

**A1. Unemployment rates data sources**

Country	WDI	Layard	OECD	Mitchell	Used in this paper
Austria	1982 - 2012	1955 - 1990	1968 - 2007	1947 - 2008	1956 -2012
Belgium	1983 - 2012	1955 - 1990	1960 - 2007	1921-1939, 1948 -2003	1954-2012
Bulgaria	1993 - 2012	N/A	N/A	1990 - 2008	1990-2012
Croatia	1991, 1996 - 2012	N/A	N/A	1981 - 2007	1981-2012
Cyprus	1999 - 2012	N/A	N/A	1967 - 2005	1967-2012
Czech Republic	1991, 1993 - 2012	N/A	1990 - 2007	1990 - 2008	1990-2012
Denmark	1983 - 2012	1955 - 1990	1960, 1965, 1967, 1969 - 2007	1910 - 1997, 2001 - 2008	1953-2012
Estonia	1989 - 2012	N/A	N/A	1990 - 1994, 1998 - 2008	1989-2012
Finland	1980 - 2012	1955 - 1990	1960 - 2007	1958 - 2008	1956-2012
France	1980 - 2012	1955 - 1990	1960 - 2007	1900 - 1913, 1970 - 2008	1955-2012
Germany	1991 - 2012	1955 - 1990	1960 - 2007	1900 - 1938, 1948 - 2008	1955-2012
Greece	1981 - 2012	N/A	1961, 1977 - 2007	1974 - 1993, 1999 - 2007	1951-2012
Hungary	1992 - 2012	N/A	1992 - 2007	1990 - 1999, 2003 - 2008	1990-2012
Ireland	1983 - 2012	1955 - 1990	1960 - 2007	1939 - 2008	1956-2012
Italy	1980 - 2012	1955 - 1990	1960 - 2007	1947 - 2008	1951-2012
Latvia	1996 - 2012	N/A	N/A	1992 - 2007	1992-2012
Lithuania	1994 - 2012	N/A	N/A	1991 - 2008	1991-2012
Luxembourg	1983 - 2012	N/A	1974 - 2007	1975 - 2008	1953-2012
Macedonia	1997 - 2012	N/A	N/A	1982 - 2000	1982-2012
Malta	2000 - 2012	N/A	N/A	1983 - 2007	1983-2012
Netherlands	1981, 1983, 1985, 1987 - 2012	1955 - 1990	1975 - 2007	1911 - 1939, 1948 - 2008	1955-2012
Poland	1992 - 2012	N/A	1990 - 2007	1927 - 1938, 1990 - 2008	1990-2012
Portugal	1980 - 2012	N/A	1960, 1974 - 2007	1992, 1993	1960, 1974-2012
Romania	1994 - 2012	N/A	N/A	1991 - 2008	1991-2012
Slovakia	1993 - 2012	N/A	1994 - 2007	1991 - 2008	1991-2012
Slovenia	1991, 1993 - 2012	N/A	N/A	1986 - 2006	1986-2012
Spain	1980 - 2012	1955 - 1990	1960 - 2007	1968 - 2008	1955-2012
Sweden	1980 - 2012	1955 - 1990	1963 - 2007	1925 - 2008	1952-2012
Switzerland	1990 - 2012	1955 - 1990	1960 - 2007	1926 - 1950, 1974 - 2008	1948, 1955-2012
Turkey	1985, 1987 - 2012	N/A	1960 - 2007	N/A	1960
United Kingdom	1984 - 2012	1955 - 1990	1960 - 2007	1900 - 2008	1956

## A2. Summary statistics, by country

Country	Household income sample		Health sample		Life Dissatisfaction sample		Obesity sample		Smoke sample		Drink sample	
	Mean	Years of schooling	Mean	Years of schooling	Mean	Years of schooling	Mean	Years of schooling	Mean	Years of schooling	Mean	Years of schooling
<i>Panel A: Unrestricted sample</i>												
Austria	2.21	11.05	0.17	11.16	0.13	11.33	0.07	11.25	0.41	11.17	0.15	11.13
Belgium	2.24	11.86	0.18	12.33	0.12	12.98	0.13	12.20	0.34	12.50	0.08	12.67
Bulgaria			0.30	12.49	0.62	12.95	0.14	12.86	0.48	12.83	0.08	12.65
Croatia			0.25	12.06	0.31	11.99	0.11	12.14	0.40	11.97	0.06	11.97
Cyprus			0.21	11.37	0.28	11.50	0.17	12.49	0.41	11.16	0.05	10.90
Czech Republic			0.21	11.95	0.21	12.01	0.08	12.04	0.34	11.96	0.05	11.94
Denmark	1.85	15.30	0.16	15.91	0.03	16.87	0.13	15.88	0.34	16.12	0.06	16.57
Estonia			0.38	12.53	0.32	12.80	0.11	12.47	0.37	12.80	0.04	12.84
Finland	2.08	13.78	0.23	14.19	0.05	15.39	0.16	14.15	0.33	14.82	0.04	15.29
France	2.49	11.92	0.22	12.33	0.17	12.82	0.09	12.34	0.41	12.66	0.05	12.84
Germany	2.31	11.33	0.24	11.36	0.20	11.84	0.10	11.62	0.40	11.40	0.11	11.35
Greece	2.14	10.67	0.10	11.42	0.50	11.94	0.15	11.26	0.54	11.58	0.08	11.59
Hungary			0.40	10.60	0.53	10.94	0.16	10.68	0.45	10.81	0.08	10.73
Ireland	2.25	10.67	0.09	11.11	0.12	11.65	0.12	11.12	0.35	11.26	0.08	11.37
Italy	2.42	11.56	0.21	11.49	0.28	11.85	0.06	11.62	0.33	11.58	0.09	11.43
Latvia			0.51	11.87	0.42	12.17	0.16	11.90	0.40	11.87	0.03	11.89
Lithuania			0.48	12.46	0.45	12.58	0.16	12.42	0.39	12.73	0.05	12.72
Luxembourg	2.33	11.53	0.18	11.76	0.07	12.85	0.12	11.63	0.32	12.11	0.05	12.08
Macedonia					0.38	11.10			0.43	10.75		10.75
Malta			0.17	9.98	0.21	10.18	0.24	10.10	0.29	10.11	0.03	10.12
Netherlands	2.37	12.46	0.17	13.25	0.06	14.04	0.13	12.89	0.33	13.62	0.07	14.13
Poland			0.32	12.45	0.25	12.81	0.13	12.61	0.41	12.59	0.02	12.59
Portugal	2.46	7.74	0.33	8.15	0.51	8.44	0.12	8.01	0.32	8.43	0.10	8.58
Romania			0.29	12.17	0.53	12.30	0.11	12.27	0.36	12.20	0.13	12.14
Slovak Republic			0.26	12.04	0.33	12.17	0.11	12.25	0.30	12.12	0.06	12.09
Slovenia			0.18	12.48	0.13	12.73	0.09	12.56	0.31	12.67	0.05	12.69
Spain	2.14	10.33	0.14	10.86	0.22	11.00	0.10	10.90	0.45	10.95	0.13	10.84
Sweden	2.28	14.14	0.21	14.99	0.04	16.11	0.10	15.23	0.27	15.45	0.01	15.54
Turkey			0.21	7.71	0.33	7.89	0.12	7.97	0.42	7.99		7.99
United Kingdom	2.23	10.18	0.22	10.60	0.11	11.24	0.18	10.57	0.38	10.96	0.11	11.19

**A2. Summary statistics, by country (continued)**

Country	Household income		Health sample		Life Dissatisfaction		Obesity sample		Smoke sample		Drink sample	
	Mean	Years of schooling	Mean	Years of schooling	Mean	Years of schooling	Mean	Years of schooling	Mean	Years of schooling	Mean	Years of schooling
<i>Panel B: Restricted sample</i>												
Austria	2.21	11.05	0.17	11.16	0.13	11.33	0.07	11.25	0.41	11.16	0.15	11.13
Belgium	2.24	11.86	0.18	12.33	0.12	12.97	0.13	12.20	0.34	12.50	0.08	12.67
Bulgaria			0.16	13.95	0.54	14.22	0.06	14.75	0.50	13.91	0.06	13.73
Croatia			0.16	12.67	0.27	12.46	0.07	12.77	0.41	12.54	0.05	12.54
Cyprus			0.19	11.71	0.28	11.70	0.16	12.90	0.41	11.35	0.05	11.07
Czech Republic			0.09	12.47	0.18	12.50	0.03	12.63	0.31	12.37	0.05	12.31
Denmark	1.85	15.30	0.16	15.91	0.03	16.85	0.13	15.88	0.34	16.10	0.06	16.57
Estonia			0.23	13.70	0.24	13.87	0.07	13.64	0.34	13.81	0.03	14.00
Finland	2.08	13.78	0.23	14.19	0.05	15.35	0.16	14.15	0.33	14.81	0.04	15.29
France	2.49	11.92	0.22	12.33	0.17	12.81	0.09	12.34	0.41	12.66	0.05	12.84
Germany	2.31	11.33	0.24	11.36	0.20	11.83	0.10	11.62	0.39	11.40	0.11	11.35
Greece	2.08	12.12	0.07	12.45	0.50	12.48	0.13	12.15	0.55	12.33	0.09	12.22
Hungary			0.19	11.61	0.47	11.73	0.09	12.02	0.43	11.58	0.03	11.51
Ireland	2.25	10.67	0.09	11.11	0.12	11.65	0.12	11.12	0.35	11.26	0.08	11.37
Italy	2.42	11.56	0.21	11.49	0.28	11.84	0.06	11.62	0.33	11.58	0.09	11.43
Latvia			0.31	12.91	0.33	13.17	0.05	13.19	0.40	12.76	0.03	12.75
Lithuania			0.33	13.34	0.33	13.41	0.09	13.02	0.37	13.75	0.03	13.42
Luxembourg	2.30	12.26	0.15	12.55	0.06	13.28	0.09	12.45	0.32	12.70	0.05	12.62
Macedonia					0.36	11.61			0.39	11.47		11.47
Malta			0.09	11.46	0.19	11.15	0.17	12.02	0.31	11.11	0.02	10.97
Netherlands	2.37	12.46	0.17	13.25	0.06	14.02	0.13	12.89	0.33	13.62	0.07	14.13
Poland			0.20	13.72	0.17	13.82	0.06	13.97	0.36	13.82	0.03	13.66
Portugal	2.33	9.41	0.24	9.58	0.49	9.47	0.11	9.34	0.36	9.66	0.08	9.68
Romania			0.15	13.91	0.46	13.51	0.05	14.16	0.40	13.43	0.11	13.68
Slovak Republic			0.13	12.63	0.26	12.74	0.05	12.50	0.29	12.77	0.05	12.83
Slovenia			0.08	13.73	0.11	13.77	0.05	14.00	0.32	13.80	0.02	13.89
Spain	2.14	10.41	0.14	10.86	0.22	10.99	0.10	10.90	0.45	10.95	0.13	10.84
Sweden	2.28	14.14	0.21	14.99	0.04	16.10	0.10	15.23	0.27	15.45	0.01	15.54
Turkey			0.21	7.71	0.33	7.89	0.12	7.97	0.42	7.99		7.99
United Kingdom	2.23	10.18	0.22	10.60	0.11	11.23	0.18	10.57	0.38	10.95	0.11	11.19

### A3: Marginal Effects of Unemployment rates when graduating and Education on Outcomes

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variables	Lower household income (Yes = 1)	General Poor Health (Yes = 1)	Life dissatisfaction (Yes = 1)	Obesity (Yes =1)	Smoker (Yes = 1)	Daily drinker (Yes = 1)
UR when graduating (3 years average)	0.554*** (0.203)	0.105 (0.150)	0.0399 (0.0642)	0.791 (1.055)	0.397*** (0.125)	0.121 (0.0816)
(Education - 9) * UR	-0.0536* (0.0303)	-0.0433** (0.0196)	-0.0218** (0.00873)	-0.267* (0.138)	-0.0414** (0.0196)	-0.0173 (0.0126)
Observations	50,590	28,440	87,450	17,697	48,367	19,639

Note: All columns are estimated in logistic model. Marginal effects at mean are reported. see Table 2 notes for sample and specification details. \*\* p<0.05, \* p<0.1.

#### A4. Education, Unemployment Rate and Outcomes in Eurobarometer

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variables	Income Quartile (1:highest - 4:lowest)	General Poor Health (Yes = 1)	Life dissatisfaction (Yes = 1)	Obesity (Yes =1)	Smoker (Yes = 1)	Daily drinker (Yes = 1)
UR when graduating (3 years average)	1.313** (0.372)	0.052 (0.134)	0.122* (0.072)	0.089 (0.128)	0.411** (0.120)	0.203* (0.123)
(Education - 9) * UR	-0.102* (0.053)	-0.033** (0.016)	-0.047** (0.010)	-0.047** (0.019)	-0.041** (0.017)	-0.028 (0.018)
Years of schooling	0.004 (0.009)	0.005 (0.004)	0.004** (0.002)	0.009** (0.004)	-0.001 (0.004)	-0.002 (0.003)
Education * Experience	-0.053** (0.009)	0.001 (0.004)	-0.009** (0.002)	-0.002 (0.004)	-0.015** (0.004)	0.004 (0.003)
Education * Experience <sup>2</sup>	0.008** (0.002)	-0.001 (0.001)	0.001** (0.001)	-0.001 (0.001)	0.003** (0.001)	-0.001* (0.001)
Male	-0.068** (0.009)	-0.019** (0.005)	0.007** (0.003)	0.004 (0.005)	0.106** (0.005)	0.088** (0.004)
Married	-0.923** (0.017)	-0.066** (0.006)	-0.091** (0.003)	0.006 (0.005)	-0.125** (0.005)	-0.033** (0.005)
Observations	50,590	28,440	87,450	17,697	48,367	19,656
R-squared	0.259	0.063	0.169	0.038	0.073	0.065

Note: see Table 2 notes for sample and specification details. \*\* p<0.05, \* p<0.1.

### A5. Education, Unemployment Rate and Outcomes in Eurobarometer, by Gender

Dependent variables	(1) Income Quartile (1:highest - 4:lowest)	(2) General Poor Health (Yes = 1)	(3) Life dissatisfaction (Yes = 1)	(4) Obesity (Yes = 1)	(5) Smoker (Yes = 1)	(6) Daily drinker (Yes = 1)
<b>Panel A: Male sample</b>						
UR when graduating (3 years average)	1.612** (0.488) [0.743]	0.075 (0.208) [0.299]	0.273** (0.104) [0.084]	-0.182 (0.213) [0.231]	0.352** (0.173) [0.212]	0.379* (0.205) [0.187]
(Education - 9) * UR	-0.074 (0.059) [0.113]	-0.023 (0.026) [0.031]	-0.068** (0.013) [0.016]	-0.028 (0.027) [0.028]	-0.025 (0.025) [0.037]	-0.043 (0.029) [0.025]
Observations	24,457	12,792	39,650	8,146	21,538	8,640
R-squared	0.229	0.075	0.171	0.045	0.075	0.066
<b>Panel B: Female sample</b>						
UR when graduating (3 years average)	0.883* (0.526) [0.796]	0.017 (0.176) [0.162]	-0.063 (0.096) [0.116]	0.302* (0.171) [0.207]	0.444** (0.151) [0.191]	0.047 (0.114) [0.096]
(Education - 9) * UR	-0.129* (0.072) [0.144]	-0.035 (0.024) [0.018]	-0.027** (0.012) [0.018]	-0.069** (0.026) [0.030]	-0.053** (0.019) [0.025]	-0.015 (0.014) [0.010]
Observations	26,133	15,648	47,800	9,588	26,829	11,016
R-squared	0.306	0.071	0.176	0.056	0.068	0.034
<i>Joint tests for relevant coefficients in Panel A are the same as those in Panel B</i>						
Chi-2 statistics	3.42	0.16	9.97	3.32	0.55	1.55
P-value	0.181	0.93	0.01	0.19	0.76	0.46

Note: see Table 2 notes for sample and specification details. \*\* p<0.05, \* p<0.1.

### A6. Education, Unemployment Rates and Outcomes in Different Age Groups

Dependent variables	(1) Income Quartile (1:highest - 4:lowest)	(2) General Poor Health (Yes = 1)	(3) Life dissatisfaction (Yes = 1)	(4) Obesity (Yes =1)	(5) Smoker (Yes = 1)	(6) Daily drinker (Yes = 1)
UR * (Ages 25-40)	1.620** (0.372) [0.707]	0.065 (0.133) [0.183]	0.187** (0.076) [0.097]	0.088 (0.129) [0.161]	0.417** (0.123) [0.188]	0.197 (0.123) [0.112]
(Education - 9) * UR * (Ages 25-40)	-0.217** (0.054) [0.120]	-0.052** (0.017) [0.017]	-0.079** (0.011) [0.018]	-0.052** (0.020) [0.018]	-0.078** (0.018) [0.036]	-0.034* (0.018) [0.014]
UR * (Ages 40-55)	-1.912** (0.573) [0.996]	-0.003 (0.197) [0.192]	-0.065 (0.097) [0.112]	-0.025 (0.209) [0.208]	0.419** (0.172) [0.239]	0.227 (0.177) [0.173]
(Education - 9) * UR * (Ages 40-55)	0.445** (0.073) [0.152]	-0.001 (0.024) [0.022]	0.002 (0.012) [0.015]	-0.030 (0.028) [0.022]	0.001 (0.022) [0.039]	-0.022 (0.021) [0.019]
Observations	50,590	28,440	87,450	17,734	48,367	19,656
R-squared	0.263	0.063	0.170	0.038	0.073	0.065

Note: see Table 2 notes for sample and specification details. \*\* p<0.05, \* p<0.1.

### A7: Education, Unemployment Rate, Age and Outcomes in Eurobarometer

	(1) Income Quartile (1:highest - 4:lowest)	(2) General Poor Health (Yes = 1)	(3) Life dissatisfaction (Yes = 1)	(4) Obesity (Yes =1)	(5) Smoker (Yes = 1)	(6) Daily drinker (Yes = 1)
UR when graduating (3 years average)	2.851** (0.574)	0.267 (0.184)	0.421** (0.109)	0.006 (0.173)	0.491** (0.192)	0.037 (0.170)
(Education - 9) * UR	-0.657** (0.072)	-0.096** (0.024)	-0.129** (0.014)	-0.069** (0.025)	-0.164** (0.026)	-0.059** (0.024)
(Age - 25) * UR	-0.214** (0.048)	-0.025 (0.016)	-0.030** (0.008)	0.008 (0.014)	-0.007 (0.016)	0.018 (0.014)
(Education - 9) * (Age - 25) * UR	0.056** (0.004)	0.006** (0.001)	0.007** (0.001)	0.001 (0.001)	0.009** (0.001)	0.001 (0.001)
Years of schooling	0.011 (0.009)	0.007** (0.004)	0.007** (0.002)	0.009** (0.004)	0.003 (0.004)	-0.002 (0.003)
Education * Experience	-0.068** (0.008)	-0.001 (0.004)	-0.011** (0.002)	-0.003 (0.004)	-0.018** (0.004)	0.004 (0.003)
Education * Experience <sup>2</sup>	0.010** (0.002)	-0.001 (0.001)	0.001** (0.001)	-0.001 (0.001)	0.003** (0.001)	-0.001 (0.001)
Observations	50,590	28,440	87,450	17,734	48,367	19,656
R-squared	0.266	0.063	0.170	0.038	0.074	0.065

Note: see Table 2 notes for sample and specification details. \*\* p<0.05, \* p<0.1.



**A8: Education choice and Unemployment Rate when Graduating**

VARIABLES	(1) Years of education	(2) Married (Yes = 1)
UR when graduating	-0.508 (0.581)	0.268*** (0.0722)
Years of education		0.00416*** (0.000705)
UR*(Education - 9)		0.0114 (0.00782)
Observations	295,295	294,951
R-squared	0.411	0.034

Note: Standard errors in parentheses are clustered at country-graduation year level. Weights in Eurobarometers are applied. Samples are combined together. Respondents are aged between 25 and 55. The covariates include indicators for gender, graduation cohorts, years since graduation, UR sources, countries, survey years, sample sources, country interacting with survey years and linear time trends for specific country. \*\* p<0.05, \* p<0.1.

**A9. Education, Unemployment Rates when graduating and Outcomes in Eurobarometer, without controlling for marital status**

Dependent variables	(1) Income Quartile (1:highest - 4:lowest)	(2) General Poor Health (Yes = 1)	(3) Life dissatisfaction (Yes = 1)	(4) Obesity (Yes =1)	(5) Smoker (Yes = 1)	(6) Daily drinker (Yes = 1)
<b><i>Panel A. Mean Unemployment Rate around year of graduation (3 years)</i></b>						
UR when graduating (3 years average)	0.717** (0.355)	0.035 (0.122)	0.090 (0.067)	0.078 (0.129)	0.265** (0.114)	0.198* (0.111)
(Education - 9) * UR	-0.113** (0.054)	-0.033** (0.016)	-0.044** (0.009)	-0.048** (0.019)	-0.036** (0.016)	-0.026 (0.016)
Observations	50,590	28,537	87,450	17,734	48,460	19,699
R-squared	0.105	0.057	0.159	0.038	0.060	0.062
<b><i>Panel B: Unemployment Rate in year of graduation</i></b>						
UR when graduating	0.806** (0.373)	0.045 (0.132)	0.121* (0.073)	0.028 (0.120)	0.409** (0.119)	0.208* (0.122)
(Education - 9) * UR	-0.123** (0.054)	-0.033** (0.017)	-0.048** (0.010)	-0.043** (0.019)	-0.039** (0.017)	-0.028 (0.017)
Observations	50,590	28,537	87,450	17,734	48,460	19,699
R-squared	0.105	0.057	0.159	0.038	0.060	0.062

Note: see Table 2 notes for sample and specification details. The only difference is that marital status is dropped here. \*\* p<0.05, \* p<0.1.

**A10: Education, Unemployment Rates by Education and Outcomes in Eurobarometer**

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variables	Income Quartile (1:highest - 4:lowest)	General Poor Health (Yes = 1)	Life dissatisfaction (Yes = 1)	Obesity (Yes = 1)	Smoker (Yes = 1)	Daily drinker (Yes = 1)
<b><i>Panel A: Unemployment rates by education level</i></b>						
UR when graduating by education level	0.299 (0.224)	0.074 (0.078)	0.159** (0.045)	0.073 (0.135)	0.455** (0.073)	0.131* (0.072)
(Education - 9) * UR	-0.131** (0.049)	-0.025 (0.019)	-0.001** (0.000)	-0.036 (0.032)	-0.055** (0.019)	-0.016 (0.017)
Observations	50,590	28,440	87,450	17,697	48,367	19,656
R-squared	0.263	0.063	0.170	0.097	0.075	0.066
<b><i>Panel B: Total Unemployment rates interacting with education level categorical dummies</i></b>						
UR when graduating	1.195** (0.379)	0.142 (0.153)	0.165* (0.093)	-0.034 (0.290)	0.219 (0.147)	0.241 (0.171)
UR * (Years of education 9 -12)	-0.256 (0.300)	-0.149 (0.139)	-0.195** (0.093)	0.012 (0.251)	-0.037 (0.138)	-0.148 (0.172)
UR * (Years of education 13+)	-0.922* (0.476)	-0.585** (0.178)	-0.478** (0.110)	-0.221 (0.338)	-0.312* (0.178)	-0.270 (0.201)
Observations	50,590	28,440	87,450	17,697	48,367	19,656
R-squared	0.263	0.064	0.170	0.096	0.074	0.066

Note: see Table 2 notes for sample and specification details. \*\* p<0.05, \* p<0.1.