

Relation between the higher educational level and the unemployment rate of the main European countries

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Data source

Populations for 171 Countries by Age, Sex, and Level of Education around 2010:
Harmonized Estimates of the Baseline Data for the Wittgenstein Centre Projections

Unemployment rate by sex and age groups - monthly average, %. Eurostat

Concept

The visual representation analyse the correlation between the percentage of population which achieved the higher degree of education (post-secondary) from 2010 to 2030, and the unemployment rate in 2010, of the main European countries.

The idea started from considering that an high percentege of unemployment, can drive an higher request of competencies in the job market.

Data meaning

cc	country	yr	sex	e0	e1	e2	e3	e4	e5	e6	tot	SHARES --e0	e1	e2	e3	e4	e5	e6	tot	increment	incrementt From prev year
40	Austria	2010	3	1235.95	0	0	298.52210111	1817.8213032	3441.6271583	1599.723412	8393.6439746	14.7	0.0	0.0	3.6	21.7	41.0	19.1	100		
40	Austria	2015	3	1198.0289169	0	0.4469133219	248.07939588	1690.2878507	3593.7427101	1817.2506699	8547.8364567	14.0	0.0	0.0	2.9	19.8	42.0	21.3	100	2.2010259902	2.2010259902
40	Austria	2020	3	1186.8020455	0	0.8956152343	223.6835501	1551.7903475	3693.8049142	2033.4477138	8690.4241862	13.7	0.0	0.0	2.6	17.9	42.5	23.4	100	4.3399689416	2.1389429515
40	Austria	2025	3	1192.3726214	2.70545E-014	1.3558508989	201.16228112	1421.171097	3764.4230901	2249.5697911	8830.0547316	13.5	0.0	0.0	2.3	16.1	42.6	25.5	100	6.4175361537	2.077567212
40	Austria	2030	3	1187.2721752	0	1.8406122639	182.42484767	1306.9966993	3807.3552208	2466.2018082	8952.0913635	13.3	0.0	0.0	2.0	14.6	42.5	27.5	100	8.4901425538	2.0726064001
56	Belgium	2010	3	1806.752	268.57219651	0	1014.6533077	2123.7067769	2765.3758372	2733.0058817	10712.066	16.9	2.5	0.0	9.5	19.8	25.8	25.5	100		
56	Belgium	2015	3	1845.9543576	231.57266467	0	832.51975344	2015.3382449	2973.5137362	3107.7881628	11006.68692	16.8	2.1	0.0	7.6	18.3	27.0	28.2	100	2.7221146983	2.7221146983
56	Belgium	2020	3	1873.677918	196.78521559	0	669.21375138	1910.0930333	3160.9558352	3492.9351378	11303.660891	16.6	1.7	0.0	5.9	16.9	28.0	30.9	100	5.3875787896	2.6654640913
56	Belgium	2025	3	1883.3237962	165.3835643	0	529.11085827	1796.2271038	3343.4147454	3891.8465775	11609.306646	16.2	1.4	0.0	4.6	15.5	28.8	33.5	100	8.0101651417	2.6225863521
56	Belgium	2030	3	1902.2721672	137.57822926	0	412.36321523	1655.2858403	3497.6458473	4311.7971254	11916.942425	16.0	1.2	0.0	3.5	13.9	29.4	36.2	100	10.668735088	2.6585699466
100	Bulgaria	2010	3	1027.883	66.905570122	50.711862899	354.10367638	1585.7504249	3174.351998	1234.6254676	7494.332	13.7	0.9	0.7	4.7	21.2	42.4	16.5	100		
100	Bulgaria	2015	3	1029.4275668	51.375116351	35.977386721	264.88033209	1339.1591663	3221.9034294	1305.080743	7247.8037407	14.2	0.7	0.5	3.7	18.5	44.5	18.0	100	1.5324455228	1.5324455228
100	Bulgaria	2020	3	1003.6593586	40.042266247	27.807957379	205.45670718	1153.0155593	3234.6560199	1350.2858467	7014.9237154	14.3	0.6	0.4	2.9	16.4	46.1	19.2	100	2.7746372902	1.2421917674
100	Bulgaria	2025	3	913.45940865	31.830478923	22.018798463	167.41380311	1018.3377101	3252.932462	1380.3252906	6786.3179519	13.5	0.5	0.3	2.5	15.0	47.9	20.3	100	3.8657034575	1.0910661673
100	Bulgaria	2030	3	847.3161422	25.496954972	17.431744597	137.25179979	864.55148819	3254.4035188	1416.2641682	6562.7158167	12.9	0.4	0.3	2.1	13.2	49.6	21.6	100	5.1063356286	1.2406321711
191	Croatia	2010	3	659.544	57.469006251	103.42659058	275.34052716	683.84403287	2102.2461714	521.45967172	4403.33	15.0	1.3	2.3	6.3	15.5	47.7	11.8	100		
191	Croatia	2015	3	619.29256467	42.517458279	76.817158289	211.73476138	670.27386557	2183.7435067	556.36034684	4360.7396617	14.2	1.0	1.8	4.9	15.4	50.1	12.8	100	0.9160003514	0.9160003514
191	Croatia	2020	3	605.16848985	29.681426935	54.440665374	156.22681706	611.24037547	2269.0637286	589.53885662	4315.3603599	14.0	0.7	1.3	3.6	14.2	52.6	13.7	100	1.8190113783	0.9030110269
191	Croatia	2025	3	579.74900219	20.507413444	37.443964507	111.38915739	565.81429364	2331.7741279	619.52925058	4266.2072096	13.6	0.5	0.9	2.6	13.3	54.7	14.5	100	2.6793869553	0.860375577
191	Croatia	2030	3	554.25148434	14.397514122	25.340056695	77.10028791	510.27941761	2383.7644778	644.57119573	4209.7044342	13.2	0.3	0.6	1.8	12.1	56.6	15.3	100	3.4691610297	0.7897740744
203	Czech Republic	2010	3	1470.756	28.073812608	1.1374406297	16.39198639	1442.7704425	6243.7692471	1290.0610708	10492.96	14.0	0.3	0.0	0.2	13.7	59.5	12.3	100		
203	Czech Republic	2015	3	1580.8950789	25.835481293	1.0543813618	14.045665256	1213.3012379	6492.8324614	1406.6138101	10734.578116	14.7	0.2	0.0	0.1	11.3	60.5	13.1	100	0.8090388336	0.8090388336
203	Czech Republic	2020	3	1684.9254918	23.389384449	1.0014151609	12.207091883	1068.8093766	6643.9688679	1507.511694	10941.813322	15.4	0.2	0.0	0.1	9.8	60.7	13.8	100	1.4829916332	0.6739527996
203	Czech Republic	2025	3	1664.9829746	21.322342494	0.9663496333	10.633943454	999.58484699	6828.4213458	1597.5474321	11123.459235	15.0	0.2	0.0	0.1	9.0	61.4	14.4	100	2.067426881	0.5844352479
203	Czech Republic	2030	3	1610.1258602	19.401936899	0.9326023988	9.2731651632	903.76948769	7022.0170094	1703.8869256	11269.406987	14.3	0.2	0.0	0.1	8.0	62.3	15.1	100	2.8250401881	0.757613307
208	Denmark	2010	3	999.605	1.87212E-014	0.68649	13.476490729	1557.7699568	1977.0822006	1001.5218619	5550.142	18.0	0.0	0.0	0.2	28.1	35.6	18.0	100		
208	Denmark	2015	3	954.92208279	0.1881203754	1.0758531919	13.905666747	1469.483324	2133.3280609	1084.9038135	5657.8069215	16.9	0.0	0.0	0.2	26.0	37.7	19.2	100	1.1303645025	1.1303645025
208	Denmark	2020	3	947.32062186	0.130004942	1.4648893651	13.311828522	1371.2347221	2257.3311895	1199.3948288	5790.1880852	16.4	0.0	0.0	0.2	23.7	39.0	20.7	100	2.669286441	1.5389219385
208	Denmark	2025	3	969.26343562	0.0913808906	1.8640150007	12.459103924	1286.1215408	2359.0561108	1319.3732978	5948.2288849	16.3	0.0	0.0	0.2	21.6	39.7	22.2	100	4.1359664008	1.4666799598
208	Denmark	2030	3	1048.9688091	0.055927713	2.2346893786	11.404056473	1174.1990973	2449.1474215	1437.8178267	6123.8278282	17.1	0.0	0.0	0.2	19.2	40.0	23.5	100	5.4340928081	1.2981264073
246	Finland	2010	3	887.239	0	0	73.15405611	1055.6435373	1597.562311	1750.9462017	5364.5451061	16.5	0.0	0.0	1.4	19.7	29.8	32.6	100		
246	Finland	2015	3	895.17804343	1.89555E-014	0.3036845545	62.371658905	1032.8550678	1651.7177105	1843.2098205	5485.6359858	16.3	0.0	0.0	1.1	18.8	30.1	33.6	100	0.961428877	0.961428877
246	Finland	2020	3	926.6671835	0	0.6126929562	56.788090185	1010.6227047	1680.9307956	1942.7558093	5618.3772763	16.5	0.0	0.0	1.0	18.0	29.9	34.6	100	1.9393632203	0.9779343433
246	Finland	2025	3	954.18411618	1.76205E-014	0.9508428665	54.455838093	1001.1674728	1707.31696	2033.5553274	5751.6305574	16.6	0.0	0.0	0.9	17.4	29.7	35.4	100	2.7169237391	0.7775605188
246	Finland	2030	3	983.75572708	3.59333E-014	1.3021297859	50.236829151	987.29184972	1739.3223653	2116.0833919	5877.992293	16.7	0.0	0.0	0.9	16.8	29.6	36.0	100	3.3608751667	0.6439514276

Data meaning

Ranking 2010

pos	cc	country	yr	sex	e0	e1	e2	e3	e4	e5	e6	tot	SHARES -->	e0	e1	e2	e3	e4	e5
1	246	Finland	2010	3	887.239	0	0	73.15405611	1055.6435373	1597.562311	1750.9462017	5364.5451061		16.5	0.0	0.0	1.4	19.7	29.8
2	372	Ireland	2010	3	947.4	15.070631081	0	466.719509	790.64632095	833.71639823	1416.3471407	4469.9		21.2	0.3	0.0	10.4	17.7	18.7
3	752	Sweden	2010	3	1551.053	0	0	853.76373436	1120.937114	3394.4157716	2459.5150299	9379.6846498		16.5	0.0	0.0	9.1	12.0	36.2
4	276	Germany	2010	3	11092.26	616.51383726	0	3300.9699015	13097.701834	34883.127908	19311.889681	82302.463162		13.5	0.7	0.0	4.0	15.9	42.4
5	578	Norway	2010	3	914.269	0	0	74.231330902	1119.3230321	1671.0369492	1104.2506215	4883.1109337		18.7	0.0	0.0	1.5	22.9	34.2
6	826	United Kingdor	2010	3	10772.868	444.49212335	0	13048.143234	19530.098941	5737.0499441	12502.917757	62035.57		17.4	0.7	0.0	21.0	31.5	9.2
7	528	Netherlands	2010	3	2940.591	415.03353178	0	1410.0143675	3250.4122102	5283.4423083	3313.4945822	16612.988		17.7	2.5	0.0	8.5	19.6	31.8
8	40	Austria	2010	3	1235.95	0	0	298.52210111	1817.8213032	3441.6271583	1599.723412	8393.6439746		14.7	0.0	0.0	3.6	21.7	41.0
9	250	France	2010	3	11530.912	1073.7040178	0	12078.518167	5687.0783414	20791.589579	11625.614447	62787.416552		18.4	1.7	0.0	19.2	9.1	33.1
10	208	Denmark	2010	3	999.605	1.87212E-014	0.68649	13.476490729	1557.7699568	1977.0822006	1001.5218619	5550.142		18.0	0.0	0.0	0.2	28.1	35.6
11	756	Switzerland	2010	3	1168.098	0	0.915453	238.92944896	1623.3920507	3270.087268	1362.8957794	7664.318		15.2	0.0	0.0	3.1	21.2	42.7
12	100	Bulgaria	2010	3	1027.883	66.905570122	50.711862899	354.10367638	1585.7504249	3174.351998	1234.6254676	7494.332		13.7	0.9	0.7	4.7	21.2	42.4
13	300	Greece	2010	3	1654.906	226.80990399	427.34269707	2413.4357199	1115.9345429	3730.9043327	1790.0128034	11359.346		14.6	2.0	3.8	21.2	9.8	32.8
14	724	Spain	2010	3	6893.885	589.26404315	3240.00476	7133.6988865	13124.030975	7889.0383427	7207.0669928	46076.989		15.0	1.3	7.0	15.5	28.5	17.1
15	616	Poland	2010	3	5659.372	281.77504583	141.25532494	82.532715977	6758.1475119	19571.104202	5782.4731997	38276.66		14.8	0.7	0.4	0.2	17.7	51.1
16	705	Slovenia	2010	3	282.322	7.2456576246	15.216178932	32.429907157	385.40249214	1030.2120146	276.85174956	2029.68		13.9	0.4	0.7	1.6	19.0	50.8
17	203	Czech Republi	2010	3	1470.756	28.073812608	1.1374406297	16.39198639	1442.7704425	6243.7692471	1290.0610708	10492.96		14.0	0.3	0.0	0.2	13.7	59.5
18	191	Croatia	2010	3	659.544	57.469006251	103.42659058	275.34052716	683.84403287	2102.2461714	521.45967172	4403.33		15.0	1.3	2.3	6.3	15.5	47.7
19	348	Hungary	2010	3	1468.693	43.480234399	33.369361297	421.86015444	2390.4875501	4528.5532624	1097.2014373	9983.645		14.7	0.4	0.3	4.2	23.9	45.4
20	642	Romania	2010	3	3264.198	431.41578057	204.28222196	1617.147288	4715.7859023	8939.8905538	2313.6512534	21486.371		15.2	2.0	1.0	7.5	21.9	41.6
21	688	Serbia	2010	3	1734.916	129.66734352	163.29331829	748.93903202	1828.7477815	4209.9396933	1040.7188313	9856.222		17.6	1.3	1.7	7.6	18.6	42.7
22	703	Slovakia	2010	3	826.16	11.341823848	0.7285027939	10.037138662	856.04824486	3182.3838217	575.41946815	5462.119		15.1	0.2	0.0	0.2	15.7	58.3
23	620	Portugal	2010	3	1613.644	513.46716091	2668.5272649	912.94051144	2353.5964996	1571.2083139	1042.1882493	10675.572		15.1	4.8	25.0	8.6	22.0	14.7
24	380	Italy	2010	3	8515.493	485.75633946	1678.3797271	9359.9836117	17102.079047	17786.761538	5622.3947366	60550.848		14.1	0.8	2.8	15.5	28.2	29.4

Data meaning

Ranking 2030

pos	cc	country	yr	sex	e0	e1	e2	e3	e4	e5	e6	tot	SHARES -->	e0	e1	e2	e3	e4	e5
1	372	Ireland	2030	3	1009.0749141	10.693520869		0	237.34159363	757.83933931	1116.7556659	2389.8512166	5521.5562505	18.3	0.2	0.0	4.3	13.7	20.2
2	246	Finland	2030	3	983.75572708	3.59333E-014	1.3021297859	50.236829151	987.29184972	1739.3223653	2116.0833919	5877.992293	16.7	0.0	0.0	0.9	16.8	29.6	
3	752	Sweden	2030	3	1916.2460556	1.9080518794	1.2241982098	322.50594935	1070.6273251	3844.9167981	3721.1422296	10878.570608	17.6	0.0	0.0	3.0	9.8	35.3	
4	578	Norway	2030	3	1043.0318657	0.7328936558	0.7007751568	48.403789888	1051.3308642	1891.3640966	1881.0722747	5916.6365598	17.6	0.0	0.0	0.8	17.8	32.0	
5	276	Germany	2030	3	10323.65664	470.57294127		0	2241.0041102	9584.1056465	33399.538921	25367.235268	81386.113527	12.7	0.6	0.0	2.8	11.8	41.0
6	250	France	2030	3	12008.761264	609.69099784		0	6588.1720135	5571.1508731	25244.057912	19972.714812	69994.547873	17.2	0.9	0.0	9.4	8.0	36.1
7	40	Austria	2030	3	1187.2721752		0	1.8406122639	182.42484767	1306.9966993	3807.3552208	2466.2018082	8952.0913635	13.3	0.0	0.0	2.0	14.6	42.5
8	826	United Kingdom	2030	3	12294.02358	318.46211591		0	8031.8106326	21849.476411	8871.5238544	18914.66795	70279.964544	17.5	0.5	0.0	11.4	31.1	12.6
9	528	Netherlands	2030	3	2695.8023532	311.18888511		0	826.91390352	2640.8126579	6491.4294695	4682.391087	17648.538356	15.3	1.8	0.0	4.7	15.0	36.8
10	724	Spain	2030	3	6014.3233202	212.4615909	1233.4606206	4796.5284378	13418.240876	11714.333516	12042.066714	49431.415076	12.2	0.4	2.5	9.7	27.1	23.7	
11	300	Greece	2030	3	1475.2806452	76.410334009	105.62723408	1464.6779146	1044.3305749	4704.1071674	2810.2212529	11680.655123	12.6	0.7	0.9	12.5	8.9	40.3	
12	208	Denmark	2030	3	1048.9688091	0.055927713	2.2346893786	11.404056473	1174.1990973	2449.1474215	1437.8178267	6123.8278282	17.1	0.0	0.0	0.2	19.2	40.0	
13	756	Switzerland	2030	3	1232.3364556		0	2.918275565	171.48312829	1313.0865789	3911.5635222	2000.8488321	8632.2367926	14.3	0.0	0.0	2.0	15.2	45.3
14	100	Bulgaria	2030	3	847.3161422	25.496954972	17.431744597	137.25179979	864.55148819	3254.4035188	1416.2641682	6562.7158167	12.9	0.4	0.3	2.1	13.2	49.6	
15	616	Poland	2030	3	5658.2687227	57.121661168	36.490164926	40.174029439	3648.0870537	20743.925147	7899.3424808	38083.40926	14.9	0.1	0.1	0.1	9.6	54.5	
16	705	Slovenia	2030	3	285.20474796	2.9077545095	5.570369076	12.481416295	282.52734446	1125.7785349	373.18836856	2087.6585357	13.7	0.1	0.3	0.6	13.5	53.9	
17	620	Portugal	2030	3	1399.937935	155.15791737	1591.8242425	1311.1365364	2380.0449716	2598.1931608	1730.8904914	11167.185255	12.5	1.4	14.3	11.7	21.3	23.3	
18	191	Croatia	2030	3	554.25148434	14.397514122	25.340056695	77.10028791	510.27941761	2383.7644778	644.57119573	4209.7044342	13.2	0.3	0.6	1.8	12.1	56.6	
19	203	Czech Republic	2030	3	1610.1258602	19.401936899	0.9326023988	9.2731651632	903.76948769	7022.0170094	1703.8869256	11269.406987	14.3	0.2	0.0	0.1	8.0	62.3	
20	348	Hungary	2030	3	1257.7474443	21.494535514	12.056778657	89.317520117	1402.2921096	5329.8099618	1367.1093076	9479.8276576	13.3	0.2	0.1	0.9	14.8	56.2	
21	688	Serbia	2030	3	1401.7242478	26.70234635	31.060903435	212.57489537	1342.4562274	5350.609002	1356.6028137	9721.7304361	14.4	0.3	0.3	2.2	13.8	55.0	
22	380	Italy	2030	3	7609.2977386	167.48835361	487.96865512	4181.9502856	15991.156152	24810.62629	8490.711488	61739.198963	12.3	0.3	0.8	6.8	25.9	40.2	
23	703	Slovakia	2030	3	874.41953467	7.4522661709	0.5675608388	5.2373503925	478.17779783	3595.1602713	762.76598656	5723.7807678	15.3	0.1	0.0	0.1	8.4	62.8	
24	642	Romania	2030	3	2536.1102242	130.2430208	62.325188877	562.13036452	3261.4164238	10747.39535	2657.5490253	19957.169598	12.7	0.7	0.3	2.8	16.3	53.9	

Graphical elements

Palette



colours of the main bars, and background that invert according to the focus



colours of the increment bars



colours of the increment bars, when hidden

Graphical elements

Chart table

focus on data or relation

unemployment bars side - from 0% to 50%

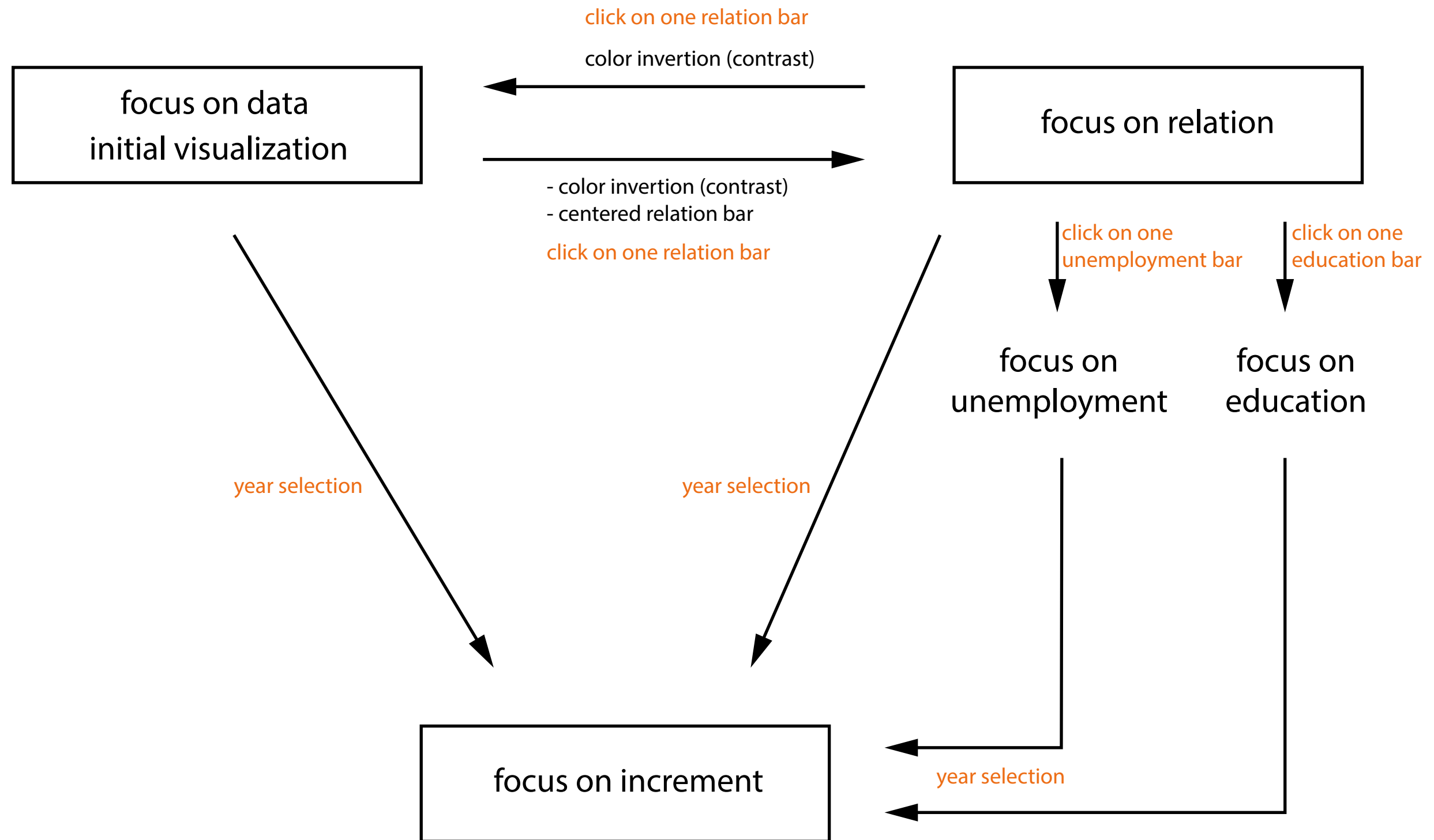
education bars side - from 0% to 50%

focus on increment

unemployment bars side - from 0% to 50%

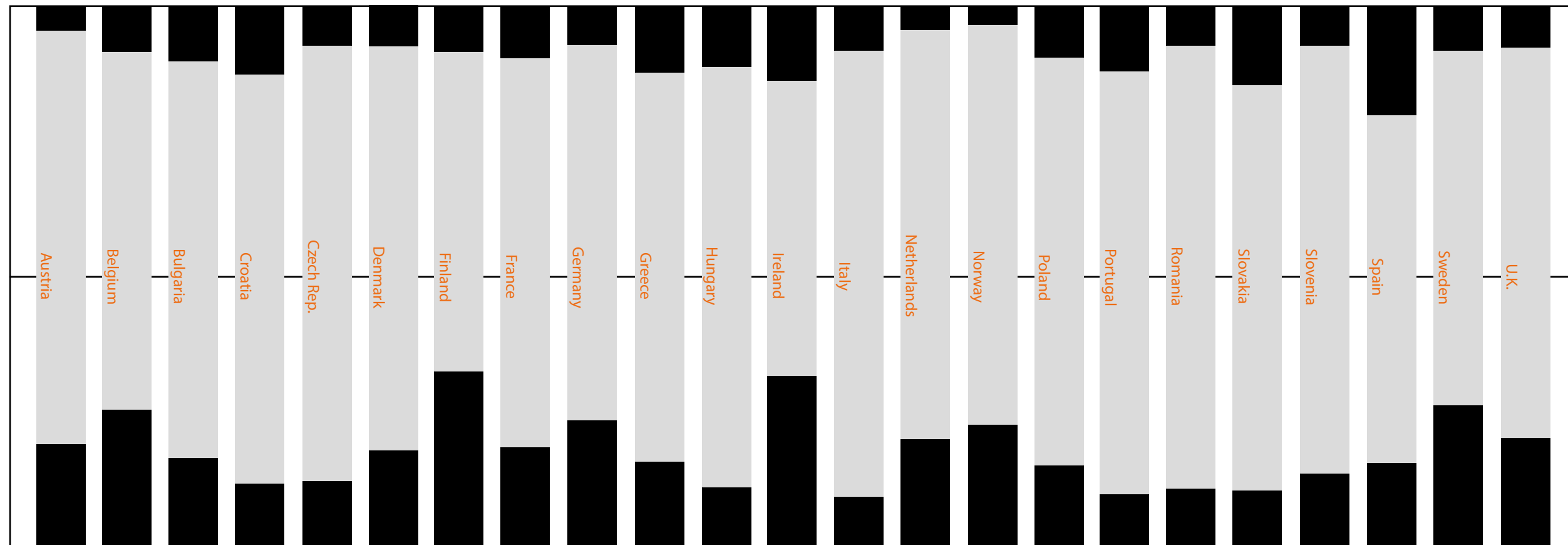
education bars side - from 0% to 20%

Interaction model



Initial visualization

% of unemployment ratio

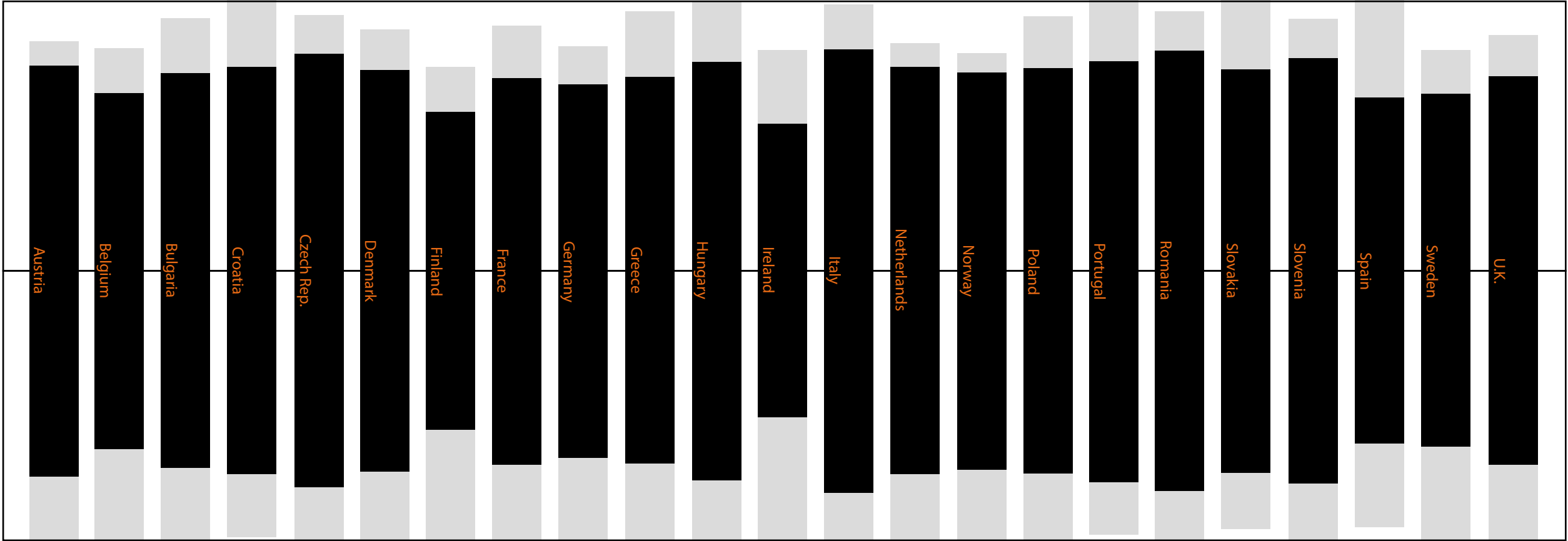


% of people with post secondary education

Focus on relation

% of unemployment ratio

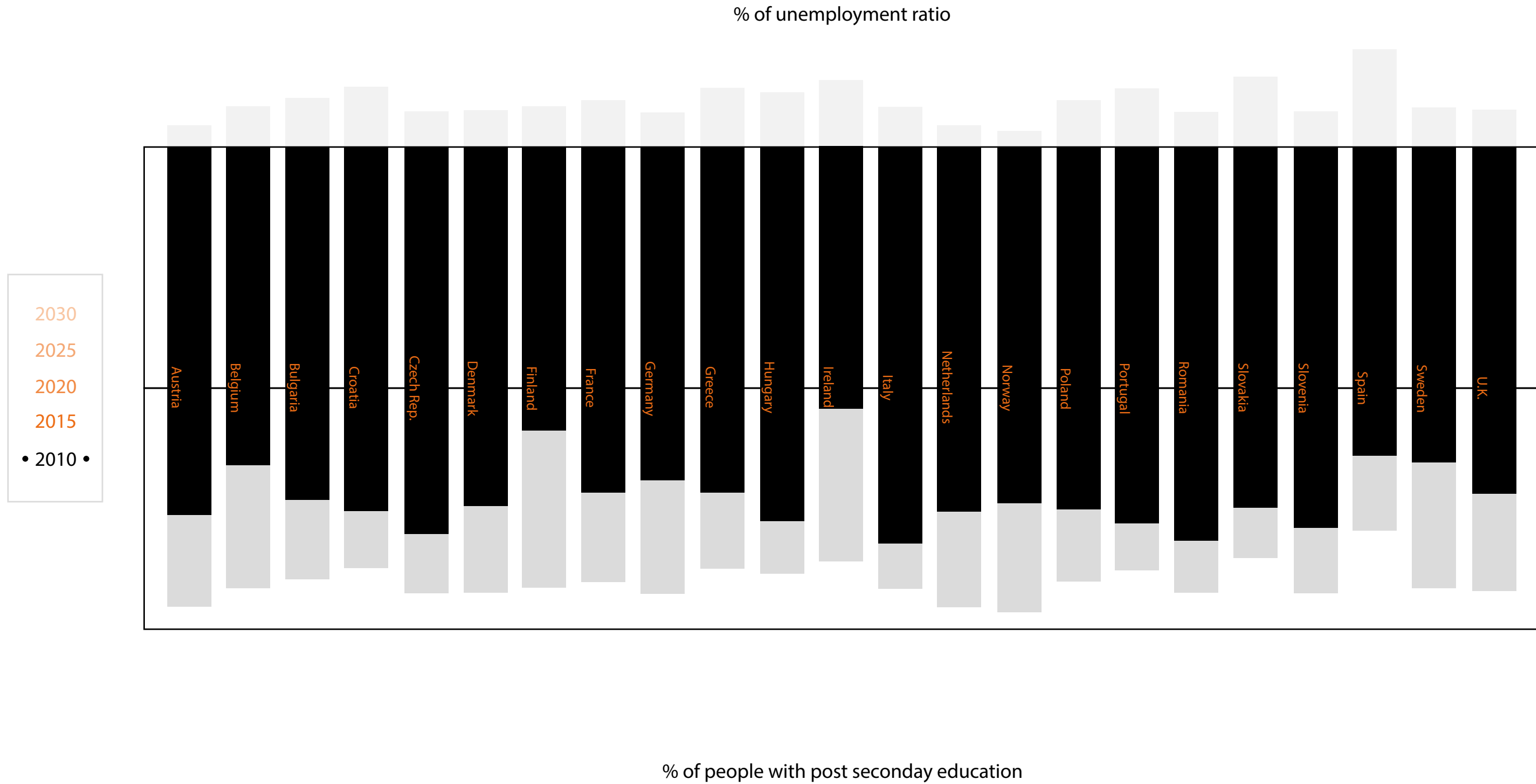
- 2030
- 2025
- 2020
- 2015
- 2010 •



% of people with post secondary education

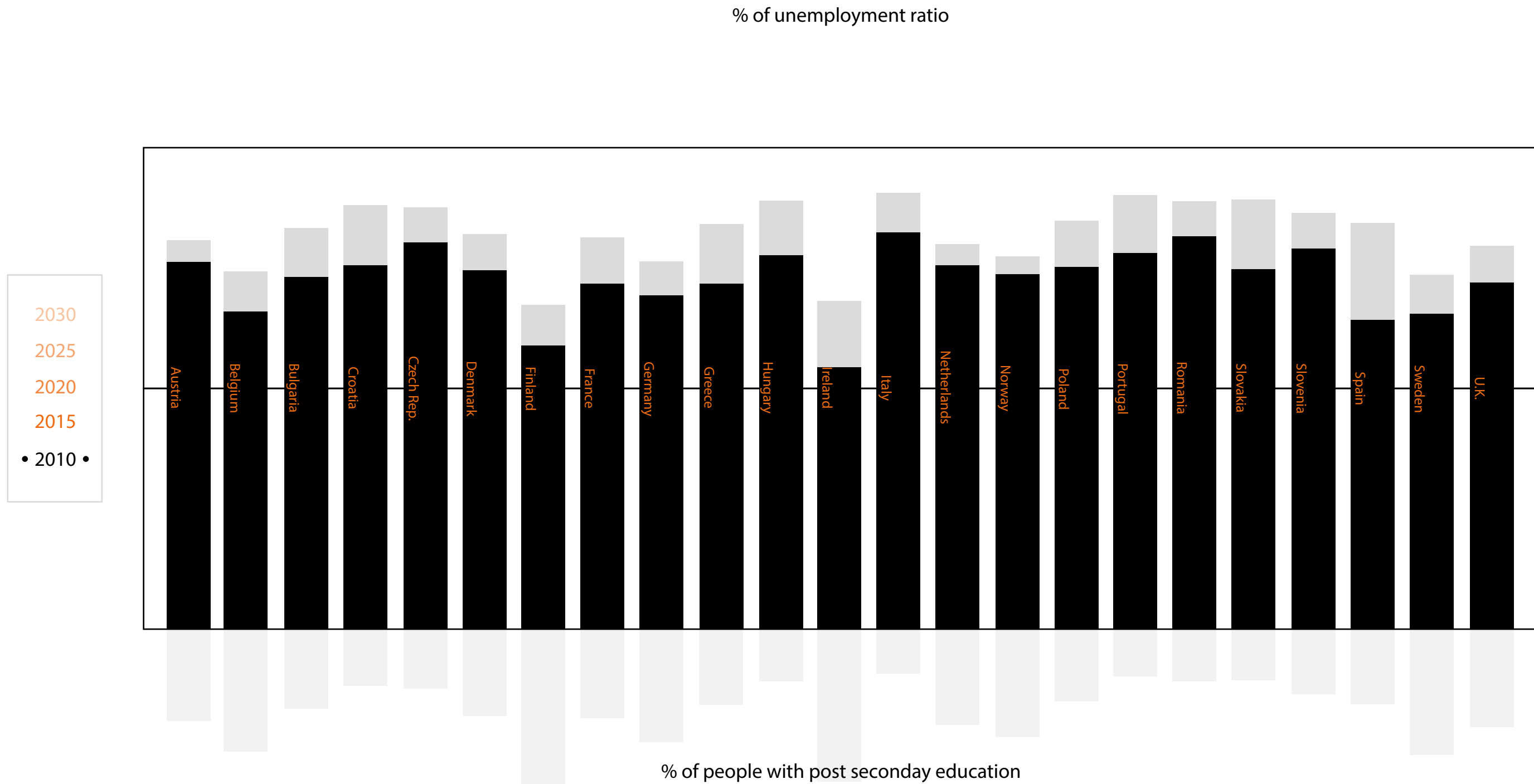
Hiding unemployment bars

click on unemployment bar



Hiding education bars

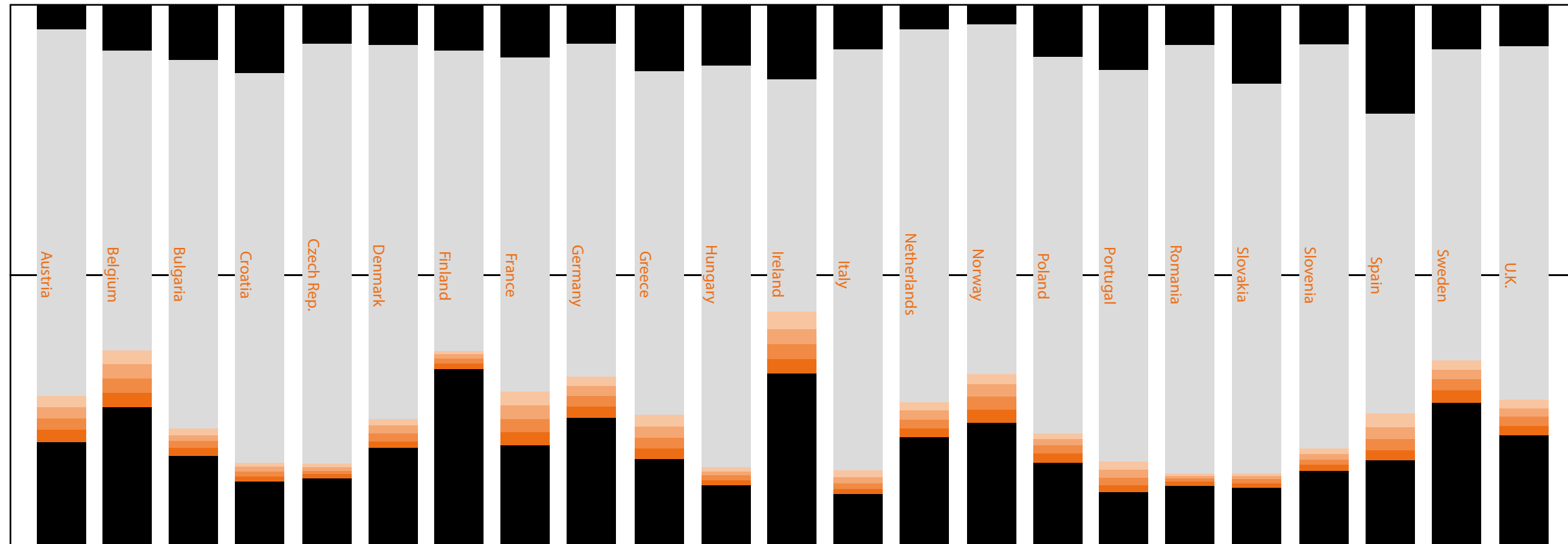
click on education bar



Increment in focus on data

click on year selection bar

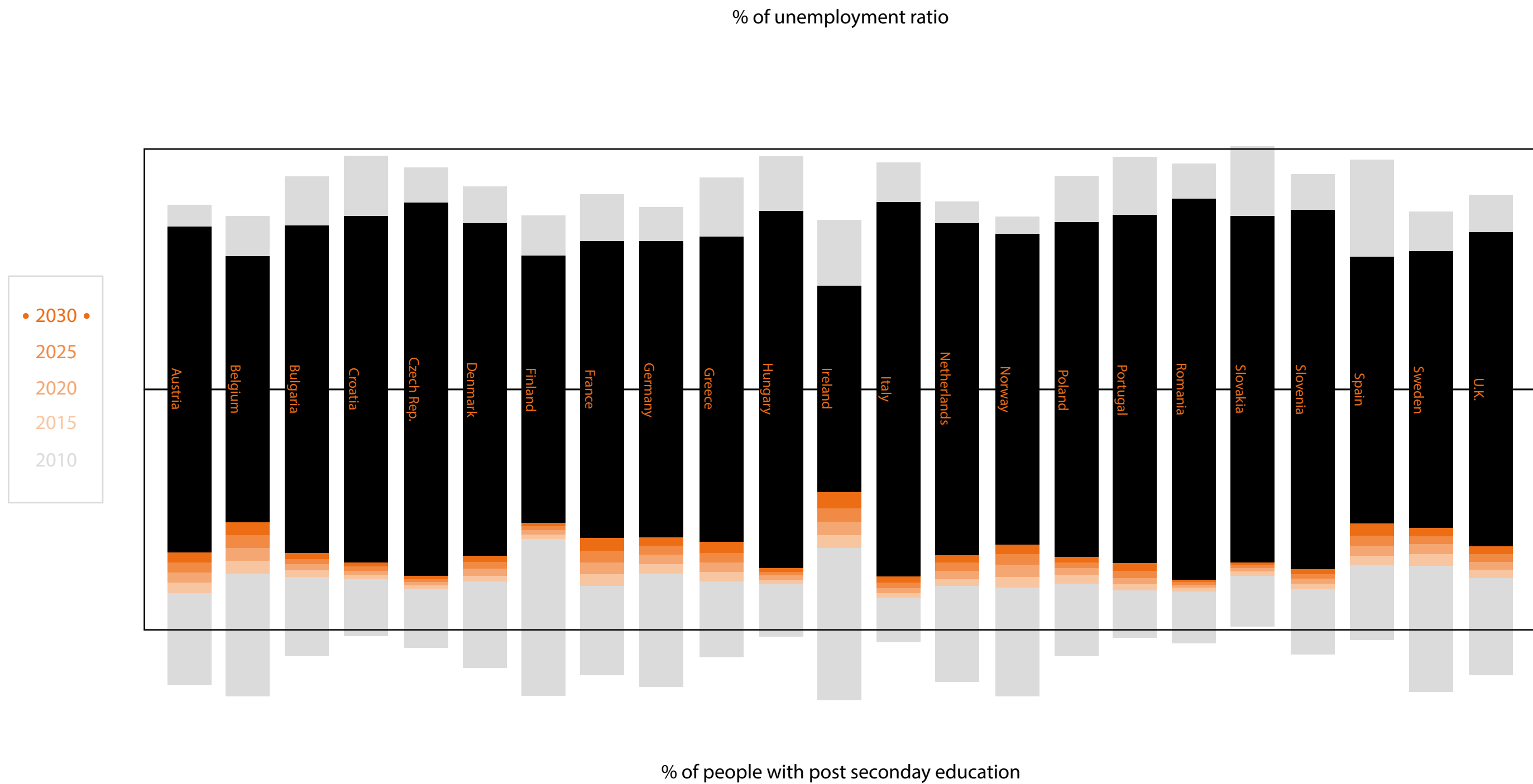
% of unemployment ratio



% of people with post secondary education

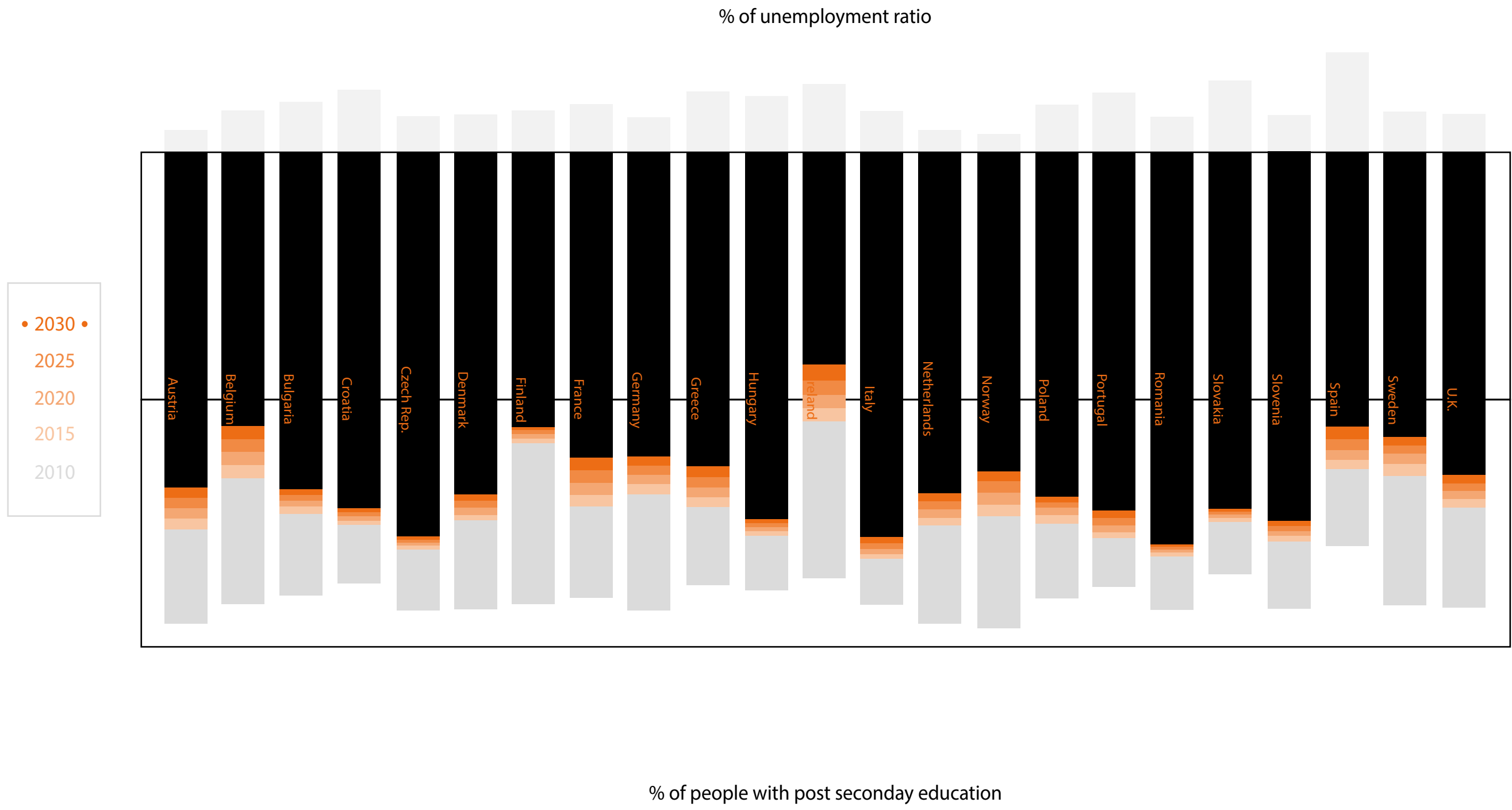
Increment in focus on relation

click on year selection bar



Increment with hidden unemployment bar

click on year selection bar

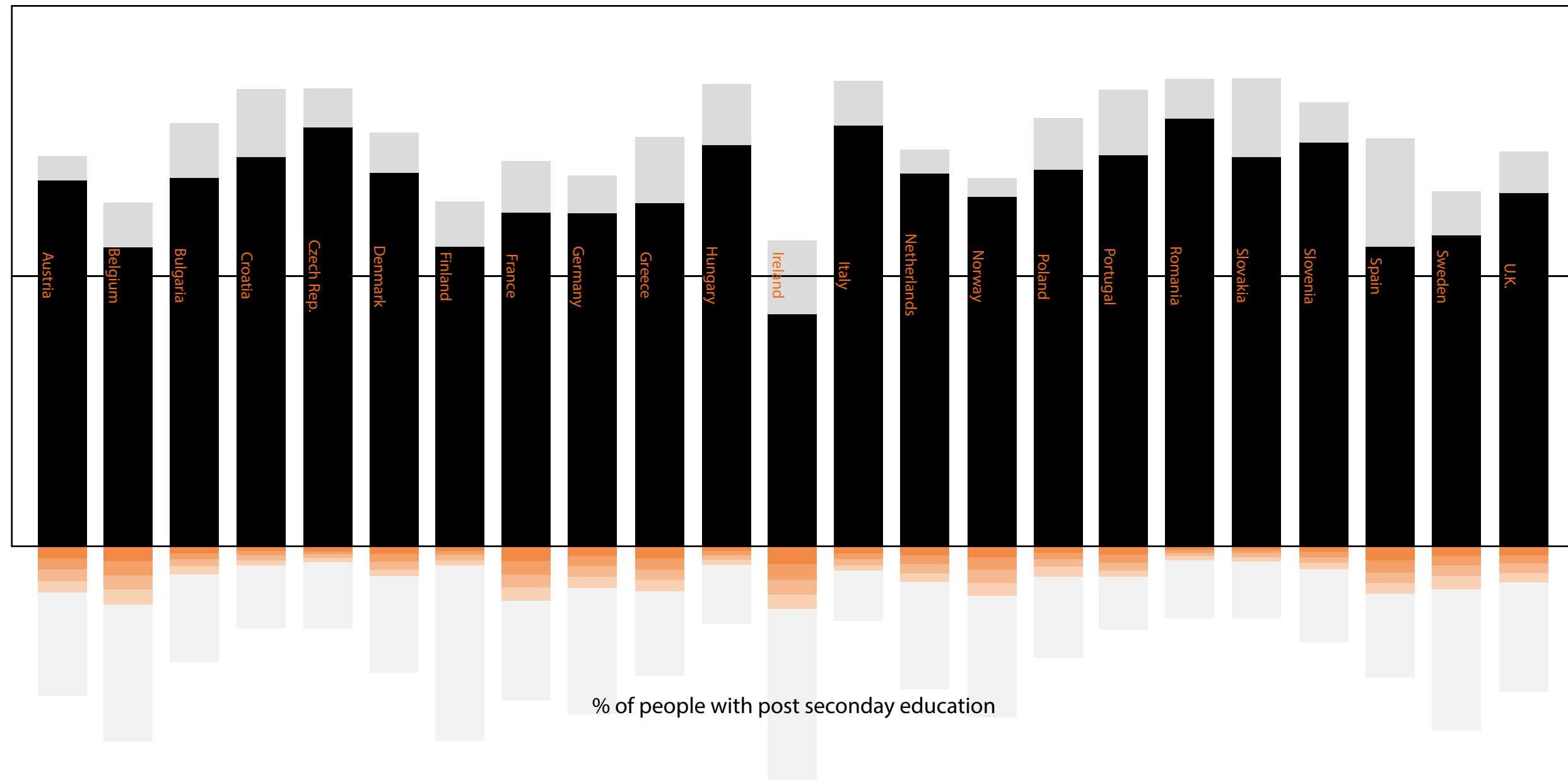


Increment with hidden education bar

click on year selection bar

% of unemployment ratio

- 2030 •
- 2025
- 2020
- 2015
- 2010

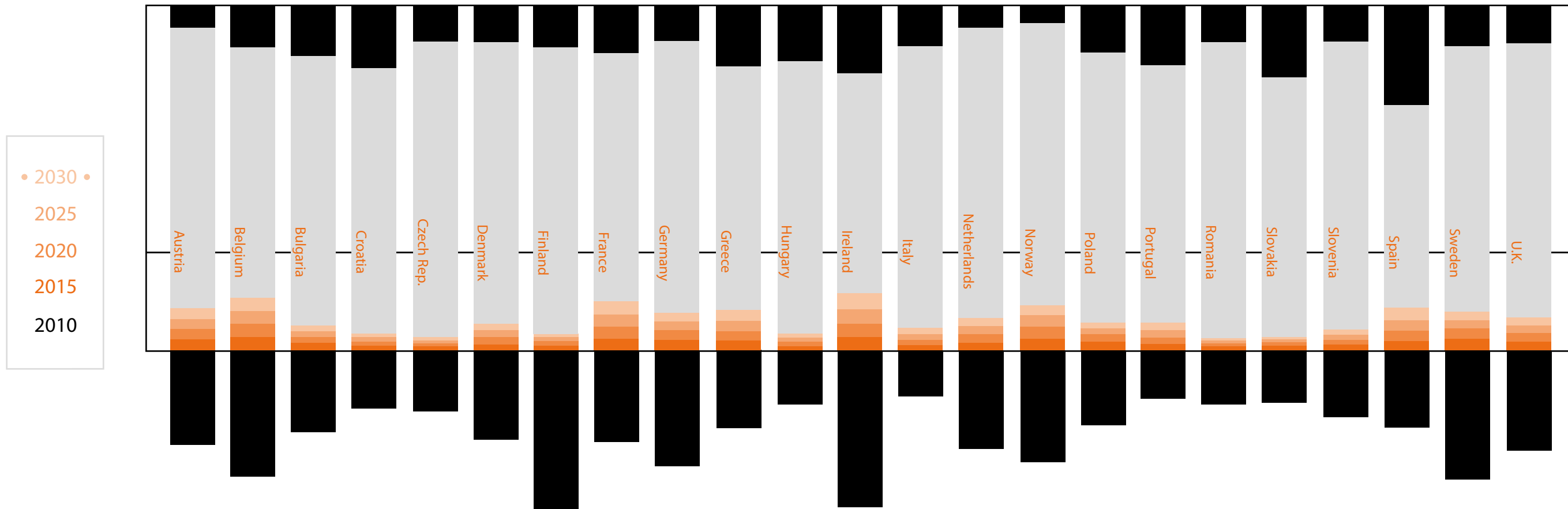


% of people with post secondary education

Focus on increment and data

click on increment bars

% of unemployment ratio

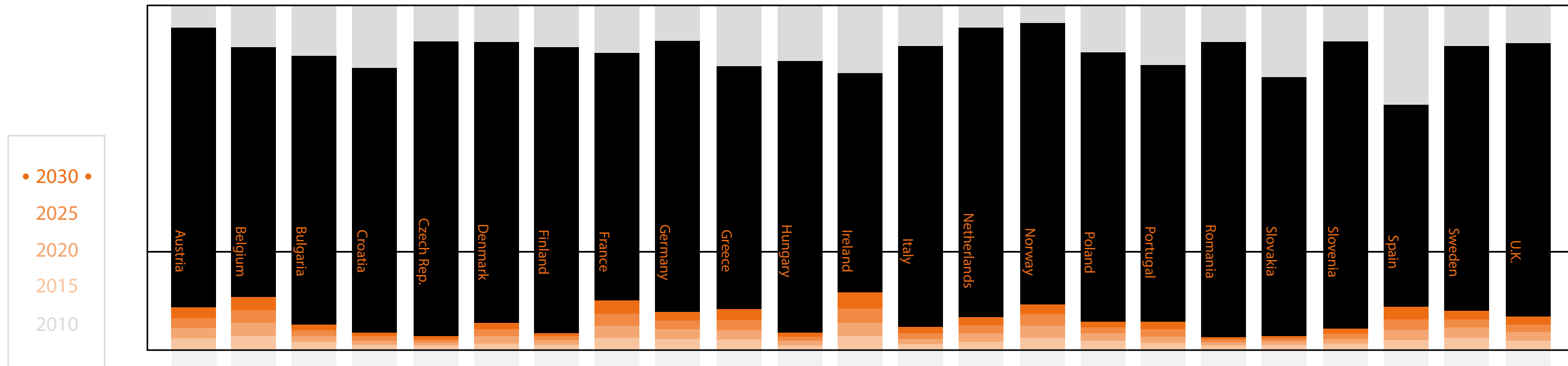


% of people with post secondary education

Focus on increment and relation

click on increment bars

% of unemployment ratio



% of people with post secondary education