A Data Appendix

Our guiding principle was to create the largest possible panel of countries with available information for all the relevant variables. For most countries in our sample, the primary data source is the Luxembourg Income Study Database (LIS). We also use IPUMS International data for Portugal (not represented in LIS), Colombia (whose LIS coverage starts in mid-2000s) and, when available, to add country observations for the earlier decades (for most countries in our sample LIS data are only available since the 1990s.) The resulting combined sample spans 24 countries over 5 decades, with information on educational attainment, marriage, fertility and employment. Since information on earnings is not available in IPUMS International, Portugal and Colombia are not included in the earnings analysis.

Most variables (e.g. employment, fertility) in LIS and IPUMS International are harmonized within and across countries, but education required a more careful analysis. Our objective was to define a "college graduate" as an individual whose highest level of educational attainment is the equivalent of a four-year college degree in the US (as it is the case for the harmonized IPUMS International variable *edattain*.) The harmonized LIS *educlev* variable classifies degrees in primary, secondary and tertiary education. However, depending on the country/wave, tertiary education may include technical degrees that are not comparable to a four-year college. *Educlev* is also not typically available in the earlier waves. To further harmonize the definition of college graduates and go as far back in time as possible, we additionally used the country-specific variable *educ_c*. The resulting education recode defines College (or higher) as *completed* tertiary education, including short cycle tertiary university degrees. For the purpose of the regression analysis we categorize education in three groups: Those who did not complete High School (i.e. primary education), those with a High School degree or Some College (corresponding to secondary education and including tertiary non-university degree) and those with at least a College Degree (e.g. tertiary education, including short cycle tertiary university degrees.)

We compare college graduation rates in our data to the OECD statistics and to the Barro and Lee (2013) data. The OECD definition tend to over-estimates college graduation rates for some countries relative to the US because it often includes technical (non-university) degrees. Barro-Lee carefully define College as comparable to a four-year

college degree in the US. This second definition, however, tend to under-estimate college graduation rates, especially for the European Union where the Bologna concord of 1999 reshaped university degrees to a "3+2" system. That is, starting in the late 1990s/early 2000s, a three-year college degree corresponds to a standard four-year Bachelor's degree (in the US), while the "+2" corresponds to a Master of Arts (MA) or Master of Sciences (MS). Reassuringly, college graduation rates obtained with our classification lye systematically between the OECD and Barro-Lee statistics.

One other key LIS variable is the wage income (*pi11*), which is consistently available for all countries in our sample. It includes monetary payments received from regular and irregular dependent employment: cash wage and salary income (gross of social security contributions and income taxes) and monetary supplements to the basic wage, such as overtime pay, employer bonuses, 13th month bonus, profit-share, tips. Therefore, potential differences by gender in work hours or weeks worked are conflated into our earnings measure.

Next are the key demographic variables. For marital status, the main LIS variable (*marital*) classifies people in relation to the marriage laws or customs of the country. In general, marital status corresponds to *de jure* partnerships (marriage or registered union), but in some cases it also includes cohabitations (consensual unions). There is substantial variation in marital categories across countries. In some cases (e.g. Australia) the *marital* variable has only one marriage category covering *de jure* partnerships (code 100, "married/in union"). In most cases, however, there are two categories: *de jure* (code 110) and *de facto* unions (code 120). Because the code for *de facto* unions is not consistently available, our baseline definition of marriage includes *de jure* unions only. For countries where the information on cohabitation is available, regression analyses that use the most inclusive definition of partnership (codes, 100, 110 and 120), the resulting trends are unaffected. In the descriptive analysis individuals are classified as never married if they were "never married/not in union" (marital code 210).

In a few countries/years it is not possible to distinguish between current and past marital status (Australia, 2000–; Mexico, 1980s; Norway, 2007–; Spain, 1980s; Sweden, 1975-1995). Whenever available, we recover this information from IPUMS international (Spain, 1980s; Mexico, 1970s). Finally, the presence of children is defined using the LIS household variable *nhhmem17*, which reports the number of household members who are

17 years old or younger.

Education Recode: Details

Below we list the data source - IPUMS or LIS - by country and decade. For LIS, we use *educ_c* in instances when *educlev* is not available or when *educlev* code 311 pools together short cycle tertiary non-university (e.g. Some College) and short cycle university degree (e.g. College).

Australia:
Data source is LIS for the years: 1981, 1985, 1989, 1995, 2001, 2003, 2004, 2008, 2010, 2014, 2018. We use variable *educ_c* to code as College (or higher degree) individuals with *educ_c* codes (in parentheses): 1981 (2); 1985, 1989 (7); 1995 (2-4); 2001, 2003 (2); 2004, 2008, 2010, 2014, 2018 (10, 11).

Austria
Data for 1971 are from IPUMS International. An individual has college (or higher) if *edattain* equals to 400. LIS data for the years 1987, 1994, 1995, 1997, 2000, 2004, 2007, 2010, 2013, 2016-2019. We use LIS variable *educlev* to code as College (or higher) individuals with codes (in parentheses): 1987 to 2010 (312-320); 2013, 2016-2019 (311-320).

Belgium
Data Source is LIS, available years: 1985, 1988, 1992, 1995, 1997, 2000, 2003-2017. Use variable *educ_c* to code as having a bachelor's degree or higher individuals with codes (in parentheses): 1985, 1988 (7, 8); 1992 (11,12,13-17); 1995, 2000 (10, 11-12); 1997 (11, 12, 13); 2003, 2005, 2006 (30, 31-34); 2004 (30, 31-35); 2007, 2008 (14, 15, 16-22); 2009 -2012 (8, 9-11); 2013-2017 (500-800).

Canada
Data Source is LIS, available years: 1971, 1975, 1981, 1987, 1991, 1994, 1996-2018. Use LIS variable *educlev* to code as having a bachelor's degree or higher individuals with codes 312-320.

Chile

Data for 1960, 1970, and 1982 are from IPUMS International.An individual has college (or higher) if *edattain* equals 4. LIS data for the years 1990, 1992, 1994, 1996, 1998, 2000, 2003, 2006, 2009, 2011, 2013, 2015, 2017. Use a combination of LIS variables *educlev* and *educ_c* to code as having a bachelor's degree or higher individuals with the codes (in parentheses). For years prior to 1996: *educlev* (300), recoding as "High School/Some College" observations with *educ_c* codes (in parentheses): 1990 (62, 82); 1992 (62, 71); 1994 (62, 71, 82). For 1996-2017: *educlev* (312-320).

Colombia

Data for 1964, 1973, 1985 and 1993 are from IPUMS International. An individual has college (or higher) if *edattain* equals 4. LIS data for the years 2001-2018. Use a combination of LIS variables *educlev* and *educ_c* to code as having a bachelor's degree or higher individuals with codes (in parentheses): *educlev* (311-313) for all years, but recode as "High School degree or Some College" observations with *educ_c* code 34.

Denmark

Data Source is LIS, available years: 1987, 1992, 1995, 2000, 2004, 2007, 2010, 2013 and 2016. Use variable *educ_c* to code as having a bachelor's degree or higher individuals with codes (in parentheses): 1987, 1992 (4, 6-8); 1995 (5-7); 2000, 2004 (19, 20, 22); 2007, 2010, 2013 (40, 50, 60, 65, 70); 2016 (4-8).

Finland

Data Source is LIS, available years: 1987, 1991, 1995, 2000, 2004, 2007, 2010, 2013, 2016. Use variable *educ_c* to code as having a bachelor's degree or higher individuals with codes (in parentheses): 1987, 1991, 1995, 2013, 2016 (5-8); 2000, 2004, 2007, 2010 (51, 53, 60).

France

Data for 1962, 1968, 1975 and 1982 are from IPUMS International. An individual has college (or higher) if *edattain* equals 4. LIS data for the years 1996-2018. Use a combination of LIS variables *educlev* and *educ_c* to code as having a bachelor's degree or higher individuals with codes (in parentheses): *educlev* (311-320) for all years. We recode as "High School degree or Some College" observations with *educ_c*: 1996-2018 (510); 1996-

2001 (522-526); 2002-2018 (520). We use LIS data as of June-August 2022, where data for France are from the French Tax Income Survey (TIS), which provides a larger sample relative to the previous editions, but does not include basic socioeconomic variables (e.g. education) prior to 1996.

Germany

Data for 1970 and 1971 are from IPUMS International. An individual has college (or higher) if *edattain* equals 4. LIS data for the years 1981, 1983-2019. Use a combination of LIS variables *educlev* and *educ_c* to code as having a bachelor's degree or higher individuals with codes (in parentheses): educlev (312-320) or educ_c (61).

Greece

Data Source is LIS, available years: 1995, 2000, 2004, 2007, 2010, 2013, 2016. Use variable *educlev* to code as having a bachelor's degree or higher individuals with codes (in parentheses): 1995-2010 (312-320); 2013 and 2016 (311-320).

Hungary

We combine LIS and IPUMS international data. Data for 1970 and 1980 are from IPUMS International. An individual has college (or higher) if *edattain* equals 4. LIS data for the years 1991, 1994, 1999, 2005, 2007, 2009, 2012, 2015. For all years, use variable *educlev* to code as having a bachelor's degree or higher individuals with codes 312-320.

Ireland

Data for 1971 and 1979 are from IPUMS International. An individual has college (or higher) if *edattain* equals 4. LIS data for the years 1987, 1994-1996, 2000, 2002 - 2018. For all years, use variable *educlev* to code as having a bachelor's degree or higher individuals with codes 312-320.

Italy

Data Source is LIS, available years: 1986, 1987, 1989, 1991, 1993, 1995, 1998, 2000, 2004, 2008, 2010, 2014, 2016. Use variable *educlev* to code as having a bachelor's degree or higher individuals with codes (in parentheses): 1986, 1987 (300); 1989 to 1998 (312-320);

2000-2016 (311-320).

Mexico

Data for 1960 and 1970 are from IPUMS International. An individual has college (or higher) if *edattain* equals 4. LIS data for the years 1984, 1989, 1992, 1994, 1996, 1998, 2000, 2002, 2004, 2008, 2010, 2012, 2012, 2014, 2016, 2018. For all years, use variable *educlev* to code as having a bachelor's degree or higher individuals with codes 300-320.

Netherlands

Data Source is LIS, available years: 1983, 1987, 1990, 1993, 1999, 2004, 2007, 2010, 2013, 2015-2018. Use variable *educlev* to code as having a bachelor's degree or higher individuals with codes (in parentheses): 1983, 1987, 2004, 2007, 2010 (300); 1990, 1993, 1999, 2013, 2015-2018 (312-320).

Norway

Data Source is LIS, available years: 1979, 1986, 1991, 1995, 2000, 2004, 2007, 2010, 2013, 2016, 2019. For all years, use variable *educlev* to code as having a bachelor's degree or higher individuals with codes 300-320.

Poland

Data Source is LIS, available years: 1986, 1992, 1995, 1999, 2004-2019. Use variable *educlev* to code as having a bachelor's degree or higher individuals with codes (in parentheses): 1986, 1992, 1995, 1999, 2004-2009 (300); 2010-2019 (312-320).

Portugal

Data Source is IPUMS International, available years 1981, 1991, 2001, 2011. An individual has college (or higher) if *edattain* equals 4.

Spain

Data Source is LIS, available years: 1980, 1985, 1990, 1995, 2000, 2004, 2007, 2010, 2013, 2016. Use variable *educlev* to code as having a bachelor's degree or higher individuals with codes (in parentheses): 1980, 1990, 2004 (300); 1985, 1995, 2000, 2007, 2010, 2013, 2016 (312-320).

Sweden

Data Source is LIS, available years: 1967, 1975, 1981, 1987, 1992, 1995, 2000, 2005. For all years, use variable *educlev* to code as having a bachelor's degree or higher individuals with codes 300-320.

Taiwan

Data Source is LIS, available years: 1981, 1986, 1991, 1995, 1997, 2000, 2005, 2007, 2010, 2013, 2016. For all years, use variable *educlev* to code as having a bachelor's degree or higher individuals with codes 300-320.

UK

Data Source is LIS, available years: 1974, 1979, 1986, 1991, 1994, 1995, 1999-2018. Use a combination of LIS variables *educlev* and *educ_c* to code as having a bachelor's degree or higher individuals with codes (in parentheses): 1974, 1979, 1986, 1991, 1994, 1995 (*educ_c*, 21-52); 1999-2018 (*educlev*, 300 or 312-320). If (*educlev*, 300) then recode as "High School and Some College" observations with (*educ_c*, 221).

USA

Data for 1960 are from IPUMS International. An individual has college (or higher) if *edattain* equals 4. LIS data for the years 1974, 1979, 1986, 1991, 1993=2018. For all years, use variable *educlev* to code as having a bachelor's degree or higher individuals with the codes 300-320.

B Regression Estimates

Figure 16: Employment differentials associated with Marriage and Children: Part A

		Males		Females	
Country	Cohort	Marriage Deficit/Surplus	Fatherhood Penalty/Premium	Marriage Deficit/Surplus	Motherhood Penalty/Premium
Australia	1940-49				
Australia	1950-59	0.151	-0.002	0.038	-0.112
Australia	1960-69	**0.175**	-0.005	**0.073**	**-0.148**
Australia	1970-79	**0.156**	**-0.013**	0.074	**-0.242**
Austria	1940-49				
Austria	1950-59	**0.071**	0.016	**-0.043**	**-0.151**
Austria	1960-69	**0.093**	-0.001	**-0.015**	**-0.096**
Austria	1970-79	**0.057**	0.043	**0.018**	**-0.154**
Belgium	1940-49				
Belgium	1950-59	**0.128**	0.007	-0.008	**-0.035**
Belgium	1960-69	**0.092**	0.045	0.034	**-0.053**
Belgium	1970-79	**0.025**	**0.102**	**-0.001**	**-0.046**
Canada	1940-49	**0.152**	**0.024**	-0.012	**-0.067**
Canada	1950-59	**0.125**	0.023	**0.012**	**-0.041**
Canada	1960-69	**0.075**	**0.034**	**-0.001**	**-0.057**
Canada	1970-79	**0.052**	**0.051**	**-0.023**	**-0.080**
Chile	1940-49				
Chile	1950-59	0.076	0.032	**-0.236**	**-0.033**
Chile	1960-69	**0.091**	0.035	**-0.229**	**-0.063**
Chile	1970-79	**0.088**	**0.059**	**-0.188**	**-0.046**
Denmark	1940-49	**0.188**	0.040	0.109	**0.018**
Denmark	1950-59	**0.141**	0.065	**0.114**	**0.016**
Denmark	1960-69	**0.079**	**0.087**	**0.078**	**0.002**
Denmark	1970-79	**0.052**	**0.097**	**0.053**	**0.002**
Finland	1940-49				
Finland	1950-59	0.128	0.064	0.073	**-0.008**
Finland	1960-69	**0.086**	0.069	**0.034**	**-0.047**
Finland	1970-79	**0.042**	**0.110**	**0.023**	**-0.195**
France	1940-49	0.109	**0.003**	**-0.131**	**-0.150**
France	1950-59	**0.099**	0.021	**-0.044**	**-0.082**
France	1960-69	**0.076**	0.049	**-0.012**	**-0.062**
France	1970-79	**0.056**	**0.064**	**0.004**	**-0.063**
Germany	1940-49	0.082	**0.003**	**-0.115**	**-0.158**
Germany	1950-59	**0.084**	**0.014**	**-0.080**	**-0.154**
Germany	1960-69	**0.098**	**0.001**	**-0.059**	**-0.180**
Germany	1970-79	**0.084**	-0.012	**-0.022**	**-0.207**
Greece	1940-49				
Greece	1950-59	0.156	0.021	-0.176	0.010
Greece	1960-69	0.121	0.027	-0.114	-0.027
Greece	1970-79	0.155	**0.029**	-0.103	-0.017
Hungary	1940-49				
Hungary	1950-59	0.087	0.040	-0.008	-0.054
Hungary	1960-69	**0.122**	-0.009	-0.014	-0.055
Hungary	1970-79	0.075	**0.001**	-0.045	**-0.096**

Notes: Sample of men and women aged 25-54. Entries are based on regression estimates of equation (1) by country and gender. The dependent variable is a dummy equal to 1 if an individual is employed. We report the interaction terms between the cohort dummies and the married dummy (col 1 and 3) or 'any child' dummy (col 2 and 4). Robust standard errors are obtained with the delta method. Coefficients in bold are statistically significant at least at the 10 percent level. Data source: LIS.

Figure 17: Employment differentials associated with Marriage and Children: Part B

		Males		Females	
Country	Cohort	Marriage Deficit/Surplus	Fatherhood Penalty/Premium	Marriage Deficit/Surplus	Motherhood Penalty/Premium
Ireland	1940-49				
Ireland	1950-59	**0.200**	**0.003**	-0.070	**-0.083**
Ireland	1960-69	**0.171**	**0.009**	**-0.048**	**-0.097**
Ireland	1970-79	**0.150**	0.012	**-0.002**	**-0.174**
Italy	1940-49	**0.109**	**0.030**	**-0.160**	**-0.062**
Italy	1950-59	0.138	**0.009**	**-0.152**	-0.017
Italy	1960-69	**0.168**	-0.002	**-0.110**	**-0.058**
Italy	1970-79	**0.182**	-0.010	**-0.035**	**-0.102**
Mexico	1940-49				
Mexico	1950-59	**0.053**	**0.025**	**-0.206**	**-0.005**
Mexico	1960-69	**0.048**	0.039	**-0.186**	**-0.005**
Mexico	1970-79	0.056	0.052	**-0.183**	**-0.064**
Netherlands	1940-49				
Netherlands	1950-59	**0.119**	**0.022**	**-0.107**	**-0.206**
Netherlands	1960-69	**0.110**	**0.032**	-0.036	**-0.157**
Netherlands	1970-79	**0.041**	**0.069**	-0.020	**-0.107**
Norway	1940-49	**0.122**	0.008	**0.040**	**-0.034**
Norway	1950-59	**0.078**	**0.049**	0.028	**-0.044**
Norway	1960-69	**0.055**	**0.097**	0.012	**-0.026**
Norway	1970-79	**0.026**	0.125	-0.004	**0.024**
Poland	1940-49				
Poland	1950-59	**0.170**	**0.044**	0.027	**-0.013**
Poland	1960-69	**0.178**	**0.037**	**0.015**	**-0.054**
Poland	1970-79	**0.165**	0.036	**0.012**	**-0.090**
Spain	1940-49				
Spain	1950-59	**0.202**	**0.019**	**-0.206**	**-0.043**
Spain	1960-69	**0.159**	0.030	**-0.103**	-0.048
Spain	1970-79	0.134	0.020	-0.056	**-0.083**
Sweden	1940-49				
Sweden	1950-59	**0.059**	**0.033**	0.051	**-0.013**
Sweden	1960-69	**0.034**	**0.066**	0.035	**0.016**
Sweden	1970-79	**-0.008**	0.093	0.013	**0.001**
Taiwan	1940-49				
Taiwan	1950-59	**0.120**	**0.026**	-0.175	-0.007
Taiwan	1960-69	**0.114**	**0.017**	**-0.178**	-0.037
Taiwan	1970-79	**0.104**	**0.027**	**-0.160**	-0.043
United Kingdom	1940-49	**0.175**	**-0.017**	**0.041**	**-0.117**
United Kingdom	1950-59	**0.146**	**0.001**	**0.063**	**-0.112**
United Kingdom	1960-69	**0.136**	**0.007**	**0.051**	**-0.125**
United Kingdom	1970-79	**0.096**	**0.013**	0.028	**-0.201**
United States	1940-49	**0.138**	**0.008**	**-0.086**	**-0.093**
United States	1950-59	**0.135**	**0.013**	**-0.037**	**-0.076**
United States	1960-69	**0.117**	**0.029**	**-0.045**	**-0.079**
United States	1970-79	0.099	0.041	-0.072	**-0.079**

Notes: Sample of men and women aged 25-54. Entries are based on regression estimates of equation (1) by country and gender. The dependent variable is a dummy equal to 1 if an individual is employed. We report the interaction terms between the cohort dummies and the married dummy (col 1 and 3) or 'any child' dummy (col 2 and 4). Robust standard errors are obtained with the delta method. Coefficients in bold are statistically significant at least at the 10 percent level. Data source: LIS.

Figure 18: Earnings differentials associated with Marriage and Children: Part A

		Males		Females	
		Marriage	Fatherhood	Marriage	Motherhood
Country	Cohort	Deficit/Surplus	Penalty/Premium	Deficit/Surplus	Penalty/Premium
Australia	1940-49				
Australia	1950-59	**0.123**	0.043	**-0.127**	**-0.318**
Australia	1960-69	**0.110**	**0.043**	-0.033	**-0.277**
Australia	1970-79	**0.089**	0.040	**0.042**	**-0.305**
Austria	1940-49				
Austria	1950-59	**0.138**	-0.025	**-0.168**	**-0.238**
Austria	1960-69	**0.199**	-0.029	**-0.161**	**-0.268**
Austria	1970-79	**0.079**	**0.113**	**-0.177**	**-0.422**
Belgium	1940-49				
Belgium	1950-59	**0.127**	-0.015	-0.049	**-0.171**
Belgium	1960-69	**0.109**	**0.092**	**-0.036**	**-0.077**
Belgium	1970-79	**0.041**	**0.108**	0.012	**-0.149**
Canada	1940-49	**0.253**	0.046	**-0.240**	**-0.189**
Canada	1950-59	**0.159**	**0.075**	**-0.127**	**-0.219**
Canada	1960-69	**0.129**	**0.050**	**-0.069**	**-0.187**
Canada	1970-79	-0.025	**0.165**	**-0.138**	**-0.234**
Chile	1940-49				
Chile	1950-59	**0.167**	-0.001	**-0.067**	**-0.085**
Chile	1960-69	**0.082**	**-0.036**	**-0.040**	**-0.110**
Chile	1970-79	**0.051**	-0.002	0.006	**-0.174**
Denmark	1940-49	**0.340**	0.008	**-0.058**	**-0.004**
Denmark	1950-59	**0.263**	**0.111**	**0.085**	**-0.028**
Denmark	1960-69	**0.186**	**0.164**	**0.122**	**-0.038**
Denmark	1970-79	**0.141**	**0.192**	**0.142**	**-0.083**
Finland	1940-49				
Finland	1950-59	**0.142**	0.020	**-0.077**	**-0.106**
Finland	1960-69	**0.122**	**0.063**	**-0.100**	**-0.182**
Finland	1970-79	0.054	**0.140**	**-0.141**	**-0.281**
France	1940-49	**0.158**	-0.019	**-0.108**	**-0.050**
France	1950-59	**0.148**	0.005	**-0.140**	**-0.066**
France	1960-69	**0.123**	**0.062**	**-0.067**	**-0.069**
France	1970-79	0.053	**0.141**	**-0.110**	**-0.139**
Germany	1940-49	**0.184**	**0.076**	**-0.376**	**-0.464**
Germany	1950-59	**0.181**	**0.082**	**-0.296**	**-0.396**
Germany	1960-69	**0.223**	0.021	**-0.230**	**-0.492**
Germany	1970-79	**0.276**	0.015	-0.039	**-0.652**
Greece	1940-49				
Greece	1950-59	0.099	-0.007	-0.071	-0.030
Greece	1960-69	0.035	**0.092**	0.000	-0.001
Greece	1970-79	0.055	0.059	-0.002	-0.051
Hungary	1940-49				
Hungary	1950-59	**0.170**	0.062	-0.072	-0.079
Hungary	1960-69	0.058	**0.090**	-0.142	**-0.160**
Hungary	1970-79	0.054	-0.033	**-0.187**	**-0.128**

Notes: Sample of men and women aged 25-54 with positive earnings. Entries are based on regression estimates of equation (1) by country and gender. The dependent variable is log(annual earnings). We report the interaction terms between the cohort dummies and the married dummy (col 1 and 3) or 'any child' dummy (col 2 and 4). Robust standard errors are obtained with the delta method. Coefficients in bold are statistically significant at least at the 10 percent level. Data source: LIS.

Figure 19: Earnings differentials associated with Marriage and Children: Part B

		Males		Females	
Country	Cohort	Marriage Deficit/Surplus	Fatherhood Penalty/Premium	Marriage Deficit/Surplus	Motherhood Penalty/Premium
Ireland	1940-49				
Ireland	1950-59	**0.292**	0.049	0.004	**-0.222**
Ireland	1960-69	**0.153**	**0.126**	**0.102**	**-0.237**
Ireland	1970-79	**0.132**	**0.104**	**0.242**	**-0.413**
Italy	1940-49	**0.088**	0.022	**-0.135**	**-0.021**
Italy	1950-59	**0.070**	**0.037**	**-0.063**	-0.006
Italy	1960-69	0.027	**0.063**	**-0.071**	**-0.095**
Italy	1970-79	**0.071**	0.039	**-0.137**	**-0.103**
Mexico	1940-49				
Mexico	1950-59	**0.274**	**-0.079**	**-0.139**	**-0.128**
Mexico	1960-69	**0.170**	**-0.049**	**-0.177**	**-0.072**
Mexico	1970-79	**0.155**	-0.026	**-0.214**	**-0.189**
Netherlands	1940-49				
Netherlands	1950-59	**0.322**	-0.011	**-0.284**	**-0.461**
Netherlands	1960-69	**0.187**	**0.074**	-0.039	**-0.416**
Netherlands	1970-79	**0.192**	**0.228**	-0.050	**-0.361**
Norway	1940-49	**0.244**	**-0.095**	**-0.174**	**-0.151**
Norway	1950-59	**0.191**	0.047	-0.064	**-0.203**
Norway	1960-69	**0.094**	**0.167**	0.034	**-0.213**
Norway	1970-79	**0.038**	**0.251**	0.036	**-0.306**
Poland	1940-49				
Poland	1950-59	**0.331**	**-0.024**	0.014	**-0.057**
Poland	1960-69	**0.289**	**0.011**	**-0.013**	**-0.031**
Poland	1970-79	**0.251**	**0.052**	**0.015**	**-0.043**
Spain	1940-49				
Spain	1950-59	**0.208**	-0.018	**-0.159**	**-0.110**
Spain	1960-69	**0.147**	**0.118**	**-0.113**	-0.049
Spain	1970-79	**0.103**	0.051	-0.027	**-0.130**
Sweden	1940-49				
Sweden	1950-59	**0.279**	**0.065**	0.038	**-0.257**
Sweden	1960-69	**0.243**	**0.049**	0.039	**-0.503**
Sweden	1970-79	**0.209**	**0.058**	0.015	**-0.572**
Taiwan	1940-49				
Taiwan	1950-59	**0.279**	**0.065**	-0.027	-0.004
Taiwan	1960-69	**0.243**	**0.049**	**0.019**	-0.007
Taiwan	1970-79	**0.209**	**0.058**	**0.026**	-0.004
United Kingdom	1940-49	**0.127**	**0.094**	**-0.273**	**-0.238**
United Kingdom	1950-59	**0.114**	**0.039**	**-0.195**	**-0.323**
United Kingdom	1960-69	**0.087**	**0.033**	**-0.080**	**-0.389**
United Kingdom	1970-79	**0.077**	**-0.037**	-0.008	**-0.597**
United States	1940-49	**0.259**	**0.037**	**-0.243**	**-0.279**
United States	1950-59	**0.234**	**0.077**	**-0.136**	**-0.242**
United States	1960-69	**0.187**	**0.099**	**-0.058**	**-0.250**
United States	1970-79	**0.170**	**0.075**	0.000	**-0.260**

Notes: Sample of men and women aged 25-54 with positive earnings. Entries are based on regression estimates of equation (1) by country and gender. The dependent variable is log(annual earnings). We report the interaction terms between the cohort dummies and the married dummy (col 1 and 3) or 'any child' dummy (col 2 and 4). Robust standard errors are obtained with the delta method. Coefficients in bold are statistically significant at least at the 10 percent level. Data source: LIS.

C Policy Data

The main data source for the policy analysis is the OECD Tax Policy Database (https://www.oecd.org/tax/tax-policy/tax-database/), which is the basis for their annual publication Taxing Wages. Specifically, we consider marginal taxes for primary and secondary earners based on family status, income and change in work effort, as reported in the marginal tax database available at https://stats.oecd.org/Index.aspx?DataSetCode=METR. This indicator measures the fraction of any additional earnings that is lost to either higher taxes or lower benefits when an employed person increases marginally their working hours. Incomes are calculated at the family level. The numerator is the change in tax liabilities and benefit entitlements when one working family member increase their working hours. The denominator is the associated increase in gross earnings. For couples, if the partner of the person who is increasing the hours of work is out of work, it is assumed that they do not receive any contributory benefits (e.g. because they have expired) but they do meet any behavioral requirements needed for eligibility to other types of social benefits. Calculations for families with children assume two children aged 4 and 6. Family benefits and in-work benefits are included in the calculations subject to relevant income and eligibility conditions. Neither childcare benefits, i.e. benefits related to the use of centre-based childcare, nor costs for centre-based childcare are considered in these calculations. Adults are aged 40 and are assumed to have full work capacity.

We consider marginal taxes for primary earners and secondary earners. When the spouses have the same wages, their marginal taxes are assumed the same. Additionally, if a partner is not employed, there are no marginal taxes. This is consistent with the increases in effort available in the dataset, which are 33-67%, 67-100% and 50-100% of full time work. We consider only the first and second type of increase in effort. Given the structure of the data, the marginal taxes are to be interpreted as applying to the intensive margin only.

We also consider net childcare costs for parents using childcare facilities, available from https://stats.oecd.org/Index.aspx?DataSetCode=METR. The data starts in the year 2000 and mostly ends in 2018 or 2019. This indicator measures the net costs paid by parents for full-time centre-based childcare, after any benefits designed to reduce the gross childcare fees, as a percentage of the average wage at full time work. Childcare

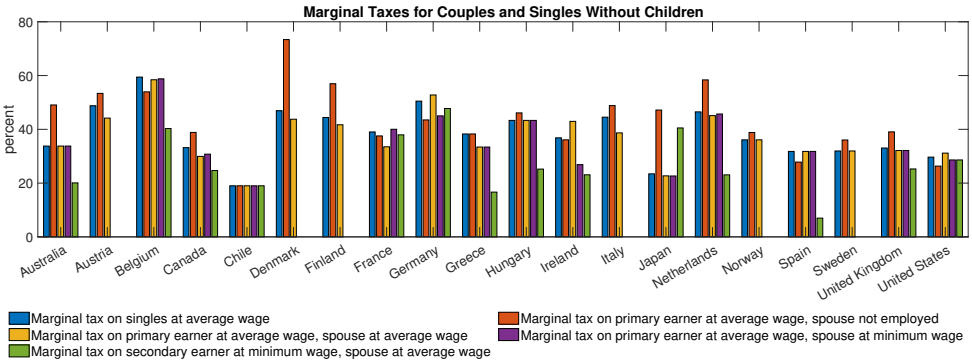
benefits can be received in the form of childcare allowances, tax concessions, fee rebates and increases in other benefit entitlements.

D Cross-Country Variation in Family Policies

D.1 Marginal Income Taxes

Figure 20 reports the marginal labor income tax on married individuals at different wage levels and for single individuals at the average wage for comparison. There is a large variation in marginal taxes across countries both in the level of marginal taxes and in how they vary across types of workers. In countries like Chile and Hungary, marginal taxes for workers at the average wage vary little by marital status and income of the spouse. But in countries like Australia, Austria, Canada, Denmark, Finland, Japan, the Netherlands and the United Kingdom, we see that marginal taxes on a married workers with a non-working spouse are substantially higher than for a single worker at the same wage. This amounts to a marriage penalty, as these workers have the same household income and differ only in marital status. For these countries, marginal taxes for married workers with a working spouse tend to be lower than for those with a non-working spouse, suggesting a regressive structure of taxation as a function of household income.

Figure 20: Marginal taxes for single workers at the average wage and married couples with primary earner at the average wage by earnings of the spouse, 2000-2015 averages.



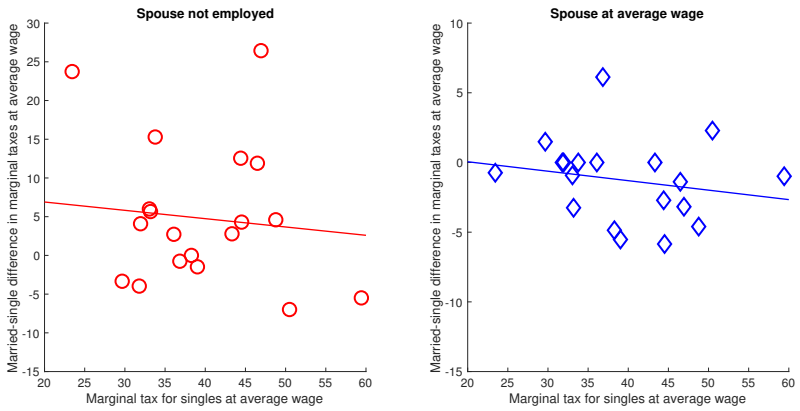
Notes: Marginal taxes calculated for an increase in effort from 50 to 100 percent of full time work for individuals and couples without children. All values in percentage. Source: Author's calculations from OECD Tax Database.

Despite the heterogeneity in the level of marginal taxes and the variation across worker types across countries, there is a systematic pattern of variation which is illustrated in Figure 21, which displays the married-single difference in marginal taxes for married

workers in couples with the primary earner at the average wage against the corresponding marginal tax on singles, by wage of the secondary earner. In low marginal tax countries, marginal taxes on married workers are mostly higher than for singles, while the opposite is true in high marginal tax countries.

In addition, these patterns vary with the spouse's work status. The left panel of Figure 21 displays the married-single difference in marginal taxes when the married workers' spouse is not employed, showing that in most countries married workers face a higher marginal tax than singles at the same household income level. The right panel reports the married-single difference in marginal taxes for workers at the average wage, when the married worker's spouse is also at the average wage. In this case, the marriage-single differential is smaller, and about half of the observations display a negative difference.

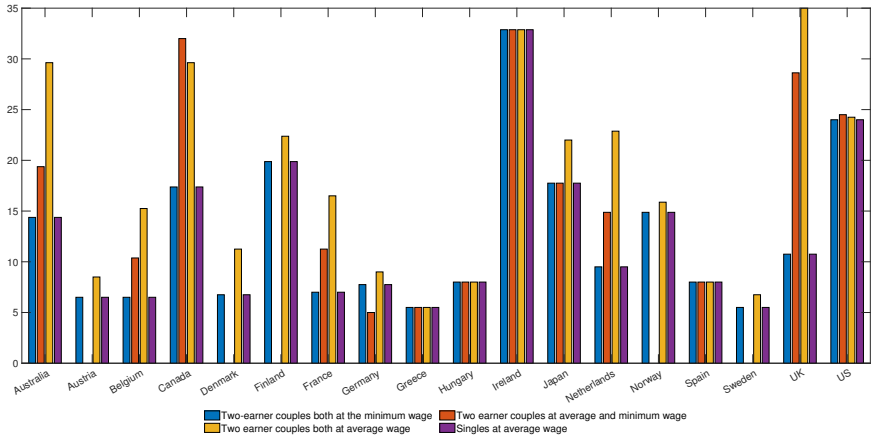
Figure 21: Difference in marginal taxes for married and single workers at the average wage by earnings of the spouse, 2000-2015 averages.



Notes: Marginal taxes calculated for an increase in effort from 50 to 100 percent of full time work for individuals and couples without children. All values in percentage. Source: Author's calculations from OECD Tax Database.

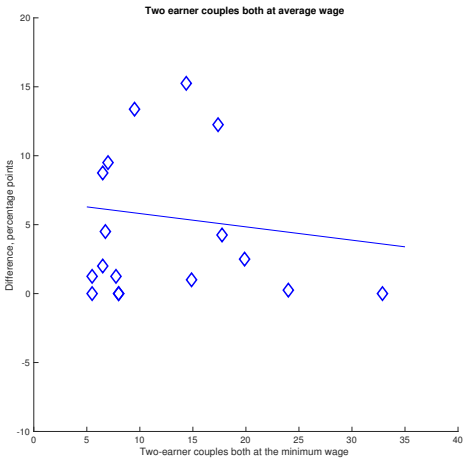
D.2 Childcare Costs

Figure 22: Childcare costs as a fraction of average labor earnings for married couples by income.



Notes: All values in percentage. Source: Author's calculations from OECD Family Policies Database.

Figure 23: Childcare costs for married couples with different income levels as a fraction of average income.



Notes: Horizontal axis measures childcare costs as fraction of average income for two-earner couples working full time at the minimum wage. Vertical axis measures differences in these costs for two-earner couples working full time both at the average wage versus two-earner couples both at the minimum wage. All values in percentage. Source: Author's calculations from OECD Family Policies Database.