3.2 INEQUALITY IN EUROPE – WOMEN, MEN AND COUPLES

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Although we know a fair amount about processes shaping income inequality of men and women on the labour market and within households, this is not true about such inequalities themselves.[1] In what follows, I would like to show for the whole of Europe that income inequality *between* as well as *within* the two genders, that is among women and men, together with patterns of cohabitation and employment are important drivers of overall income inequality. We shall see that these drivers show remarkable differences across geographic areas in Europe and have changed considerably during the 2009–2012 crisis.

The basis of this section is *Benczúr et al.* (2017),[2] which uses an EU-wide individual database, considers different income sources and computes different inequality measures to look at income inequality in the EU as a whole. Because there are significant differences among them, I use the geographic areas as defined there: North-west- (NW), Southern- (SO) and Central and Eastern Europe (CEE).[3] The following calculations use data from the years 2006–2014 for the 25–60 years old population with personal income.

One can characterise the income inequality *between* men and women with differences in the share of those with non-zero income and that in average income levels among them. After the 2009 crisis, an increasingly larger percentage of women earned labour income, both in the whole of the EU and in each area considered. At the same time, the share of working men has decreased, especially in Southern Europe. Differences in income levels are substantial: in Europe, a man commands 50–70 per cent more labour- and personal income on average than a woman – see the first half of *Table 3.2.1.* If, instead of relying solely on personal income, cohabiting partners[4] share half of that with each other, the disposable income of women increases by 15–30 per cent, and that of men decreases by 18–30 per cent in the EU as a whole (see the second half of *Table 3.2.1*).[5] The same is true in all geographic areas, but the gain of women and the loss of men is much lower in Central and Eastern Europe than elsewhere. Inequality between the average woman and man is thus similar in the case of personal- and labour income but is likely to decrease notably if partners pool income.

The level of average income is always lower in the case of women than in the case of men, but inequality (measured by the log-variance of income) is higher for women – see *Figure 3.2.1.* The difference is relatively small in Central and Eastern Europe (inequality is larger only by 15 per cent among women than among men), while much larger elsewhere (the difference is be-

1 *Ortiz-Ospina and Rosner* (2018) provides a noteworthy global overview.

2 *Filauro* (2018) and *Vacas-Soriano and Fernández-Macías* (2017) uses a similar approach. Graphs used here are from a recent revision of *Benczúr et al.* (2017).

3 We have created the database by pooling per country microdata from the European Union Statistics on Income and Living Conditions (EU-SILC) survey. North-West Europe (NW) is comprised of Austria, Belgium, Denmark, United Kingdom, Finland, France, Netherlands, Ireland, Luxembourg, Germany and Sweden. Southern Europe (SO) is comprised of Cyprus, Greece, Italy, Malta, Portugal and Spain. Central and Eastern Europe (CEE) is comprised of Bulgaria, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia. Personal income is defined as the sum of personal labour income and transfers attached to persons. All income sources are yearly totals. Labour income is a result of worked months, hours and wage rates, thus cannot be directly compared to the ILO employment rate.

4 Here and in what follows, I use the word 'partners' as a catch-all phrase for spouses and those cohabiting.

5 Due to the procedure used for data cleaning, shared income does not precisely match on average in the case of men and women; therefore I present average values here. Sharing half of the personal income is assumed as there is no information on actual sharing in an EU-wide database. Data on personal consumption, such as the one *Bargain et al.* (2018) uses, could be used for this purpose.

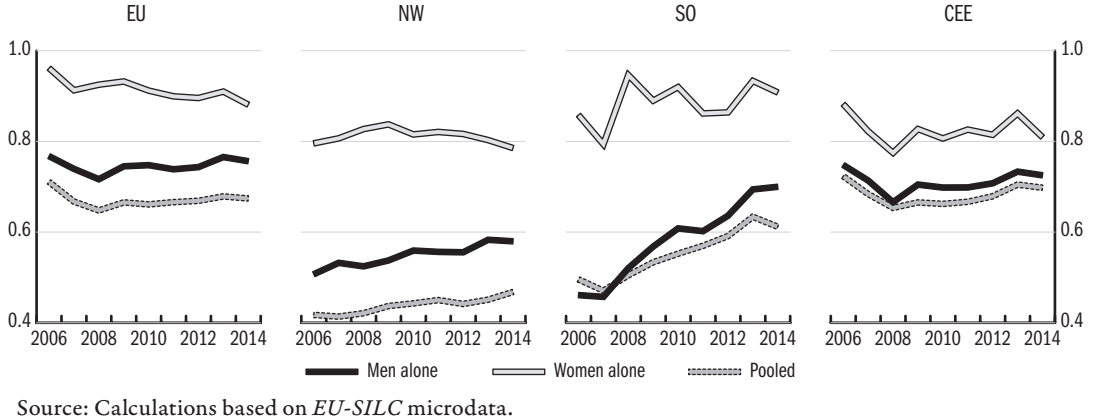
tween 30–60 per cent). These differences are due to the components of annual labour income, mostly months and hours worked [*Benczúr et al.* (2017) discusses the details]. Participation patterns of women and men in Southern Europe changed considerably during the crisis years, and this also affected inequality, decreasing differences among women and men. Indeed: inequality among men rose dramatically, from a level typical of North-west Europe to that characteristic of Central and Eastern Europe. A change towards a similar direction, but of smaller magnitude took place in North-west Europe too. Inequality levels of income shared among partners are smaller in all years and areas than the already low levels of men (measured in log variance, assuming equal sharing).

Table 3.2.1: Average annual income levels for women and men in geographic areas of the European Union (in thousands of Euros at 2015 prices, adjusted for purchasing power parity; 25–60-year-olds commanding personal income)

	Labour income				Personal income				Shared		Shared/personal			
	Women		Men		Women		Men		Together		Women		Men	
	thousand euros										per cent			
	2006	2014	2006	2014	2006	2014	2006	2014	2006	2014	2006	2014	2006	2014
EU	14	15	27	25	16	16	29	27	21	21	131	128	72	76
NW	18	19	34	32	20	20	36	34	26	26	130	130	72	76
SO	14	13	26	21	15	14	28	23	20	18	130	125	70	76
CEE	7	9	11	14	8	10	12	14	10	12	119	115	79	82

Remark: The modified OECD scale was used to calculate per capita household income and the PPI indicator of Eurostat to adjust for differences in purchasing power.
Source: Own calculations based on *EU–SILC* microdata.

Figure 3.2.1: Inequality of personal income among women and men as measured by the log variance in geographic areas of the European Union (25–60-year-olds with personal income)

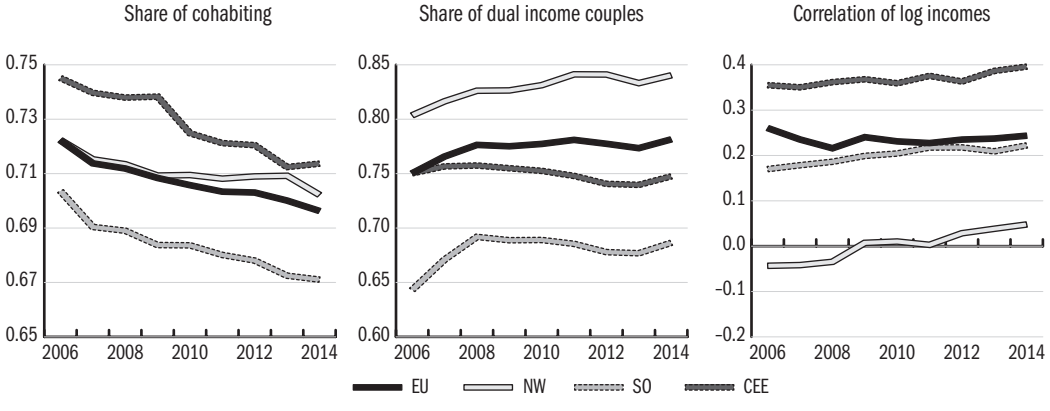


Source: Calculations based on *EU-SILC* microdata.

The overall gain coming from income pooling among partners depends on the prevalence of cohabitation and labour market activity of partners as well

as the correlation between incomes. About two-thirds of the Europeans in the sample cohabits in partnership – see the first panel of *Figure 3.2.2.* The same proportion is somewhat above the EU-average in Central and Eastern Europe and below that in Southern Europe but exhibits a decreasing trend over time almost everywhere (the North-west after the Crisis being an exception). An increasing number of partners work in all geographic areas. Both the share of dual-earner couples and its increase is the largest in North-west Europe, followed by that in Central and Eastern Europe, while Southern Europe comes last with a rather low level. The rightmost panel of *Figure 3.2.2* shows that there are considerable differences across areas also in terms of the correlation of partners' incomes. The correlation is positive and relatively strong in the CEE, not significantly different from zero in the North-west, while in Southern Europe it is measured in-between, around the EU average.

Figure 3.2.2: Household characteristics and their effect on pooled income



Source: Own calculations based on *EU-SILC* microdata.

Based on the differences among and the trends of the components of inequality, we see that it is their interaction that shapes inequality among men and women living in partnership. Couples residing in North-west Europe experience a drop in income inequality not only because of the above-average demographic potential of cohabitation but also because of the small correlation between the income of the partners. Quite the opposite happens in Central and Eastern Europe, where the large positive correlation between income sources cancels the more modest, but still favourable demographic and labour market potential. This cancellation is the reason why income inequality across women does not change significantly when passing to pooled income. The same underlying mechanisms and the dramatic changes in labour market participation of women and men explain why the gain from pooled income decreases over time in the case of women in Southern Europe.

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