Labour Market and Employment Policy
Spring 2024

Work careers of university graduates

Week 6

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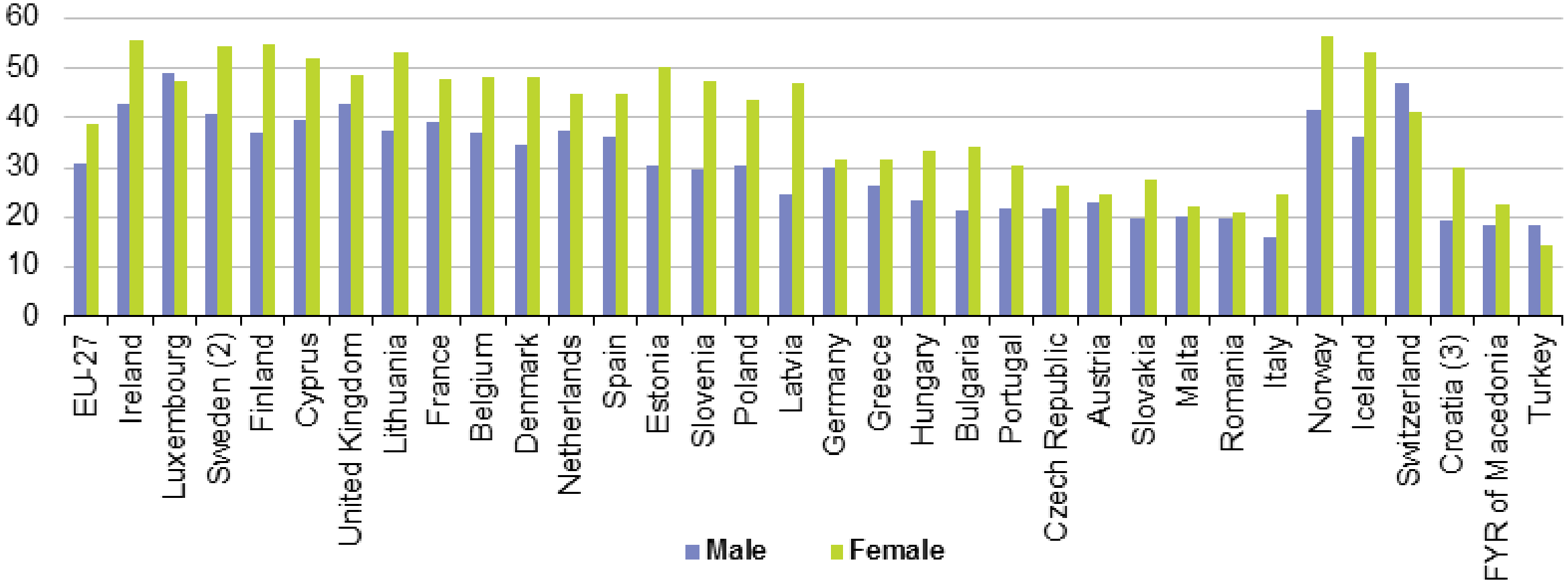
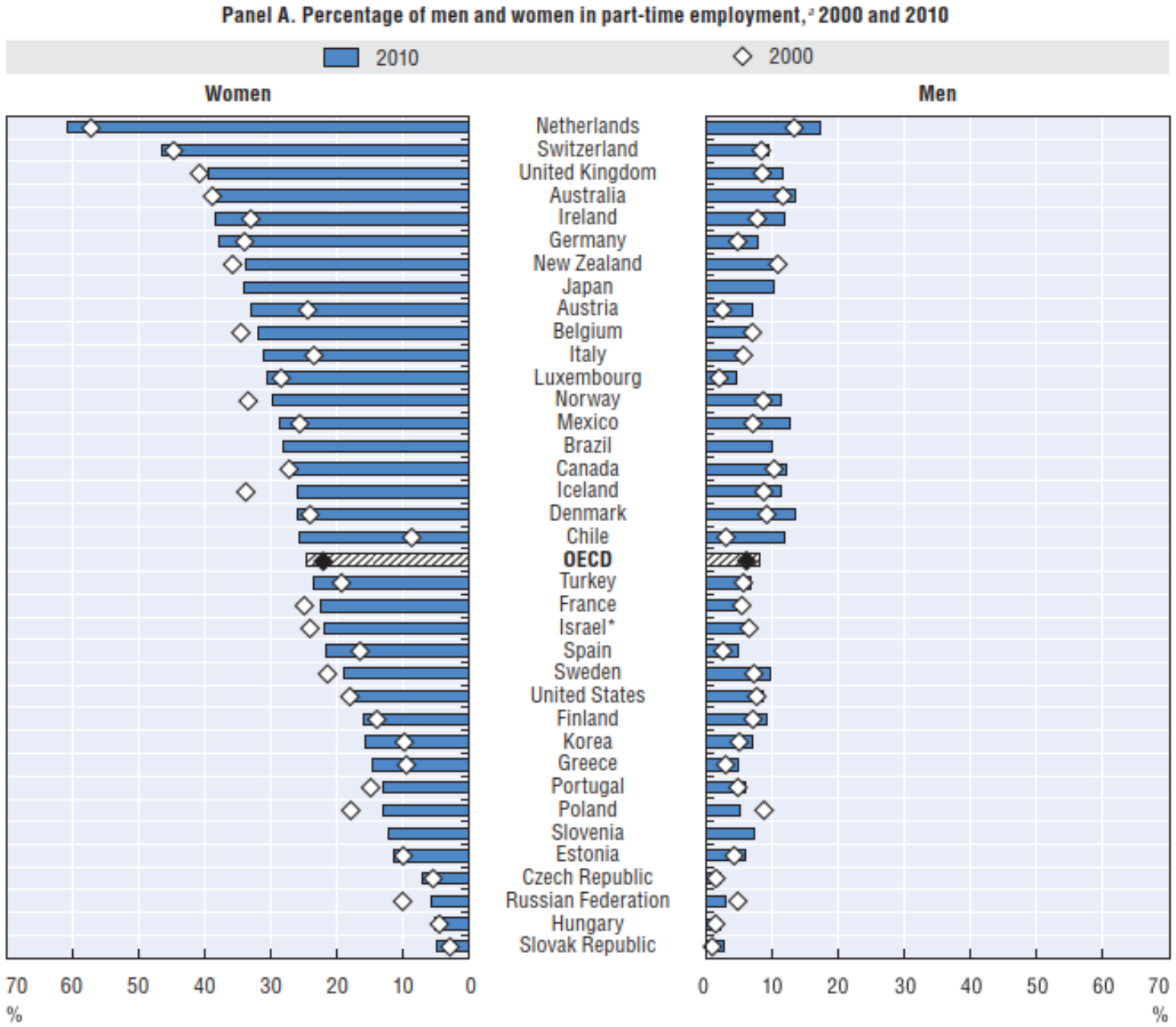
Proportion of the population aged 30 to 34 having a tertiary education, 2011



- Young women are increasingly better educated than young men.
  Boys are also more likely than girls to drop out from secondary education.

Figure 12.1. **There are large gender gaps in part-time work and full-time equivalent employment rates**

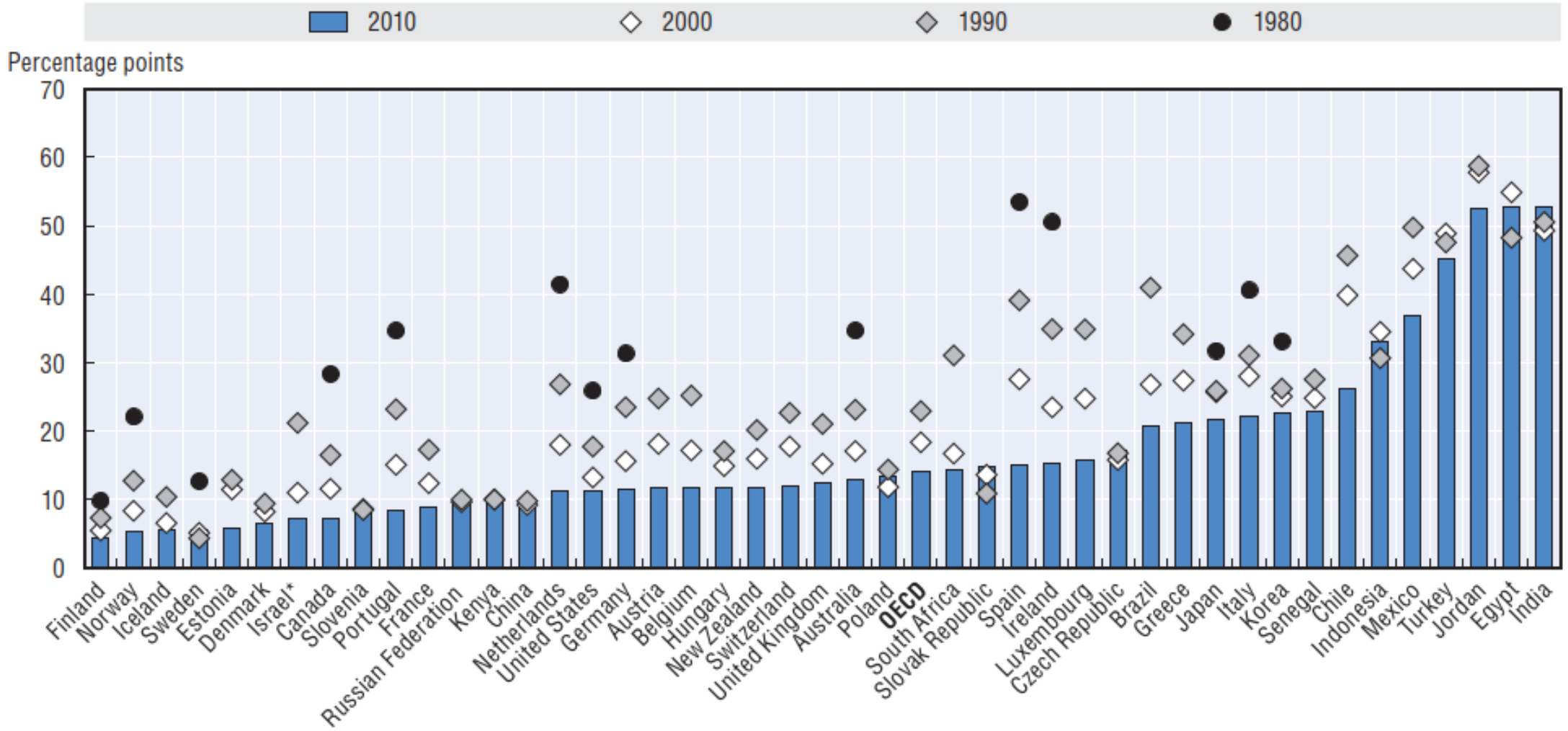


- Working part-time on a long-term basis tends to have a negative effect on women's career opportunities as it limits their abilities to develop leadership skills and take on jobs with high levels of responsibility.

Part-time employment refers to persons who usually work less than 30 hours per week in their main job.
Source: OECD Employment Database 2012.

Figure 11.1. **In the OECD, gender gaps in labour force participation vary widely across countries**

Gender gap in labour force participation (male rates *minus* female rates) in OECD, enhanced engagement countries, and selected developing countries,[a] 15-64 years old, 1980-2010

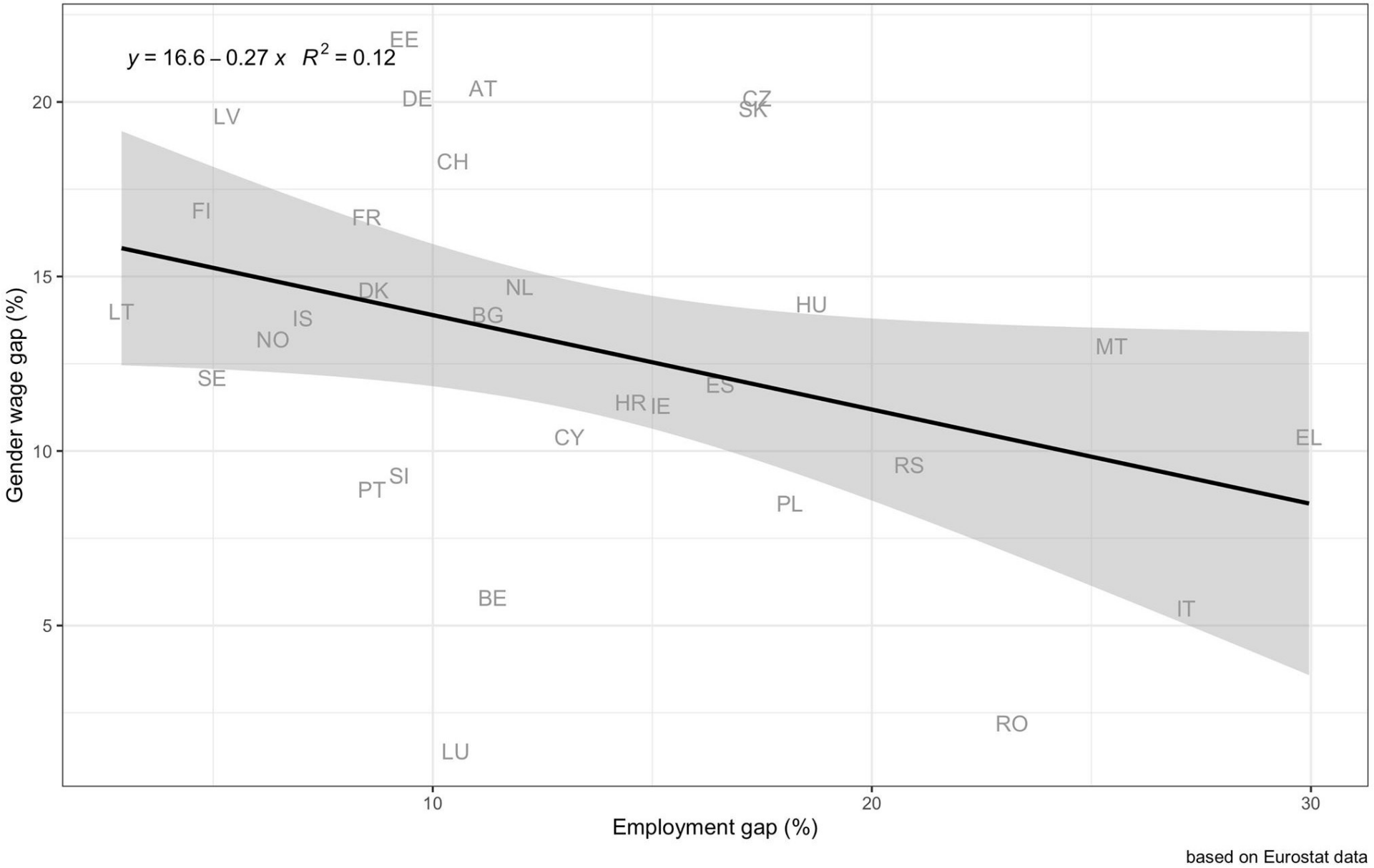


* Information on data for Israel: *http://dx.doi.org/10.1787/888932315602*.

a) Countries are arranged from left to right in ascending order of 2010 gender gap in labour force participation.

Source: *OECD Employment Database 2012* and ILO (2012), "Key Indicators of the Labour Market (KILM)", 7th Edition, *ILO Department of Economic and Labour Market Analysis*, Geneva, available at *www.kilm.ilo.org*.

The employment and wage gaps between men and women are related.



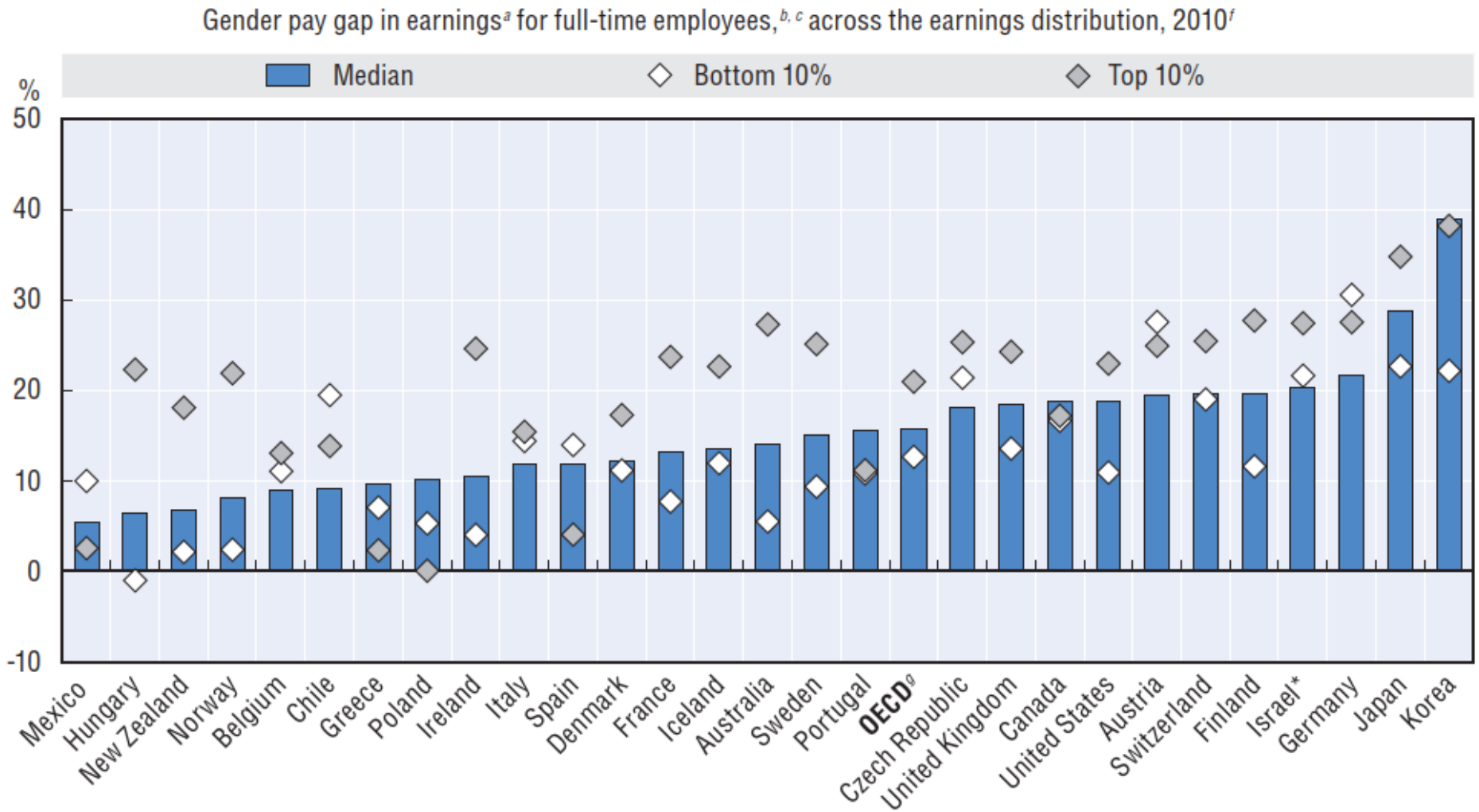
There is an inverse relationship between wage and employment gender gaps.

For example 48% of women participate in the labour market in Italy in comparison to 70% in Germany. The employment gender gap is larger in Italy and the gender wage gap is lower in Italy relative to Germany.

One explanation is that women who choose to be employed have the highest earning potential and the higher selectivity in employment contributes to low wage gap in Italy.

The other explanation is the flexibility of labour contracts. In Germany, for example, 48% of working women use part-time jobs, while it is 31% in Italy and only 5.7% in Czechia.

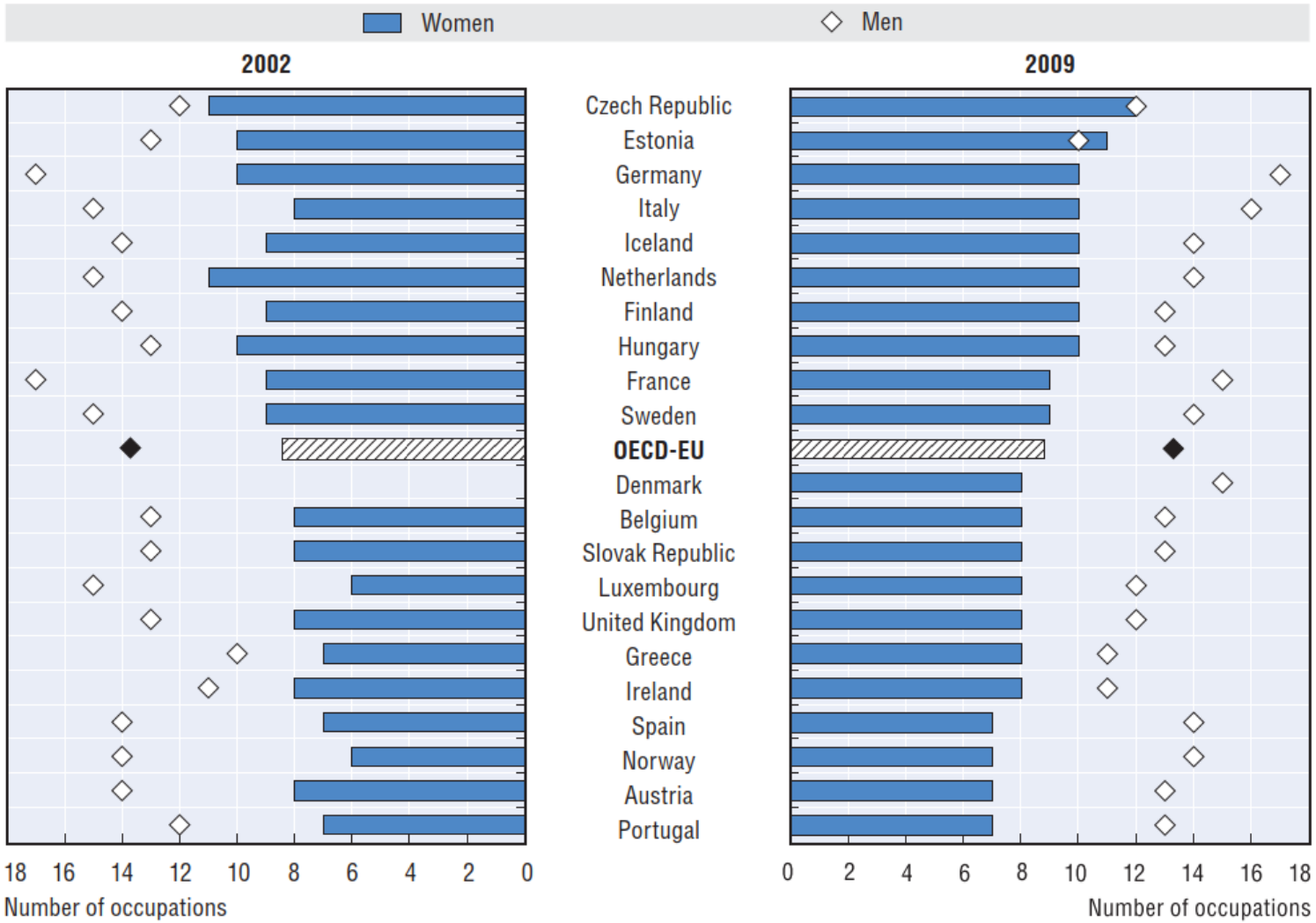
The pay gap is higher for incomes at the top of the earnings distribution



The wage gap is defined as the difference between male and female wages divided by male wages (at the first decile, median and ninth decile of the earnings distribution).
OECD Database on Earnings Distribution

Figure 11.4. **Female employment is concentrated in a limited number of occupations**

Minimum number of occupations[a] that account for half of employed men and women, 2002-09



Note: Countries are arranged in descending order of the number of occupations in which women were employed in 2009.

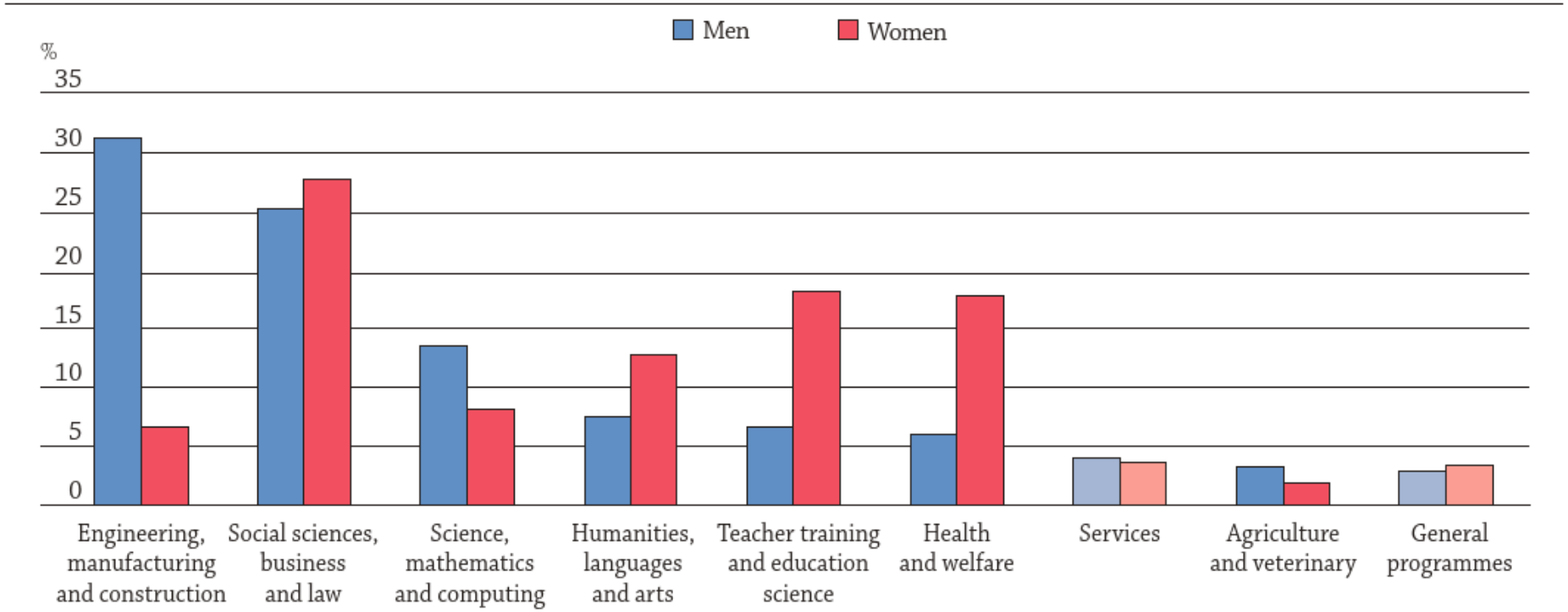
a) The 3-digit ISCO88 classification of occupations has been used, with 111 occupations distinguished.

Source: Eurostat (2012), *European Union Labour Force Survey* 1995-2009, available at *http://circa.europa.eu/irc/dsis/employment/info/ data/eu_lfs/index.htm.*

StatLink http://dx.doi.org/10.1787/888932675918

Figure 1. **Distribution of fields of education studied among tertiary-educated adults, by gender (2012 or 2015)**

Survey of Adult Skills, 25-64 year-old non-students, average

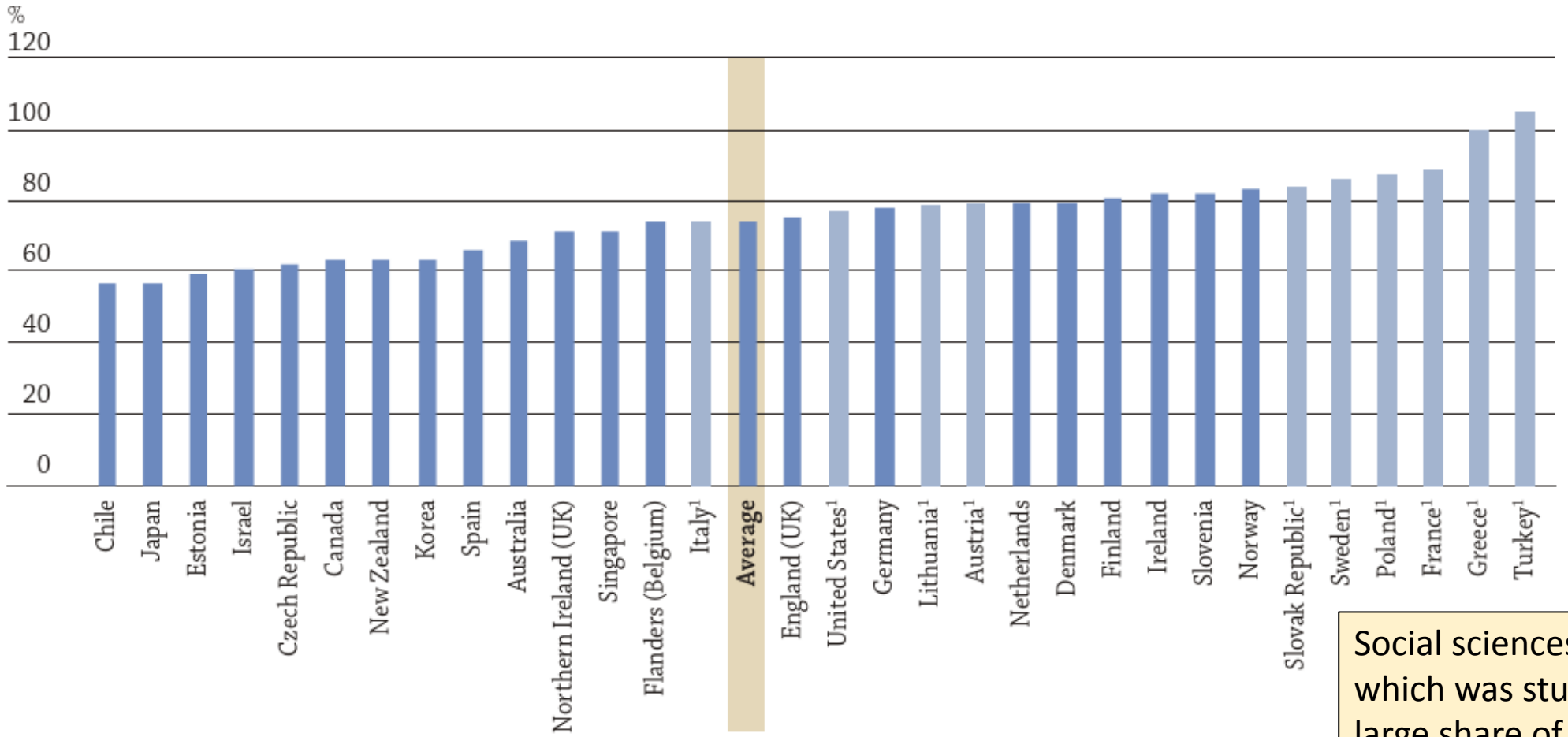


Notes: Different year of reference for countries, see explanations in the textbox. Differences between genders are not statistically significant at 5% for the fields of *Services* and *General programmes*, thus, these fields are represented in a lighter shade.
Fields of education are ranked in descending order of the share of men who studied in this specific field.
Source: OECD (2012, 2015), Survey of Adult Skills (PIAAC), www.oecd.org/skills/piaac/publicdataandanalysis.

- Education fields with a larger share of women are typically associated with lower employment rates and lower earnings. However, even within the same field of education, employment rates and earnings are generally higher for men than for women. Gender stereotypes at school (young age).

Figure 3. **Differences in earnings between female and male workers among those who studied *Social sciences, business and law* (2012 or 2015)**

Survey of Adult Skills, 25-64 year-old non-student full-time workers; women's earnings as a percentage of men's earnings



Notes: Different year of reference for countries, see explanations in the textbox.
1. The difference between earnings of men and women is not statistically significant at 5% (lighter tone).
Countries and subnational entities are ranked in ascending order of the earnings of women as a percentage of men's earnings.
Source: OECD (2012, 2015), Survey of Adult Skills (PIAAC), www.oecd.org/skills/piaac/publicdataandanalysis.

Social sciences, business and law, which was studied by a relatively large share of both women and men in OECD countries and is associated with relatively high earnings, women earn only about 75% as much as men.

Table 11.1. **Women are over-represented in the service sector**

Distribution of employment by sector, region and sex, 2010[a, b]

	Women				Men			
	Agriculture	Industry	Services	All activities[c]	Agriculture	Industry	Services	All activities[c]
Caribbean	3	9	88	100	11	29	60	100
Central America	8	16	76	100	34	23	42	100
East Asia and the Pacific	31	12	56	100	33	20	46	100
Eastern and Middle Africa	58	8	34	100	52	14	34	100
Eastern Europe and Central Asia	23	14	63	100	23	30	47	100
Middle East and North Africa	21	7	72	100	12	29	58	100
OECD	**5**	**12**	**83**	**100**	**6**	**34**	**60**	**100**
South America	12	12	76	100	20	28	52	100
Southern Africa	12	11	77	100	21	26	53	100
Southern Asia	51	19	28	100	35	20	41	100
Western Africa	53	7	36	100	60	11	27	100

a) 2010 or most recent year, unweighted averages for countries in each region for which data was available after 2005.

b) See the Annex III.A1 for more detail on the countries and years used to calculate regional averages.

c) Data for all activities may also include "activity not adequately defined", here not reported. The sum of agriculture, industry and services may not therefore equal exactly 100.

Source: *OECD Employment Database 2012*; for OECD countries (excluding France, Luxembourg and the United States) and Brazil; ILO (2012), "Key Indicators of the Labour Market (KILM)", 7th Edition, *ILO Department of Economic and Labour Market Analysis*, Geneva, *www.kilm.ilo.org* for France, Luxembourg, the United States and non-OECD countries (excluding Brazil).

StatLink http://dx.doi.org/10.1787/888932677324

Gender equality in employment

- Women work fewer hours and have lower participation in the labor market
- Women are over-represented in contractual employment, lower job categories, and part-time work.
- High concentration of males or females in certain occupations and sectors (Gender-stereotyped profiles of occupations)

Key policy messages

- Collect and share data (promote pay transparency)
- Combat all forms of pay discrimination
- Address other barriers to gender equality (e.g. cultural)
- Set targets for women in senior management positions in the public service
- Get girls more interested in science and boys in reading
- Ensure that work pays to both parents (via tax and benefit systems)
- Promote support for female-owned enterprises in high-tech sectors.

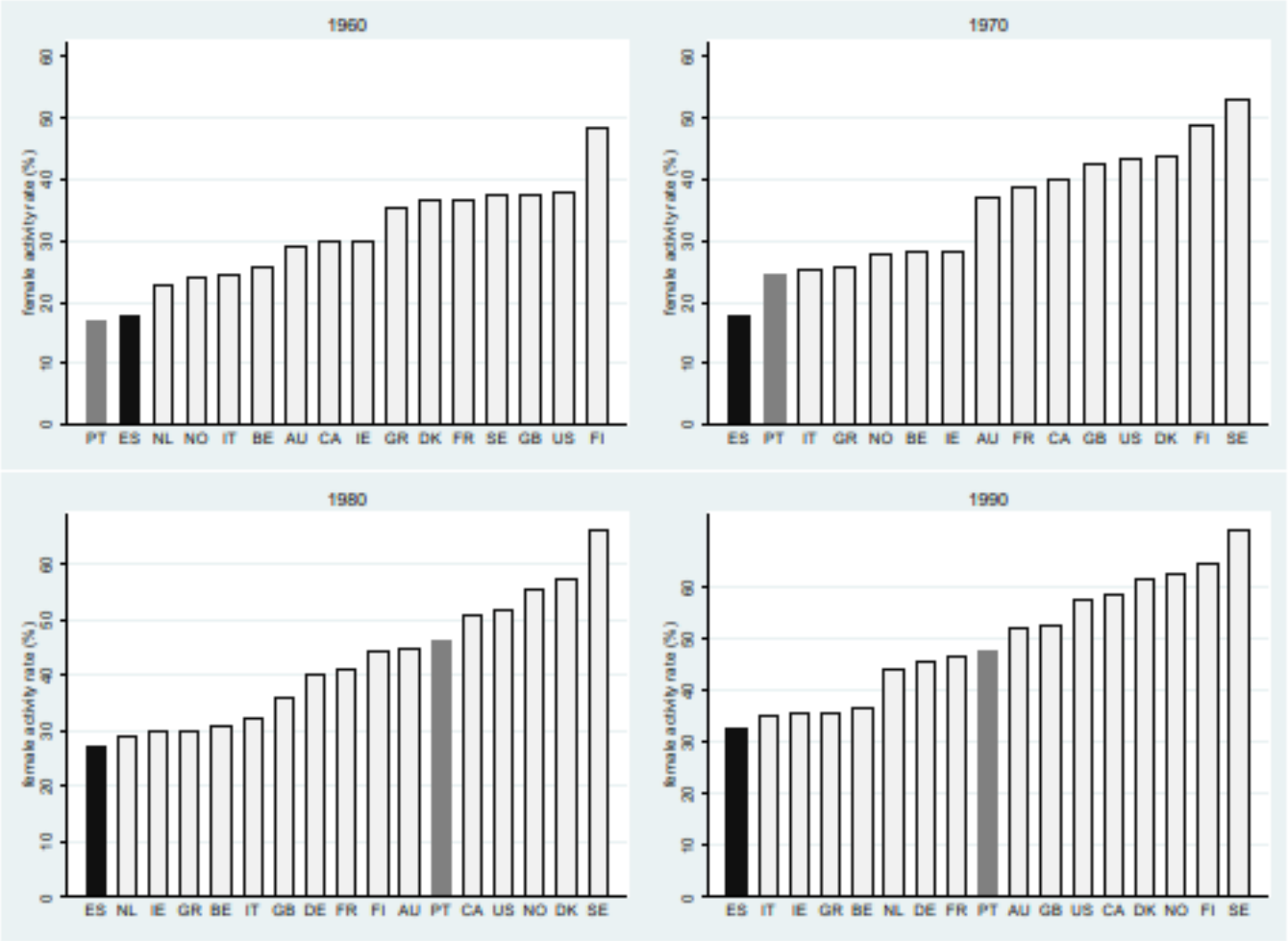
Case study: Portugal

Ana Rute Cardoso and Louis-Philippe Morin, 2018, Can Economic Pressure Overcome Social Norms? The Case of Female Labor Force Participation

Portugal: Institutional setting, 1926-1974

- Constitution 1933, equality of all citizens before the law, with the exception "in the case of the woman, the differences that result from her nature and the good of the family" (art. 5)
- 1956, compulsory schooling: 4 yrs for boys and 3 yrs for girls; Diploma of 4 yrs required to access jobs in public admin, manufacturing, the services, get a driver's license, or participate in official sports competitions
- Right to vote: different requirements on males and females
- Employment contract, passport: husband's consent required
- Divorce and contraception outlawed
- Gender norms were pervasive: women's participation should be restricted to the household

Trends in female participation in the labor market



- Widespread rise in female labor force participation
- The puzzle of Portugal

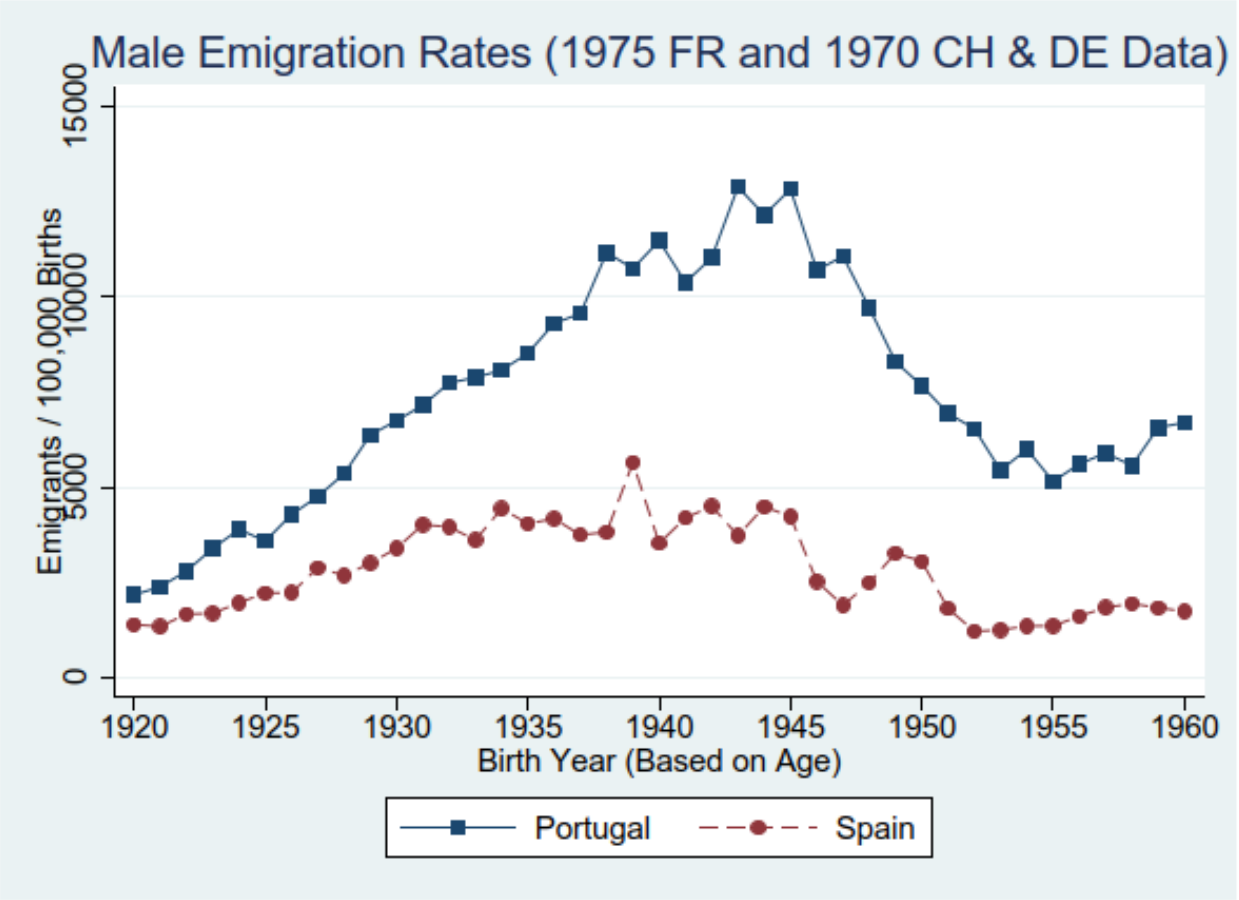
Source: World Bank, 2018. Notes: Population aged 15+. For each year t, reports the earliest available data t or $t+1$. The exceptions are France (1962 and 1975), Sweden (1965, 1975, and 1982), and Germany (1983). The data for (Federal Republic of) Germany start in 1983. No data reported for The Netherlands between 1960 and 1977.

Portuguese Colonial War

- War in Africa, 1961-74: Angola, Mozambique, Guinea-Bissau
- Major drain of human resources: males drafted for 2-4 years, starting the year they turned 21
  - *[A]round one per cent of the country's population was called up to fight. By way of comparison: had the Americans called up the same proportion for the war in Vietnam, they would have had to have recruited and deployed 2.5 million troops instead of the 500,000 that were actually mobilized* (Pinto 2011)
- Major drain of financial resources: military expenses reached 63% of Central Govt budget in 1968
- Poverty and war, combined motivation to emigrate

Male Emigration Rates, Spain vs Portugal

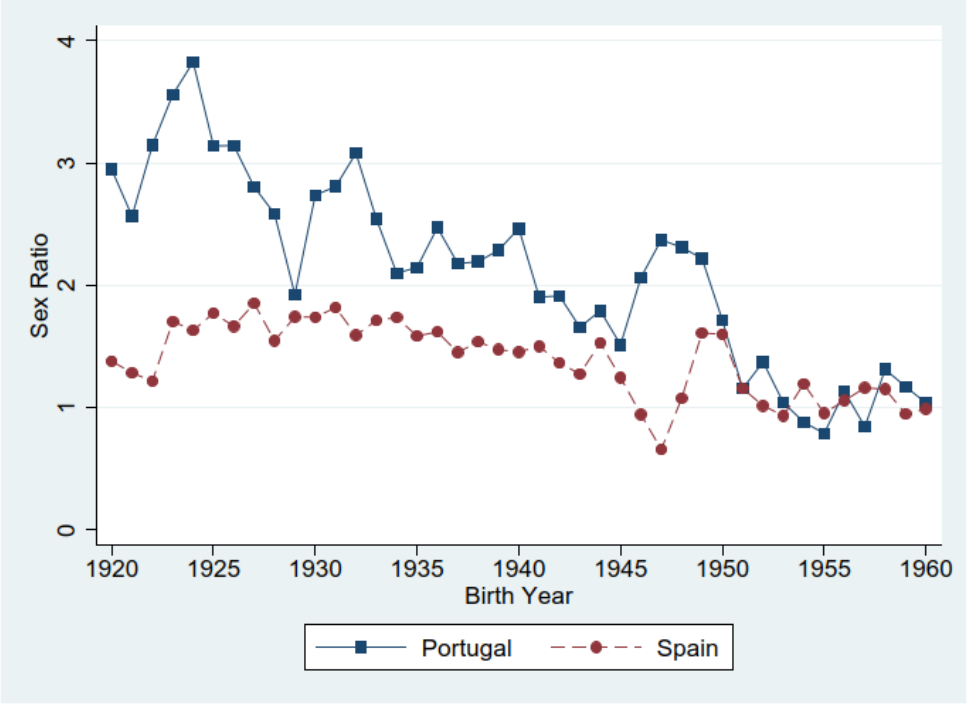
- Emigration: 1.5 million left Portugal during 1960s and first half of 1970s, out of initial 9 million inhabitants
- Spain also 1.5 million emigrants, but out of initial 30 million
- By 1969, France absorbed 72% of Portuguese emigrants; Germany, Switzerland and France absorbed the majority of Spanish ones
- Major drain of human resources from Portugal: as much as 8%-12% of male cohorts born in 1940s



Source: IPUMS, 2015, INE PT and INE SP.

Sex ratio among Portuguese and Spanish emigrants at destination countries (late 1960s)

- The Spanish emigration rate was not only remarkably lower than the Portuguese, it was also much more gender balanced
- Men left first, women followed later)
- Scarcity of male human resources in economy
- Until 1968, large gender imbalance in emigration
- From 1969 to 1974, large magnitude of outflow



Note: The sex ratio for each cohort is the number of Portuguese (Spanish) males per female observed in the Census in France 1968 and in Germany and Switzerland 1970.

Occupational upgrading in Portugal

- 1960 Census: classify occupations as "male" or "female"
- 1980 Census: major occupational upgrading, as women increasingly represented in the following “male" occupations: legislators, senior officials, managers; plant and machine operators and assemblers; skilled agricultural workers;
- declining female representation in "elementary occupations“
- reduction of gender segregation across occupations
- reduction of gender pay gap by 7-8 p.p.

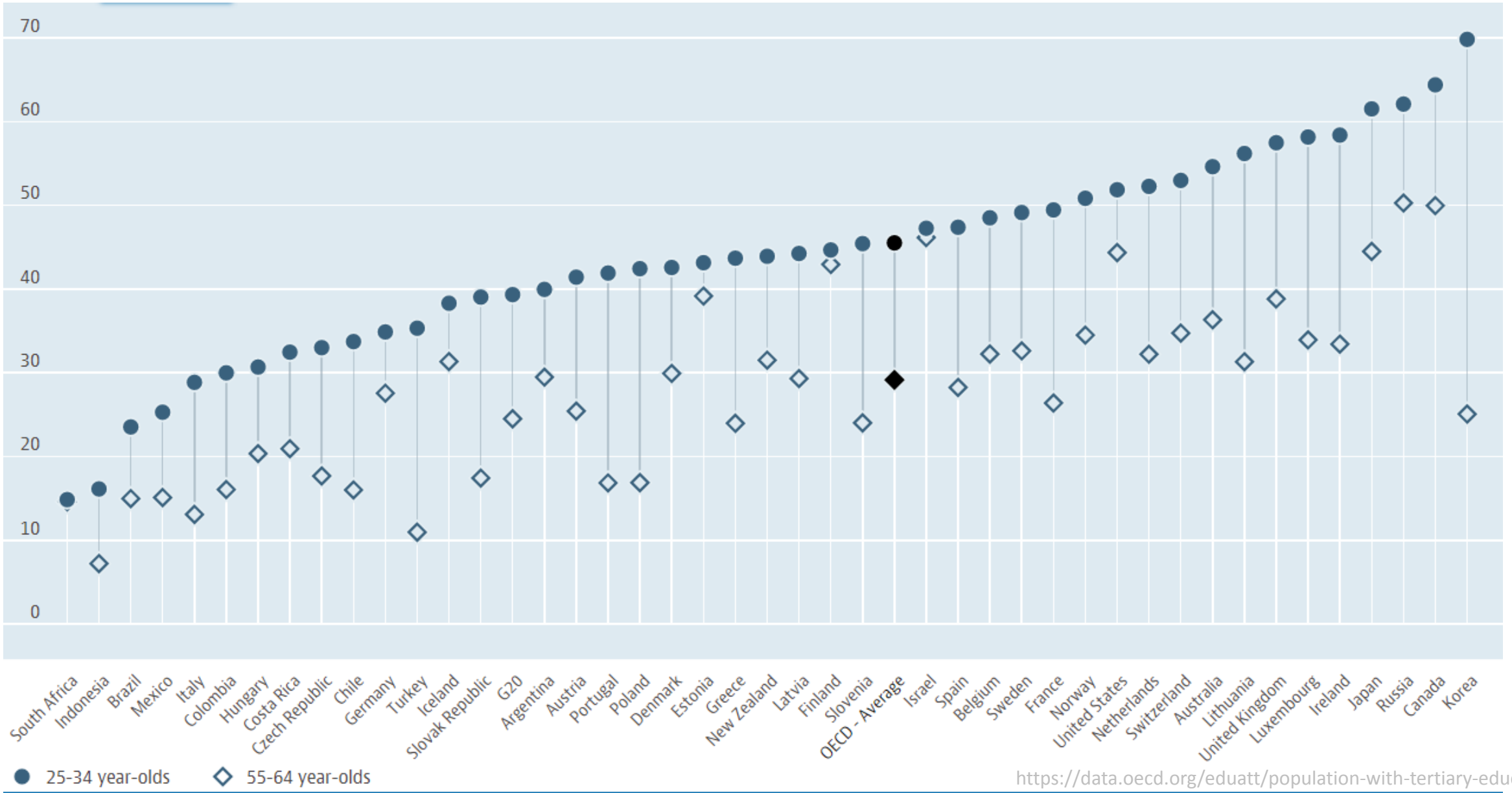
Work careers of university graduates

- The importance of education in the society
- Earnings advantages from education
- Why starting your career during a strong economy is better?
- Why finding a matching job is important?

History of university education

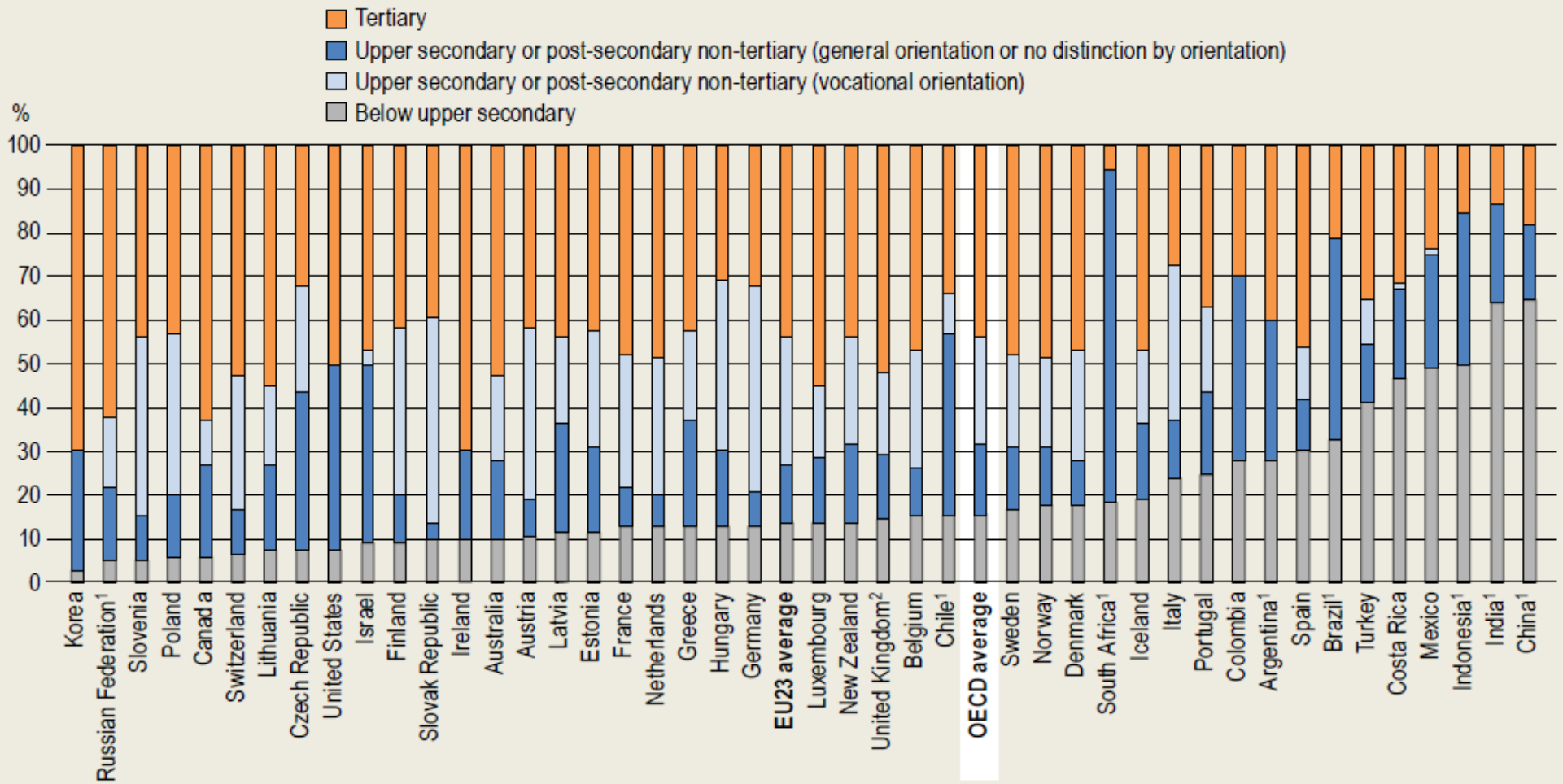
- First European universities established in Bologna (1088), Paris (1150), Oxford (1167), Cambridge (1209), Salamanca (1218), Montpellier, Padua, Naples, Toulouse, Prague (1348), Heidelberg, Louvain (1425).
- Participation in university at that time was at 1.75% (almost all clerics)
- In 2021 more than 40% of 25 to 34 year olds in OECD countries have a tertiary-level education.

Population with tertiary education, 2021
25-34 year-olds / 55-64 year-olds, % in same age group



https://data.oecd.org/eduatt/population-with-tertiary-education.htm

Figure A1.1. Educational attainment of 25-34 year-olds (2019)



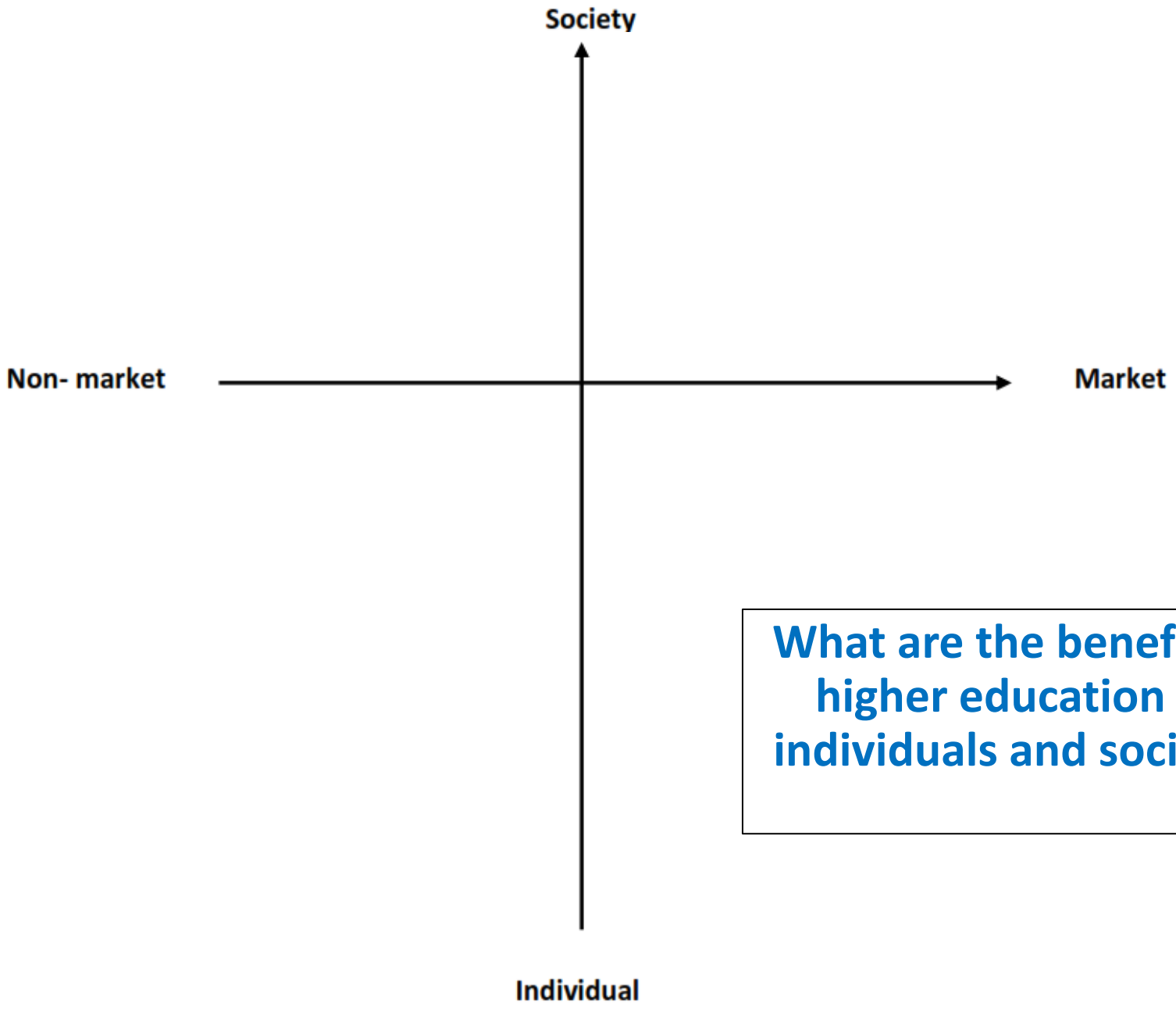
1. Year of reference differs from 2019. Refer to the source table for more details.

2. Data for upper secondary attainment include completion of a sufficient volume and standard of programmes that would be classified individually as completion o intermediate upper secondary programmes (12% of adults aged 25-64 are in this group).

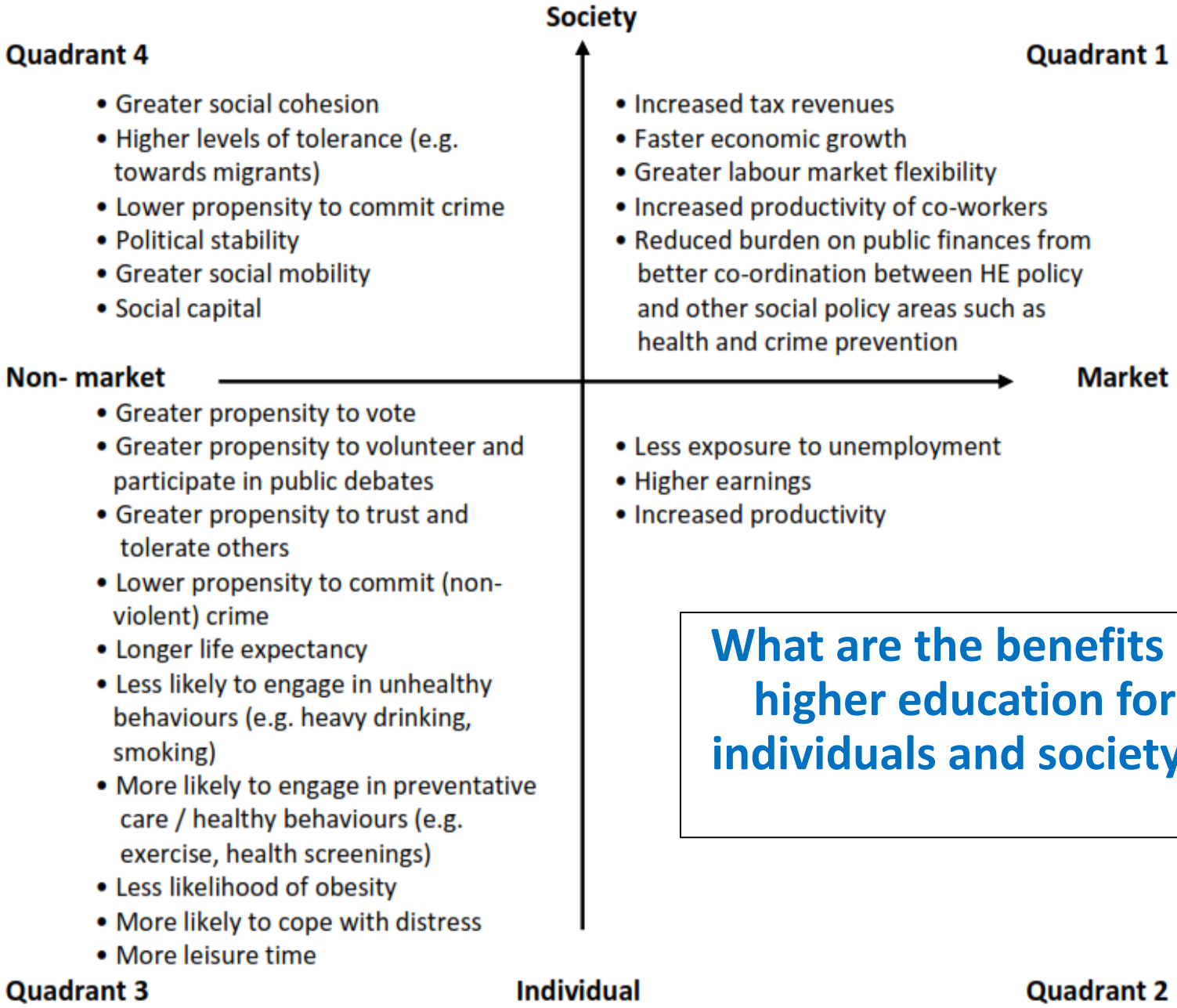
Countries are ranked in ascending order of the share of 25-34 year-olds who attained below upper secondary education.

Source: OECD (2020), Education at a Glance Database, http://stats.oecd.org. See *Source* section for more information and Annex 3 for notes (https://doi.org/10.1787/69096873-en).

In OECD countries, almost half of young is tertiary educated but differences between countries are large.



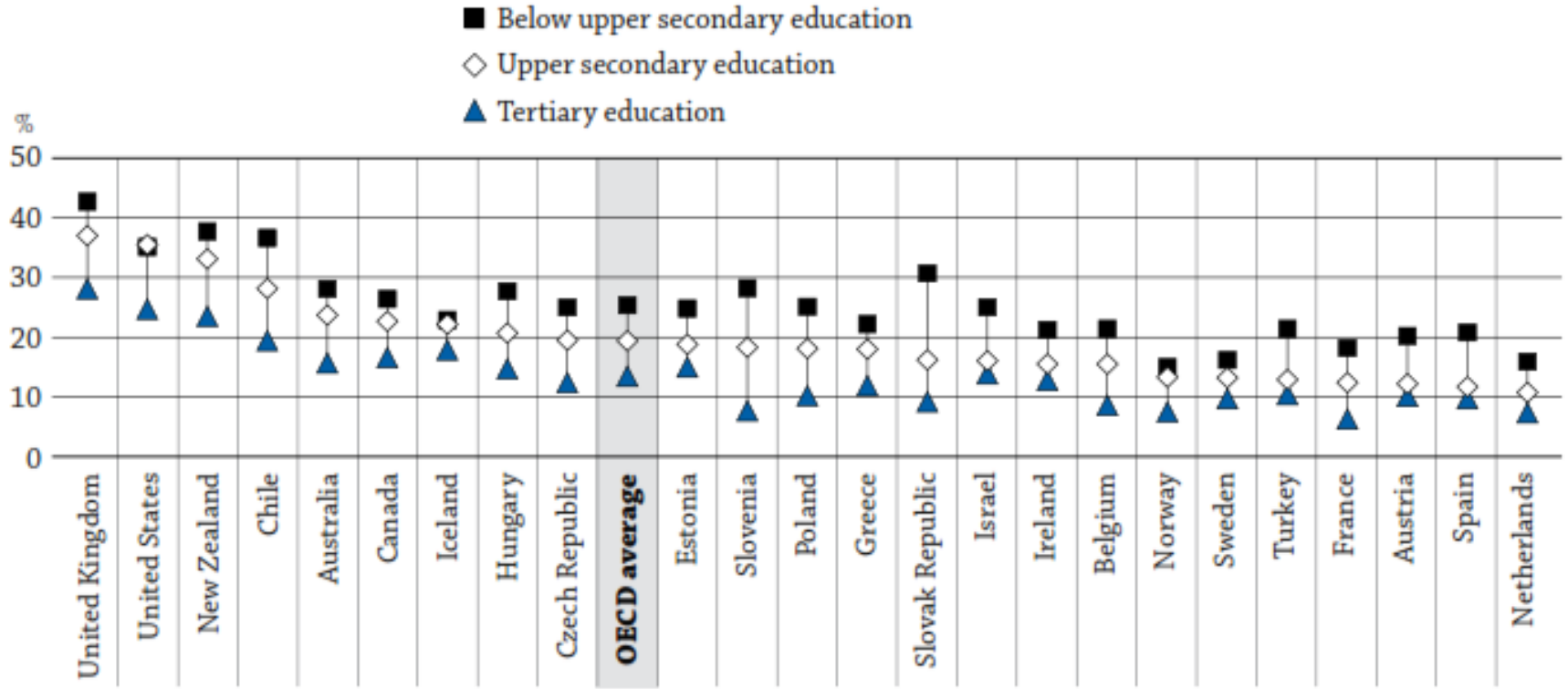
What are the benefits of higher education for individuals and society ?



What are the benefits of higher education for individuals and society ?

Source: Brennan at al., 2013

Chart A8.1. **Proportion of obese adults, by level of educational attainment (2011)**



Notes: Obese adults are defined as those whose Body Mass Index (BMI) is greater or equal to 30 (see Annex 3 for survey questions used).

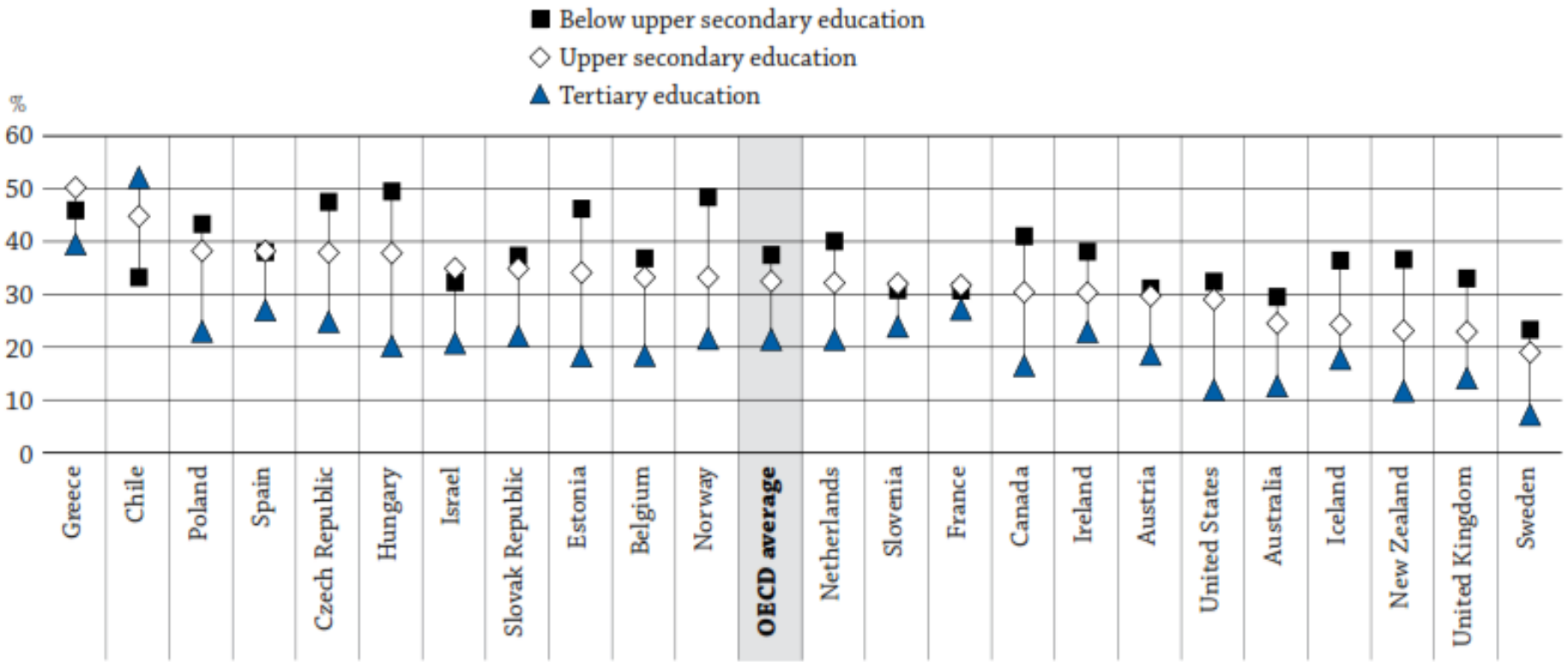
Data refers to 2011, except for Australia (2010), Austria (2006), Belgium (2008), Chile (2009-10), the Czech Republic (2008), Estonia (2006), France (2008), Greece (2009), Hungary (2009), Iceland (2007), Ireland (2007), Israel (2010), the Netherlands (2008), Norway (2008), Poland (2009), the Slovak Republic (2009), Slovenia (2007), Spain (2009), Switzerland (2007), Turkey (2008), the United Kingdom (2010).

Countries are ranked in descending order of the proportion of adults aged 25-64 reporting levels of BMI greater or equal to 30, among adults who have attained upper secondary education.

Source: OECD. Table A8.1. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846709

Chart A8.2. **Proportion of adults who smoke, by level of educational attainment (2011)**



Notes: Adults who smoke are defined as those who currently smoke or otherwise use tobacco products (see Annex 3 for survey questions used). Data refers to 2011, except for Australia (2010), Austria (2006), Belgium (2008), Chile (2009-10), the Czech Republic (2008), Estonia (2006), France (2008), Greece (2009), Hungary (2009), Iceland (2007), Ireland (2007), Israel (2010), the Netherlands (2008), Norway (2008), Poland (2009), the Slovak Republic (2009), Slovenia (2007), Spain (2009), Switzerland (2007), Turkey (2008), the United Kingdom (2010).

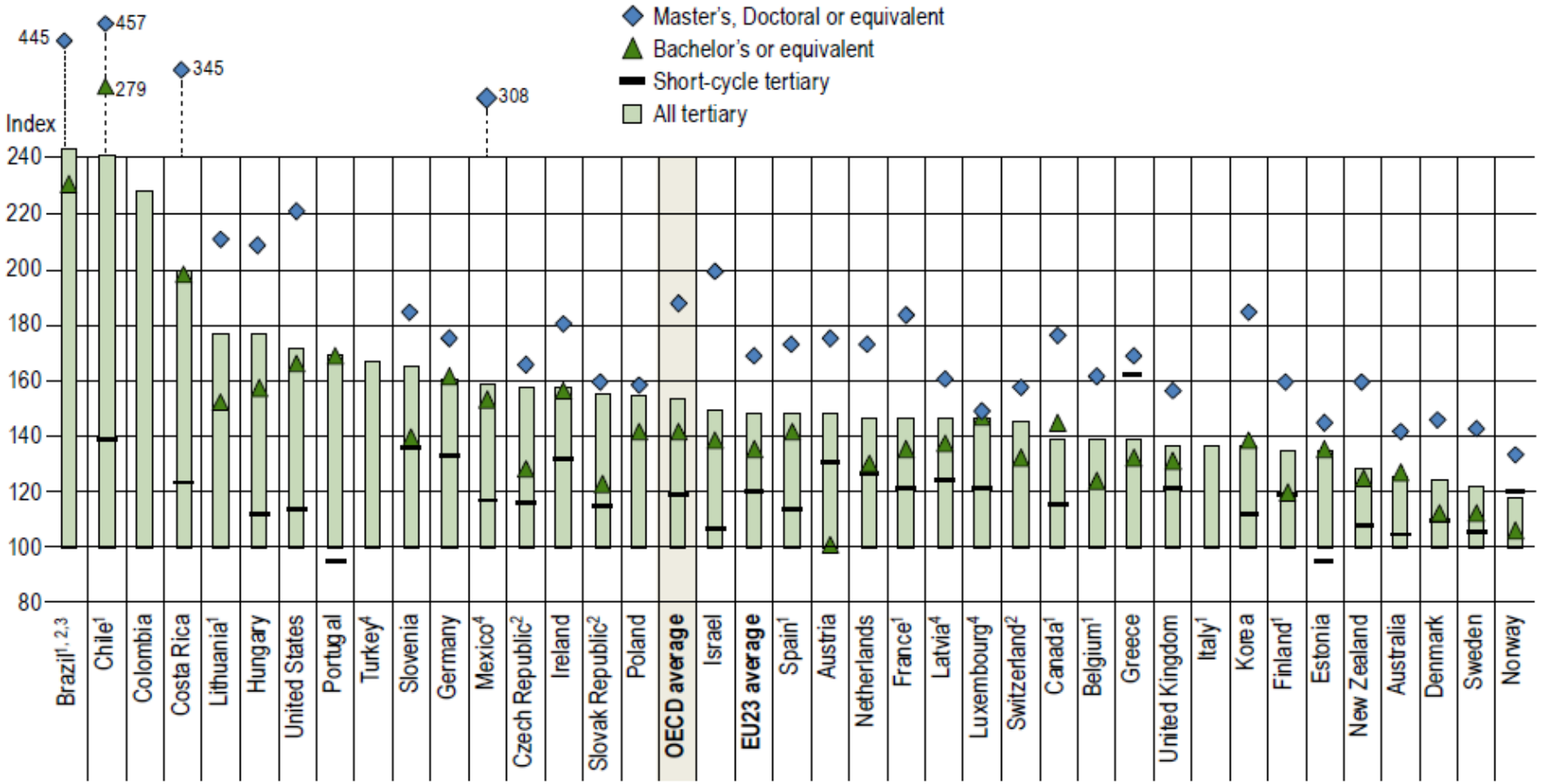
Countries are ranked in descending order of the proportion of adults aged 25-64 reporting using tobacco regularly, among adults who have attained upper secondary education.

Source: OECD. Table A8.2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846728

Figure A4.2. Relative earnings of tertiary-educated adults compared to earnings of adults with an upper secondary education (2018)

25-64 year-old workers (full-time full-year workers); upper secondary education = 100



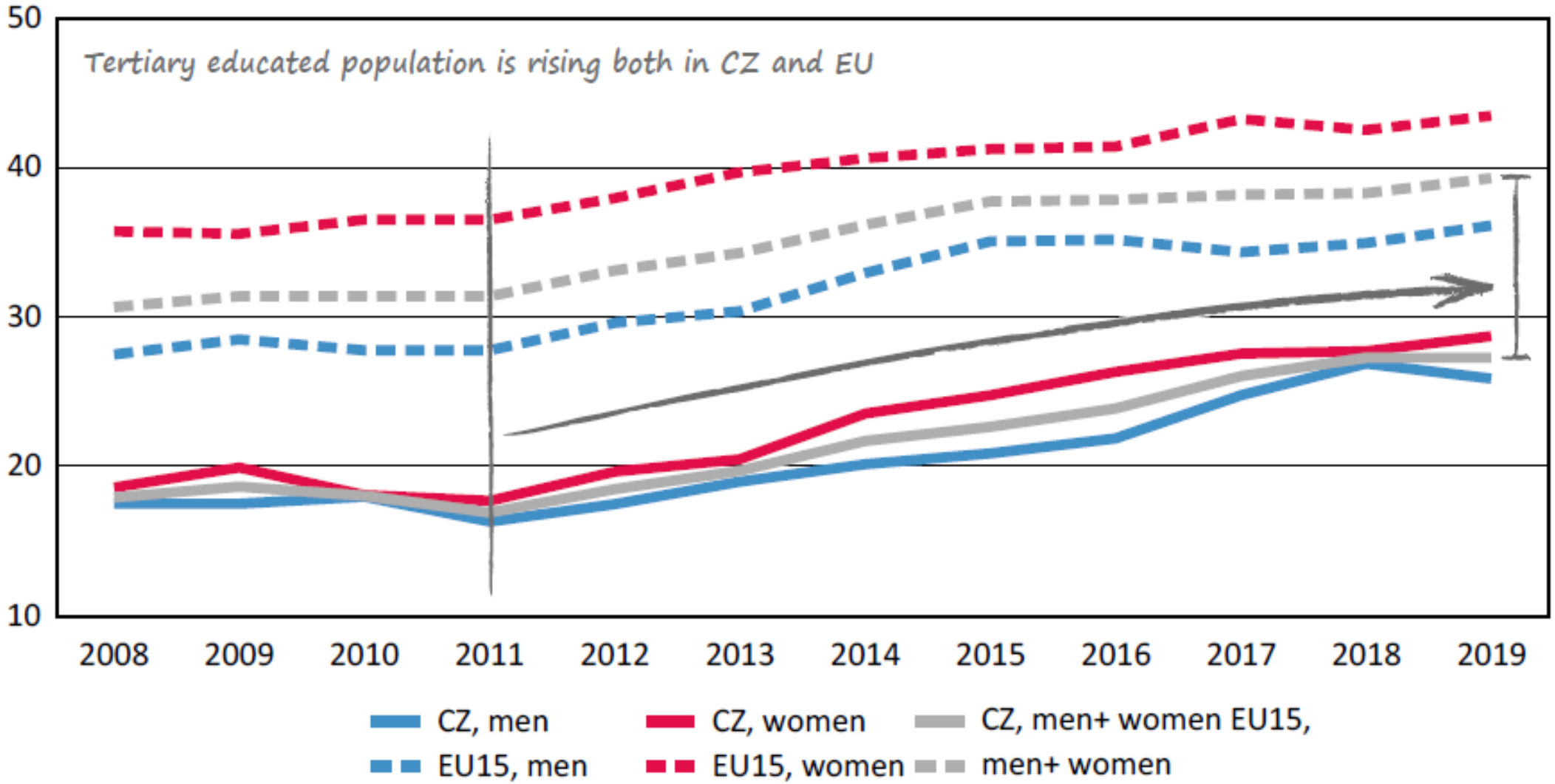
1. Year of reference differs from 2018. Refer to the source table for details.
2. Index 100 refers to the combined ISCED levels 3 and 4 of the educational attainment levels in the ISCED 2011 classification.
3. Bachelor's or equivalent includes short-cycle tertiary.
4. Earnings net of income tax.

Countries are ranked in descending order of the relative earnings of workers with any tertiary level of education.

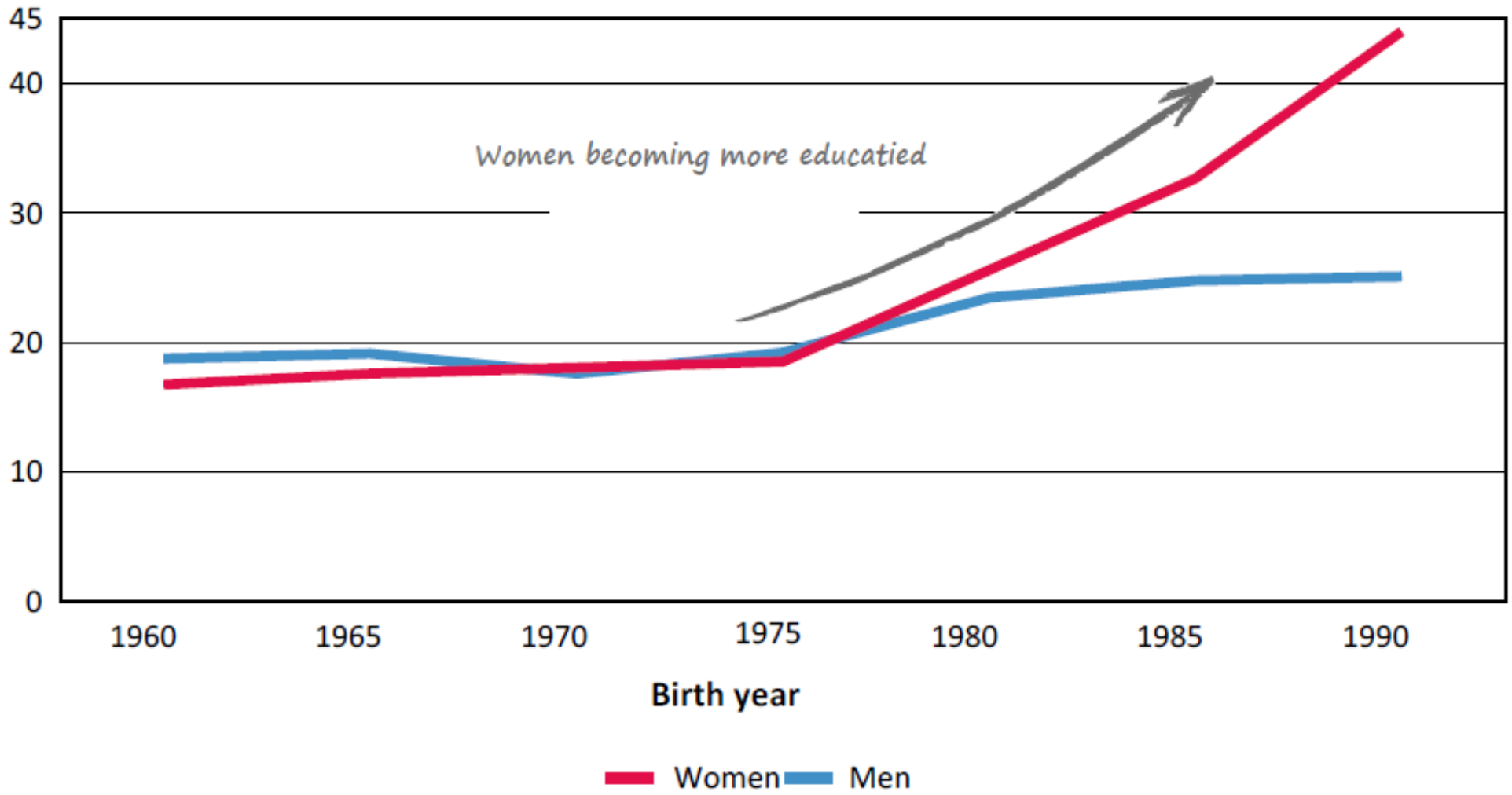
Source: OECD (2020). Education at a Glance Database, http://stats.oecd.org/. See *Source* section for more information and Annex 3 for notes (https://doi.org/10.1787/69096873-en).

- On average across OECD countries, 25-64 year-olds with a tertiary degree earn on average 54% more for full-time employment than those with upper secondary attainment.
- Premia differs by type of tertiary education (20% for a short-cycle tertiary degree, 43% for bachelor's degree and 90% master's or doctoral degree).
- Which countries have the largest premium for education?

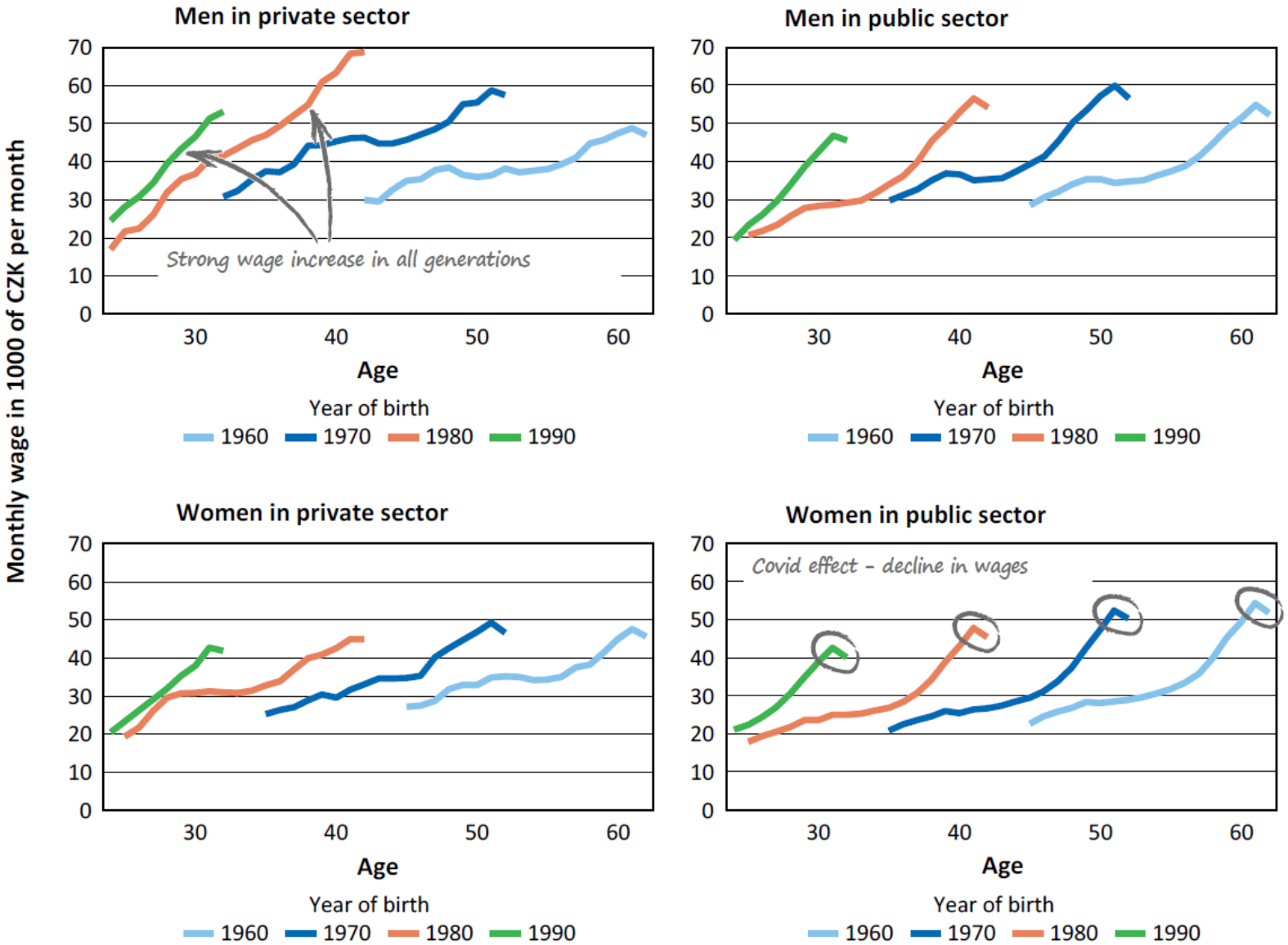
Figure : Share of Tertiary educated in employment (Czechia vs EU)



Share of tertiary educated in employment by gender in Czechia



Cohort specific wage profiles of Tertiary educated workers

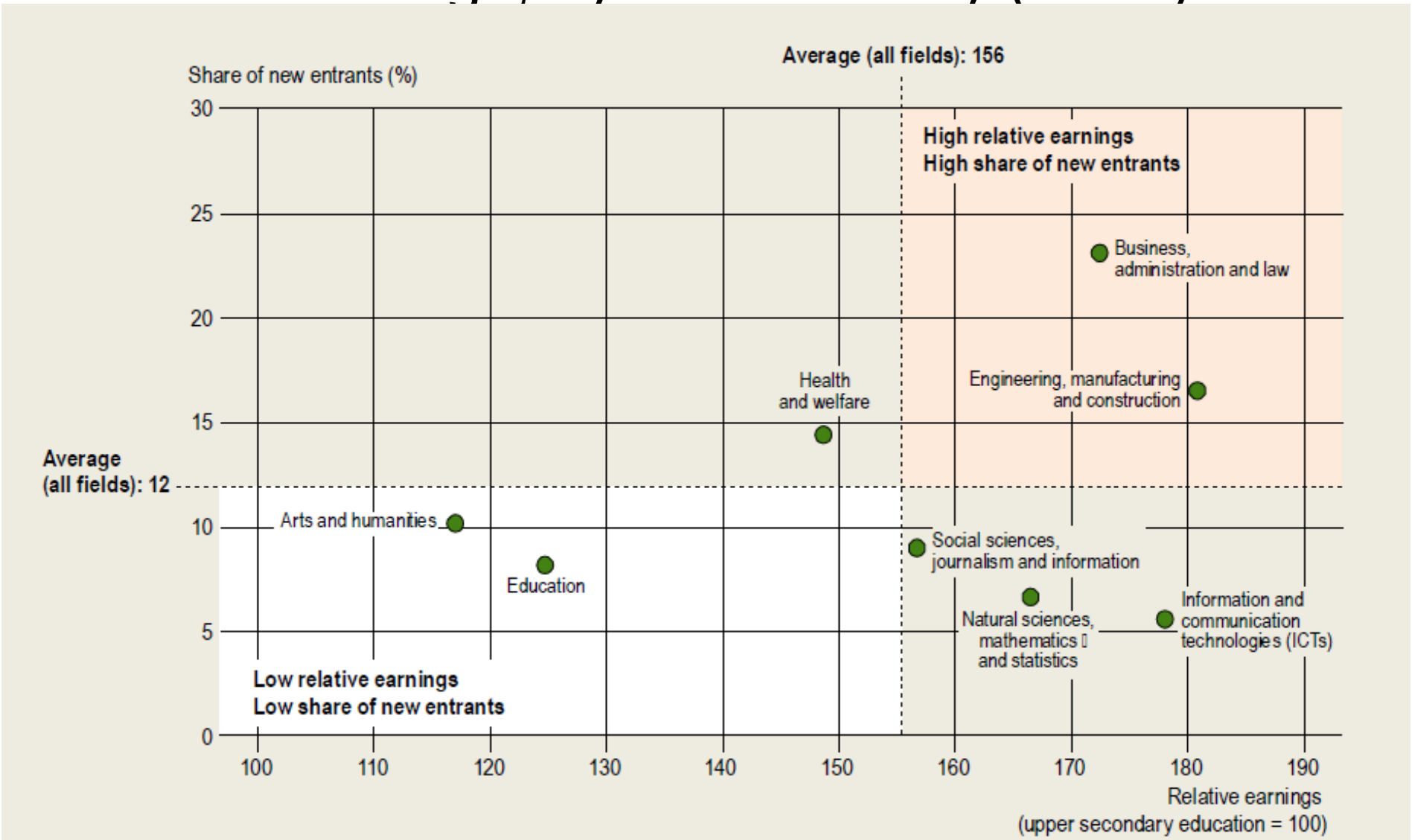


Pozn.: Data ISPV
Zaměstnanci se státním občanstvím ČR nebo SK.
Přepočtený počet zaměstnanců podle evidenční doby.

Choice of field of studies and expected earnings

- The earnings advantage for tertiary-educated adults also varies by their field of study.
- The fields of study with the highest earnings (80% premium) are engineering, manufacturing and construction, and ICT. Fields of study with the lowest earnings (20%) are arts/humanities, and education.
- Are students' preferences in field of study related to relative earnings?
- Other factors are more important: limited admission of students in some fields of study, lack of information on expected earnings in different fields, and students' personal interests and motivation.

Relationship between the share of tertiary new entrants and relative earnings, by field of study (2017)



Source: OECD (2020). Education at a Glance Database, http://stats.oecd.org/. See Source section for more information and Annex 3 for notes (https://doi.org/10.1787/f8d7880d-en).

For younger workers, less favorable outcomes early in their careers, may negatively impact future labor market success

- Business cycle
  - Think why youths graduating in a recession incur permanent career losses.
- Employment mismatch
  - Think why the supply of and demand for graduates might not match in a labor market.

Evidence from literature

- Individuals who enter the labor market in a recession, when the unemployment rate increases by 3-4 points, earn 6-16% less than their graduates who start career during a strong economy
- In a recession it takes longer to find a job and hourly wages are lower
- Despite these losses, university graduates perform much better than individuals without a university degree.
- Graduating in a recession also has the effect of delaying marriage and having kids for men. This finding does not hold for women.

How to improve your chances of finding a great job after university?

- It may help to enhance your CV and make it more attractive to employer
- Include any volunteering activities (gold for your CV) or student mobility
- Signal other skills
- Correct all spelling mistakes in your CV

Spelling mistakes in your resume can cost you a job interview

- sent 1335 CVs of three fictitious job candidates. These three candidates differed in the number of spelling errors in their CV: zero, two, or five.
- the probability of a job interview was 65.6% for those who made no spelling mistakes, compared to 58.1% for those with two spelling errors and 46.6% for those with five spelling errors.
- the effect of two spelling mistakes was equally damaging as the positive effect derived from volunteering work
- applicants for low-skilled occupations are penalized more heavily for making many spelling mistakes
- spelling errors as a signal of lower interpersonal skills
  i) hardworking, (ii) organized, (iii) thorough, (iv) responsible, and (v) systematic

https://www.universal-sci.com/article/effect-of-spelling-mistakes-on-chances-for-job-interview

Source: IZA DP No. 14614: Costly Mistakes: Why and When Spelling Errors in Resumes Jeopardise Interview Chances by Philippe Sterkens, Ralf Caers, Marijke De Couck, Michael Geamanu, Victor Van Driessche, Stijn Baert