A. Data Appendix

Our analysis includes all OECD-member states (which joined the organization before 1974) with the exception of Turkey. That means, our estimation sample comprises Australia (AU), Austria (AT), Belgium (BE), Canada (CA), Denmark (DK), Finland (FI), France (FR), Germany (DE), Greece (GR), Iceland (IS), Ireland (IE), Italy (IT), Japan (JP), Luxembourg (LU), Netherlands (NL), New Zealand (NZ), Norway (NO), Portugal (PT), Spain (ES), Sweden (SE), Switzerland (CH), United Kingdom (UK), and the United States (US). We excluded Turkey from our analysis, since data on marriage, divorce and fertility behavior is not available for most of the years. For the other countries we have been successful to compile a data set based on official sources that covers almost all country-years for the period from 1970 through 2007. Public social expenditures on the family is not available before 1980.

Data on the absolute number of **marriages**, **divorces**, **births** (total, marital and non-marital) and **population** (by sex and age-groups) are obtained from different sources. For all EU Member States (as well as NO and CH) we use data provided by *Eurostat*. For the US the numbers of marriages, divorces and births are from annual editions of the *Vital Statistics*. US (sex-specific) adult population data is calculated from county-level data from the *Reading Survey of Epidemiology and End Results* provided by the *National Bureau of Economic Research*. Information for all other remaining non-EU Member States (AU, CA, and JP) is from the *United Nation Database*, supplemented with data from various national yearbooks and additional data provided by respective national statistical offices (upon request). This support is thankfully acknowledged. Further details are available upon request. Based on this data we defined the **marriage rate** as the absolute number of marriages per $1,000$ of the population between 15 and 64 years of age. This variable is missing for the following country-years: AU(1980-81, 1991-92, 2002-03, 2005-07), CA(1980, 1991-1992, 1999, 2000, 2005, 2007), JP(1980, 1991, 2007), NZ(1971-72, 1980-81, 1991, 2004, 2006-2007), and UK(1971, 2006). We exclude two country-years with exceptionally high number of marriages due to a policy intervention: AT(1987) and SE(1989). The **divorce rate** is defined as the absolute number of divorces per $1,000$ of the population between 15 and 64 years of age; and missing for AU(1980-81, 1991-92, 2002-03, 2005-07), CA(1980, 1991-1992, 1999, 2000, 2004-07), FR(2007), JP(1980, 1991, 2007), NZ(1971-72, 1980-81, 1991, 2004, 2006-2007), ES(2006), and UK(1971). The **fertility rate** is defined as the absolute number of live births to all females per $1,000$ female population of childbearing age (i. e. between 15 and 44 years of age); and missing for AU(1991-92, 2002-03, 2005-07), CA(1974-2000, 2005-07), JP(2007), NZ(1972, 2004, 2007), and US($2003-07$). The **marital fertility rate** is defined as the absolute number of live births to all married females per $1,000$ female population of childbearing age; and missing for AU(1991-92, 2002-03, 2005-07), BE(2001-02,) CA(1974-2007), IT(2004), JP(1971-2007), NZ(1972, 2004, 2007), UK(1981) and US(2003-07). The **non-marital fertility** rate is defined as the absolute number of live births to all unmarried females per $1,000$ female population of childbearing age; and missing for the same country-years as the marital fertility rate. The **out-of-wedlock ratio** is defined as the number of non-marital births divided by all births multiplied by 100; and missing for the same country-years as the marital fertility rate.

Data on **public social spending** (starting with 1980) and **public social spending on the family** is derived from the *OECD Social Expenditure Database*. This database classifies expenditure items as social if the benefits are intended to address one or more

social purposes, and if programs regulating the provision involve either inter-personal redistribution, or compulsory participation. Public social spending may arise from cash benefits, social services or tax breaks with a social purpose. Consult OECD (2011) for more details on the composition of public social expenditures as measured by the OECD. Information on both variables is available for all country-years from 1980 through 2007 with exception of AT(1981-84, 1986-89), IS(1981-89), and NO(1982-84, 1986-87). Information on public social spending is further missing for NO(1981). The OECD also provides information on public social spending before 1980; however, there is (as Figure 1 shows) an obvious break in the series.

Data on **public spending** is from different OECD sources. This variable measures total government spending as percentage of the gross domestic product (GDP). Note, the OECD refers to this variable as 'general government total outlays'. It consists of current outlays plus capital outlays. Current outlays are the sum of current consumption, transfer payments, subsidies and property income paid (including interest payments). Data refer to the general government sector, which is a consolidation of accounts for the central, state and local government plus social security. For further details on sources and methods refer to an issue of the *OECD Economic Outlook*. This variable is available for all country-years, with exception of IS(1970-79), LU(1970-89), NZ(1982-85), PT(1970-76) and CH(1976-89).

Data on the **Rae-Index** is obtained from the *Comparative Political Data Set I (*23 *OECD Countries)* provided by Klaus Armingeon, Sarah Engler, Panajotis Potolidis, Marléne Gerber and Philipp Leimgruber; see `http://www.ipw.unibe.ch/content/team/klaus_armingeon/comparative_political_data_sets/index_ger.html`. The Rae-Index is defined as $1-\sum_{i=1}^{n} s_i^2$, where s_i is the share of seats for party i and n the number of parties. That means, it is a index of legislative fractionalization of the party-system according to the formula proposed by (Rae, 1968). This variable is available for all country-years.

B Web Appendix

B.1 Additional Tables and Figures

Table B.1: The Effect of Public Social Spending on the Formation and Dissolution of Families: With Standard Errors Clustered at a Country Level)[a]

	Marriage rate[b]	Divorce rate[c]	Fertility rate[d]	Marital fertility rate[e]	Non-marital fertility rate[f]	Out-of-wedlock ratio[g]
Public social spending[h]						
Coefficient[i]	0.210	0.118**	1.175	0.662	0.590	0.677
Standard error[j]	(0.153)	(0.051)	(0.911)	(0.823)	(0.383)	(0.633)
Semi-elasticity[k]	[0.024]	[0.039]	[0.021]	[0.016]	[0.039]	[0.027]
Beta coefficient[l]	{0.530}	{0.393}	{0.471}	{0.322}	{0.287}	{0.215}
OLS estimate	-0.061	0.051***	-0.154	-0.212	0.006	-0.031
	(0.041)	(0.014)	(0.137)	(0.138)	(0.129)	(0.202)
Control variables[m]	Yes	Yes	Yes	Yes	Yes	Yes
Country and year fixed-effects	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs./countries	570/23	570/23	570/23	538/21	538/21	538/21
Mean of dependent variable	8.59	3.05	55.21	42.54	14.94	25.23
Summary of first stages:						
Rae-Index[n]	-0.103***	-0.103***	-0.103***	-0.108***	-0.108***	-0.108***
	(0.030)	(0.030)	(0.030)	(0.030)	(0.030)	(0.030)
F-statistic[o]	11.754	11.754	11.754	12.994	12.994	12.994

[a] The estimations presented in this table are equivalent to those presented in Table 1 of the article; however, all standard errors are clustered on a country level. See notes to Table 1.

Table B.2: The Effect of Public Social Spending on the Formation and Dissolution of Families: With Standard Errors Clustered at a Country-Electoral Cycle Level

	Marriage rate[b]	Divorce rate[c]	Fertility rate[d]	Marital fertility rate[e]	Non-marital fertility rate[f]	Out-of-wedlock ratio[g]
Public social spending[h]						
Coefficient[i]	0.210*	0.118***	1.175**	0.662	0.590**	0.677*
Standard error[j]	(0.126)	(0.039)	(0.558)	(0.509)	(0.294)	(0.395)
Semi-elasticity[k]	[0.024]	[0.039]	[0.021]	[0.016]	[0.039]	[0.027]
Beta coefficient[l]	{0.530{	{0.393{	{0.471{	{0.322{	{0.287{	{ 0.215{
OLS estimate	-0.061**	0.051***	-0.154	-0.212	0.006	-0.031
	(0.029)	(0.011)	(0.141)	(0.147)	(0.090)	(0.149)
Control variables[m]	Yes	Yes	Yes	Yes	Yes	Yes
Country and year fixed-effects	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs./countries	570/23	570/23	570/23	538/21	538/21	538/21
Mean of dependent variable	8.59	3.05	55.21	42.54	14.94	25.23
Summary of first stages:						
Rae-Index[n]	-0.103***	-0.103***	-0.103***	-0.108***	-0.108***	-0.108***
	(0.024)	(0.024)	(0.024)	(0.027)	(0.027)	(0.027)
F-statistic[o]	18.026	18.026	18.026	16.213	16.213	16.213

[a] The estimations presented in this table are equivalent to those presented in Table 1 of the article; however, all standard errors are clustered at a country-electoral cycle level. See notes to Table 1.

Table B.3: Public (Social) Spending in Percent of GDP in $t = 1$ by Country

Country	First year in sample	Public social spending	Public social spend. on the family	Public spending
Austria	1980	22.39	3.14	49.29
Australia	1982	11.08	1.15	35.41
Belgium	1980	23.52	2.99	55.95
Canada	2001	17.00	1.06	41.99
Denmark	1980	24.76	2.79	53.42
Finland	1980	18.07	1.85	40.11
France	1980	20.76	2.43	45.72
Germany	1980	22.11	2.01	46.89
Greece	1980	10.24	0.31	29.25
Iceland	1990	13.74	2.40	32.96
Ireland	1980	16.66	1.09	54.26
Italy	1980	17.98	1.08	40.74
Japan	1981	10.84	0.48	33.99
Luxembourg	1980 (1990)	20.63	1.72	37.76
The Netherlands	1980	24.79	2.50	55.83
New Zealand	1982 (1986)	18.08	1.96	59.11
Norway	1980	16.85	1.80	46.08
Portugal	1980	9.92	0.65	34.27
Spain	1980	15.55	0.47	33.90
Sweden	1980	27.16	3.90	62.78
Switzerland	1980 (1990)	13.80	1.02	30.30
UK	1980	16.54	2.28	45.93
USA	1980	13.16	0.79	34.29

This table tabulates all countries, the first year they appear in our estimation samples (the year in round brackets indicates the first year in the sample analyzing public spending) and all three spending categories in this year.

Table B.4: The Effect of the Welfare State on the Total Fertility Rate[a]

	Public social spending	**PSS on the family**	**Public spending**
Welfare state[b]			
Coefficient[c]	0.047***	0.581**	0.022***
Standard error[d]	(0.013)	(0.255)	(0.006)
Semi-elasticity[e]	[0.028]	[0.345]	[0.022]
Beta coefficient[f]	{0.889}	{2.223}	{0.630}
Control variables [g]	Yes	Yes	Yes
Country and year fixed-effects	Yes	Yes	Yes
Number of obs./countries	549/22	548/22	552/22
Mean of dependent variable	1.68	1.68	1.70
Summary of first stages:			
Rae-Index[h]	-0.103***	-0.008**	-0.209***
	(0.019)	(0.003)	(0.035)
F-statistic[i]	29.487	6.577	35.235

[a] This table summarizes results from a 2SLS estimation of the effect of the welfare state on fertility behavior which is captured by the total fertility rate. Data from OECD-member countries from the years 1980 through 2007 is used. Note, some country-years are missing. The instrumental variable is equal to the a measure of fractionalization (see below). The total fertility rate is defined as the total number of children that would be born to each woman if she were to live to the end of her child-bearing years and give birth to children in agreement with the prevailing age-specific fertility rates by the OECD. [b] In the first column the size of the welfare state is measured with public social spending, in the second column with public social spending on the family, and in the third column with total public spending. Each variables is scaled as percentage of GDP. [c] Listed coefficients are reported as the change in the specific rate (ratio) due to an one percentage point increase in the respective measure of the welfare state. *, ** and *** indicate statistical significance at the 10-percent level, 5-percent level, and 1-percent level, respectively. [d] Robust standard errors (allowing for heteroskedasticity of unknown form) in round parentheses. [e] This semi-elasticity (calculated using the unweighted mean as the base) multiplied by 100 gives the percentage change in the specific rate (ratio) due to an one percentage point increase in the respective measure of the welfare state. [f] This standardized (beta) coefficient gives the standard deviation increase in the specific rate (ratio) due to a one standard deviation increases in the respective measure of the welfare state. [g] Each specification controls for the government's ideological orientation, the government's polarization, the prevailing abortion law, the divorce law regime, and the sex-age distribution. The latter is captured by 24 variables measuring the share of the total population of sex s in age group a where a is $0-14, 15-19, \ldots, 60-64, 65+$. [h] The Rae-Index (Rae, 1968) is a measure of the degree of legislative fractionalization of the party-system; a higher value of the Rae-Index indicates a more fragmented system. [i] Kleibergen-Paap F-statistic (Kleibergen and Paap, 2006); null-hypothesis is that instrument is weak.

Table B.5: The Effect of Public Social Spending on the Formation and Dissolution of Families: Excluding Social Spending for Old-Aged Population and Retirement[a]

	Marriage rate[b]	**Divorce rate**[c]	**Fertility rate**[d]	**Marital fertility rate**[e]	**Non-marital fertility rate**[f]	**Out-of-wedlock ratio**[g]
Public social spending[h]						
Coefficient[i]	0.468*	0.271*	2.656**	1.565	2.990	4.116
Standard error[j]	(0.247)	(0.142)	(1.140)	(1.023)	(4.103)	(4.090)
Semi-Elasticity[k]	[0.055]	[0.089]	[0.048]	[0.037]	[0.200]	[0.163]
Beta coefficient[l]	{0.897}	{0.685}	{0.810}	{0.580}	{1.106}	{0.993}
OLS estimate	-0.061***	0.052***	-0.106	-0.181	-0.021	-0.156
	(0.022)	(0.010)	(0.104)	(0.118)	(0.069)	(0.111)
Control variables[m]	Yes	Yes	Yes	Yes	Yes	Yes
Country and year fixed-effects	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	568/23	568/23	568/23	536/21	536/21	536/21
Mean of dependent variable	8.59	3.05	55.20	42.52	14.96	25.26
Summary of first stages:						
Rae-Index[n]	-0.044***	-0.044***	-0.044***	-0.045**	-0.045**	-0.045**
	(0.016)	(0.016)	(0.016)	(0.018)	(0.018)	(0.018)
F-statistic[o]	7.124	7.124	7.124	6.268	6.268	6.268

[a] The estimations presented in this table are equivalent to those presented in Table 1 of the article; however, all public social spending on old-aged population and retirement are excluded from total public social spending. See notes to Table 1.

Table B.6: The Effect of Public Social Spending on the Formation and Dissolution of Families: Without Countries with Majority Voting System[a]

	Marriage rate[b]	Divorce rate[c]	Fertility rate[d]	Marital fertility rate[e]	Non-marital fertility rate[f]	Out-of-wedlock ratio[g]
Public social spending[h]						
Coefficient[i]	0.259**	0.102***	1.418**	1.267**	0.018	-0.283
Standard error[j]	(0.109)	(0.034)	(0.607)	(0.538)	(0.223)	(0.354)
Semi-Elasticity[k]	[0.032]	[0.038]	[0.025]	[0.030]	[0.001]	[-0.012]
Beta coefficient[l]	{1.064}	{0.421}	{0.750}	{0.590}	{0.009}	{-0.086}
OLS estimate	-0.070***	0.041***	-0.311***	-0.213**	-0.162***	-0.282***
	(0.022)	(0.009)	(0.117)	(0.104)	(0.062)	(0.094)
Control variables[m]	Yes	Yes	Yes	Yes	Yes	Yes
Country and year fixed-effects	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs./countries	443/17	443/17	443/17	440/17	440/17	440/17
Mean of dependent variable	8.16	2.71	55.87	42.32	13.80	23.78
Summary of first stages:						
Rae-Index[n]	-0.153***	-0.153***	-0.153***	-0.153***	-0.153***	-0.153***
	(0.035)	(0.035)	(0.035)	(0.035)	(0.035)	(0.035)
F-statistic[o]	18.991	18.991	18.991	18.830	18.830	18.830

[a] The estimations presented in this table are equivalent to those presented in Table 1 of the article; however, all countries with a majority or plurality voting system are excluded from the estimation sample. See notes to Table 1.

Table B.7: The Effect of Public Social Spending on the Formation and Dissolution of Families: 1970–2007[a]

	Marriage rate[b]	Divorce rate[c]	Fertility rate[d]	Marital fertility rate[e]	Non-marital fertility rate[f]	Out-of-wedlock ratio[g]
Public social spending[h]						
Coefficient[i]	0.294	0.324	5.550*	2.698	1.626*	1.586*
Standard error[j]	(0.309)	(0.212)	(3.145)	(1.773)	(0.830)	(0.855)
Semi-elasticity[k]	[0.032]	[0.110]	[0.096]	[0.057]	[0.124]	[0.073]
Beta coefficient[l]	{0.651}	{1.106}	{1.971}	{0.969}	{0.884}	{0.547}
Control variables[m]	Yes	Yes	Yes	Yes	Yes	Yes
Country and year fixed-effects	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	739/23	739/23	739/23	697/22	697/22	697/22
Mean of dependent variable	9.25	2.95	57.88	47.56	13.14	21.79
Summary of first stages:						
Rae-Index[n]	-0.036	-0.036	-0.036	-0.045*	-0.045*	-0.045*
	(0.022)	(0.022)	(0.022)	(0.023)	(0.023)	(0.023)
F-statistic[o]	2.698	2.698	2.698	3.806	3.806	3.806

[a] The estimations presented in this table are equivalent to those presented in Table 1 of the article; however, use an extended sample covering the years 1970 through 2007. Note, some country-years are missing (see Data Appendix). See notes to Table 1.

Table B.8: The Effect of Public Spending on the Formation and Dissolution of Families: 1970–2007[a]

	Marriage rate[b]	**Divorce rate**[c]	**Fertility rate**[d]	**Marital fertility rate**[e]	**Non-marital fertility rate**[f]	**Out-of-wedlock ratio**[g]
Public spending[h]						
Coefficient[i]	0.042	0.062**	1.366***	0.633**	0.592***	0.702***
Standard error[j]	(0.056)	(0.026)	(0.428)	(0.302)	(0.178)	(0.244)
Semi-elasticity[k]	[0.005]	[0.021]	[0.023]	[0.013]	[0.043]	[0.031]
Beta coefficient[l]	{0.140}	{ 0.324}	{0.725}	{0.337}	{ 0.474}	{0.363}
Control variables[m]	Yes	Yes	Yes	Yes	Yes	Yes
Country and year fixed-effects	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	755/23	755/23	755/23	712/22	712/22	712/22
Mean of dependent variable	9.25	2.93	58.58	47.57	13.82	22.71
Summary of first stages:						
Rae-Index[n]	-0.122***	-0.122***	-0.122***	-0.129***	-0.129***	-0.129***
	(0.031)	(0.031)	(0.031)	(0.032)	(0.032)	(0.032)
F-statistic[o]	15.279	15.279	15.279	16.504	16.504	16.504

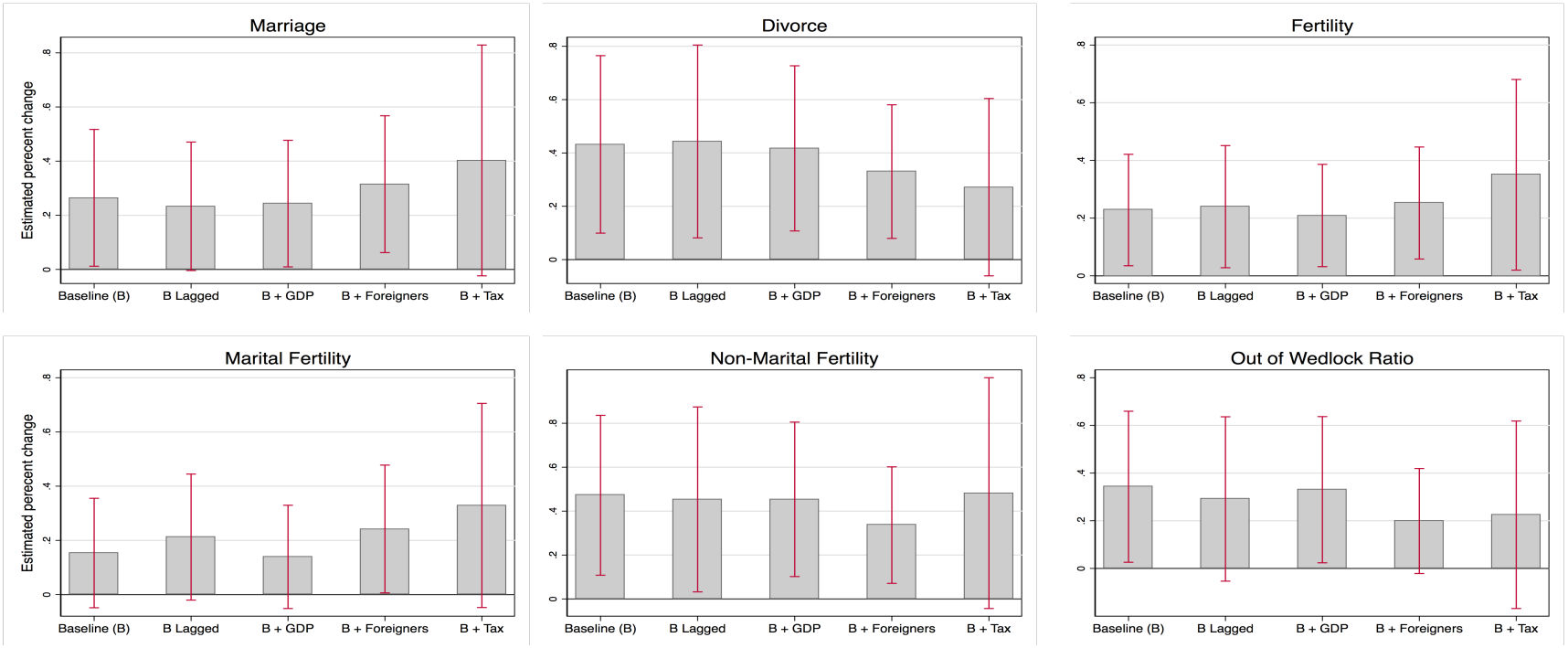
[a] The estimations presented in this table are equivalent to those presented in Table 3 of the article; however, use an extended sample covering the years 1970 through 2007. Note, some country-years are missing (see Data Appendix). See notes to Table 3.

Table B.9: The Effect of Public Social Spending on the Formation and Dissolution of Families: Based on aggregated data (electoral cycles)[a]

	Marriage rate[b]	Divorce rate[c]	Fertility rate[d]	Marital fertility rate[e]	Non-marital fertility rate[f]	Out-of-wedlock ratio[g]
Public social spending[h]						
Coefficient[i]	0.092	0.084***	1.018*	0.354	0.647**	0.949**
Standard error[j]	(0.104)	(0.024)	(0.589)	(0.469)	(0.299)	(0.394)
Control variables[m]	Yes	Yes	Yes	Yes	Yes	Yes
Country and year fixed-effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations/countries	185/23	185/23	185/23	175/21	175/21	175/21
Mean of dependent variable	8.59	3.05	55.20	42.52	14.96	25.26
Summary of first stages:						
Rae-Index[n]	-0.125***	-0.125***	-0.125***	-0.142***	-0.142***	-0.142***
	(0.037)	(0.037)	(0.037)	(0.041)	(0.041)	(0.041)
F-statistic[o]	11.682	11.682	11.682	12.099	12.099	12.099

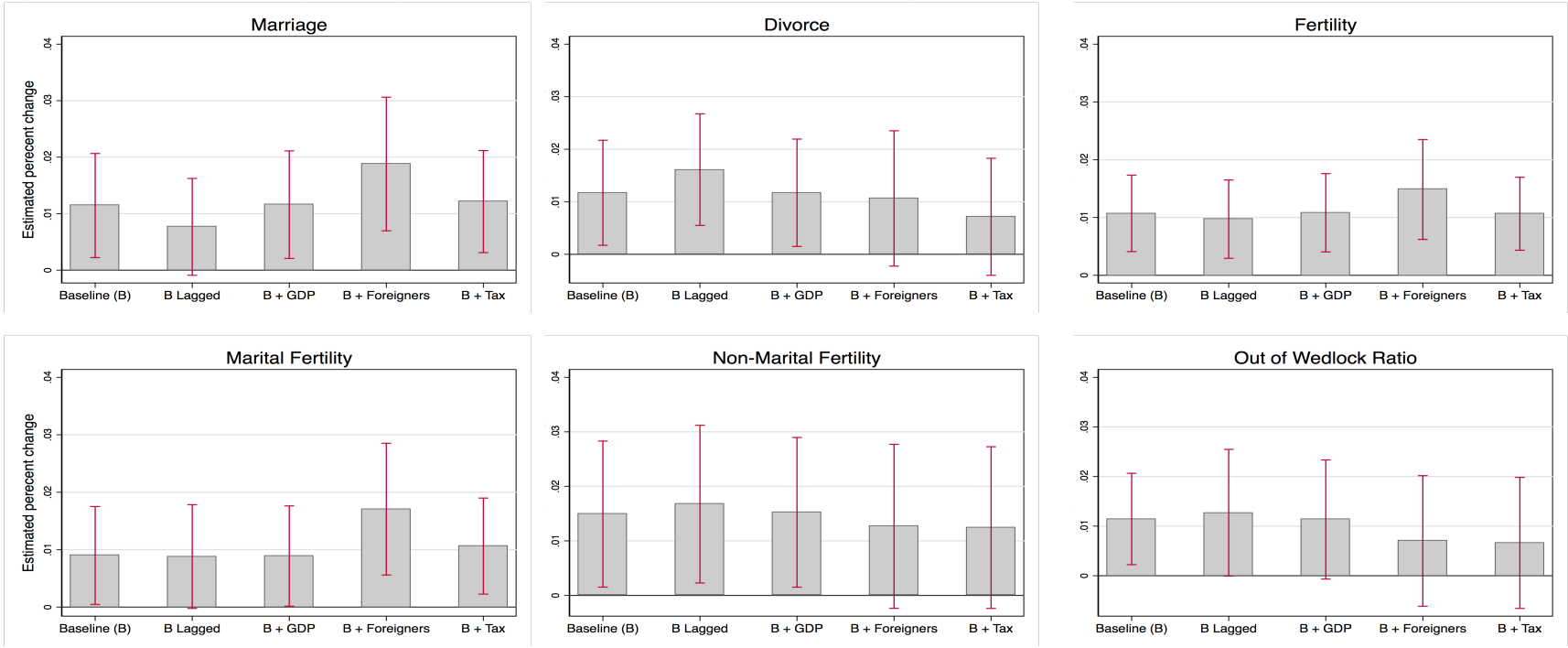
[a] The estimations presented in this table are equivalent to those presented in Table 1 of our manuscript, however, the data used is aggregated to election cycles. We calculated for all variables (ignoring any missing values) the within spell-mean and ran estimations equivalent to our baseline specifications. See notes to Table 1.

Figure B.1: Sensitivity Analysis of the Effect of Public Social Spending on the Family on the Formation and Dissolution of Families



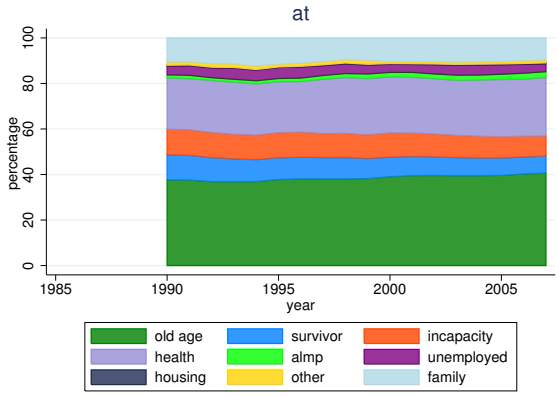
[a] These graphs summarize several robustness checks of the 2SLS estimations results of the effect of public social spending on the family on different family outcomes presented in Table 2. The estimated coefficients are reported with the bars. In particular, they represent the respective semi-elasticities (calculated using the unweighted mean as the base), which give (multiplied by 100) the percentage change in the specific rate (ratio) due to an one percentage point increase in public social spending on the family measured as percentage of GDP. The whiskers in each bar show 95 percent confidence intervals based on robust standard errors (allowing for heteroskedasticity of unknown form). Each panel shows first the baseline specification presented in Table 2. The second specification uses lagged public social spending on the family instead of the contemporaneous value. The third specification extends the baseline specification by the country's GDP growth. The fourth specification extends the baseline specification by a measure of the foreign population. The fifth specification extends the baseline specification by a measure of the average income tax rate for a single with no child, and a married couples with two children.

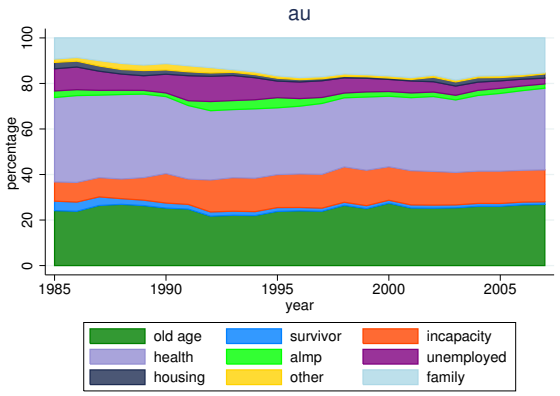
Figure B.2: Sensitivity Analysis of the Effect of Public Spending on the Formation and Dissolution of Families

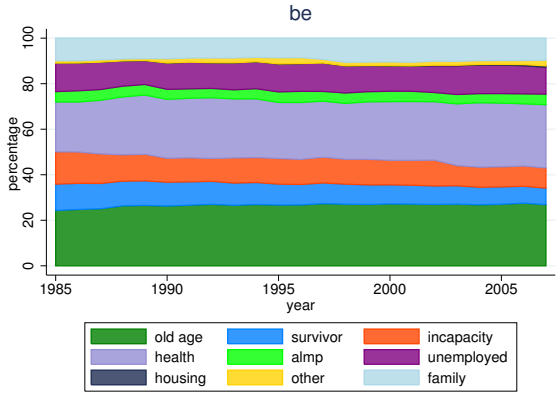


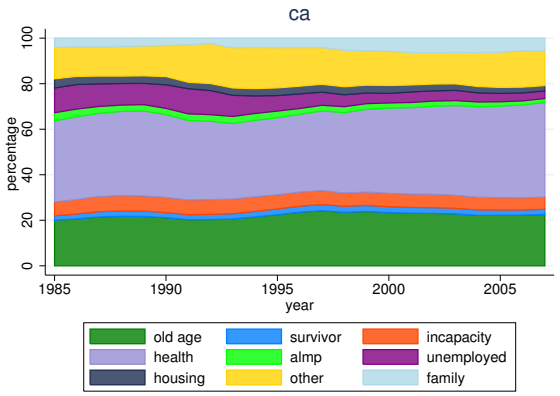
[a] These graphs summarize several robustness checks of the 2SLS estimations results of the effect of public spending on different family outcomes presented in Table 3. The estimated coefficients are reported with the bars. In particular, they represent the respective semi-elasticities (calculated using the unweighted mean as the base), which give (multiplied by 100) the percentage change in the specific rate (ratio) due to an one percentage point increase in public spending measured as percentage of GDP. The whiskers in each bar show 95 percent confidence intervals based on robust standard errors (allowing for heteroskedasticity of unknown form). Each panel shows first the baseline specification presented in Table 3. The second specification uses lagged public spending instead of the contemporaneous value. The third specification extends the baseline specification by the country's GDP growth. The fourth specification extends the baseline specification by a measure of the foreign population. he fifth specification extends the baseline specification by a measure of the average income tax rate for a single with no child, and a married couples with two children.

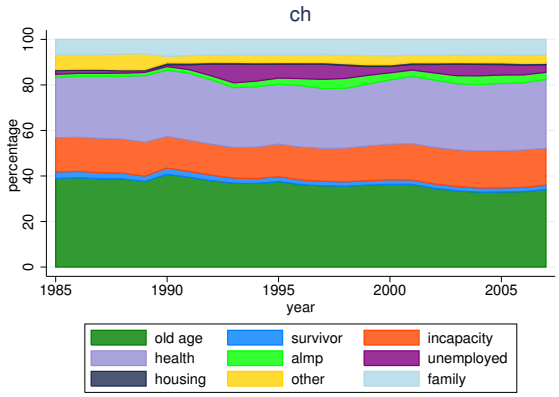
B.2 Structure of Public Social Expenditures

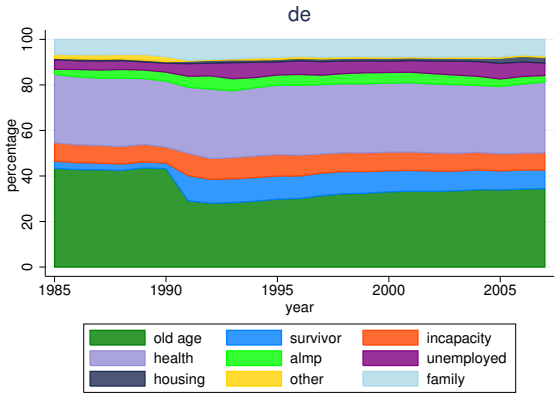


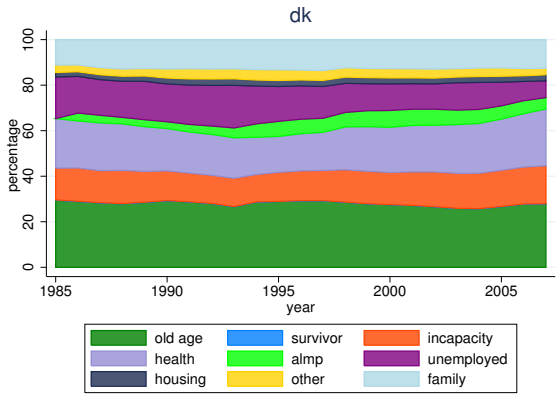


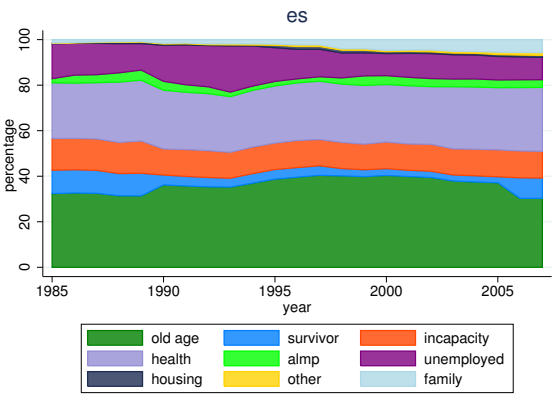


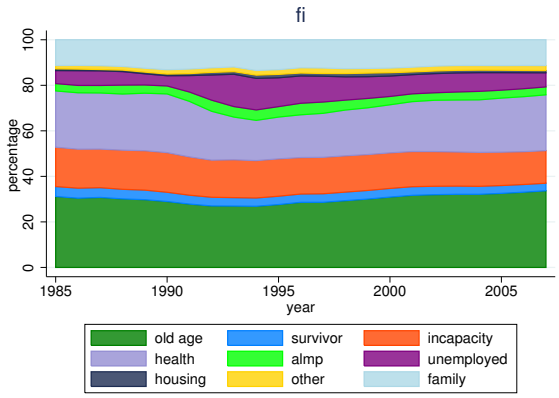








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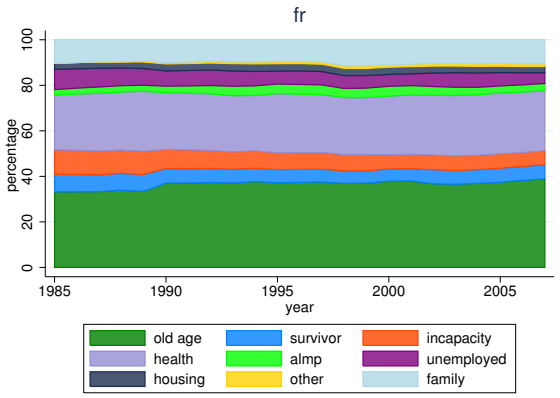
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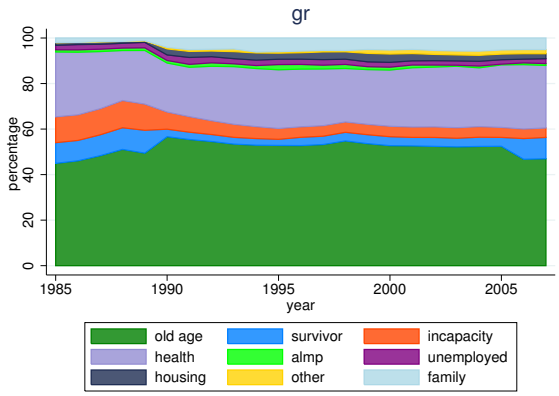
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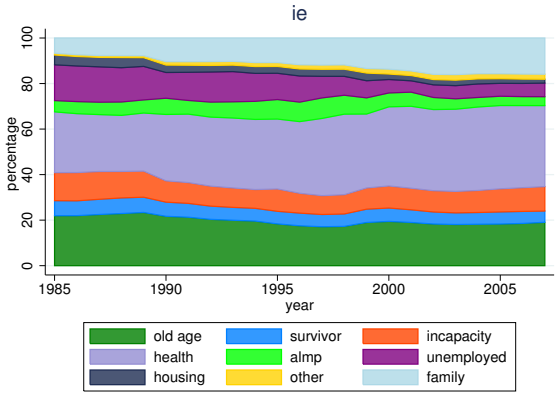
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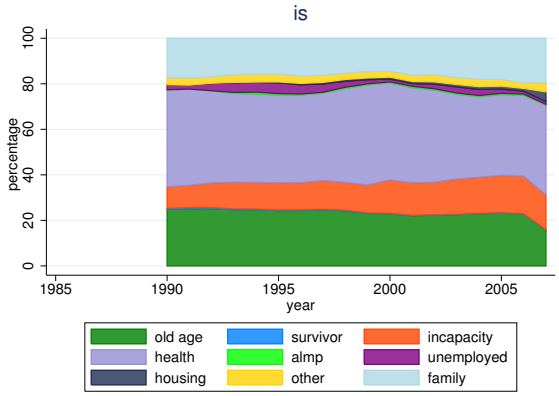
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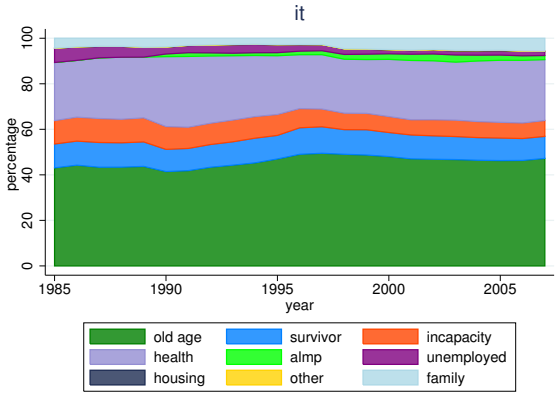
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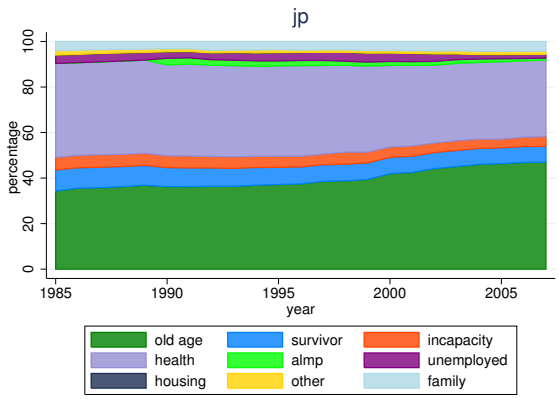
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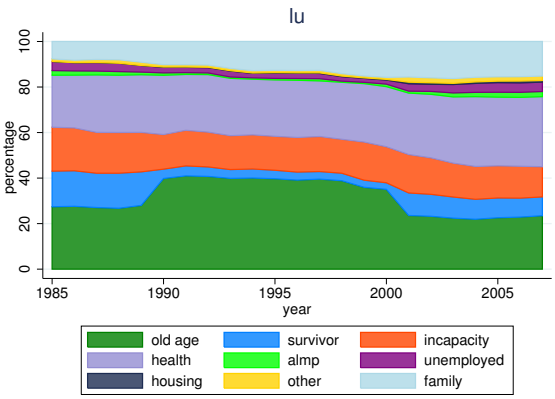
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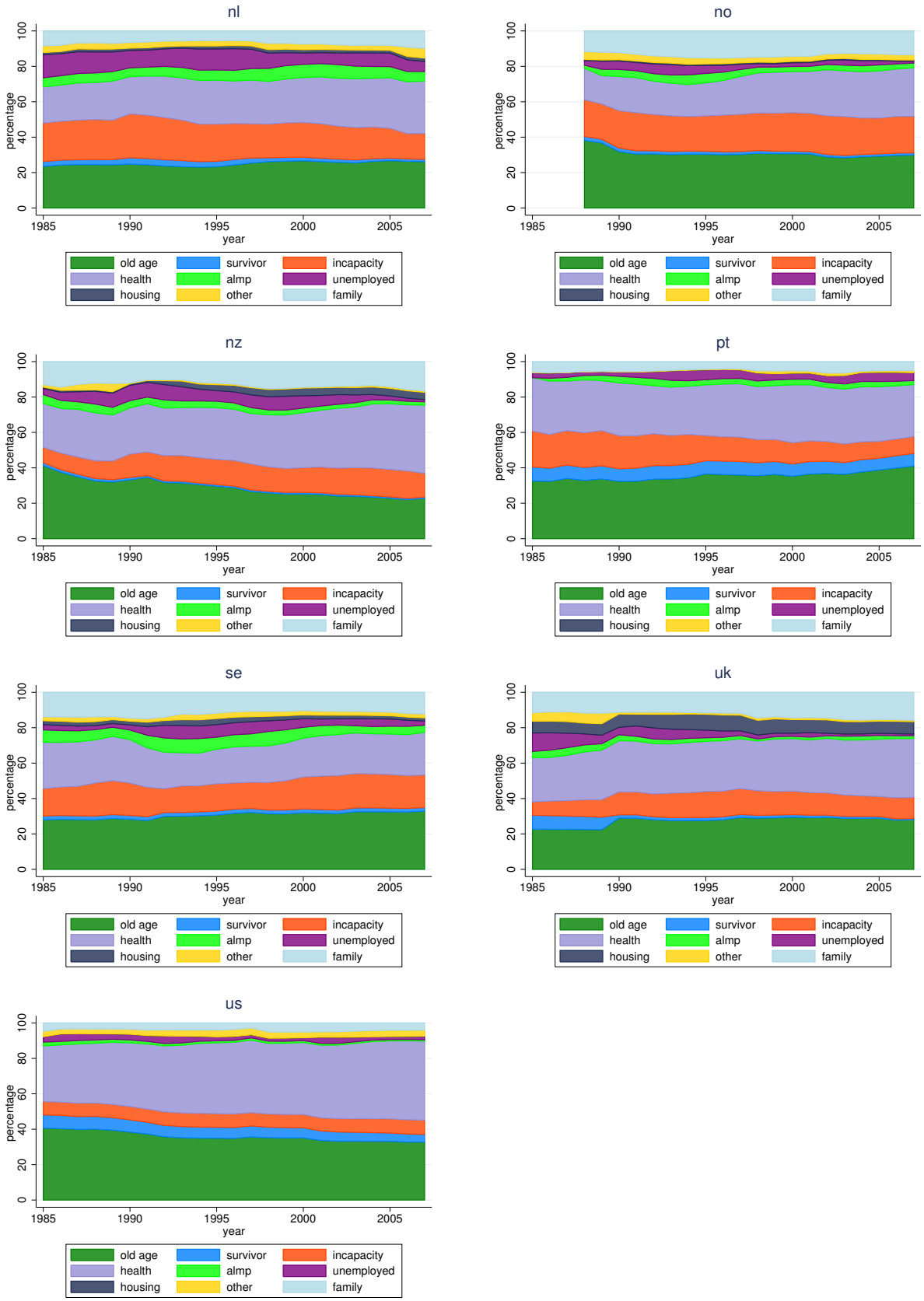
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