, Stone and Other Mineral Products Machine Operators

812 Metal Processing and Finishing Plant Operators

8121 Metal Processing Plant Operators

8122 Metal Finishing, Plating and Coating Machine Operators

813 Chemical and Photographic Products Plant and Machine Operators

8131 Chemical Products Plant and Machine Operators

8132 Photographic Products Machine Operators

9 Elementary Occupations

91 Cleaners and Helpers

911 Domestic, Hotel and Office Cleaners and Helpers

9111 Domestic Cleaners and Helpers

9112 Cleaners and Helpers in Offices, Hotels and Other Establishments

912 Vehicle, Window, Laundry and Other Hand Cleaning Workers

9121 Hand Launderers and Pressers

9122 Vehicle Cleaners

9123 Window Cleaners

9129 Other Cleaning Workers

92 Agricultural, Forestry and Fishery Labourers

921 Agricultural, Forestry and Fishery Labourers

9211 Crop Farm Labourers

9212 Livestock Farm Labourers

9213 Mixed Crop and Livestock Farm Labourers

9214 Garden and Horticultural Labourers

9215 Forestry Labourers

9216 Fishery and Aquaculture Labourers

Labour Market Outcomes of third level graduates

- 1) Matched employment (ISCO 1-3)
- 2) Overqualified (ISCO 4-9)
- 3) Inactive

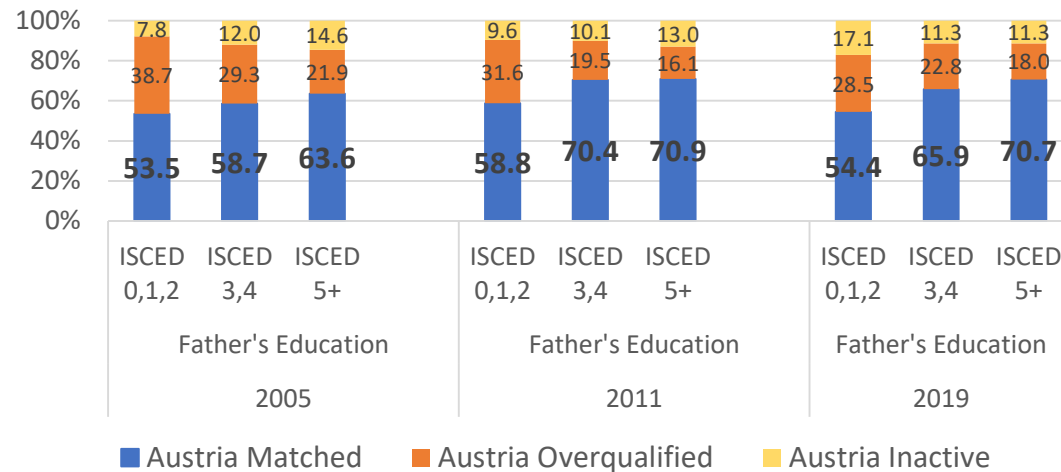
Outcomes of third level graduates (25-59)				
		2005	2011	2019
Austria	Matched	58.0	67.3	65.4
	Overqualified	30.9	21.9	22.2
	Inactive	11.1	10.8	12.4
Belgium	Matched	59.9	64.0	70.3
	Overqualified	26.2	19.1	20.0
	Inactive	13.9	16.9	9.7
Denmark	Matched	77.3	76.9	72.1
	Overqualified	11.9	13.6	15.7
	Inactive	10.8	9.5	12.3
Finland	Matched	72.9	69.3	71.8
	Overqualified	16.1	18.5	16.7
	Inactive	11.0	12.2	11.5
France	Matched	70.7	69.4	71.0
	Overqualified	16.6	16.8	19.0
	Inactive	12.7	13.8	10.0
Germany	Matched	63.0	74.7	73.2
	Overqualified	17.5	16.5	17.6
	Inactive	19.4	8.7	9.2
Ireland	Matched	67.0	52.4	54.5
	Overqualified	22.2	26.6	32.4
	Inactive	10.8	21.0	13.1

Italy	Matched	71.0	69.6	66.2
	Overqualified	14.6	17.4	19.7
	Inactive	14.4	13.0	14.1
Portugal	Matched	82.5	80.9	78.8
	Overqualified	10.8	11.0	12.7
	Inactive	6.7	8.1	8.6
Spain	Matched	53.1	52.7	51.8
	Overqualified	32.2	27.9	33.6
	Inactive	14.7	19.4	14.6
Sweden	Matched	77.6	75.9	79.1
	Overqualified	10.5	14.1	13.4
	Inactive	11.9	10.1	7.5
The Netherlands	Matched	74.6	77.2	73.0
	Overqualified	11.2	11.9	14.0
	Inactive	14.2	10.9	13.0
UK	Matched	60.7	66.5	
	Overqualified	26.0	21.8	
	Inactive	13.3	11.8	

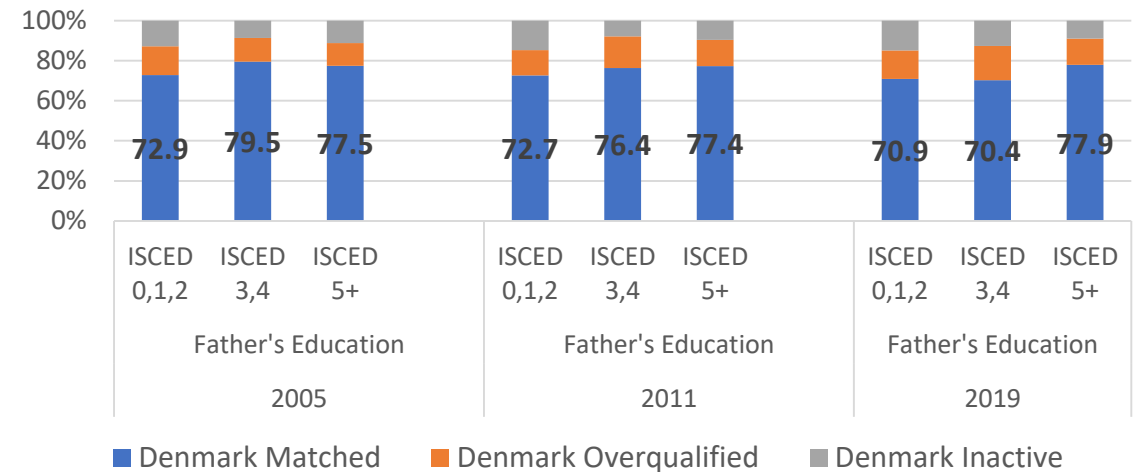
By background

- In **2019**, the unweighted average share in the sample of graduates (excluding the UK) in high end jobs from highly educated backgrounds was **75.6%**, **70.7%** for those from backgrounds in the middle bracket of formal education and **63.5%** for those from backgrounds in the lower bracket. In **2005**, the same figures were **68.8%**, **69.2%** and **65.2%**.
- Between 2005 and 2019 (excluding the UK), the outcome gap has widened by 8.3 pp on average between graduates from backgrounds in the top education bracket versus the lowest formal education bracket to 12.1 pp (excluding the UK).

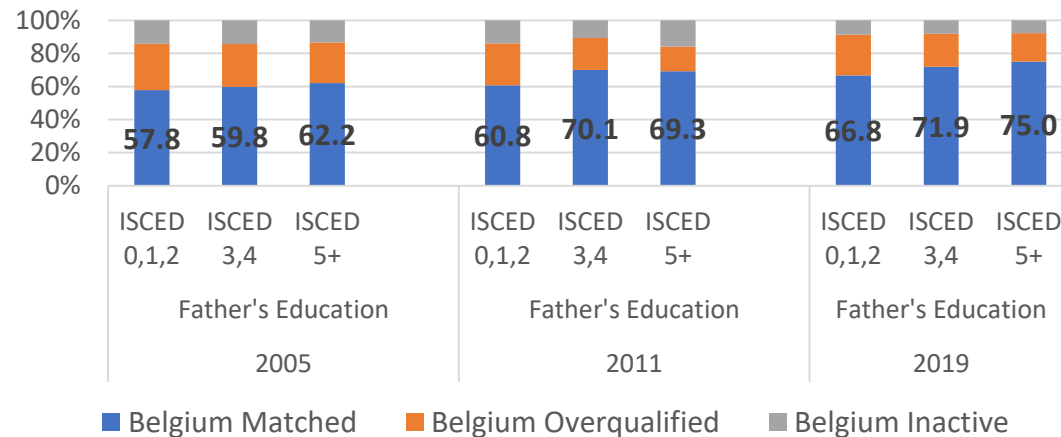
Labour market outcomes of third level graduates,
Austria



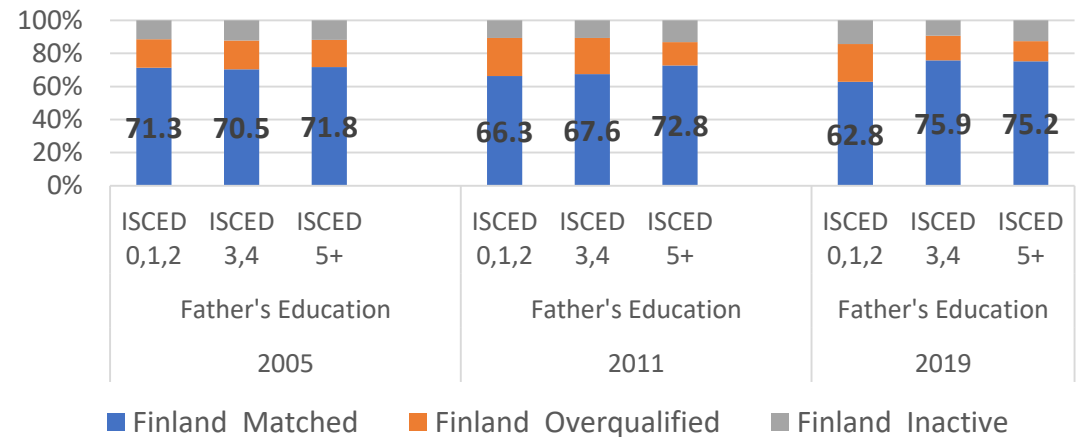
Labour market outcomes of third level graduates,
Denmark



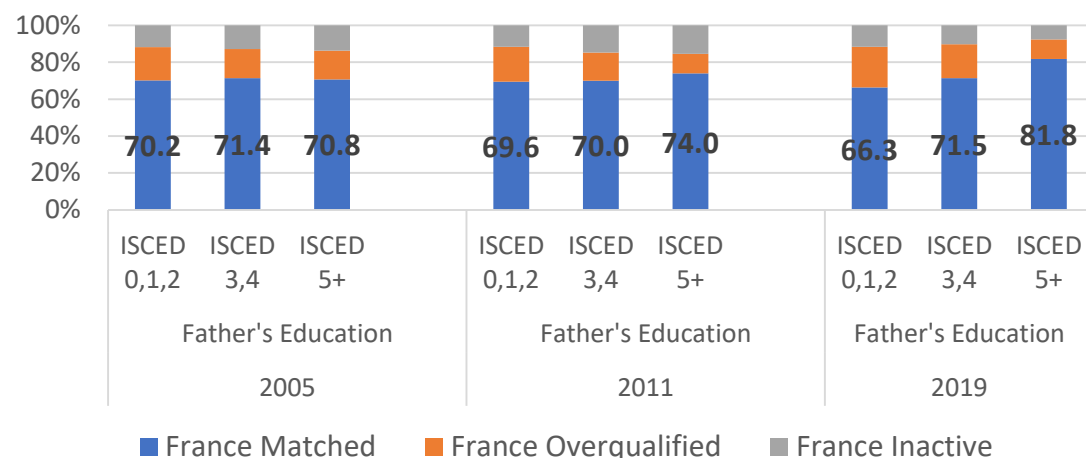
Labour market outcomes of third level graduates,
Belgium



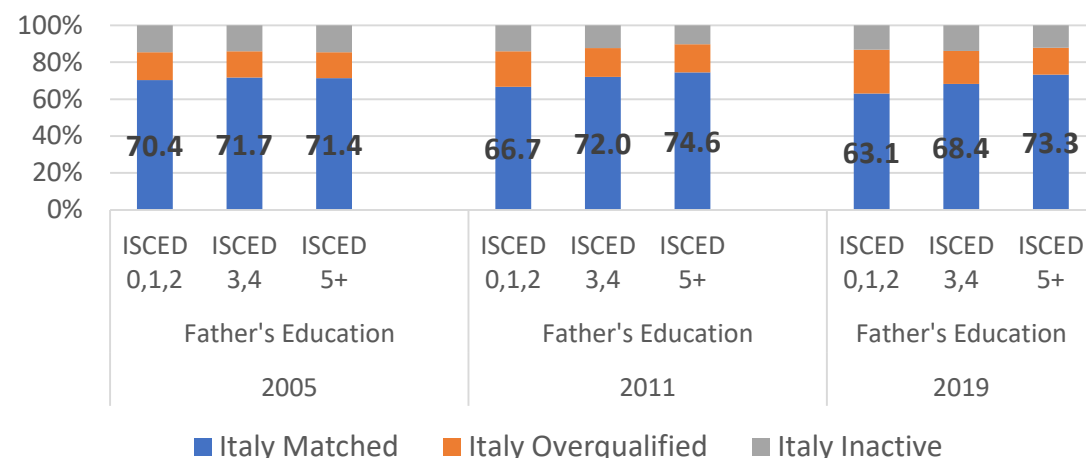
Labour market outcomes of third level graduates,
Finland



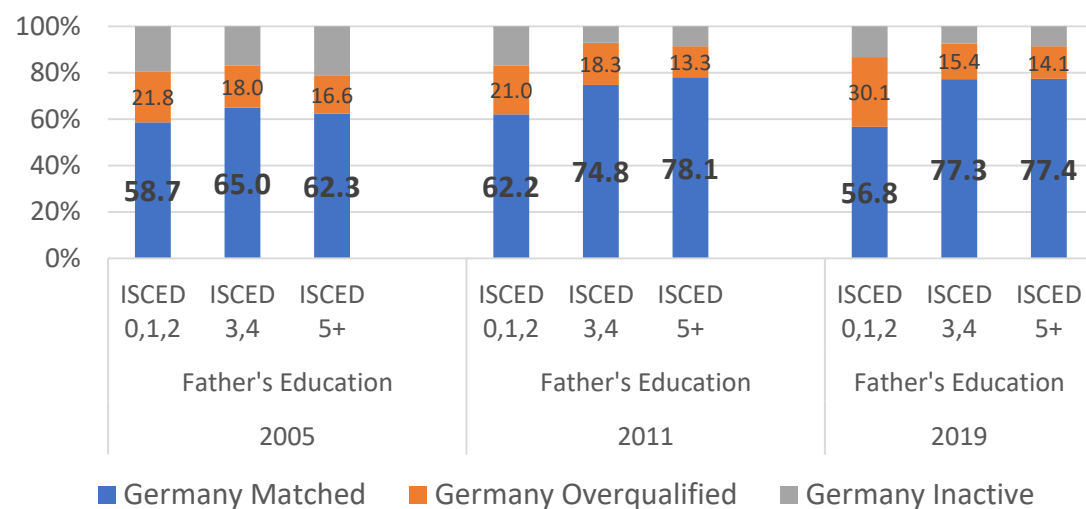
Labour market outcomes of third level graduates,
France



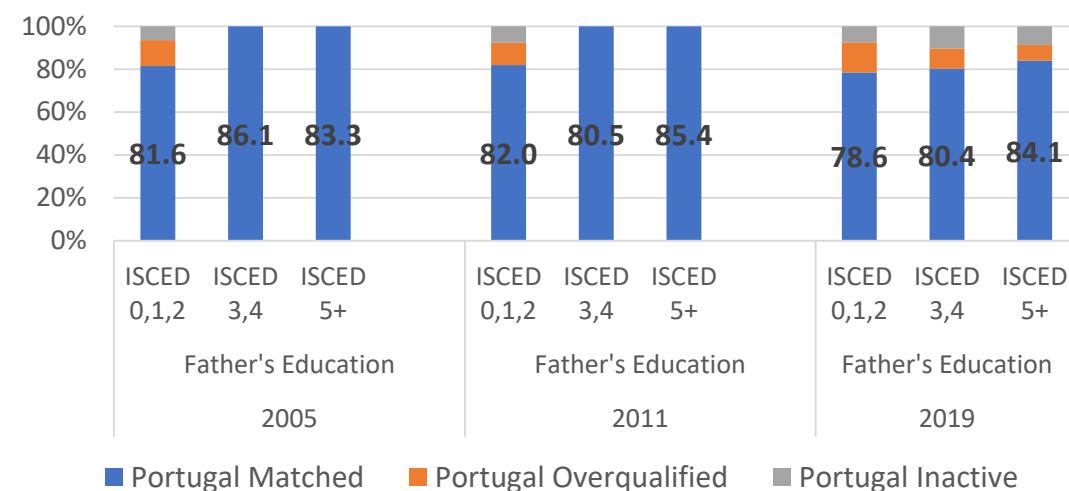
Labour market outcomes of third level graduates,
Italy



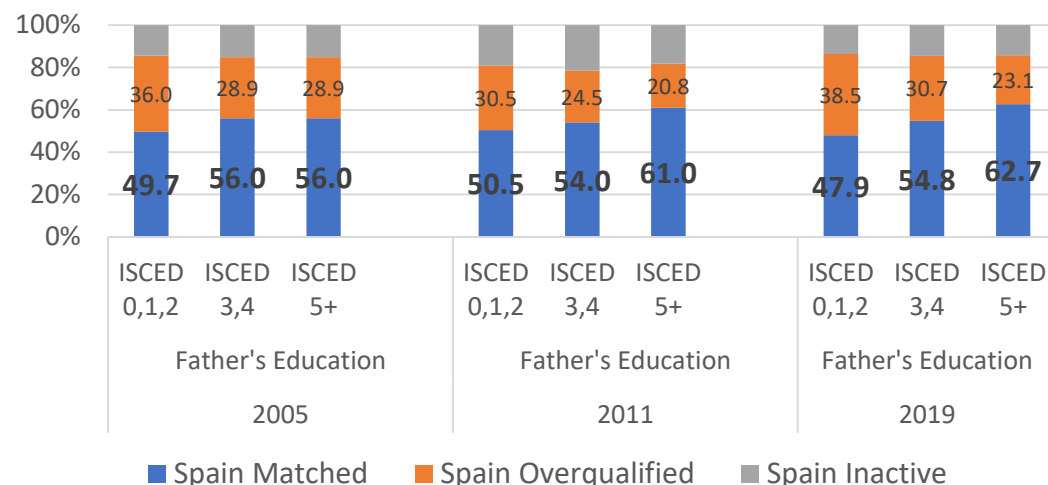
Labour market outcomes of third level graduates,
Germany



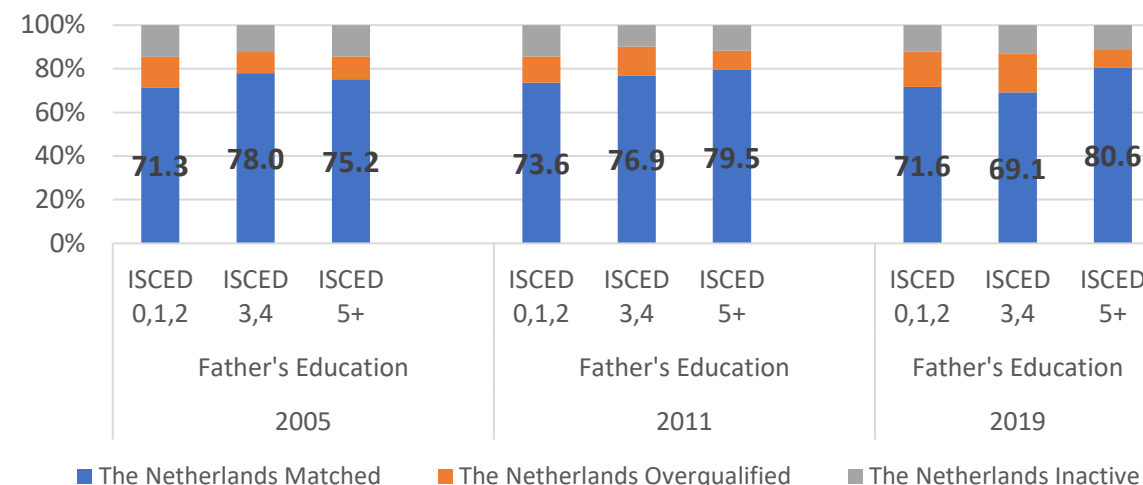
Labour market outcomes of third level graduates,
Portugal



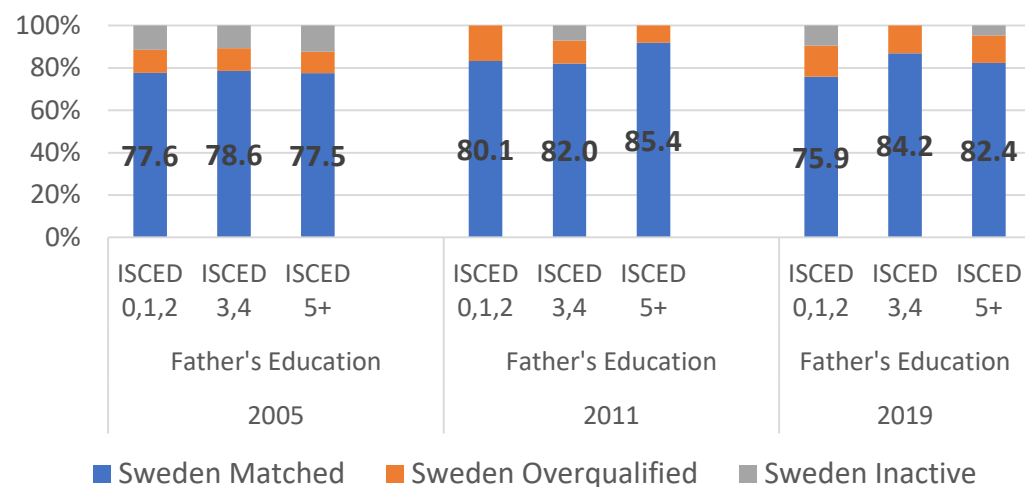
Labour market outcomes of third level graduates, Spain



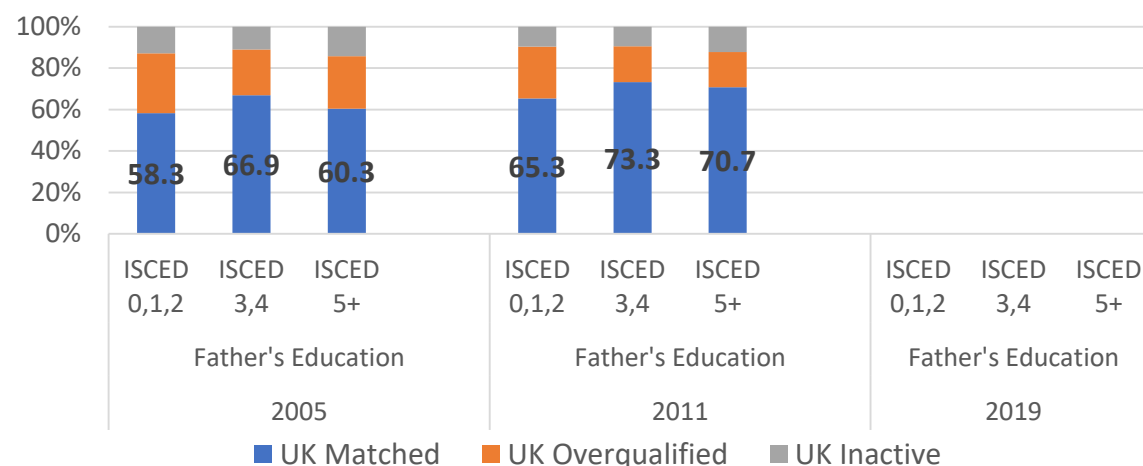
Labour market outcomes of third level graduates, Netherlands

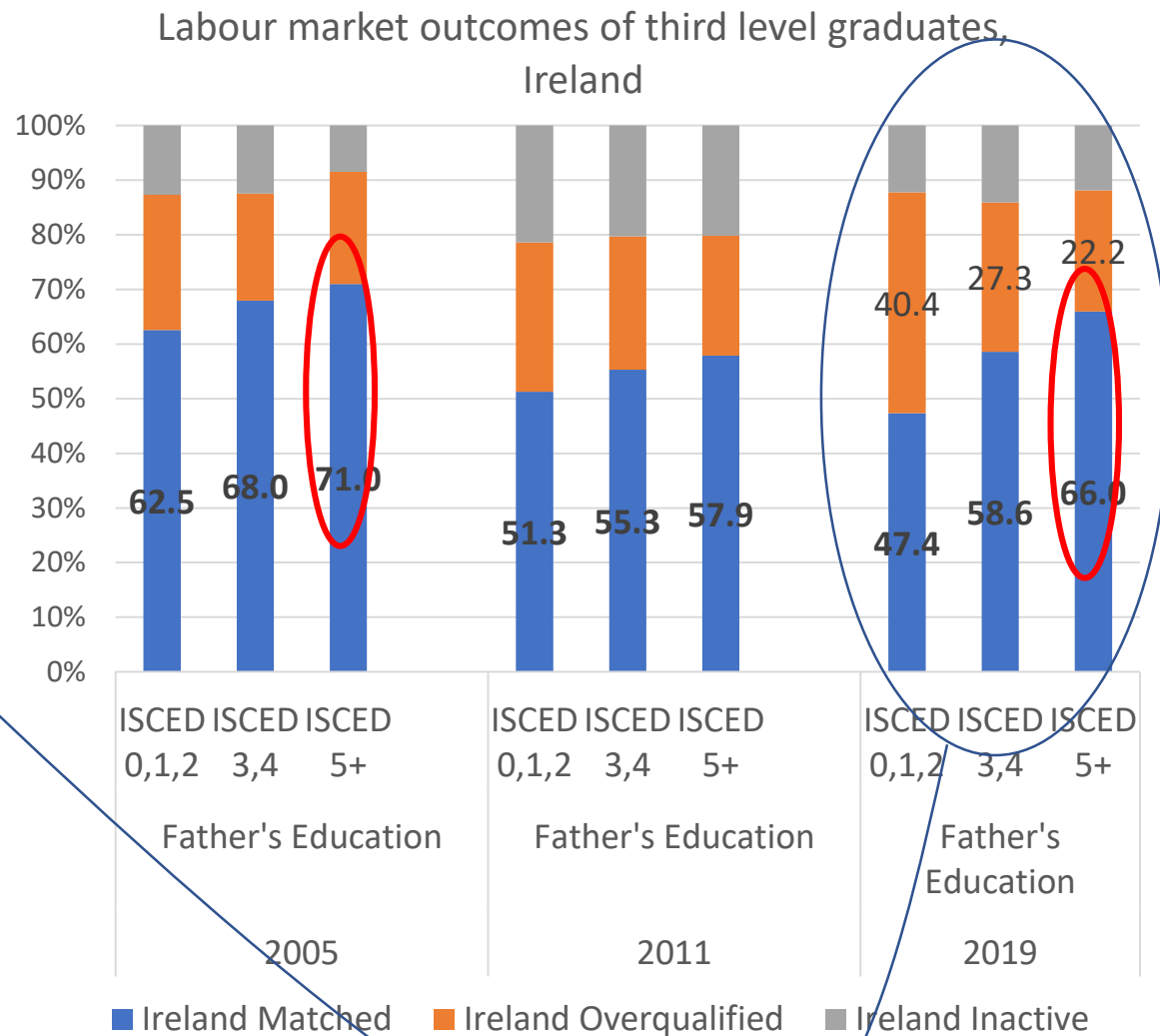
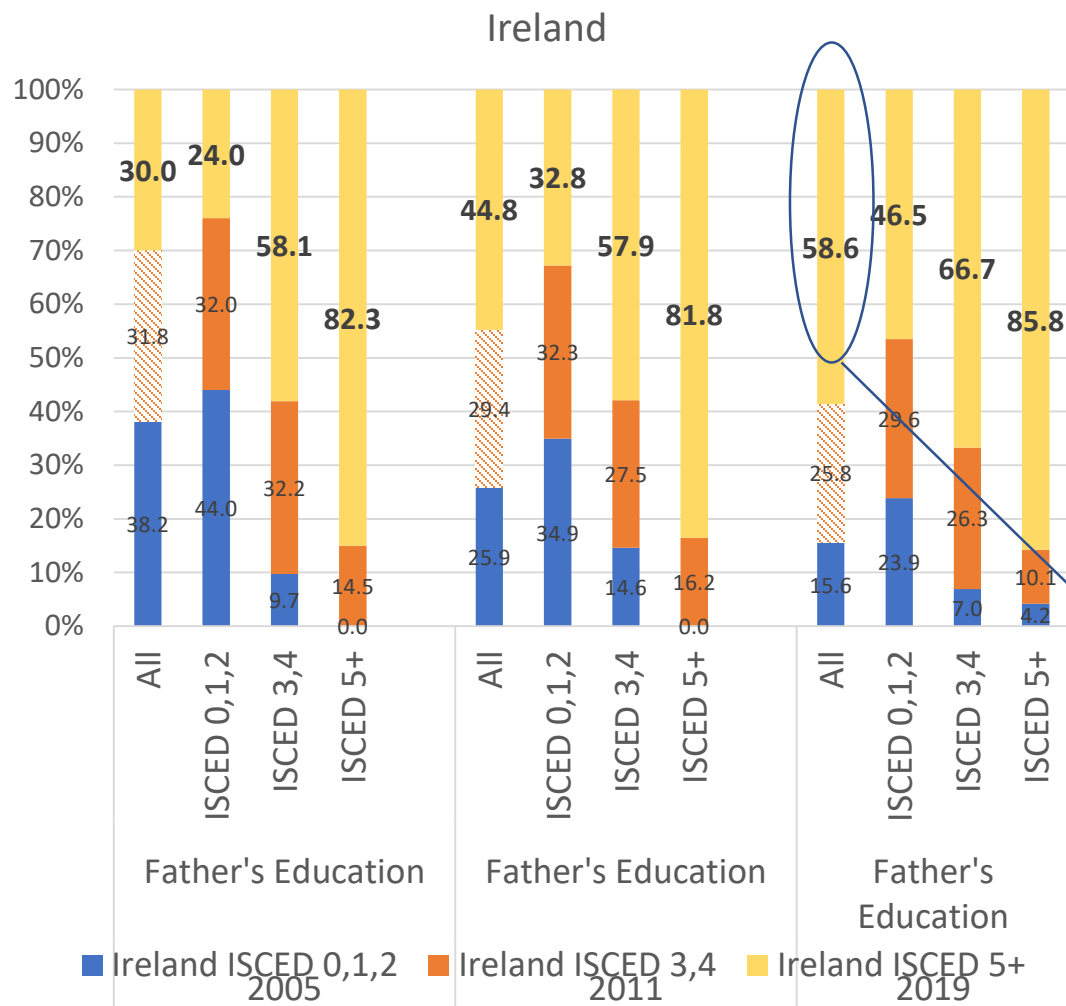


Labour market outcomes of third level graduates, Sweden

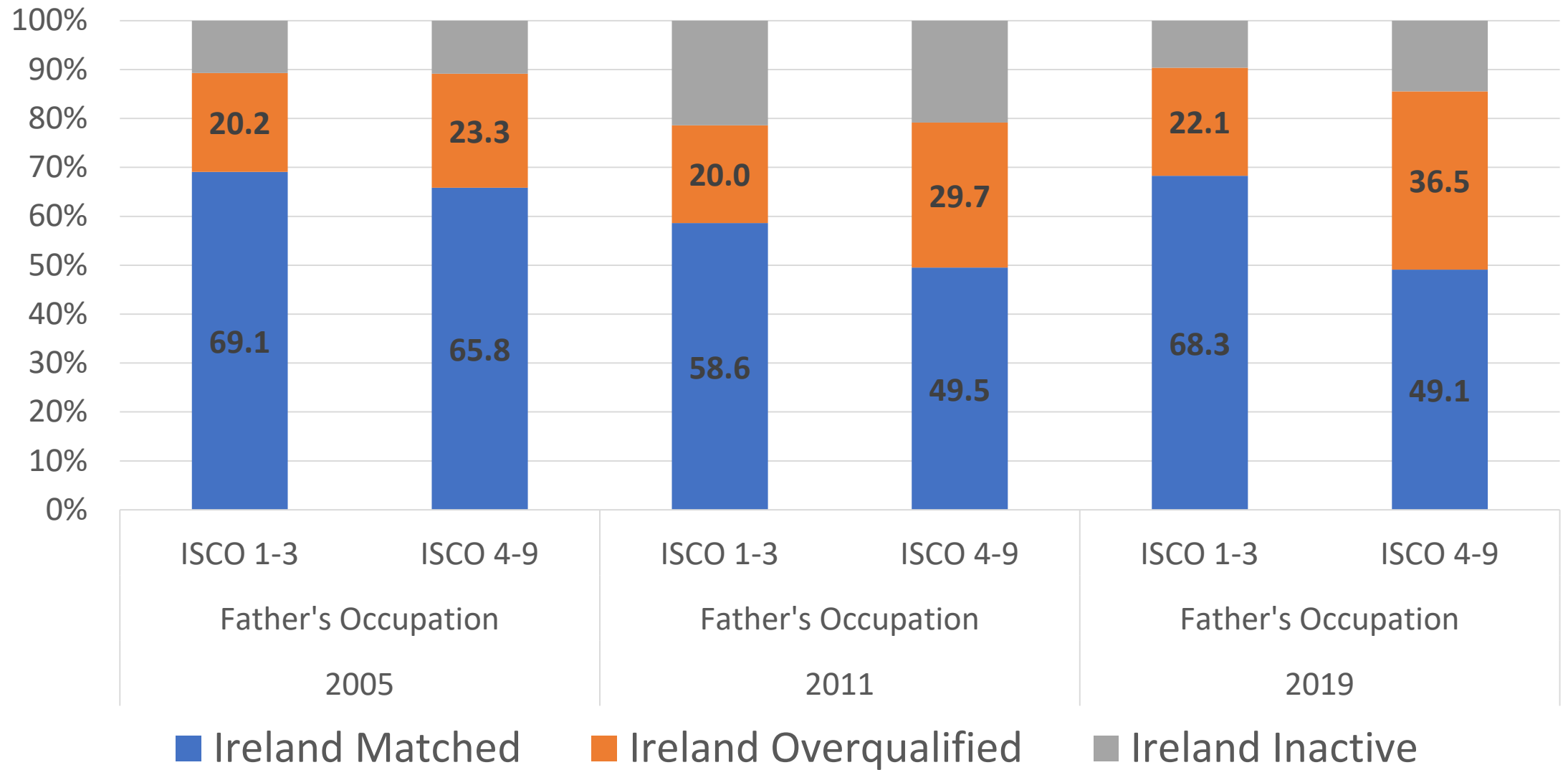


Labour market outcomes of third level graduates, UK





Labour market outcomes of third level graduates, Ireland



Thanks!

