

Why Is Europe More Equal Than the United States?

Technical Appendix

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WHY IS EUROPE MORE EQUAL THAN THE US?

EXTENDED APPENDIX*

For Online Publication

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Abstract

This appendix supplements “WHY US EUROPE MORE EQUAL THAN THE US?”. It provides supplementary material on data files, computer codes, methodological issues and main results for each country covered by the paper.

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1 Country-specific estimations of top shares from tabulated tax returns

1.1 Austria

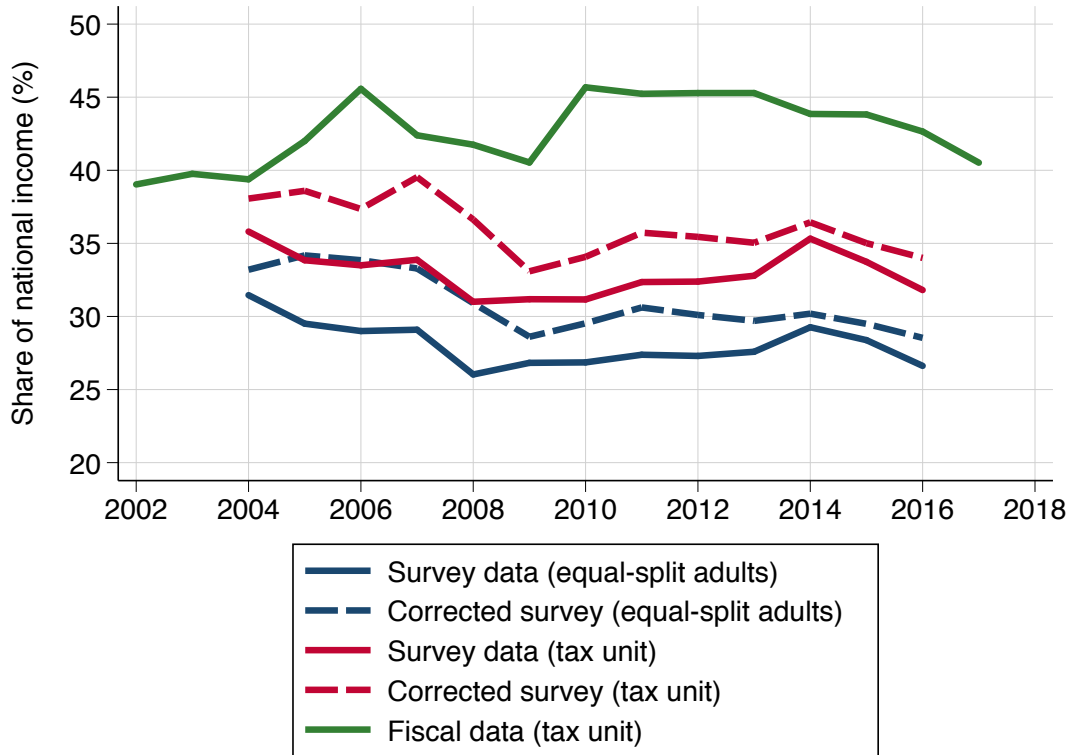
Our data for Austria comes from [Altzinger et al. \(2010\)](#), who use tax data from the *Integrierte Lohn und Einkommensteuerstatistik* (LUE) to study the evolution of top income shares between 1976 and 2006. We complete their series by gathering more recent LUE tabulations from Statistics Austria (2008-2015). These tabulations cover the entire Austrian population and can therefore be directly used to compute top income shares. We turn the tabulations into complete distributions by using generalized Pareto interpolation ([Blanchet, Fournier, and Piketty, 2017](#)). Our results for more recent years are very consistent with those found by [Altzinger et al. \(2010\)](#): before 2010, the top 10% income share remained very stable around 33% and the top 1% share decreased from 10% to 9%.

1.2 East Germany

Our data for the distribution of East German income comes from a yearly publication of official statistics on the economy of East Germany (*Statistisches Jahrbuch der deutschen Demokratischen Republik*). The 1990 edition of that publication provides estimates of the population by income bracket and by type of household over the period 1980–1990. We interpolate the distribution for each type of household ([Blanchet, Fournier, and Piketty, 2017](#)), and then merge them into a single distribution after having multiplied the number of observations corresponding to each type of household by the number of adults in the corresponding type of household. That way, we get a distribution for equal-split adults.

That data relate to the distribution of post-tax income only. As an approximation, we use the same distribution for pre-tax income. The distinction between pre-tax and post-tax income in socialist economies was indeed less salient than it is today: see [Bukowski and Novokmet \(2017\)](#) for a detailed discussion of that issue in the case of Poland.

Figure A.1.1
Top 10% income share in Estonia:
survey data vs. fiscal data vs. corrected survey



1.3 Estonia

We estimate top income shares for Estonia by exploiting tabulated tax returns from various reports of the Tax and Customs Board. Tabulations are available from 2002 to 2017. For each year, they provide information on the total number of taxpayers and total taxable income for various income brackets. The income tax in Estonia is a flat tax, collected on individual earnings. It applies to most sources of income (income from work, interest income, royalties, dividends...) which are taxed on a gross basis.

We use these tabulations to estimate top income shares by matching them with survey microdata from EU-SILC in the following way. We first use generalized Pareto interpolation techniques ([Blanchet, Fournier, and Piketty, 2017](#)) to compute thresholds and average incomes for various quantiles of the fiscal income

distribution. We then correct the EU-SILC survey by using the [Blanchet, Flores, and Morgan \(2018\)](#) method (BFM), which exploits the fiscal data to reweigh survey observations so that top incomes are properly represented. Since the BFM method preserves the survey microdata, and in particular other covariates, it allows us to directly account for the fact that (1) the unit of observation in the tax data is the individual, not the equal-split adult and (2) taxable income includes gross components which must be deducted to obtain pre-tax income estimates. We can therefore directly compute the share of pre-tax income accruing to top earners in the corrected survey by changing the unit of observation and the income concept *after* having reweighed survey observations.

Figure [A.1.1](#) compares the top 10% income share estimated from survey data, fiscal data and corrected survey data. Inequality is highest when measured directly from tax tabulations since many individuals have zero taxable income, in part due to the possibility to deduct some expenditures. Correcting the survey for the under-representation of top incomes increases significantly the top 10% income share, even if the overall trend is not substantially affected. Unsurprisingly, inequality is lower between equal-split adults than between tax units (here, individuals) since the former does not account for within-household heterogeneity. Our final estimates show a decrease in the top 10% income share from 35% in 2004 to 30% in 2016. Since survey microdata is not available for 2002, 2003 and 2017, we extrapolate top income shares to these years by using the average ratio of pre-tax income between fiscal data series and corrected survey estimates over the 2004-2016 period, by generalized percentile.

1.4 Greece

Our data for Greece comes from [Chrissis and Koutentakis \(2017\)](#), who used published tax tabulations to measure the evolution of top income shares from 1967 to 2017. By combining these tabulations with control totals for income and the adult population, they estimate that the top 10% fiscal income share varied between 23% and 29% over the period. This appears surprisingly low compared to results from other European countries, especially given that the unit of observation is the individual.

One specific concern with the Greek case has to do with tax evasion, which has previously been found to

be particularly pronounced at the top of the distribution. Based on a matched samples of income taxpayers and respondents from the household budget survey, [Matsaganis and Flevotomou \(2010\)](#) find that top 1% earners report incomes which are 23.6% *lower* in the tax data than in the survey. This result is consistent with our own results obtained from the EU-SILC survey, where we find the top 10% pre-tax income share (among individual adults) to fluctuate around 35% between 2006 and 2015. The under-representation of top incomes in Greek tax data therefore threatens the comparability of our estimates and calls for a specific adjustment.

In order to correct Greek top income shares, we proceed as follows. First, we define a new “taxable income” concept in the EU-SILC survey such that we artificially reduce the pre-tax incomes of individuals based on the coefficients provided by [Matsaganis and Flevotomou \(2010\)](#) on underreporting by income decile and the top 1%. Then, we interpolate the fiscal income averages of [Chrissis and Koutentakis \(2017\)](#) using generalized Pareto interpolation ([Blanchet, Fournier, and Piketty, 2017](#)) and we apply the [Blanchet, Flores, and Morgan \(2018\)](#) method to rescale our new taxable income concept to the fiscal data. Finally, we use the reweighed survey to compute top income shares in our concept of interest, that is pre-tax income splitted equally among spouses, and we correct top income shares before 2008 by extrapolating the correction coefficient by percentile that we obtained from the correction.

This method has the advantage of fully exploiting the tax data, which is more granular at the very top of the distribution and covers every year from 1980 to 2017, while at the same time accounting for tax evasion in a simple way. We stress that this adjustment is however far from being sufficient, so that distributional data for Greece should be interpreted with care. As tax evasion is increasingly tackled by tax authorities, future research will hopefully be able to obtain more reliable estimates.

1.5 Iceland

For Iceland, we use directly the tax data that is available online since 1990 from Statistics Iceland. Given that Iceland has had a flat — or nearly flat — comprehensive income tax over the entire period, the entire distribution is covered, so we use it to directly compute top income shares.

1.6 Italy

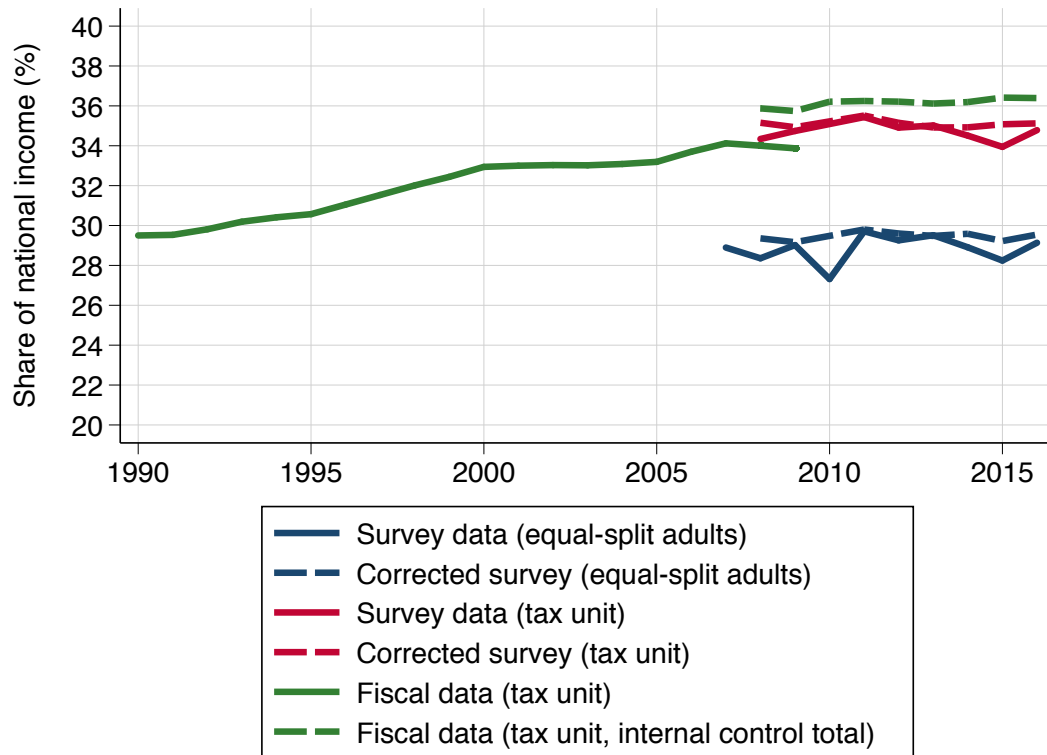
Top income shares for Italy are available from the World Inequality Database from 1980 to 2009 thanks to previous work done by [Alvaredo and Pisano \(2010\)](#). We update their series by collecting tax tabulations available from the data portal of the Italian ministry of Finance.¹ These tabulations are available over the 2008-2016 period and provide information on the number of taxpayers and total taxable income for different income brackets.

The income tax in Italy applies to individuals and includes most income components on a gross basis, except for interest income which is not taxed. We compute top income shares over the 2008-2016 period by using the exact same methodology as the one used for Estonia (see above). That is, we use the method developed by [Blanchet, Flores, and Morgan \(2018\)](#) to reweigh the survey and compute income shares which are both representative of top incomes and consistent with the benchmark income concept and population unit used in this paper.

Figure [A.1.2](#) compares the top 10% income share estimated from survey data, fiscal data and corrected survey data. Tax data leads to increasing inequality less than in Estonia, perhaps because some components of capital income are not reported in the tabulated tax returns. For the two years for which we can compare our estimates with that of [Alvaredo and Pisano \(2010\)](#), 2008 and 2009, the top 10% income shares coincide almost perfectly, which suggests that both methods are alternative and complementary ways of obtaining robust estimates of the evolution of top incomes. Changing the welfare concept from individual taxable income to pre-tax income per adult decreased the top 10% share by about 4 percentage points. We use this relationship to correct conceptual discrepancies in Italian top income shares over the 1980-2009 period. For each generalized percentile among the top decile, we compute the ratio of average taxable individual income to pre-tax income per adult over the 2009-2016 period. We then use the average ratio over this period to harmonized top income shares series in previous years.

¹See http://www1.finanze.gov.it/finanze3/pagina_dichiarazioni/dichiarazioni.php.

Figure A.1.2
Top 10% income share in Italy:
survey data vs. fiscal data vs. corrected survey

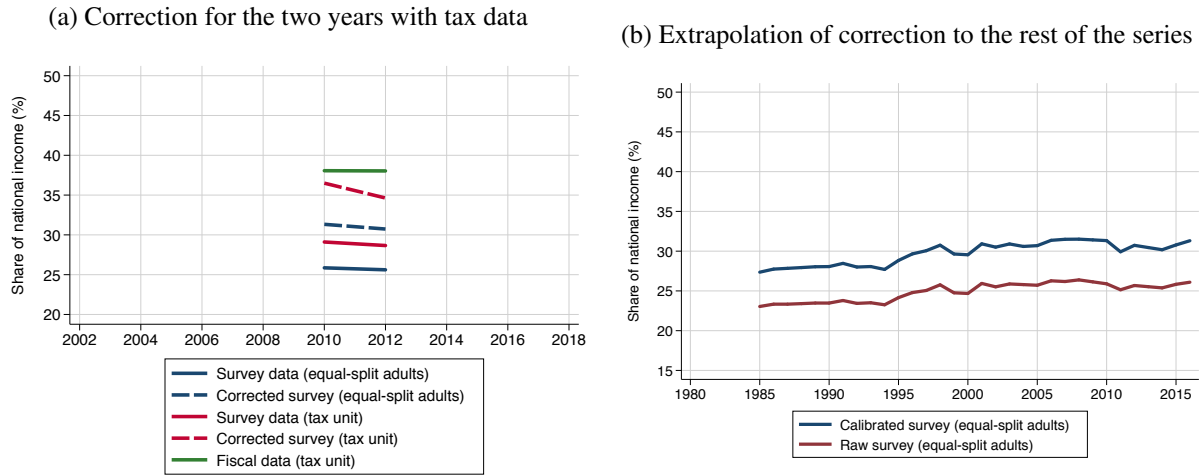


1.7 Luxembourg

For Luxembourg, we use two years of tax data that were published as part of reports by the Conseil Économique et Social (*Analyse des données fiscales au Luxembourg, 2015* and *Analyse des données fiscales au Luxembourg, 2018*). These contain detailed tabulations that cover the income of resident households for two years, 2010 and 2012.

We interpolate these two distributions using generalized Pareto interpolation ([Blanchet, Fournier, and Piketty, 2017](#)) and then correct the EU-SILC data in the two corresponding years using the method of [Blanchet, Flores, and Morgan \(2018\)](#). The correction is very similar for both years, with the top 10% share increasing by roughly 5pp (see figure [A.1.3a](#)). We then extrapolate that correction to previous years by

Figure A.1.3
Top 10% income share in Luxembourg:
survey data vs. fiscal data vs. corrected survey



extrapolating the correction coefficient by percentile that we obtained from the tax data correction (see figure A.1.3b).

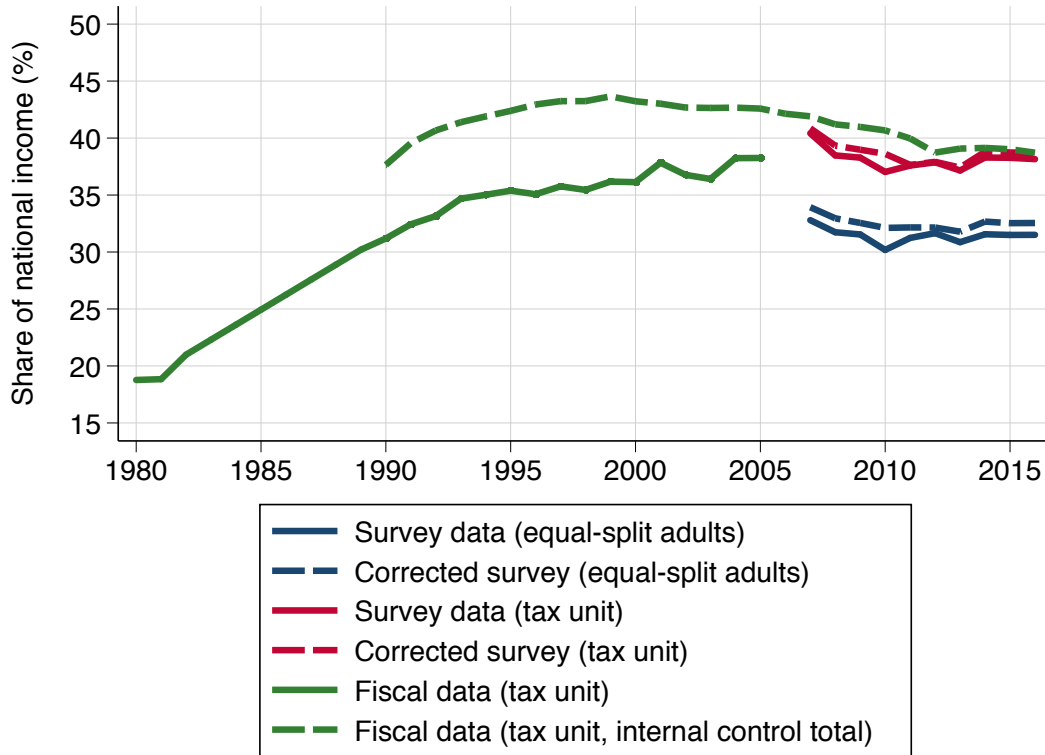
1.8 Portugal

Top income shares for Portugal are available from the World Inequality Database from 1980 to 2009 thanks to previous work done by [Alvaredo \(2009\)](#). We update these series by collecting tax tabulations available from the data portal Pordata.² These tabulations are available over the 1990-2016 period and provide information on the number of taxpayers and total taxable income for different income brackets.

The income tax in Portugal applies to most income components on a gross basis, except for most capital gains and all interest income which are not taxed. The unit to which the tax data relate is the married couple, or single adult. We compute top income shares over the 2007-2016 period by using the exact same methodology as the one used for Estonia (see above). That is, we use the method developed by [Blanchet, Flores, and Morgan \(2018\)](#) to reweigh the survey and compute income shares which are both representative

²See <https://www.pordata.pt>.

Figure A.1.4
Top 10% income share in Portugal:
survey data vs. fiscal data vs. corrected survey



of top incomes and consistent with the benchmark income concept and population unit used in this paper. In the case of Portugal, since tax units are either individuals or married couples, we first match couples in the EU-SILC survey and aggregate their incomes. We are then able to use tax tabulations to correct for the under-representation of "top tax units" in the survey.

Figure A.1.4 compares the top 10% income share estimated from survey data, fiscal data and corrected survey data. Using tax data leads to only moderately higher inequality, perhaps because some components of capital income are not taxed. While there is a gap in the [Alvaredo \(2009\)](#) series and our series between 2005 and 2007, comparing the two estimates suggests that using the BFM methodology leads to a slightly higher top 10% income share, which might be due to the income control being too high in previous estimates.

We use our estimates to correct conceptual discrepancies in Portuguese top income shares in previous years. First, we extrapolate our series back to 2005 by using the trends observed in the fiscal data (with internal income control) over the 2005-2007 period. For each generalized percentile among the top decile, we then use the ratio of average taxable income per tax unit to pre-tax income per adult in 2005 to harmonize top income shares before 2005.

1.9 Romania

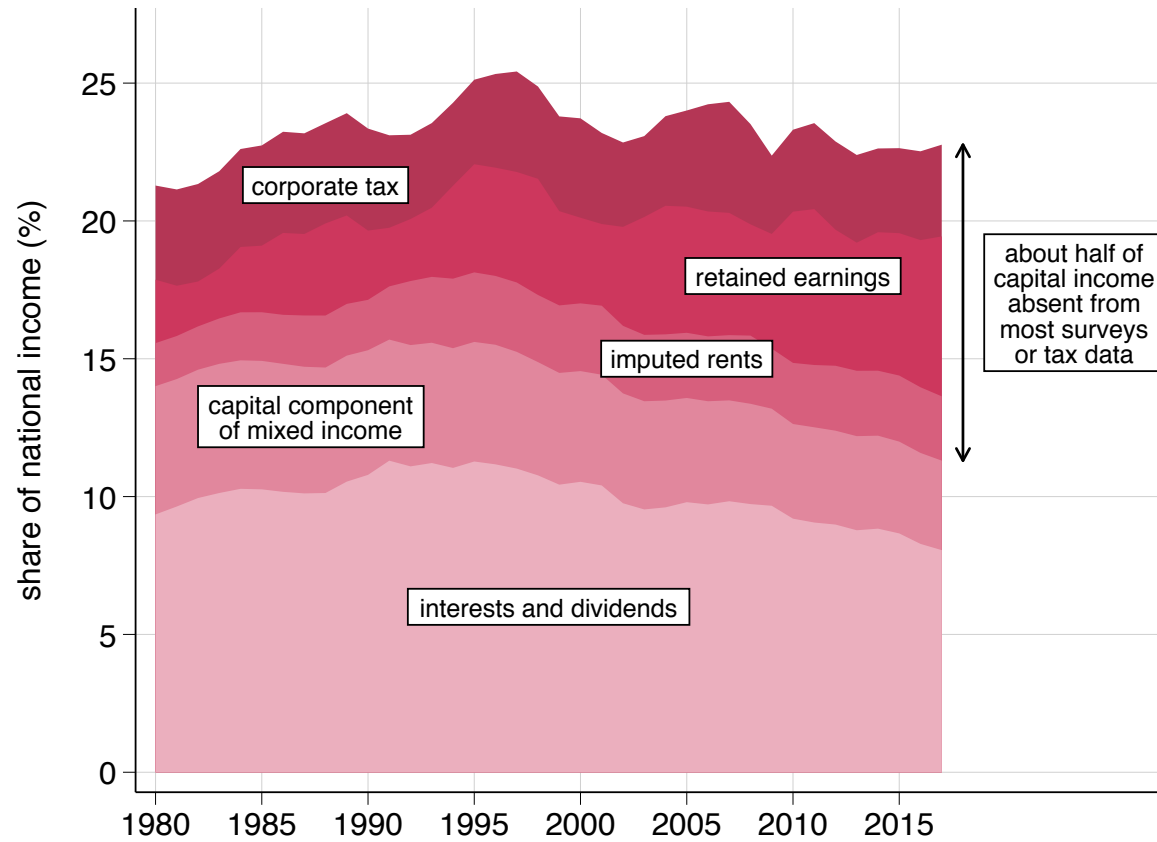
Our data for Romania comes from [Oancea, Andrei, and Pirjol \(2017\)](#). The authors had access to the universe of individual income tax data for 2013 and provide detailed information on the distribution of taxable income. The income tax data covers about 45% of the adult population. We correct the EU-SILC data in 2013 using the method of [Blanchet, Flores, and Morgan \(2018\)](#). The comparison of the survey with the tax data reveals that top earners are strongly underrepresented in EU-SILC: the average income of the top 1% is below 70,000 lei in the surveys compared to 150,000 lei in the tax data. The correction increases the top 10% income share from 26% to 31% and the top 1% share from 5% to 8%. We extend that correction to previous years by extrapolating the coefficient by percentile that we obtained from the correction.

1.10 Serbia

Our data for Serbia comes from the Statistical Office of the Republic of Serbia, who provided us with detailed tabulations on the pre-tax income of Serbian taxpayers in 2017 and 2018. Income shown in the tables are taken over from the Individual tax return form on accrued taxes and contributions (PPP-PD form) which are submitted to the Tax Administration. The data covers employees, founders and members of companies employed in their company, persons insured on the basis of independent activity including independent artists, persons insured on the basis of agricultural activities, persons not provided on other grounds, non-residents, disabled persons, military insured persons, pensioners self-employed, pensioners on the basis of employment, military pensioners and agricultural retirees. As a simple approximation, we use the 2017 tabulation to directly calibrate the 2016 EU-SILC survey with the [Blanchet, Flores, and Morgan \(2018\)](#) method.

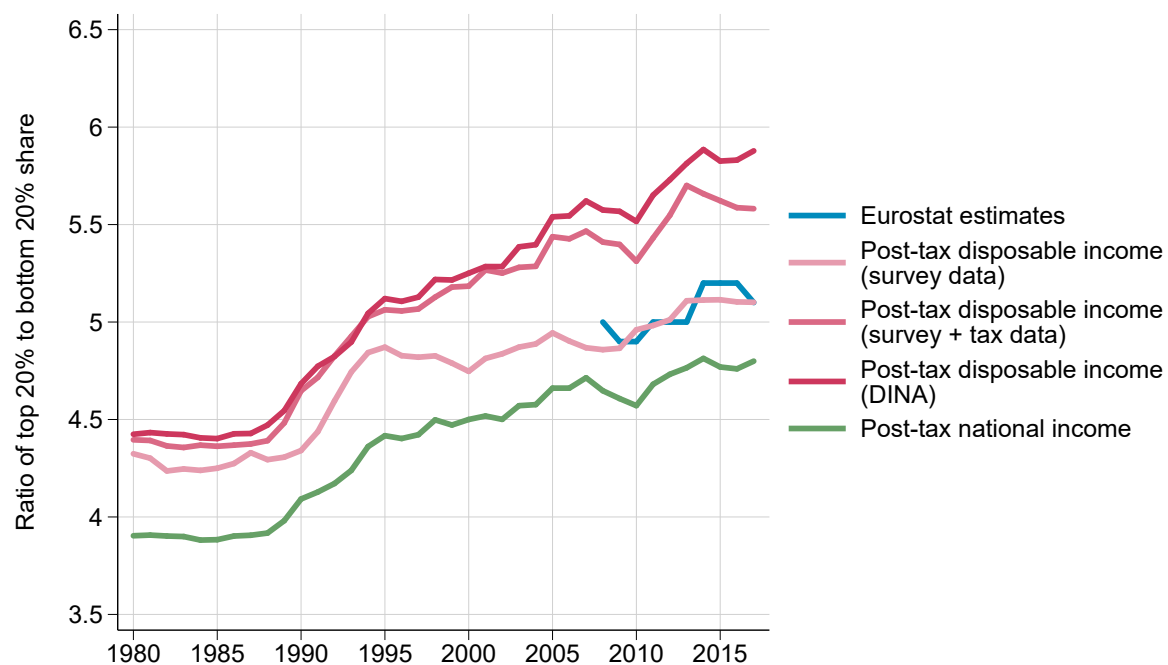
2 Additional figures and tables

Figure A.2.1
Level and composition of capital income in Europe, 1980-2017



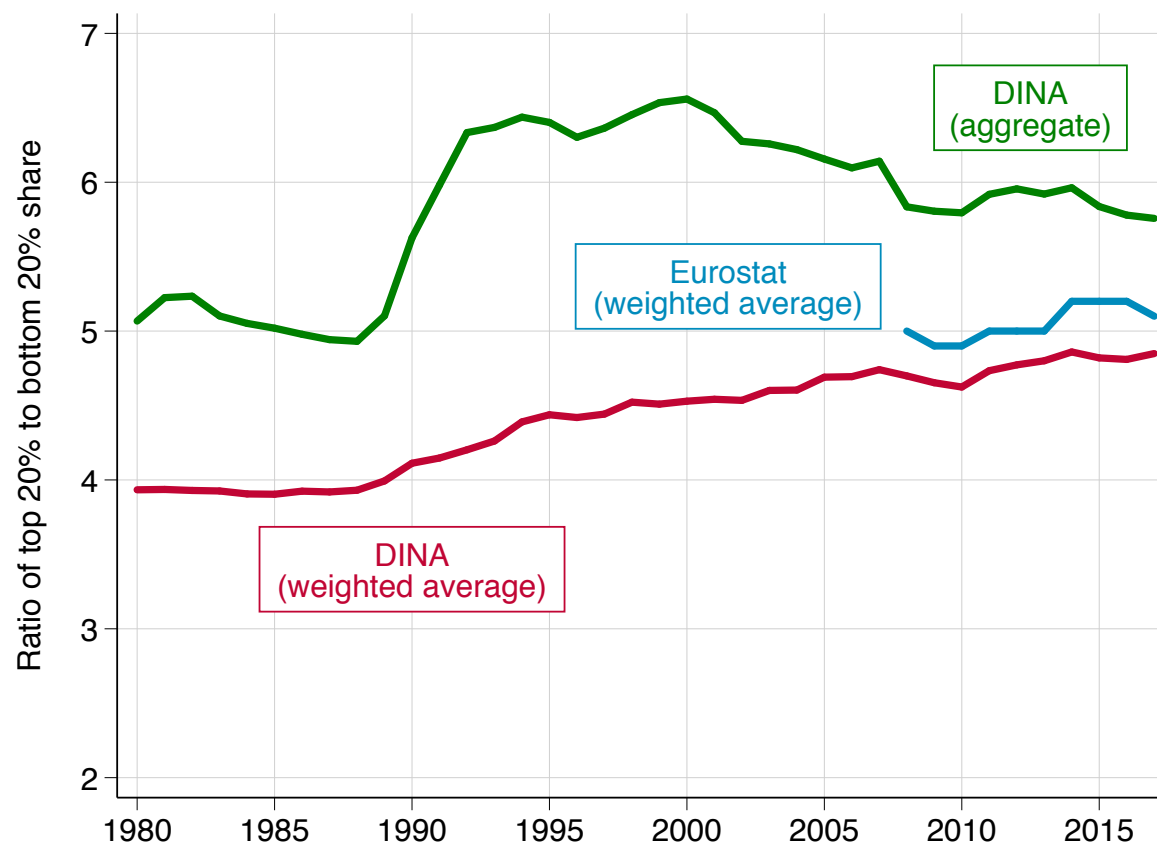
Notes. The figure plots the share of capital income in overall European income – equal to the sum of all European national incomes – between 1980 and 2015. The capital component of mixed income is assumed to be equal to one third of mixed income.

Figure A.2.2
Average post-tax income quintile share ratio in the European Union:
Eurostat vs. post-tax disposable income vs. post-tax national income



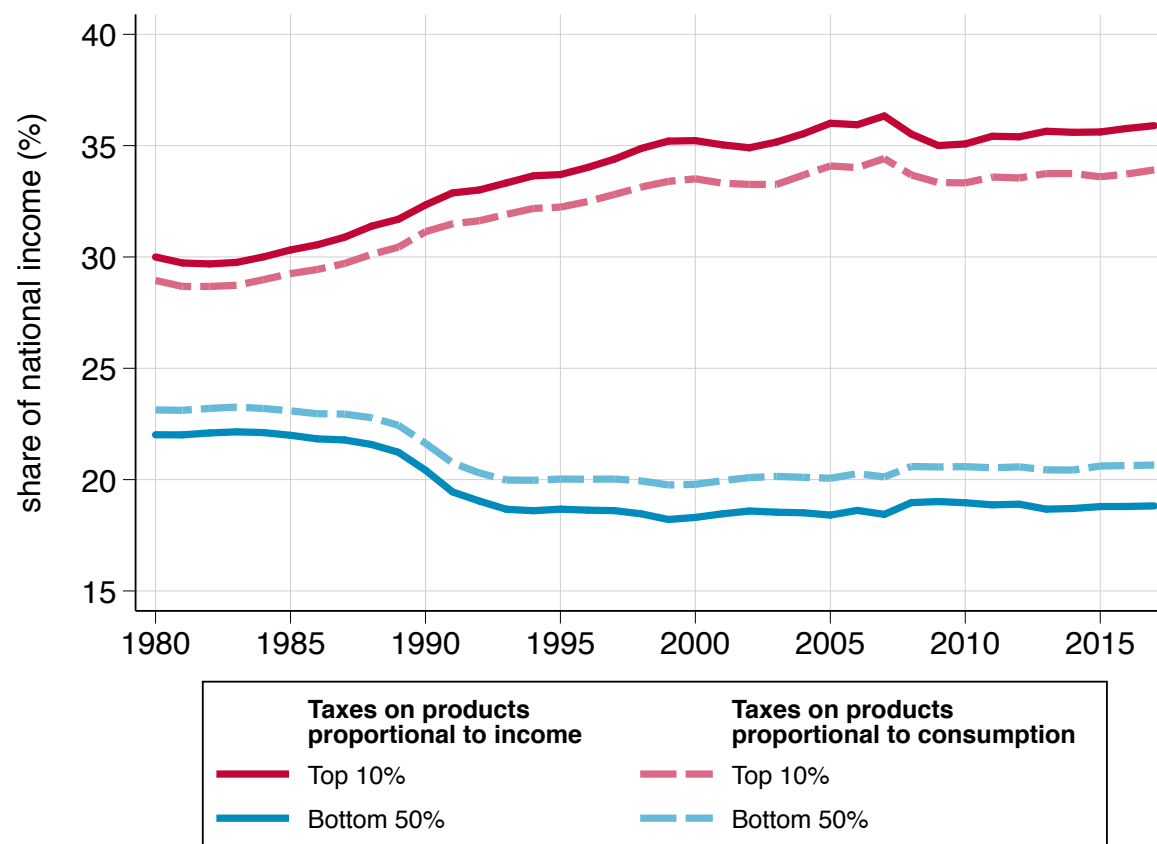
Notes. The figure compares the evolution of the average post-tax income quintile share ratio (the share of the top 20% over the share of the bottom 20%), in the European Union (28 countries) between 1980 and 2017. The figure corresponds to population-weighted averages of the indicator. Post-tax disposable income corresponds to income after taxes and transfers, but excluding collective government expenditures. Post-tax national income includes collective government expenditures (see methodology).

Figure A.2.3
Post-tax income quintile share ratio in Europe: DINA vs. Eurostat



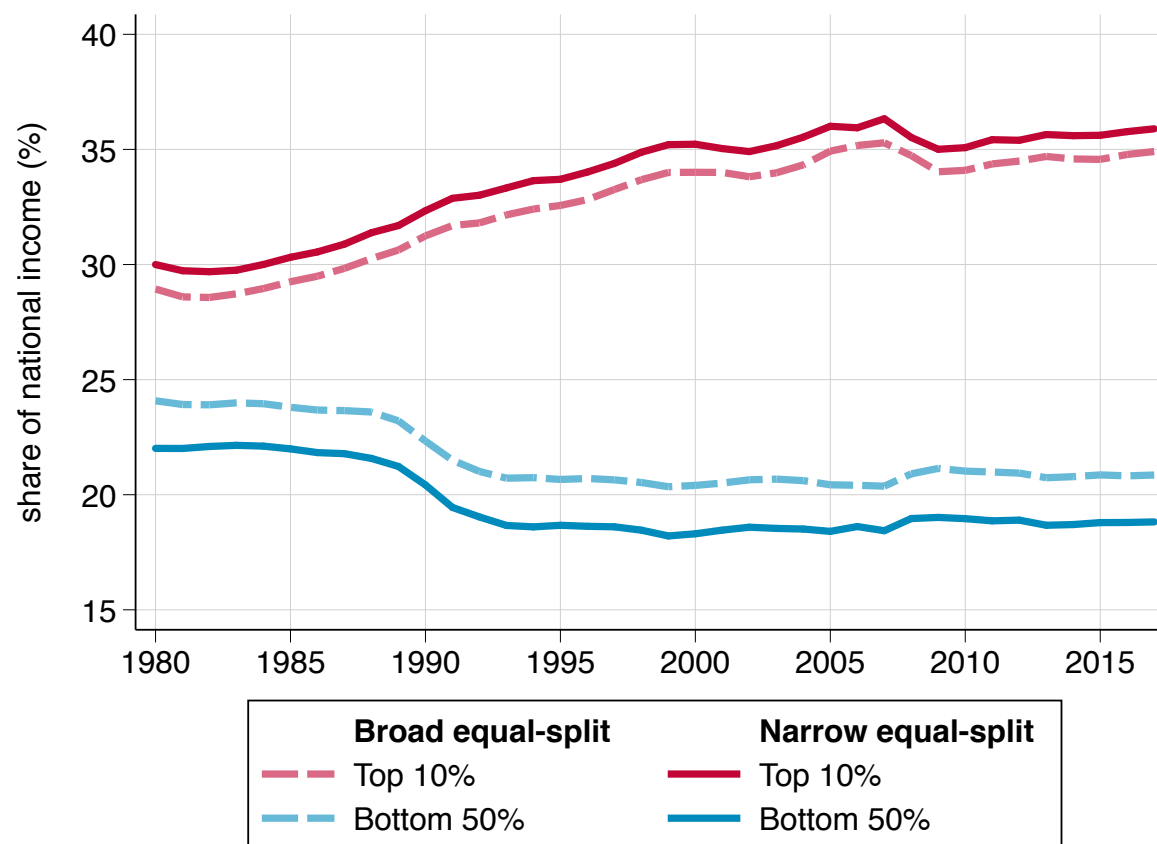
Notes. The figure plots the ratio of the top 20% post-tax income share to the bottom 20% post-tax income share in the European Union (28 countries) between 1980 and 2017. Eurostat estimates correspond to population-weighted averages of post-tax disposable income quintile share ratios. DINA estimates correspond to post-tax national income series (see methodology).

Figure A.2.4
Pre-tax income shares in Europe: distribution of taxes on products



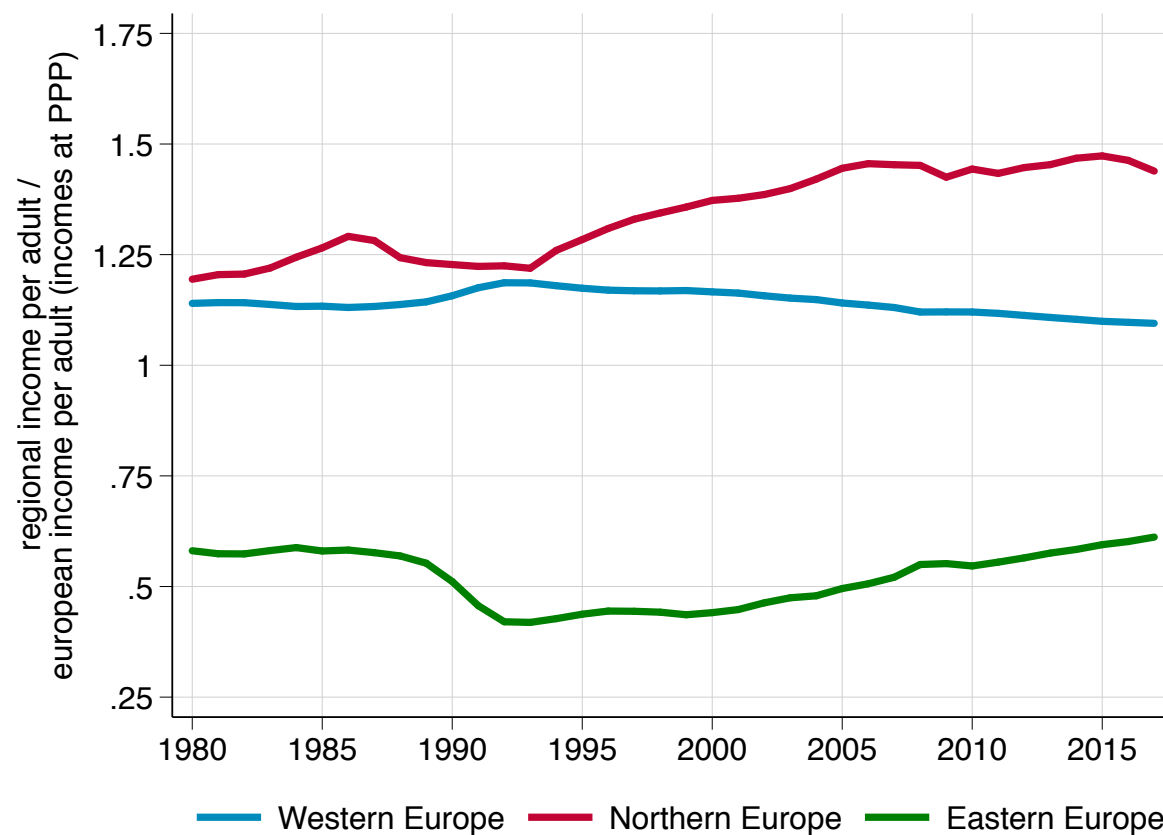
Notes. The figure compares the top 10% and bottom 50% European income shares in two scenarios: one in which taxes on products are distributed proportionally to income, and one in which they are distributed proportionally to consumption.

Figure A.2.5
Pre-tax income shares in Europe: broad equal-split vs. narrow equal-split



Notes. The figure compares the top 10% and bottom 50% European income shares in two scenarios: one in which income is split equally among all members of the household (broad equal-split), and one in which income is split equally among spouses (narrow equal-split).

Figure A.2.6
Average regional incomes per adult relative to European-wide average, 1980-2017



Notes. Western Europe includes Austria, Belgium, Cyprus, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Spain, Switzerland, and the United Kingdom. Northern Europe includes Sweden, Norway, Finland, Denmark, and Iceland. Eastern Europe includes the remaining European countries.

Figure A.2.7
Bottom 50% pre-tax income share in Europe: counterfactual decomposition

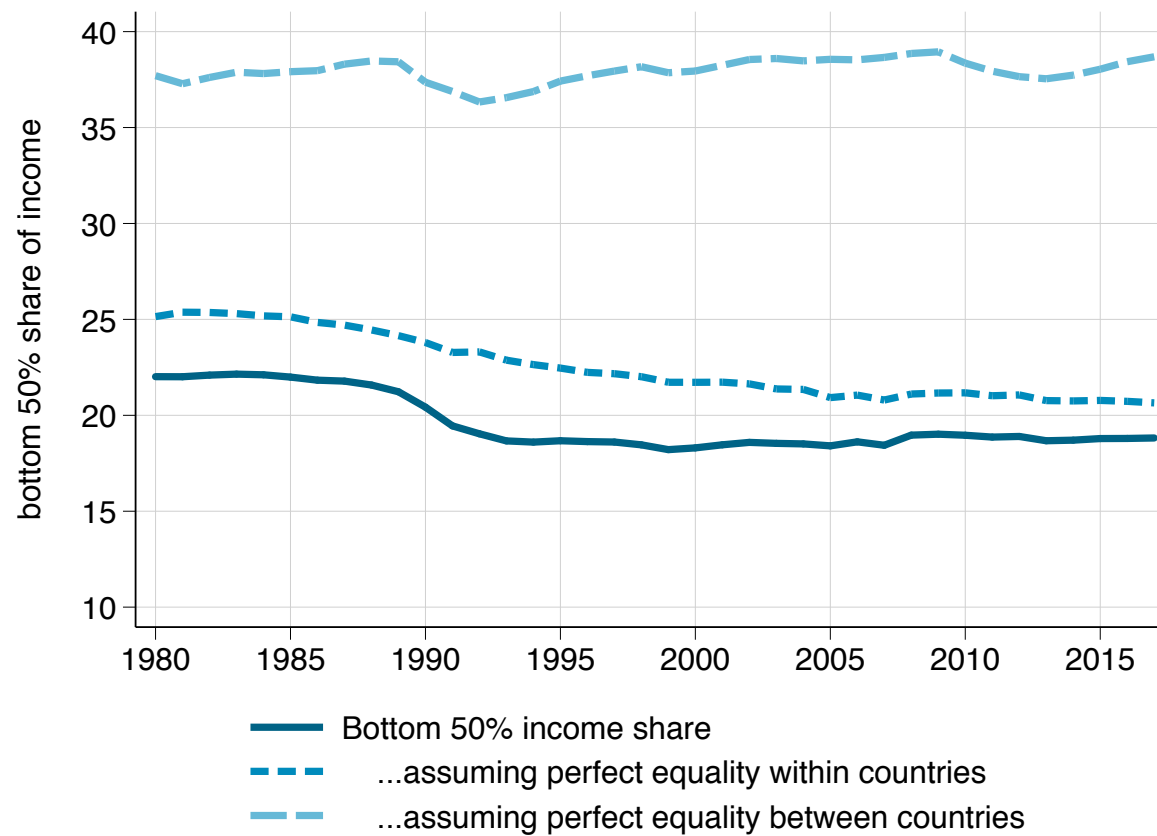


Figure A.2.8
Net redistribution in Europe and the US

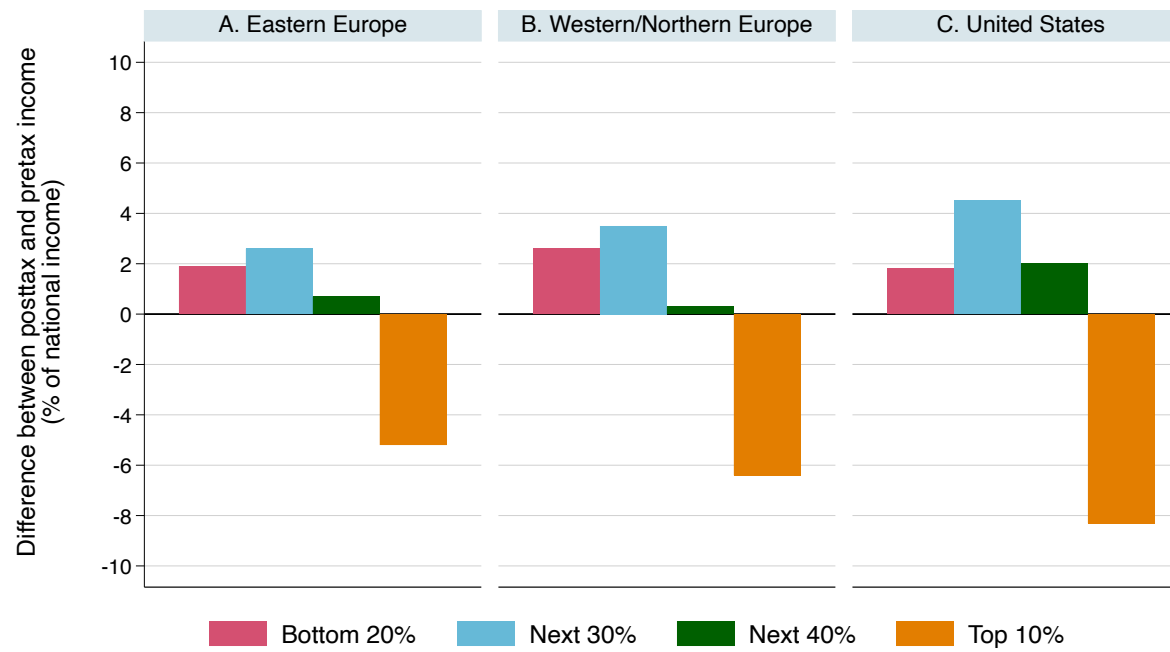


Table A.2.1
Average national incomes in Europe, 1980-2017

	Average income (2017 PPP €)					% of European average income				
	1980	1990	2000	2007	2017	1980	1990	2000	2007	2017
European regions										
Europe	21160	24120	27600	30910	32130	100	100	100	100	100
EU-15 (West)	24010	27810	31930	34950	35250	113	116	116	113	110
EU-13 (East)	12940	13230	13440	17720	21690	61	55	49	57	68
Other West	35050	40960	48610	51900	51700	165	170	177	168	161
Other East	9100	8110	6460	8700	10080	43	34	23	28	31
Eastern Europe										
Albania	6630	5720	6670	9340	11000	31	24	24	30	34
Bosnia and Herzegovina	2540	2070	7750	9110	10630	12	9	28	30	33
Bulgaria	8450	10440	8760	12500	17080	40	43	32	41	53
Croatia	18370	16190	13680	18910	19070	87	67	50	61	59
Czech Republic	17660	20280	17100	21980	24260	83	84	62	71	76
Estonia	13130	15120	14320	23010	24700	62	63	52	75	77
Hungary	14200	15070	14710	18690	20890	67	63	53	61	65
Latvia	13180	15280	8920	17350	19510	62	64	32	56	61

Table A.2.1
Average national incomes in Europe, 1980-2017

	Average income (2017 PPP €)					% of European average income				
	1980	1990	2000	2007	2017	1980	1990	2000	2007	2017
Lithuania	14760	15560	11380	20390	24620	70	65	41	66	77
Moldova	6010	6530	2350	3570	4880	28	27	9	12	15
Montenegro	19710	15160	10720	13560	15750	93	63	39	44	49
North Macedonia	11160	9630	8680	9110	11140	53	40	32	30	35
Poland	11550	10480	14630	17200	22510	55	44	53	56	70
Romania	11400	11920	10120	14830	19370	54	50	37	48	60
Serbia	12690	11520	6520	9950	11290	60	48	24	32	35
Slovakia	14180	15260	13710	20140	23980	67	63	50	65	75
Slovenia	22150	18020	19840	25170	24910	105	75	72	82	78
Southern Europe										
Cyprus	16950	26320	30890	37000	31270	80	110	112	120	98
Greece	21690	22180	24610	30110	20670	102	92	89	98	64
Italy	25280	28660	31820	32950	29450	119	119	116	107	92
Malta	14300	18310	23680	25660	33050	67	76	86	83	103
Portugal	14370	18670	22670	23070	23010	68	78	82	75	72
Spain	18770	23300	27230	29340	30230	89	97	99	95	94

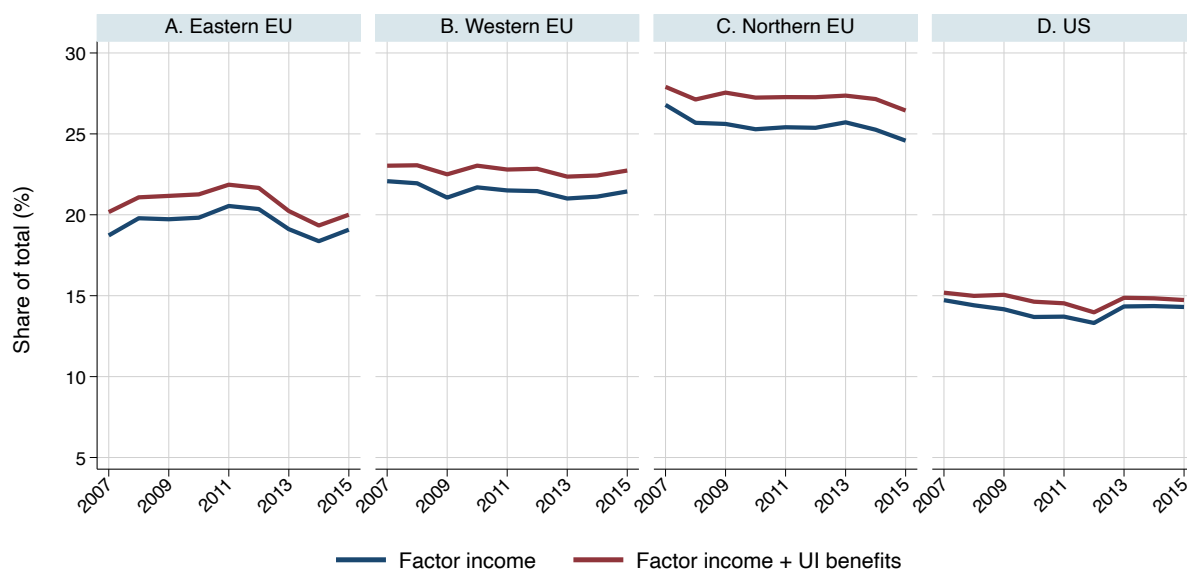
Table A.2.1
Average national incomes in Europe, 1980-2017

	Average income (2017 PPP €)					% of European average income				
	1980	1990	2000	2007	2017	1980	1990	2000	2007	2017
Western Europe										
Austria	25400	29640	34700	38960	38930	120	123	126	126	121
Belgium	24850	29130	34380	37010	37610	117	121	125	120	117
France	24690	28480	32980	34930	35130	117	118	120	113	110
Germany	26740	29820	32520	35920	39420	126	124	118	116	123
Ireland	15590	20730	37870	42740	43960	74	86	138	139	137
Luxembourg	31040	54900	75660	89090	60010	146	228	275	289	187
Netherlands	32030	31590	39890	43840	43580	151	131	145	142	136
Switzerland	36070	42640	44940	45220	45530	170	177	163	147	142
United Kingdom	21070	25850	32300	37010	37490	99	108	117	120	117
Northern Europe										
Denmark	25740	29010	36040	41430	42410	121	121	131	134	132
Finland	20970	25420	31410	37760	35240	99	106	114	122	110
Iceland	27510	30430	35330	42800	45740	130	127	128	139	143
Norway	33810	38800	55480	63880	62510	160	161	202	207	195
Sweden	23470	27670	33860	41530	45880	111	115	123	135	143

Table A.2.1
Average national incomes in Europe, 1980-2017

Average income (2017 PPP €)					% of European average income				
1980	1990	2000	2007	2017	1980	1990	2000	2007	2017

Notes. The table shows the average national income per adult of European countries in 2017 PPP euros (five first columns) and relative to the European average income per adult (five last columns). Serbia includes Kosovo.



Source: Authors' computations combining surveys, tax data and national accounts for European countries and [Piketty, Saez, and Zucman, 2018](#) for the US. *Notes:* Distribution of factor income among the working age population. The unit of observation is the adult individual aged 25-59 in European countries and 20-64 in the US. Available microdata does not allow for a detailed decomposition of factor income and UI benefits in Europe before 2007, see methodology section.

Figure A.2.9
Bottom 50% factor income share, working-age population, Europe vs. US, 2007-2017

Table A.2.2
Average state incomes in the United States, 1980-2017

	Average income (2017 PPP €)					% of US average income				
	1980	1990	2000	2007	2017	1980	1990	2000	2007	2017
Alabama	25350	29540	34630	38170	38420	80	79	73	76	73
Alaska	107310	81880	59480	79110	65000	337	218	126	157	123
Arizona	30360	32490	42450	45730	40800	95	87	90	91	77
Arkansas	23980	27480	33370	36060	37500	75	73	71	72	71
California	36080	43330	53420	57930	62130	113	115	113	115	118
Colorado	35090	38290	54530	54050	54020	110	102	116	107	103
Connecticut	33920	48350	63240	69700	63780	107	129	134	138	121
Delaware	35470	48760	73480	68090	66970	112	130	156	135	127
District of Columbia	77000	99640	127890	158180	159120	242	265	271	314	302
Florida	24890	31220	38600	42520	39420	78	83	82	84	75
Georgia	28170	36490	49120	48250	48390	89	97	104	96	92
Hawaii	37260	47850	43500	50780	53580	117	127	92	101	102
Idaho	29800	31880	40210	39910	38970	94	85	85	79	74
Illinois	33950	40370	51800	53970	57190	107	108	110	107	109
Indiana	29170	33270	44170	45140	48770	92	89	94	90	93
Iowa	31760	33540	41960	48180	54460	100	89	89	96	103

Table A.2.2
Average state incomes in the United States, 1980-2017

	Average income (2017 PPP €)					% of US average income				
	1980	1990	2000	2007	2017	1980	1990	2000	2007	2017
Kansas	31560	35090	42660	47110	49610	99	93	90	94	94
Kentucky	27540	30760	36310	38060	40520	87	82	77	76	77
Louisiana	42730	39080	39890	50930	47270	134	104	85	101	90
Maine	24390	30990	36630	37660	38990	77	83	78	75	74
Maryland	29720	38230	46920	53150	57740	93	102	100	105	110
Massachusetts	31350	42080	57510	60440	66680	99	112	122	120	127
Michigan	30720	34780	46270	42440	44820	97	93	98	84	85
Minnesota	33110	39300	50850	52480	56640	104	105	108	104	108
Mississippi	24130	26170	31030	33680	33950	76	70	66	67	64
Missouri	28210	33430	43750	42950	44390	89	89	93	85	84
Montana	30750	28210	31600	38520	40090	97	75	67	76	76
Nebraska	31190	36060	44020	49010	58230	98	96	93	97	111
Nevada	37430	41880	49310	53690	46280	118	112	105	107	88
New Hampshire	26680	35050	47310	48240	51240	84	93	100	96	97
New Jersey	31220	44160	54980	57770	58190	98	118	117	115	110
New Mexico	34090	30720	40890	43520	41890	107	82	87	86	80

Table A.2.2
Average state incomes in the United States, 1980-2017

	Average income (2017 PPP €)					% of US average income				
	1980	1990	2000	2007	2017	1980	1990	2000	2007	2017
New York	34900	44130	56180	60180	68250	110	118	119	119	130
North Carolina	26660	34260	43800	45750	46630	84	91	93	91	89
North Dakota	31830	30420	36430	45750	66070	100	81	77	91	125
Ohio	30090	34660	45100	44980	49510	95	92	96	89	94
Oklahoma	33030	30900	34670	42490	43820	104	82	74	84	83
Oregon	29830	32740	44010	47400	49260	94	87	93	94	94
Pennsylvania	27750	33120	42140	45820	51190	87	88	89	91	97
Rhode Island	26140	34330	41950	46730	48500	82	91	89	93	92
South Carolina	24330	31300	37310	37760	38440	76	83	79	75	73
South Dakota	26820	31610	40280	47300	52320	84	84	85	94	99
Tennessee	26100	31590	40700	41090	45580	82	84	86	82	87
Texas	39030	38570	47950	54480	55970	123	103	102	108	106
Utah	32040	35420	45640	52370	52740	101	94	97	104	100
Vermont	25500	34280	38590	40650	44110	80	91	82	81	84
Virginia	28900	38050	48320	52730	53190	91	101	102	105	101
Washington	33440	40420	52270	55920	60200	105	108	111	111	114

Table A.2.2
Average state incomes in the United States, 1980-2017

	Average income (2017 PPP €)					% of US average income				
	1980	1990	2000	2007	2017	1980	1990	2000	2007	2017
West Virginia	25240	25290	29340	32300	36340	79	67	62	64	69
Wisconsin	30310	34250	44180	45470	49510	95	91	94	90	94
Wyoming	61270	49350	46230	71160	62160	193	131	98	141	118

Notes. The table shows the average income per adult of US states in 2017 PPP euros (five first columns) and relative to the US average national income per adult (five last columns). *Sources.* Bureau of Economic Analysis (GDP) and Census Bureau (adult population estimates).

Table A.2.3
Summary measures of inequality in Europe and the US, before and after taxes 1980-2017

Region		Gini		Theil		Atkinson	
		<i>Pretax</i>	<i>Posttax</i>	<i>Pretax</i>	<i>Posttax</i>	<i>Pretax</i>	<i>Posttax</i>
1980	US	.452	.373	.441	.307	.332	.232
	Eastern Europe	.341	.299	.204	.155	.232	.169
	Northern Europe	.345	.27	.219	.134	.211	.134
	Western Europe	.397	.333	.309	.21	.296	.209
1981	US	.459	.384	.461	.336	.346	.248
	Eastern Europe	.344	.303	.207	.159	.233	.171
	Northern Europe	.339	.269	.21	.129	.2	.126
	Western Europe	.392	.321	.298	.188	.293	.181
1982	US	.46	.388	.468	.341	.342	.237
	Eastern Europe	.346	.306	.21	.163	.234	.173
	Northern Europe	.34	.272	.214	.134	.197	.131
	Western Europe	.39	.32	.292	.189	.272	.181
1983	US	.47	.4	.484	.358	.363	.251
	Eastern Europe	.34	.3	.205	.157	.256	.171
	Northern Europe	.34	.276	.221	.141	.203	.138
	Western Europe	.393	.321	.297	.193	.286	.18
1984	US	.48	.417	.525	.404	.368	.267
	Eastern Europe	.338	.301	.203	.161	.231	.173
	Northern Europe	.35	.279	.246	.152	.221	.138
	Western Europe	.397	.324	.305	.194	.294	.184
1985	US	.48	.415	.523	.397	.369	.267

Table A.2.3
Summary measures of inequality in Europe and the US, before and after taxes 1980-2017

Region		Gini		Theil		Atkinson	
		<i>Pretax</i>	<i>Posttax</i>	<i>Pretax</i>	<i>Posttax</i>	<i>Pretax</i>	<i>Posttax</i>
1986	Eastern Europe	.338	.299	.201	.157	.225	.172
	Northern Europe	.354	.282	.252	.156	.252	.141
	Western Europe	.399	.329	.311	.203	.29	.189
	US	.482	.412	.515	.372	.378	.264
1987	Eastern Europe	.338	.298	.203	.156	.235	.172
	Northern Europe	.338	.271	.217	.135	.198	.128
	Western Europe	.405	.337	.326	.217	.304	.228
	US	.492	.417	.554	.403	.388	.271
1988	Eastern Europe	.336	.296	.2	.153	.234	.171
	Northern Europe	.346	.273	.228	.138	.23	.123
	Western Europe	.406	.336	.33	.213	.303	.208
	US	.502	.43	.619	.461	.398	.285
1989	Eastern Europe	.334	.294	.198	.152	.229	.171
	Northern Europe	.338	.267	.218	.137	.195	.124
	Western Europe	.411	.339	.344	.221	.311	.207
	US	.501	.425	.599	.441	.397	.278
1990	Eastern Europe	.344	.309	.211	.168	.219	.184
	Northern Europe	.332	.267	.211	.134	.189	.124
	Western Europe	.412	.34	.345	.227	.314	.21
	US	.502	.424	.603	.44	.402	.278
	Eastern Europe	.37	.329	.248	.191	.279	.201

Table A.2.3
Summary measures of inequality in Europe and the US, before and after taxes 1980-2017

Region		Gini		Theil		Atkinson	
		<i>Pretax</i>	<i>Posttax</i>	<i>Pretax</i>	<i>Posttax</i>	<i>Pretax</i>	<i>Posttax</i>
1991	Northern Europe	.328	.261	.198	.127	.188	.147
	Western Europe	.417	.343	.348	.225	.304	.221
	US	.503	.423	.588	.425	.416	.277
	Eastern Europe	.378	.337	.268	.207	.258	.212
	Northern Europe	.333	.259	.205	.12	.192	.107
1992	Western Europe	.418	.333	.346	.211	.316	.19
	US	.512	.432	.631	.459	.412	.287
	Eastern Europe	.394	.352	.3	.229	.281	.23
	Northern Europe	.337	.273	.213	.136	.196	.121
	Western Europe	.414	.335	.332	.215	.309	.204
1993	US	.511	.427	.621	.44	.411	.282
	Eastern Europe	.413	.369	.334	.25	.313	.257
	Northern Europe	.348	.288	.234	.158	.203	.145
	Western Europe	.418	.344	.339	.225	.317	.212
	US	.513	.428	.624	.438	.41	.283
1994	Eastern Europe	.429	.384	.373	.28	.337	.266
	Northern Europe	.372	.306	.285	.19	.234	.158
	Western Europe	.419	.341	.343	.22	.323	.206
	US	.521	.435	.652	.456	.419	.291
	Eastern Europe	.438	.393	.398	.3	.371	.282
1995	Northern Europe	.378	.305	.301	.198	.238	.15

Table A.2.3
Summary measures of inequality in Europe and the US, before and after taxes 1980-2017

Region		Gini		Theil		Atkinson	
		<i>Pretax</i>	<i>Posttax</i>	<i>Pretax</i>	<i>Posttax</i>	<i>Pretax</i>	<i>Posttax</i>
1996	Western Europe	.419	.34	.344	.219	.315	.205
	US	.534	.441	.696	.475	.457	.296
	Eastern Europe	.429	.389	.369	.29	.329	.272
	Northern Europe	.376	.312	.302	.203	.232	.161
1997	Western Europe	.424	.345	.36	.228	.314	.21
	US	.54	.446	.725	.498	.456	.303
	Eastern Europe	.434	.383	.385	.286	.338	.256
	Northern Europe	.394	.32	.342	.232	.263	.169
1998	Western Europe	.428	.347	.377	.237	.32	.219
	US	.541	.448	.734	.5	.456	.306
	Eastern Europe	.44	.388	.402	.299	.355	.262
	Northern Europe	.387	.313	.325	.211	.251	.157
1999	Western Europe	.431	.347	.387	.24	.322	.212
	US	.547	.452	.77	.525	.456	.313
	Eastern Europe	.439	.394	.4	.309	.351	.278
	Northern Europe	.394	.317	.352	.228	.264	.165
2000	Western Europe	.437	.353	.393	.249	.33	.218
	US	.551	.456	.797	.542	.466	.32
	Eastern Europe	.442	.398	.4	.313	.358	.283
	Northern Europe	.394	.307	.363	.215	.264	.154
	Western Europe	.436	.345	.392	.235	.323	.201

Table A.2.3
Summary measures of inequality in Europe and the US, before and after taxes 1980-2017

		Gini		Theil		Atkinson	
		<i>Pretax</i>	<i>Posttax</i>	<i>Pretax</i>	<i>Posttax</i>	<i>Pretax</i>	<i>Posttax</i>
2001	US	.542	.453	.752	.53	.456	.316
	Eastern Europe	.442	.395	.401	.307	.362	.281
	Northern Europe	.377	.304	.312	.205	.231	.153
	Western Europe	.433	.35	.387	.245	.325	.221
2002	US	.543	.457	.745	.54	.465	.322
	Eastern Europe	.449	.398	.421	.313	.367	.289
	Northern Europe	.382	.304	.327	.211	.252	.152
	Western Europe	.433	.346	.383	.236	.319	.209
2003	US	.542	.461	.749	.552	.444	.329
	Eastern Europe	.449	.41	.416	.327	.355	.294
	Northern Europe	.379	.299	.328	.222	.239	.151
	Western Europe	.434	.348	.388	.244	.328	.208
2004	US	.551	.466	.8	.581	.456	.334
	Eastern Europe	.462	.41	.456	.337	.393	.295
	Northern Europe	.396	.308	.371	.255	.295	.16
	Western Europe	.436	.35	.4	.249	.324	.21
2005	US	.56	.469	.853	.604	.467	.335
	Eastern Europe	.47	.416	.478	.347	.408	.299
	Northern Europe	.412	.329	.433	.346	.286	.187
	Western Europe	.445	.357	.423	.268	.334	.221
2006	US	.569	.475	.888	.625	.482	.344

Table A.2.3
Summary measures of inequality in Europe and the US, before and after taxes 1980-2017

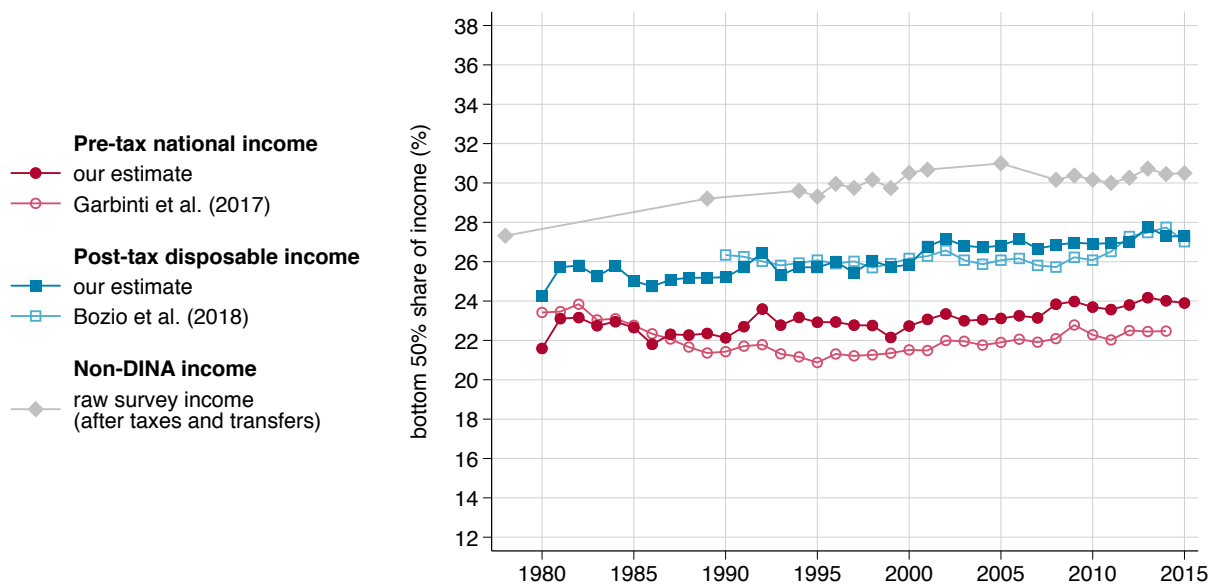
Region		Gini		Theil		Atkinson	
		<i>Pretax</i>	<i>Posttax</i>	<i>Pretax</i>	<i>Posttax</i>	<i>Pretax</i>	<i>Posttax</i>
2007	Eastern Europe	.48	.417	.499	.357	.446	.298
	Northern Europe	.402	.313	.387	.228	.263	.164
	Western Europe	.443	.352	.429	.255	.334	.211
	US	.57	.469	.891	.606	.482	.332
2008	Eastern Europe	.484	.421	.522	.374	.448	.3
	Northern Europe	.399	.312	.377	.227	.264	.163
	Western Europe	.447	.355	.439	.267	.345	.218
	US	.563	.463	.871	.608	.473	.332
2009	Eastern Europe	.476	.418	.508	.371	.423	.293
	Northern Europe	.4	.313	.37	.219	.271	.167
	Western Europe	.44	.351	.418	.259	.34	.218
	US	.554	.469	.835	.621	.456	.347
2010	Eastern Europe	.471	.416	.482	.363	.42	.294
	Northern Europe	.39	.302	.32	.181	.273	.15
	Western Europe	.439	.347	.405	.243	.348	.205
	US	.567	.473	.902	.658	.469	.35
2011	Eastern Europe	.465	.41	.459	.343	.412	.287
	Northern Europe	.404	.316	.359	.209	.289	.164
	Western Europe	.44	.351	.407	.25	.352	.209
	US	.571	.477	.886	.646	.481	.356
	Eastern Europe	.465	.412	.463	.34	.418	.291

Table A.2.3
Summary measures of inequality in Europe and the US, before and after taxes 1980-2017

Region		Gini		Theil		Atkinson	
		<i>Pretax</i>	<i>Posttax</i>	<i>Pretax</i>	<i>Posttax</i>	<i>Pretax</i>	<i>Posttax</i>
2012	Northern Europe	.4	.309	.347	.195	.28	.157
	Western Europe	.445	.349	.419	.251	.362	.206
	US	.581	.489	.946	.689	.494	.369
	Eastern Europe	.47	.417	.477	.351	.424	.295
	Northern Europe	.399	.305	.345	.188	.28	.153
2013	Western Europe	.444	.353	.412	.252	.36	.214
	US	.573	.479	.888	.628	.477	.356
	Eastern Europe	.468	.409	.473	.344	.422	.282
	Northern Europe	.407	.306	.356	.196	.338	.155
	Western Europe	.451	.36	.421	.267	.383	.224
2014	US	.579	.482	.918	.64	.49	.359
	Eastern Europe	.474	.422	.501	.379	.423	.301
	Northern Europe	.41	.312	.361	.199	.343	.159
	Western Europe	.449	.36	.419	.268	.379	.228
	US	.596	.5	.942	.655	.517	.388
2015	Eastern Europe	.476	.419	.509	.37	.425	.298
	Northern Europe	.413	.312	.358	.2	.336	.159
	Western Europe	.449	.358	.422	.266	.372	.224
	US	.594	.501	.933	.661	.523	.397
	Eastern Europe	.475	.408	.505	.351	.424	.282
2016	Northern Europe	.407	.308	.345	.191	.33	.155

Table A.2.3
Summary measures of inequality in Europe and the US, before and after taxes 1980-2017

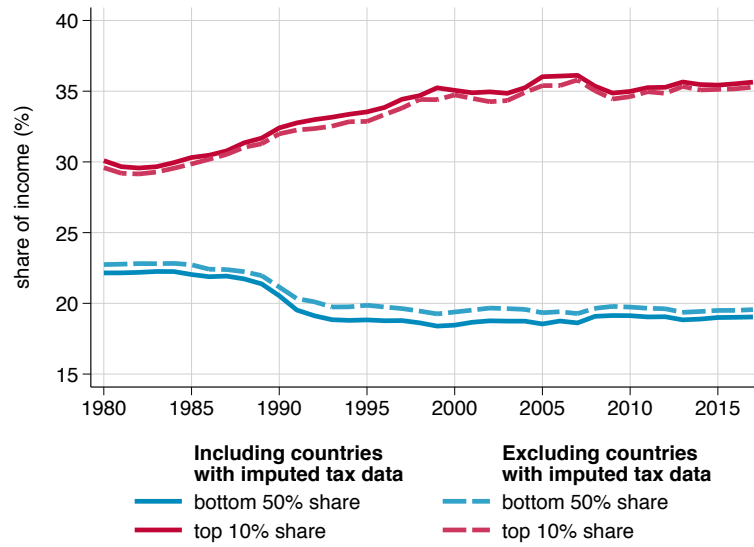
		Gini		Theil		Atkinson	
		<i>Pretax</i>	<i>Posttax</i>	<i>Pretax</i>	<i>Posttax</i>	<i>Pretax</i>	<i>Posttax</i>
2017	Western Europe	.451	.359	.43	.271	.374	.226
	US	.593	.499	.963	.66	.523	.408
	Eastern Europe	.477	.409	.51	.356	.427	.283
	Northern Europe	.408	.306	.35	.19	.33	.154
	Western Europe	.453	.361	.437	.275	.375	.228



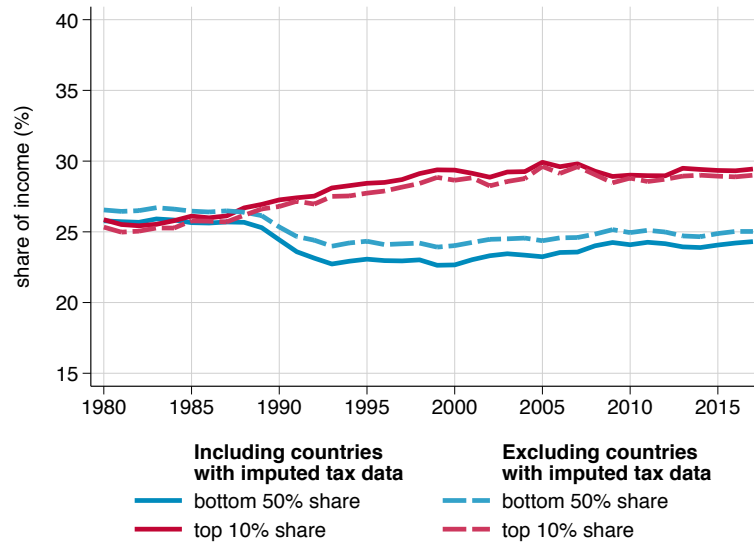
Source: Authors' computations combining surveys, tax data and national accounts. *Note:* The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses, except for the "raw survey income" series in the bottom panel for which income is split equally among all adult household members.

Figure A.2.10
Comparison of our Results with Other DINA Studies in France: Bottom 50% Share

(a) Pretax Income Inequality in All 38 European Countries, 1980–2017



(b) Post-tax Income Inequality in All 38 European Countries, 1980–2017



Source: Authors' computations combining surveys, tax data and national accounts. *Note:* Incomes measured at purchasing power parity. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.2.11
Robustness Check: Exclusion of Countries with Imputed Nonresponse instead of Tax Data

3 Results by country

3.1 Albania

3.1.1 Albania: data sources and methodological steps

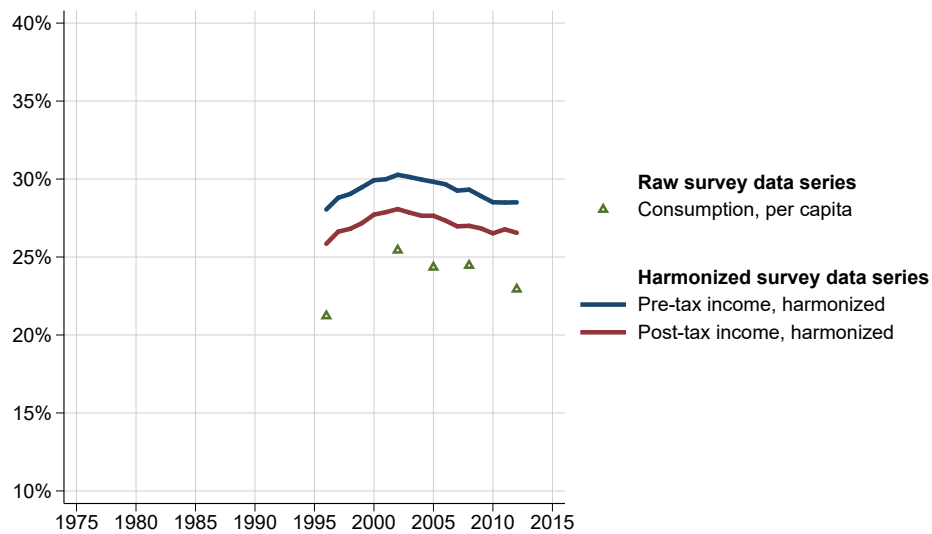
Table A.3.1
Albania: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980									
1981									
1982									
1983									
1984									
1985									
1986									
1987									
1988									
1989									
1990									
1991									
1992									
1993									
1994									
1995									
1996	x								
1997									
1998									
1999									
2000									
2001									
2002	x								
2003									
2004									
2005	x								
2006									
2007									
2008	x								
2009									
2010									
2011									
2012	x								
2013									
2014									
2015									
2016									
2017									

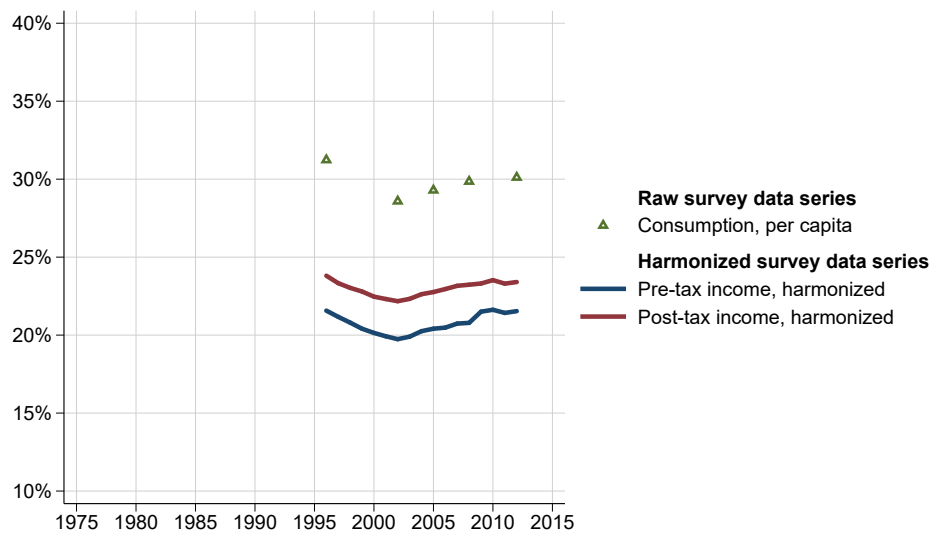
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.1
Albania: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



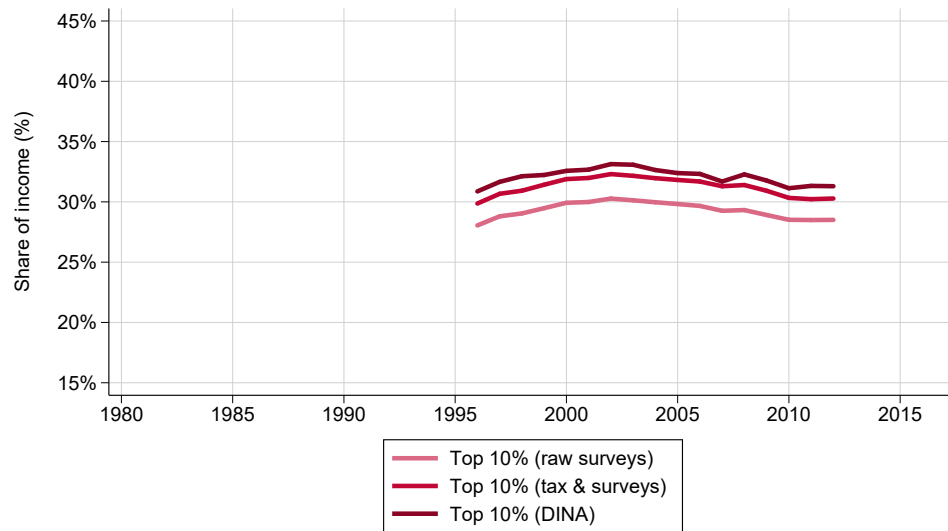
(b) Bottom 50% pre-tax income share



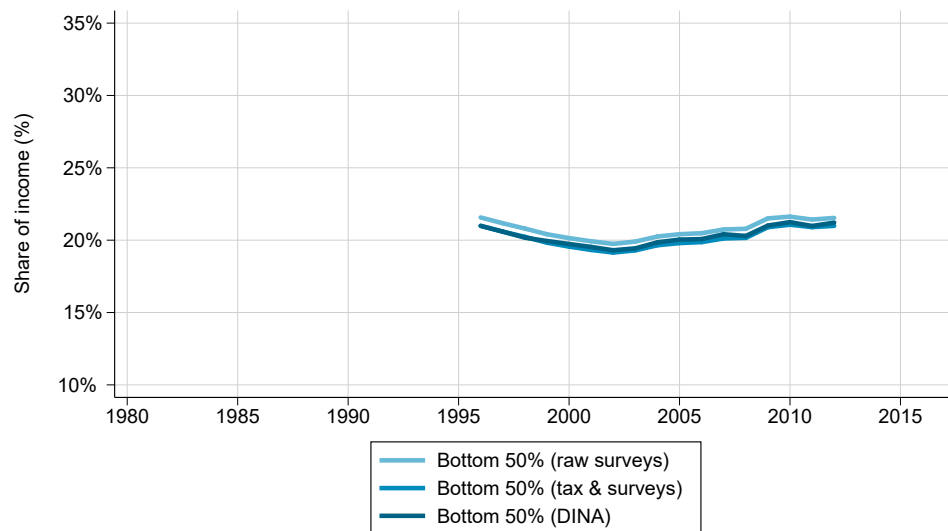
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.2
Albania: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



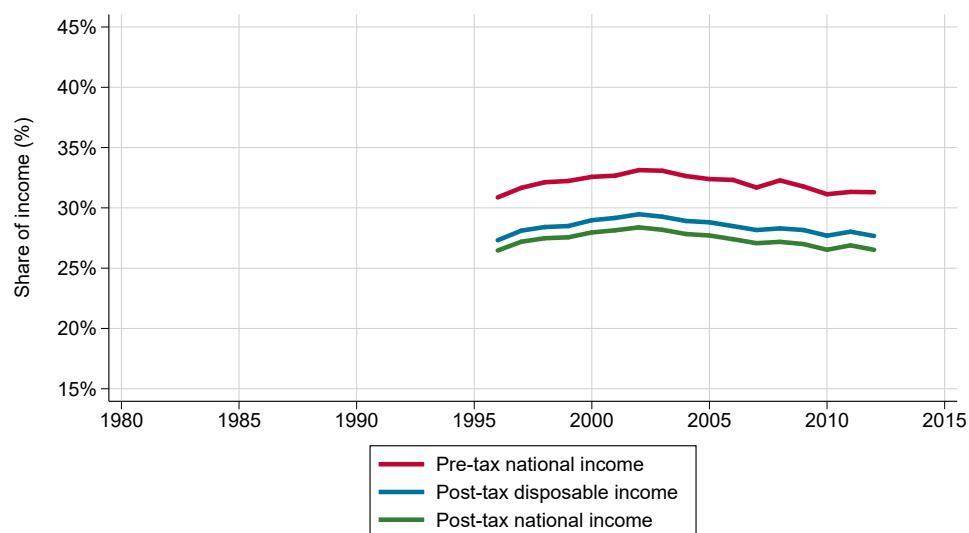
(b) Bottom 50% pre-tax income share



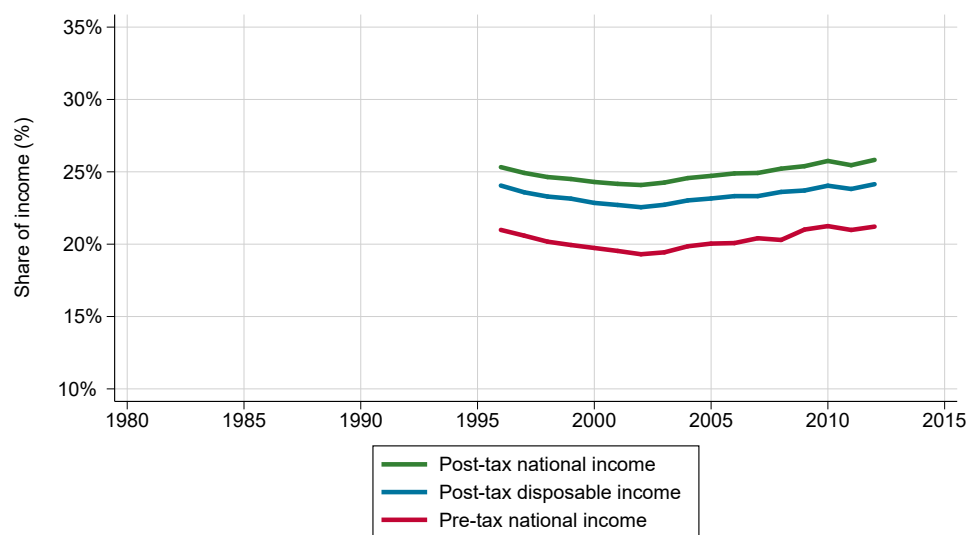
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.3
Albania: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.1.2 Albania: main results

Table A.3.2
The distribution of the national income in Albania, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€11,000	100%	€11,000	100%	€11,000	100%
Bottom 50%	€4,600	20.9%	€5,300	24.0%	€5,600	25.6%
Bottom 20%	€2,000	3.7%	€2,700	4.8%	€3,200	5.8%
Next 30%	€6,300	17.3%	€7,000	19.2%	€7,300	19.8%
Middle 40%	€13,000	47.1%	€13,200	47.9%	€13,000	47.4%
Top 10%	€35,200	32.0%	€30,900	28.1%	€29,700	27.0%
Top 1%	€90,300	8.2%	€70,700	6.4%	€66,600	6.1%
Top 0.1%	€232,000	2.1%	€162,000	1.5%	€149,000	1.4%
Top 0.01%	€595,000	0.5%	€370,000	0.3%	€335,000	0.3%
Top 0.001%	€1,530,000	0.1%	€846,000	0.1%	€753,000	0.1%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.3
The distribution of national income growth in Albania, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.4%	1.6%	1.4%	1.6%	1.4%	1.6%
Bottom 50%	1.3%	1.9%	1.4%	2.0%	1.4%	1.9%
Bottom 20%	1.7%	2.1%	1.8%	2.5%	1.9%	2.4%
Next 30%	1.2%	1.9%	1.3%	1.8%	1.3%	1.8%
Middle 40%	1.3%	1.5%	1.3%	1.5%	1.3%	1.5%
Top 10%	1.6%	1.7%	1.5%	1.6%	1.4%	1.6%
Top 1%	1.9%	1.9%	1.7%	1.6%	1.7%	1.6%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.2 Austria

3.2.1 Austria: data sources and methodological steps

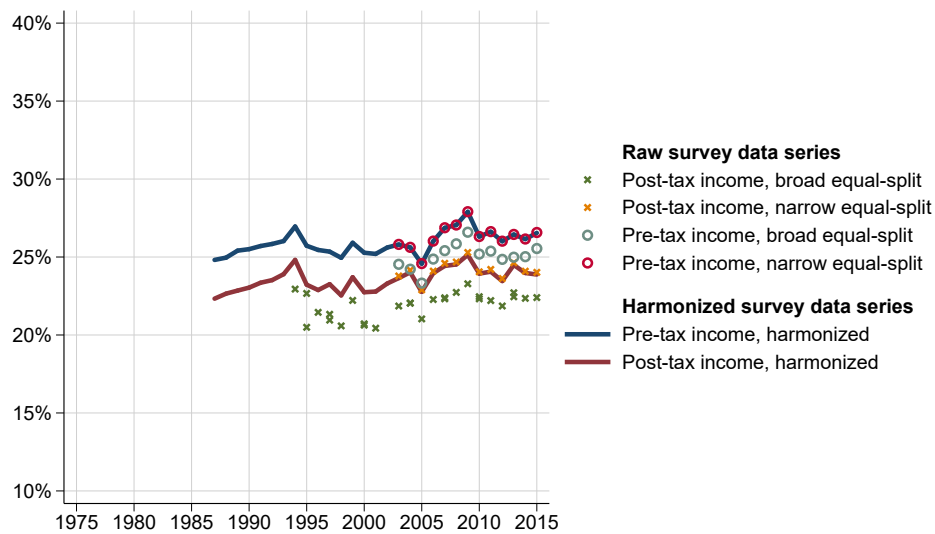
Table A.3.4
Austria: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980									
1981									
1982			x						
1983									
1984									
1985									
1986									
1987	x	x							
1988									
1989									
1990									
1991									
1992									
1993									
1994	x	x	x						
1995	x	x		x	x	x	x	x	
1996	x	x	x	x	x	x	x	x	
1997	x	x		x	x	x	x	x	
1998	x	x	x	x	x	x	x	x	
1999	x	x	x	x	x	x	x	x	
2000	x	x	x	x	x	x	x	x	
2001	x	x	x	x	x	x	x	x	
2002			x	x	x	x	x	x	
2003	x	x	x	x	x	x	x	x	
2004	x	x	x	x	x	x	x	x	x
2005	x	x	x	x	x	x	x	x	x
2006	x	x	x	x	x	x	x	x	x
2007	x	x		x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x	x	x	x	x	x	x	x
2012	x	x	x	x	x	x	x	x	x
2013	x	x	x	x	x	x	x	x	x
2014	x	x	x	x	x	x	x	x	x
2015	x	x	x	x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

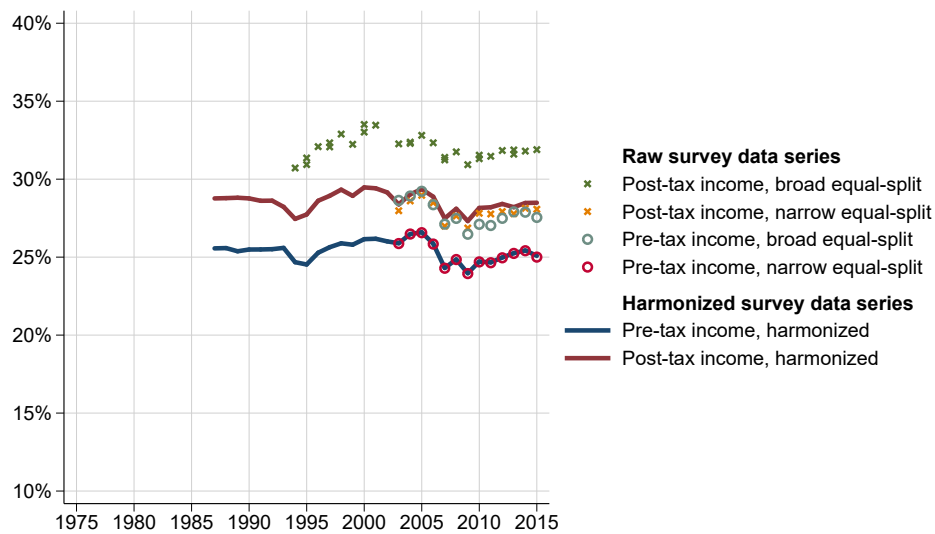
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.4
Austria: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



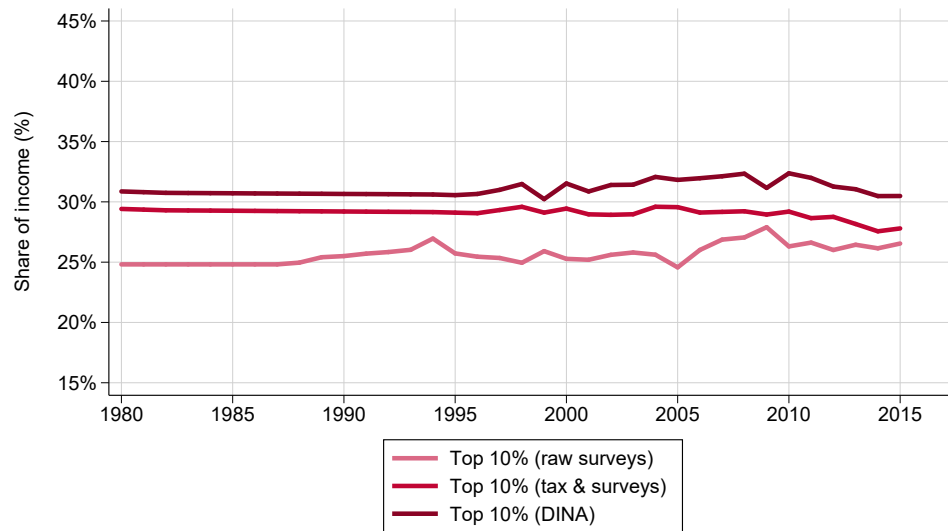
(b) Bottom 50% pre-tax income share



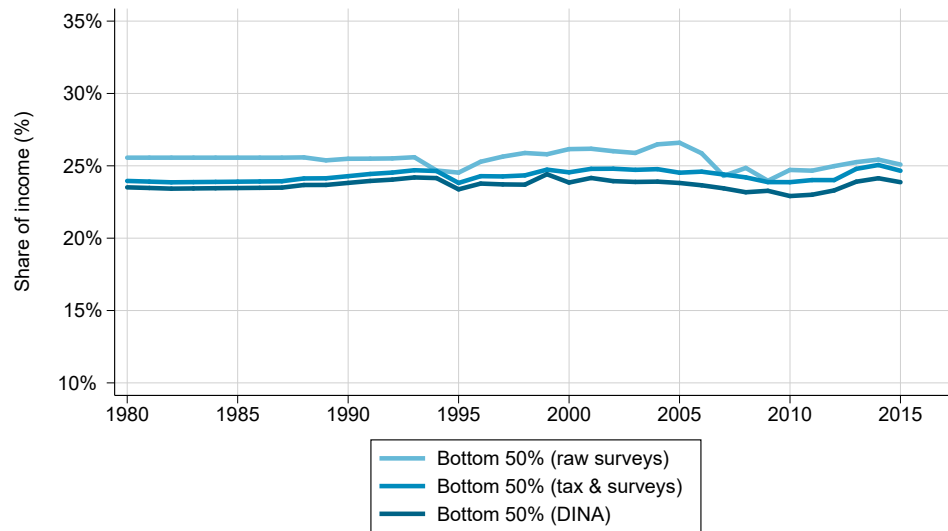
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.5
Austria: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



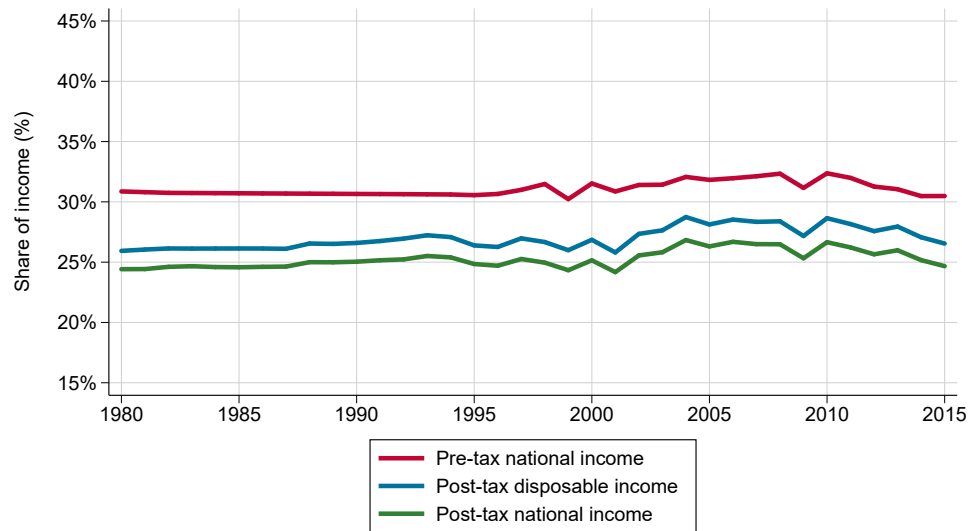
(b) Bottom 50% pre-tax income share



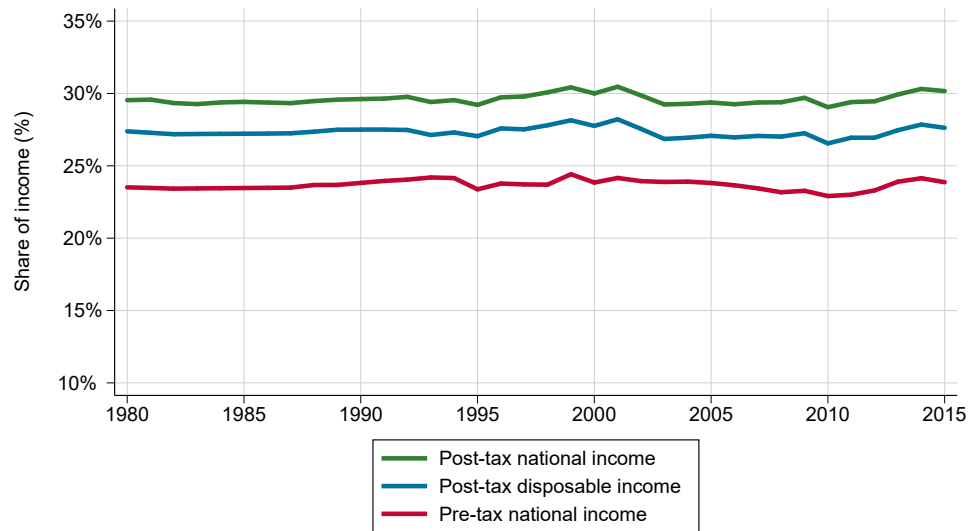
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.6
Austria: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.2.2 Austria: main results

Table A.3.5
The distribution of the national income in Austria, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€38,900	100%	€38,900	100%	€38,900	100%
Bottom 50%	€18,200	23.4%	€21,100	27.1%	€23,100	29.7%
Bottom 20%	€9,500	4.9%	€11,900	6.1%	€14,900	7.7%
Next 30%	€24,100	18.5%	€27,300	21.0%	€28,600	22.0%
Middle 40%	€43,700	44.9%	€43,900	45.2%	€43,400	44.6%
Top 10%	€123,000	31.7%	€108,000	27.7%	€100,000	25.7%
Top 1%	€361,000	9.3%	€290,000	7.5%	€258,000	6.6%
Top 0.1%	€1,060,000	2.7%	€780,000	2.0%	€663,000	1.7%
Top 0.01%	€3,090,000	0.8%	€2,100,000	0.5%	€1,710,000	0.4%
Top 0.001%	€9,060,000	0.2%	€5,640,000	0.1%	€4,400,000	0.1%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.6
The distribution of national income growth in Austria, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.2%	0.0%	1.2%	0.0%	1.2%	0.0%
Bottom 50%	1.2%	0.0%	1.1%	0.0%	1.2%	0.1%
Bottom 20%	1.2%	-0.4%	1.3%	-0.5%	1.3%	-0.1%
Next 30%	1.1%	0.1%	1.1%	0.2%	1.1%	0.2%
Middle 40%	1.1%	0.1%	1.1%	0.1%	1.1%	0.1%
Top 10%	1.2%	-0.2%	1.3%	-0.2%	1.3%	-0.3%
Top 1%	1.2%	-0.3%	1.6%	-0.3%	1.5%	-0.5%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.3 Belgium

3.3.1 Belgium: data sources and methodological steps

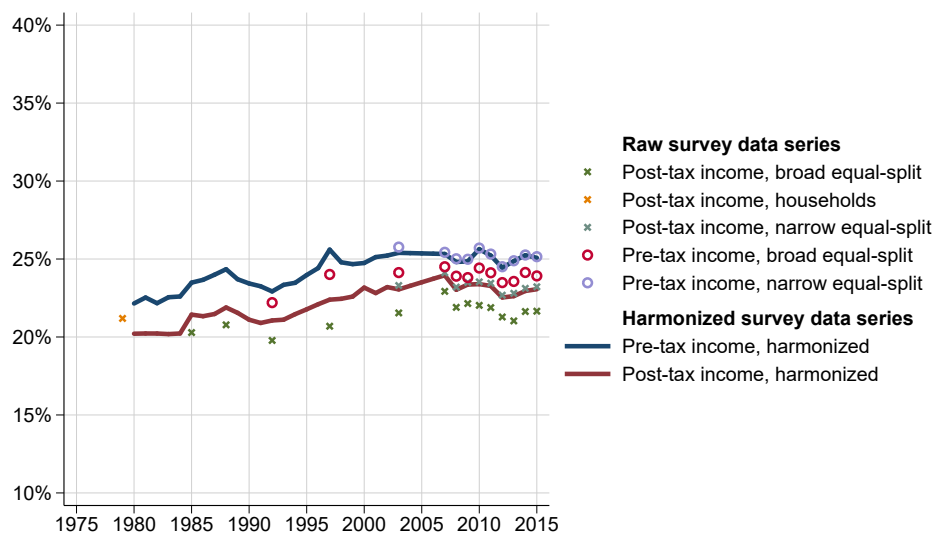
Table A.3.7
Belgium: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1979	x								
1980									
1981									
1982									
1983									
1984									
1985	x	x		x		x	x	x	
1986				x		x	x	x	
1987				x		x	x	x	
1988	x	x		x		x	x	x	
1989				x		x	x	x	
1990			x	x		x	x	x	
1991			x	x		x	x	x	
1992	x	x	x	x		x	x	x	
1993			x	x		x	x	x	
1994			x	x	x	x	x	x	
1995			x	x	x	x	x	x	
1996			x	x	x	x	x	x	
1997	x	x	x	x	x	x	x	x	
1998			x	x	x	x	x	x	
1999			x	x	x	x	x	x	
2000			x	x	x	x	x	x	
2001			x	x	x	x	x	x	
2002			x	x	x	x	x	x	
2003	x	x	x	x	x	x	x	x	x
2004			x	x	x	x	x	x	x
2005			x	x	x	x	x	x	x
2006			x	x	x	x	x	x	x
2007	x	x	x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x	x	x	x	x	x	x	x
2012	x	x	x	x	x	x	x	x	x
2013	x	x	x	x	x	x	x	x	x
2014	x	x		x	x	x	x	x	x
2015	x	x		x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

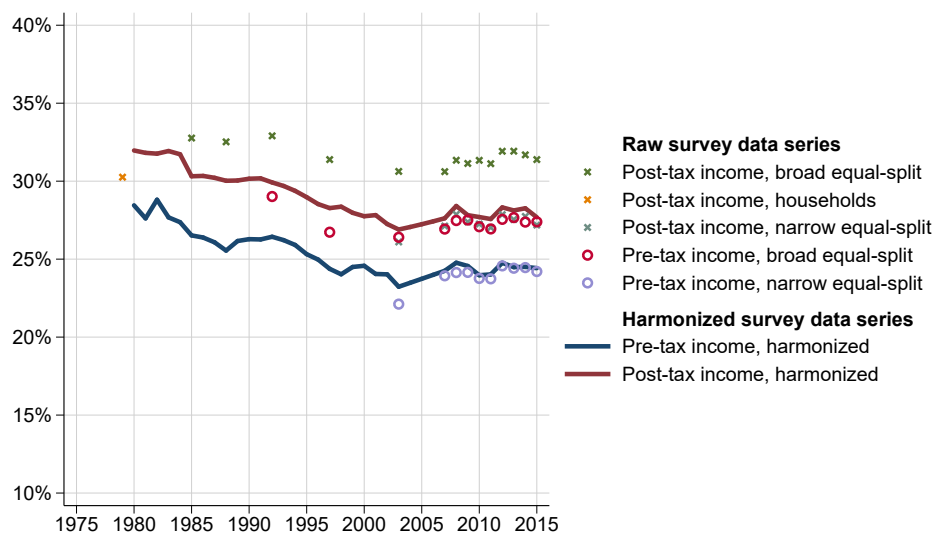
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.7
Belgium: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



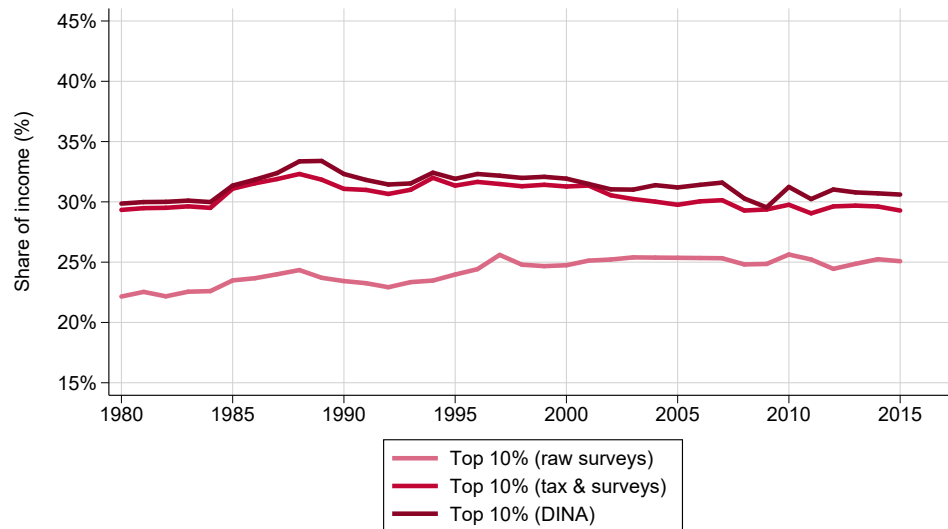
(b) Bottom 50% pre-tax income share



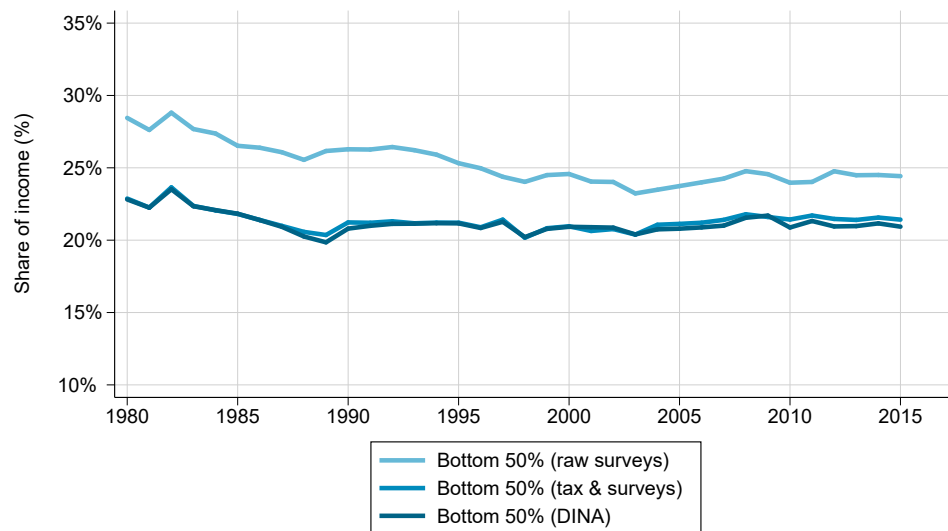
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.8
Belgium: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



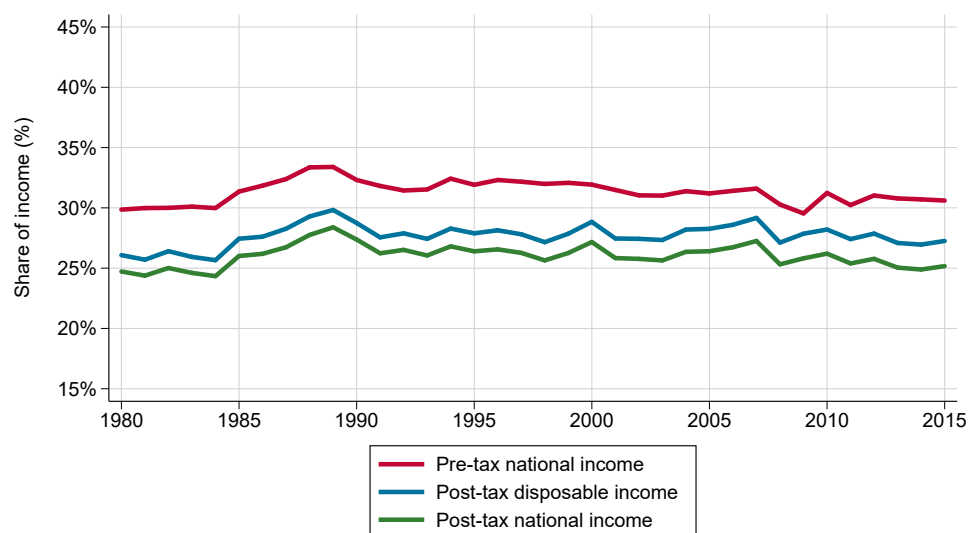
(b) Bottom 50% pre-tax income share



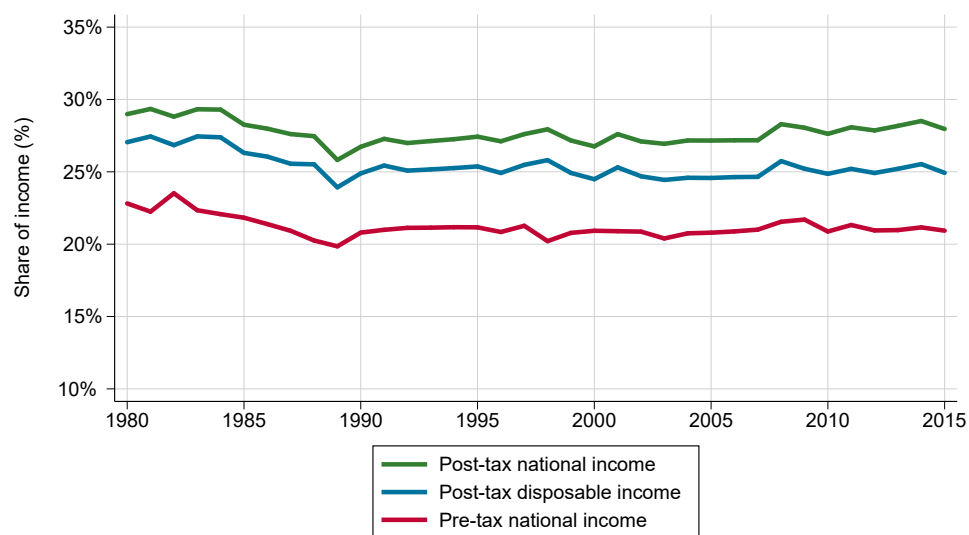
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.9
Belgium: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.3.2 Belgium: main results

Table A.3.8
The distribution of the national income in Belgium, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€37,600	100%	€37,600	100%	€37,600	100%
Bottom 50%	€15,500	20.6%	€18,500	24.6%	€20,800	27.6%
Bottom 20%	€6,100	3.3%	€9,100	4.9%	€12,500	6.7%
Next 30%	€21,700	17.3%	€24,700	19.7%	€26,300	20.9%
Middle 40%	€45,100	48.0%	€44,700	47.5%	€43,800	46.6%
Top 10%	€118,000	31.4%	€105,000	27.9%	€97,000	25.8%
Top 1%	€292,000	7.8%	€241,000	6.4%	€214,000	5.7%
Top 0.1%	€724,000	1.9%	€554,000	1.5%	€474,000	1.3%
Top 0.01%	€1,790,000	0.5%	€1,270,000	0.3%	€1,050,000	0.3%
Top 0.001%	€4,440,000	0.1%	€2,920,000	0.1%	€2,310,000	0.1%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.9
The distribution of national income growth in Belgium, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.1%	0.2%	1.1%	0.2%	1.1%	0.2%
Bottom 50%	0.8%	0.0%	0.9%	0.1%	1.0%	0.3%
Bottom 20%	0.8%	-2.4%	1.0%	-0.8%	1.3%	-0.1%
Next 30%	0.9%	0.5%	0.8%	0.4%	0.9%	0.4%
Middle 40%	1.2%	0.3%	1.2%	0.4%	1.1%	0.4%
Top 10%	1.3%	0.1%	1.3%	-0.3%	1.2%	-0.4%
Top 1%	1.4%	-0.2%	1.5%	-1.4%	1.4%	-1.5%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.4 Bosnia and Herzegovina

3.4.1 Bosnia and Herzegovina: data sources and methodological steps

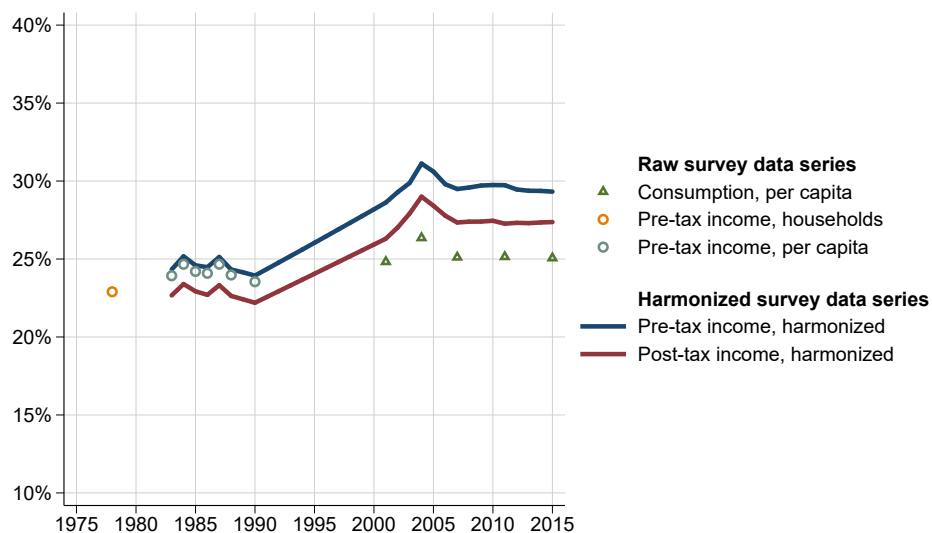
Table A.3.10
Bosnia and Herzegovina: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1978	x								
1980									
1981									
1982									
1983	x								
1984	x								
1985	x								
1986	x								
1987	x								
1988	x								
1989									
1990	x								
1991									
1992									
1993									
1994									
1995									
1996									
1997									
1998									
1999									
2000									
2001	x								
2002									
2003									
2004	x								
2005									
2006									
2007	x								
2008									
2009									
2010									
2011	x								
2012									
2013									
2014									
2015	x								
2016									
2017									

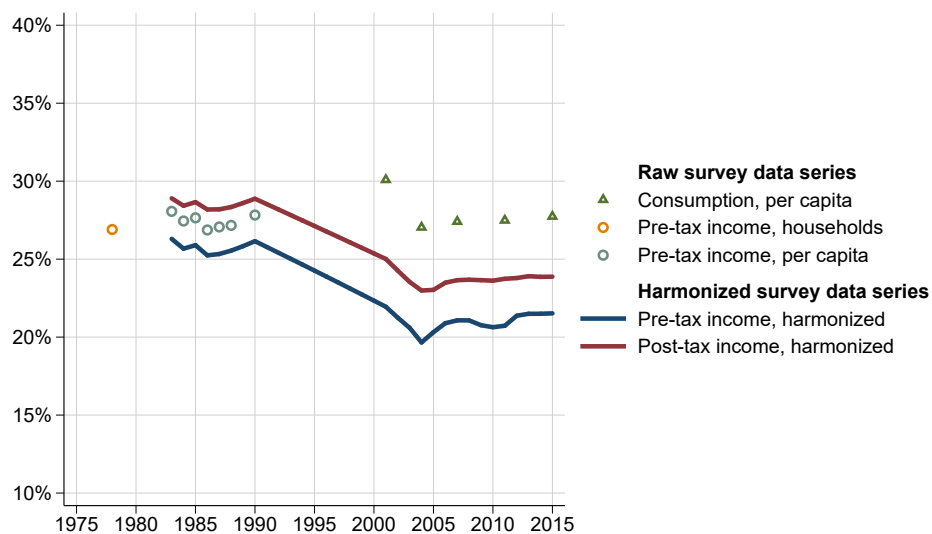
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.10
Bosnia and Herzegovina: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



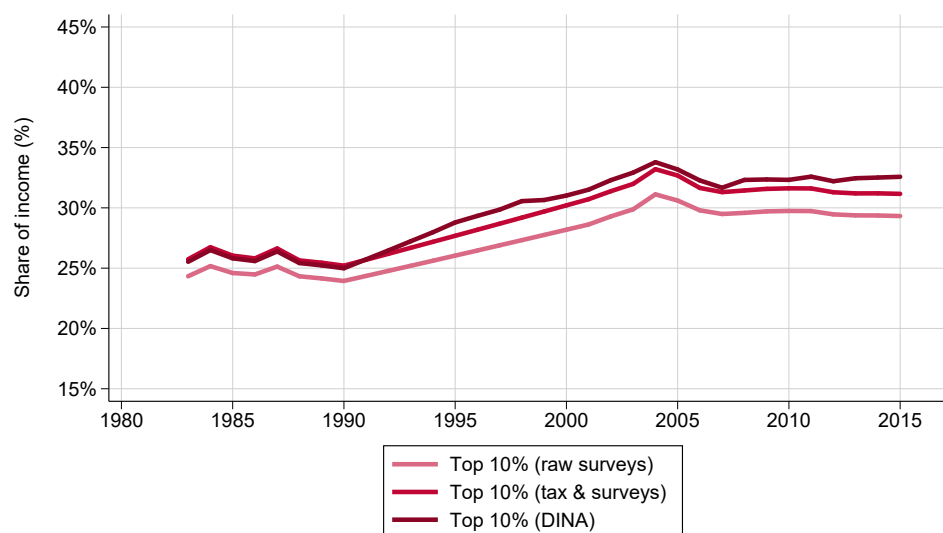
(b) Bottom 50% pre-tax income share



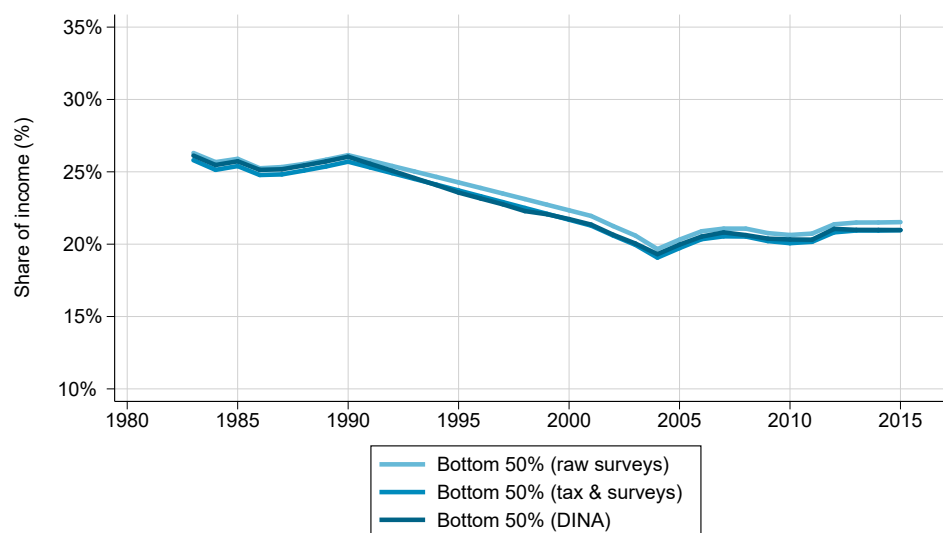
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.11
Bosnia and Herzegovina: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



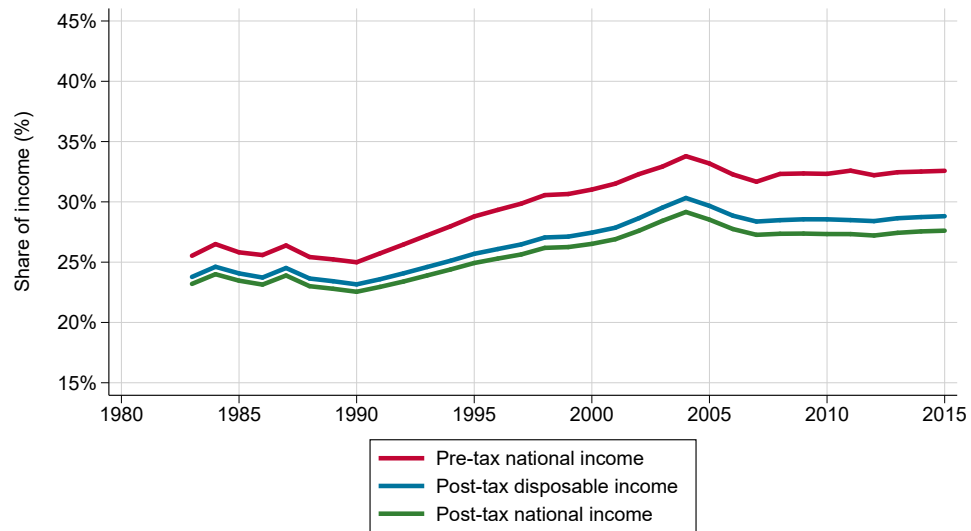
(b) Bottom 50% pre-tax income share



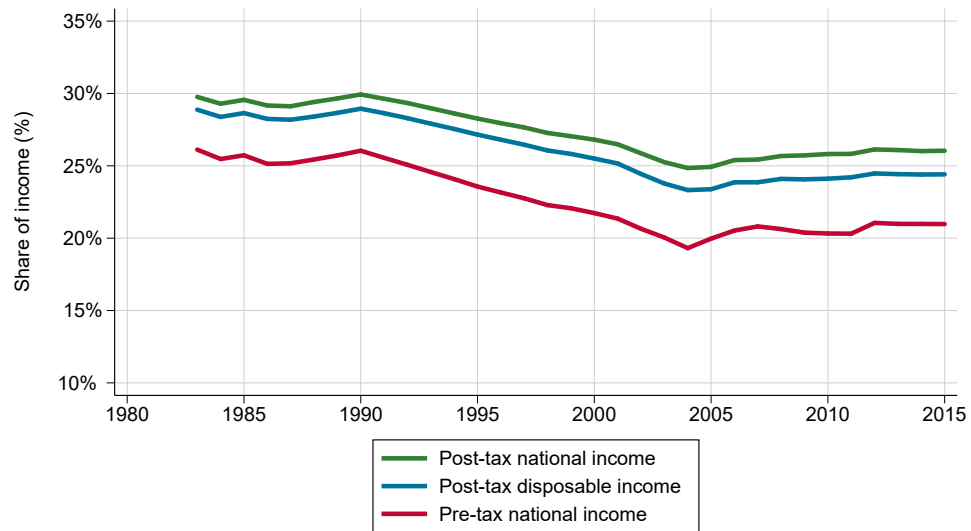
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.12
Bosnia and Herzegovina: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.4.2 Bosnia and Herzegovina: main results

Table A.3.11
The distribution of the national income in Bosnia and Herzegovina, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€10,600	100%	€10,600	100%	€10,600	100%
Bottom 50%	€4,400	20.9%	€5,200	24.4%	€5,500	26.0%
Bottom 20%	€2,200	4.2%	€3,000	5.6%	€3,500	6.5%
Next 30%	€5,900	16.8%	€6,700	18.8%	€6,900	19.5%
Middle 40%	€12,300	46.3%	€12,400	46.7%	€12,300	46.3%
Top 10%	€34,800	32.8%	€30,700	28.9%	€29,500	27.7%
Top 1%	€95,200	9.0%	€75,900	7.1%	€71,800	6.8%
Top 0.1%	€269,000	2.5%	€200,000	1.9%	€188,000	1.8%
Top 0.01%	€772,000	0.7%	€540,000	0.5%	€507,000	0.5%
Top 0.001%	€2,220,000	0.2%	€1,470,000	0.1%	€1,380,000	0.1%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.12
The distribution of national income growth in Bosnia and Herzegovina, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	3.9%	1.6%	3.9%	1.6%	3.9%	1.6%
Bottom 50%	3.3%	1.6%	3.5%	1.8%	3.6%	1.8%
Bottom 20%	2.8%	1.8%	3.2%	2.3%	3.4%	2.2%
Next 30%	3.5%	1.5%	3.6%	1.6%	3.6%	1.6%
Middle 40%	3.8%	1.3%	3.9%	1.3%	3.9%	1.3%
Top 10%	4.6%	1.9%	4.5%	1.7%	4.4%	1.7%
Top 1%	5.4%	3.2%	4.6%	3.2%	4.6%	3.1%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.5 Bulgaria

3.5.1 Bulgaria: data sources and methodological steps

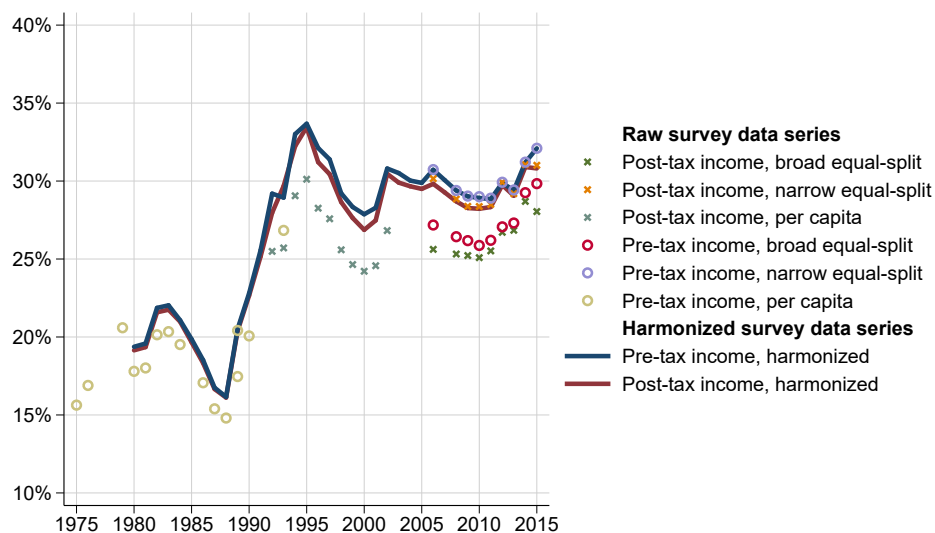
Table A.3.13
Bulgaria: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1975	x								
1976	x								
1979	x								
1980	x								
1981	x								
1982	x								
1983	x								
1984	x								
1985									
1986	x								
1987	x								
1988	x								
1989	x								
1990	x								
1991									
1992	x								
1993	x								
1994	x								
1995	x								
1996	x								
1997	x								
1998	x								
1999	x			x		x	x	x	
2000	x			x		x	x	x	
2001	x			x		x	x	x	
2002	x			x		x	x	x	
2003				x		x	x	x	
2004				x		x	x	x	
2005				x		x	x	x	
2006	x	x		x		x	x	x	
2007				x		x	x	x	
2008	x	x		x		x	x	x	
2009	x	x		x		x	x	x	
2010	x	x		x		x	x	x	
2011	x	x		x		x	x	x	
2012	x	x		x		x	x	x	
2013	x	x		x		x	x	x	
2014	x	x		x		x	x	x	
2015	x	x		x		x	x	x	
2016				x		x	x	x	
2017				x		x	x	x	

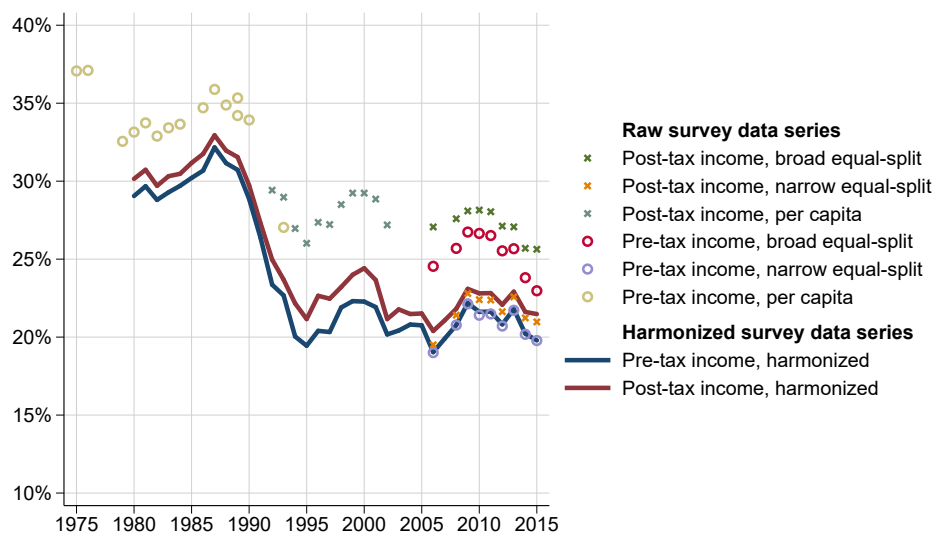
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.13
Bulgaria: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



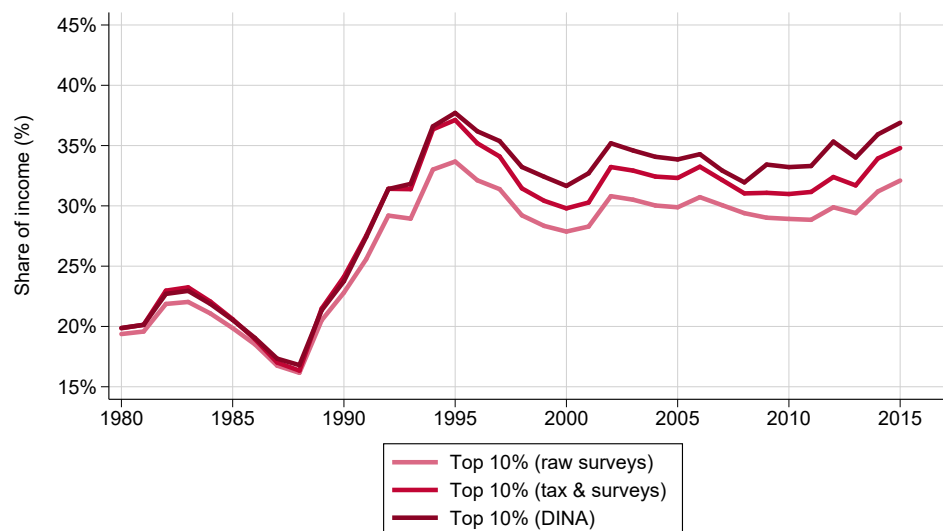
(b) Bottom 50% pre-tax income share



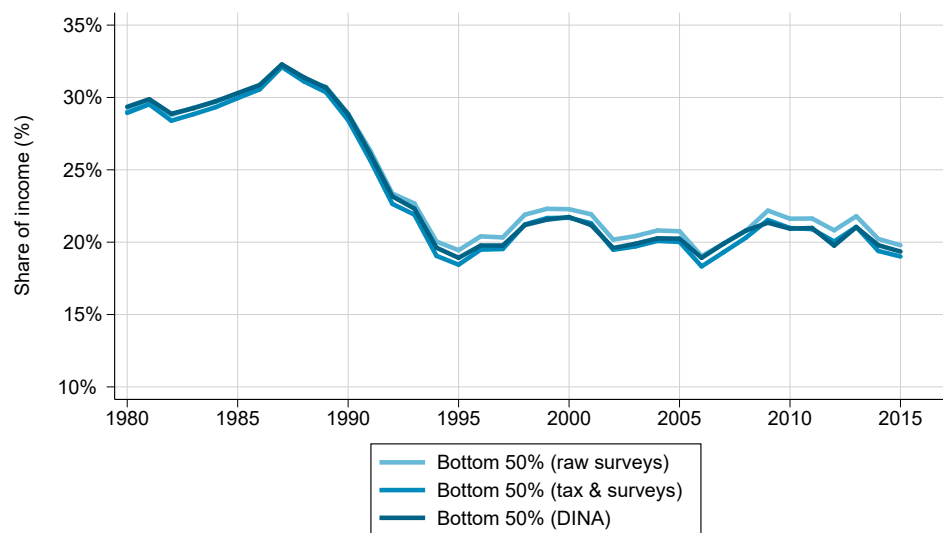
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.14
Bulgaria: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



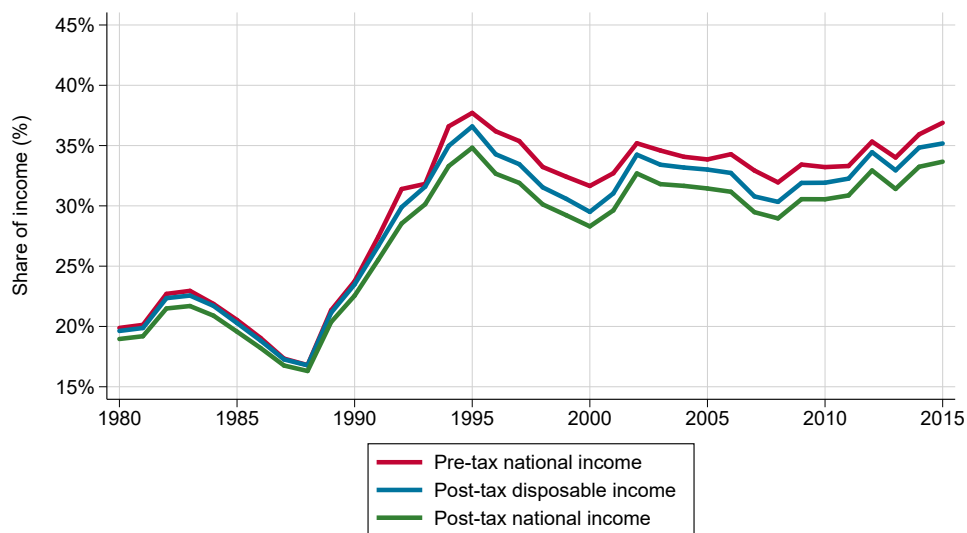
(b) Bottom 50% pre-tax income share



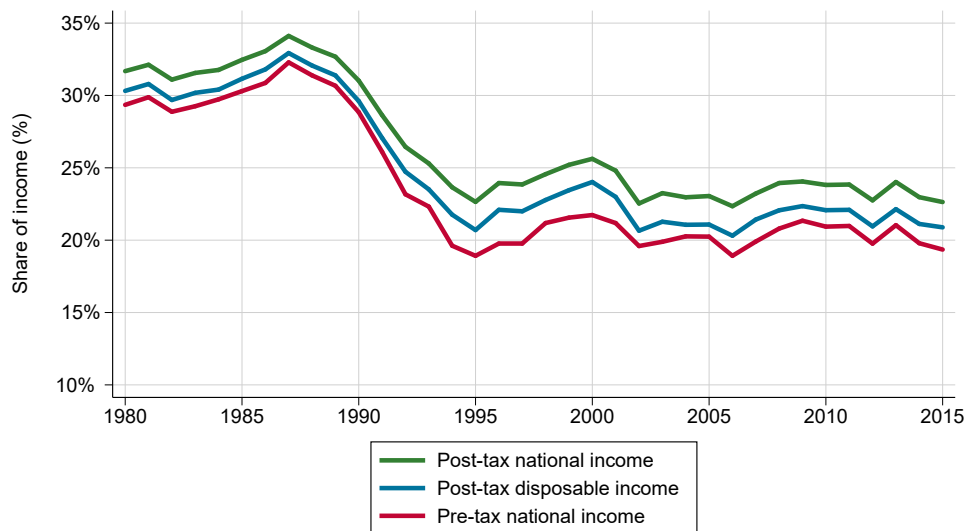
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.15
Bulgaria: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.5.2 Bulgaria: main results

Table A.3.14
The distribution of the national income in Bulgaria, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€17,100	100%	€17,100	100%	€17,100	100%
Bottom 50%	€6,600	19.3%	€7,100	20.8%	€7,700	22.5%
Bottom 20%	€3,200	3.8%	€3,600	4.2%	€4,300	5.1%
Next 30%	€8,900	15.6%	€9,500	16.6%	€9,900	17.4%
Middle 40%	€18,500	43.3%	€18,600	43.5%	€18,500	43.3%
Top 10%	€63,800	37.4%	€61,000	35.7%	€58,500	34.3%
Top 1%	€216,000	12.6%	€206,000	12.1%	€195,000	11.4%
Top 0.1%	€742,000	4.3%	€730,000	4.3%	€690,000	4.0%
Top 0.01%	€2,570,000	1.5%	€2,620,000	1.5%	€2,480,000	1.4%
Top 0.001%	€8,900,000	0.5%	€9,450,000	0.6%	€8,920,000	0.5%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.15
The distribution of national income growth in Bulgaria, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.9%	3.2%	1.9%	3.2%	1.9%	3.2%
Bottom 50%	0.8%	2.9%	0.9%	2.9%	1.0%	2.8%
Bottom 20%	0.0%	3.8%	0.2%	4.1%	0.5%	3.6%
Next 30%	1.0%	2.6%	1.1%	2.6%	1.1%	2.6%
Middle 40%	1.5%	2.3%	1.5%	2.2%	1.6%	2.3%
Top 10%	3.7%	4.5%	3.6%	4.7%	3.6%	4.7%
Top 1%	6.1%	6.9%	6.1%	8.3%	6.1%	8.3%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.6 Croatia

3.6.1 Croatia: data sources and methodological steps

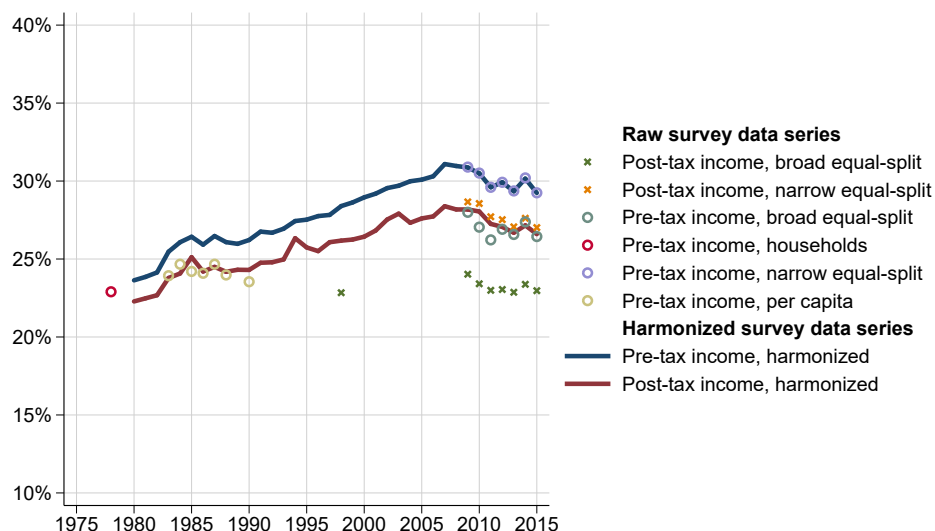
Table A.3.16
Croatia: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1978	x								
1980									
1981									
1982									
1983	x		x						
1984	x								
1985	x								
1986	x		x						
1987	x		x						
1988	x		x						
1989			x						
1990	x								
1991									
1992									
1993									
1994									
1995									
1996							x		
1997			x	x			x	x	
1998	x			x			x	x	
1999			x	x			x	x	
2000			x	x			x	x	
2001			x	x			x	x	
2002			x	x		x	x	x	
2003			x	x		x	x	x	
2004			x	x		x	x	x	
2005			x	x		x	x	x	
2006			x	x		x	x	x	
2007			x	x		x	x	x	
2008			x	x		x	x	x	
2009	x	x	x	x		x	x	x	
2010	x	x	x	x		x	x	x	
2011	x	x	x	x		x	x	x	
2012	x	x	x	x		x	x	x	
2013	x	x	x	x		x	x	x	
2014	x	x		x		x	x	x	
2015	x	x							
2016									
2017									

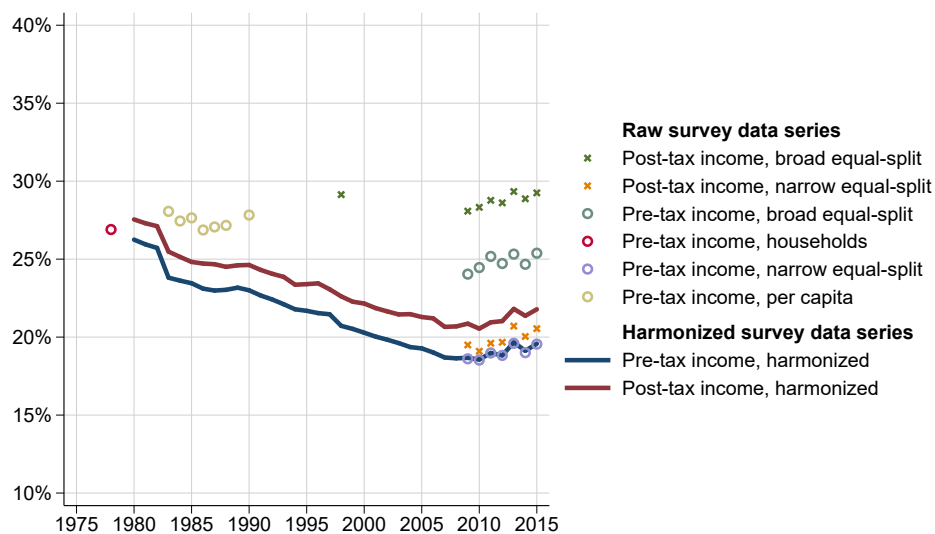
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.16
Croatia: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



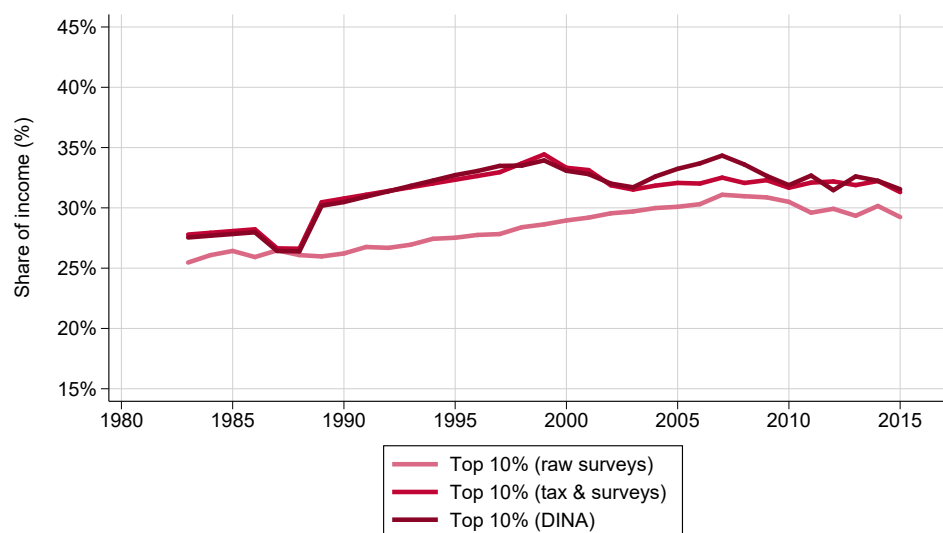
(b) Bottom 50% pre-tax income share



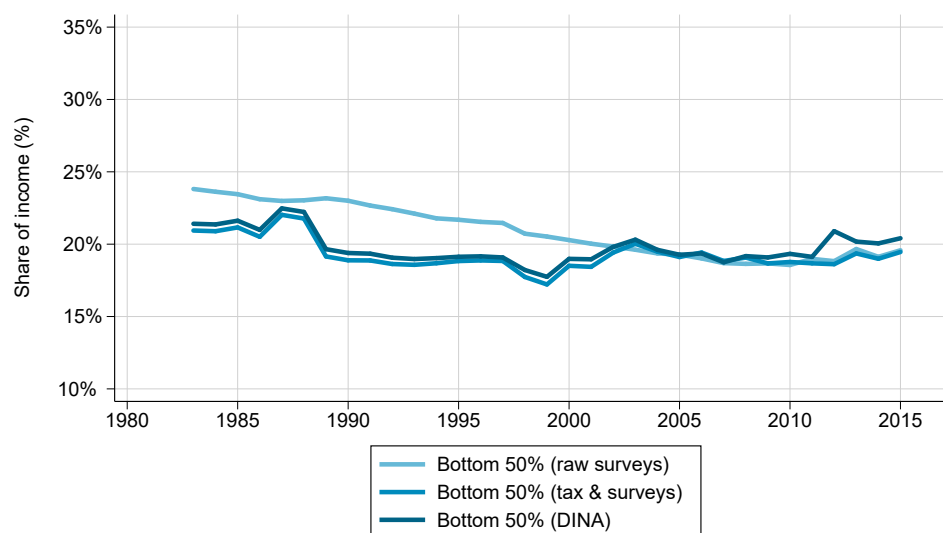
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.17
Croatia: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



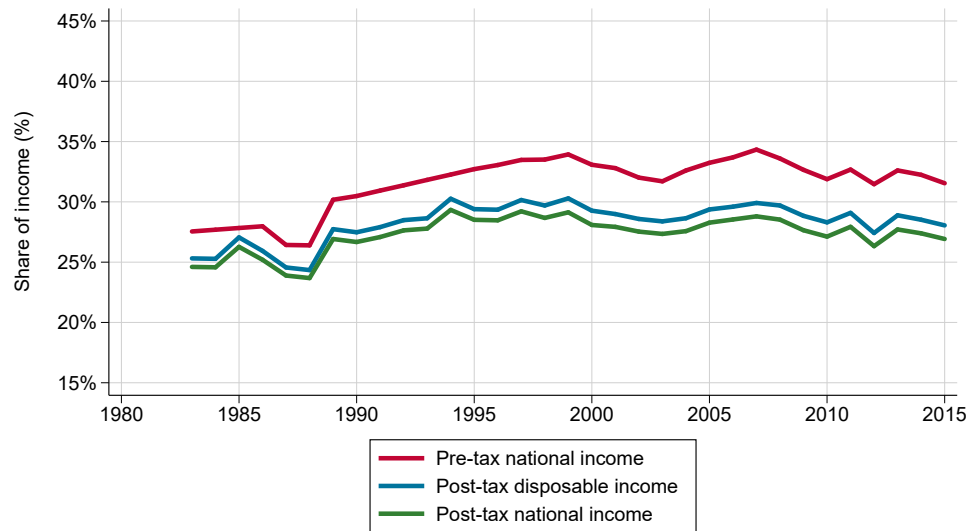
(b) Bottom 50% pre-tax income share



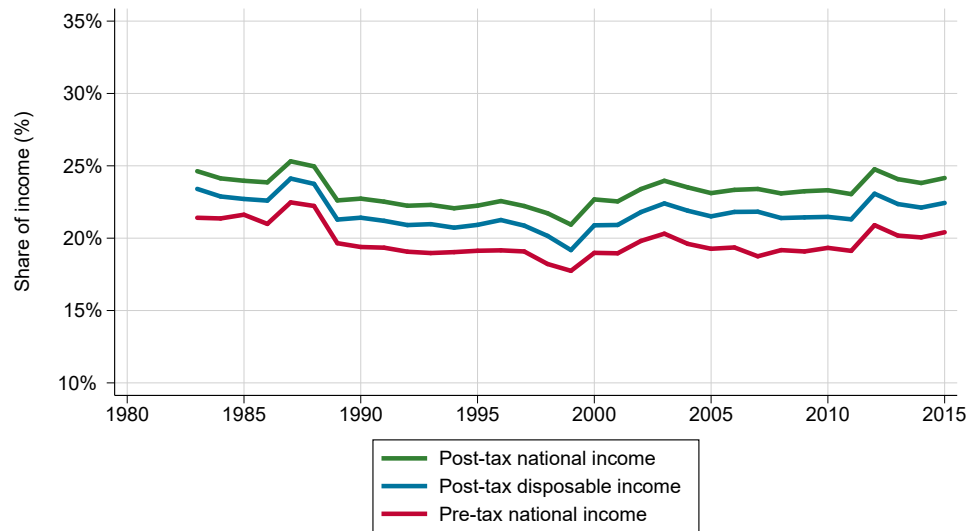
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.18
Croatia: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.6.2 Croatia: main results

Table A.3.17
The distribution of the national income in Croatia, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€19,100	100%	€19,100	100%	€19,100	100%
Bottom 50%	€7,800	20.4%	€8,500	22.4%	€9,200	24.1%
Bottom 20%	€3,000	3.1%	€3,200	3.4%	€4,200	4.4%
Next 30%	€11,000	17.3%	€12,100	19.1%	€12,500	19.7%
Middle 40%	€22,900	48.0%	€23,600	49.5%	€23,300	48.9%
Top 10%	€60,300	31.6%	€53,600	28.1%	€51,500	27.0%
Top 1%	€156,000	8.2%	€122,000	6.4%	€115,000	6.1%
Top 0.1%	€398,000	2.1%	€271,000	1.4%	€255,000	1.3%
Top 0.01%	€1,010,000	0.5%	€596,000	0.3%	€561,000	0.3%
Top 0.001%	€2,540,000	0.1%	€1,310,000	0.1%	€1,230,000	0.1%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.18
The distribution of national income growth in Croatia, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Bottom 50%	0.0%	0.9%	0.0%	0.3%	0.0%	0.4%
Bottom 20%	0.9%	1.4%	0.3%	-0.1%	0.4%	0.1%
Next 30%	-0.2%	0.8%	-0.1%	0.4%	0.0%	0.4%
Middle 40%	-0.1%	0.3%	0.0%	0.3%	0.0%	0.3%
Top 10%	0.5%	-0.7%	0.4%	-0.5%	0.4%	-0.6%
Top 1%	2.0%	-1.6%	1.7%	-1.5%	1.7%	-1.5%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.7 Cyprus

3.7.1 Cyprus: data sources and methodological steps

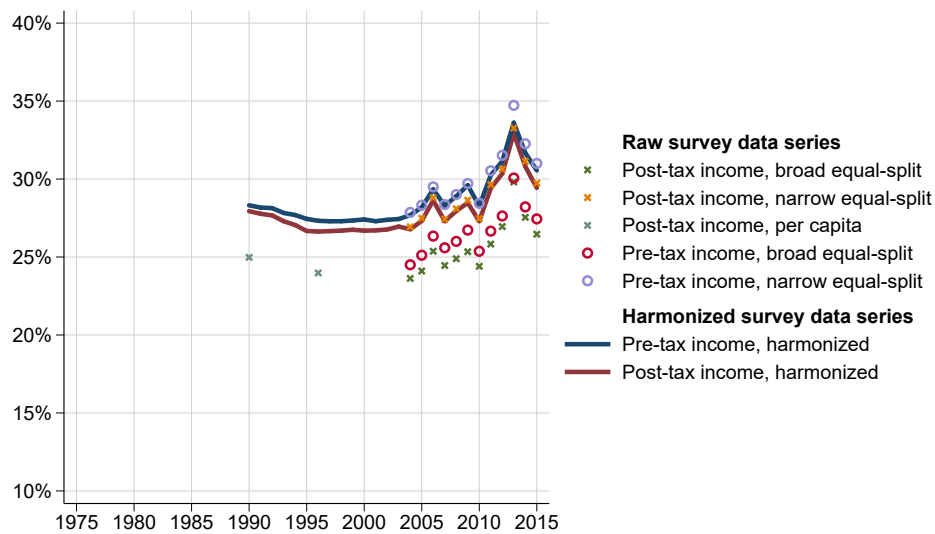
Table A.3.19
Cyprus: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980									
1981									
1982									
1983									
1984									
1985									
1986									
1987									
1988									
1989									
1990	x								
1991									
1992									
1993									
1994									
1995				x		x	x	x	
1996	x			x		x	x	x	
1997				x		x	x	x	
1998				x		x	x	x	
1999				x		x	x	x	
2000				x		x	x	x	
2001				x		x	x	x	
2002				x		x	x	x	
2003				x		x	x	x	
2004	x	x		x		x	x	x	
2005	x	x		x		x	x	x	
2006	x	x		x		x	x	x	
2007	x	x		x		x	x	x	
2008	x	x		x		x	x	x	
2009	x	x		x		x	x	x	
2010	x	x		x		x	x	x	
2011	x	x		x		x	x	x	
2012	x	x		x		x	x	x	
2013	x	x		x		x	x	x	
2014	x	x		x		x	x	x	
2015	x	x		x		x	x	x	
2016				x		x	x	x	
2017				x		x	x	x	

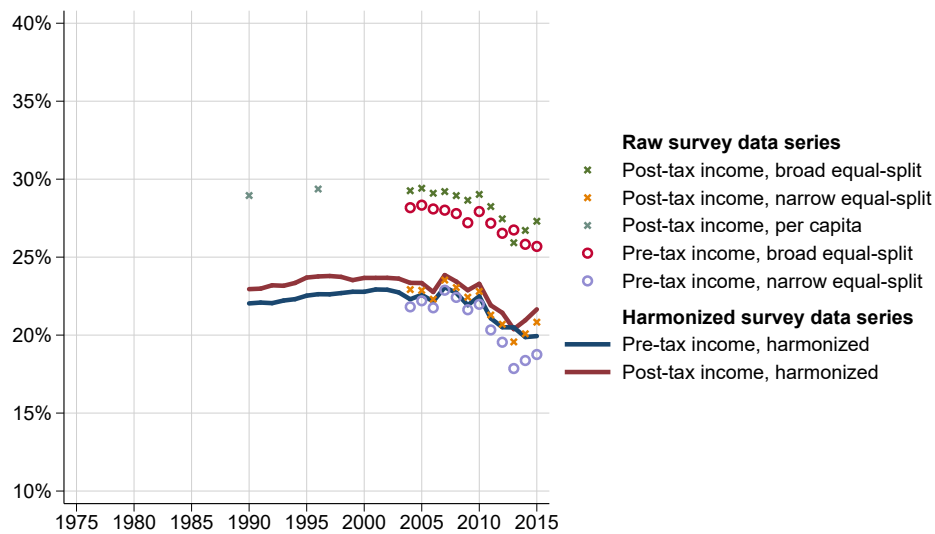
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.19
Cyprus: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



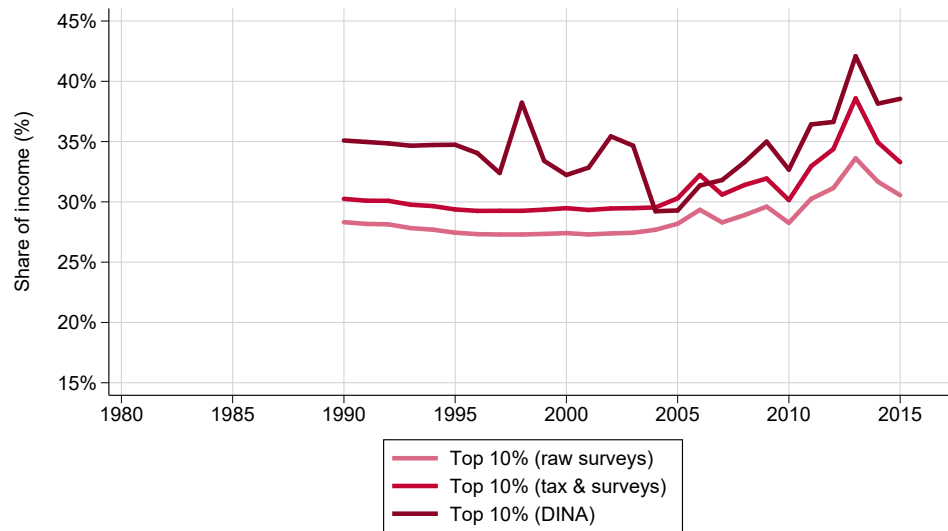
(b) Bottom 50% pre-tax income share



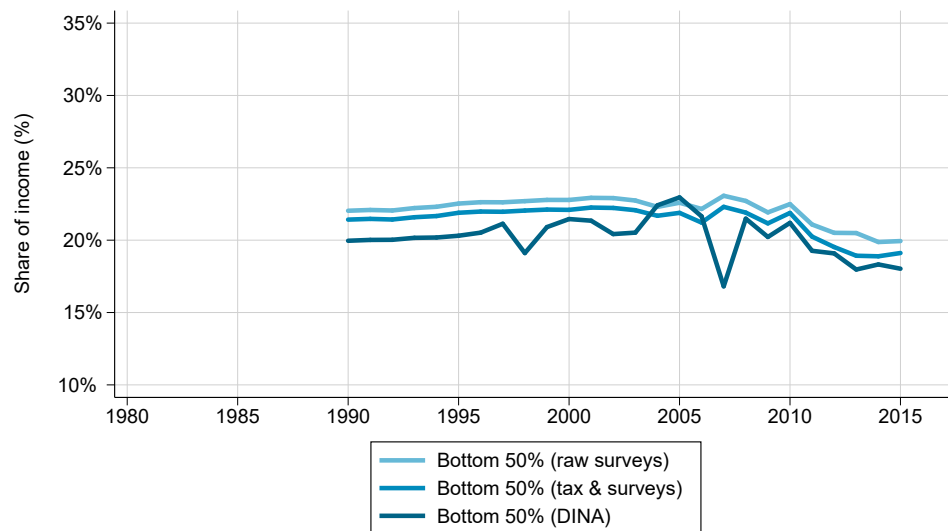
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.20
Cyprus: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



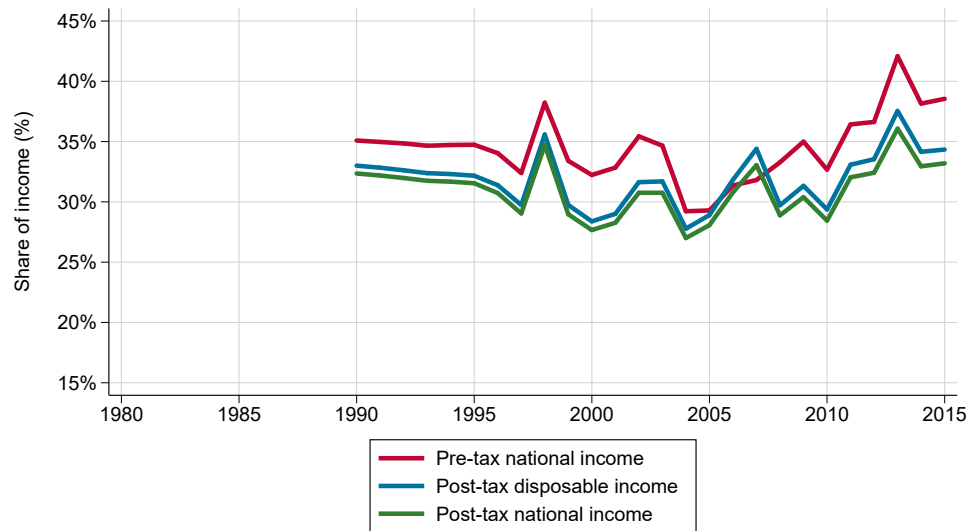
(b) Bottom 50% pre-tax income share



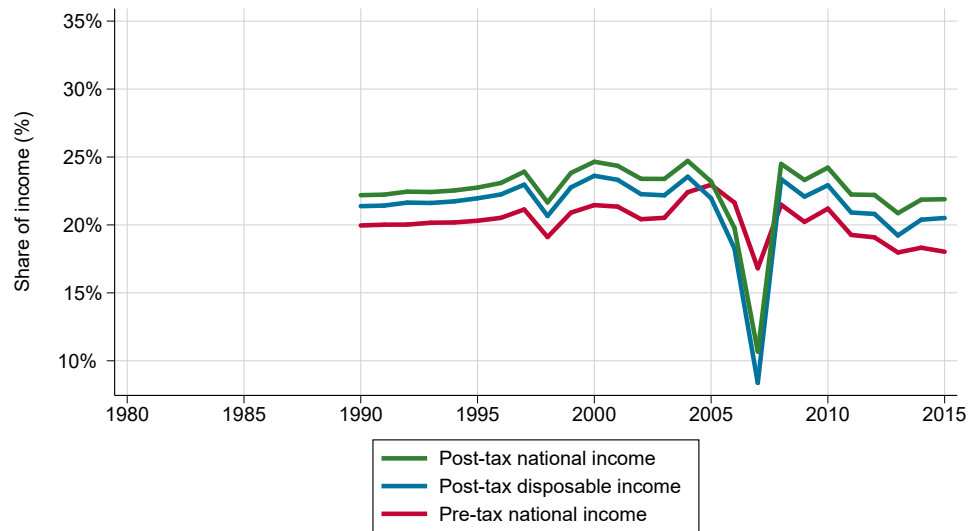
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.21
Cyprus: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.7.2 Cyprus: main results

Table A.3.20
The distribution of the national income in Cyprus, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€31,300	100%	€31,300	100%	€31,300	100%
Bottom 50%	€11,800	18.9%	€13,400	21.4%	€14,200	22.7%
Bottom 20%	€4,700	3.0%	€6,600	4.2%	€7,700	4.9%
Next 30%	€16,600	15.9%	€17,900	17.2%	€18,500	17.8%
Middle 40%	€34,900	44.6%	€36,100	46.2%	€35,900	45.9%
Top 10%	€114,000	36.5%	€101,000	32.4%	€98,100	31.4%
Top 1%	€364,000	11.6%	€296,000	9.5%	€284,000	9.1%
Top 0.1%	€1,180,000	3.8%	€928,000	3.0%	€887,000	2.8%
Top 0.01%	€3,880,000	1.2%	€2,980,000	1.0%	€2,840,000	0.9%
Top 0.001%	€12,750,000	0.4%	€9,610,000	0.3%	€9,160,000	0.3%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.21
The distribution of national income growth in Cyprus, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.7%	-1.7%	1.7%	-1.7%	1.7%	-1.7%
Bottom 50%	1.5%	-0.5%	1.7%	8.0%	1.7%	6.1%
Bottom 20%	1.1%		1.7%		1.8%	
Next 30%	1.6%	-3.6%	1.7%	-3.8%	1.7%	-3.7%
Middle 40%	1.7%	-3.0%	1.7%	-3.8%	1.7%	-3.7%
Top 10%	1.8%	-0.3%	1.6%	-2.2%	1.6%	-2.2%
Top 1%	1.9%	1.7%	1.7%	-1.0%	1.7%	-1.0%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.8 Czech Republic

3.8.1 Czech Republic: data sources and methodological steps

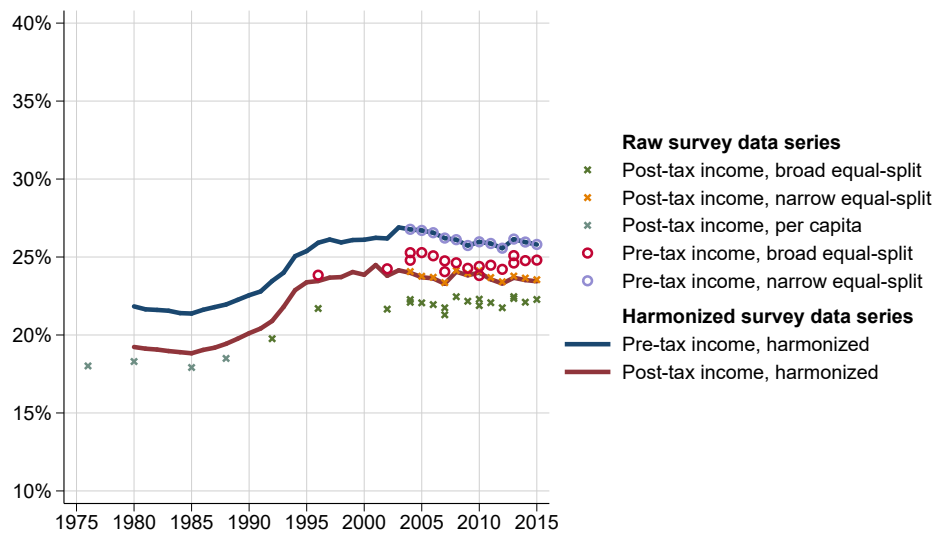
Table A.3.22
Czech Republic: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1976	x								
1980	x		x						
1981									
1982									
1983									
1984									
1985	x		x						
1986									
1987									
1988	x		x						
1989									
1990									
1991									
1992	x	x	x					x	
1993			x	x		x	x	x	
1994			x	x		x	x	x	
1995			x	x	x	x	x	x	
1996	x	x	x	x	x	x	x	x	
1997			x	x	x	x	x	x	
1998			x	x	x	x	x	x	
1999			x	x	x	x	x	x	
2000			x	x	x	x	x	x	
2001			x	x	x	x	x	x	
2002	x	x	x	x	x	x	x	x	
2003			x	x	x	x	x	x	x
2004	x	x	x	x	x	x	x	x	x
2005	x	x	x	x	x	x	x	x	x
2006	x	x	x	x	x	x	x	x	x
2007	x	x	x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x	x	x	x	x	x	x	x
2012	x	x	x	x	x	x	x	x	x
2013	x	x	x	x	x	x	x	x	x
2014	x	x	x	x	x	x	x	x	x
2015	x	x	x	x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

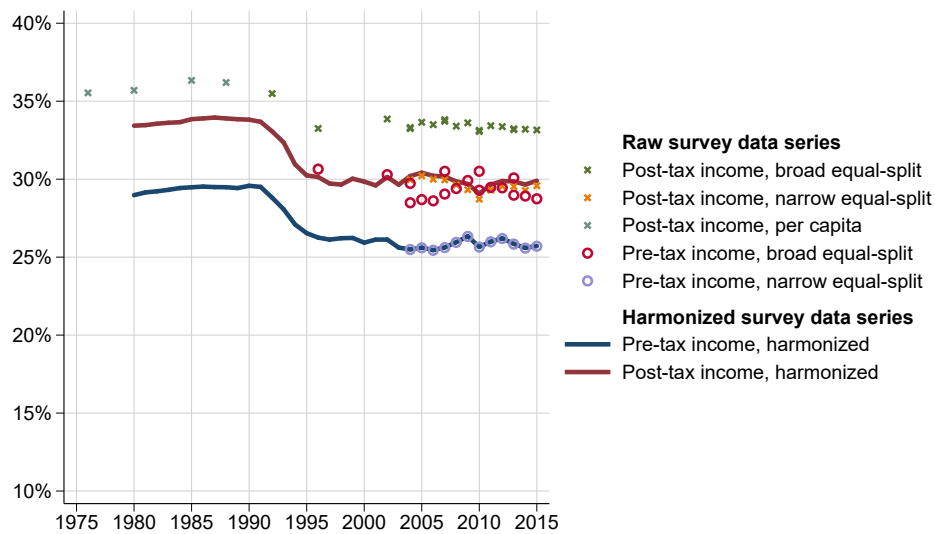
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.22
Czech Republic: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



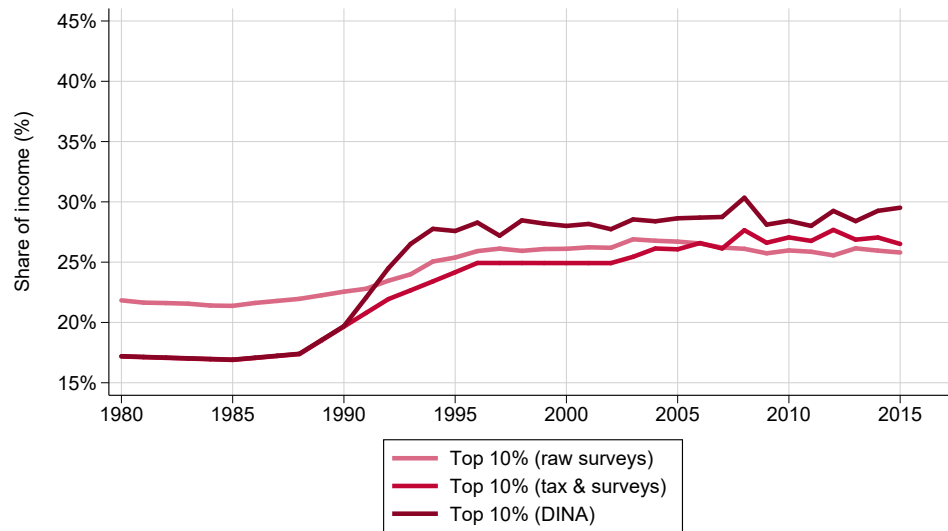
(b) Bottom 50% pre-tax income share



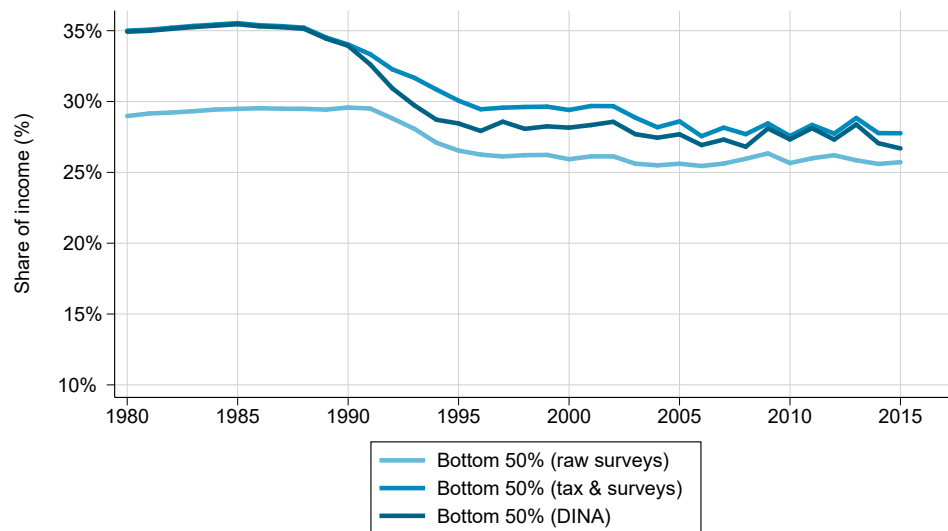
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.23
Czech Republic: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



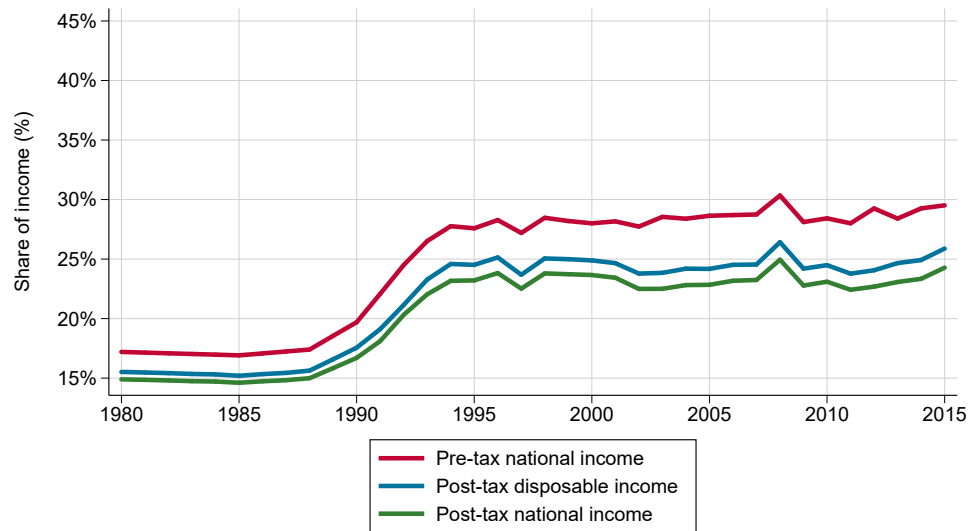
(b) Bottom 50% pre-tax income share



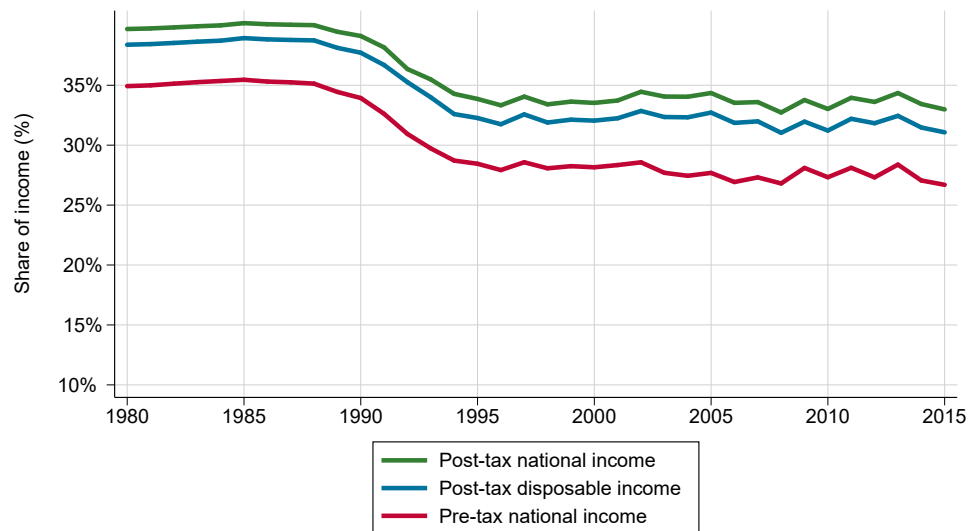
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.24
Czech Republic: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.8.2 Czech Republic: main results

Table A.3.23
The distribution of the national income in Czech Republic, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€24,300	100%	€24,300	100%	€24,300	100%
Bottom 50%	€13,000	26.8%	€15,100	31.2%	€16,100	33.1%
Bottom 20%	€8,300	6.9%	€10,600	8.8%	€12,000	9.9%
Next 30%	€16,200	20.0%	€18,100	22.4%	€18,800	23.2%
Middle 40%	€26,600	43.9%	€26,100	43.1%	€26,000	42.8%
Top 10%	€70,900	29.2%	€62,300	25.7%	€58,400	24.1%
Top 1%	€244,000	10.1%	€206,000	8.5%	€188,000	7.7%
Top 0.1%	€925,000	3.8%	€789,000	3.3%	€711,000	2.9%
Top 0.01%	€3,610,000	1.5%	€3,140,000	1.3%	€2,830,000	1.2%
Top 0.001%	€14,170,000	0.6%	€12,660,000	0.5%	€11,370,000	0.5%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.24
The distribution of national income growth in Czech Republic, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	0.9%	1.0%	0.9%	1.0%	0.9%	1.0%
Bottom 50%	0.1%	0.8%	0.3%	0.7%	0.4%	0.8%
Bottom 20%	-0.3%	0.7%	0.0%	0.7%	0.1%	0.9%
Next 30%	0.3%	0.9%	0.4%	0.8%	0.5%	0.8%
Middle 40%	0.6%	1.0%	0.7%	0.9%	0.7%	0.9%
Top 10%	2.3%	1.2%	2.2%	1.4%	2.2%	1.4%
Top 1%	4.8%	0.9%	4.8%	1.6%	4.7%	1.5%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.9 Denmark

3.9.1 Denmark: data sources and methodological steps

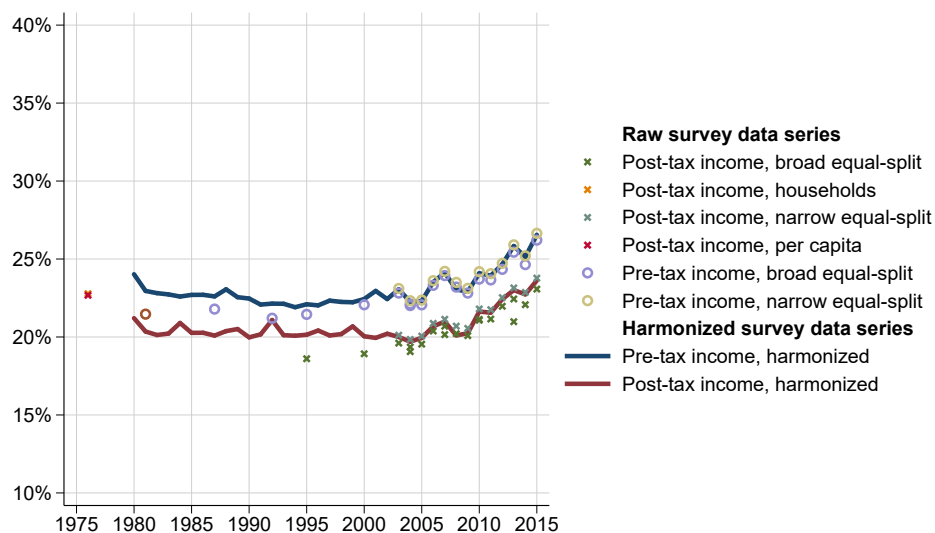
Table A.3.25
Denmark: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1976	x								
1980			x						
1981	x		x	x			x	x	
1982			x	x			x	x	
1983			x	x			x	x	
1984			x	x			x	x	
1985			x	x			x	x	
1986			x	x			x	x	
1987	x	x	x	x			x	x	
1988			x	x			x	x	
1989			x	x			x	x	
1990			x	x		x	x	x	
1991			x	x		x	x	x	
1992	x	x	x	x		x	x	x	
1993			x	x		x	x	x	
1994			x	x	x	x	x	x	
1995	x	x	x	x	x	x	x	x	
1996			x	x	x	x	x	x	
1997			x	x	x	x	x	x	x
1998			x	x	x	x	x	x	x
1999			x	x	x	x	x	x	x
2000	x	x	x	x	x	x	x	x	x
2001			x	x	x	x	x	x	x
2002			x	x	x	x	x	x	x
2003	x	x	x	x	x	x	x	x	x
2004	x	x	x	x	x	x	x	x	x
2005	x	x	x	x	x	x	x	x	x
2006	x	x	x	x	x	x	x	x	x
2007	x	x	x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x		x	x	x	x	x	x
2012	x	x		x	x	x	x	x	x
2013	x	x		x	x	x	x	x	x
2014	x	x		x	x	x	x	x	x
2015	x	x		x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

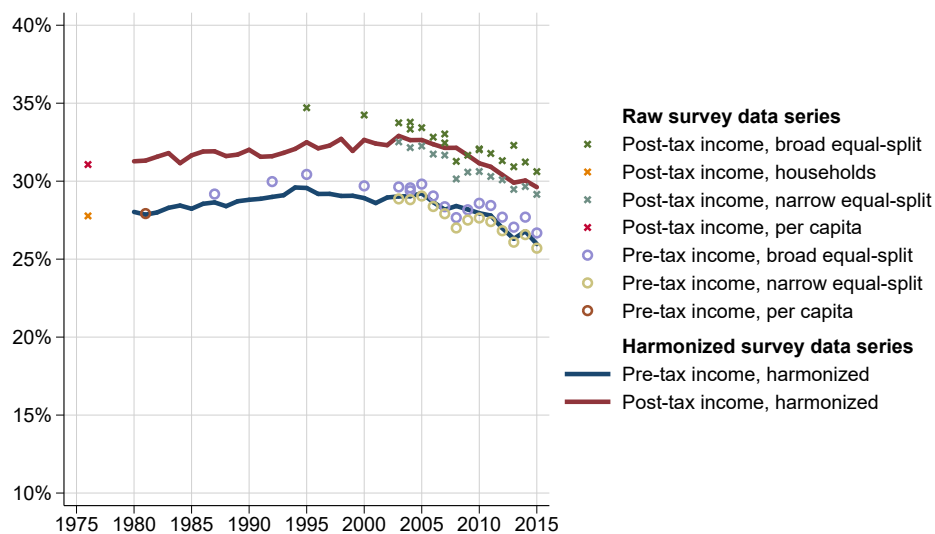
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.25
Denmark: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



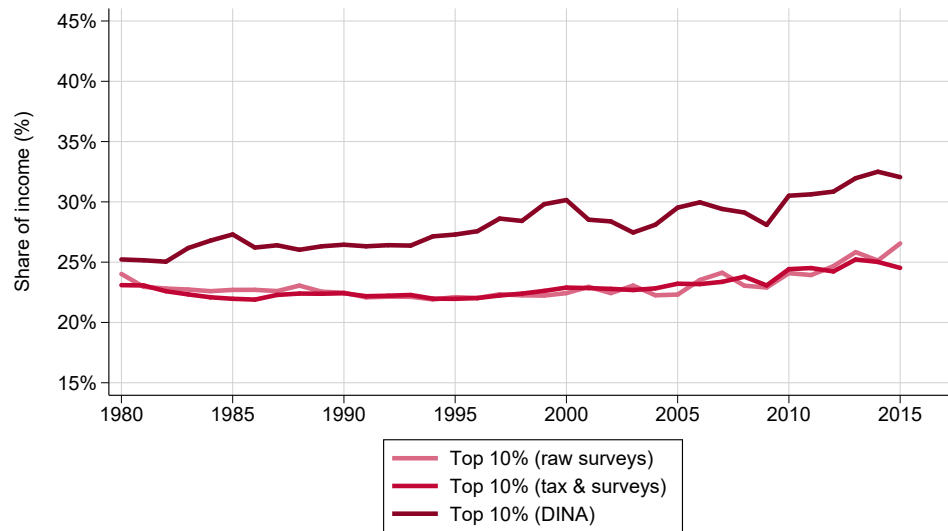
(b) Bottom 50% pre-tax income share



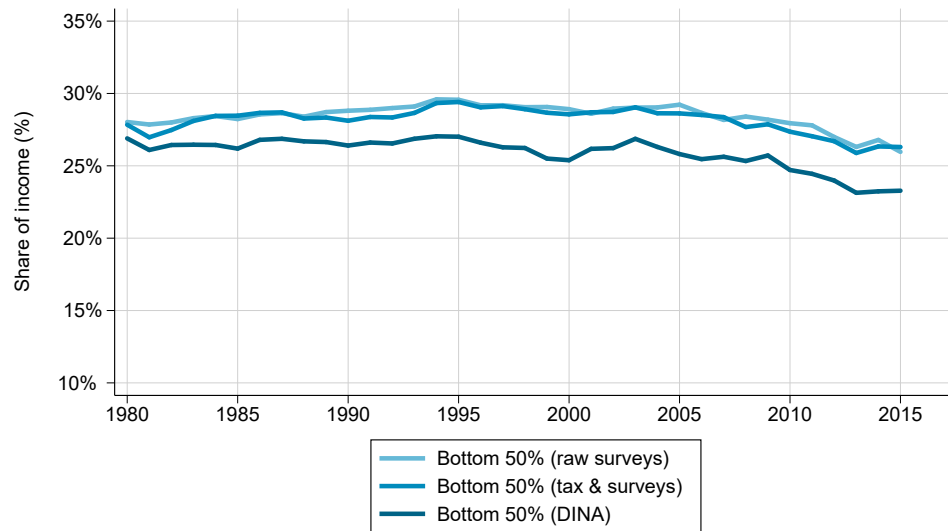
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.26
Denmark: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



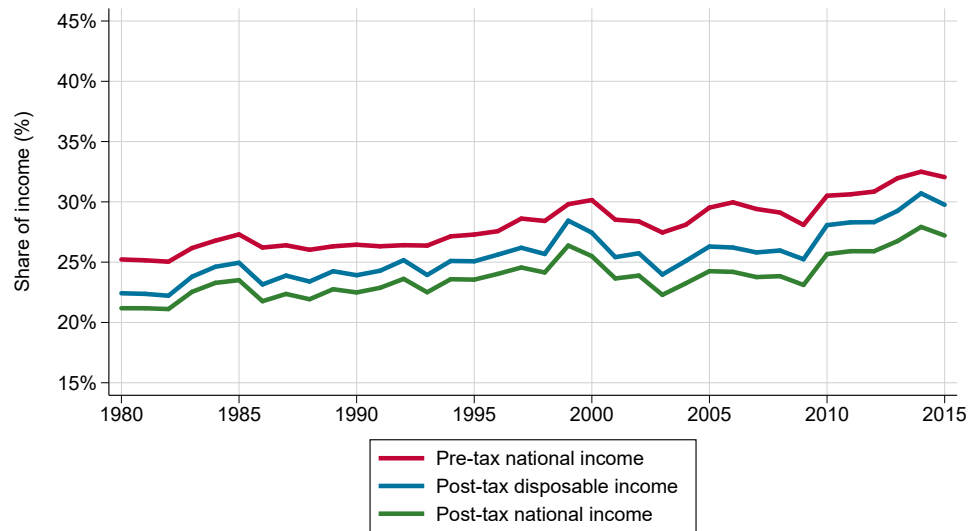
(b) Bottom 50% pre-tax income share



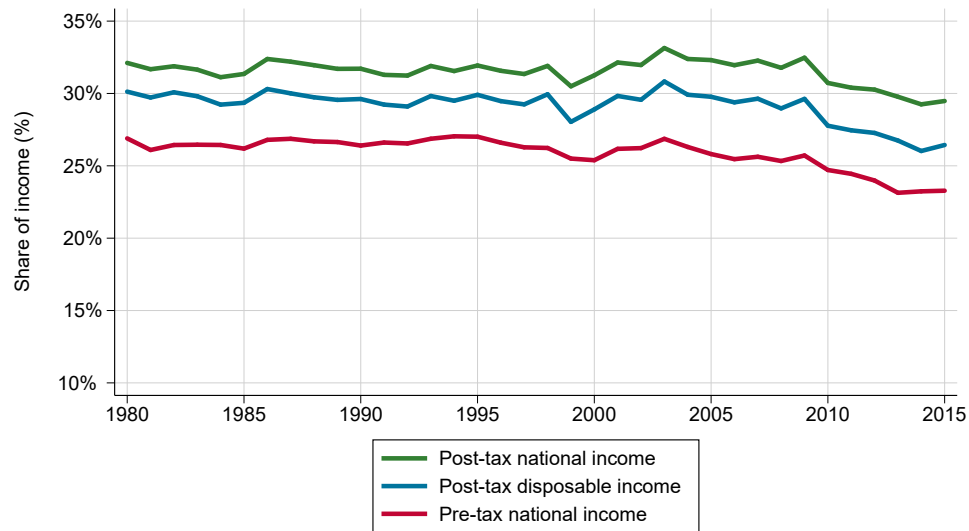
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.27
Denmark: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.9.2 Denmark: main results

Table A.3.26
The distribution of the national income in Denmark, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€42,400	100%	€42,400	100%	€42,400	100%
Bottom 50%	€20,100	23.7%	€23,000	27.1%	€25,500	30.1%
Bottom 20%	€10,800	5.1%	€15,000	7.1%	€18,600	8.8%
Next 30%	€26,300	18.6%	€28,400	20.1%	€30,200	21.4%
Middle 40%	€48,000	45.3%	€47,400	44.7%	€46,700	44.1%
Top 10%	€132,000	31.0%	€119,000	28.2%	€109,000	25.8%
Top 1%	€454,000	10.7%	€404,000	9.5%	€357,000	8.4%
Top 0.1%	€1,840,000	4.3%	€1,670,000	3.9%	€1,460,000	3.4%
Top 0.01%	€7,760,000	1.8%	€7,290,000	1.7%	€6,350,000	1.5%
Top 0.001%	€33,130,000	0.8%	€32,270,000	0.8%	€28,070,000	0.7%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.27
The distribution of national income growth in Denmark, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.4%	0.2%	1.4%	0.2%	1.4%	0.2%
Bottom 50%	1.0%	-0.5%	1.1%	-0.6%	1.2%	-0.5%
Bottom 20%	0.7%	-1.4%	1.1%	-0.8%	1.3%	-0.5%
Next 30%	1.1%	-0.3%	1.1%	-0.6%	1.1%	-0.4%
Middle 40%	1.2%	0.3%	1.2%	0.3%	1.2%	0.3%
Top 10%	1.9%	0.8%	2.0%	1.1%	1.9%	1.1%
Top 1%	2.8%	1.0%	3.0%	1.4%	2.9%	1.4%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.10 Estonia

3.10.1 Estonia: data sources and methodological steps

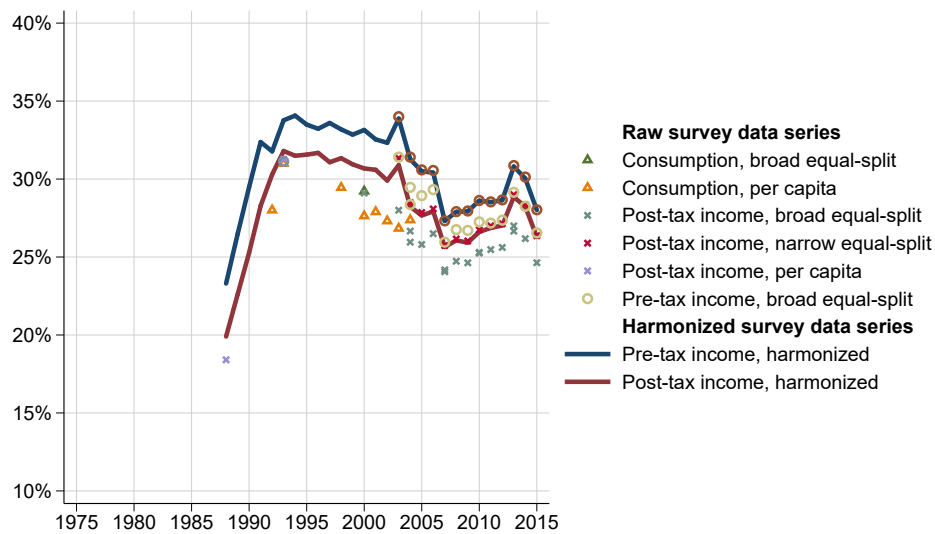
Table A.3.28
Estonia: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980			x						
1981			x						
1982			x						
1983			x						
1984			x						
1985			x						
1986			x						
1987			x						
1988	x		x						
1989			x						
1990			x						
1991			x						
1992	x		x						
1993	x		x						
1994			x	x		x	x	x	
1995			x	x	x	x	x	x	
1996			x	x	x	x	x	x	
1997			x	x	x	x	x	x	
1998	x		x	x	x	x	x	x	
1999			x	x	x	x	x	x	
2000	x	x	x	x	x	x	x	x	
2001	x		x	x	x	x	x	x	
2002	x		x	x	x	x	x	x	
2003	x	x	x	x	x	x	x	x	x
2004	x	x	x	x	x	x	x	x	x
2005	x	x	x	x	x	x	x	x	x
2006	x	x	x	x	x	x	x	x	x
2007	x	x	x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x	x	x	x	x	x	x	x
2012	x	x	x	x	x	x	x	x	x
2013	x	x	x	x	x	x	x	x	x
2014	x	x	x	x	x	x	x	x	x
2015	x	x	x	x	x	x	x	x	x
2016			x	x	x	x	x	x	x
2017			x	x	x	x	x	x	x

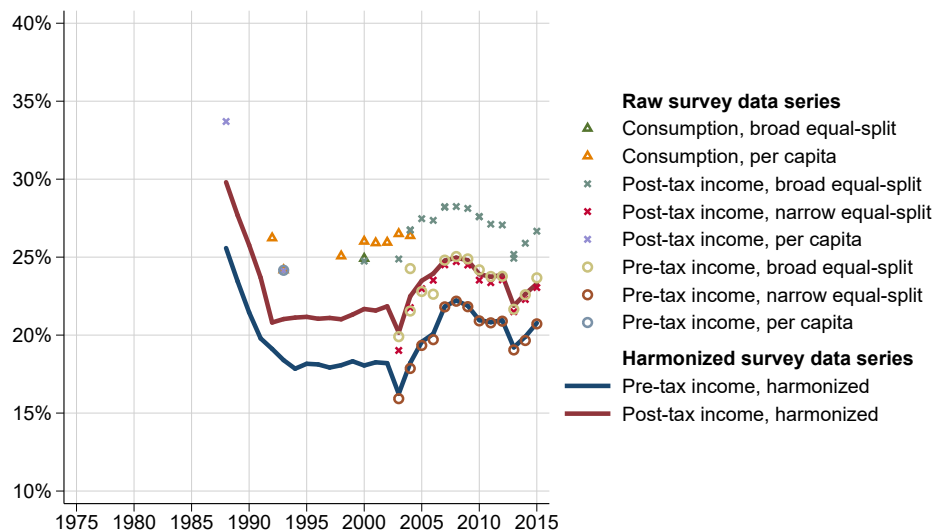
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.28
Estonia: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



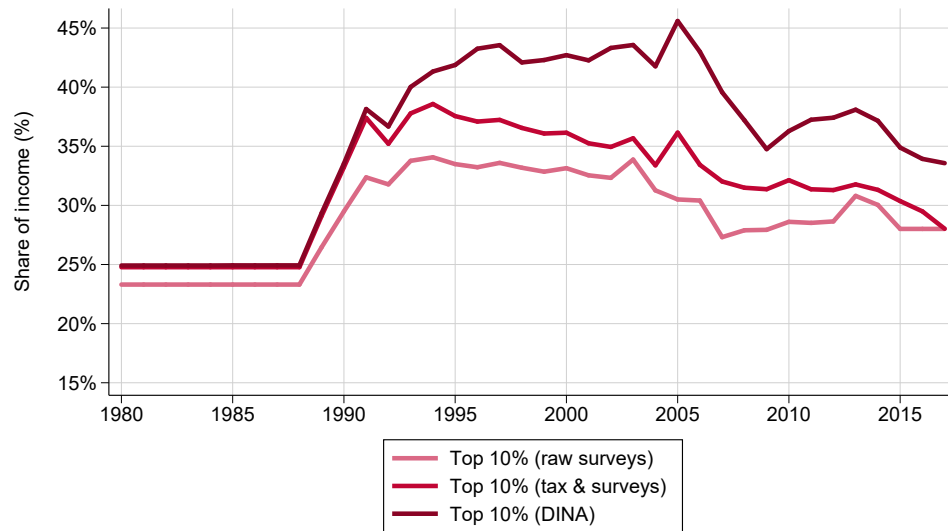
(b) Bottom 50% pre-tax income share



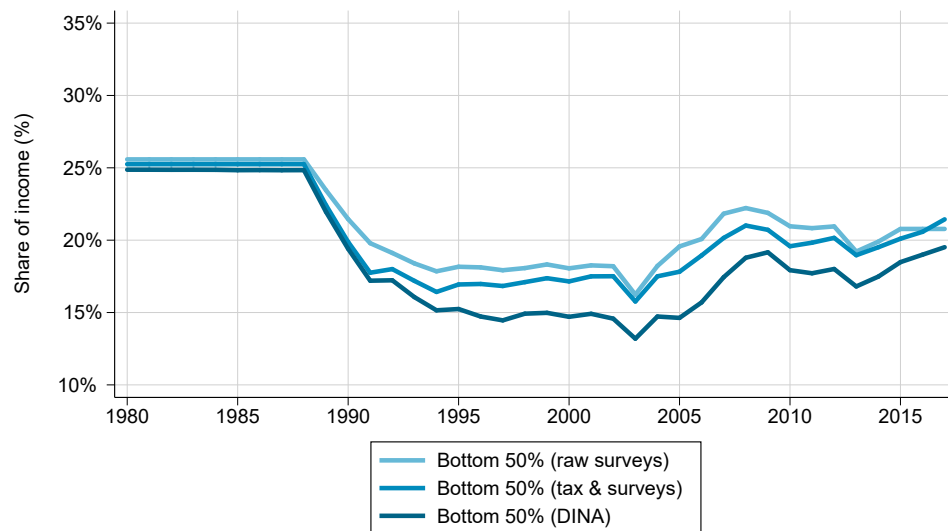
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.29
Estonia: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



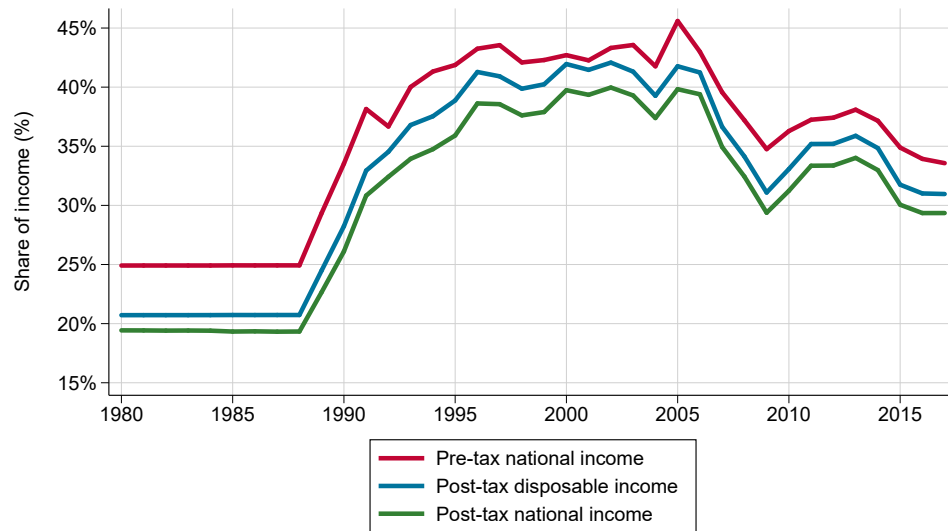
(b) Bottom 50% pre-tax income share



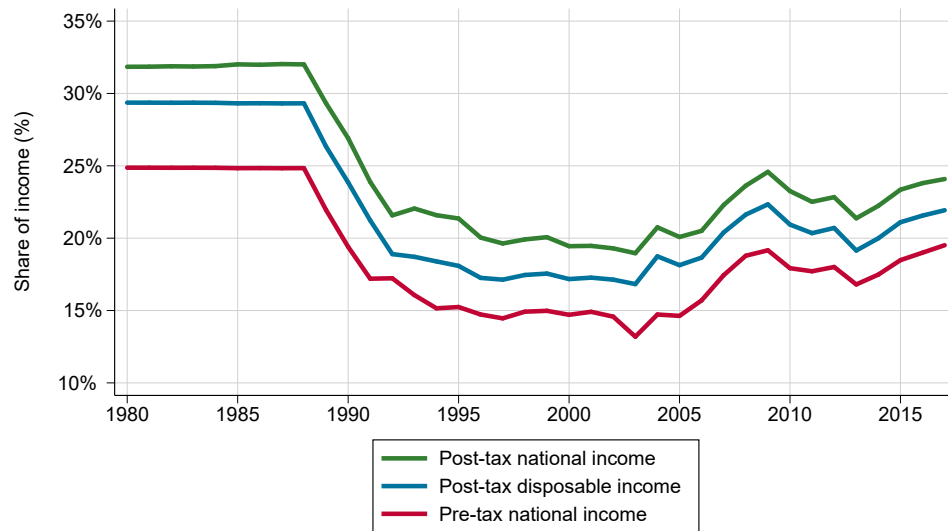
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.30
Estonia: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.10.2 Estonia: main results

Table A.3.29
The distribution of the national income in Estonia, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€24,700	100%	€24,700	100%	€24,700	100%
Bottom 50%	€9,600	19.5%	€10,800	21.9%	€11,900	24.1%
Bottom 20%	€5,400	4.3%	€6,300	5.1%	€7,700	6.2%
Next 30%	€12,500	15.2%	€13,900	16.9%	€14,700	17.9%
Middle 40%	€29,000	46.9%	€29,100	47.1%	€28,800	46.6%
Top 10%	€82,900	33.6%	€76,500	31.0%	€72,500	29.4%
Top 1%	€274,000	11.1%	€233,000	9.4%	€217,000	8.8%
Top 0.1%	€1,040,000	4.2%	€797,000	3.2%	€737,000	3.0%
Top 0.01%	€4,110,000	1.7%	€2,840,000	1.1%	€2,620,000	1.1%
Top 0.001%	€16,370,000	0.7%	€10,200,000	0.4%	€9,410,000	0.4%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.30
The distribution of national income growth in Estonia, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.7%	0.7%	1.7%	0.7%	1.7%	0.7%
Bottom 50%	1.1%	1.8%	0.9%	1.4%	1.0%	1.5%
Bottom 20%	0.9%	2.3%	0.6%	1.9%	0.7%	1.9%
Next 30%	1.1%	1.7%	1.0%	1.3%	1.1%	1.4%
Middle 40%	1.5%	1.6%	1.6%	1.6%	1.6%	1.6%
Top 10%	2.5%	-0.9%	2.8%	-1.0%	2.9%	-1.0%
Top 1%	4.1%	-2.9%	4.6%	-3.2%	4.7%	-3.3%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.11 Finland

3.11.1 Finland: data sources and methodological steps

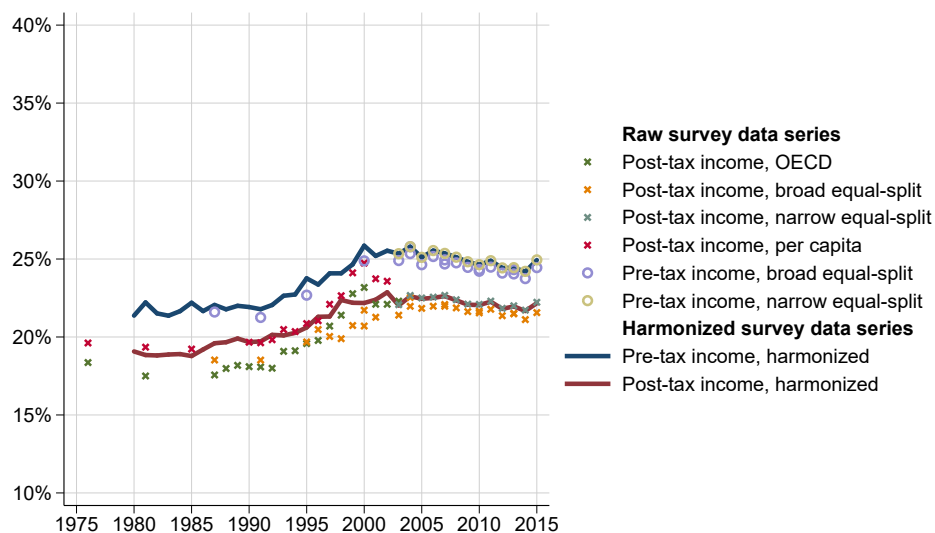
Table A.3.31
Finland: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1976	x								
1980			x	x		x	x	x	
1981	x		x	x		x	x	x	
1982			x	x		x	x	x	
1983			x	x		x	x	x	
1984			x	x		x	x	x	
1985	x		x	x		x	x	x	
1986			x	x		x	x	x	
1987	x	x	x	x		x	x	x	
1988	x		x	x		x	x	x	
1989	x		x	x		x	x	x	
1990	x		x	x		x	x	x	
1991	x	x	x	x		x	x	x	
1992	x		x	x		x	x	x	
1993	x		x	x		x	x	x	
1994	x		x	x		x	x	x	
1995	x	x	x	x	x	x	x	x	x
1996	x	x	x	x	x	x	x	x	x
1997	x	x	x	x	x	x	x	x	x
1998	x	x	x	x	x	x	x	x	x
1999	x	x	x	x	x	x	x	x	x
2000	x	x	x	x	x	x	x	x	x
2001	x	x	x	x	x	x	x	x	x
2002	x		x	x	x	x	x	x	x
2003	x	x	x	x	x	x	x	x	x
2004	x	x	x	x	x	x	x	x	x
2005	x	x	x	x	x	x	x	x	x
2006	x	x	x	x	x	x	x	x	x
2007	x	x	x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x		x	x	x	x	x	x
2011	x	x		x	x	x	x	x	x
2012	x	x		x	x	x	x	x	x
2013	x	x		x	x	x	x	x	x
2014	x	x		x	x	x	x	x	x
2015	x	x		x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

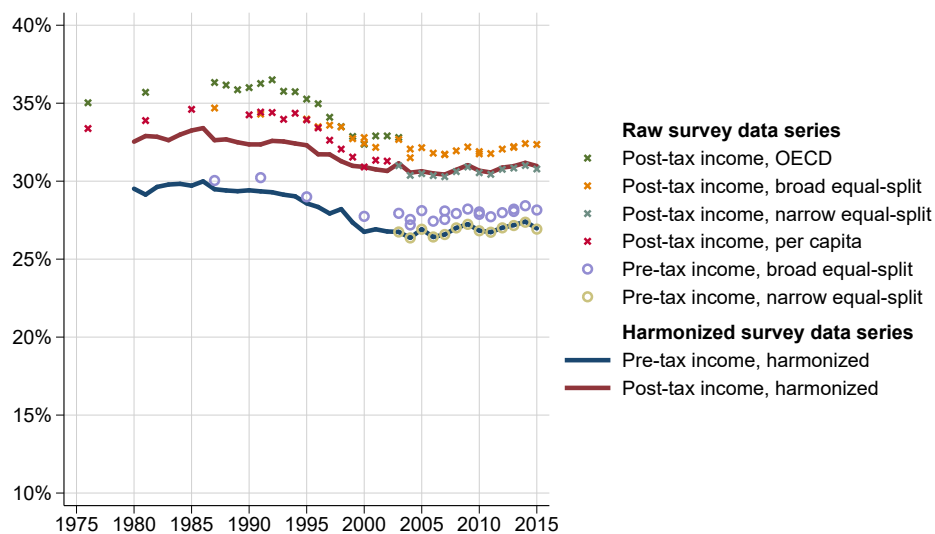
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.31
Finland: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



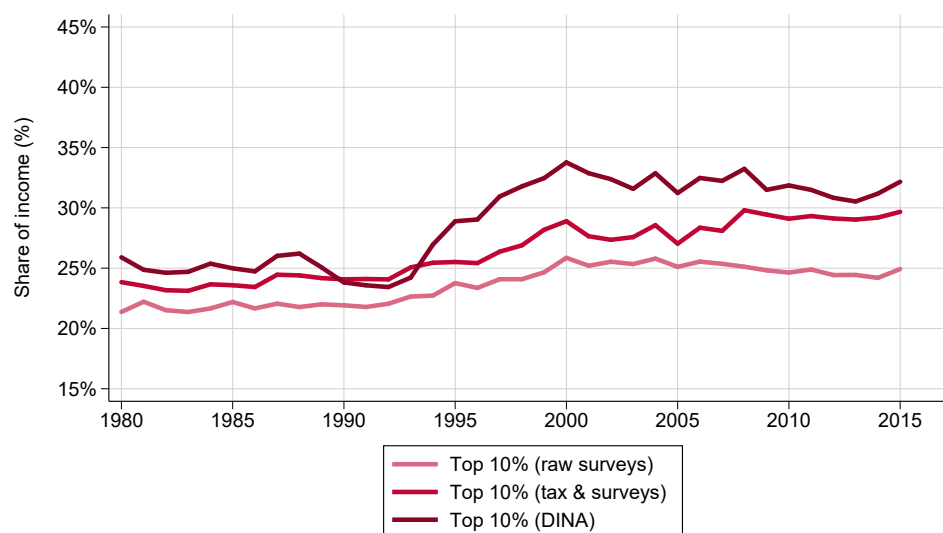
(b) Bottom 50% pre-tax income share



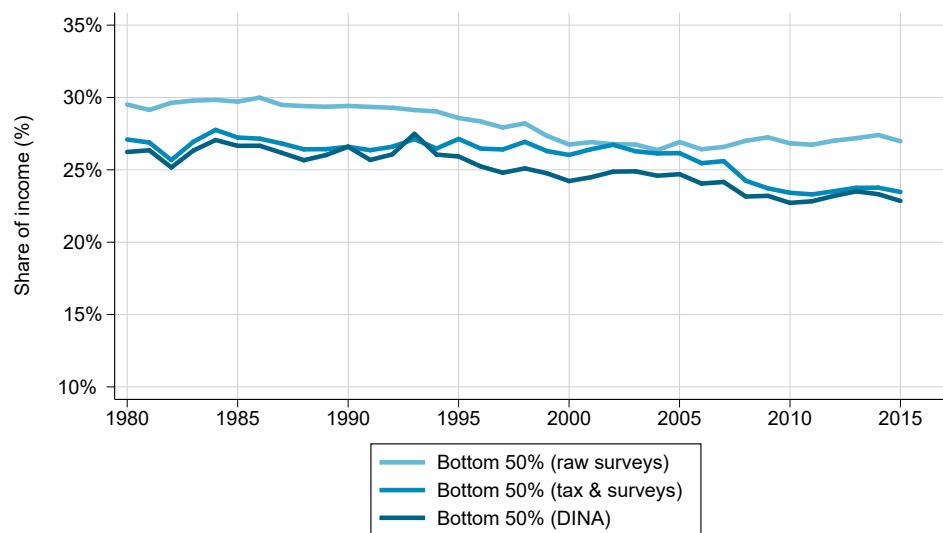
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.32
Finland: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



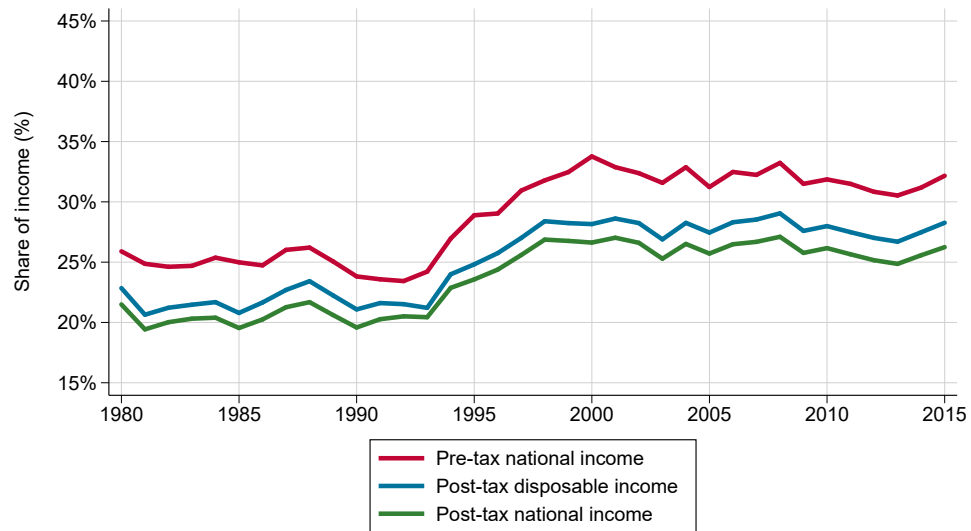
(b) Bottom 50% pre-tax income share



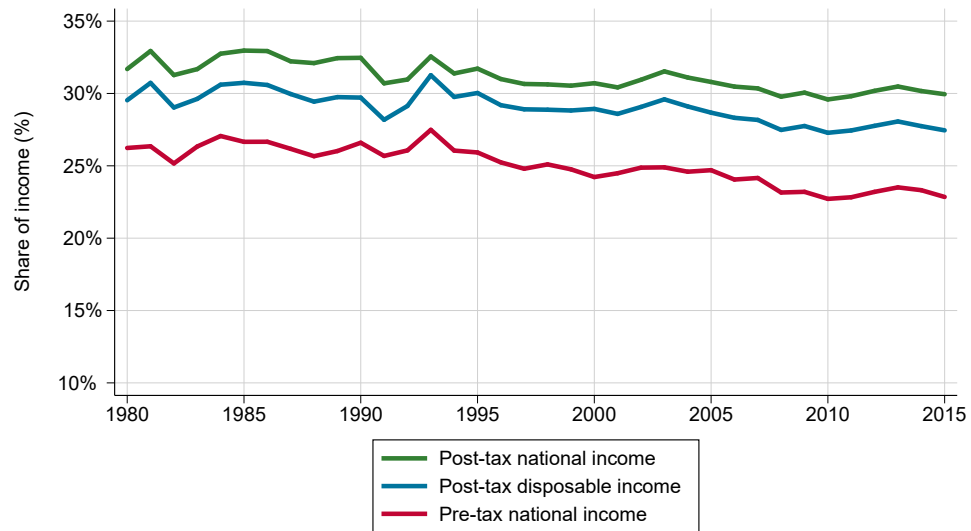
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.33
Finland: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.11.2 Finland: main results

Table A.3.32
The distribution of the national income in Finland, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€35,200	100%	€35,200	100%	€35,200	100%
Bottom 50%	€15,900	22.5%	€19,100	27.2%	€20,900	29.6%
Bottom 20%	€8,800	5.0%	€13,400	7.6%	€15,800	8.9%
Next 30%	€20,600	17.5%	€23,000	19.5%	€24,300	20.6%
Middle 40%	€39,100	44.4%	€38,700	43.9%	€38,300	43.5%
Top 10%	€117,000	33.1%	€102,000	28.9%	€94,900	26.9%
Top 1%	€357,000	10.1%	€303,000	8.6%	€274,000	7.8%
Top 0.1%	€1,220,000	3.4%	€1,040,000	2.9%	€930,000	2.6%
Top 0.01%	€4,270,000	1.2%	€3,720,000	1.1%	€3,330,000	0.9%
Top 0.001%	€15,140,000	0.4%	€13,500,000	0.4%	€12,070,000	0.3%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.33
The distribution of national income growth in Finland, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.4%	-0.7%	1.4%	-0.7%	1.4%	-0.7%
Bottom 50%	1.0%	-1.4%	1.2%	-1.0%	1.2%	-0.9%
Bottom 20%	0.8%	-2.0%	1.6%	-1.0%	1.5%	-0.8%
Next 30%	1.0%	-1.2%	1.0%	-1.1%	1.1%	-1.0%
Middle 40%	1.2%	-0.5%	1.2%	-0.5%	1.2%	-0.6%
Top 10%	2.1%	-0.4%	2.1%	-0.5%	2.0%	-0.6%
Top 1%	3.0%	-1.7%	3.0%	-2.2%	3.0%	-2.2%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.12 France

3.12.1 France: data sources and methodological steps

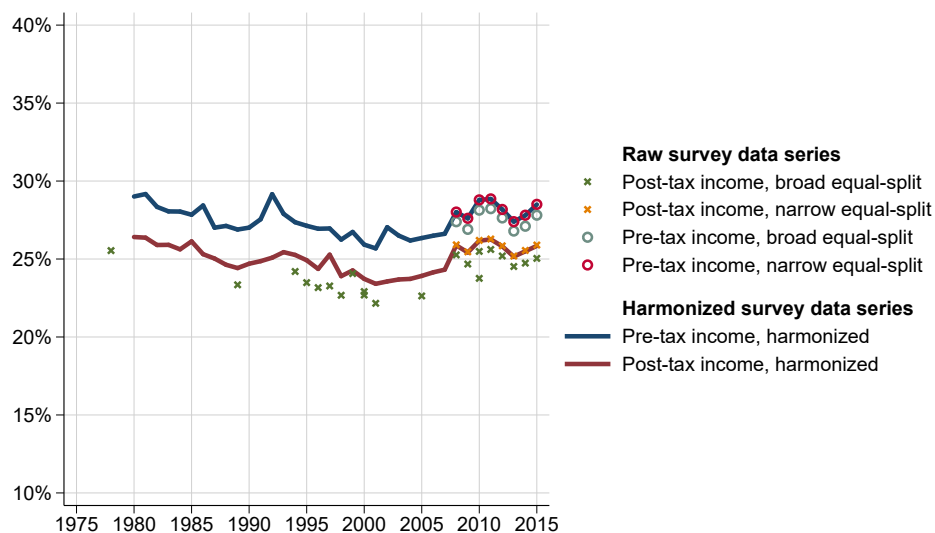
Table A.3.34
France: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1978	x	x							
1980			x	x		x	x	x	
1981			x	x		x	x	x	
1982			x	x		x	x	x	
1983			x	x		x	x	x	
1984			x	x		x	x	x	
1985			x	x		x	x	x	
1986			x	x		x	x	x	
1987			x	x		x	x	x	
1988			x	x		x	x	x	
1989	x	x	x	x		x	x	x	
1990			x	x		x	x	x	
1991			x	x		x	x	x	
1992			x	x		x	x	x	
1993			x	x		x	x	x	
1994	x	x	x	x		x	x	x	
1995	x	x	x	x	x	x	x	x	
1996	x	x	x	x	x	x	x	x	
1997	x	x	x	x	x	x	x	x	
1998	x	x	x	x	x	x	x	x	
1999	x	x	x	x	x	x	x	x	
2000	x	x	x	x	x	x	x	x	
2001	x	x	x	x	x	x	x	x	
2002			x	x	x	x	x	x	
2003			x	x	x	x	x	x	x
2004			x	x	x	x	x	x	x
2005	x	x	x	x	x	x	x	x	x
2006			x	x	x	x	x	x	x
2007			x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x	x	x	x	x	x	x	x
2012	x	x	x	x	x	x	x	x	x
2013	x	x	x	x	x	x	x	x	x
2014	x	x	x	x	x	x	x	x	x
2015	x	x		x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

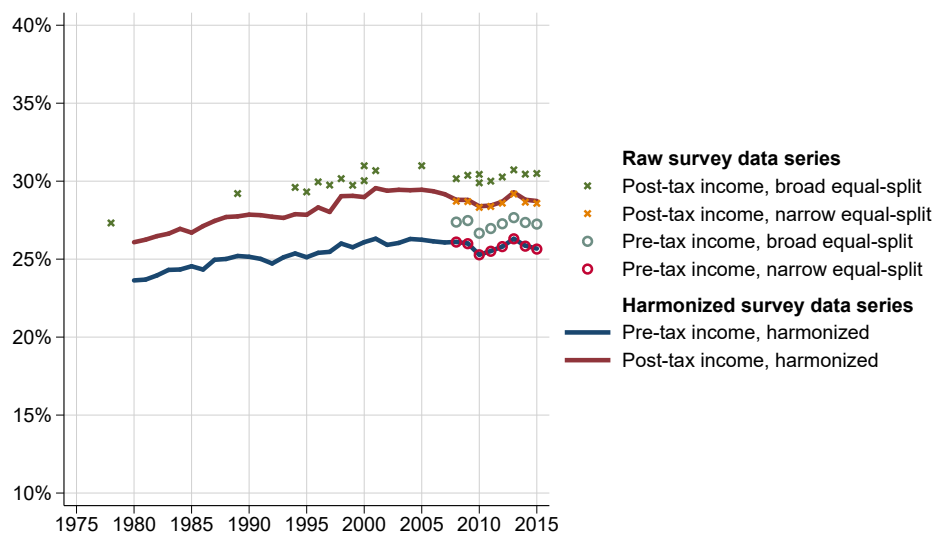
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.34
France: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



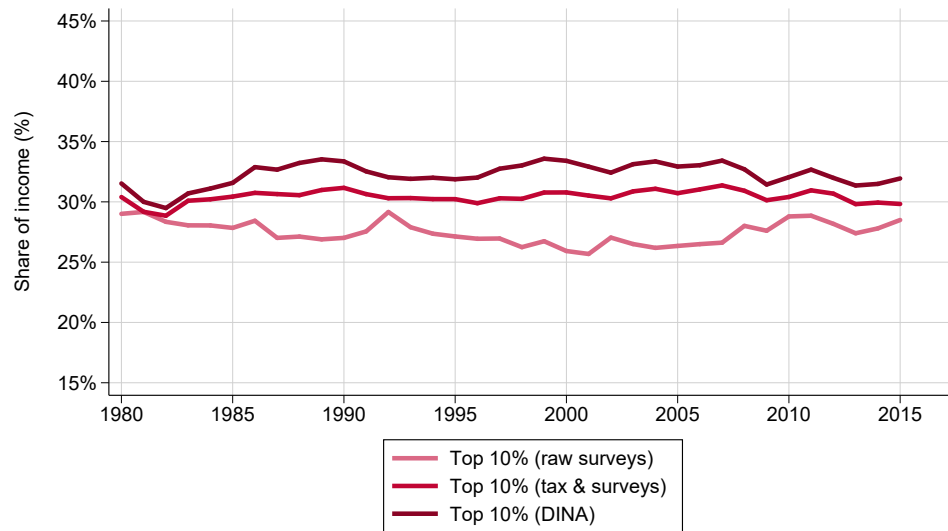
(b) Bottom 50% pre-tax income share



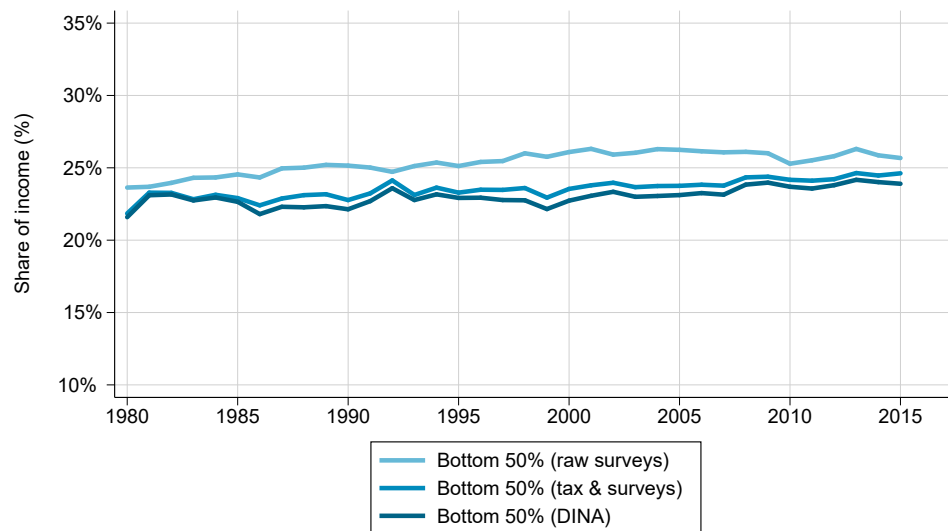
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.35
France: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



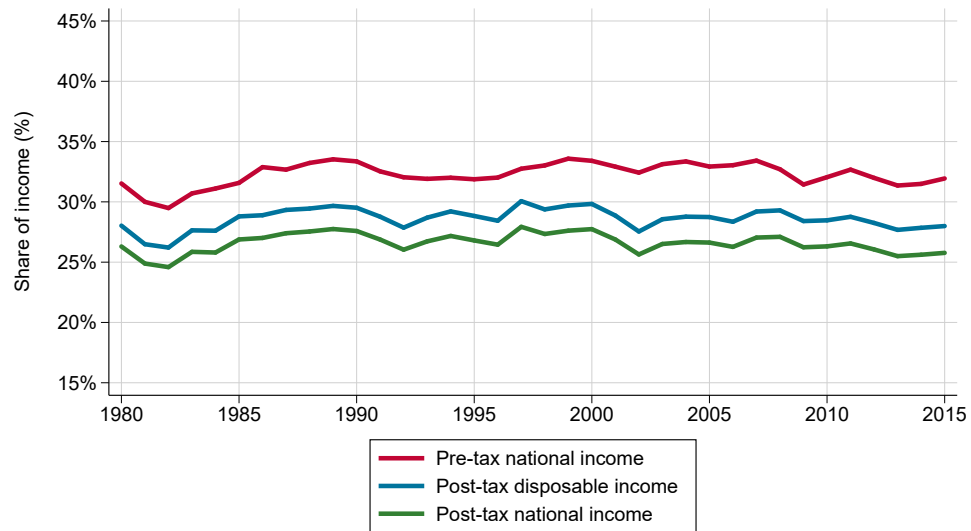
(b) Bottom 50% pre-tax income share



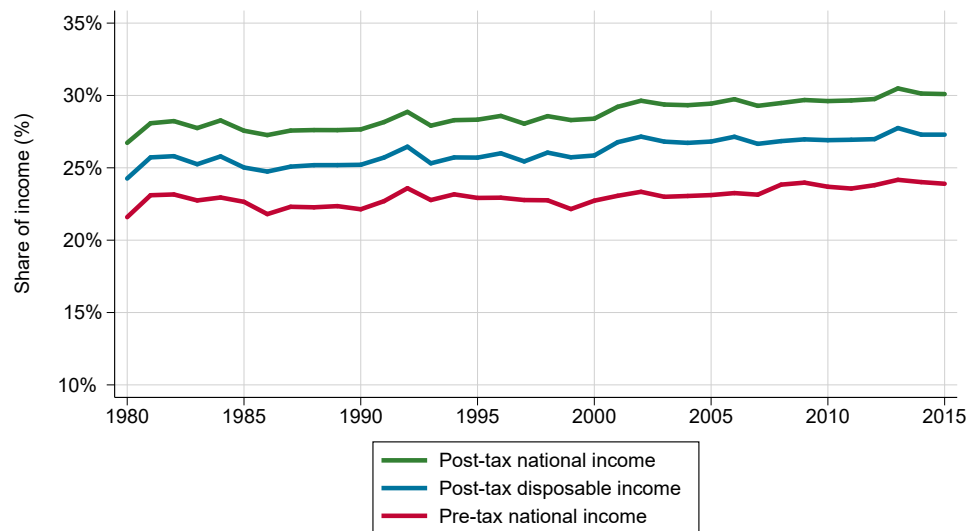
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.36
France: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.12.2 France: main results

Table A.3.35
The distribution of the national income in France, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€35,100	100%	€35,100	100%	€35,100	100%
Bottom 50%	€16,800	24.0%	€19,300	27.4%	€21,200	30.2%
Bottom 20%	€9,000	5.1%	€11,900	6.8%	€14,800	8.4%
Next 30%	€22,100	18.9%	€24,200	20.7%	€25,500	21.8%
Middle 40%	€38,800	44.2%	€39,400	44.9%	€38,900	44.3%
Top 10%	€112,000	31.8%	€97,200	27.7%	€89,500	25.5%
Top 1%	€343,000	9.8%	€262,000	7.4%	€234,000	6.6%
Top 0.1%	€1,170,000	3.3%	€792,000	2.3%	€698,000	2.0%
Top 0.01%	€4,090,000	1.2%	€2,500,000	0.7%	€2,200,000	0.6%
Top 0.001%	€14,460,000	0.4%	€8,020,000	0.2%	€7,030,000	0.2%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.36
The distribution of national income growth in France, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.0%	0.1%	1.0%	0.1%	1.0%	0.1%
Bottom 50%	1.2%	0.4%	1.3%	0.3%	1.3%	0.4%
Bottom 20%	1.9%	0.4%	2.1%	0.6%	1.9%	0.7%
Next 30%	1.1%	0.4%	1.1%	0.3%	1.1%	0.3%
Middle 40%	0.8%	0.2%	0.8%	0.2%	0.8%	0.2%
Top 10%	1.0%	-0.4%	0.9%	-0.5%	0.9%	-0.5%
Top 1%	1.3%	-1.5%	1.1%	-1.7%	1.0%	-1.8%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.13 Germany

3.13.1 Germany: data sources and methodological steps

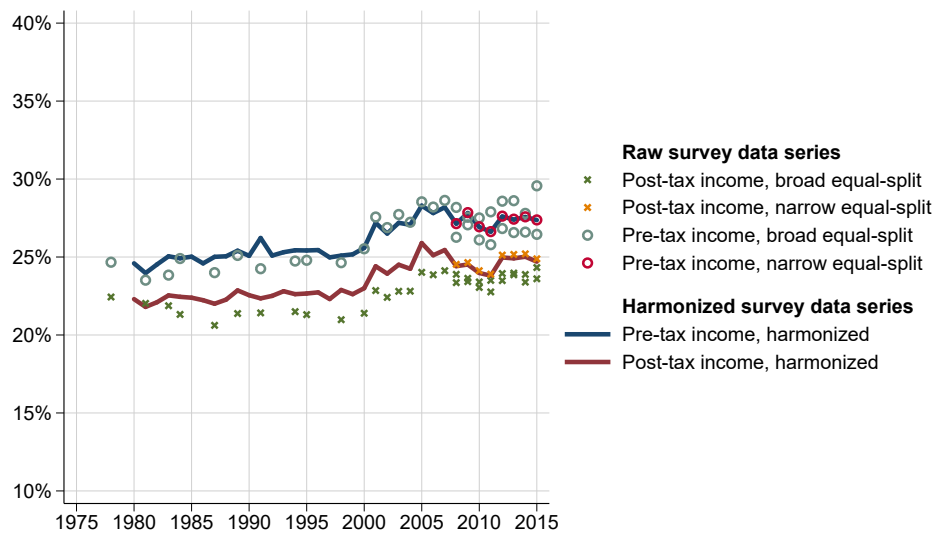
Table A.3.37
Germany: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1978	x	x							
1980			x						
1981	x	x							
1982									
1983	x	x	x						
1984	x	x							
1985									
1986			x						
1987	x	x							
1988									
1989	x	x	x						
1990									
1991	x	x		x	x	x	x	x	
1992			x	x	x	x	x	x	x
1993				x	x	x	x	x	x
1994	x	x		x	x	x	x	x	x
1995	x	x	x	x	x	x	x	x	x
1996				x	x	x	x	x	x
1997				x	x	x	x	x	x
1998	x	x	x	x	x	x	x	x	x
1999				x	x	x	x	x	x
2000	x	x		x	x	x	x	x	x
2001	x	x	x	x	x	x	x	x	x
2002	x	x	x	x	x	x	x	x	x
2003	x	x	x	x	x	x	x	x	x
2004	x	x	x	x	x	x	x	x	x
2005	x	x	x	x	x	x	x	x	x
2006	x	x	x	x	x	x	x	x	x
2007	x	x	x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x	x	x	x	x	x	x	x
2012	x	x	x	x	x	x	x	x	x
2013	x	x	x	x	x	x	x	x	x
2014	x	x		x	x	x	x	x	x
2015	x	x		x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

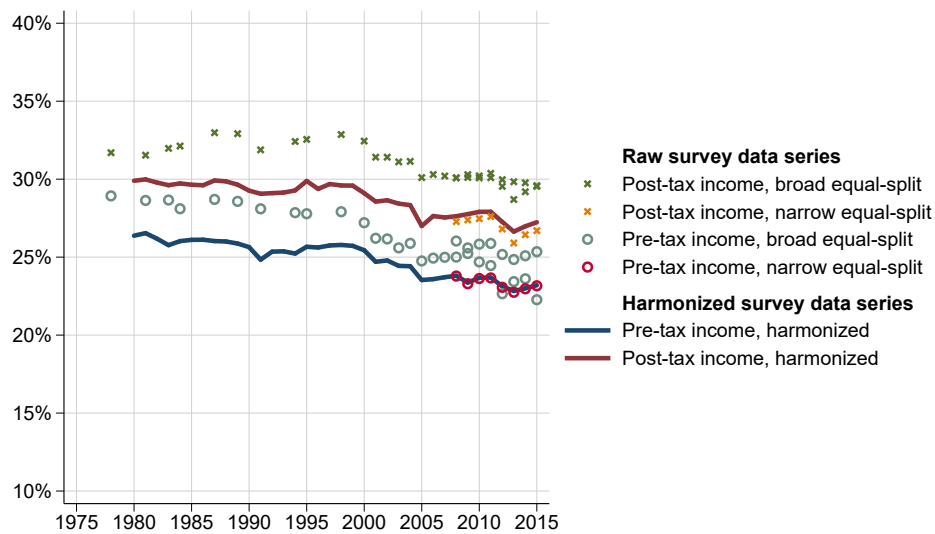
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.37
Germany: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



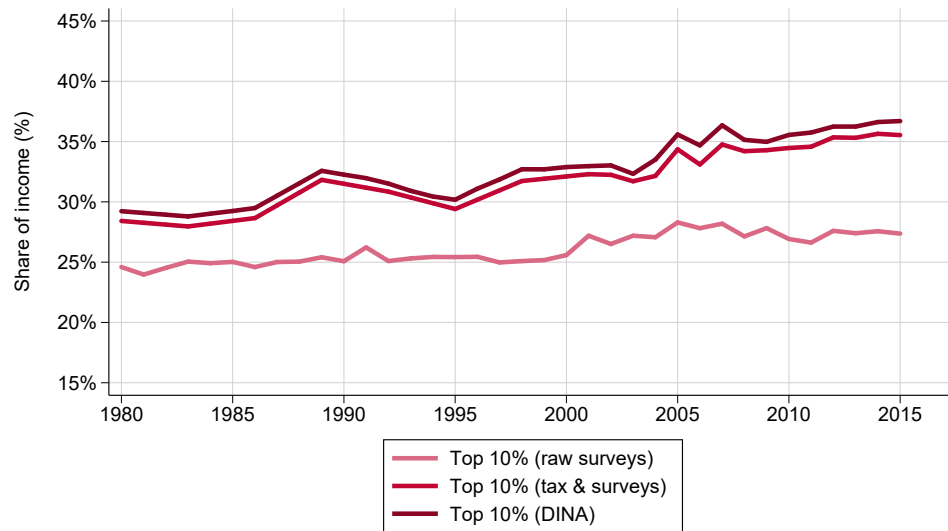
(b) Bottom 50% pre-tax income share



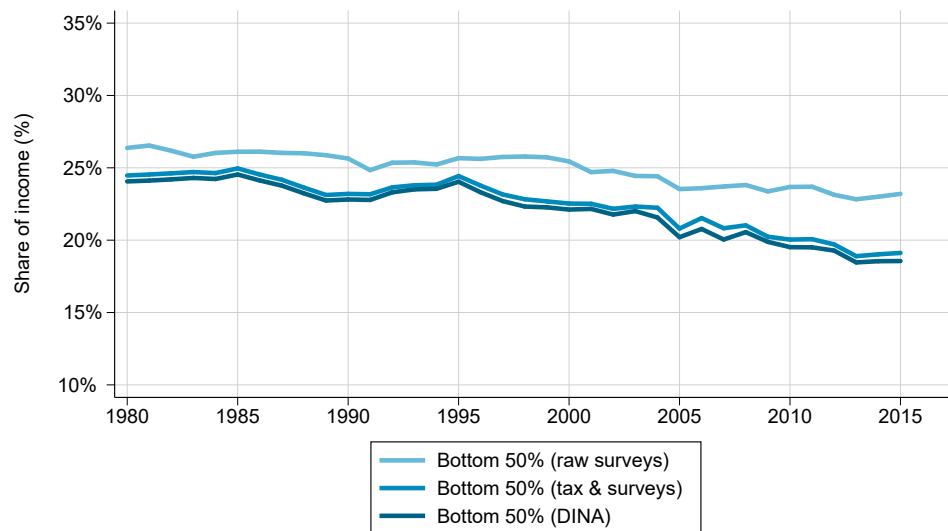
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.38
Germany: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



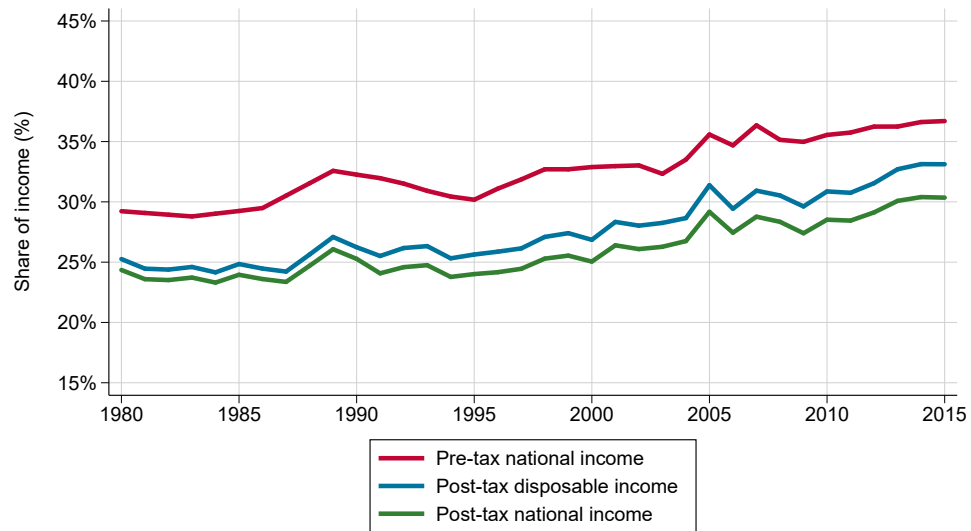
(b) Bottom 50% pre-tax income share



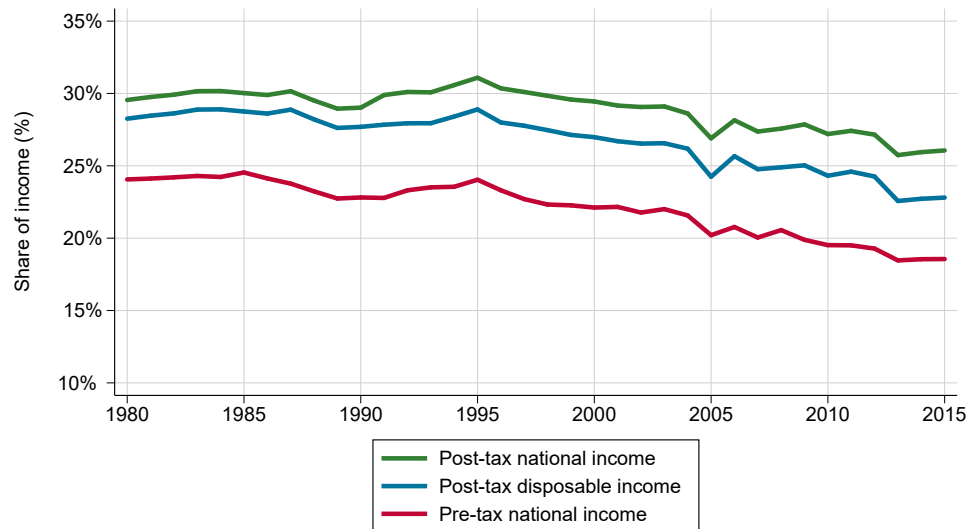
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.39
Germany: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.13.2 Germany: main results

Table A.3.38
The distribution of the national income in Germany, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€39,400	100%	€39,400	100%	€39,400	100%
Bottom 50%	€14,600	18.5%	€18,000	22.8%	€20,600	26.2%
Bottom 20%	€5,700	2.9%	€9,200	4.7%	€12,900	6.6%
Next 30%	€20,500	15.6%	€23,800	18.1%	€25,800	19.6%
Middle 40%	€44,100	44.7%	€43,500	44.1%	€43,000	43.6%
Top 10%	€145,000	36.8%	€130,000	33.1%	€119,000	30.2%
Top 1%	€494,000	12.5%	€463,000	11.8%	€411,000	10.4%
Top 0.1%	€1,910,000	4.8%	€1,980,000	5.0%	€1,740,000	4.4%
Top 0.01%	€7,660,000	1.9%	€8,840,000	2.2%	€7,750,000	2.0%
Top 0.001%	€30,990,000	0.8%	€39,990,000	1.0%	€35,050,000	0.9%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.39
The distribution of national income growth in Germany, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Bottom 50%	0.2%	0.1%	0.3%	0.1%	0.6%	0.5%
Bottom 20%	-0.6%	-1.8%	-0.1%	-1.2%	0.6%	-0.1%
Next 30%	0.4%	0.5%	0.5%	0.5%	0.6%	0.7%
Middle 40%	0.8%	1.2%	0.8%	0.9%	0.8%	0.9%
Top 10%	1.6%	1.0%	1.7%	1.6%	1.5%	1.4%
Top 1%	1.5%	0.4%	2.0%	2.6%	1.8%	2.4%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.14 Greece

3.14.1 Greece: data sources and methodological steps

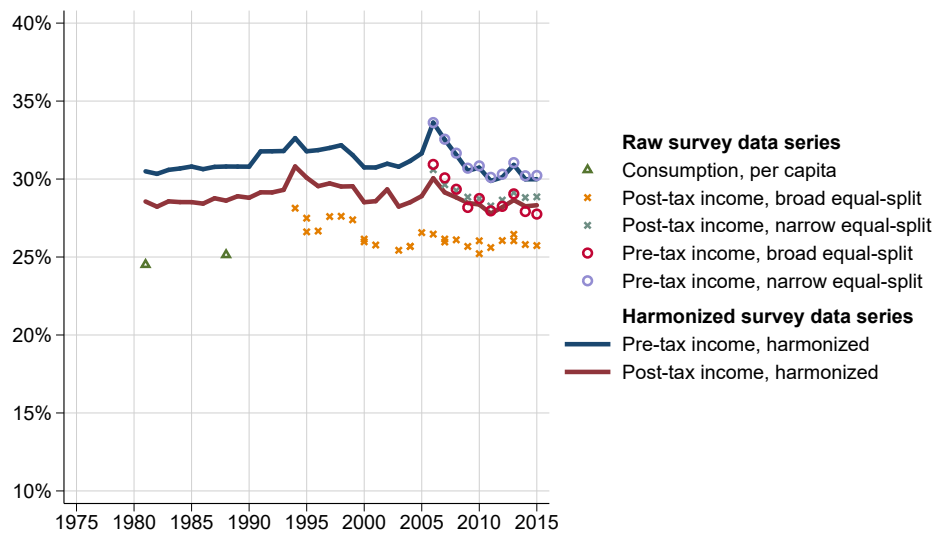
Table A.3.40
Greece: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980			x						
1981	x		x						
1982			x						
1983			x						
1984			x						
1985			x						
1986			x						
1987			x						
1988	x		x						
1989			x						
1990			x						
1991			x						
1992			x						
1993			x						
1994	x	x	x						
1995	x	x	x	x	x	x	x	x	
1996	x	x	x	x	x	x	x	x	
1997	x	x	x	x	x	x	x	x	
1998	x	x	x	x	x	x	x	x	
1999	x	x	x	x	x	x	x	x	
2000	x	x	x	x	x	x	x	x	
2001	x	x	x	x	x	x	x	x	
2002			x	x	x	x	x	x	
2003	x	x	x	x	x	x	x	x	
2004	x	x	x	x	x	x	x	x	
2005	x	x	x	x	x	x	x	x	
2006	x	x	x	x	x	x	x	x	
2007	x	x	x	x	x	x	x	x	
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x	x	x	x	x	x	x	x
2012	x	x	x	x	x	x	x	x	x
2013	x	x	x	x	x	x	x	x	x
2014	x	x	x	x	x	x	x	x	x
2015	x	x	x	x	x	x	x	x	x
2016			x	x	x	x	x	x	x
2017			x	x	x	x	x	x	x

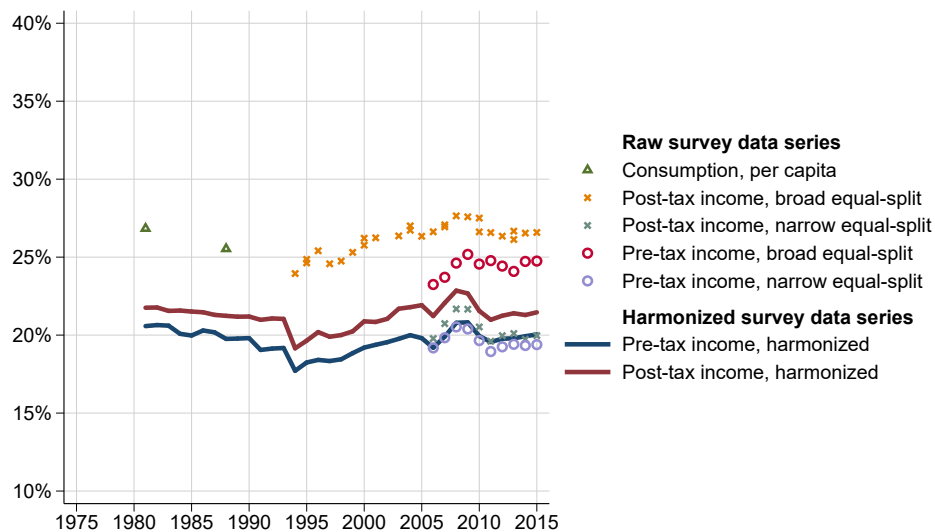
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.40
Greece: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



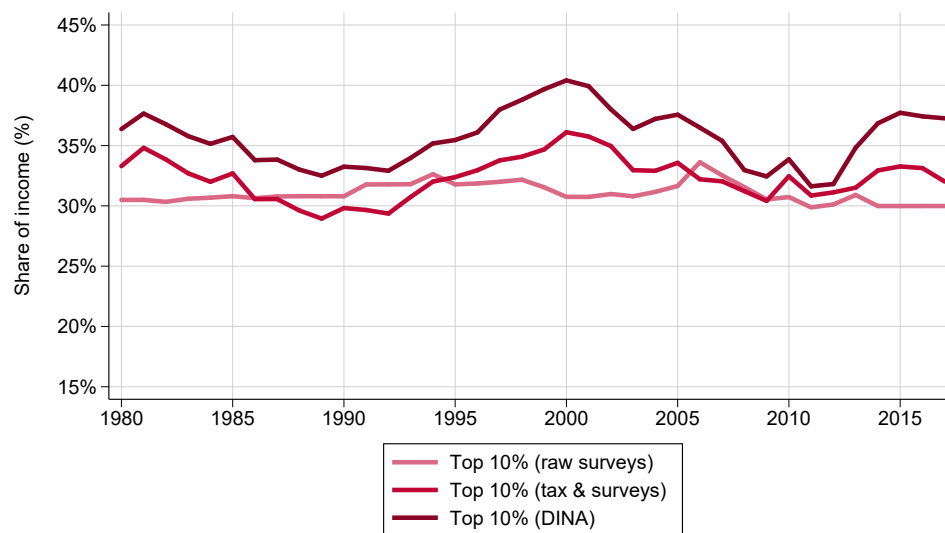
(b) Bottom 50% pre-tax income share



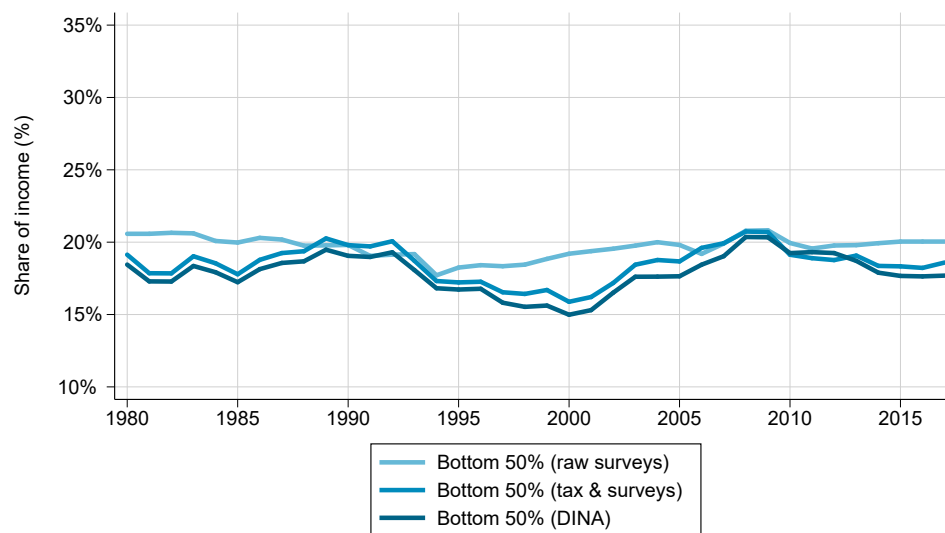
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.41
Greece: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



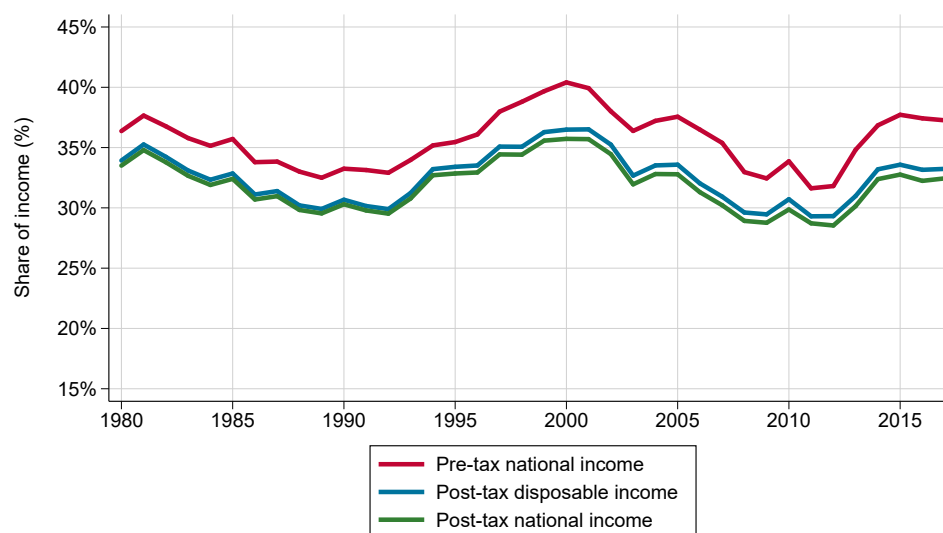
(b) Bottom 50% pre-tax income share



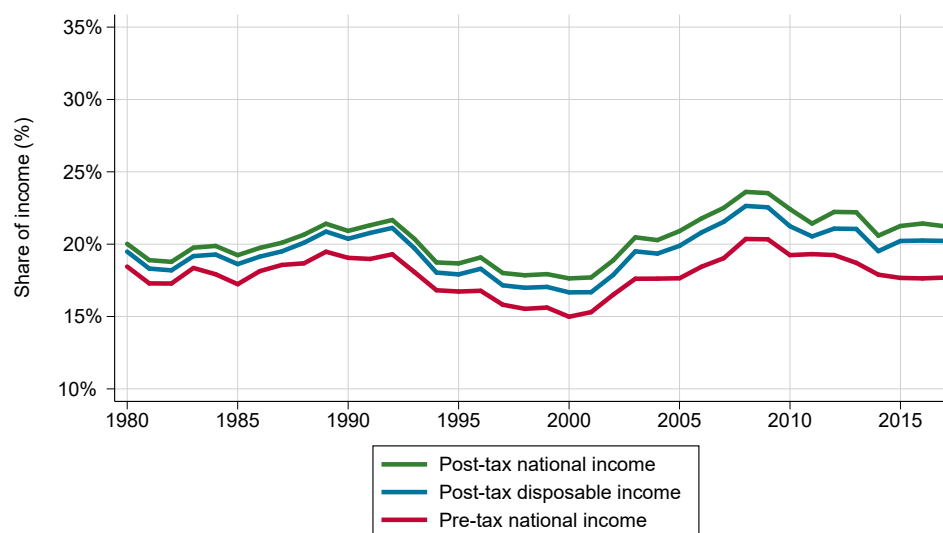
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.42
Greece: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.14.2 Greece: main results

Table A.3.41
The distribution of the national income in Greece, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€20,700	100%	€20,700	100%	€20,700	100%
Bottom 50%	€7,300	17.7%	€8,400	20.2%	€8,800	21.2%
Bottom 20%	€1,600	1.5%	€3,000	2.9%	€3,600	3.5%
Next 30%	€11,100	16.2%	€11,900	17.3%	€12,200	17.8%
Middle 40%	€23,300	45.0%	€24,100	46.5%	€23,900	46.3%
Top 10%	€77,000	37.3%	€68,700	33.2%	€67,100	32.4%
Top 1%	€276,000	13.4%	€212,000	10.3%	€205,000	9.9%
Top 0.1%	€1,100,000	5.3%	€719,000	3.5%	€695,000	3.4%
Top 0.01%	€4,450,000	2.2%	€2,510,000	1.2%	€2,430,000	1.2%
Top 0.001%	€18,250,000	0.9%	€8,860,000	0.4%	€8,560,000	0.4%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.42
The distribution of national income growth in Greece, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	-0.1%	-3.7%	-0.1%	-3.7%	-0.1%	-3.7%
Bottom 50%	-0.2%	-4.4%	0.0%	-4.3%	0.0%	-4.2%
Bottom 20%	-2.0%	-10.7%	-0.2%	-5.7%	0.1%	-5.4%
Next 30%	0.0%	-3.5%	0.0%	-4.0%	0.0%	-4.0%
Middle 40%	-0.1%	-3.8%	-0.1%	-3.9%	-0.1%	-3.9%
Top 10%	-0.1%	-3.2%	-0.2%	-3.0%	-0.2%	-3.0%
Top 1%	0.7%	-1.5%	0.3%	-1.3%	0.3%	-1.3%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.15 Hungary

3.15.1 Hungary: data sources and methodological steps

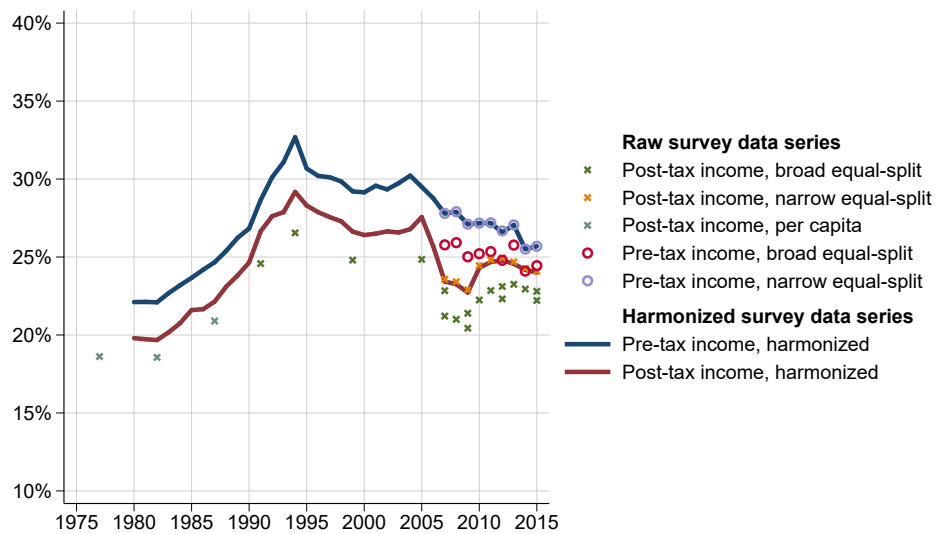
Table A.3.43
Hungary: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1977	x								
1980			x						
1981									
1982	x		x						
1983									
1984			x						
1985									
1986			x						
1987	x								
1988			x						
1989									
1990									
1991	x	x			x				
1992			x		x				
1993			x		x				
1994	x	x	x		x				
1995			x	x	x	x	x	x	
1996			x	x	x	x	x	x	
1997			x	x	x	x	x	x	
1998			x	x	x	x	x	x	
1999	x	x	x	x	x	x	x	x	
2000			x	x	x	x	x	x	
2001			x	x	x	x	x	x	
2002			x	x	x	x	x	x	
2003			x	x	x	x	x	x	x
2004			x	x	x	x	x	x	x
2005	x	x	x	x	x	x	x	x	x
2006			x	x	x	x	x	x	x
2007	x	x	x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x		x	x	x	x	x	x
2010	x	x		x	x	x	x	x	x
2011	x	x		x	x	x	x	x	x
2012	x	x		x	x	x	x	x	x
2013	x	x		x	x	x	x	x	x
2014	x	x		x	x	x	x	x	x
2015	x	x		x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

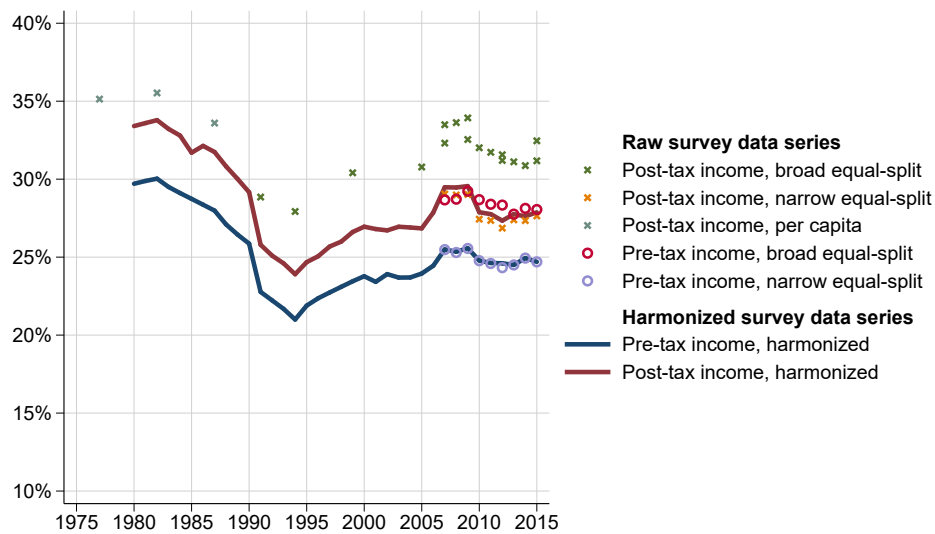
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.43
Hungary: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



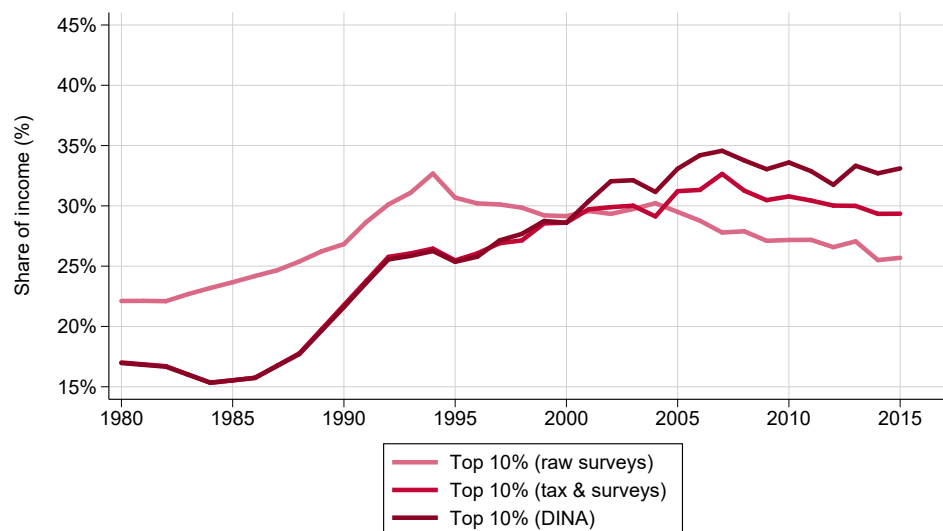
(b) Bottom 50% pre-tax income share



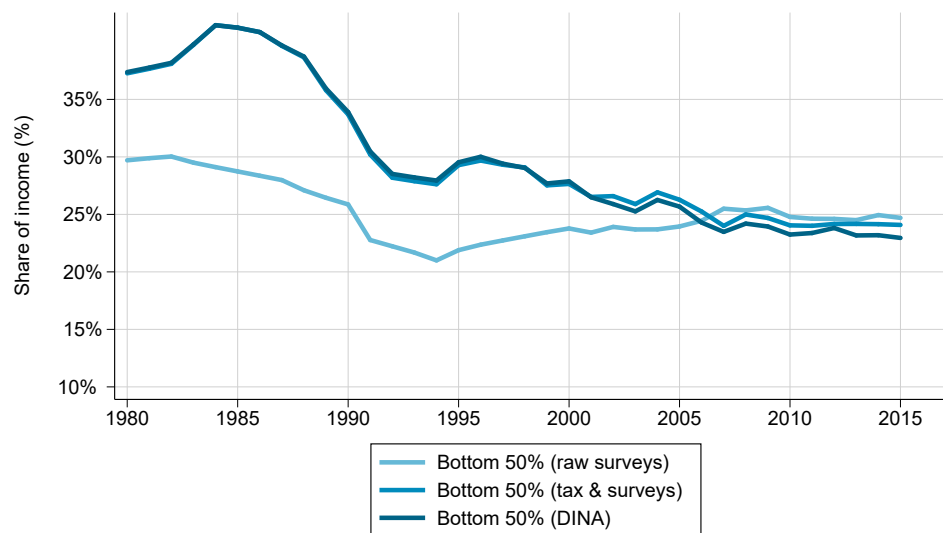
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.44
Hungary: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



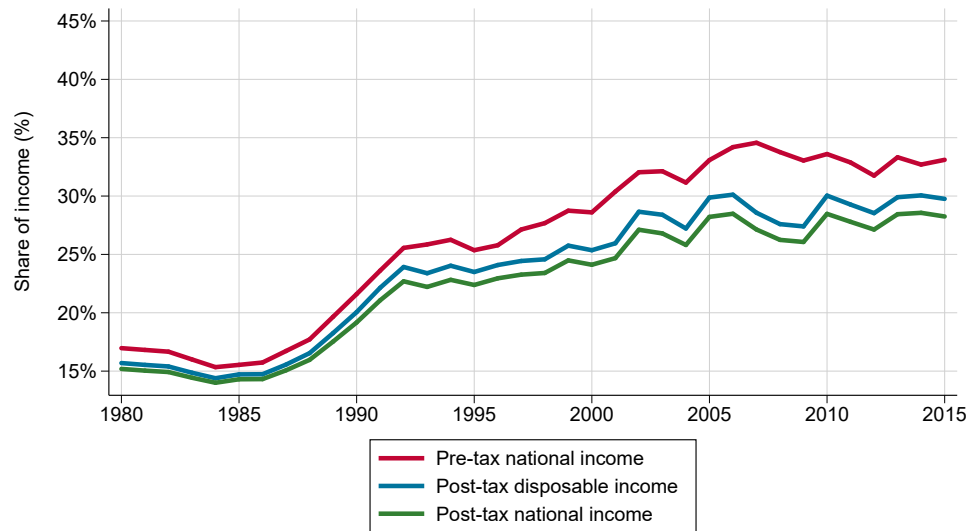
(b) Bottom 50% pre-tax income share



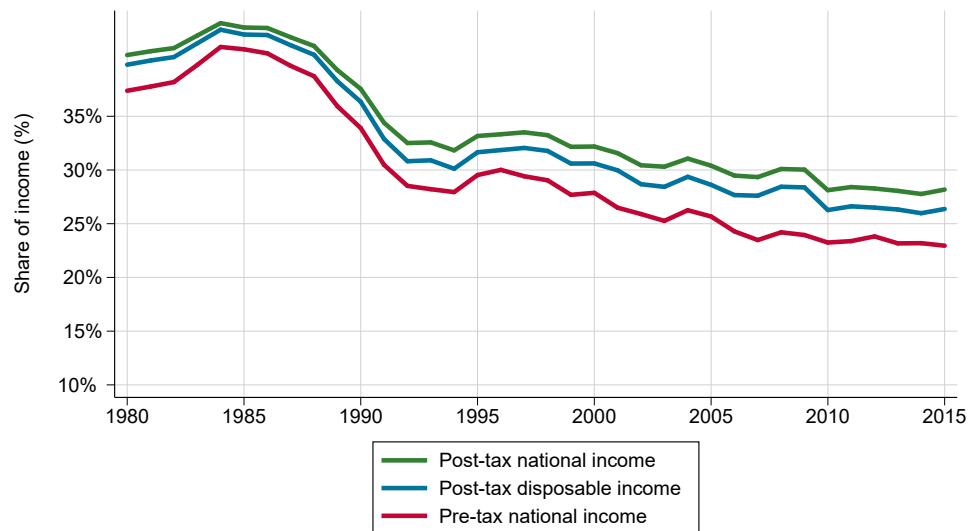
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.45
Hungary: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.15.2 Hungary: main results

Table A.3.44
The distribution of the national income in Hungary, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€20,900	100%	€20,900	100%	€20,900	100%
Bottom 50%	€9,500	22.8%	€11,000	26.3%	€11,700	28.1%
Bottom 20%	€3,600	3.5%	€6,000	5.7%	€7,100	6.8%
Next 30%	€13,500	19.4%	€14,300	20.6%	€14,800	21.3%
Middle 40%	€22,800	43.7%	€22,800	43.7%	€22,700	43.5%
Top 10%	€69,800	33.4%	€62,600	30.0%	€59,500	28.5%
Top 1%	€253,000	12.1%	€209,000	10.0%	€194,000	9.3%
Top 0.1%	€940,000	4.5%	€746,000	3.6%	€691,000	3.3%
Top 0.01%	€3,510,000	1.7%	€2,730,000	1.3%	€2,520,000	1.2%
Top 0.001%	€13,120,000	0.6%	€10,020,000	0.5%	€9,260,000	0.4%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.45
The distribution of national income growth in Hungary, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.0%	1.1%	1.0%	1.1%	1.0%	1.1%
Bottom 50%	-0.3%	0.8%	-0.1%	0.6%	0.0%	0.7%
Bottom 20%	-2.2%	-2.2%	-1.2%	0.0%	-0.8%	0.2%
Next 30%	0.3%	1.5%	0.3%	0.8%	0.4%	0.8%
Middle 40%	0.9%	1.5%	1.0%	1.1%	1.0%	1.1%
Top 10%	2.9%	0.8%	2.8%	1.6%	2.8%	1.6%
Top 1%	5.2%	1.8%	5.1%	2.7%	5.0%	2.7%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.16 Iceland

3.16.1 Iceland: data sources and methodological steps

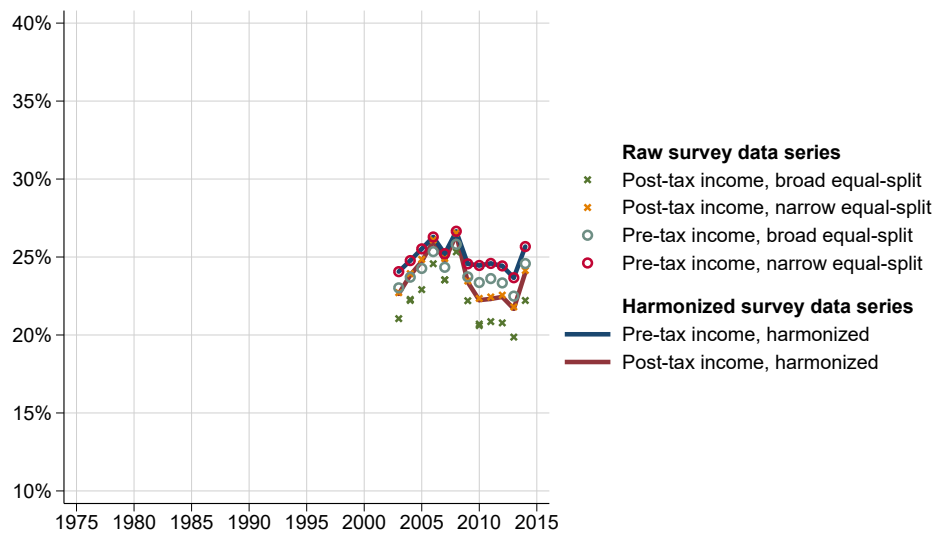
Table A.3.46
Iceland: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980									
1981									
1982									
1983									
1984									
1985									
1986									
1987									
1988									
1989									
1990									
1991									
1992									
1993									
1994									
1995									
1996									
1997									
1998									
1999									
2000				X		X	X	X	
2001				X		X	X	X	
2002				X		X	X	X	
2003	X	X		X	X	X	X	X	X
2004	X	X		X	X	X	X	X	X
2005	X	X		X	X	X	X	X	X
2006	X	X		X	X	X	X	X	X
2007	X	X		X	X	X	X	X	X
2008	X	X		X	X	X	X	X	X
2009	X	X		X	X	X	X	X	X
2010	X	X		X	X	X	X	X	X
2011	X	X		X	X	X	X	X	X
2012	X	X		X	X	X	X	X	X
2013	X	X		X	X	X	X	X	X
2014	X	X		X		X	X	X	X
2015							X		X
2016									X
2017									X

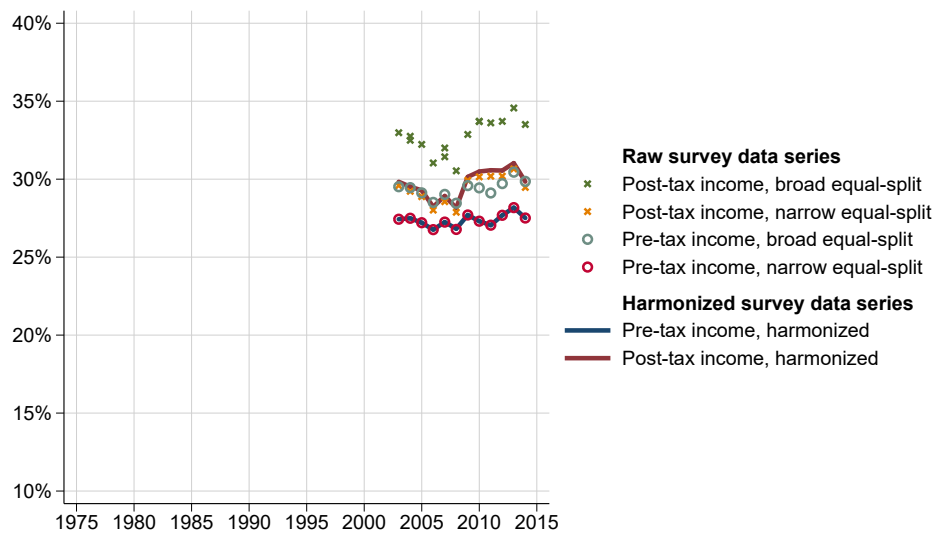
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.46
Iceland: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



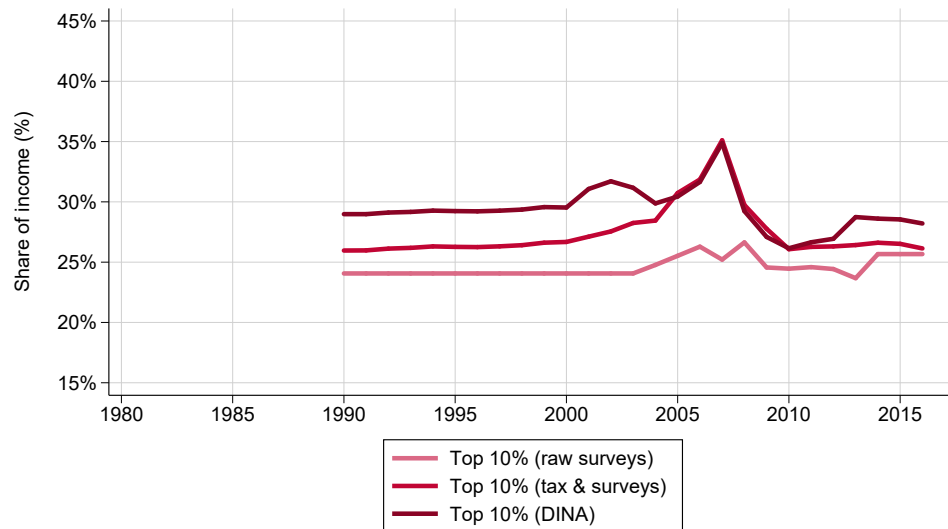
(b) Bottom 50% pre-tax income share



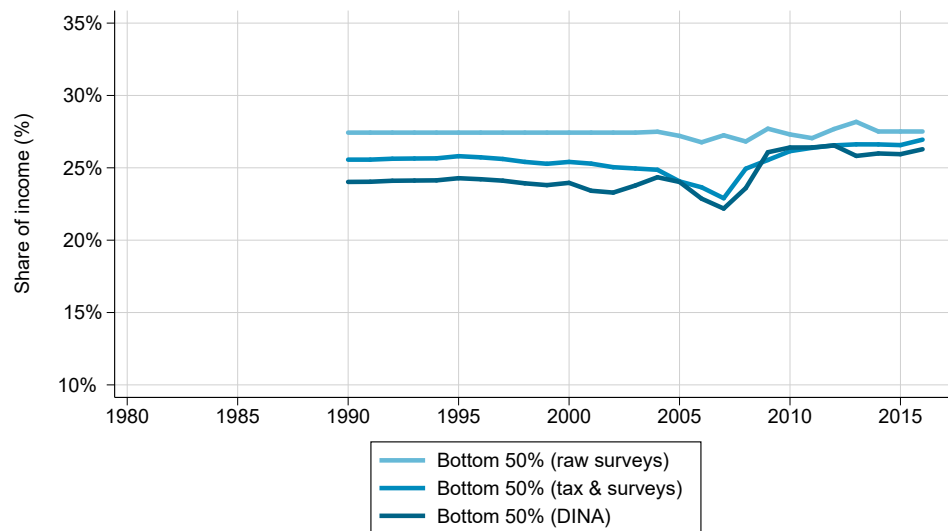
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.47
Iceland: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



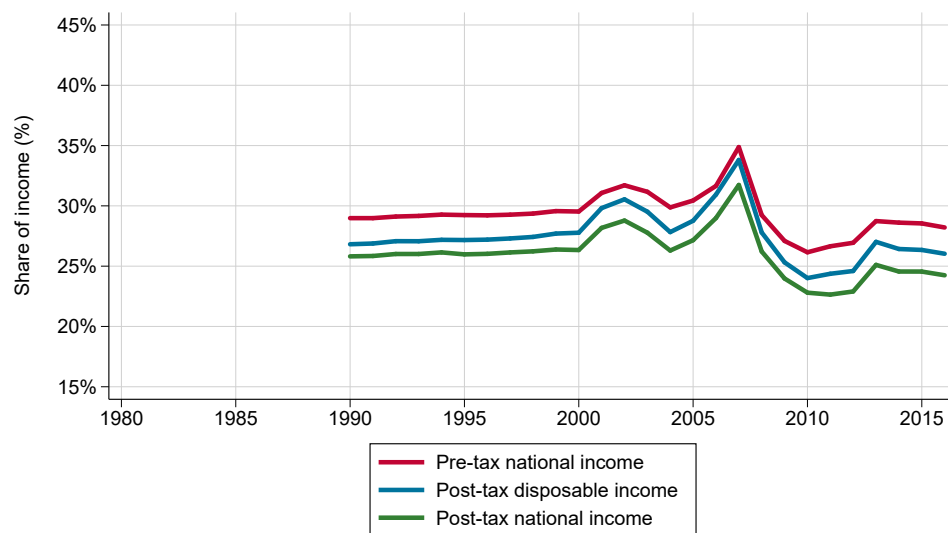
(b) Bottom 50% pre-tax income share



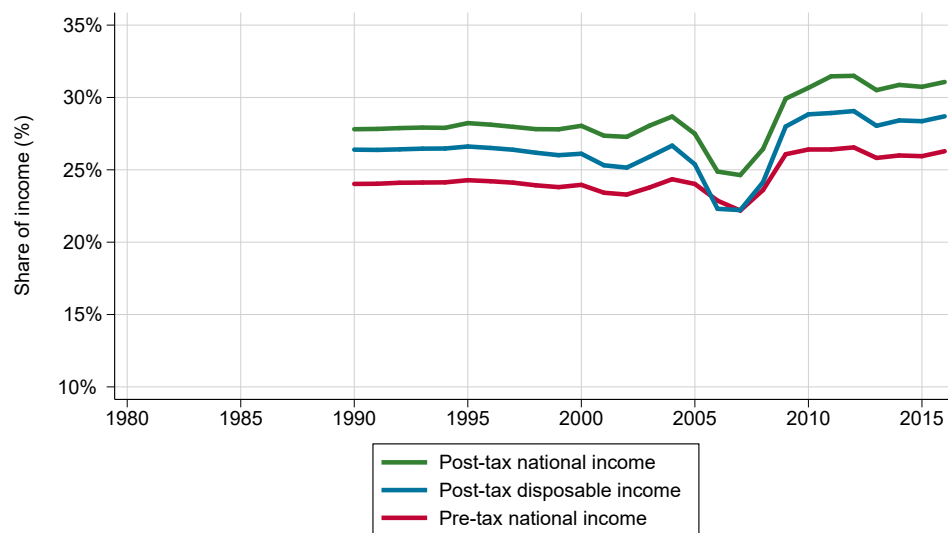
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.48
Iceland: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.16.2 Iceland: main results

Table A.3.47
The distribution of the national income in Iceland, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€45,700	100%	€45,700	100%	€45,700	100%
Bottom 50%	€24,000	26.3%	€26,300	28.7%	€28,500	31.1%
Bottom 20%	€14,700	6.4%	€15,000	6.6%	€18,500	8.1%
Next 30%	€30,200	19.8%	€33,700	22.1%	€35,100	23.0%
Middle 40%	€52,000	45.5%	€51,800	45.3%	€51,100	44.7%
Top 10%	€129,000	28.2%	€119,000	26.0%	€111,000	24.2%
Top 1%	€349,000	7.6%	€314,000	6.9%	€284,000	6.2%
Top 0.1%	€994,000	2.2%	€876,000	1.9%	€781,000	1.7%
Top 0.01%	€2,880,000	0.6%	€2,490,000	0.5%	€2,210,000	0.5%
Top 0.001%	€8,420,000	0.2%	€7,120,000	0.2%	€6,320,000	0.1%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.48
The distribution of national income growth in Iceland, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.4%	0.7%	1.4%	0.7%	1.4%	0.7%
Bottom 50%	1.6%	2.4%	1.6%	3.3%	1.7%	3.0%
Bottom 20%	1.9%	4.7%	1.9%	16.0%	2.1%	10.5%
Next 30%	1.6%	1.8%	1.5%	1.4%	1.6%	1.4%
Middle 40%	1.3%	1.3%	1.3%	1.0%	1.3%	0.9%
Top 10%	1.3%	-1.4%	1.3%	-1.9%	1.2%	-2.0%
Top 1%	1.7%	-5.3%	1.7%	-6.3%	1.5%	-6.5%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.17 Ireland

3.17.1 Ireland: data sources and methodological steps

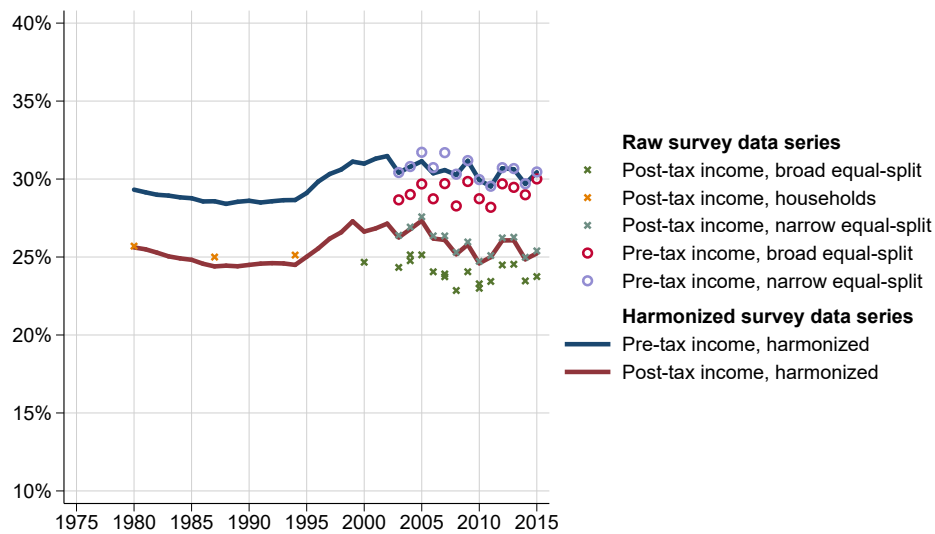
Table A.3.49
Ireland: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980	x		x						
1981			x						
1982			x						
1983			x						
1984			x						
1985			x						
1986			x						
1987	x		x						
1988			x						
1989			x						
1990			x						
1991			x						
1992			x						
1993			x						
1994	x		x						
1995			x	x		x	x	x	
1996			x	x		x	x	x	
1997			x	x		x	x	x	
1998			x	x		x	x	x	
1999			x	x		x	x	x	
2000	x	x	x	x		x	x	x	
2001			x	x	x	x	x	x	
2002			x	x	x	x	x	x	
2003	x	x	x	x	x	x	x	x	
2004	x	x	x	x	x	x	x	x	
2005	x	x	x	x	x	x	x	x	
2006	x	x	x	x	x	x	x	x	
2007	x	x	x	x	x	x	x	x	
2008	x	x	x	x	x	x	x	x	
2009	x	x	x	x	x	x	x	x	
2010	x	x	x	x	x	x	x	x	
2011	x	x	x	x	x	x	x	x	x
2012	x	x	x	x	x	x	x	x	x
2013	x	x	x	x	x	x	x	x	x
2014	x	x	x	x	x	x	x	x	x
2015	x	x	x	x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

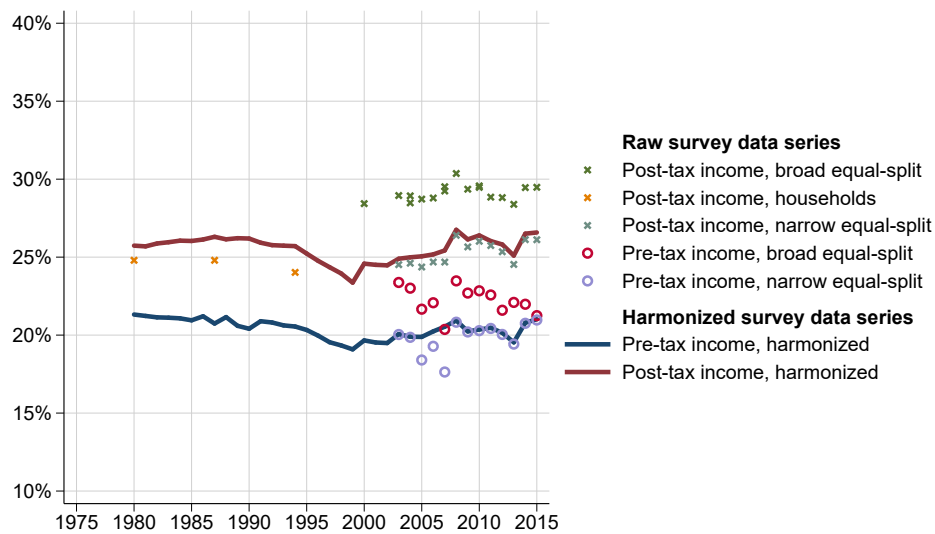
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.49
Ireland: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



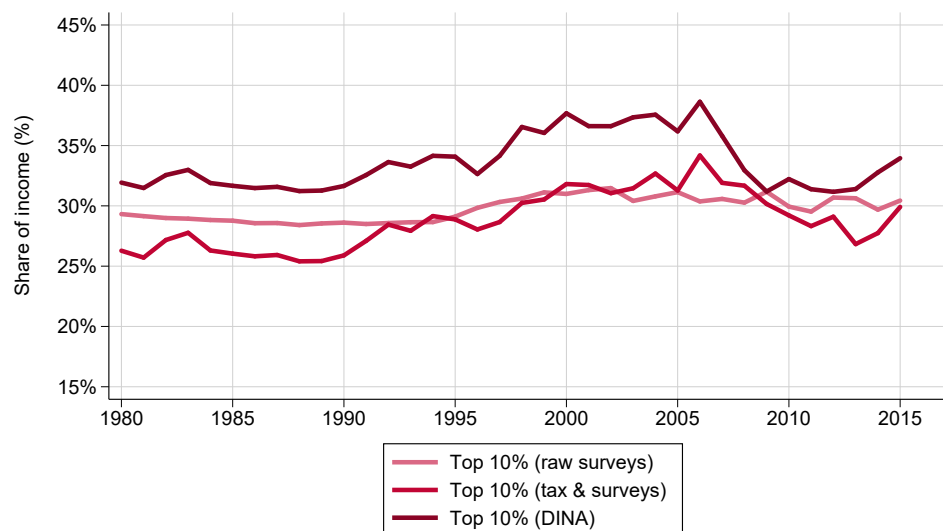
(b) Bottom 50% pre-tax income share



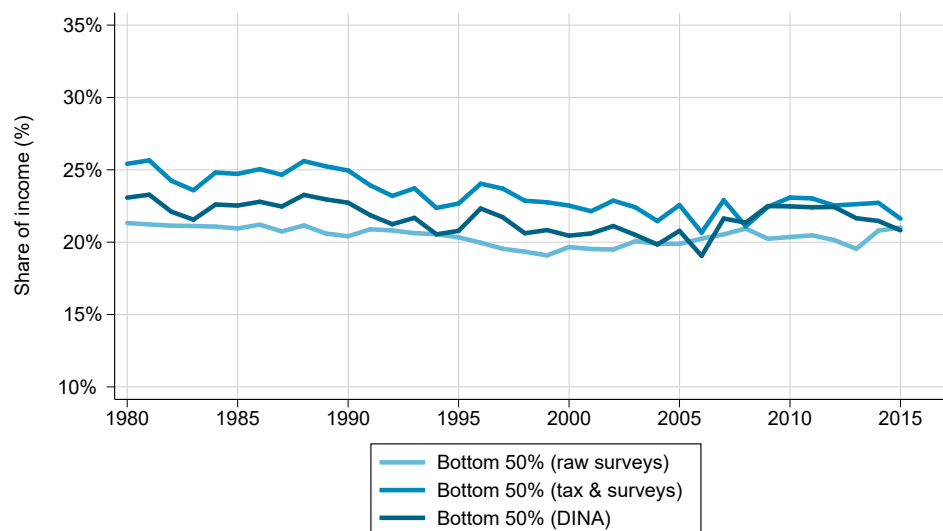
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.50
Ireland: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



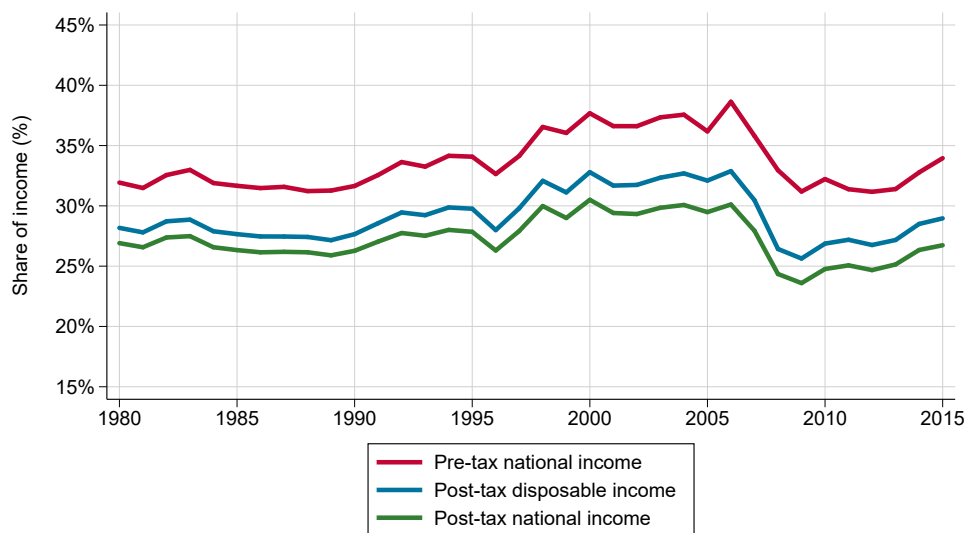
(b) Bottom 50% pre-tax income share



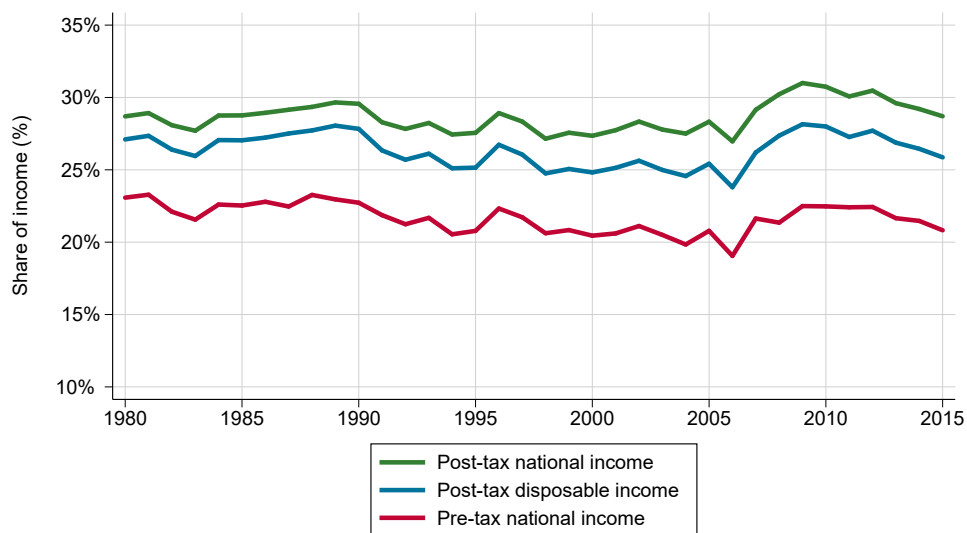
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.51
Ireland: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.17.2 Ireland: main results

Table A.3.50
The distribution of the national income in Ireland, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€44,000	100%	€44,000	100%	€44,000	100%
Bottom 50%	€18,300	20.9%	€22,800	25.9%	€25,300	28.8%
Bottom 20%	€10,700	4.9%	€14,500	6.6%	€18,000	8.2%
Next 30%	€23,400	16.0%	€28,300	19.3%	€30,100	20.6%
Middle 40%	€49,600	45.1%	€49,600	45.1%	€48,900	44.5%
Top 10%	€150,000	34.0%	€127,000	29.0%	€118,000	26.7%
Top 1%	€494,000	11.2%	€398,000	9.1%	€356,000	8.1%
Top 0.1%	€1,820,000	4.1%	€1,430,000	3.2%	€1,260,000	2.9%
Top 0.01%	€6,920,000	1.6%	€5,360,000	1.2%	€4,720,000	1.1%
Top 0.001%	€26,550,000	0.6%	€20,320,000	0.5%	€17,910,000	0.4%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.51
The distribution of national income growth in Ireland, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	2.8%	0.3%	2.8%	0.3%	2.8%	0.3%
Bottom 50%	2.6%	-0.1%	2.7%	0.2%	2.8%	0.1%
Bottom 20%	2.9%	-0.2%	3.1%	0.2%	3.3%	0.1%
Next 30%	2.5%	-0.1%	2.6%	0.2%	2.7%	0.2%
Middle 40%	2.8%	0.9%	2.9%	0.7%	2.8%	0.6%
Top 10%	3.0%	-0.2%	2.9%	-0.2%	2.8%	-0.2%
Top 1%	3.4%	-0.8%	3.3%	-0.9%	3.2%	-0.8%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.18 Italy

3.18.1 Italy: data sources and methodological steps

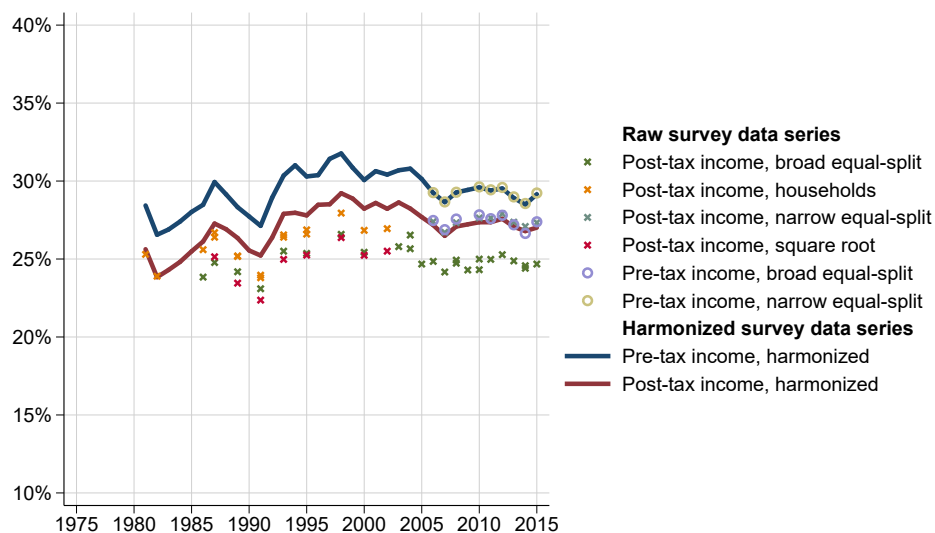
Table A.3.52
Italy: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980			x	x		x	x	x	
1981	x		x	x		x	x	x	
1982	x		x	x		x	x	x	
1983			x	x		x	x	x	
1984			x	x		x	x	x	
1985			x	x		x	x	x	
1986	x	x	x	x		x	x	x	
1987	x	x	x	x		x	x	x	
1988			x	x		x	x	x	
1989	x	x	x	x		x	x	x	
1990			x	x		x	x	x	
1991	x	x	x	x		x	x	x	
1992			x	x		x	x	x	
1993	x	x	x	x		x	x	x	
1994			x	x		x	x	x	
1995	x	x	x	x	x	x	x	x	x
1996			x	x	x	x	x	x	x
1997			x	x	x	x	x	x	x
1998	x	x	x	x	x	x	x	x	x
1999			x	x	x	x	x	x	x
2000	x	x	x	x	x	x	x	x	x
2001			x	x	x	x	x	x	x
2002	x		x	x	x	x	x	x	x
2003	x	x	x	x	x	x	x	x	x
2004	x	x	x	x	x	x	x	x	x
2005	x	x	x	x	x	x	x	x	x
2006	x	x	x	x	x	x	x	x	x
2007	x	x	x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x	x	x	x	x	x	x	x
2012	x	x	x	x	x	x	x	x	x
2013	x	x	x	x	x	x	x	x	x
2014	x	x	x	x	x	x	x	x	x
2015	x	x	x	x	x	x	x	x	x
2016			x	x	x	x	x	x	x
2017				x	x	x	x	x	x

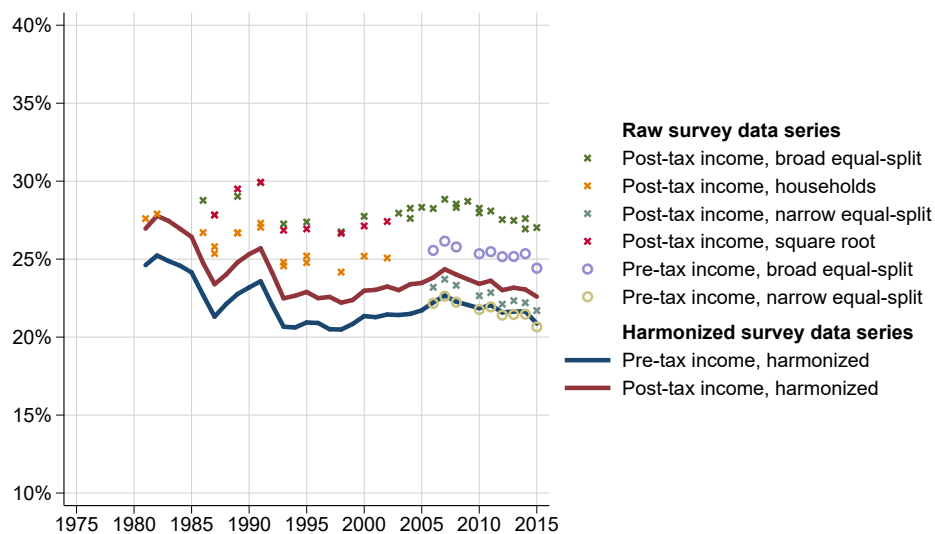
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.52
Italy: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



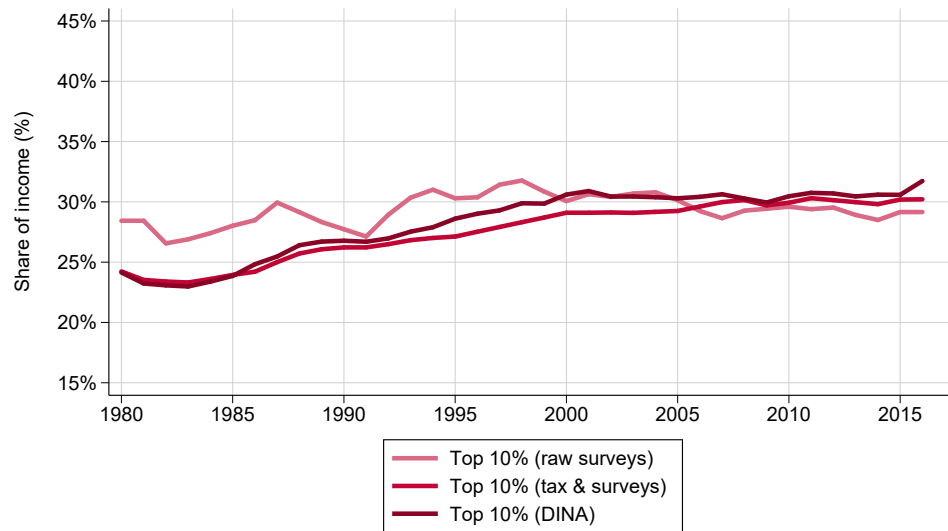
(b) Bottom 50% pre-tax income share



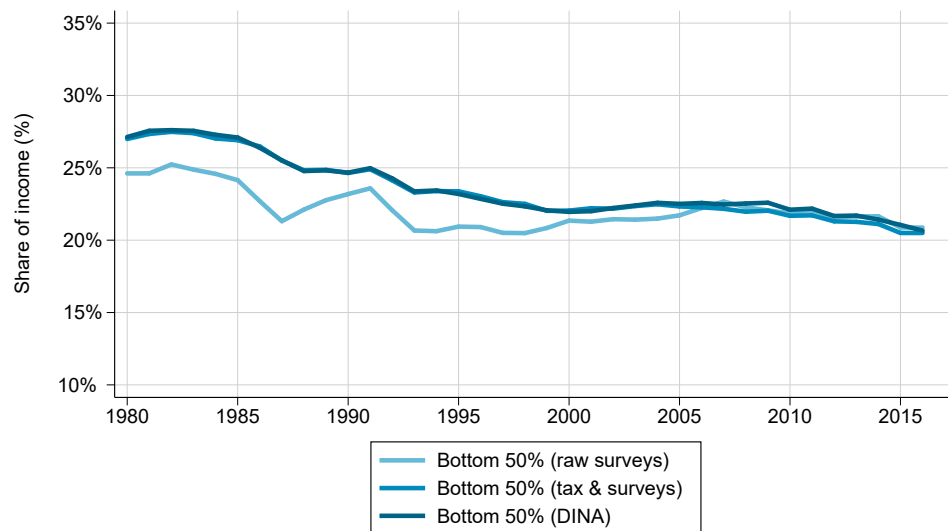
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.53
Italy: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



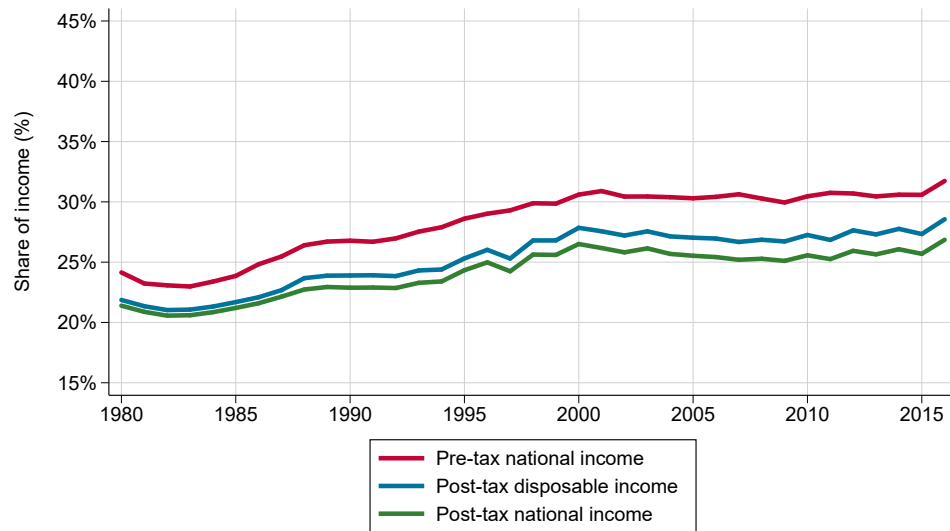
(b) Bottom 50% pre-tax income share



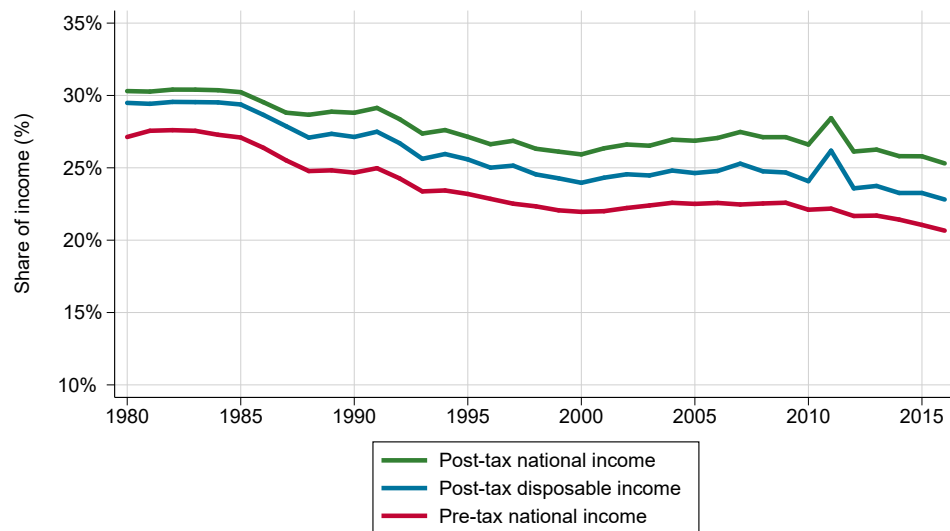
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.54
Italy: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.18.2 Italy: main results

Table A.3.53
The distribution of the national income in Italy, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€29,400	100%	€29,400	100%	€29,400	100%
Bottom 50%	€12,100	20.6%	€13,400	22.8%	€14,900	25.2%
Bottom 20%	€4,400	3.0%	€5,100	3.4%	€7,300	4.9%
Next 30%	€17,300	17.7%	€19,000	19.3%	€19,900	20.3%
Middle 40%	€35,000	47.5%	€35,700	48.5%	€35,200	47.8%
Top 10%	€93,800	31.9%	€84,500	28.7%	€79,500	27.0%
Top 1%	€257,000	8.7%	€211,000	7.2%	€195,000	6.6%
Top 0.1%	€730,000	2.5%	€554,000	1.9%	€506,000	1.7%
Top 0.01%	€2,100,000	0.7%	€1,480,000	0.5%	€1,350,000	0.5%
Top 0.001%	€6,080,000	0.2%	€4,000,000	0.1%	€3,630,000	0.1%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.54
The distribution of national income growth in Italy, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	0.4%	-1.1%	0.4%	-1.1%	0.4%	-1.1%
Bottom 50%	-0.3%	-2.0%	-0.3%	-2.2%	-0.1%	-2.0%
Bottom 20%	-1.3%	-4.6%	-1.3%	-5.0%	-0.5%	-3.7%
Next 30%	-0.1%	-1.4%	-0.1%	-1.5%	0.0%	-1.5%
Middle 40%	0.3%	-1.0%	0.4%	-1.0%	0.4%	-1.0%
Top 10%	1.2%	-0.7%	1.2%	-0.4%	1.0%	-0.4%
Top 1%	1.9%	-0.4%	2.0%	0.6%	1.9%	0.5%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.19 Kosovo

3.19.1 Kosovo: data sources and methodological steps

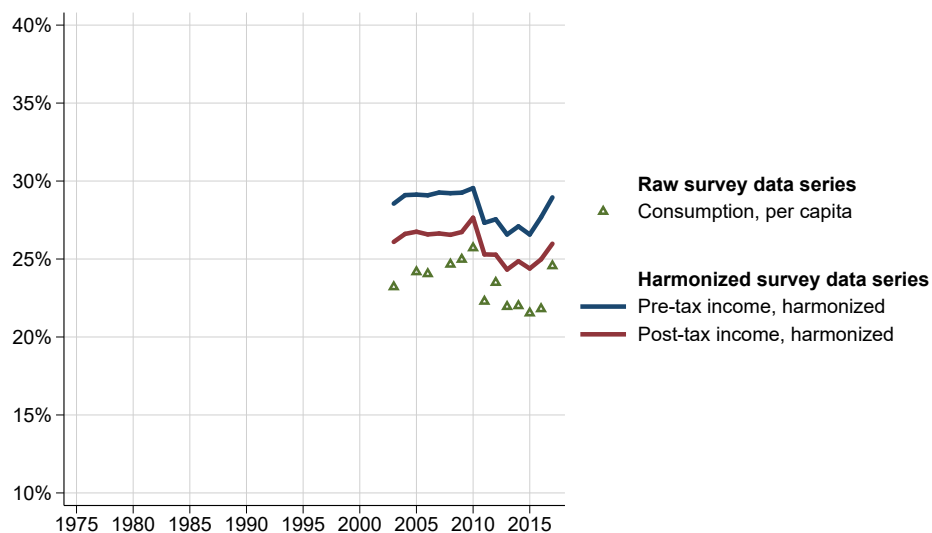
Table A.3.55
Kosovo: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980									
1981									
1982									
1983									
1984									
1985									
1986									
1987									
1988									
1989									
1990									
1991									
1992									
1993									
1994									
1995									
1996									
1997									
1998									
1999									
2000									
2001									
2002									
2003	x								
2004									
2005	x								
2006	x								
2007									
2008	x								
2009	x								
2010	x								
2011	x								
2012	x								
2013	x								
2014	x								
2015	x								
2016	x								
2017	x								

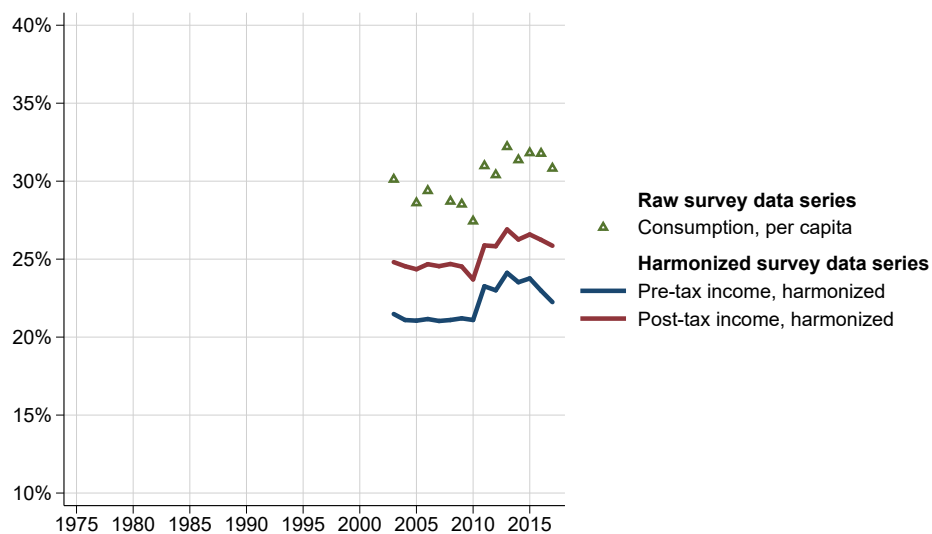
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.55
Kosovo: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



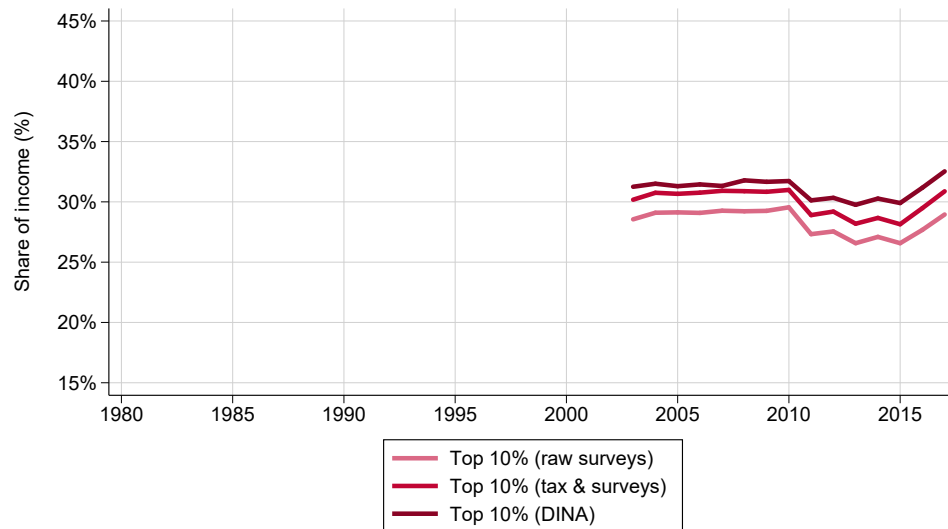
(b) Bottom 50% pre-tax income share



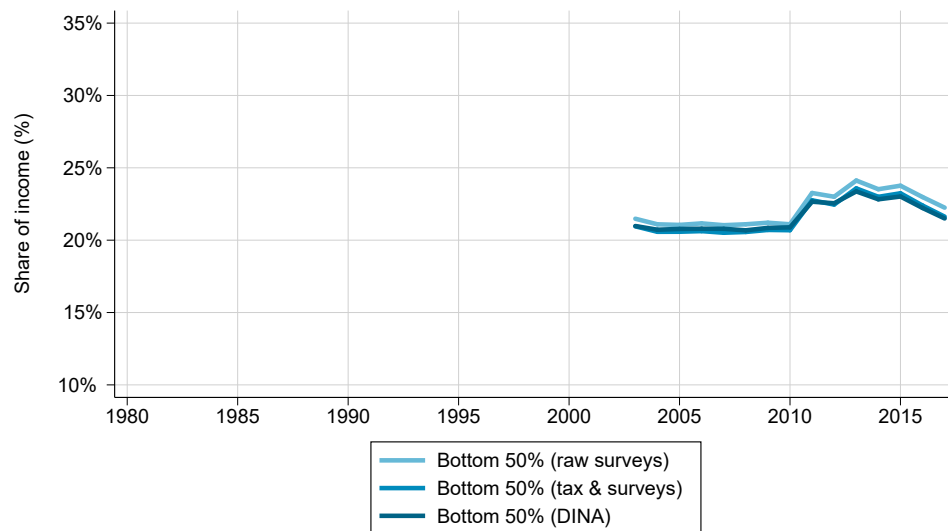
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.56
Kosovo: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



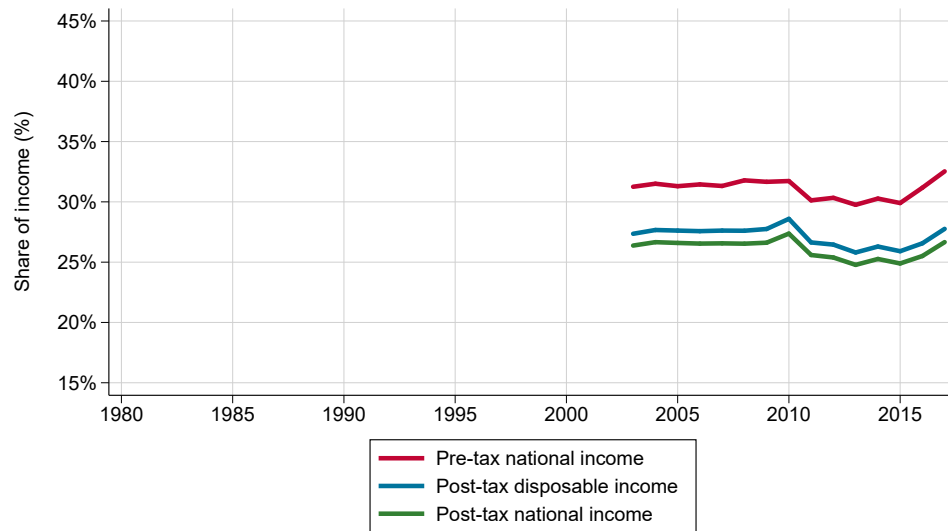
(b) Bottom 50% pre-tax income share



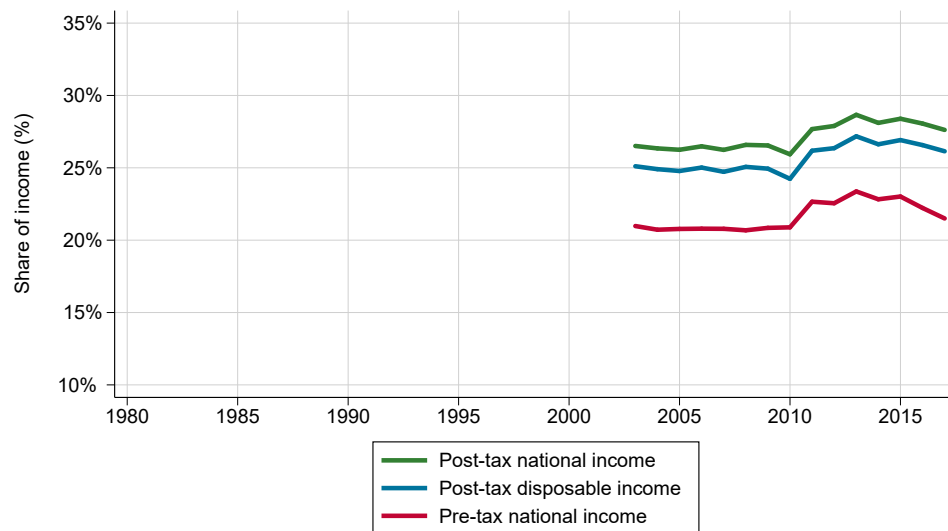
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.57
Kosovo: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.19.2 Kosovo: main results

Table A.3.56
The distribution of the national income in Kosovo, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€9,800	100%	€9,800	100%	€9,800	100%
Bottom 50%	€4,200	21.5%	€5,100	26.1%	€5,400	27.6%
Bottom 20%	€2,000	4.1%	€3,000	6.1%	€3,400	6.9%
Next 30%	€5,700	17.4%	€6,600	20.1%	€6,800	20.7%
Middle 40%	€11,300	46.0%	€11,300	46.1%	€11,200	45.7%
Top 10%	€31,900	32.5%	€27,200	27.8%	€26,100	26.7%
Top 1%	€91,000	9.3%	€70,200	7.2%	€66,500	6.8%
Top 0.1%	€266,000	2.7%	€194,000	2.0%	€183,000	1.9%
Top 0.01%	€785,000	0.8%	€553,000	0.6%	€519,000	0.5%
Top 0.001%	€2,320,000	0.2%	€1,590,000	0.2%	€1,490,000	0.2%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.57
The distribution of national income growth in Kosovo, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population		2.9%		2.9%		2.9%
Bottom 50%		3.2%		3.5%		3.4%
Bottom 20%		4.1%		4.0%		3.8%
Next 30%		3.0%		3.3%		3.3%
Middle 40%		2.5%		2.5%		2.6%
Top 10%		3.3%		2.9%		2.9%
Top 1%		5.7%		5.3%		5.3%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.20 Latvia

3.20.1 Latvia: data sources and methodological steps

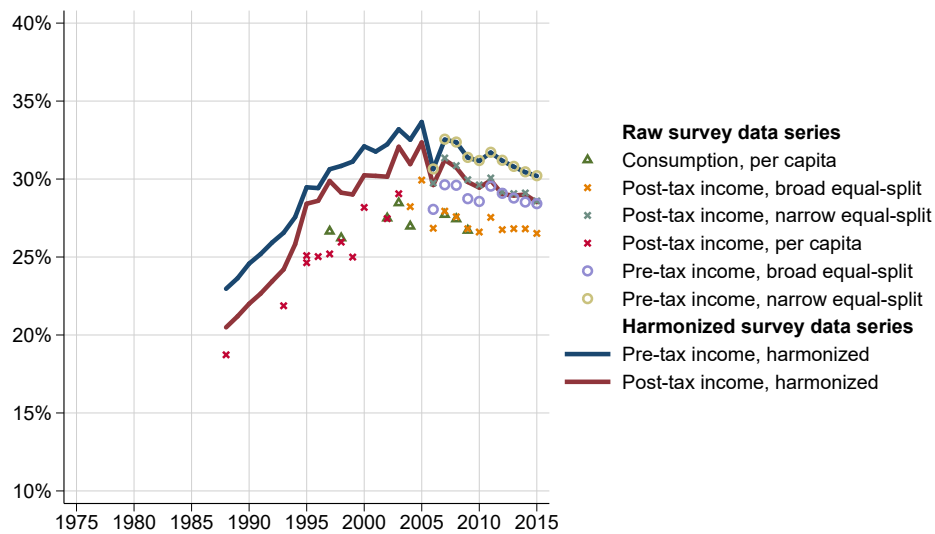
Table A.3.58
Latvia: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980									
1981									
1982									
1983									
1984									
1985									
1986									
1987									
1988	x								
1989									
1990									
1991									
1992									
1993	x								
1994							x		
1995	x				x	x	x		
1996	x				x	x	x		
1997	x				x	x	x		
1998	x				x	x	x		
1999	x				x	x	x		
2000	x				x	x	x		x
2001				x	x	x	x	x	x
2002	x			x	x	x	x	x	x
2003	x			x	x	x	x	x	x
2004	x	x		x	x	x	x	x	x
2005	x	x		x	x	x	x	x	x
2006	x	x		x	x	x	x	x	x
2007	x	x		x	x	x	x	x	x
2008	x	x		x	x	x	x	x	x
2009	x	x		x	x	x	x	x	x
2010	x	x		x	x	x	x	x	x
2011	x	x		x	x	x	x	x	x
2012	x	x		x	x	x	x	x	x
2013	x	x		x	x	x	x	x	x
2014	x	x		x	x	x	x	x	x
2015	x	x		x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

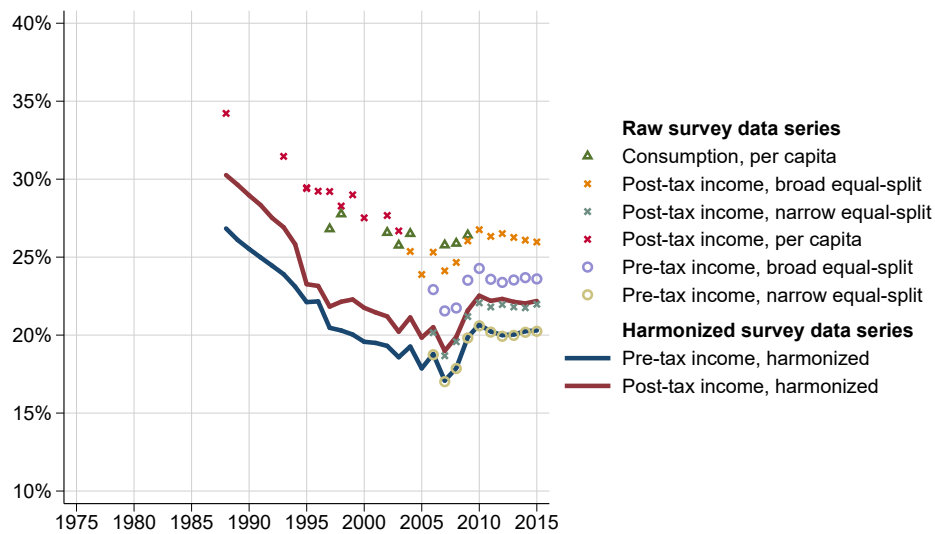
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.58
Latvia: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



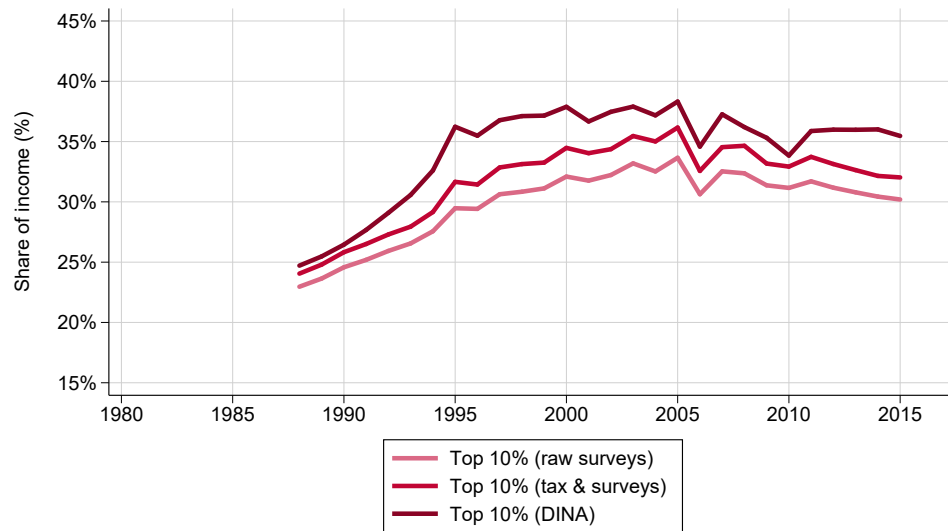
(b) Bottom 50% pre-tax income share



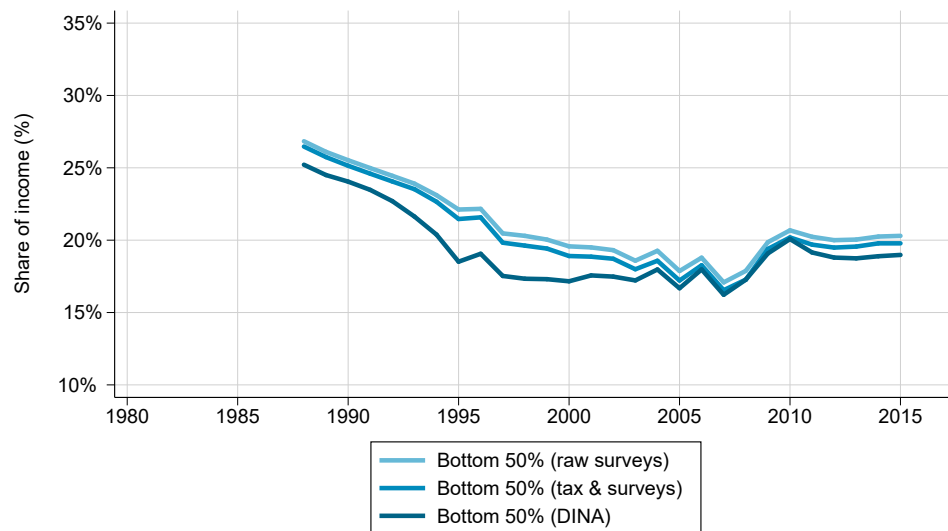
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.59
Latvia: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



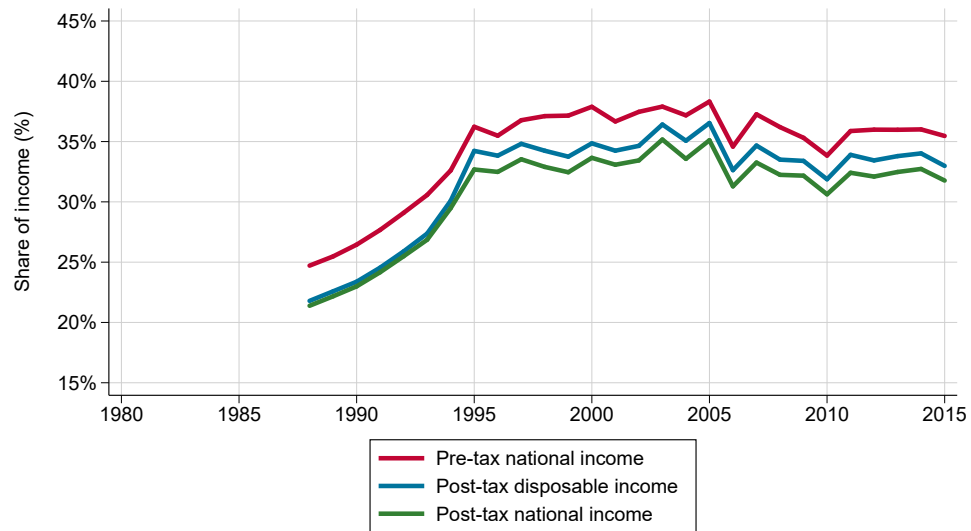
(b) Bottom 50% pre-tax income share



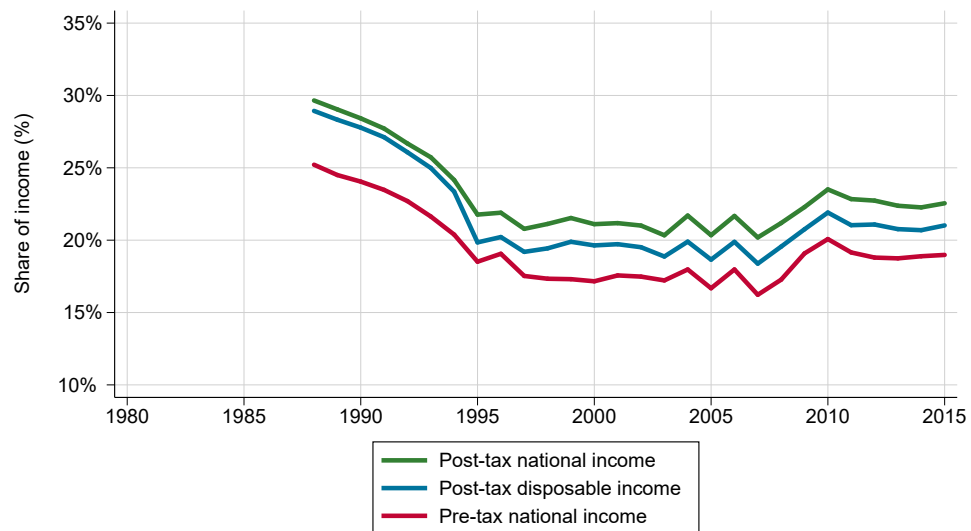
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.60
Latvia: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.20.2 Latvia: main results

Table A.3.59
The distribution of the national income in Latvia, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€19,500	100%	€19,500	100%	€19,500	100%
Bottom 50%	€7,500	19.3%	€8,300	21.2%	€8,900	22.8%
Bottom 20%	€4,000	4.1%	€4,600	4.7%	€5,400	5.6%
Next 30%	€9,900	15.2%	€10,700	16.5%	€11,200	17.2%
Middle 40%	€21,900	44.9%	€22,100	45.3%	€21,900	45.0%
Top 10%	€69,900	35.8%	€65,400	33.5%	€62,900	32.2%
Top 1%	€213,000	10.9%	€186,000	9.5%	€177,000	9.1%
Top 0.1%	€643,000	3.3%	€516,000	2.6%	€489,000	2.5%
Top 0.01%	€1,940,000	1.0%	€1,420,000	0.7%	€1,340,000	0.7%
Top 0.001%	€5,850,000	0.3%	€3,890,000	0.2%	€3,680,000	0.2%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.60
The distribution of national income growth in Latvia, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.1%	1.2%	1.1%	1.2%	1.1%	1.2%
Bottom 50%	0.3%	2.9%	0.2%	2.6%	0.3%	2.4%
Bottom 20%	0.0%	3.4%	-0.1%	3.8%	0.2%	3.1%
Next 30%	0.4%	2.8%	0.3%	2.3%	0.4%	2.2%
Middle 40%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Top 10%	2.1%	0.8%	2.3%	0.8%	2.2%	0.9%
Top 1%	3.3%	1.8%	3.6%	1.9%	3.6%	1.9%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.21 Lithuania

3.21.1 Lithuania: data sources and methodological steps

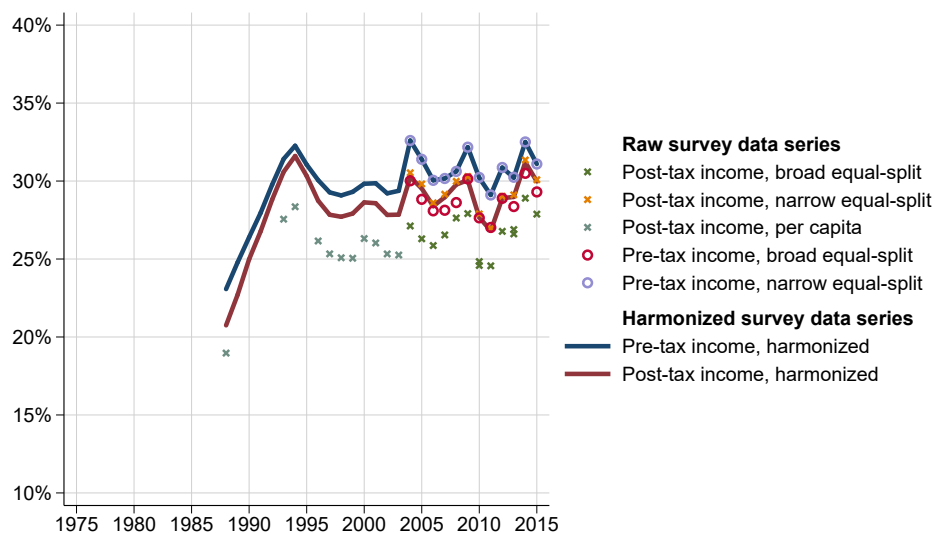
Table A.3.61
Lithuania: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980									
1981									
1982									
1983									
1984									
1985									
1986									
1987									
1988	x								
1989									
1990									
1991									
1992									
1993	x								
1994	x								
1995				x	x	x	x	x	
1996	x			x	x	x	x	x	
1997	x			x	x	x	x	x	
1998	x			x	x	x	x	x	
1999	x			x	x	x	x	x	
2000	x			x	x	x	x	x	x
2001	x			x	x	x	x	x	x
2002	x			x	x	x	x	x	x
2003	x			x	x	x	x	x	x
2004	x	x		x	x	x	x	x	x
2005	x	x		x	x	x	x	x	x
2006	x	x		x	x	x	x	x	x
2007	x	x		x	x	x	x	x	x
2008	x	x		x	x	x	x	x	x
2009	x	x		x	x	x	x	x	x
2010	x	x		x	x	x	x	x	x
2011	x	x		x	x	x	x	x	x
2012	x	x		x	x	x	x	x	x
2013	x	x		x	x	x	x	x	x
2014	x	x		x	x	x	x	x	x
2015	x	x		x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

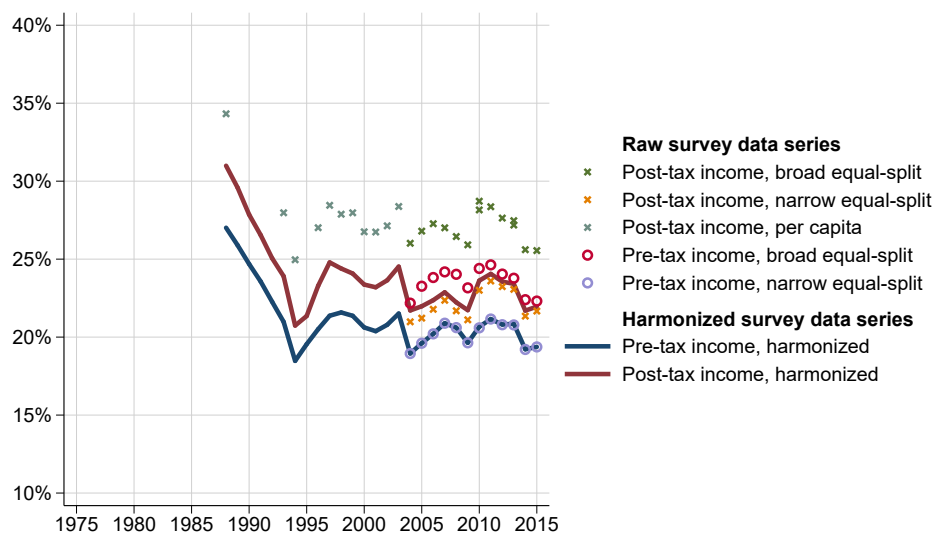
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.61
Lithuania: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



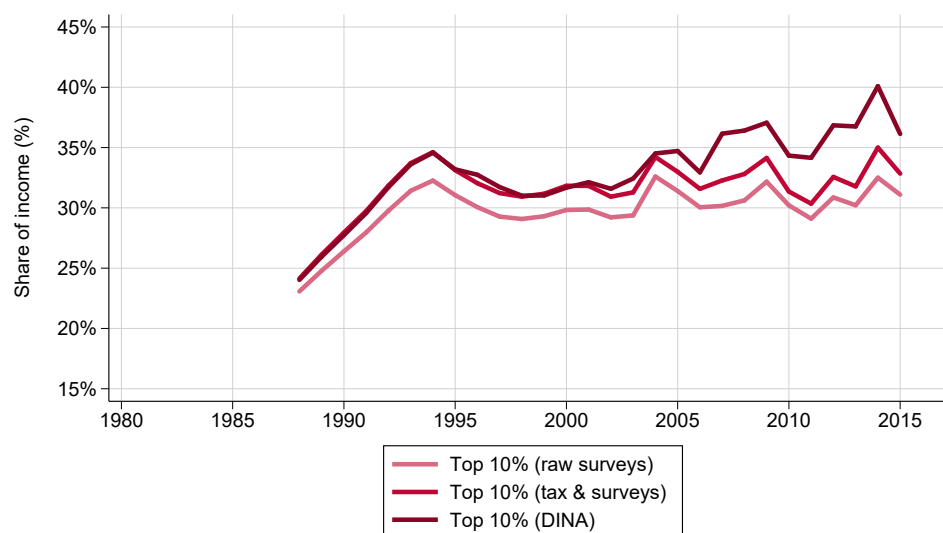
(b) Bottom 50% pre-tax income share



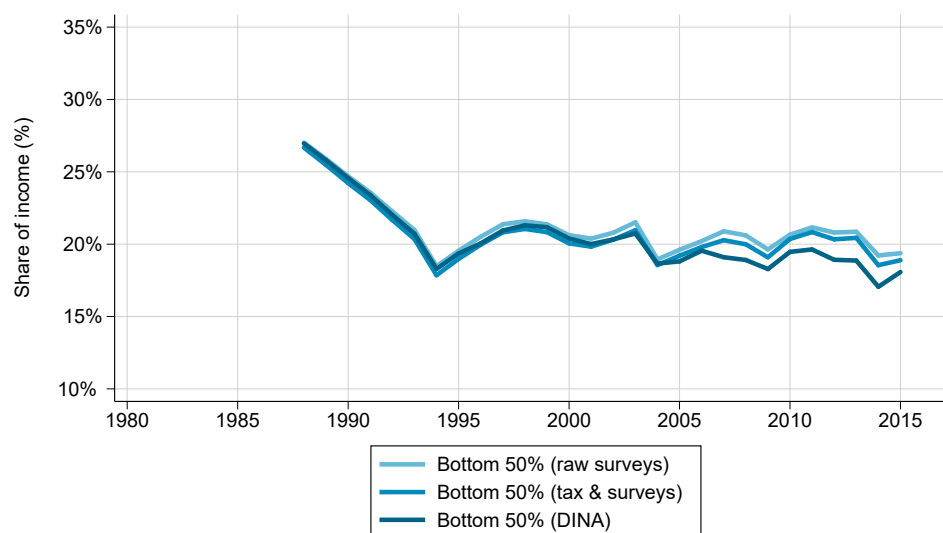
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.62
Lithuania: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



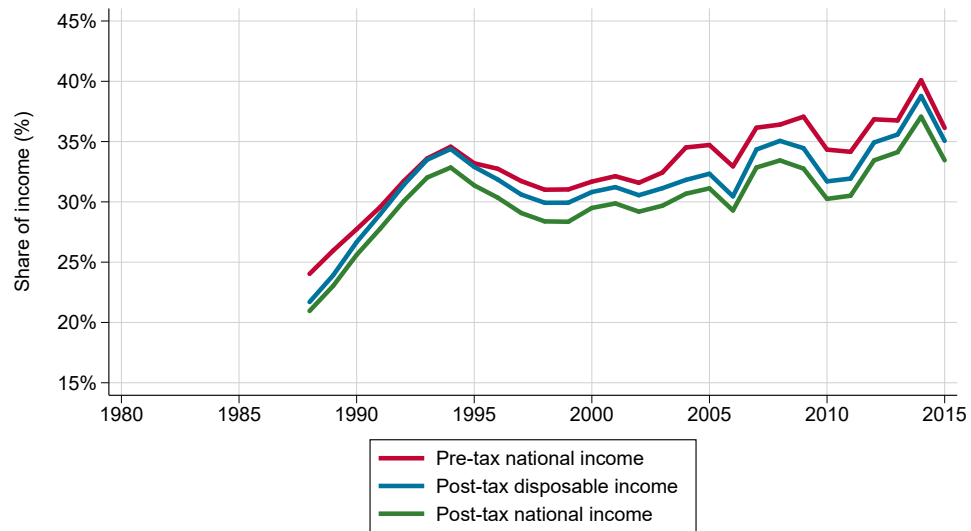
(b) Bottom 50% pre-tax income share



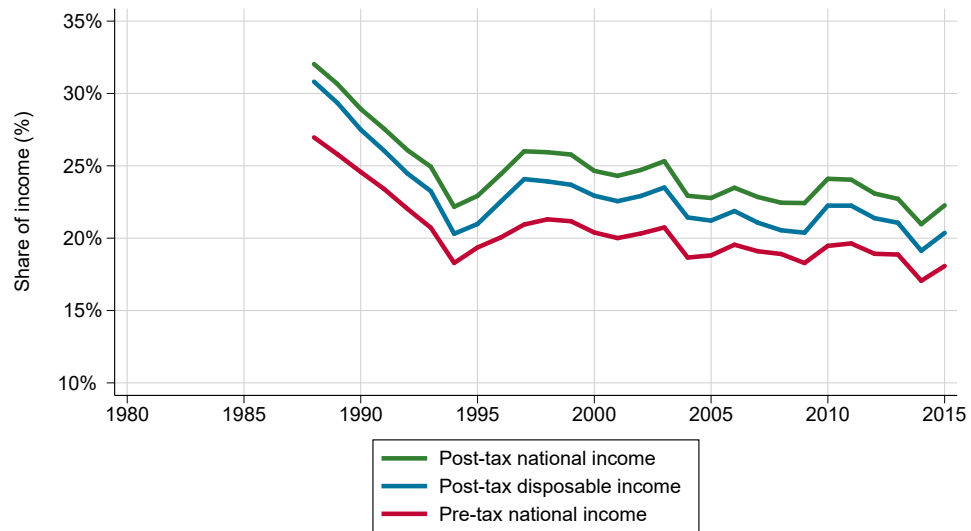
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.63
Lithuania: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.21.2 Lithuania: main results

Table A.3.62
The distribution of the national income in Lithuania, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€24,600	100%	€24,600	100%	€24,600	100%
Bottom 50%	€8,800	18.0%	€10,000	20.2%	€10,900	22.1%
Bottom 20%	€4,200	3.4%	€5,100	4.2%	€6,400	5.2%
Next 30%	€11,900	14.5%	€13,200	16.0%	€13,900	16.9%
Middle 40%	€28,100	45.6%	€27,300	44.4%	€27,200	44.1%
Top 10%	€89,600	36.4%	€87,200	35.4%	€83,200	33.8%
Top 1%	€256,000	10.4%	€260,000	10.6%	€243,000	9.9%
Top 0.1%	€729,000	3.0%	€776,000	3.2%	€711,000	2.9%
Top 0.01%	€2,080,000	0.8%	€2,320,000	0.9%	€2,080,000	0.8%
Top 0.001%	€5,940,000	0.2%	€6,910,000	0.3%	€6,080,000	0.2%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.63
The distribution of national income growth in Lithuania, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.4%	1.9%	1.4%	1.9%	1.4%	1.9%
Bottom 50%	0.3%	1.3%	0.2%	1.5%	0.4%	1.6%
Bottom 20%	-0.6%	0.8%	-0.6%	1.6%	-0.2%	1.7%
Next 30%	0.5%	1.4%	0.5%	1.5%	0.6%	1.5%
Middle 40%	1.2%	2.1%	1.2%	1.9%	1.2%	1.9%
Top 10%	2.5%	2.0%	2.7%	2.2%	2.7%	2.2%
Top 1%	3.7%	1.2%	4.2%	2.1%	4.1%	2.1%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.22 Luxembourg

3.22.1 Luxembourg: data sources and methodological steps

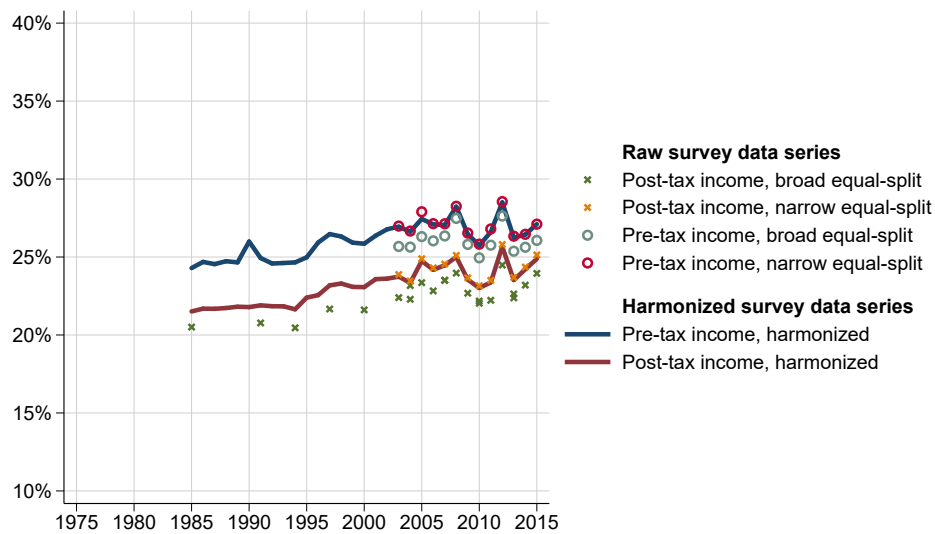
Table A.3.64
Luxembourg: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980			x						
1981			x						
1982			x						
1983			x						
1984			x						
1985	x	x	x						
1986			x						
1987			x						
1988			x						x
1989			x						x
1990			x				x		x
1991	x	x	x				x		x
1992			x				x		x
1993			x				x		x
1994	x	x	x				x		x
1995			x	x		x	x	x	x
1996			x	x		x	x	x	x
1997	x	x	x	x		x	x	x	x
1998			x	x		x	x	x	x
1999			x	x	x	x	x	x	
2000	x	x	x	x	x	x	x	x	x
2001			x	x	x	x	x	x	x
2002			x	x	x	x	x	x	x
2003	x	x	x	x	x	x	x	x	x
2004	x	x	x	x	x	x	x	x	x
2005	x	x	x	x	x	x	x	x	x
2006	x	x	x	x	x	x	x	x	x
2007	x	x	x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x	x	x	x	x	x	x	x
2012	x	x	x	x	x	x	x	x	x
2013	x	x	x	x	x	x	x	x	x
2014	x	x	x	x	x	x	x	x	x
2015	x	x	x	x	x	x	x	x	x
2016			x	x	x	x	x	x	x
2017			x	x		x	x	x	x

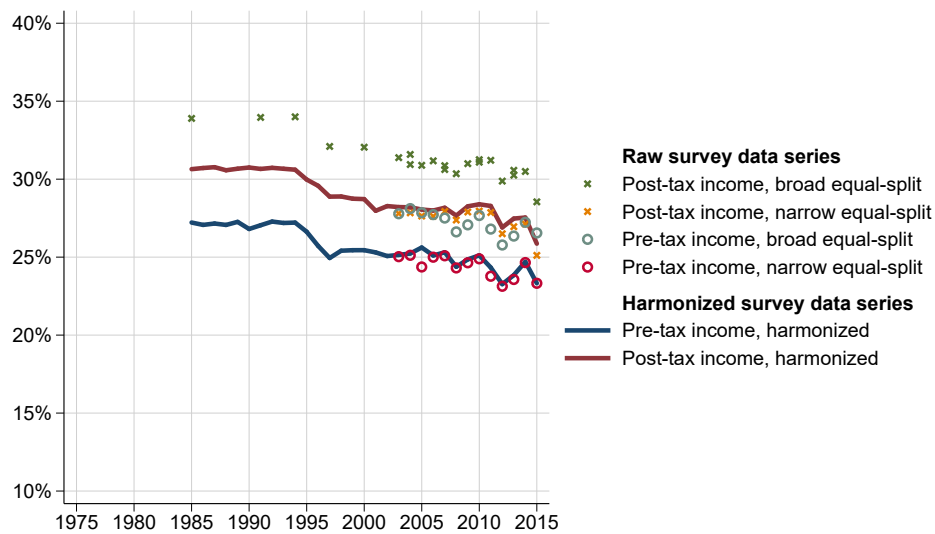
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.64
Luxembourg: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



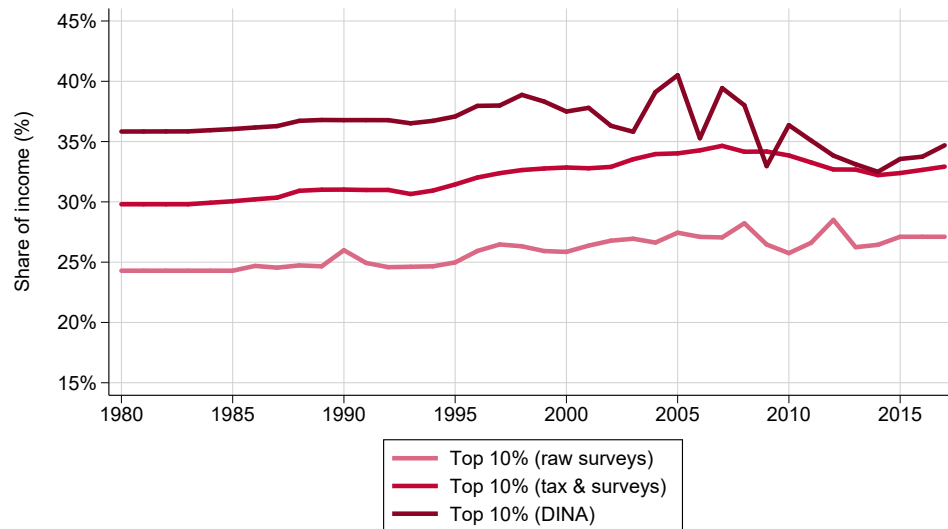
(b) Bottom 50% pre-tax income share



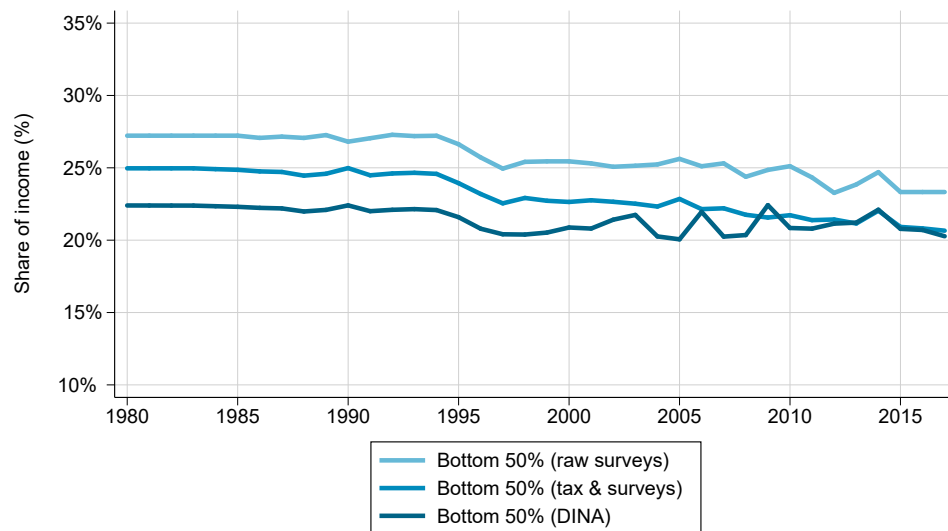
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.65
Luxembourg: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



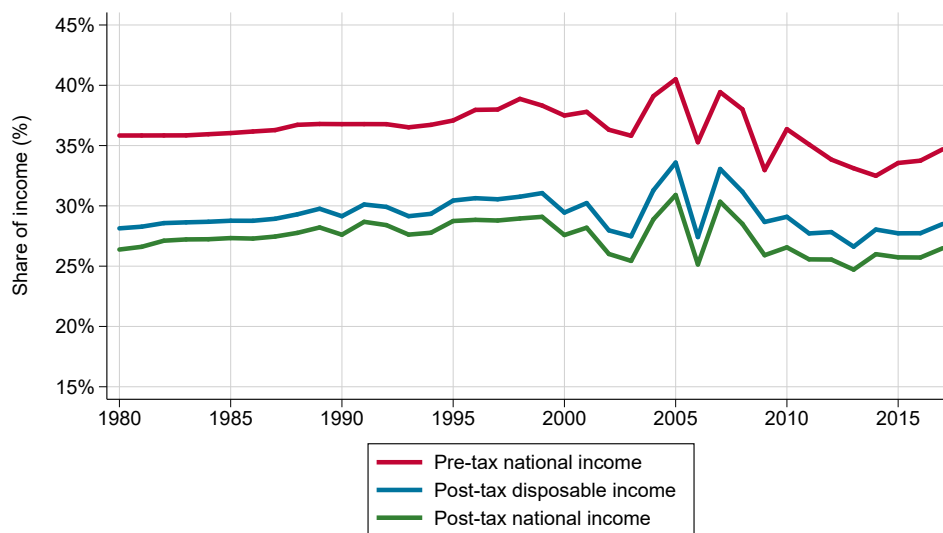
(b) Bottom 50% pre-tax income share



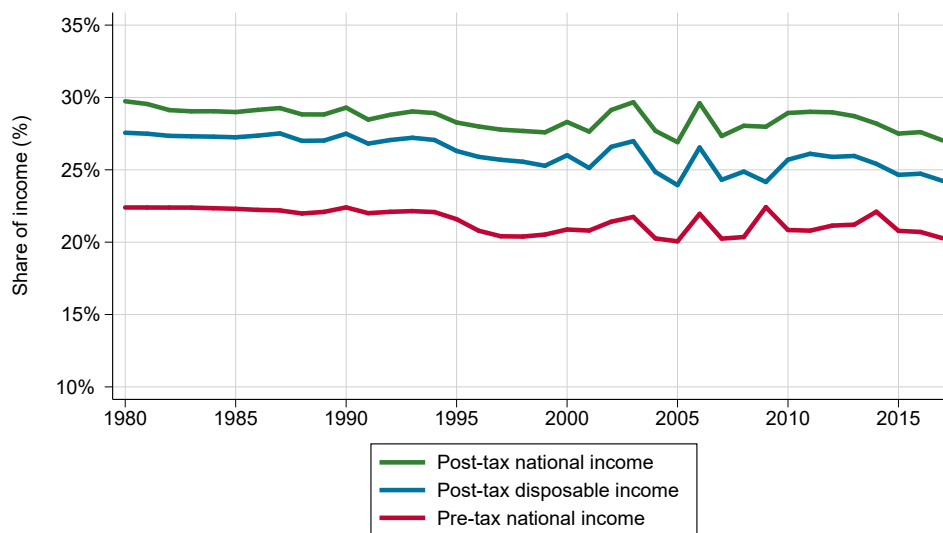
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.66
Luxembourg: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.22.2 Luxembourg: main results

Table A.3.65
The distribution of the national income in Luxembourg, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€60,000	100%	€60,000	100%	€60,000	100%
Bottom 50%	€24,300	20.3%	€29,100	24.2%	€32,400	27.0%
Bottom 20%	€9,800	3.3%	€13,100	4.4%	€18,200	6.1%
Next 30%	€34,000	17.0%	€39,800	19.9%	€42,000	21.0%
Middle 40%	€67,600	45.0%	€70,900	47.3%	€69,700	46.5%
Top 10%	€208,000	34.7%	€171,000	28.5%	€159,000	26.5%
Top 1%	€716,000	11.9%	€431,000	7.2%	€391,000	6.5%
Top 0.1%	€2,760,000	4.6%	€1,160,000	1.9%	€1,040,000	1.7%
Top 0.01%	€11,020,000	1.8%	€3,190,000	0.5%	€2,850,000	0.5%
Top 0.001%	€44,350,000	0.7%	€8,880,000	0.1%	€7,920,000	0.1%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.66
The distribution of national income growth in Luxembourg, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.8%	-3.9%	1.8%	-3.9%	1.8%	-3.9%
Bottom 50%	1.5%	-3.9%	1.4%	-3.9%	1.5%	-4.0%
Bottom 20%	0.6%	-6.4%	0.5%	-6.3%	1.0%	-5.7%
Next 30%	1.7%	-3.3%	1.7%	-3.3%	1.7%	-3.4%
Middle 40%	2.0%	-2.8%	2.0%	-2.9%	2.0%	-3.0%
Top 10%	1.7%	-5.1%	1.8%	-5.3%	1.8%	-5.2%
Top 1%	1.4%	-6.7%	1.3%	-8.4%	1.3%	-8.3%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.23 North Macedonia

3.23.1 North Macedonia: data sources and methodological steps

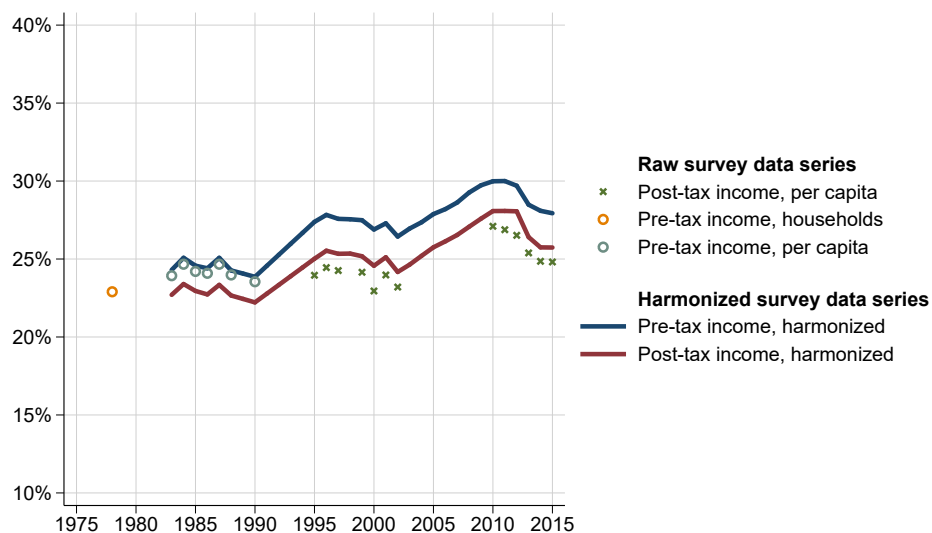
Table A.3.67
North Macedonia: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1978	x								
1980									
1981									
1982									
1983	x								
1984	x								
1985	x								
1986	x								
1987	x								
1988	x								
1989									
1990	x								
1991									
1992									
1993									
1994									
1995	x								
1996	x								
1997	x								
1998									
1999	x								
2000	x								
2001	x								
2002	x								
2003									
2004									
2005									
2006									
2007									
2008									
2009									
2010	x								
2011	x								
2012	x								
2013	x								
2014	x								
2015	x								
2016									
2017									

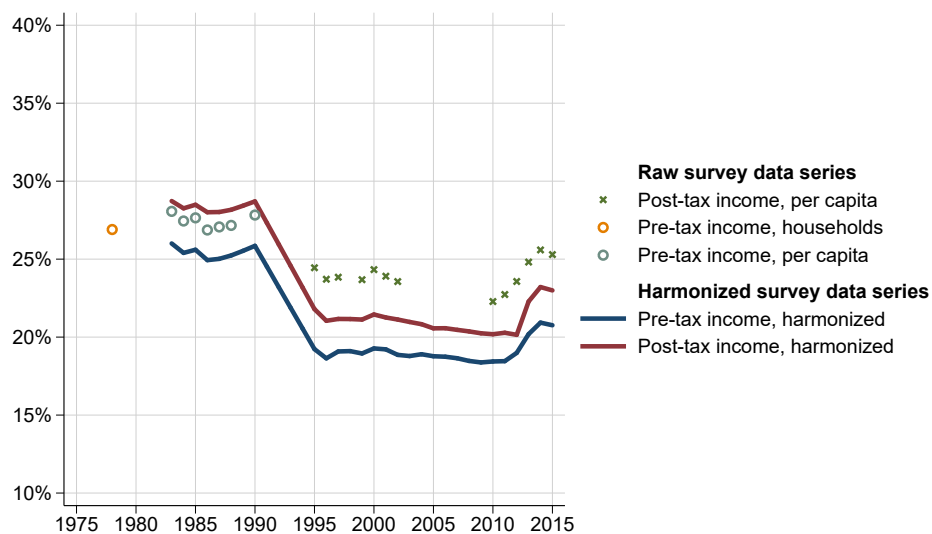
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.67
North Macedonia: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



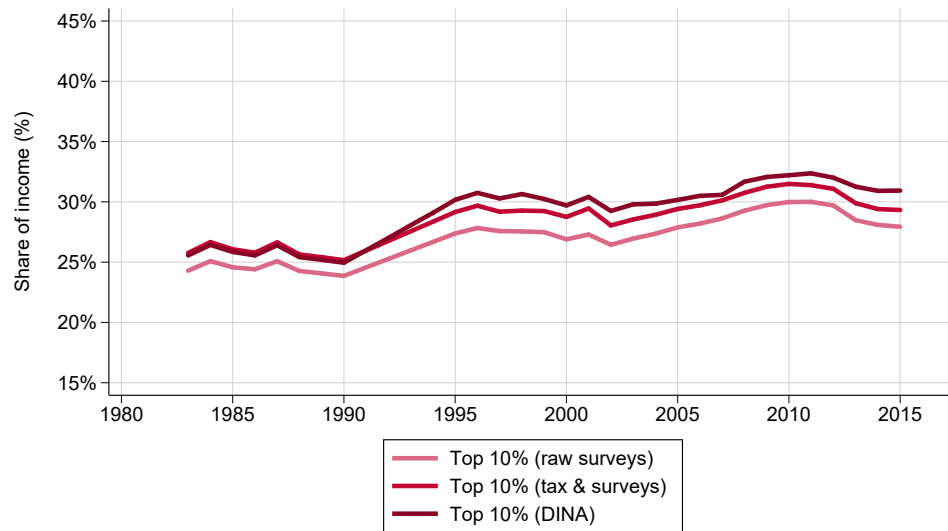
(b) Bottom 50% pre-tax income share



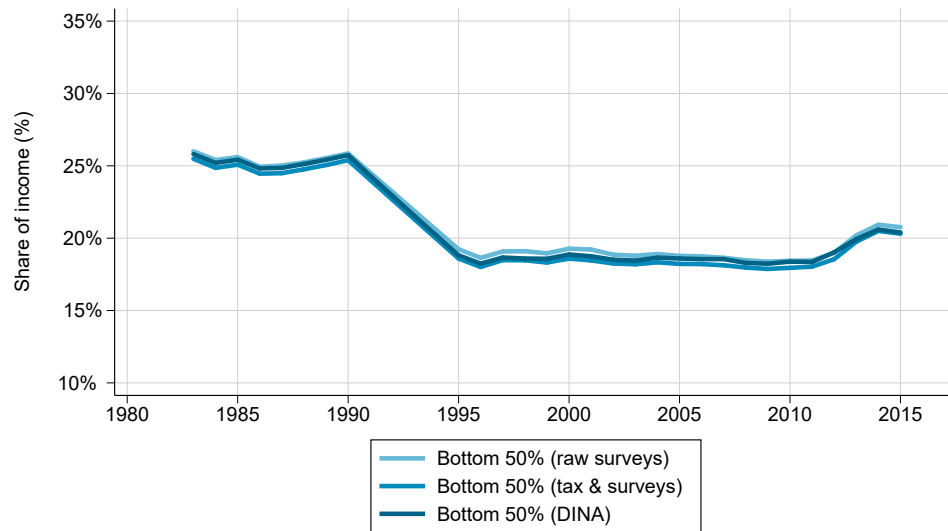
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.68
North Macedonia: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



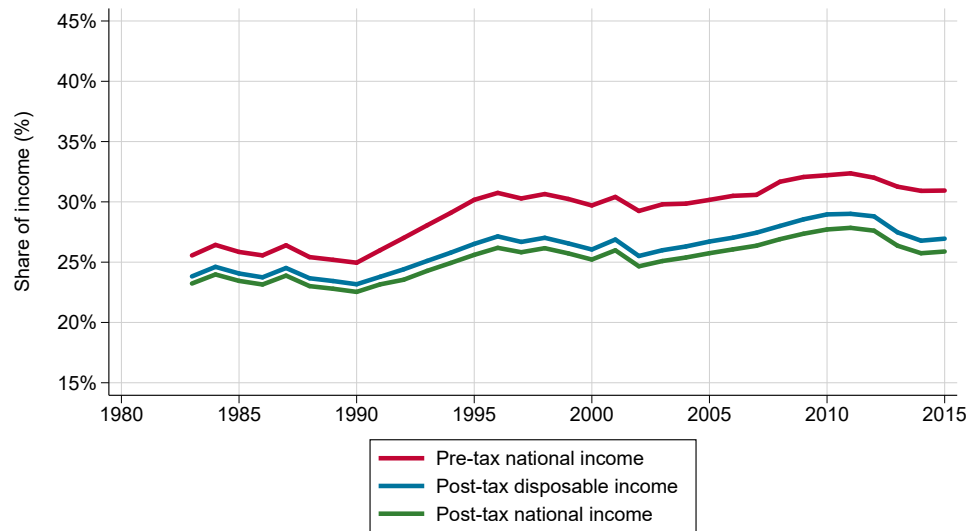
(b) Bottom 50% pre-tax income share



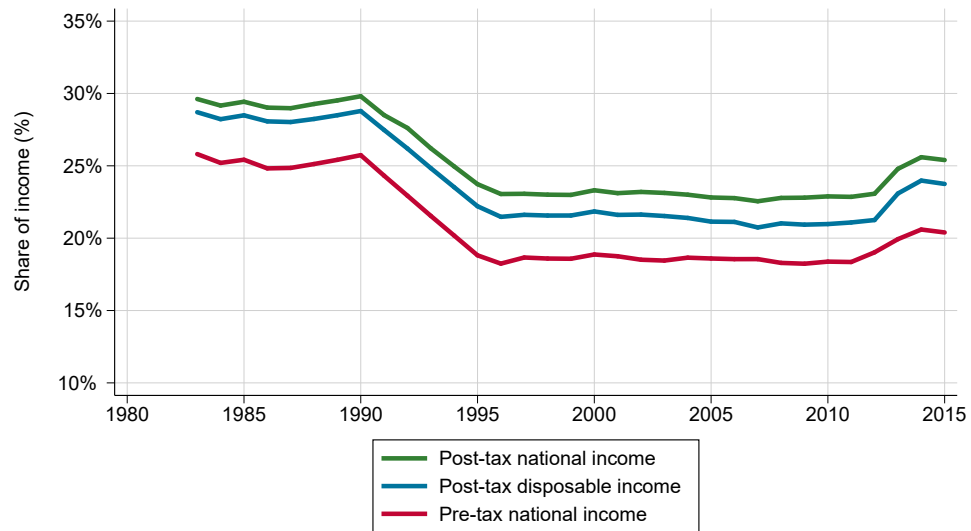
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.69
North Macedonia: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.23.2 North Macedonia: main results

Table A.3.68
The distribution of the national income in North Macedonia, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€11,100	100%	€11,100	100%	€11,100	100%
Bottom 50%	€4,500	20.3%	€5,300	23.8%	€5,600	25.3%
Bottom 20%	€1,700	3.1%	€2,400	4.4%	€3,000	5.3%
Next 30%	€6,400	17.3%	€7,200	19.4%	€7,400	20.0%
Middle 40%	€13,500	48.5%	€13,700	49.2%	€13,500	48.6%
Top 10%	€34,700	31.1%	€30,100	27.1%	€29,000	26.0%
Top 1%	€85,300	7.7%	€66,100	5.9%	€62,800	5.6%
Top 0.1%	€213,000	1.9%	€151,000	1.4%	€142,000	1.3%
Top 0.01%	€536,000	0.5%	€350,000	0.3%	€330,000	0.3%
Top 0.001%	€1,350,000	0.1%	€820,000	0.1%	€770,000	0.1%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.69
The distribution of national income growth in North Macedonia, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	0.0%	2.0%	0.0%	2.0%	0.0%	2.0%
Bottom 50%	-0.6%	3.0%	-0.5%	3.4%	-0.4%	3.2%
Bottom 20%	-1.9%	7.0%	-1.4%	8.5%	-1.0%	6.5%
Next 30%	-0.3%	2.4%	-0.3%	2.6%	-0.2%	2.5%
Middle 40%	0.0%	1.6%	0.1%	1.5%	0.1%	1.5%
Top 10%	0.5%	2.2%	0.3%	1.9%	0.3%	1.9%
Top 1%	0.8%	3.6%	0.1%	2.7%	0.1%	2.7%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.24 Malta

3.24.1 Malta: data sources and methodological steps

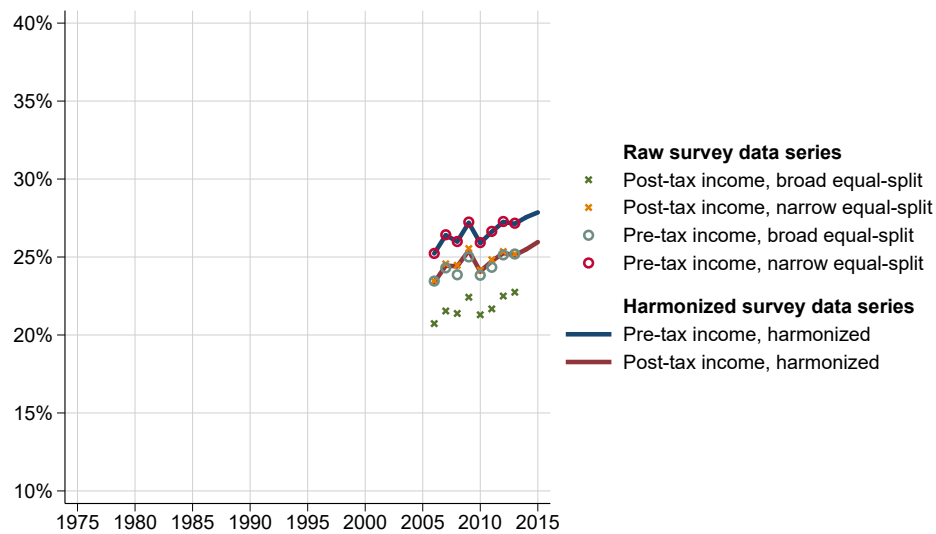
Table A.3.70
Malta: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980									
1981									
1982									
1983									
1984									
1985									
1986									
1987									
1988									
1989									
1990									
1991									
1992									
1993									
1994									
1995									
1996							x		
1997							x		
1998							x		
1999							x		
2000						x	x		
2001						x	x		
2002						x	x		
2003						x	x		
2004						x	x		
2005						x	x		
2006	x	x				x	x		
2007	x	x				x	x		
2008	x	x				x	x		
2009	x	x				x	x		
2010	x	x				x	x		
2011	x	x				x	x		
2012	x	x				x	x		
2013	x	x				x	x		
2014	x	x				x	x		
2015	x	x				x	x		
2016						x	x		
2017						x	x		

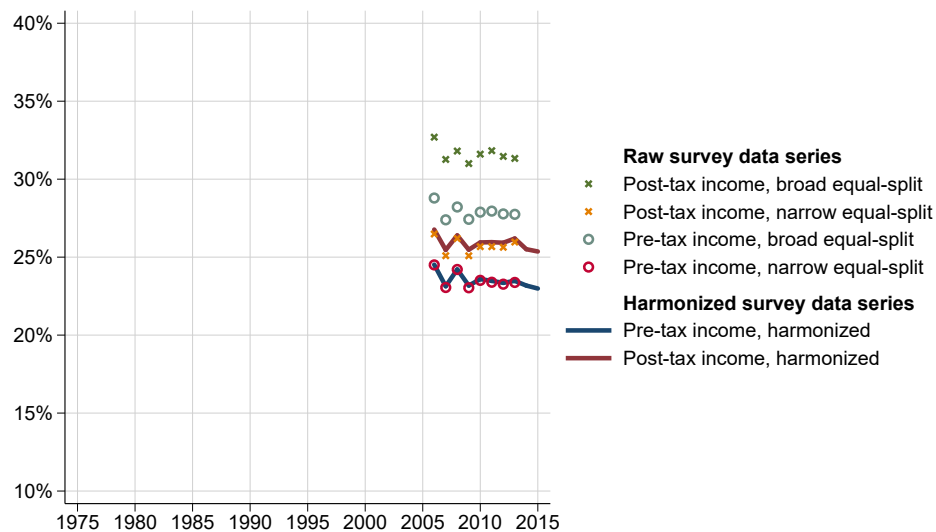
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.70
Malta: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



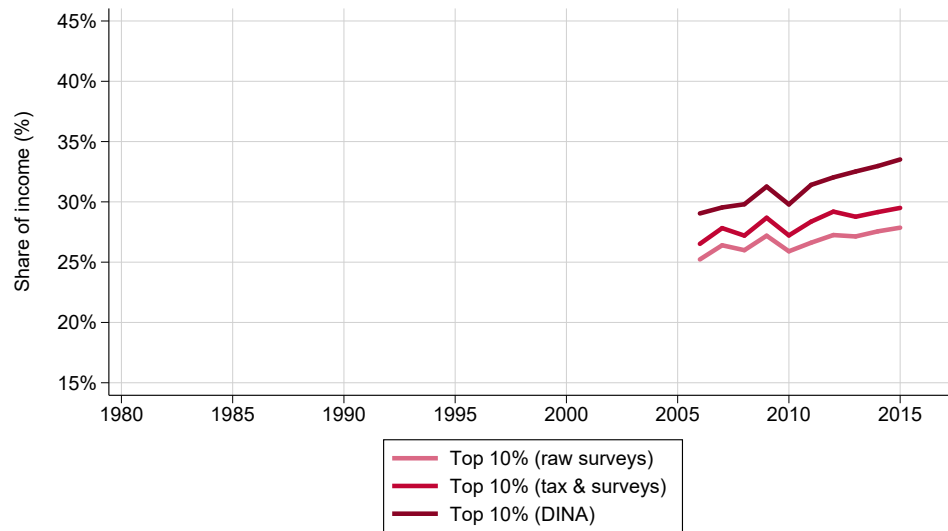
(b) Bottom 50% pre-tax income share



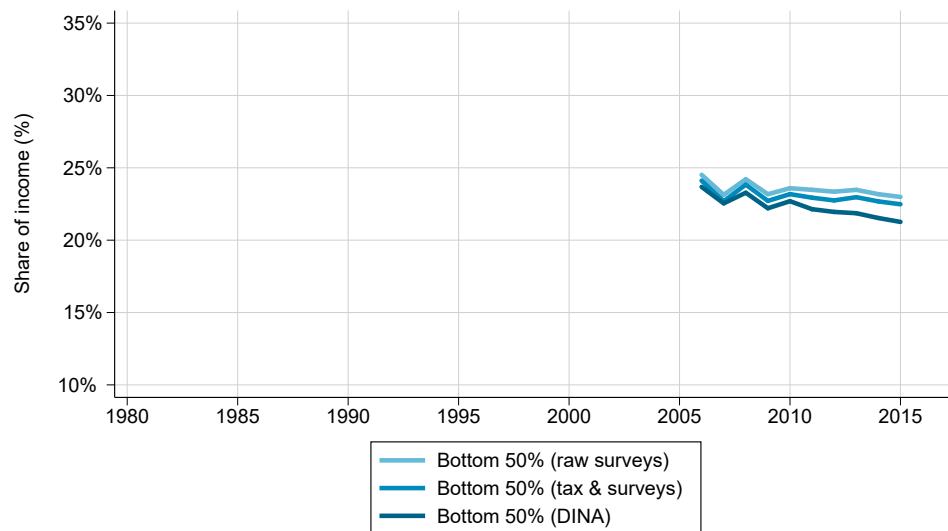
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.71
Malta: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



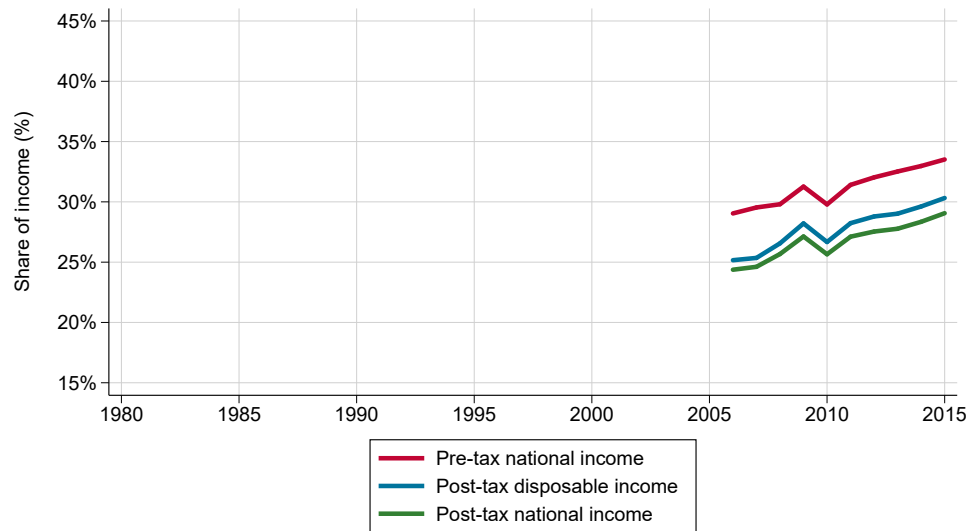
(b) Bottom 50% pre-tax income share



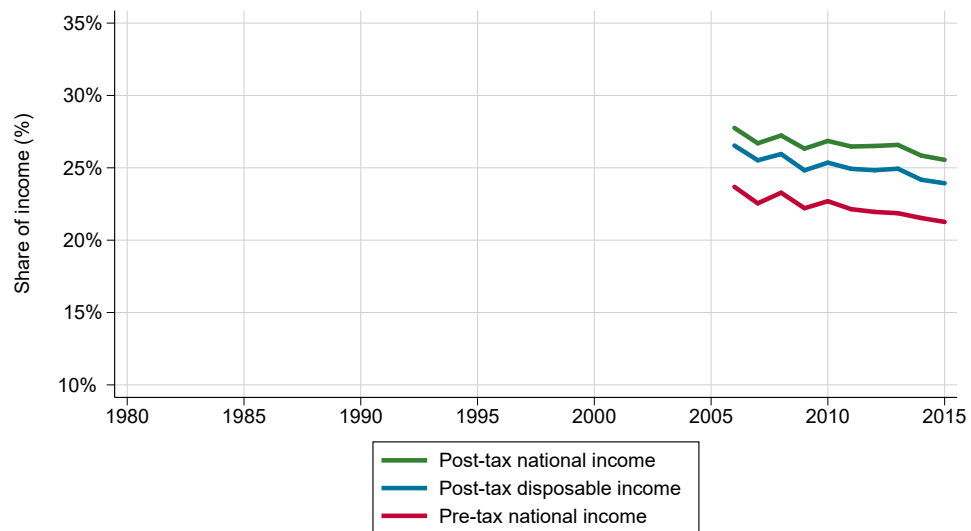
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.72
Malta: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.24.2 Malta: main results

Table A.3.71
The distribution of the national income in Malta, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€33,000	100%	€33,000	100%	€33,000	100%
Bottom 50%	€14,000	21.1%	€15,700	23.8%	€16,900	25.5%
Bottom 20%	€7,200	4.3%	€8,800	5.4%	€10,400	6.3%
Next 30%	€18,500	16.8%	€20,300	18.4%	€21,100	19.2%
Middle 40%	€37,200	45.0%	€37,600	45.5%	€37,300	45.2%
Top 10%	€112,000	33.8%	€101,000	30.7%	€96,900	29.3%
Top 1%	€377,000	11.4%	€310,000	9.4%	€292,000	8.8%
Top 0.1%	€1,460,000	4.4%	€1,080,000	3.3%	€1,010,000	3.1%
Top 0.01%	€5,840,000	1.8%	€3,900,000	1.2%	€3,640,000	1.1%
Top 0.001%	€23,670,000	0.7%	€14,250,000	0.4%	€13,310,000	0.4%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.72
The distribution of national income growth in Malta, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	2.3%	2.6%	2.3%	2.6%	2.3%	2.6%
Bottom 50%	1.9%	1.9%	2.0%	1.8%	2.1%	2.1%
Bottom 20%	1.7%	2.0%	1.9%	2.3%	2.2%	2.8%
Next 30%	2.0%	1.9%	2.0%	1.7%	2.1%	1.9%
Middle 40%	2.2%	1.9%	2.2%	1.8%	2.2%	1.8%
Top 10%	2.7%	4.0%	2.7%	4.5%	2.6%	4.4%
Top 1%	3.0%	6.5%	3.1%	9.1%	3.0%	8.9%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.25 Moldova

3.25.1 Moldova: data sources and methodological steps

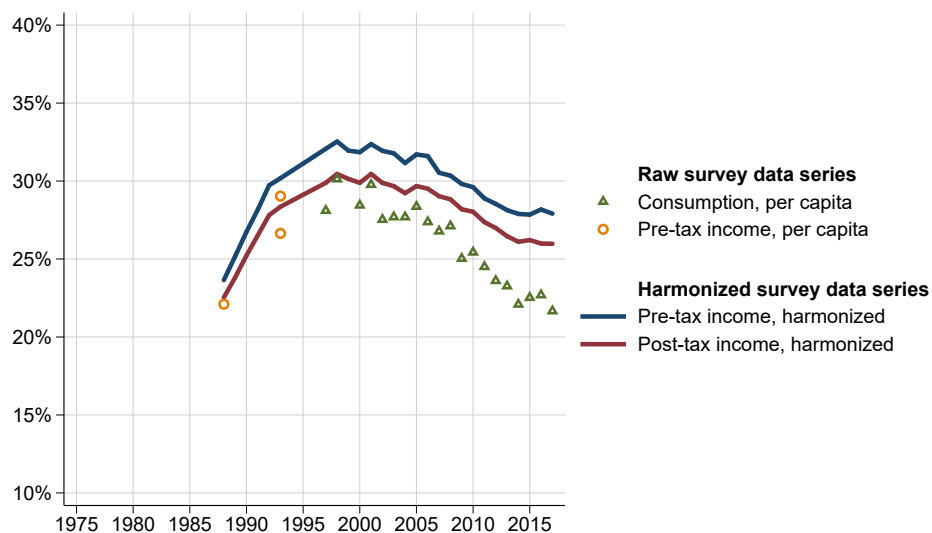
Table A.3.73
Moldova: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980									
1981									
1982									
1983									
1984									
1985									
1986									
1987									
1988	x								
1989							x		
1990							x		
1991							x		
1992							x		
1993	x						x		
1994							x		
1995							x		
1996							x		
1997	x						x		
1998	x						x		
1999							x		
2000	x						x		
2001	x						x		
2002	x						x		
2003	x						x		
2004	x						x		
2005	x						x		
2006	x						x		
2007	x						x		
2008	x						x		
2009	x						x		
2010	x						x		
2011	x						x		
2012	x						x		
2013	x						x		
2014	x						x		
2015	x								
2016	x								
2017	x								

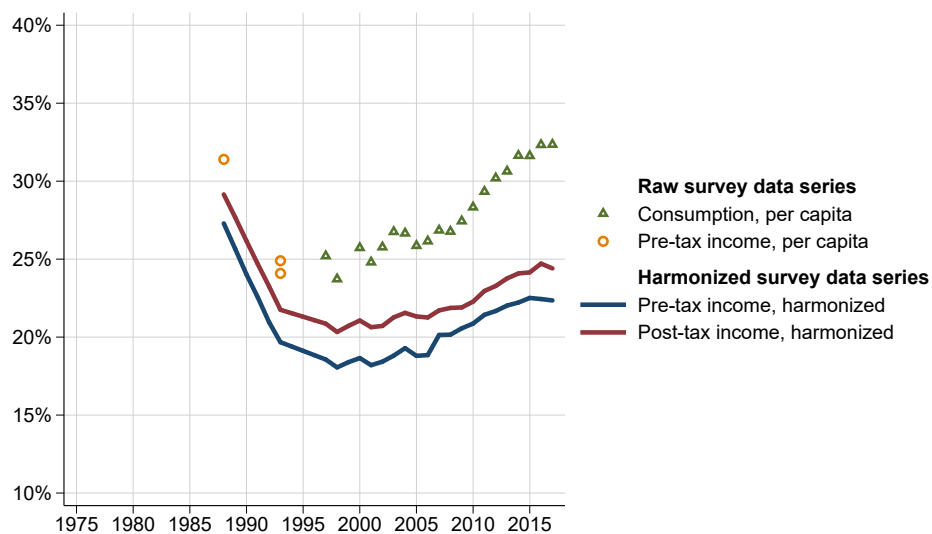
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.73
Moldova: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



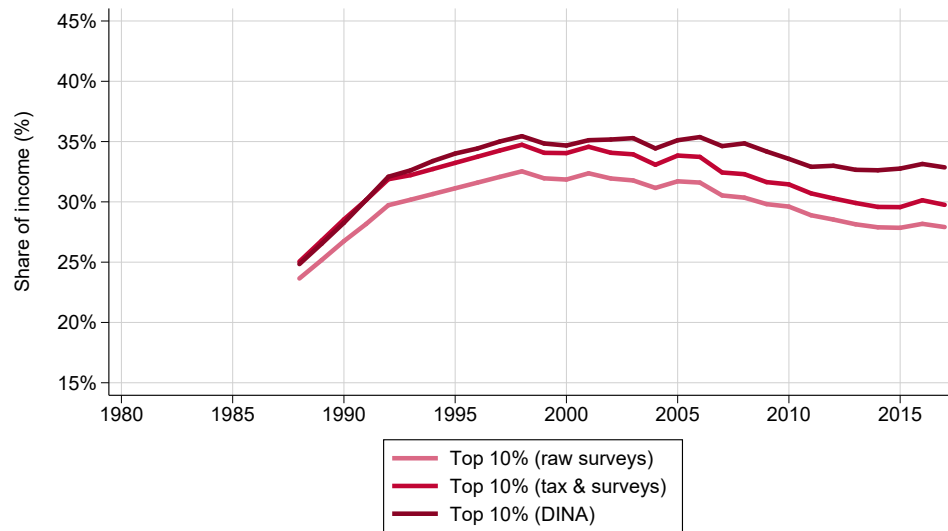
(b) Bottom 50% pre-tax income share



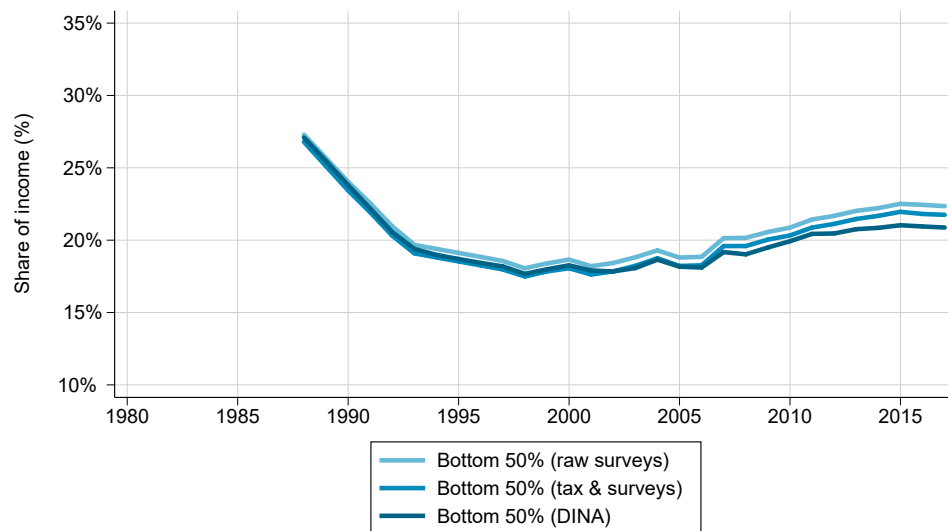
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.74
Moldova: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



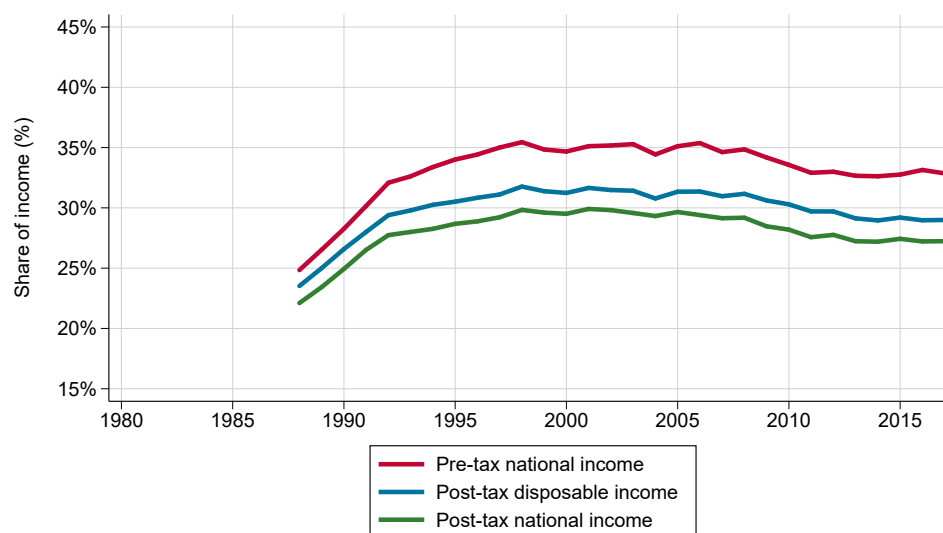
(b) Bottom 50% pre-tax income share



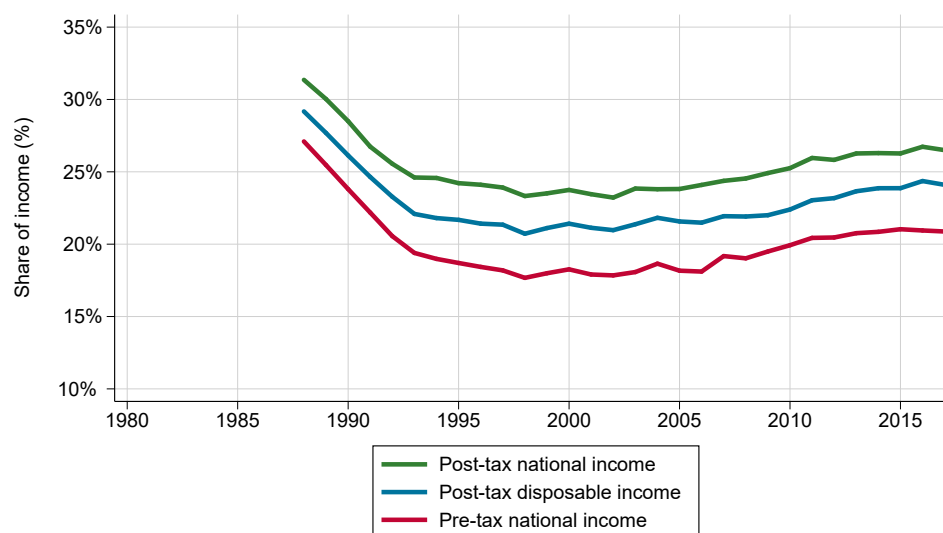
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.75
Moldova: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.25.2 Moldova: main results

Table A.3.74
The distribution of the national income in Moldova, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€4,900	100%	€4,900	100%	€4,900	100%
Bottom 50%	€2,000	20.9%	€2,400	24.1%	€2,600	26.5%
Bottom 20%	€800	3.3%	€1,100	4.6%	€1,500	6.0%
Next 30%	€2,900	17.5%	€3,200	19.5%	€3,300	20.5%
Middle 40%	€5,600	46.3%	€5,700	46.9%	€5,600	46.3%
Top 10%	€16,000	32.9%	€14,100	29.0%	€13,300	27.2%
Top 1%	€48,400	9.9%	€39,000	8.0%	€35,900	7.4%
Top 0.1%	€161,000	3.3%	€117,000	2.4%	€107,000	2.2%
Top 0.01%	€549,000	1.1%	€364,000	0.7%	€330,000	0.7%
Top 0.001%	€1,900,000	0.4%	€1,140,000	0.2%	€1,030,000	0.2%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.75
The distribution of national income growth in Moldova, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	-0.6%	3.2%	-0.6%	3.2%	-0.6%	3.2%
Bottom 50%	-1.3%	4.0%	-1.1%	4.1%	-1.0%	4.0%
Bottom 20%	-1.8%	2.9%	-1.3%	3.8%	-1.2%	3.7%
Next 30%	-1.2%	4.3%	-1.0%	4.2%	-1.0%	4.1%
Middle 40%	-0.7%	3.2%	-0.6%	3.1%	-0.6%	3.1%
Top 10%	0.2%	2.6%	0.0%	2.5%	0.0%	2.5%
Top 1%	1.0%	3.7%	0.6%	4.0%	0.6%	4.0%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.26 Montenegro

3.26.1 Montenegro: data sources and methodological steps

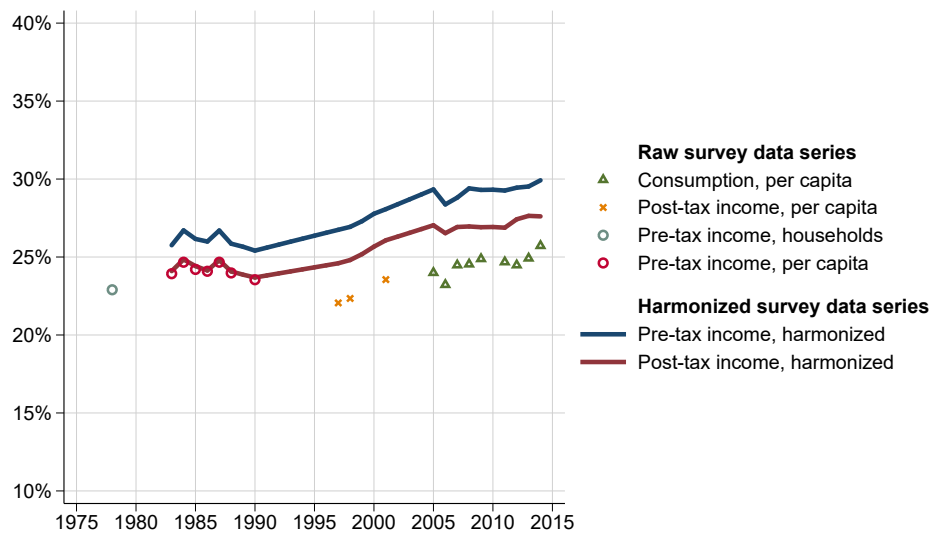
Table A.3.76
Montenegro: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1978	x								
1980									
1981									
1982									
1983	x								
1984	x								
1985	x								
1986	x								
1987	x								
1988	x								
1989									
1990	x								
1991									
1992									
1993									
1994									
1995									
1996									
1997	x								
1998	x								
1999									
2000									
2001	x								
2002									
2003									
2004									
2005	x								
2006	x								
2007	x								
2008	x								
2009	x								
2010									
2011	x								
2012	x								
2013	x								
2014	x								
2015									
2016									
2017									

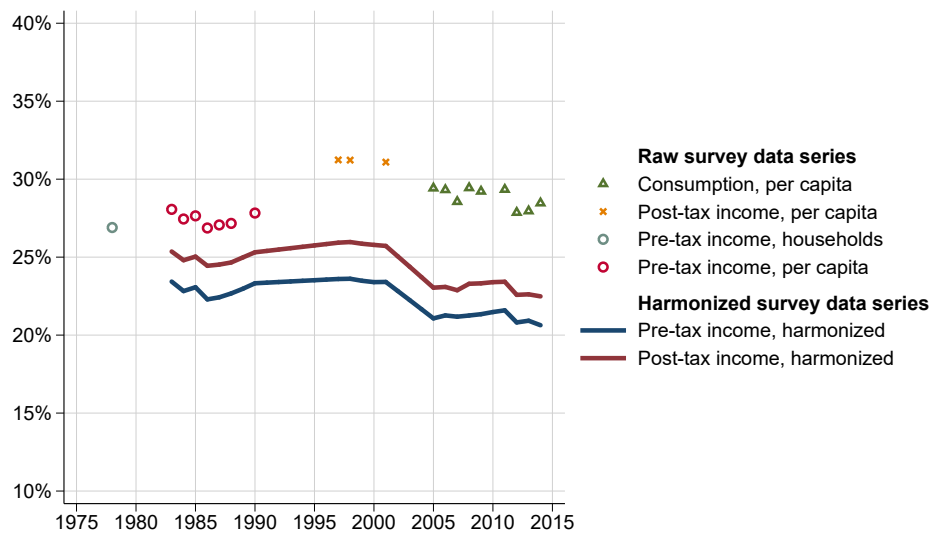
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.76
Montenegro: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



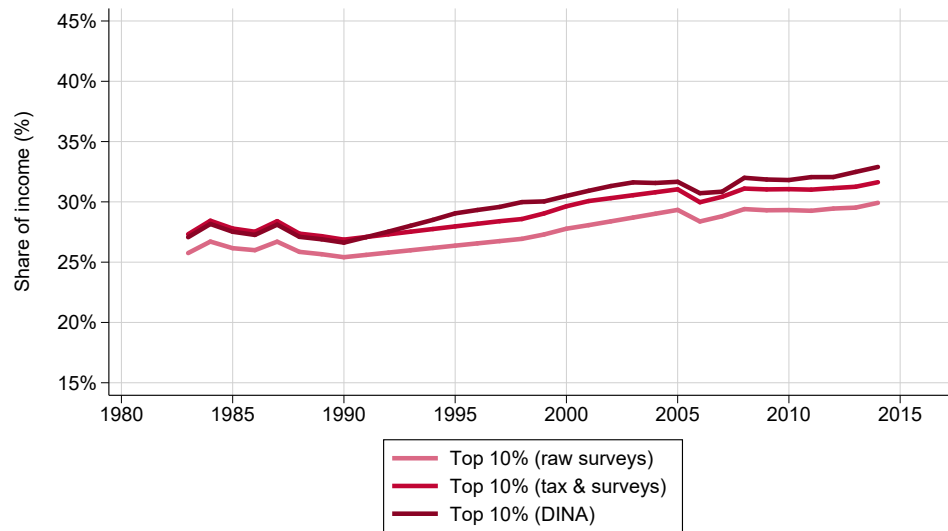
(b) Bottom 50% pre-tax income share



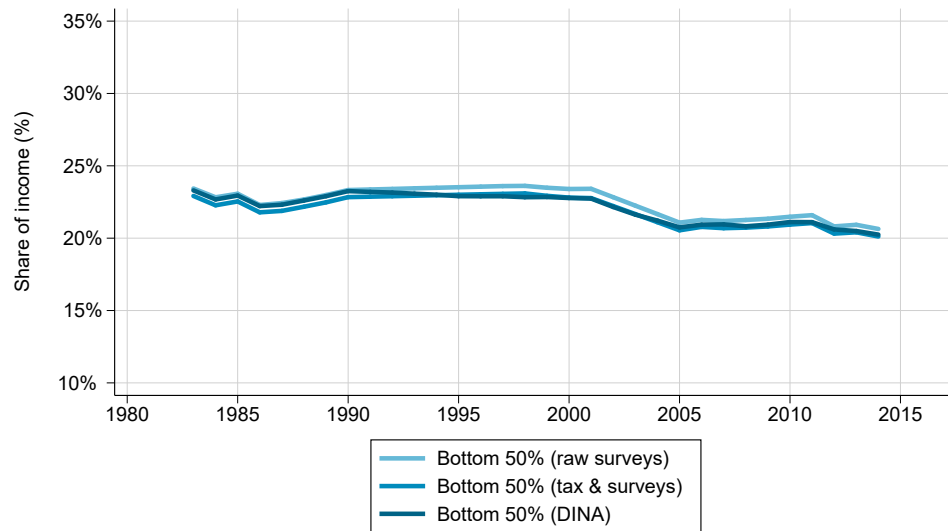
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.77
Montenegro: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



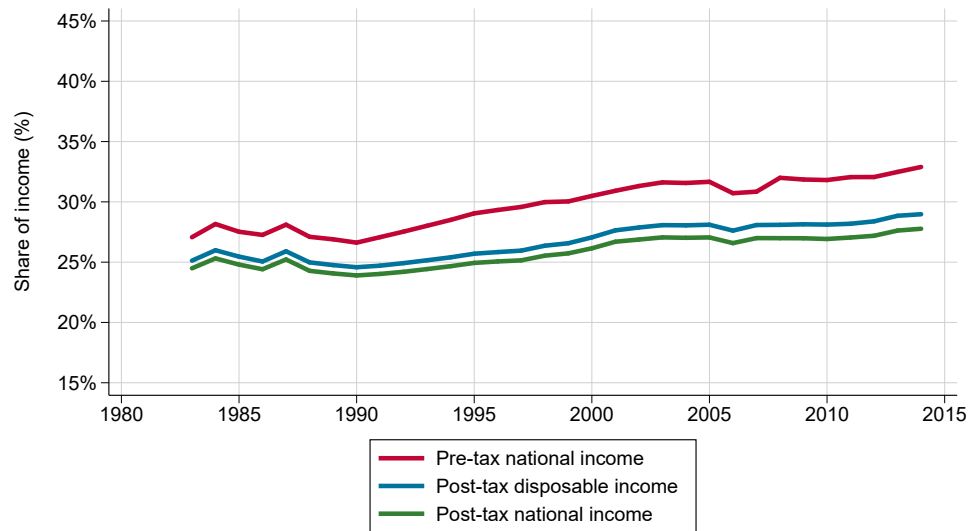
(b) Bottom 50% pre-tax income share



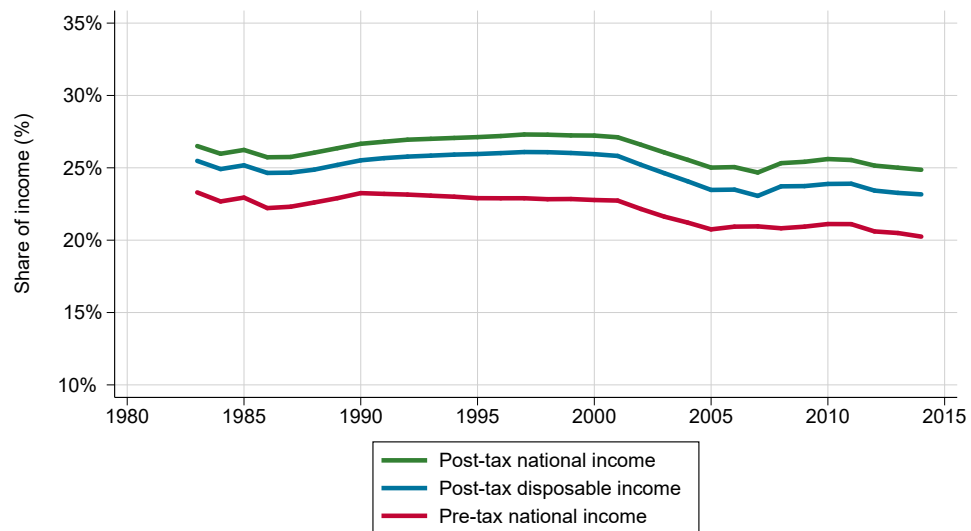
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.78
Montenegro: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.26.2 Montenegro: main results

Table A.3.77
The distribution of the national income in Montenegro, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€15,800	100%	€15,800	100%	€15,800	100%
Bottom 50%	€6,400	20.2%	€7,300	23.2%	€7,800	24.8%
Bottom 20%	€2,800	3.5%	€3,600	4.6%	€4,400	5.5%
Next 30%	€8,700	16.7%	€9,800	18.6%	€10,100	19.3%
Middle 40%	€18,400	46.7%	€18,800	47.7%	€18,600	47.2%
Top 10%	€52,200	33.2%	€45,900	29.1%	€44,000	27.9%
Top 1%	€134,000	8.5%	€107,000	6.8%	€101,000	6.4%
Top 0.1%	€331,000	2.1%	€246,000	1.6%	€232,000	1.5%
Top 0.01%	€803,000	0.5%	€566,000	0.4%	€532,000	0.3%
Top 0.001%	€1,940,000	0.1%	€1,300,000	0.1%	€1,220,000	0.1%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.78
The distribution of national income growth in Montenegro, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	-0.6%	1.5%	-0.6%	1.5%	-0.6%	1.5%
Bottom 50%	-1.0%	1.1%	-0.9%	1.6%	-0.8%	1.6%
Bottom 20%	-1.2%	1.0%	-1.0%	2.2%	-0.7%	2.1%
Next 30%	-1.0%	1.1%	-0.8%	1.4%	-0.8%	1.4%
Middle 40%	-0.8%	1.2%	-0.7%	1.3%	-0.7%	1.3%
Top 10%	-0.1%	2.2%	-0.2%	1.9%	-0.3%	1.9%
Top 1%	0.4%	3.4%	0.0%	2.5%	0.0%	2.5%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.27 Netherlands

3.27.1 Netherlands: data sources and methodological steps

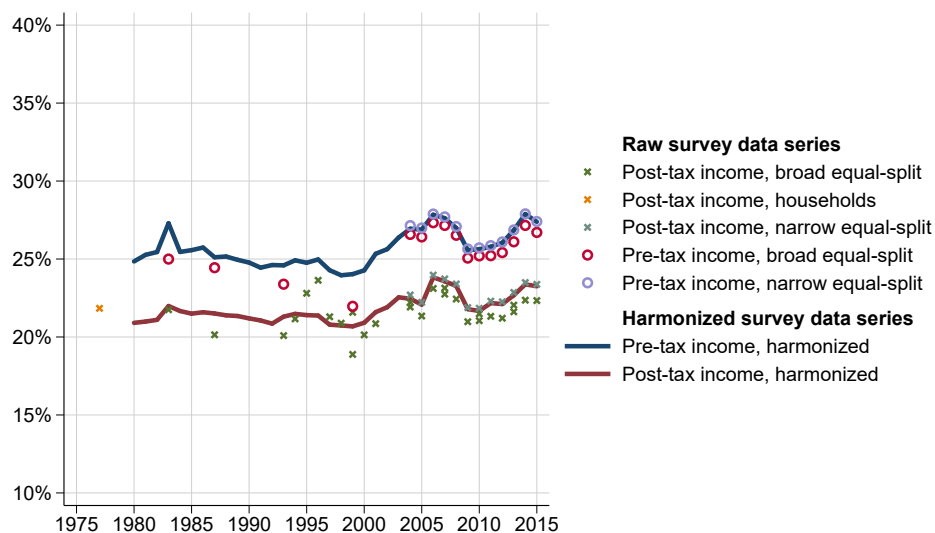
Table A.3.79
Netherlands: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1977	x								
1980				x		x	x	x	
1981			x	x		x	x	x	
1982				x		x	x	x	
1983	x	x		x		x	x	x	
1984				x		x	x	x	
1985			x	x		x	x	x	
1986				x		x	x	x	
1987	x	x		x		x	x	x	
1988				x		x	x	x	
1989			x	x		x	x	x	
1990			x	x	x	x	x	x	
1991			x	x	x	x	x	x	
1992			x	x	x	x	x	x	
1993	x	x	x	x	x	x	x	x	
1994	x	x	x	x	x	x	x	x	
1995	x	x	x	x	x	x	x	x	
1996	x	x	x	x	x	x	x	x	
1997	x	x	x	x	x	x	x	x	
1998	x	x	x	x	x	x	x	x	x
1999	x	x	x	x	x	x	x	x	x
2000	x	x	x	x	x	x	x	x	x
2001	x	x	x	x	x	x	x	x	x
2002			x	x	x	x	x	x	x
2003			x	x	x	x	x	x	x
2004	x	x	x	x	x	x	x	x	x
2005	x	x	x	x	x	x	x	x	x
2006	x	x	x	x	x	x	x	x	x
2007	x	x	x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x	x	x	x	x	x	x	x
2012	x	x	x	x	x	x	x	x	x
2013	x	x	x	x	x	x	x	x	x
2014	x	x	x	x	x	x	x	x	x
2015	x	x		x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

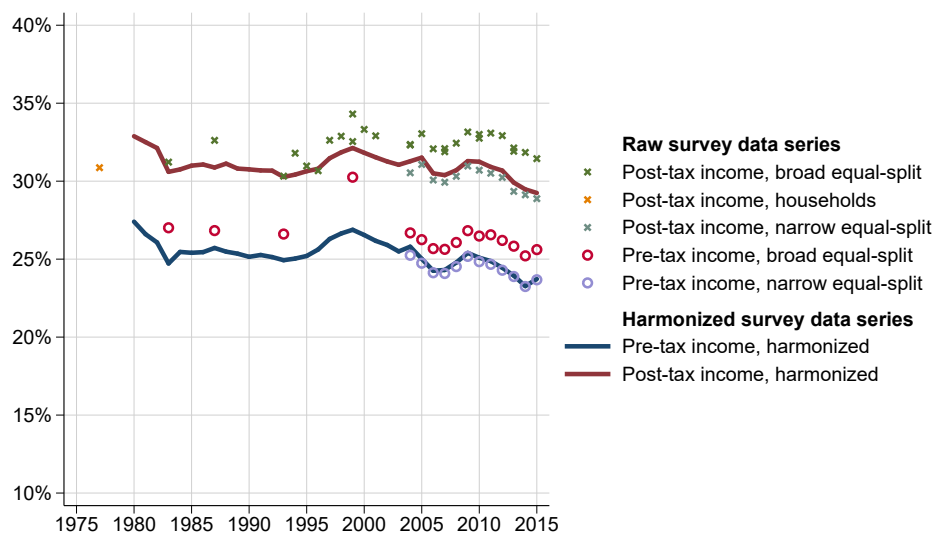
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.79
Netherlands: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



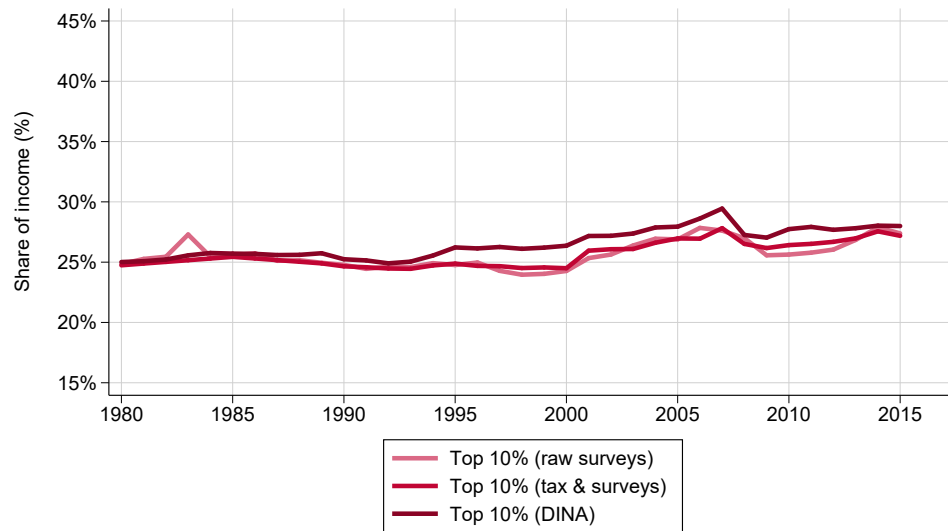
(b) Bottom 50% pre-tax income share



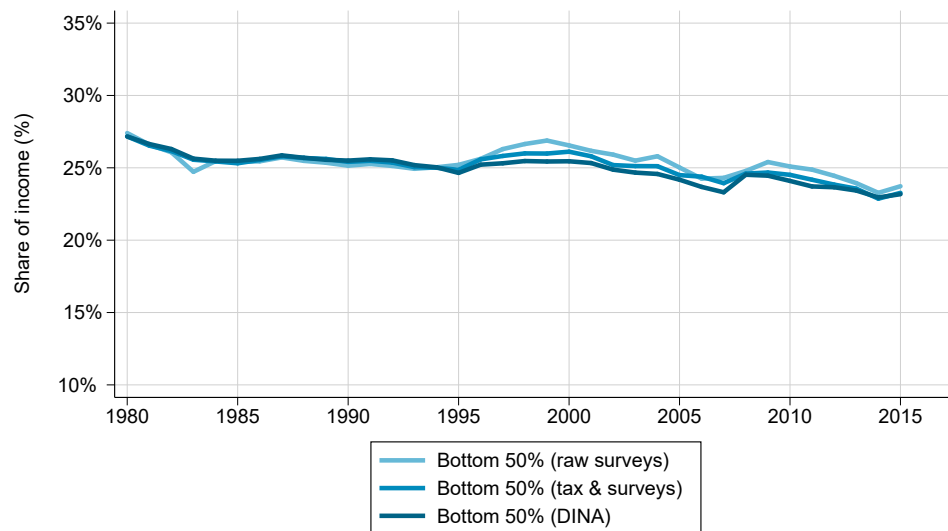
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.80
Netherlands: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



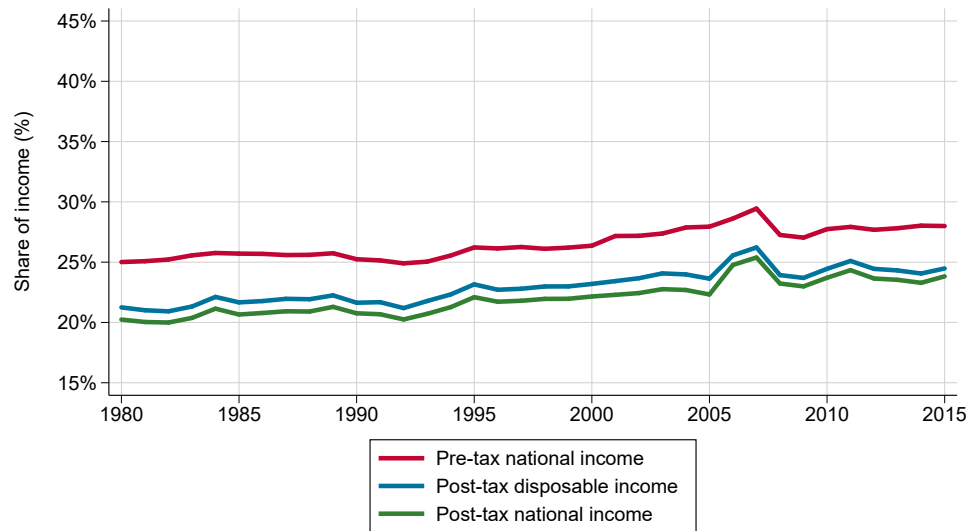
(b) Bottom 50% pre-tax income share



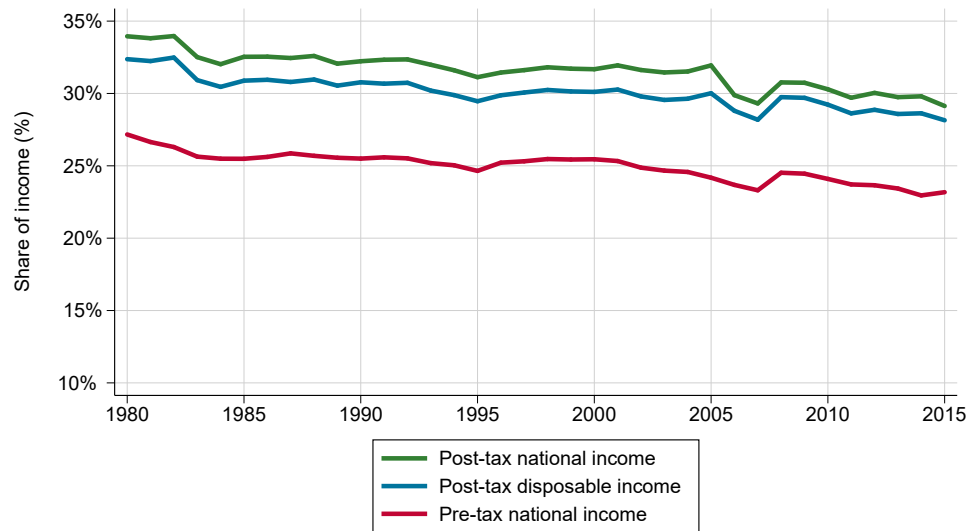
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.81
Netherlands: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.27.2 Netherlands: main results

Table A.3.80
The distribution of the national income in Netherlands, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€43,600	100%	€43,600	100%	€43,600	100%
Bottom 50%	€20,200	23.2%	€24,400	28.0%	€25,300	29.0%
Bottom 20%	€9,500	4.4%	€15,000	6.9%	€16,300	7.5%
Next 30%	€27,300	18.8%	€30,700	21.2%	€31,300	21.5%
Middle 40%	€53,100	48.7%	€51,500	47.3%	€51,200	47.0%
Top 10%	€122,000	28.1%	€107,000	24.7%	€105,000	24.0%
Top 1%	€270,000	6.2%	€234,000	5.4%	€226,000	5.2%
Top 0.1%	€618,000	1.4%	€559,000	1.3%	€536,000	1.2%
Top 0.01%	€1,440,000	0.3%	€1,390,000	0.3%	€1,330,000	0.3%
Top 0.001%	€3,360,000	0.1%	€3,510,000	0.1%	€3,360,000	0.1%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.81
The distribution of national income growth in Netherlands, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	0.8%	-0.1%	0.8%	-0.1%	0.8%	-0.1%
Bottom 50%	0.4%	-0.1%	0.4%	-0.1%	0.4%	-0.2%
Bottom 20%	0.2%	-0.9%	0.3%	-0.7%	0.2%	-0.7%
Next 30%	0.4%	0.1%	0.5%	0.1%	0.5%	0.0%
Middle 40%	0.9%	0.3%	0.9%	0.3%	0.9%	0.3%
Top 10%	1.2%	-0.5%	1.2%	-0.7%	1.3%	-0.6%
Top 1%	1.3%	-1.3%	1.6%	-1.2%	1.7%	-1.2%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.28 Norway

3.28.1 Norway: data sources and methodological steps

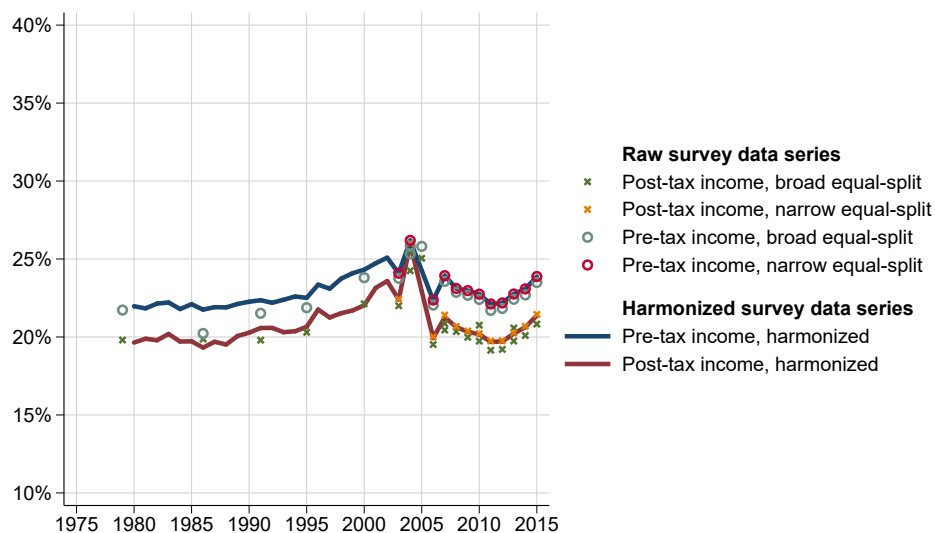
Table A.3.82
Norway: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1979	x	x							
1980			x	x		x	x	x	
1981			x	x		x	x	x	
1982			x	x		x	x	x	
1983			x	x		x	x	x	
1984			x	x		x	x	x	
1985			x	x		x	x	x	
1986	x	x	x	x		x	x	x	
1987			x	x		x	x	x	
1988			x	x		x	x	x	
1989			x	x		x	x	x	
1990			x	x		x	x	x	
1991	x	x	x	x		x	x	x	
1992			x	x		x	x	x	
1993			x	x		x	x	x	
1994			x	x		x	x	x	
1995	x	x	x	x	x	x	x	x	
1996			x	x	x	x	x	x	
1997			x	x	x	x	x	x	
1998			x	x	x	x	x	x	
1999			x	x	x	x	x	x	
2000	x	x	x	x	x	x	x	x	
2001			x	x	x	x	x	x	
2002			x	x	x	x	x	x	
2003	x	x	x	x	x	x	x	x	x
2004	x	x	x	x	x	x	x	x	x
2005	x	x	x	x	x	x	x	x	x
2006	x	x	x	x	x	x	x	x	x
2007	x	x	x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x	x	x	x	x	x	x	x
2012	x	x		x	x	x	x	x	x
2013	x	x		x	x	x	x	x	x
2014	x	x		x	x	x	x	x	x
2015	x	x		x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

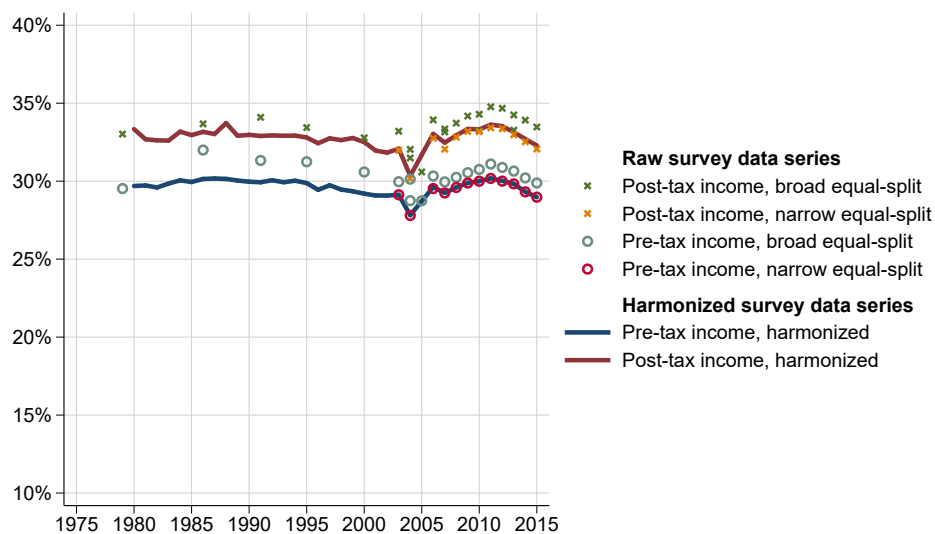
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.82
Norway: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



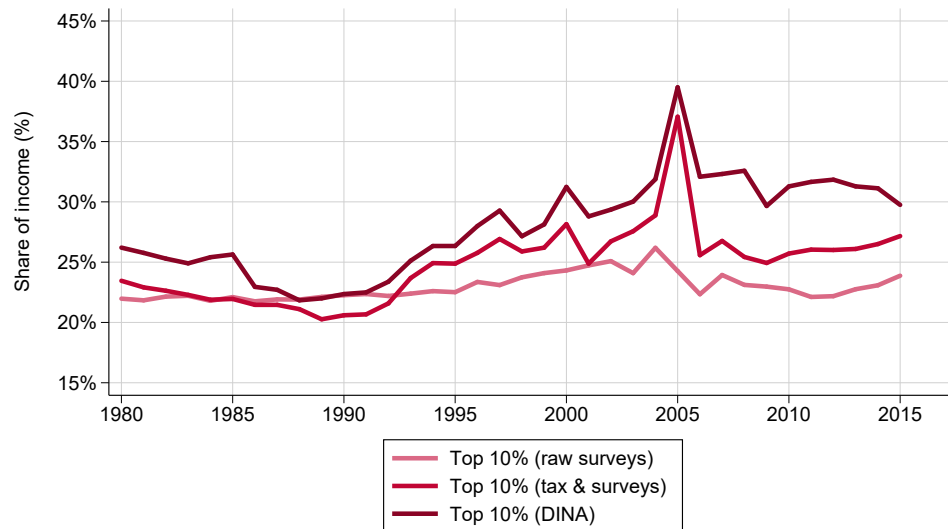
(b) Bottom 50% pre-tax income share



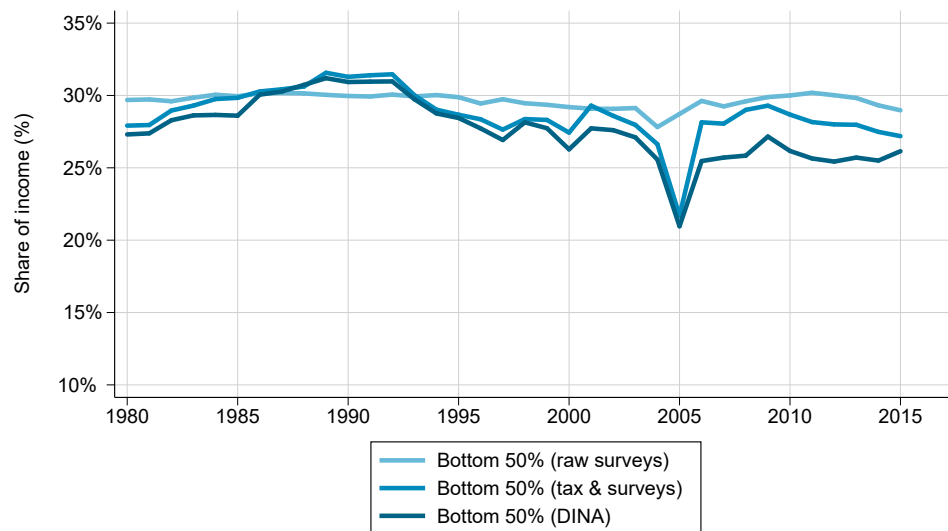
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.83
Norway: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



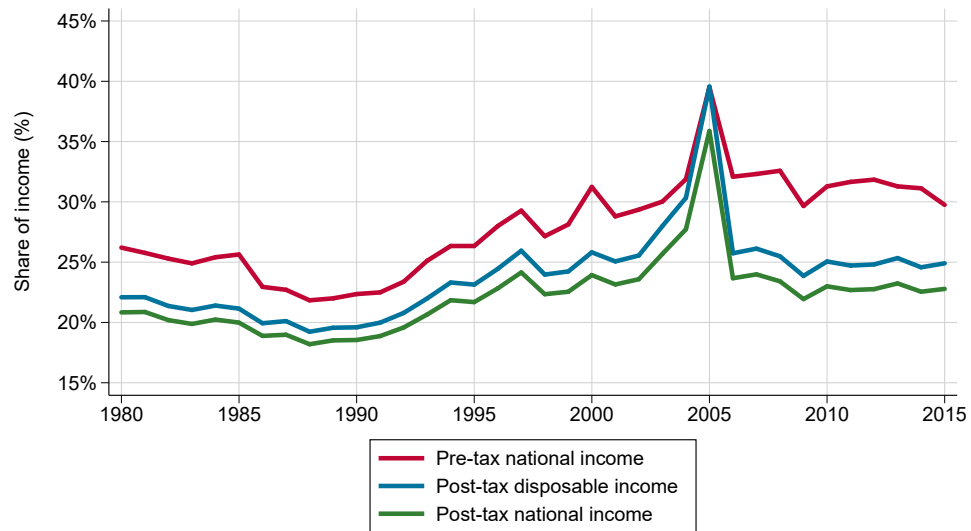
(b) Bottom 50% pre-tax income share



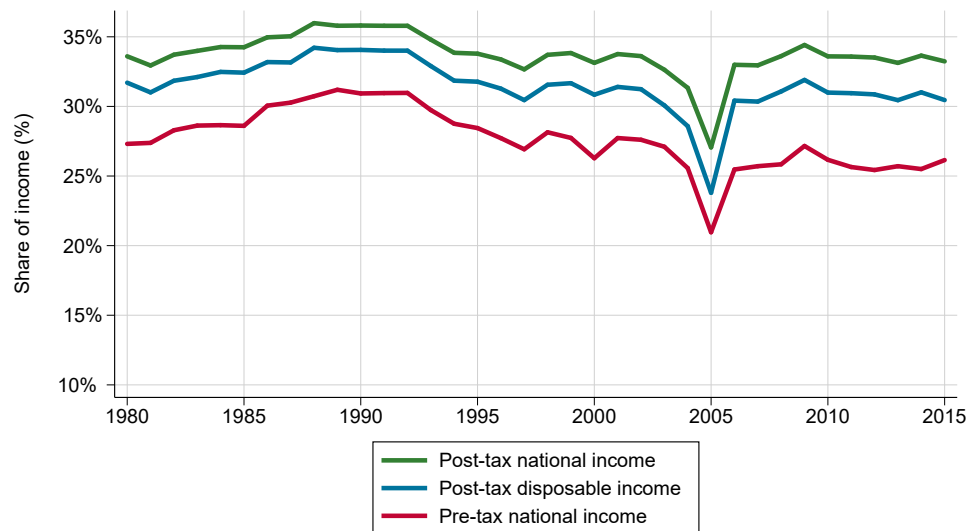
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.84
Norway: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.28.2 Norway: main results

Table A.3.83
The distribution of the national income in Norway, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€62,500	100%	€62,500	100%	€62,500	100%
Bottom 50%	€32,500	26.0%	€37,900	30.3%	€41,500	33.2%
Bottom 20%	€19,200	6.2%	€24,900	8.0%	€30,400	9.7%
Next 30%	€41,300	19.8%	€46,600	22.3%	€48,900	23.5%
Middle 40%	€68,600	43.9%	€69,600	44.5%	€68,500	43.8%
Top 10%	€188,000	30.1%	€157,000	25.2%	€143,000	22.9%
Top 1%	€584,000	9.3%	€421,000	6.7%	€368,000	5.9%
Top 0.1%	€1,950,000	3.1%	€1,220,000	1.9%	€1,050,000	1.7%
Top 0.01%	€6,640,000	1.1%	€3,640,000	0.6%	€3,110,000	0.5%
Top 0.001%	€22,810,000	0.4%	€10,980,000	0.2%	€9,360,000	0.1%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.84
The distribution of national income growth in Norway, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.7%	-0.2%	1.7%	-0.2%	1.7%	-0.2%
Bottom 50%	1.5%	-0.1%	1.6%	-0.2%	1.6%	-0.1%
Bottom 20%	1.3%	-0.6%	1.3%	-0.4%	1.5%	-0.2%
Next 30%	1.6%	0.0%	1.7%	-0.2%	1.7%	-0.1%
Middle 40%	1.5%	0.2%	1.6%	0.0%	1.6%	0.0%
Top 10%	2.1%	-0.9%	2.0%	-0.6%	1.9%	-0.7%
Top 1%	2.6%	-2.6%	2.5%	-2.3%	2.4%	-2.4%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.29 Poland

3.29.1 Poland: data sources and methodological steps

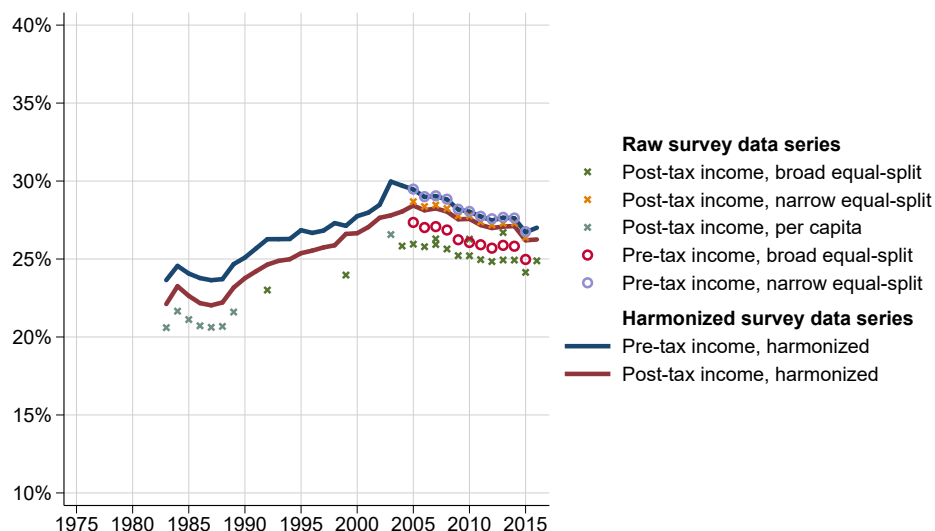
Table A.3.85
Poland: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980									
1981									
1982									
1983	x		x						
1984	x		x						
1985	x		x						
1986	x		x						
1987	x		x						
1988	x		x						
1989	x		x						
1990									
1991									
1992	x	x	x						
1993			x						
1994			x						
1995			x		x				
1996			x	x	x	x	x	x	
1997			x	x	x	x	x	x	
1998			x	x	x	x	x	x	
1999	x	x	x	x	x	x	x	x	
2000			x	x	x	x	x	x	
2001			x	x	x	x	x	x	
2002			x	x	x	x	x	x	
2003	x		x	x	x	x	x	x	x
2004	x	x	x	x	x	x	x	x	x
2005	x	x	x	x	x	x	x	x	x
2006	x	x	x	x	x	x	x	x	x
2007	x	x	x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x	x	x	x	x	x	x	x
2012	x	x	x	x	x	x	x	x	x
2013	x	x	x	x	x	x	x	x	x
2014	x	x	x	x	x	x	x	x	x
2015	x	x	x	x	x	x	x	x	x
2016	x	x		x	x	x	x	x	x
2017				x	x	x	x	x	x

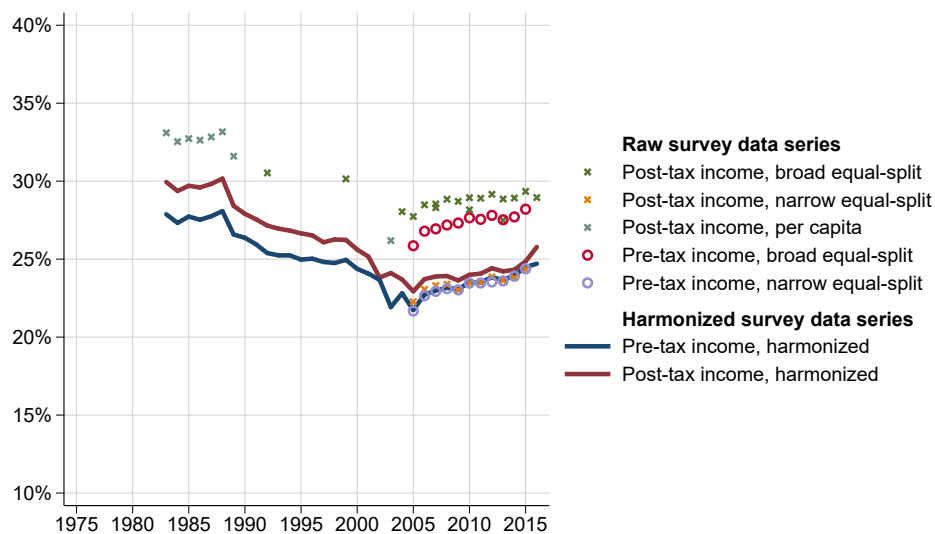
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.85
Poland: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



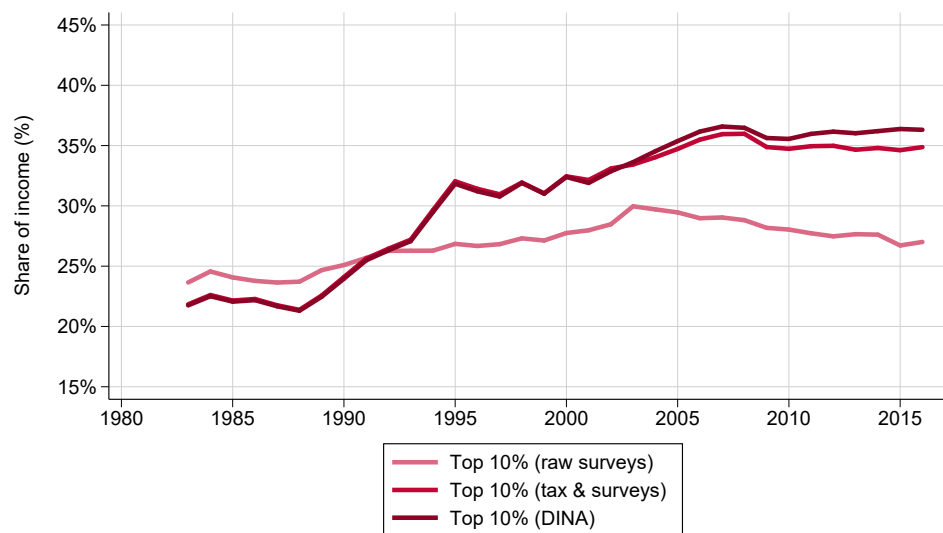
(b) Bottom 50% pre-tax income share



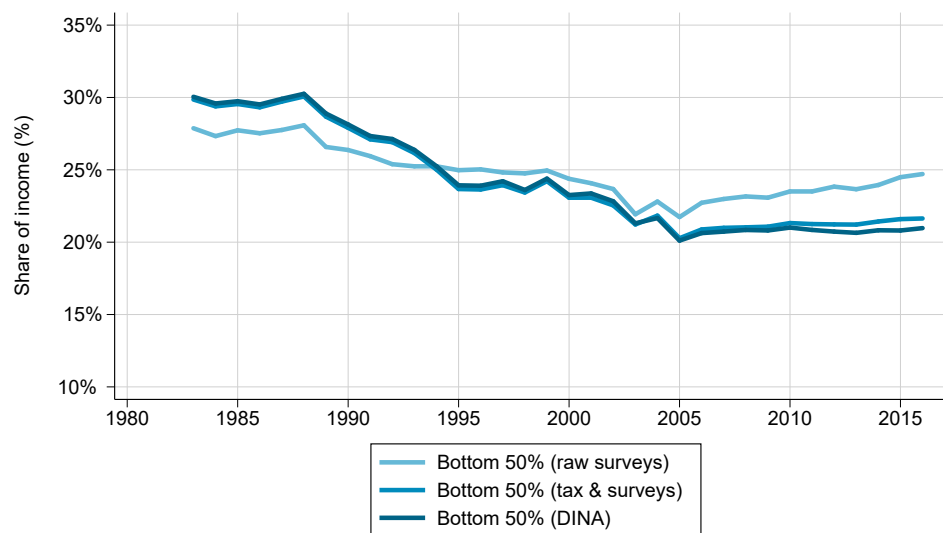
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.86
Poland: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



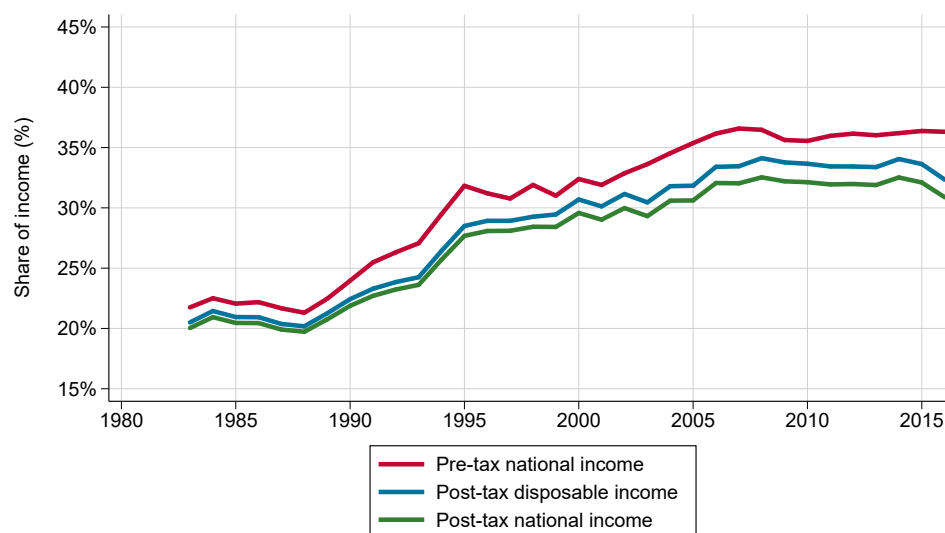
(b) Bottom 50% pre-tax income share



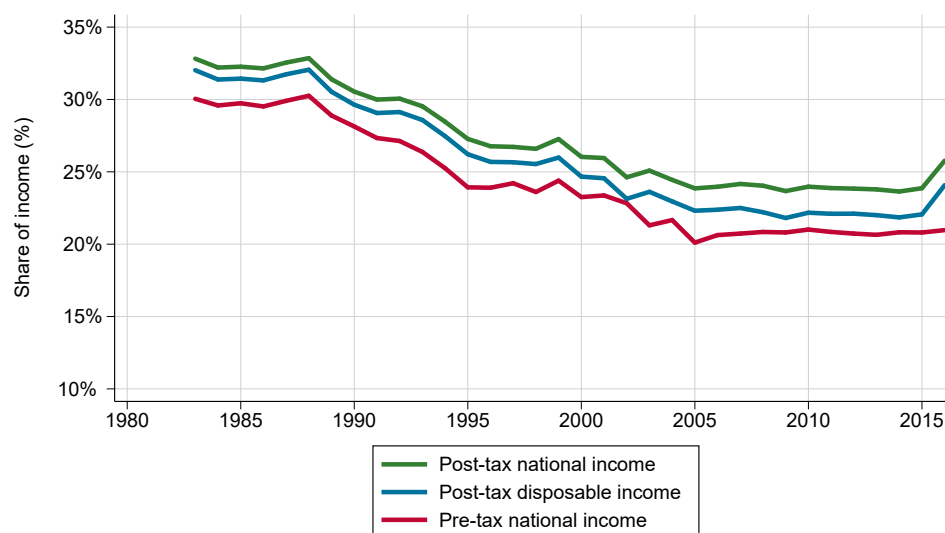
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.87
Poland: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.29.2 Poland: main results

Table A.3.86
The distribution of the national income in Poland, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€22,500	100%	€22,500	100%	€22,500	100%
Bottom 50%	€9,400	20.9%	€10,800	24.0%	€11,600	25.7%
Bottom 20%	€3,800	3.4%	€5,500	4.9%	€6,600	5.9%
Next 30%	€13,100	17.5%	€14,300	19.1%	€14,900	19.8%
Middle 40%	€24,000	42.6%	€24,500	43.5%	€24,400	43.3%
Top 10%	€82,100	36.5%	€73,200	32.5%	€69,800	31.0%
Top 1%	€315,000	14.0%	€243,000	10.8%	€228,000	10.1%
Top 0.1%	€1,290,000	5.7%	€840,000	3.7%	€785,000	3.5%
Top 0.01%	€5,400,000	2.4%	€2,950,000	1.3%	€2,750,000	1.2%
Top 0.001%	€22,630,000	1.0%	€10,370,000	0.5%	€9,680,000	0.4%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.87
The distribution of national income growth in Poland, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.8%	2.7%	1.8%	2.7%	1.8%	2.7%
Bottom 50%	0.8%	2.8%	1.0%	3.4%	1.1%	3.4%
Bottom 20%	-0.4%	1.9%	0.3%	4.4%	0.6%	4.2%
Next 30%	1.1%	3.0%	1.3%	3.1%	1.3%	3.1%
Middle 40%	1.5%	2.7%	1.6%	2.6%	1.6%	2.6%
Top 10%	3.3%	2.7%	3.1%	2.4%	3.0%	2.4%
Top 1%	5.2%	2.2%	4.8%	1.9%	4.7%	1.9%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.30 Portugal

3.30.1 Portugal: data sources and methodological steps

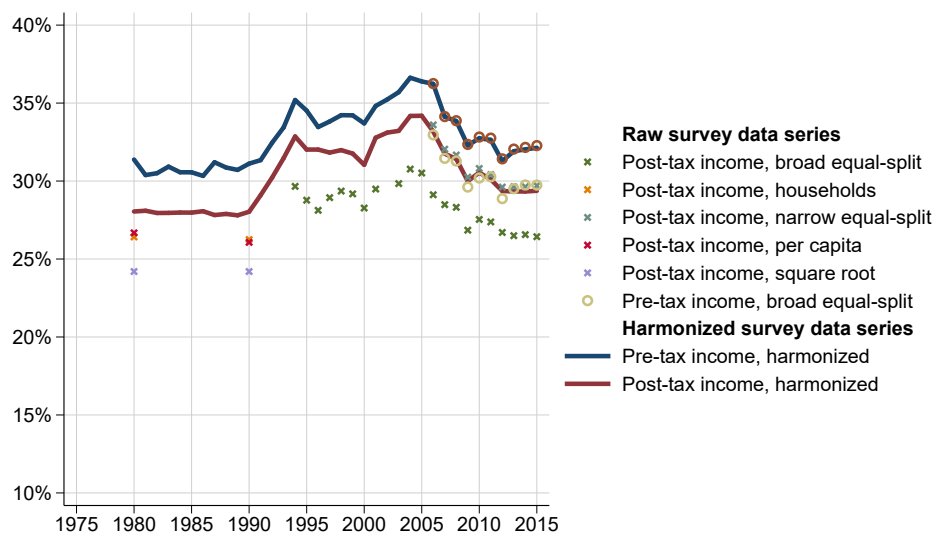
Table A.3.88
Portugal: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980	x		x						
1981			x						
1982			x						
1983			x						
1984			x						
1985			x						
1986			x						
1987			x						
1988			x						
1989			x						
1990	x		x						
1991			x						
1992			x						
1993			x						
1994	x	x	x						
1995	x	x	x	x	x	x	x	x	
1996	x	x	x	x	x	x	x	x	
1997	x	x	x	x	x	x	x	x	
1998	x	x	x	x	x	x	x	x	
1999	x	x	x	x	x	x	x	x	
2000	x	x	x	x	x	x	x	x	x
2001	x	x	x	x	x	x	x	x	x
2002			x	x	x	x	x	x	x
2003	x	x	x	x	x	x	x	x	x
2004	x	x	x	x	x	x	x	x	x
2005	x	x	x	x	x	x	x	x	x
2006	x	x	x	x	x	x	x	x	x
2007	x	x	x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x	x	x	x	x	x	x	x
2012	x	x	x	x	x	x	x	x	x
2013	x	x	x	x	x	x	x	x	x
2014	x	x	x	x	x	x	x	x	x
2015	x	x	x	x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

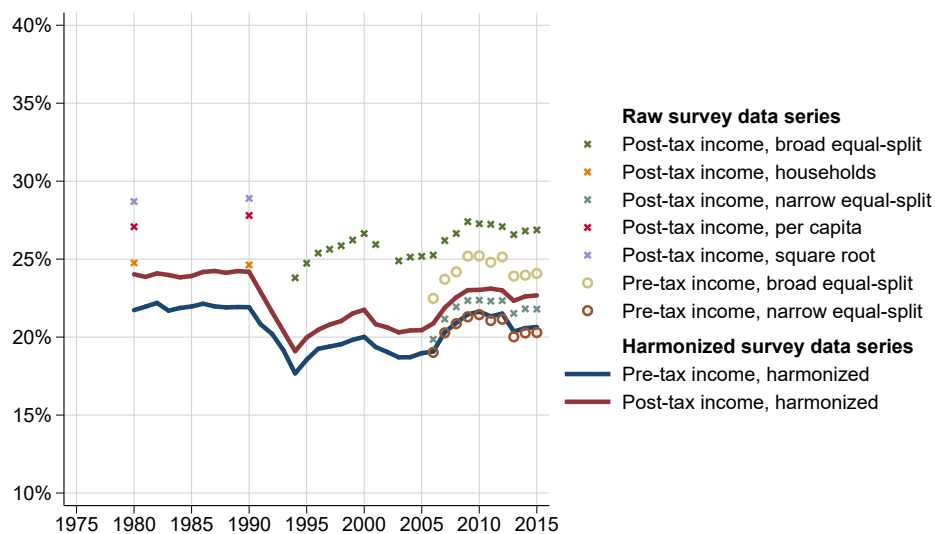
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.88
Portugal: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



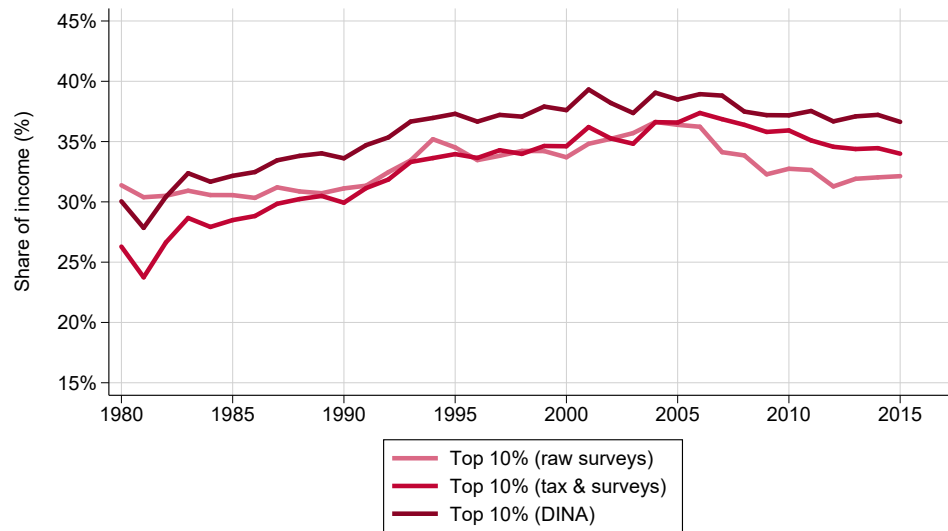
(b) Bottom 50% pre-tax income share



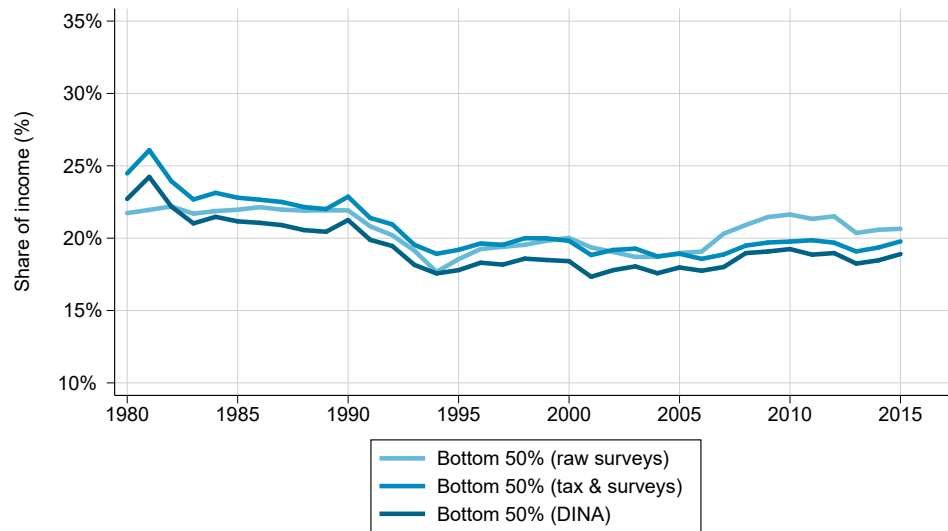
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.89
Portugal: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



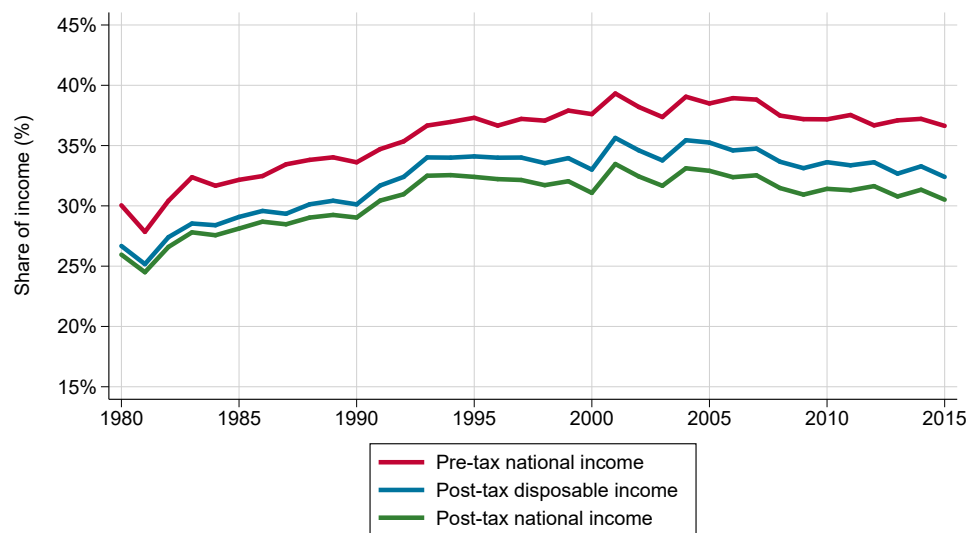
(b) Bottom 50% pre-tax income share



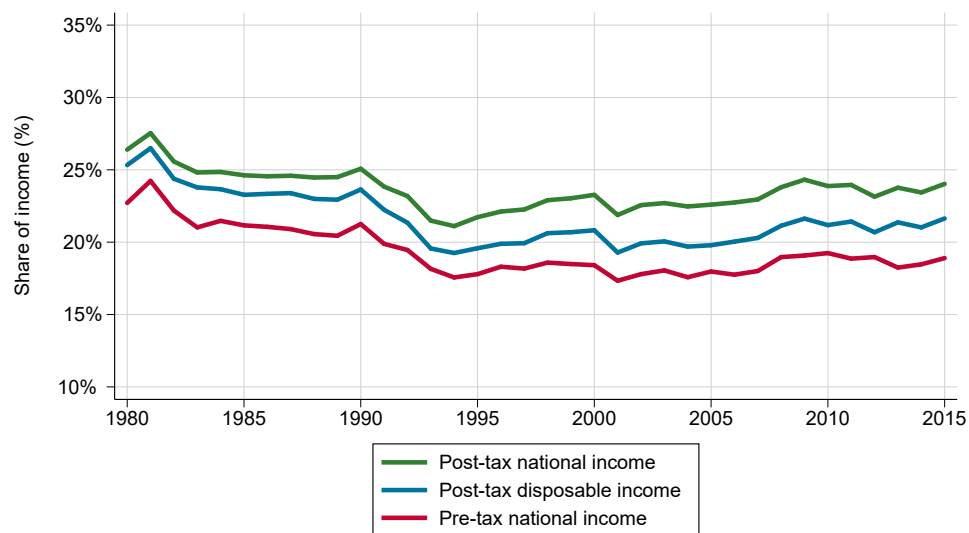
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.90
Portugal: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.30.2 Portugal: main results

Table A.3.89
The distribution of the national income in Portugal, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€23,000	100%	€23,000	100%	€23,000	100%
Bottom 50%	€8,600	18.7%	€9,900	21.5%	€11,000	23.9%
Bottom 20%	€3,500	3.0%	€4,600	4.0%	€6,200	5.4%
Next 30%	€12,000	15.7%	€13,400	17.5%	€14,200	18.6%
Middle 40%	€25,400	44.2%	€26,300	45.8%	€26,000	45.3%
Top 10%	€85,400	37.1%	€75,400	32.8%	€70,900	30.8%
Top 1%	€244,000	10.6%	€194,000	8.4%	€179,000	7.8%
Top 0.1%	€683,000	3.0%	€502,000	2.2%	€461,000	2.0%
Top 0.01%	€1,900,000	0.8%	€1,300,000	0.6%	€1,190,000	0.5%
Top 0.001%	€5,300,000	0.2%	€3,370,000	0.1%	€3,080,000	0.1%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.90
The distribution of national income growth in Portugal, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.3%	0.0%	1.3%	0.0%	1.3%	0.0%
Bottom 50%	0.7%	0.4%	0.8%	0.5%	1.0%	0.4%
Bottom 20%	-0.1%	-0.2%	0.2%	0.7%	0.8%	0.3%
Next 30%	1.0%	0.5%	1.0%	0.5%	1.1%	0.4%
Middle 40%	1.1%	0.2%	1.1%	0.1%	1.1%	0.1%
Top 10%	1.9%	-0.5%	1.8%	-0.6%	1.8%	-0.6%
Top 1%	2.4%	0.2%	2.4%	0.0%	2.3%	0.1%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.31 Romania

3.31.1 Romania: data sources and methodological steps

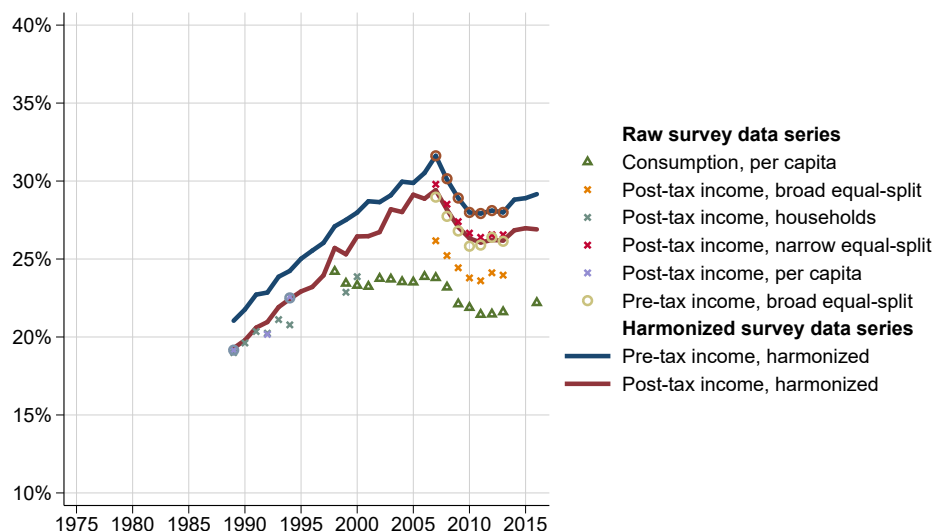
Table A.3.91
Romania: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980			x						
1981			x						
1982			x						
1983			x						
1984			x						
1985			x						
1986			x						
1987			x						
1988			x						
1989	x		x						
1990	x		x				x	x	
1991	x		x				x	x	
1992	x		x				x	x	
1993	x		x				x	x	
1994	x		x				x	x	
1995			x	x		x	x	x	
1996			x	x		x	x	x	
1997			x	x		x	x	x	
1998	x		x	x		x	x	x	
1999	x		x	x		x	x	x	
2000	x		x	x		x	x	x	
2001	x		x	x		x	x	x	
2002	x		x	x		x	x	x	
2003	x		x	x		x	x	x	
2004	x		x	x		x	x	x	
2005	x		x	x		x	x	x	
2006	x		x	x		x	x	x	
2007	x	x	x	x		x	x	x	
2008	x	x	x	x		x	x	x	
2009	x	x	x	x		x	x	x	
2010	x	x	x	x		x	x	x	
2011	x	x	x	x		x	x	x	
2012	x	x	x	x		x	x	x	
2013	x	x	x	x		x	x	x	
2014			x	x		x	x	x	
2015			x	x		x	x	x	
2016	x		x	x		x	x	x	
2017			x	x		x	x	x	

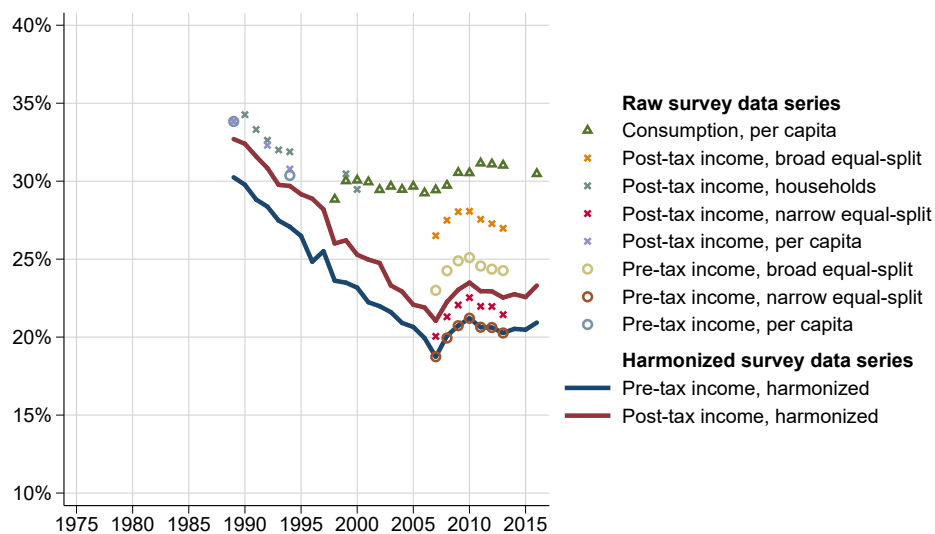
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.91
Romania: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



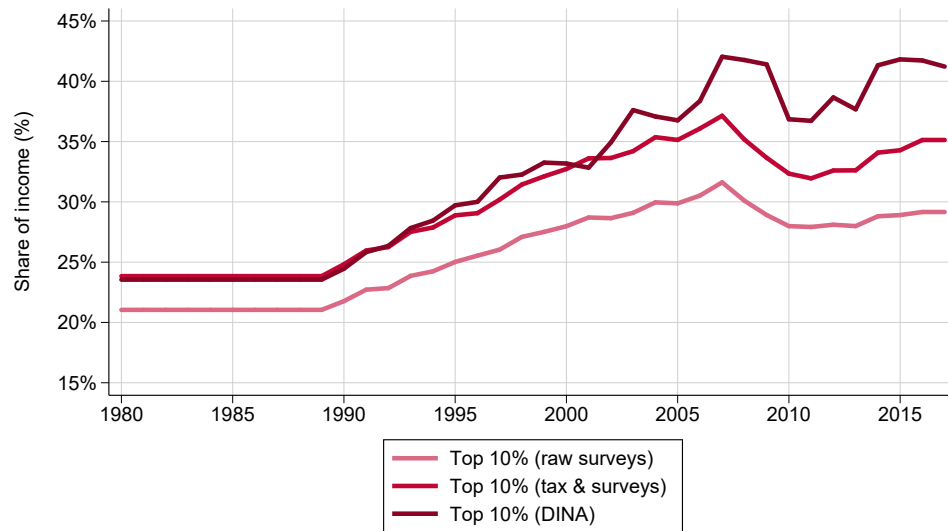
(b) Bottom 50% pre-tax income share



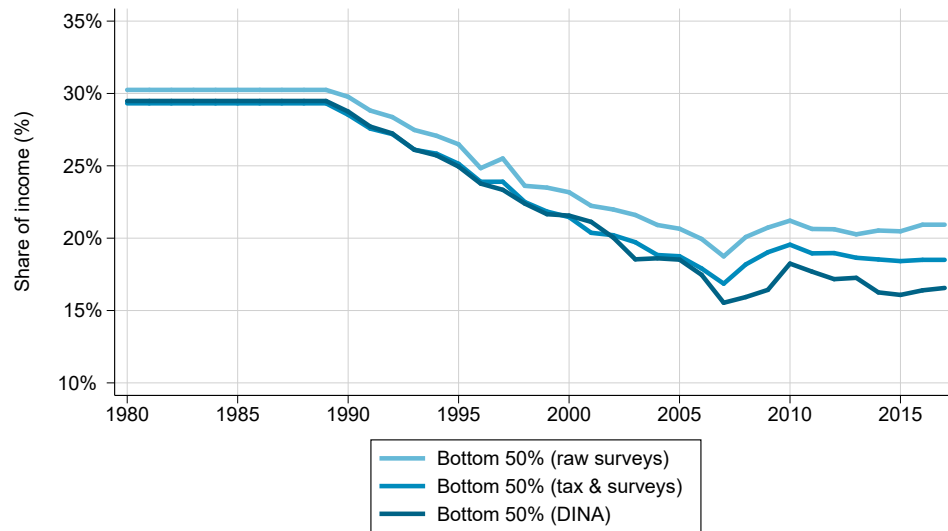
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.92
Romania: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



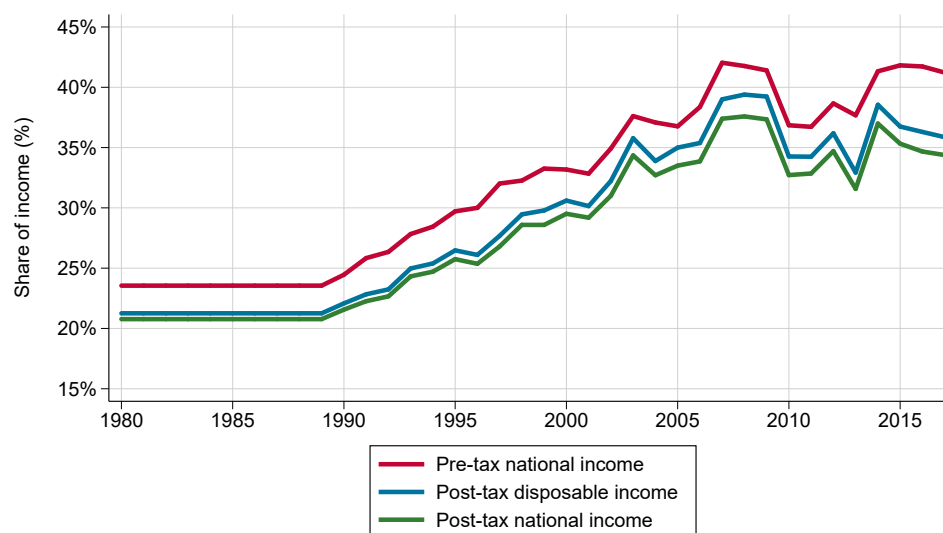
(b) Bottom 50% pre-tax income share



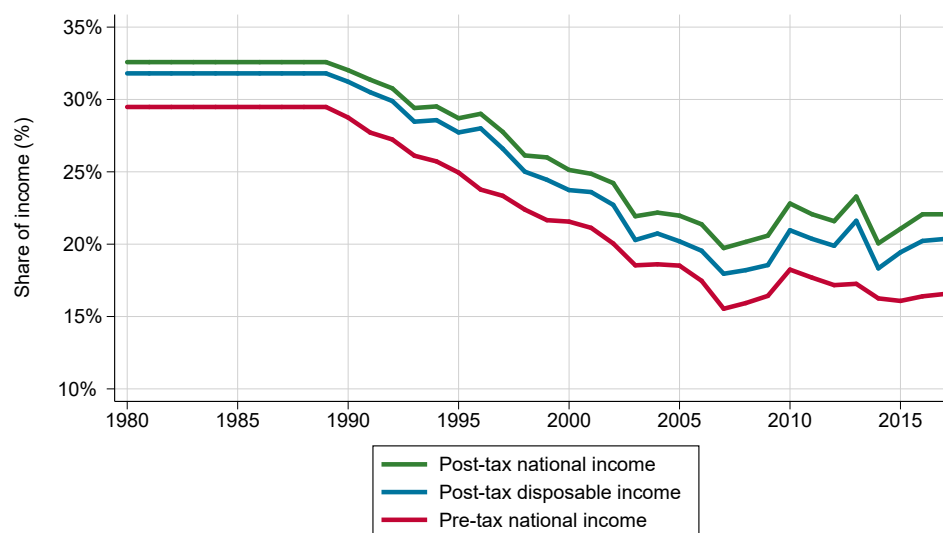
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.93
Romania: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.31.2 Romania: main results

Table A.3.92
The distribution of the national income in Romania, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€19,400	100%	€19,400	100%	€19,400	100%
Bottom 50%	€6,400	16.6%	€7,900	20.4%	€8,500	22.1%
Bottom 20%	€2,100	2.2%	€3,300	3.4%	€4,200	4.4%
Next 30%	€9,300	14.4%	€11,000	17.0%	€11,400	17.7%
Middle 40%	€20,400	42.2%	€21,200	43.8%	€21,100	43.6%
Top 10%	€79,800	41.2%	€69,500	35.9%	€66,600	34.4%
Top 1%	€295,000	15.2%	€232,000	12.0%	€218,000	11.2%
Top 0.1%	€1,090,000	5.6%	€773,000	4.0%	€711,000	3.7%
Top 0.01%	€4,030,000	2.1%	€2,580,000	1.3%	€2,330,000	1.2%
Top 0.001%	€14,900,000	0.8%	€8,590,000	0.4%	€7,600,000	0.4%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.93
The distribution of national income growth in Romania, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.4%	2.7%	1.4%	2.7%	1.4%	2.7%
Bottom 50%	-0.1%	3.4%	0.2%	4.0%	0.4%	3.9%
Bottom 20%	-1.7%	3.5%	-0.8%	4.1%	-0.3%	3.8%
Next 30%	0.2%	3.3%	0.5%	4.0%	0.6%	3.9%
Middle 40%	1.2%	2.7%	1.3%	2.9%	1.3%	2.9%
Top 10%	3.0%	2.5%	2.9%	1.8%	2.8%	1.8%
Top 1%	4.5%	2.7%	4.4%	1.3%	4.4%	1.3%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.32 Serbia

3.32.1 Serbia: data sources and methodological steps

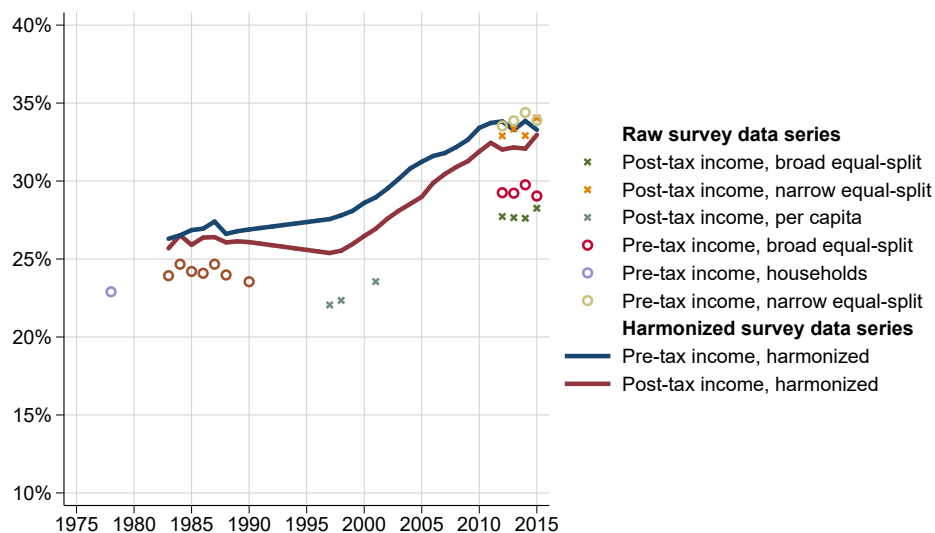
Table A.3.94
Serbia: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1978	x								
1980			x						
1981			x						
1982			x						
1983	x		x						
1984	x		x						
1985	x		x						
1986	x		x						
1987	x		x						
1988	x		x						
1989			x						
1990	x		x						
1991			x						
1992			x						
1993			x						
1994			x						
1995			x						
1996			x						
1997	x		x			x	x		
1998	x		x			x	x		
1999			x			x	x		
2000			x	x		x	x	x	
2001	x		x	x		x	x	x	
2002			x	x		x	x	x	
2003			x	x		x	x	x	
2004			x	x		x	x	x	
2005			x	x		x	x	x	
2006			x	x		x	x	x	
2007			x	x		x	x	x	
2008			x	x		x	x	x	
2009			x	x		x	x	x	
2010			x	x		x	x	x	
2011			x	x		x	x	x	
2012	x	x	x						
2013	x	x	x						
2014	x	x	x						
2015	x	x	x						
2016			x						
2017			x						

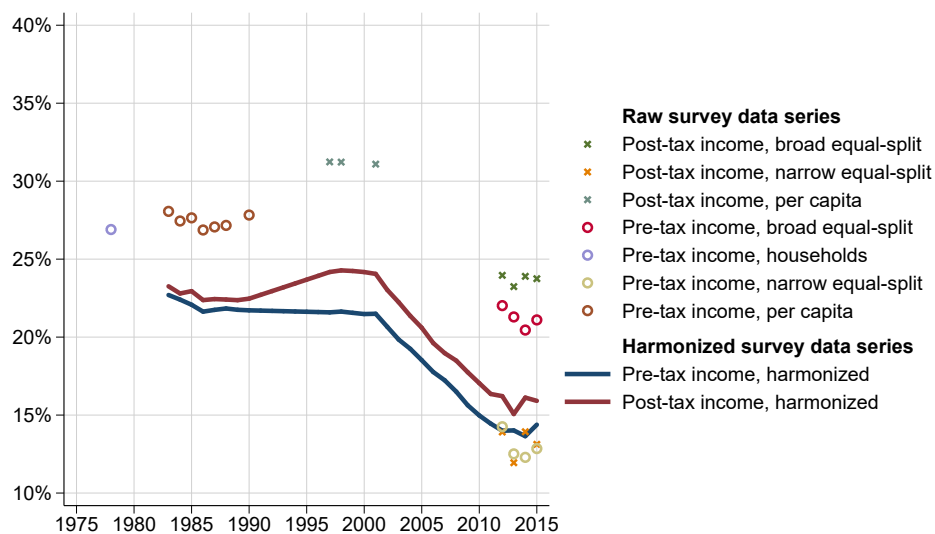
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.94
Serbia: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



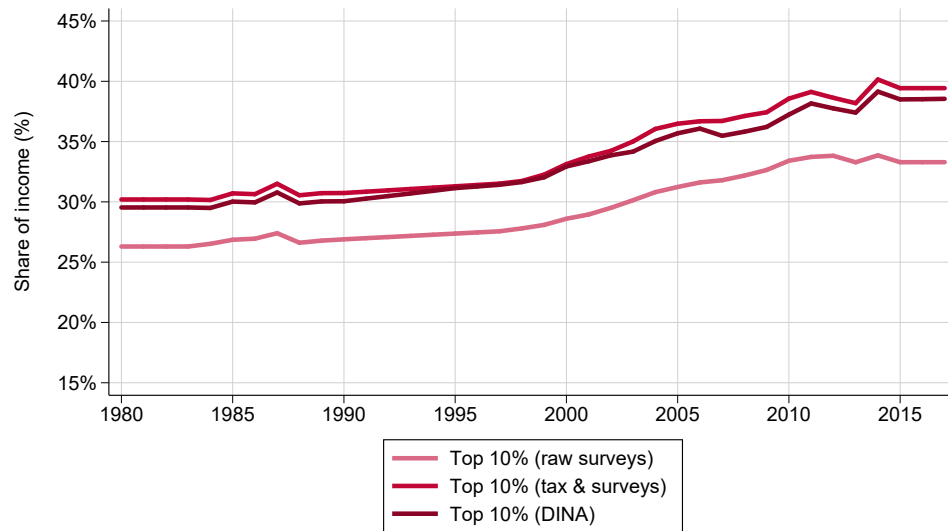
(b) Bottom 50% pre-tax income share



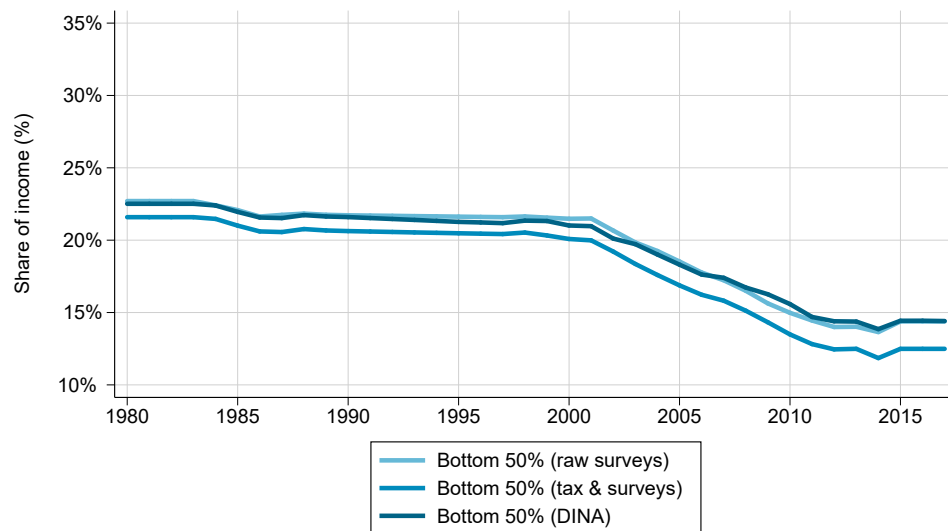
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.95
Serbia: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



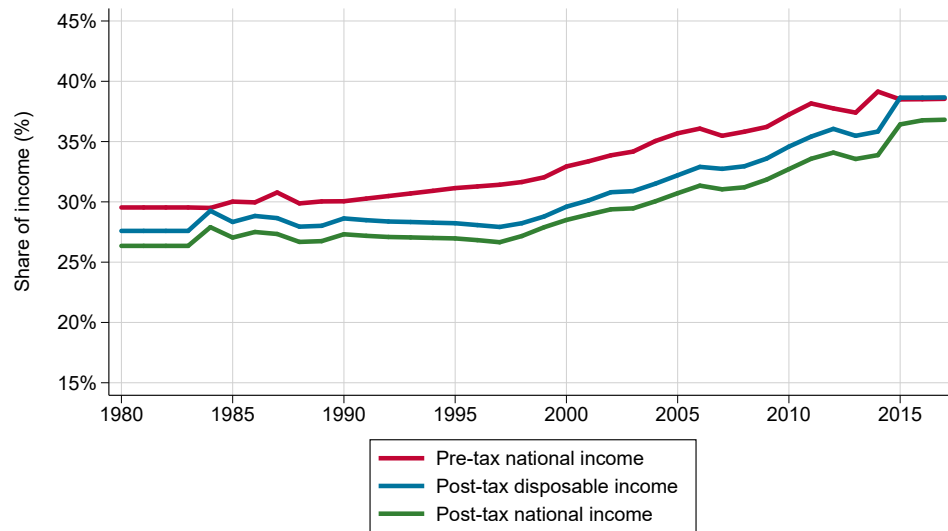
(b) Bottom 50% pre-tax income share



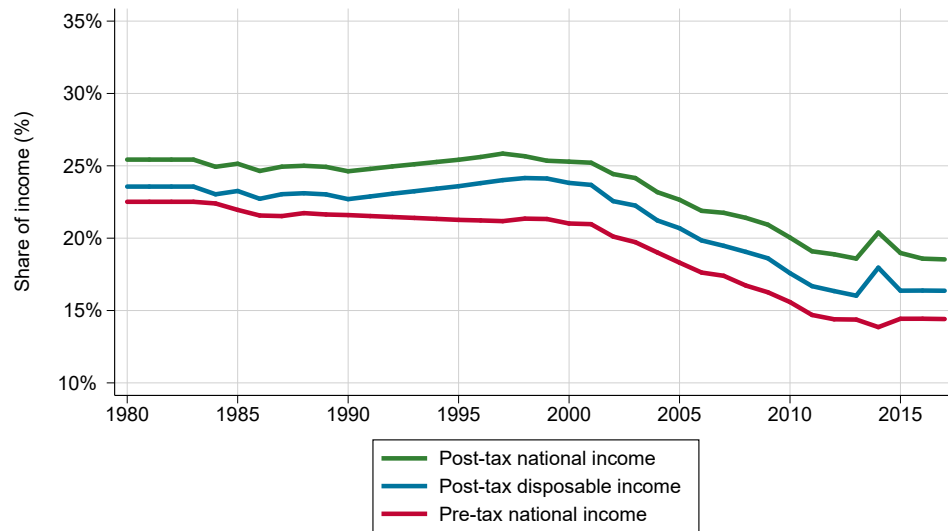
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.96
Serbia: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.32.2 Serbia: main results

Table A.3.95
The distribution of the national income in Serbia, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€11,700	100%	€11,700	100%	€11,700	100%
Bottom 50%	€3,400	14.4%	€3,800	16.4%	€4,300	18.5%
Bottom 20%	€700	1.2%	€1,500	2.5%	€2,100	3.6%
Next 30%	€5,200	13.3%	€5,400	13.9%	€5,800	14.9%
Middle 40%	€13,700	47.0%	€13,100	45.0%	€13,000	44.7%
Top 10%	€45,000	38.5%	€45,100	38.7%	€42,900	36.8%
Top 1%	€149,000	12.8%	€177,000	15.2%	€167,000	14.3%
Top 0.1%	€540,000	4.6%	€801,000	6.9%	€750,000	6.4%
Top 0.01%	€2,000,000	1.7%	€3,740,000	3.2%	€3,500,000	3.0%
Top 0.001%	€7,450,000	0.6%	€17,600,000	1.5%	€16,470,000	1.4%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.96
The distribution of national income growth in Serbia, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	-0.2%	1.0%	-0.2%	1.0%	-0.2%	1.0%
Bottom 50%	-1.4%	-0.9%	-1.2%	-0.7%	-1.1%	-0.6%
Bottom 20%	-3.8%	-6.1%	-1.9%	0.6%	-1.4%	0.3%
Next 30%	-1.1%	-0.2%	-1.1%	-1.0%	-1.0%	-0.8%
Middle 40%	-0.3%	1.0%	-0.4%	0.4%	-0.4%	0.4%
Top 10%	0.5%	1.8%	0.7%	2.7%	0.7%	2.7%
Top 1%	0.8%	2.7%	1.9%	6.3%	1.9%	6.4%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.33 Slovakia

3.33.1 Slovakia: data sources and methodological steps

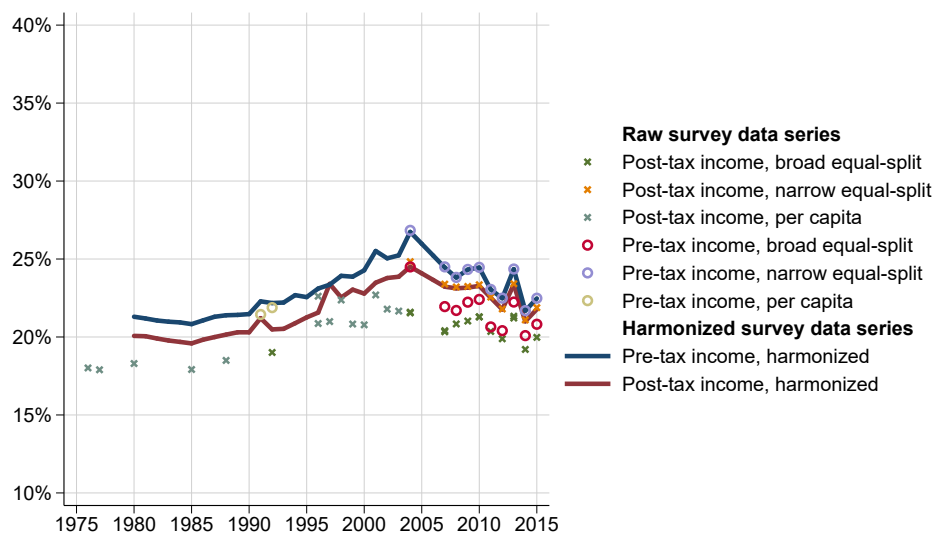
Table A.3.97
Slovakia: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1976	x								
1977	x								
1980	x								
1981									
1982									
1983									
1984									
1985	x								
1986									
1987									
1988	x								
1989									
1990									
1991	x								
1992	x	x						x	
1993								x	
1994								x	
1995				x	x	x	x	x	
1996	x			x	x	x	x	x	
1997	x			x	x	x	x	x	x
1998	x			x	x	x	x	x	x
1999	x			x	x	x	x	x	
2000	x			x	x	x	x	x	
2001	x			x	x	x	x	x	
2002	x			x	x	x	x	x	
2003	x			x	x	x	x	x	
2004	x	x		x	x	x	x	x	
2005				x	x	x	x	x	x
2006				x	x	x	x	x	x
2007	x	x		x	x	x	x	x	x
2008	x	x		x	x	x	x	x	x
2009	x	x		x	x	x	x	x	x
2010	x	x		x	x	x	x	x	x
2011	x	x		x	x	x	x	x	x
2012	x	x		x	x	x	x	x	x
2013	x	x		x	x	x	x	x	x
2014	x	x		x	x	x	x	x	x
2015	x	x		x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

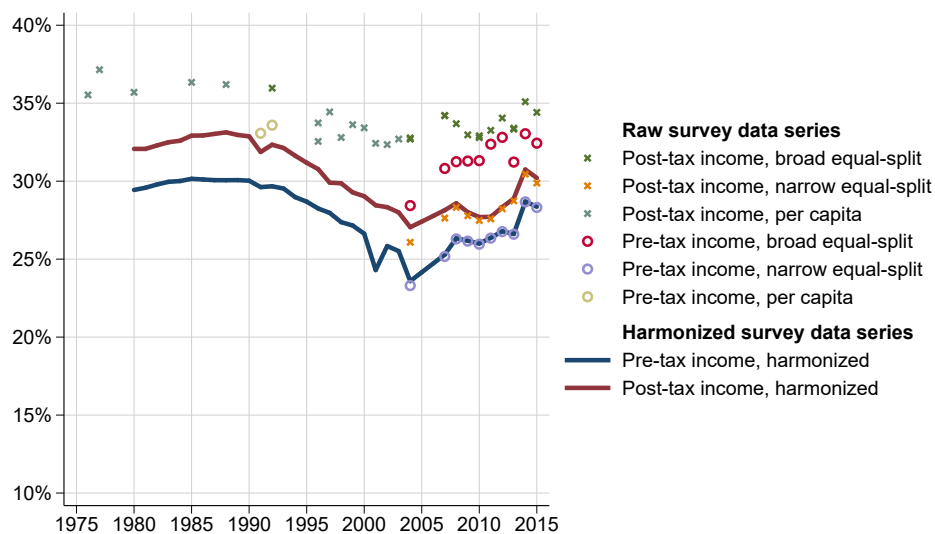
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.97
Slovakia: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



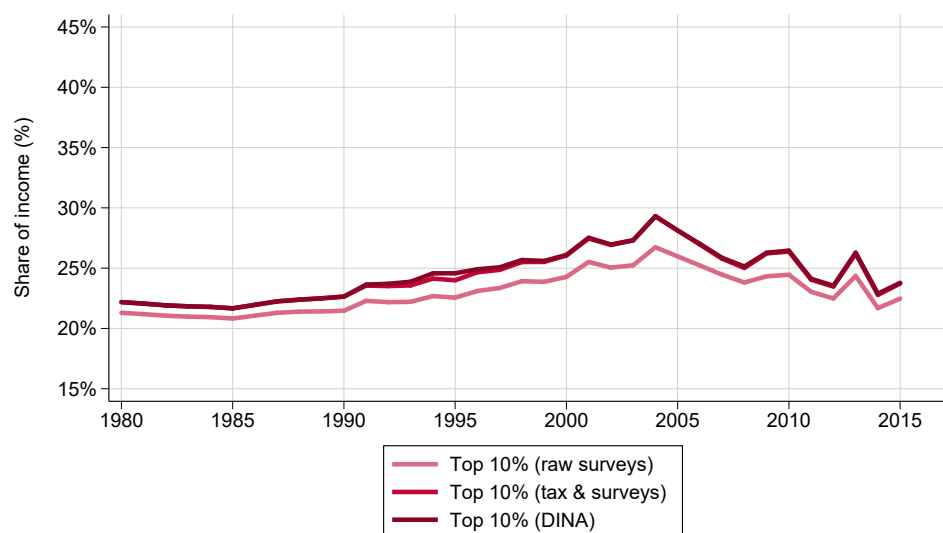
(b) Bottom 50% pre-tax income share



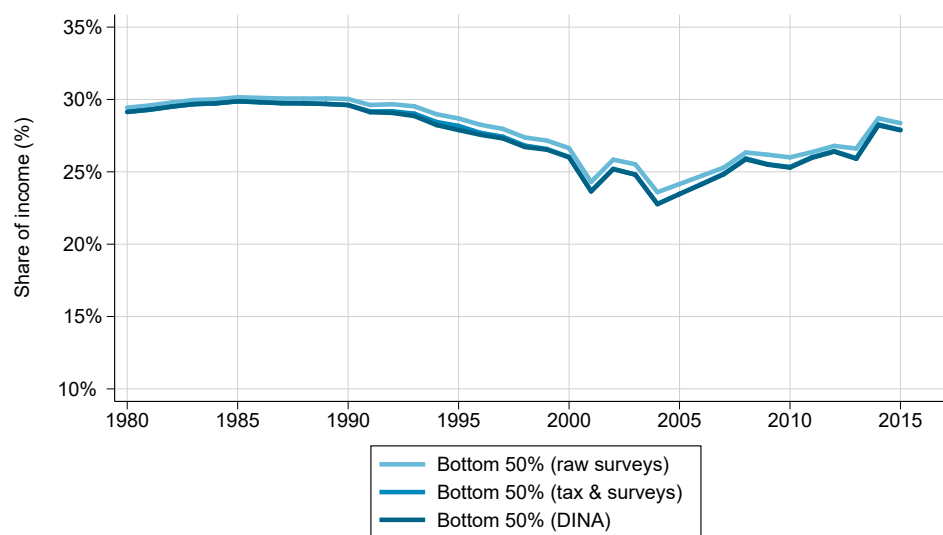
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.98
Slovakia: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



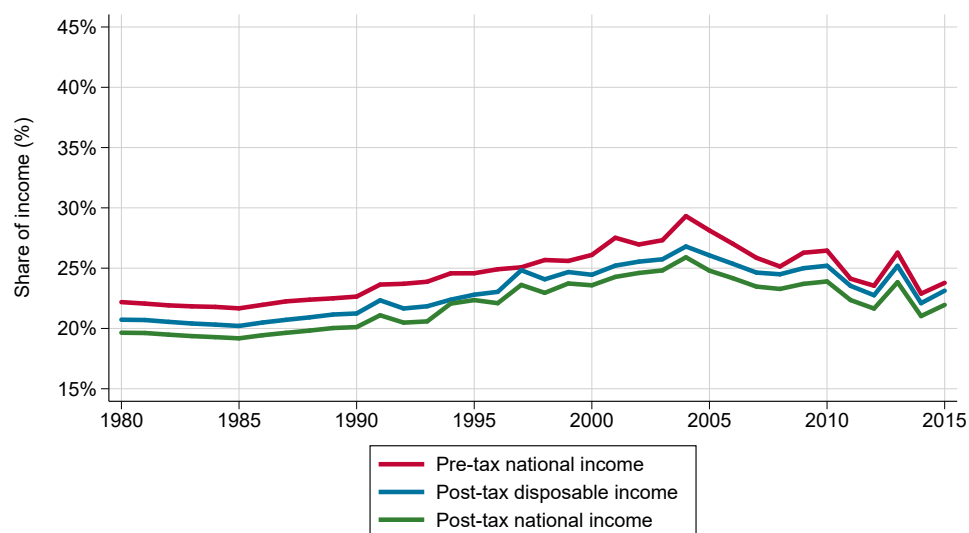
(b) Bottom 50% pre-tax income share



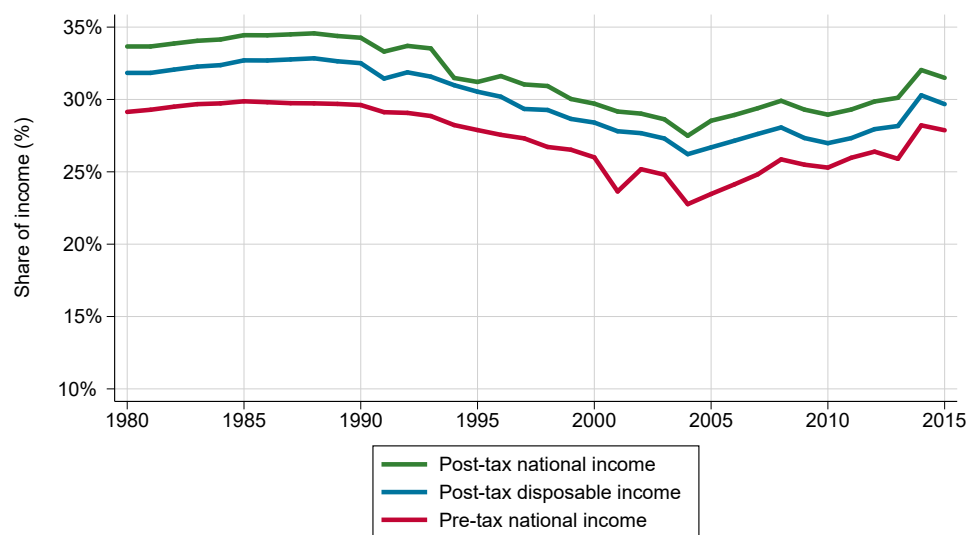
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.99
Slovakia: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.33.2 Slovakia: main results

Table A.3.98
The distribution of the national income in Slovakia, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€24,000	100%	€24,000	100%	€24,000	100%
Bottom 50%	€13,300	27.8%	€14,200	29.6%	€15,000	31.4%
Bottom 20%	€6,600	5.5%	€7,300	6.1%	€8,700	7.3%
Next 30%	€17,800	22.3%	€18,800	23.5%	€19,300	24.1%
Middle 40%	€28,900	48.2%	€28,300	47.1%	€27,900	46.5%
Top 10%	€57,600	24.0%	€55,800	23.3%	€53,000	22.1%
Top 1%	€128,000	5.3%	€128,000	5.3%	€119,000	5.0%
Top 0.1%	€311,000	1.3%	€332,000	1.4%	€305,000	1.3%
Top 0.01%	€787,000	0.3%	€912,000	0.4%	€835,000	0.3%
Top 0.001%	€2,030,000	0.1%	€2,560,000	0.1%	€2,330,000	0.1%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.99
The distribution of national income growth in Slovakia, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.4%	1.8%	1.4%	1.8%	1.4%	1.8%
Bottom 50%	1.3%	2.9%	1.2%	2.5%	1.2%	2.4%
Bottom 20%	0.6%	3.2%	0.5%	3.0%	0.6%	2.9%
Next 30%	1.5%	2.8%	1.5%	2.3%	1.4%	2.3%
Middle 40%	1.4%	1.5%	1.4%	1.6%	1.4%	1.6%
Top 10%	1.6%	1.0%	1.7%	1.2%	1.8%	1.2%
Top 1%	2.2%	1.4%	2.7%	1.5%	2.7%	1.4%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.34 Slovenia

3.34.1 Slovenia: data sources and methodological steps

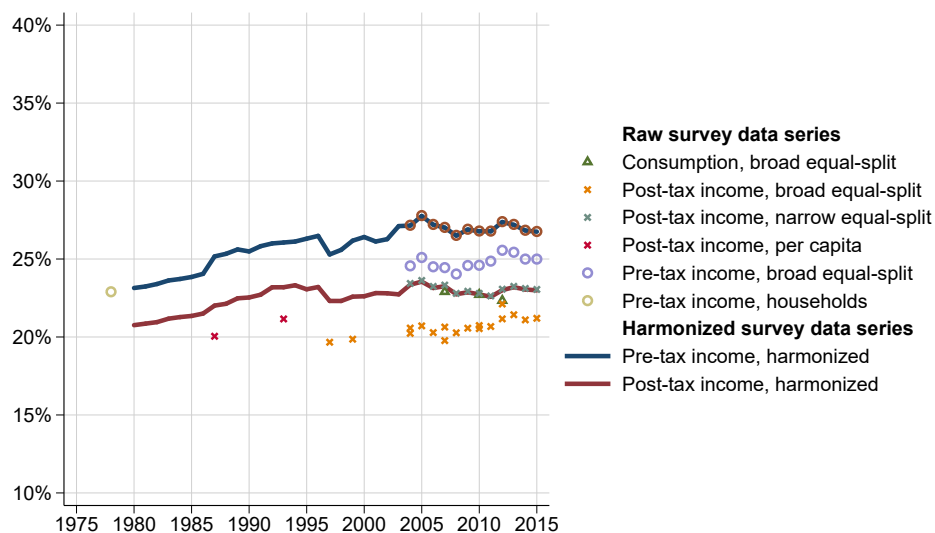
Table A.3.100
Slovenia: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1978	x								
1980									
1981									
1982									
1983									
1984									
1985									
1986									
1987	x								
1988									
1989									
1990									
1991			x						
1992			x						
1993	x		x						
1994			x						
1995			x	x	x	x	x	x	
1996			x	x	x	x	x	x	
1997	x	x	x	x	x	x	x	x	
1998			x	x	x	x	x	x	
1999	x	x	x	x	x	x	x	x	
2000			x	x	x	x	x	x	
2001			x	x	x	x	x	x	
2002			x	x	x	x	x	x	
2003			x	x	x	x	x	x	x
2004	x	x	x	x	x	x	x	x	x
2005	x	x	x	x	x	x	x	x	x
2006	x	x	x	x	x	x	x	x	x
2007	x	x	x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x	x	x	x	x	x	x	x
2012	x	x	x	x	x	x	x	x	x
2013	x	x		x	x	x	x	x	x
2014	x	x		x	x	x	x	x	x
2015	x	x		x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

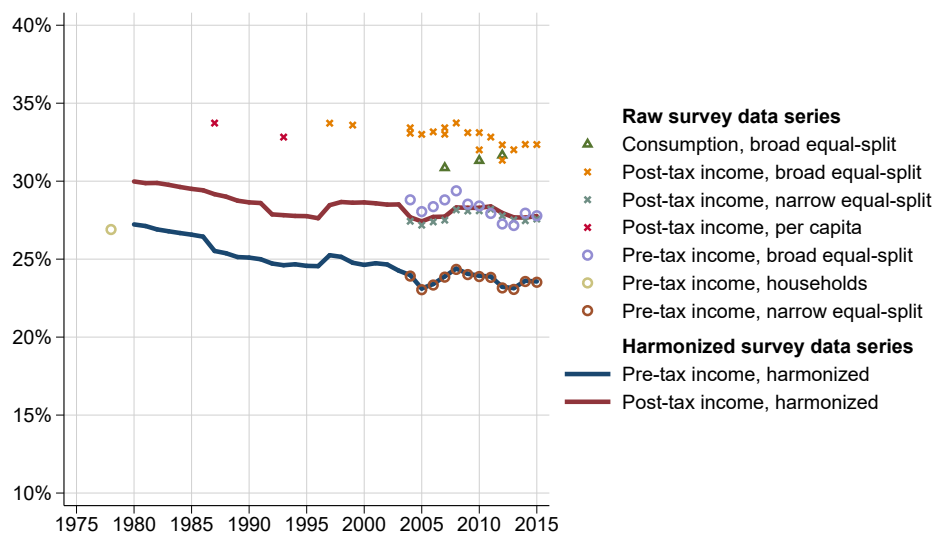
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.100
Slovenia: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



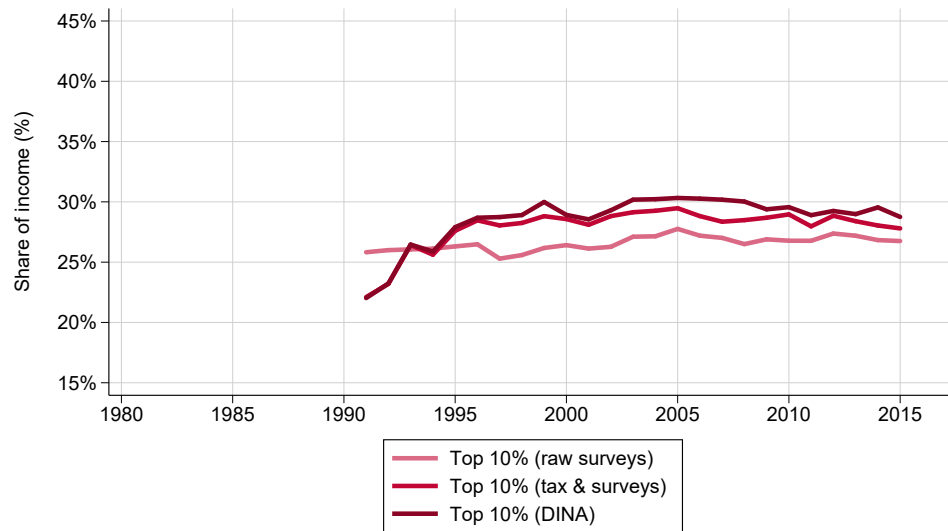
(b) Bottom 50% pre-tax income share



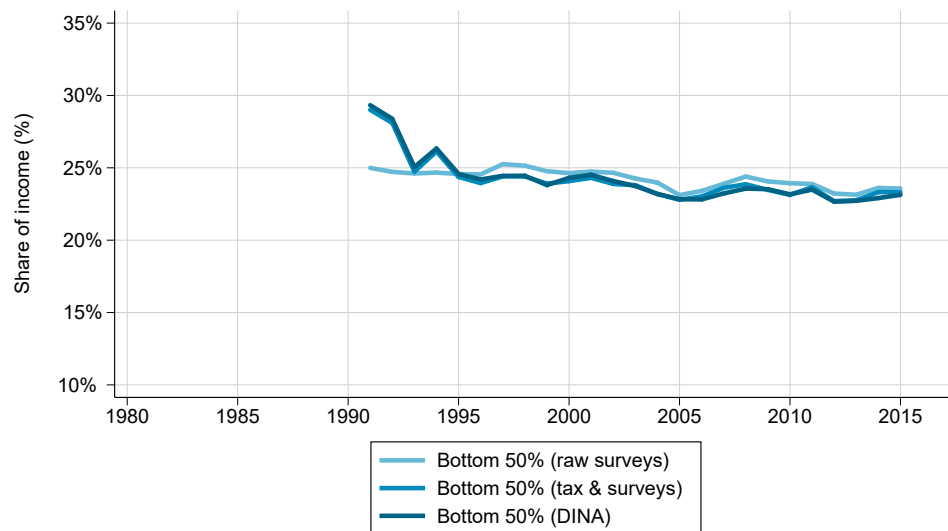
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.101
Slovenia: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



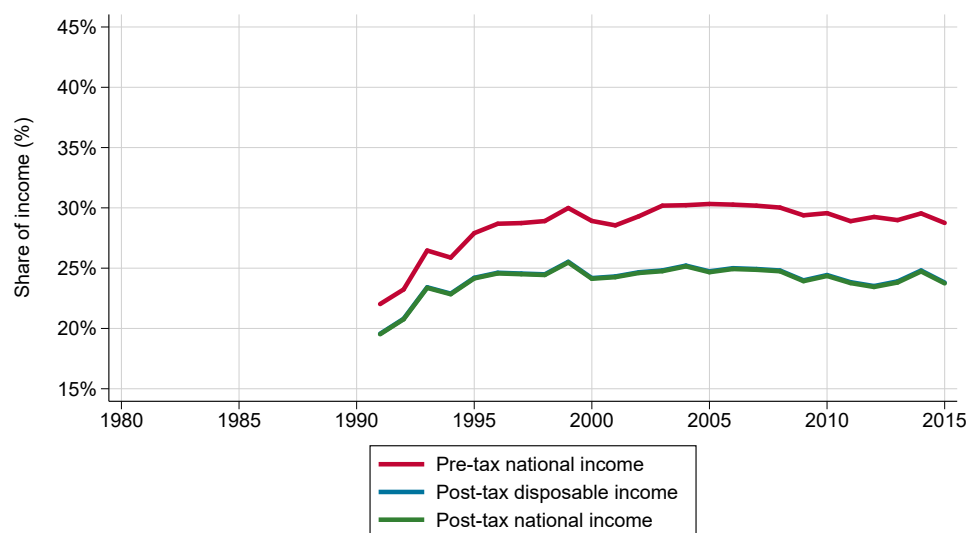
(b) Bottom 50% pre-tax income share



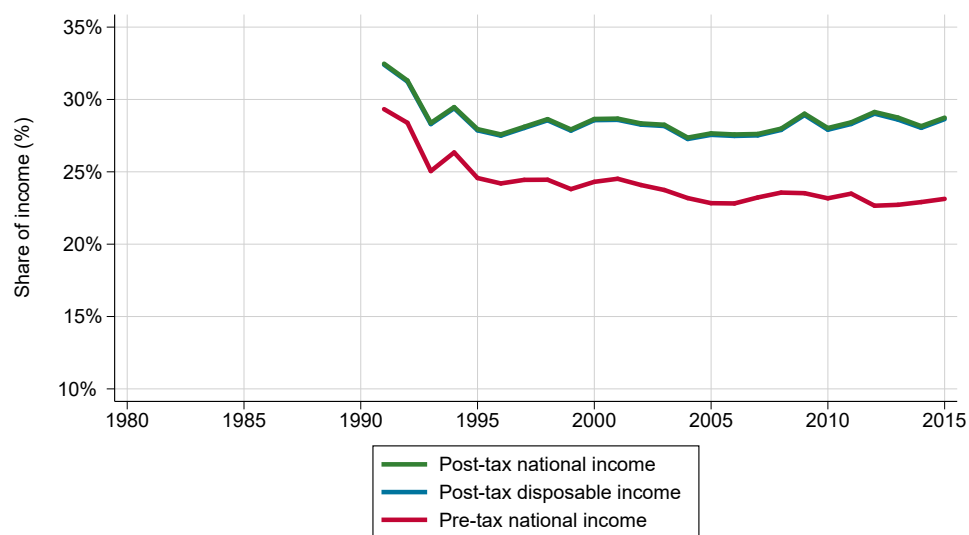
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.102
Slovenia: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.34.2 Slovenia: main results

Table A.3.101
The distribution of the national income in Slovenia, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€24,900	100%	€24,900	100%	€24,900	100%
Bottom 50%	€11,400	22.8%	€14,100	28.3%	€14,200	28.4%
Bottom 20%	€5,000	4.0%	€8,800	7.0%	€8,800	7.1%
Next 30%	€15,600	18.8%	€17,700	21.3%	€17,700	21.3%
Middle 40%	€29,700	47.7%	€29,400	47.2%	€29,300	47.1%
Top 10%	€73,400	29.5%	€61,000	24.5%	€60,900	24.4%
Top 1%	€191,000	7.7%	€142,000	5.7%	€142,000	5.7%
Top 0.1%	€513,000	2.1%	€365,000	1.5%	€363,000	1.5%
Top 0.01%	€1,390,000	0.6%	€971,000	0.4%	€967,000	0.4%
Top 0.001%	€3,810,000	0.2%	€2,630,000	0.1%	€2,620,000	0.1%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.102
The distribution of national income growth in Slovenia, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	0.3%	-0.1%	0.3%	-0.1%	0.3%	-0.1%
Bottom 50%	-0.4%	-0.3%	-0.1%	0.2%	0.0%	0.2%
Bottom 20%	-1.0%	-1.0%	-0.1%	1.3%	-0.1%	1.3%
Next 30%	-0.2%	-0.1%	0.0%	-0.1%	0.0%	-0.1%
Middle 40%	0.3%	0.1%	0.3%	-0.2%	0.3%	-0.2%
Top 10%	1.1%	-0.3%	0.9%	-0.3%	0.9%	-0.3%
Top 1%	2.0%	-0.8%	1.7%	-0.1%	1.7%	-0.1%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.35 Spain

3.35.1 Spain: data sources and methodological steps

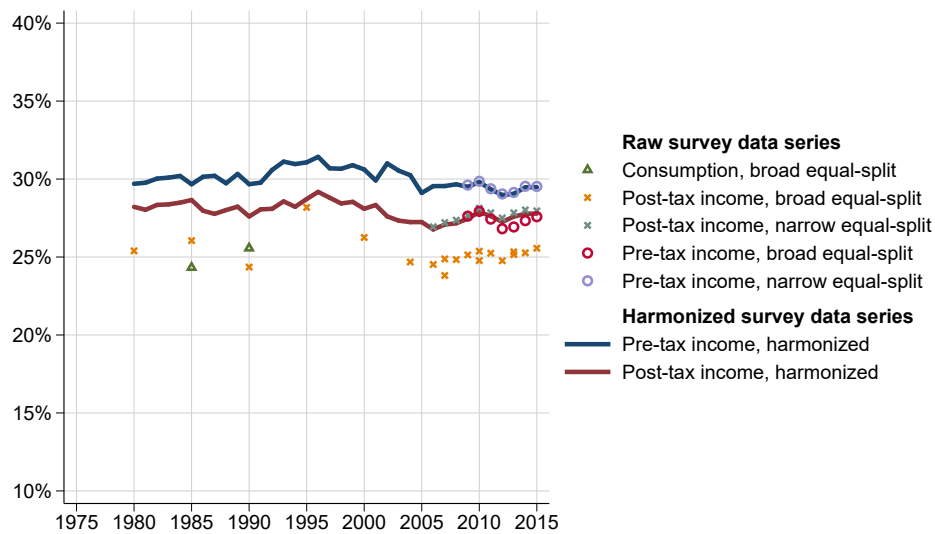
Table A.3.103
Spain: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980	x	x			x				
1981			x		x				
1982			x		x				
1983			x		x				
1984			x		x				
1985	x	x	x		x				
1986			x		x				
1987			x		x				
1988			x		x				
1989			x		x				
1990	x	x	x		x				
1991			x		x				
1992			x		x				
1993			x		x				
1994			x		x				
1995	x	x	x		x		x		
1996			x		x		x		
1997			x		x		x		
1998			x		x		x		
1999			x	x	x	x	x	x	
2000	x	x	x	x	x	x	x	x	
2001			x	x	x	x	x	x	
2002			x	x	x	x	x	x	
2003			x	x	x	x	x	x	x
2004	x	x	x	x	x	x	x	x	x
2005			x	x	x	x	x	x	x
2006	x	x	x	x	x	x	x	x	x
2007	x	x	x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x	x	x	x	x	x	x	x
2012	x	x	x	x	x	x	x	x	x
2013	x	x		x	x	x	x	x	x
2014	x	x		x	x	x	x	x	x
2015	x	x		x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

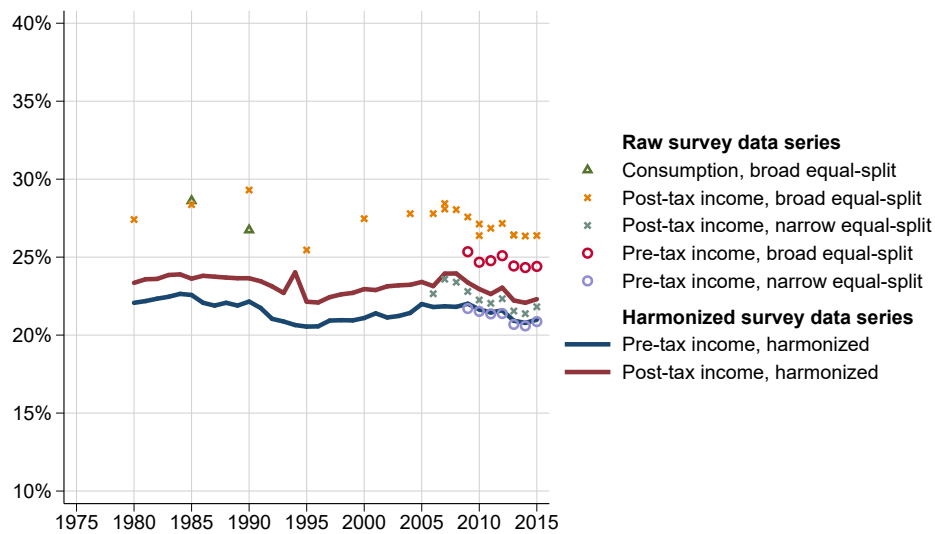
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.103
Spain: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



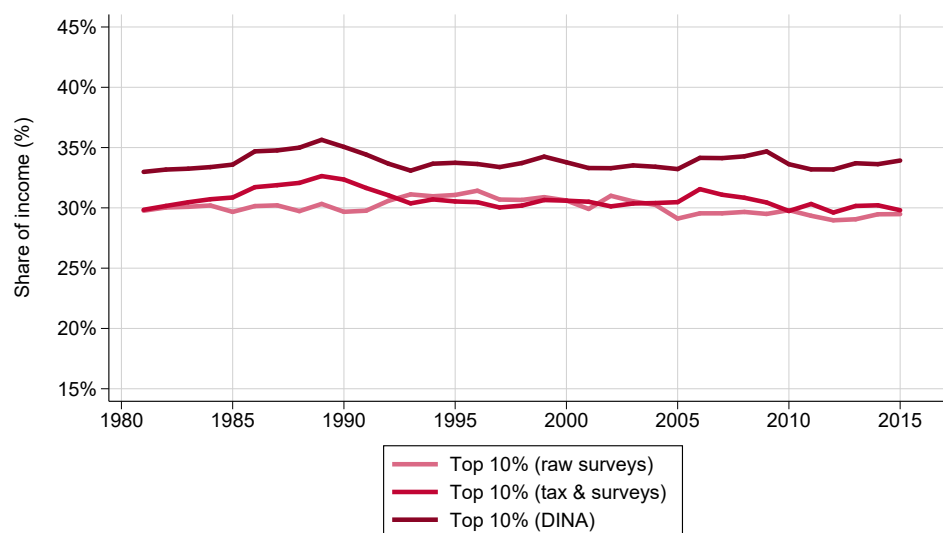
(b) Bottom 50% pre-tax income share



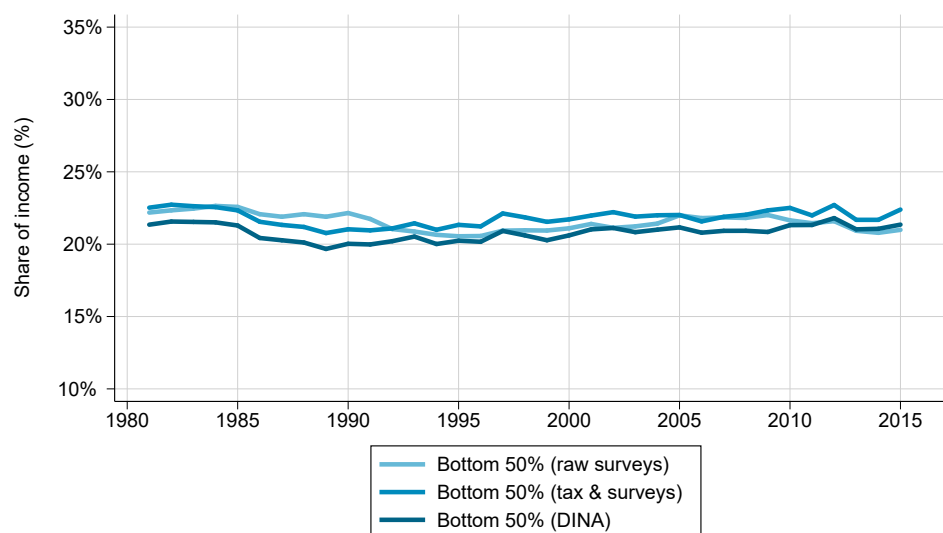
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.104
Spain: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



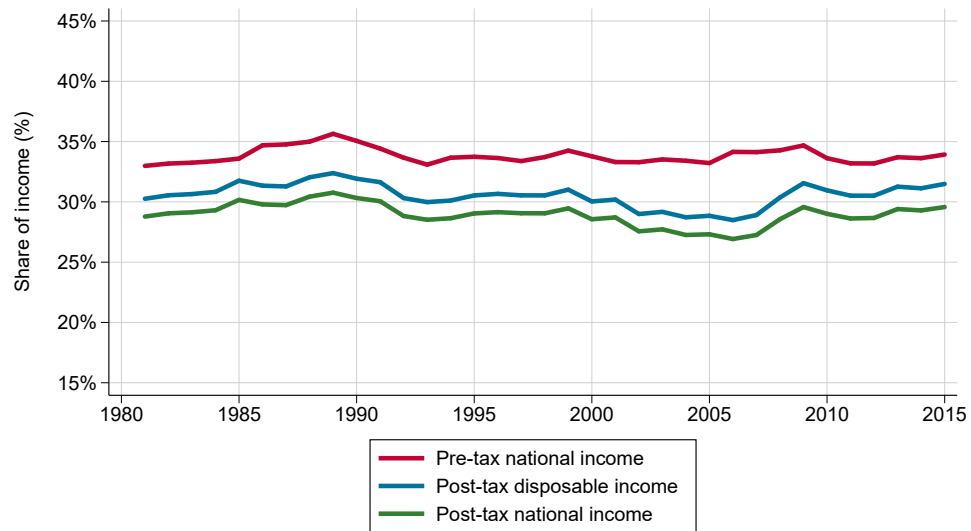
(b) Bottom 50% pre-tax income share



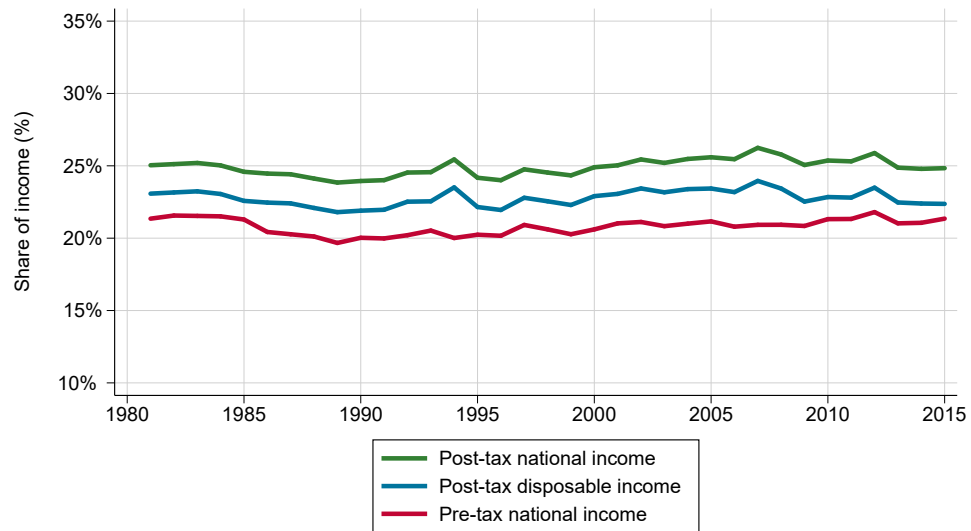
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.105
Spain: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.35.2 Spain: main results

Table A.3.104
The distribution of the national income in Spain, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€30,200	100%	€30,200	100%	€30,200	100%
Bottom 50%	€12,600	20.9%	€13,200	21.8%	€14,700	24.3%
Bottom 20%	€5,900	3.9%	€5,500	3.6%	€7,600	5.0%
Next 30%	€17,100	17.0%	€18,300	18.2%	€19,400	19.2%
Middle 40%	€33,400	44.2%	€34,300	45.4%	€34,000	45.0%
Top 10%	€106,000	34.9%	€99,000	32.8%	€93,000	30.8%
Top 1%	€359,000	11.9%	€320,000	10.6%	€295,000	9.7%
Top 0.1%	€1,260,000	4.2%	€1,100,000	3.6%	€1,010,000	3.3%
Top 0.01%	€4,490,000	1.5%	€3,880,000	1.3%	€3,540,000	1.2%
Top 0.001%	€16,000,000	0.5%	€13,720,000	0.5%	€12,520,000	0.4%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.105
The distribution of national income growth in Spain, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.3%	0.3%	1.3%	0.3%	1.3%	0.3%
Bottom 50%	1.2%	0.3%	1.1%	-0.6%	1.2%	-0.5%
Bottom 20%	1.3%	0.2%	0.8%	-3.0%	1.1%	-2.0%
Next 30%	1.2%	0.3%	1.2%	-0.1%	1.3%	0.0%
Middle 40%	1.2%	0.1%	1.2%	-0.1%	1.2%	0.0%
Top 10%	1.4%	0.5%	1.5%	1.6%	1.5%	1.5%
Top 1%	1.9%	1.4%	2.1%	4.4%	2.1%	4.4%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.36 Sweden

3.36.1 Sweden: data sources and methodological steps

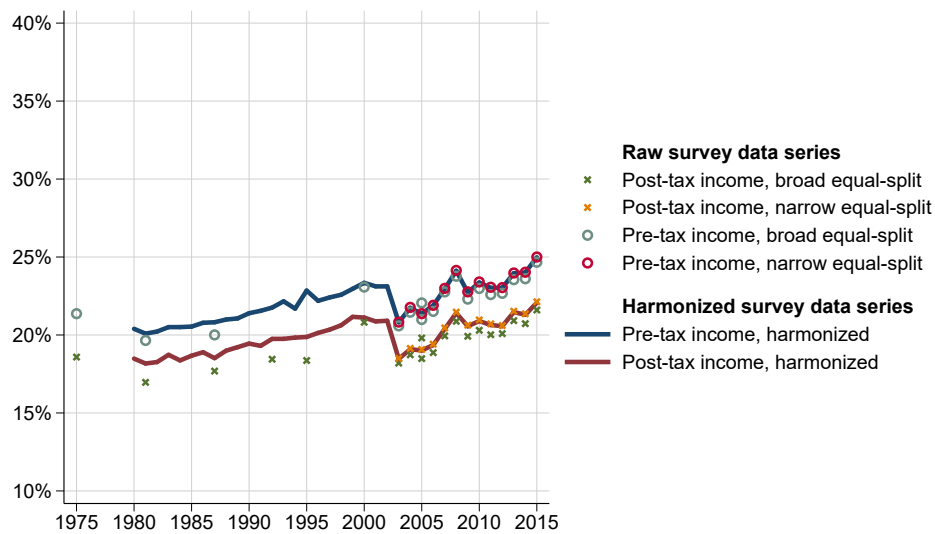
Table A.3.106
Sweden: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1975	x	x							
1980			x	x		x		x	
1981	x	x	x	x		x		x	
1982			x	x		x		x	
1983			x	x		x		x	
1984			x	x		x		x	
1985			x	x		x		x	
1986			x	x		x		x	
1987	x	x	x	x		x		x	
1988			x	x		x		x	
1989			x	x		x		x	
1990			x	x		x		x	
1991			x	x		x		x	
1992	x	x	x	x		x		x	
1993			x	x		x	x	x	
1994			x	x		x	x	x	
1995	x	x	x	x	x	x	x	x	
1996			x	x	x	x	x	x	
1997			x	x	x	x	x	x	
1998			x	x	x	x	x	x	
1999			x	x	x	x	x	x	
2000	x	x	x	x	x	x	x	x	
2001			x	x	x	x	x	x	x
2002			x	x	x	x	x	x	x
2003	x	x	x	x	x	x	x	x	x
2004	x	x	x	x	x	x	x	x	x
2005	x	x	x	x	x	x	x	x	x
2006	x	x	x	x	x	x	x	x	x
2007	x	x	x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x	x	x	x	x	x	x	x
2012	x	x	x	x	x	x	x	x	x
2013	x	x	x	x	x	x	x	x	x
2014	x	x		x	x	x	x	x	x
2015	x	x		x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

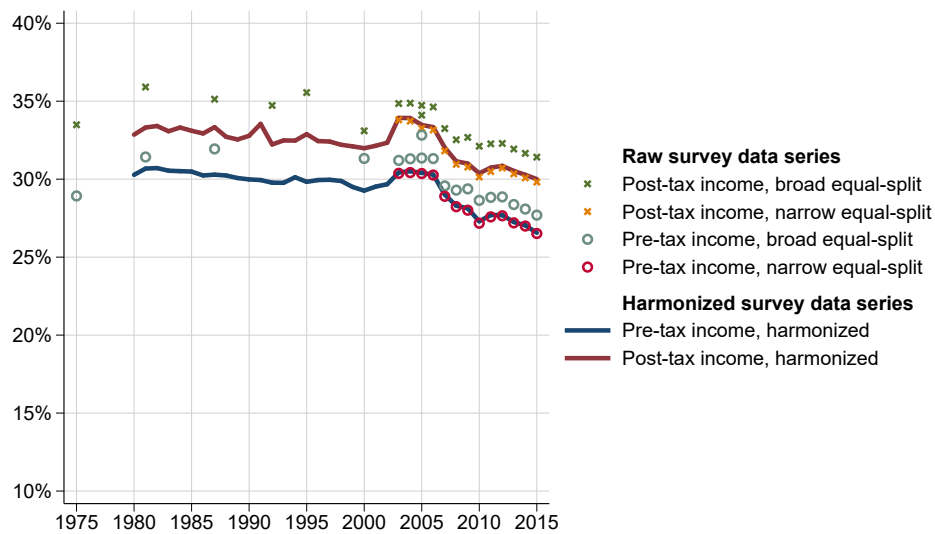
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.106
Sweden: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



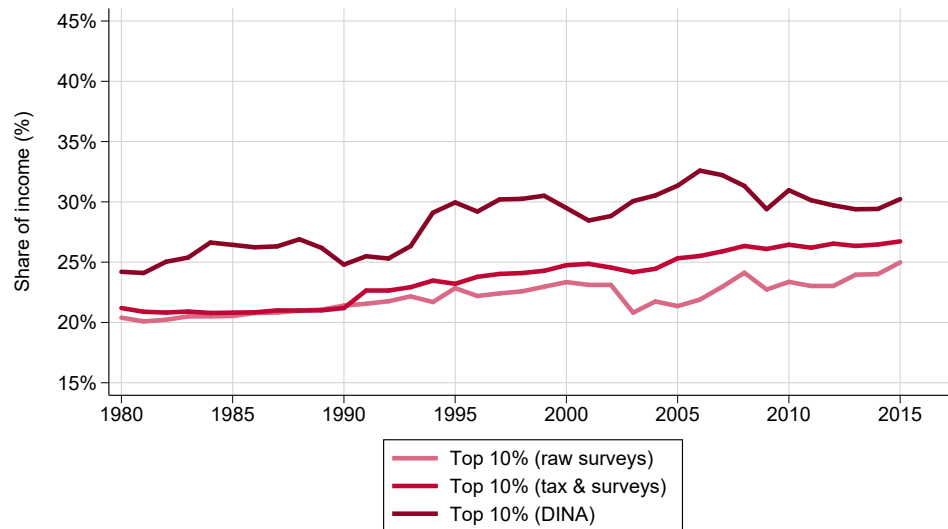
(b) Bottom 50% pre-tax income share



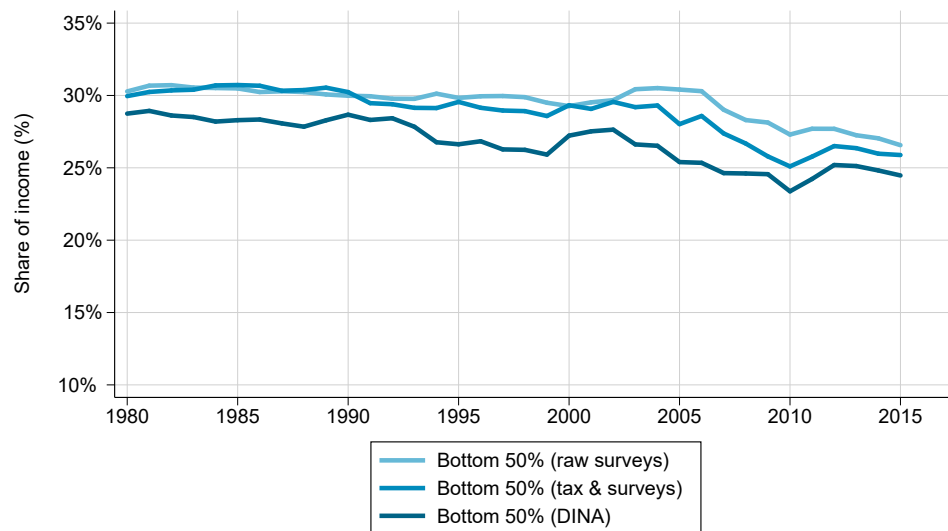
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.107
Sweden: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



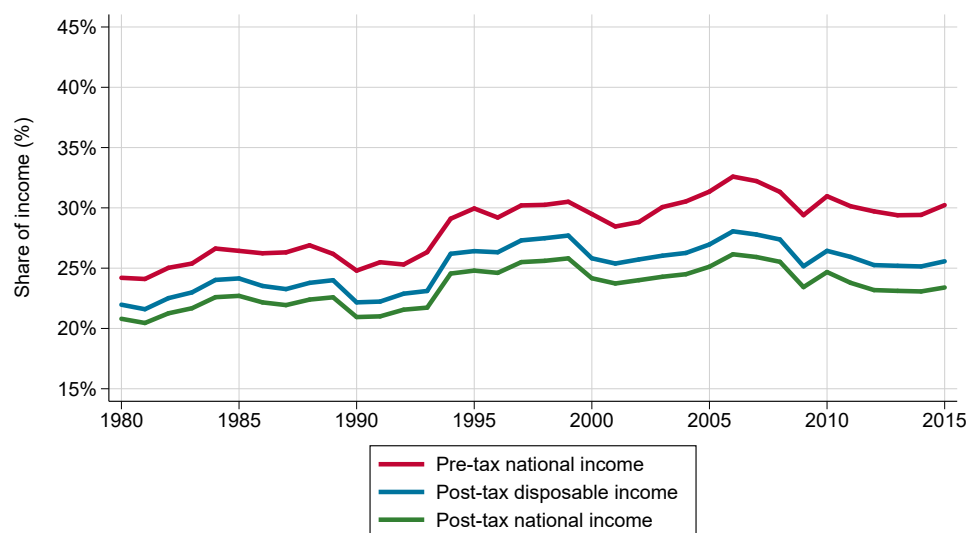
(b) Bottom 50% pre-tax income share



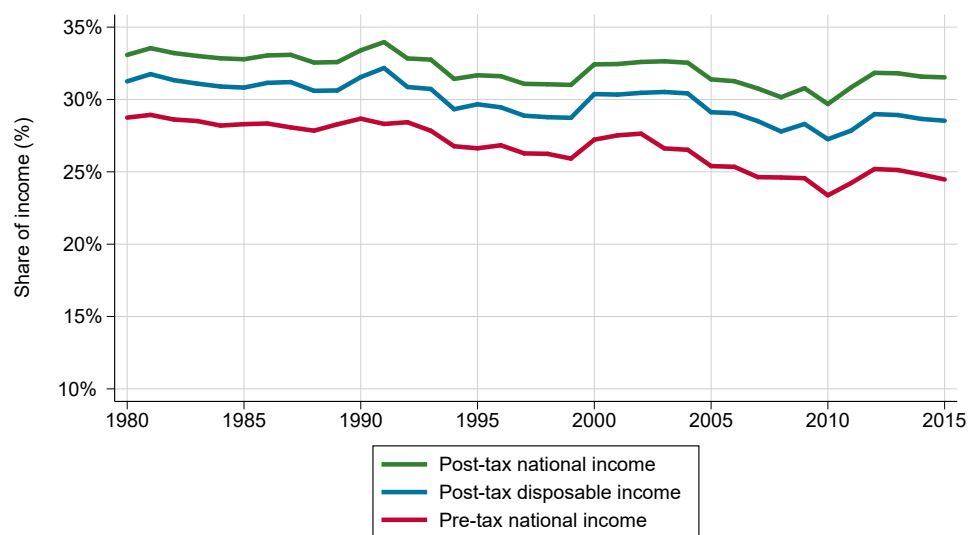
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.108
Sweden: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.36.2 Sweden: main results

Table A.3.107
The distribution of the national income in Sweden, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€45,900	100%	€45,900	100%	€45,900	100%
Bottom 50%	€22,600	24.7%	€26,400	28.7%	€29,200	31.8%
Bottom 20%	€11,600	5.1%	€17,100	7.4%	€21,200	9.2%
Next 30%	€30,000	19.6%	€32,600	21.3%	€34,500	22.6%
Middle 40%	€52,200	45.5%	€52,900	46.1%	€51,900	45.3%
Top 10%	€137,000	29.8%	€115,000	25.1%	€105,000	22.9%
Top 1%	€414,000	9.0%	€312,000	6.8%	€274,000	6.0%
Top 0.1%	€1,350,000	2.9%	€975,000	2.1%	€842,000	1.8%
Top 0.01%	€4,510,000	1.0%	€3,210,000	0.7%	€2,760,000	0.6%
Top 0.001%	€15,170,000	0.3%	€10,770,000	0.2%	€9,220,000	0.2%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.108
The distribution of national income growth in Sweden, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.8%	1.0%	1.8%	1.0%	1.8%	1.0%
Bottom 50%	1.4%	1.0%	1.6%	1.1%	1.7%	1.3%
Bottom 20%	1.0%	0.5%	1.6%	0.6%	1.8%	1.3%
Next 30%	1.5%	1.2%	1.6%	1.2%	1.7%	1.4%
Middle 40%	1.7%	1.6%	1.8%	1.5%	1.8%	1.4%
Top 10%	2.4%	0.2%	2.2%	0.0%	2.1%	-0.2%
Top 1%	3.0%	-1.2%	2.6%	-1.9%	2.4%	-2.2%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.37 Switzerland

3.37.1 Switzerland: data sources and methodological steps

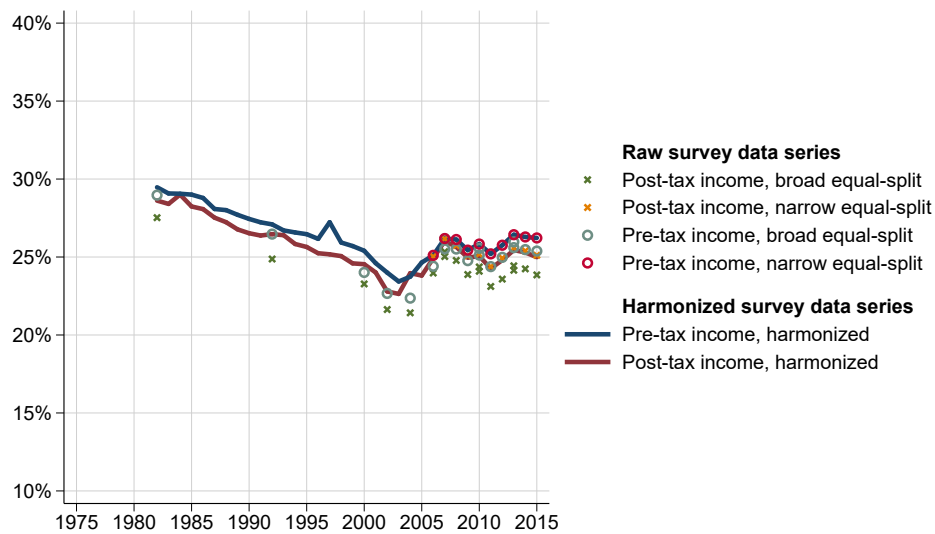
Table A.3.109
Switzerland: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1980									
1981			x						
1982	x	x							
1983			x						
1984									
1985			x						
1986									
1987			x						
1988									
1989			x						
1990				x		x	x	x	
1991			x	x		x	x	x	
1992	x	x		x		x	x	x	
1993			x	x		x	x	x	
1994				x		x	x	x	
1995			x	x		x	x	x	x
1996			x	x		x	x	x	x
1997			x	x		x	x	x	x
1998			x	x		x	x	x	x
1999			x	x		x	x	x	x
2000	x	x	x	x		x	x	x	x
2001			x	x		x	x	x	x
2002	x	x	x	x		x	x	x	x
2003			x	x		x	x	x	x
2004	x	x	x	x		x	x	x	x
2005			x	x		x	x	x	x
2006	x	x	x	x		x	x	x	x
2007	x	x	x	x		x	x	x	x
2008	x	x	x	x		x	x	x	x
2009	x	x	x	x		x	x	x	x
2010	x	x	x	x		x	x	x	x
2011	x	x	x	x		x	x	x	x
2012	x	x	x	x		x	x	x	x
2013	x	x	x	x		x	x	x	x
2014	x	x	x	x		x	x	x	x
2015	x	x		x		x	x	x	x
2016				x		x	x	x	x
2017				x		x		x	x

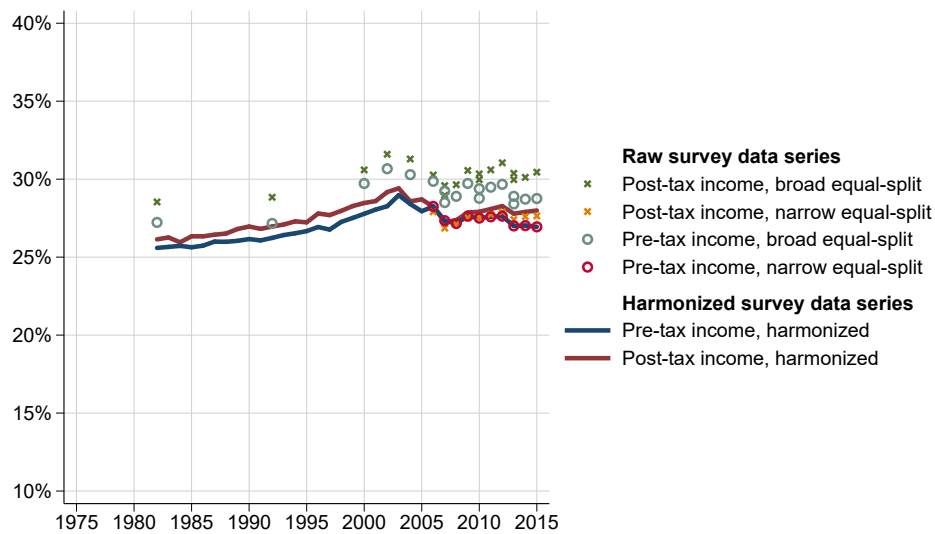
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.109
Switzerland: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



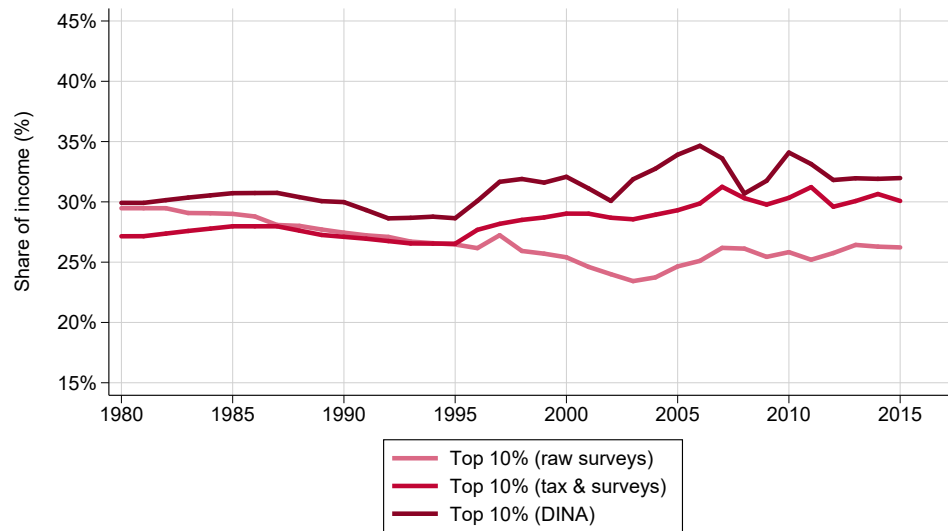
(b) Bottom 50% pre-tax income share



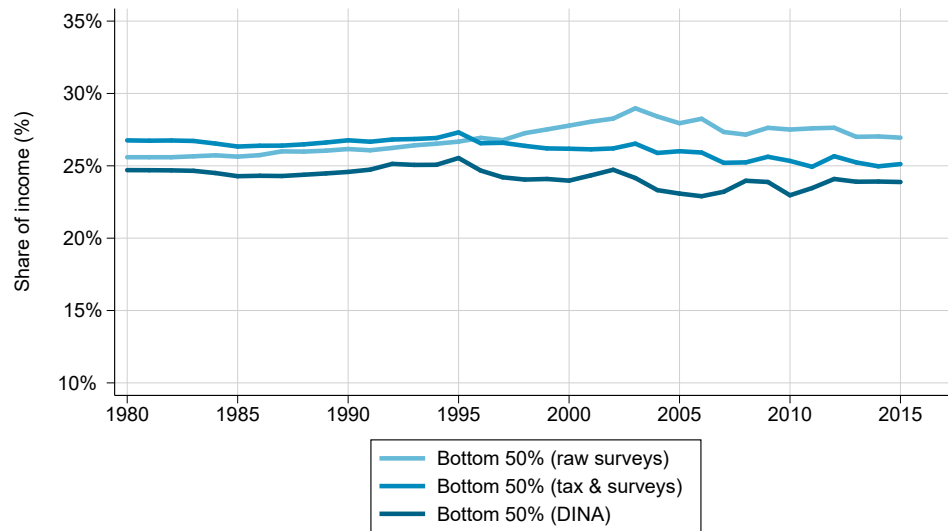
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.110
Switzerland: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



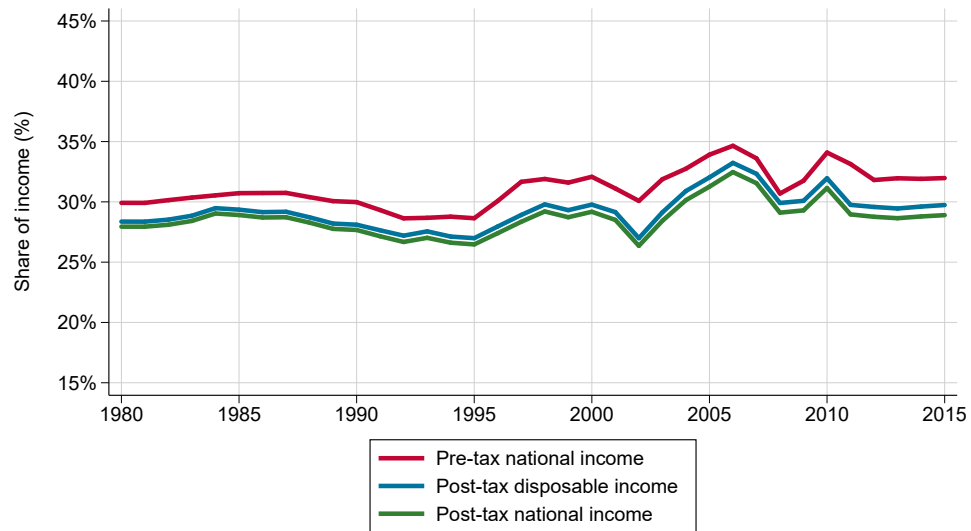
(b) Bottom 50% pre-tax income share



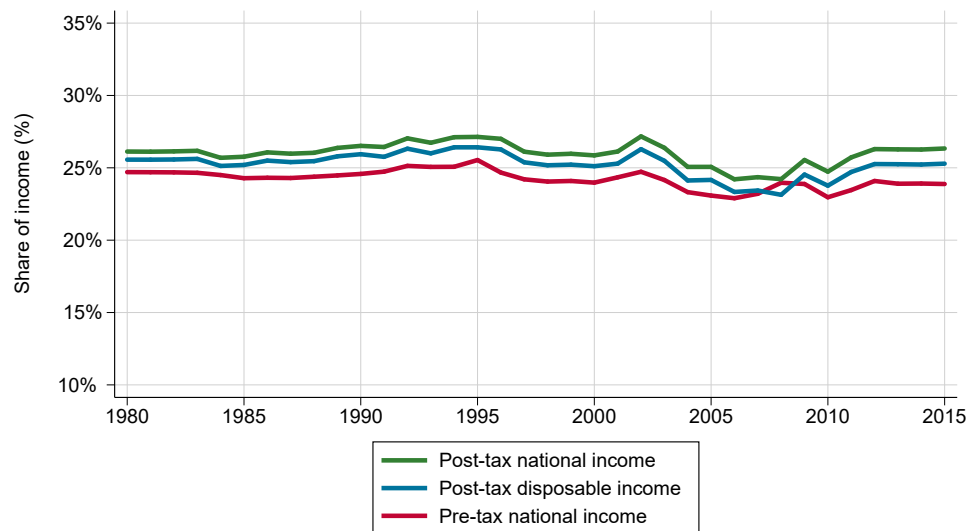
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.111
Switzerland: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.37.2 Switzerland: main results

Table A.3.110
The distribution of the national income in Switzerland, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€45,500	100%	€45,500	100%	€45,500	100%
Bottom 50%	€22,000	24.2%	€23,200	25.5%	€24,200	26.6%
Bottom 20%	€11,800	5.2%	€12,200	5.4%	€13,700	6.0%
Next 30%	€28,800	19.0%	€30,600	20.2%	€31,300	20.6%
Middle 40%	€50,600	44.5%	€51,500	45.3%	€51,300	45.0%
Top 10%	€143,000	31.3%	€133,000	29.2%	€129,000	28.4%
Top 1%	€482,000	10.6%	€427,000	9.4%	€411,000	9.0%
Top 0.1%	€1,900,000	4.2%	€1,670,000	3.7%	€1,600,000	3.5%
Top 0.01%	€7,840,000	1.7%	€6,880,000	1.5%	€6,580,000	1.4%
Top 0.001%	€32,660,000	0.7%	€28,840,000	0.6%	€27,570,000	0.6%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.111
The distribution of national income growth in Switzerland, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	0.6%	0.1%	0.6%	0.1%	0.6%	0.1%
Bottom 50%	0.6%	0.5%	0.6%	0.9%	0.7%	1.0%
Bottom 20%	0.6%	0.6%	0.8%	2.4%	0.9%	2.3%
Next 30%	0.6%	0.5%	0.6%	0.6%	0.6%	0.6%
Middle 40%	0.6%	0.4%	0.6%	0.3%	0.6%	0.3%
Top 10%	0.8%	-0.6%	0.7%	-0.9%	0.7%	-1.0%
Top 1%	1.0%	-0.9%	0.8%	-1.5%	0.8%	-1.6%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.38 United Kingdom

3.38.1 United Kingdom: data sources and methodological steps

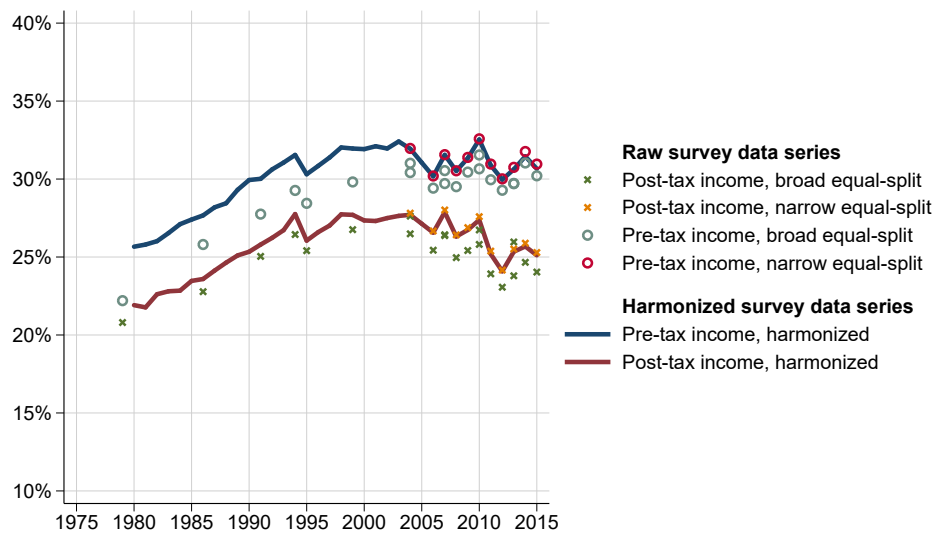
Table A.3.112
United Kingdom: data sources available by year

Year	Survey tabulation	Survey microdata	Tax data	Retained earnings	of which: households' share	Imputed rents	Taxes on products	Corporate income tax	Health expenditures
1979	x	x							
1980									
1981			x						
1982			x						
1983			x						
1984			x						
1985			x						
1986	x	x	x						
1987			x	x			x	x	
1988			x	x			x	x	
1989			x	x			x	x	
1990			x	x	x	x	x	x	
1991	x	x	x	x	x	x	x	x	
1992			x	x	x	x	x	x	
1993			x	x	x	x	x	x	
1994	x	x	x	x	x	x	x	x	
1995	x	x	x	x	x	x	x	x	
1996			x	x	x	x	x	x	
1997			x	x	x	x	x	x	
1998			x	x	x	x	x	x	
1999	x	x	x	x	x	x	x	x	
2000			x	x	x	x	x	x	x
2001			x	x	x	x	x	x	x
2002			x	x	x	x	x	x	x
2003			x	x	x	x	x	x	x
2004	x	x	x	x	x	x	x	x	x
2005			x	x	x	x	x	x	x
2006	x	x	x	x	x	x	x	x	x
2007	x	x	x	x	x	x	x	x	x
2008	x	x	x	x	x	x	x	x	x
2009	x	x	x	x	x	x	x	x	x
2010	x	x	x	x	x	x	x	x	x
2011	x	x	x	x	x	x	x	x	x
2012	x	x	x	x	x	x	x	x	x
2013	x	x	x	x	x	x	x	x	x
2014	x	x	x	x	x	x	x	x	x
2015	x	x		x	x	x	x	x	x
2016				x	x	x	x	x	x
2017				x	x	x	x	x	x

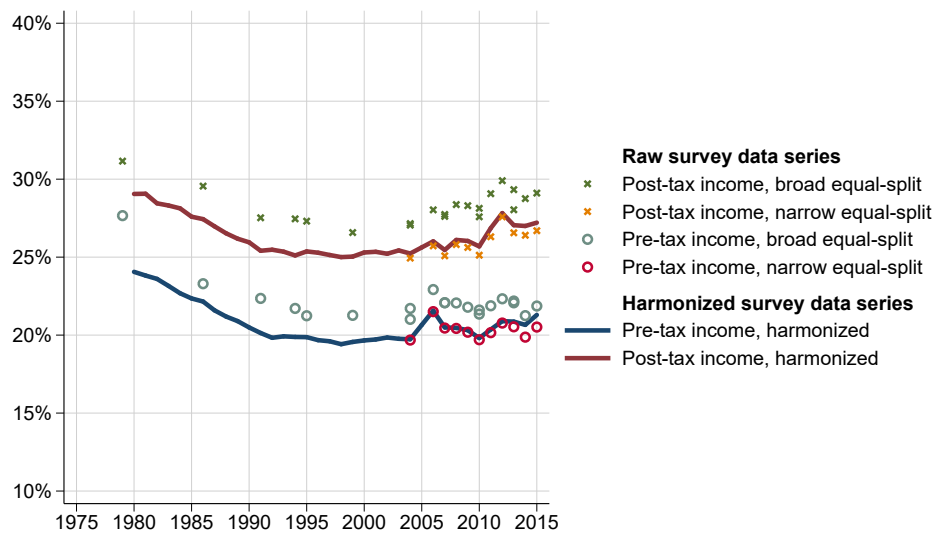
Notes. The table shows the years for which surveys, tax data and key national accounts sources are available.

Figure A.3.112
United Kingdom: from raw survey data series to harmonized survey data series

(a) Top 10% pre-tax income share



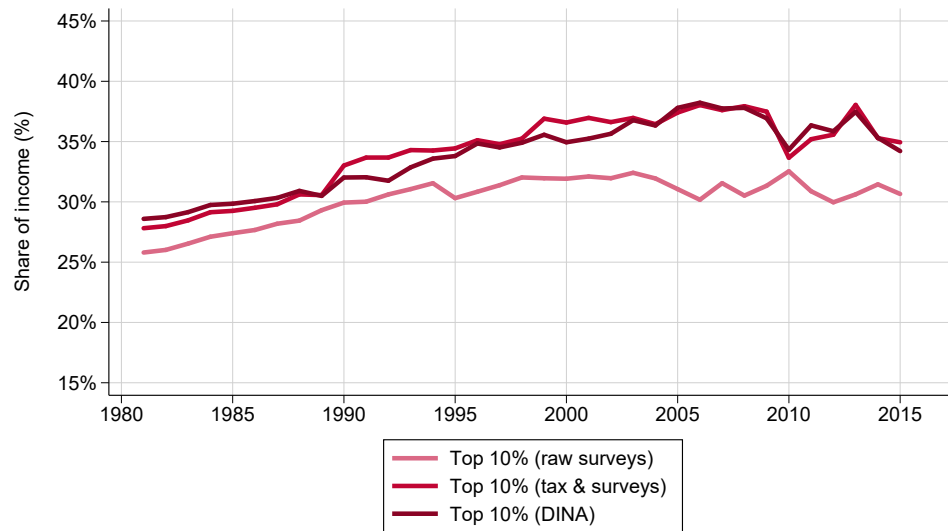
(b) Bottom 50% pre-tax income share



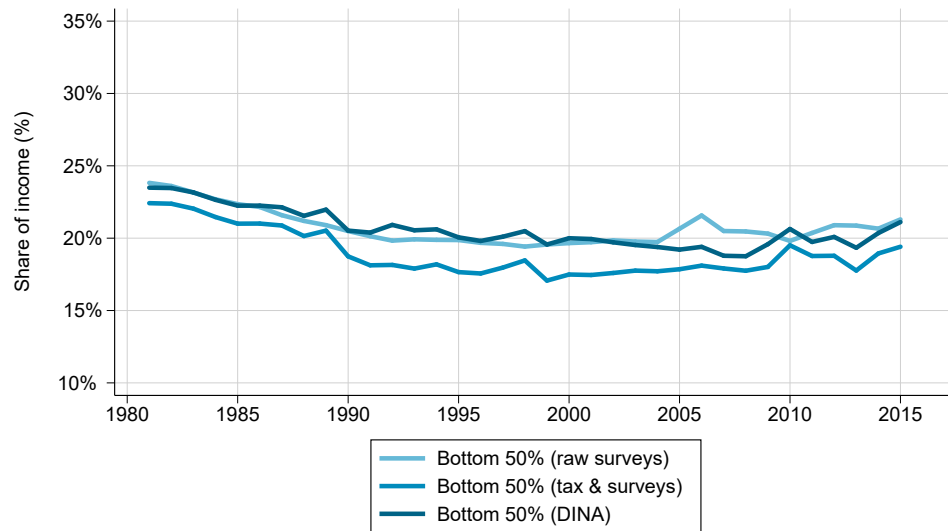
Notes. The figure shows how raw survey data sources covering different income concepts and equivalence scales are converted to a single harmonized pre-tax income and post-tax income survey data series, where income is split equally among couples (narrow equal-split).

Figure A.3.113
United Kingdom: from harmonized surveys to distributional national accounts

(a) Top 10% pre-tax income share



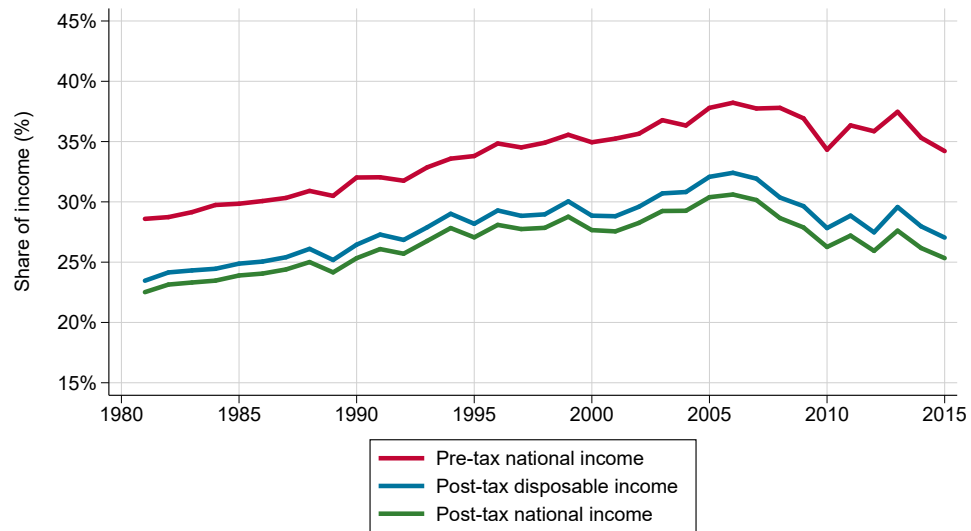
(b) Bottom 50% pre-tax income share



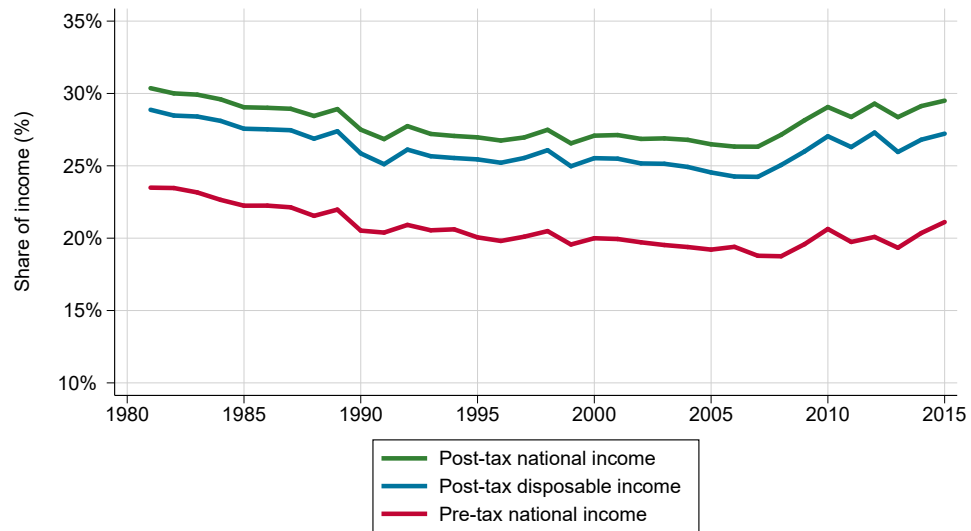
Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Figure A.3.114
United Kingdom: from pre-tax national income to post-tax national income

(a) Top 10% income share



(b) Bottom 50% income share



Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

3.38.2 United Kingdom: main results

Table A.3.113
The distribution of the national income in United Kingdom, 2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	Average income	Income share	Average income	Income share	Average income	Income share
Full population	€37,500	100%	€37,500	100%	€37,500	100%
Bottom 50%	€15,500	20.6%	€20,000	26.7%	€21,800	29.0%
Bottom 20%	€7,500	4.0%	€11,800	6.3%	€14,300	7.7%
Next 30%	€20,800	16.6%	€25,500	20.4%	€26,700	21.4%
Middle 40%	€41,200	43.9%	€42,300	45.1%	€41,800	44.6%
Top 10%	€133,000	35.5%	€106,000	28.2%	€98,900	26.4%
Top 1%	€473,000	12.6%	€328,000	8.8%	€299,000	8.0%
Top 0.1%	€1,910,000	5.1%	€1,220,000	3.3%	€1,100,000	2.9%
Top 0.01%	€7,940,000	2.1%	€4,830,000	1.3%	€4,350,000	1.2%
Top 0.001%	€33,360,000	0.9%	€19,380,000	0.5%	€17,420,000	0.5%

Notes. Figures are reported in 2017 PPP euros. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

Table A.3.114
The distribution of national income growth in United Kingdom, 1980-2017

	Pre-tax national income		Post-tax disposable income		Post-tax national income	
	1980-2017	2007-2017	1980-2017	2007-2017	1980-2017	2007-2017
Full population	1.6%	0.1%	1.6%	0.1%	1.6%	0.1%
Bottom 50%	1.2%	1.1%	1.4%	1.1%	1.5%	1.1%
Bottom 20%	0.9%	1.1%	1.2%	0.9%	1.4%	1.1%
Next 30%	1.3%	1.0%	1.4%	1.2%	1.5%	1.1%
Middle 40%	1.3%	0.2%	1.4%	0.4%	1.4%	0.4%
Top 10%	2.2%	-0.5%	2.1%	-1.1%	2.0%	-1.2%
Top 1%	3.2%	-0.8%	3.1%	-1.8%	3.0%	-2.0%

Notes. The unit of observation is the adult individual aged 20 or above. Income is split equally among spouses.

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