

Partnership formation and changes in material well-being: Nordic vs East-European context

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Background

While numerous studies address the economic impacts of divorce and union dissolution on former partners, relatively little is known about changes in material well-being as individuals form a union. In case of union break-up substantial gender differences have been found (see for example, Aassve et al., 2007; Mortelmans, 2020; Smock et al., 1999), but with respect to start of a partnership focus has been given mainly to employment, education, or occupational status of the male and female partner. The ambition of this paper is therefore to address changes in material well-being (MWB) as measured by household income and housing conditions, experienced by men and women as they form unions.

Couple formation can be linked to increased MWB for individuals due to resource pooling and economies of scale. A new partnership can involve moving into a better, larger dwelling, and be the start of homeownership (Michielin & Mulder, 2008; Smits & Mulder, 2008). Compared to single, divorced, and living-apart-together individuals, cohabiting and married couples are generally expected to have MWB advantages, although these differences can vary by country.

Our analysis is about the East-European and North European context, which are often seen as distinct from each other regarding family diversity and complexity, economic and social development and welfare arrangements, and gender equality and care policies (Sobotka & Toulemon, 2008; Thévenon, 2011; Thomson, 2014). These differences have implications also with respect to how vulnerable individuals are in various partnership statuses in the regions studied (see Oláh et al., 2023). To better understand the association between partnership formation and MWB, we distinguish between direct well-being measures (here: income and housing) and measures of vulnerability (here: educational attainment, employment status and perceived economic situation).

Research questions and hypotheses

We ask, how are direct measures of MWB associated with union formation:

1. How does household income change as non-partnered individuals form a co-resident union? We expect that net equivalized household income will be higher after union formation.
2. What effect does union formation have on housing? This is evaluated in two dimensions – number of rooms available and homeownership status. We expect that the number of rooms and the likelihood of ownership (vs renting) will increase after union formation.
3. If MWB changes after union formation, do men or women experience more prominent difference in the before and after? We expect that women experience more drastic changes, explained by a relatively younger age at partnering and average income differences by gender.

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4. Comparing the Nordic region to East-European, where is the change in household income and housing conditions more prominent? We expect that gains or losses in MWB are bigger in countries with less generous social systems and mainly ownership-oriented housing markets.

Data and methods

We use all available rounds of EU Survey of Income and Living Conditions (EU-SILC) longitudinal data, covering observations between 2003 and 2023 in four Nordic countries (Denmark, Finland, Norway, Sweden), the three Baltic states (Estonia, Latvia, Lithuania), Czechia, and Poland. EU-SILC applies a rotational panel, which means that 25% of the sample (a rotation group) is replaced each year. From each round we select the rotation group that has reached its final year, which ensures that we do not include observations that are in the middle of the rotation. Regular EU-SILC panel length is four years, but exceptions are Norway and Sweden with eight years.

Time of union formation is not explicitly recorded in EU-SILC, but we construct this based on household roster changes and linkages between partners. When a partner first appears in the panel, we take this as the year of union formation. The other years spent in the panel are counted as years before (with a negative sign) or after (positive) union formation. From the entire dataset we select only individuals who experienced union formation event during the panel, provided that the event occurs to people who were aged 25-59. This results in 12,264 unique individuals who represent 37,328 observations.

We have multiple dependent variables:

- a) *net-equivalized household income* (as per OECD equivalence scale, first adult weighted 1, next 0.5, children below age 14 weighted 0.3). We use gross household income which includes total income earned by all household members, pensions, different kinds of benefits, allowances, income from rental of a property, capital investments, and from inter-household cash transfers. We use “within effects” panel regression to model this as well as linear regression (including year dummies relative to union formation to indicate before/after).
- b) *number of rooms per equivalent household size*. Number of rooms is directly available from EU-SILC. This is modelled using the same methods as household income.
- c) *homeownership status*. Homeownership (tenure status) is recorded in the survey with 5 levels: 1) outright owner, 2) owner paying mortgage, 3) tenant or subtenant paying rent at prevailing or market rate, 4) renting at a reduced rate, 5) accommodation for free. We recode the last three into “renting” category. Multinomial logistic regression is used to estimate the effect of union formation on the probability of being an owner, mortgaged owner, or renter.

Preliminary findings

First, we model countries separately using panel regression. The results suggest that entering partnership is associated with increasing net equivalized household income in all countries under study (Table 1). In contrast, the number of rooms per equivalent household member mostly declines in East-European countries, but increases in most Nordic countries (Table 2).

Table 1 Panel regression of net equivalized (log) household income

	CZ	DK	EE	FI	LT	LV	NO	PL	SE
Has a partner	0.282*** (0.018)	0.319*** (0.017)	0.328*** (0.022)	0.359*** (0.015)	0.351*** (0.075)	0.181*** (0.028)	0.379*** (0.012)	0.282*** (0.021)	0.310*** (0.014)
Observations	2,599	3,178	2,554	4,933	987	2,755	11,141	4,023	5,038
R ²	0.178	0.220	0.139	0.266	0.185	0.085	0.199	0.122	0.186

Note: control variables not shown—household size, marital status, employment status.

Table 2 Panel regression of rooms per equivalent household member

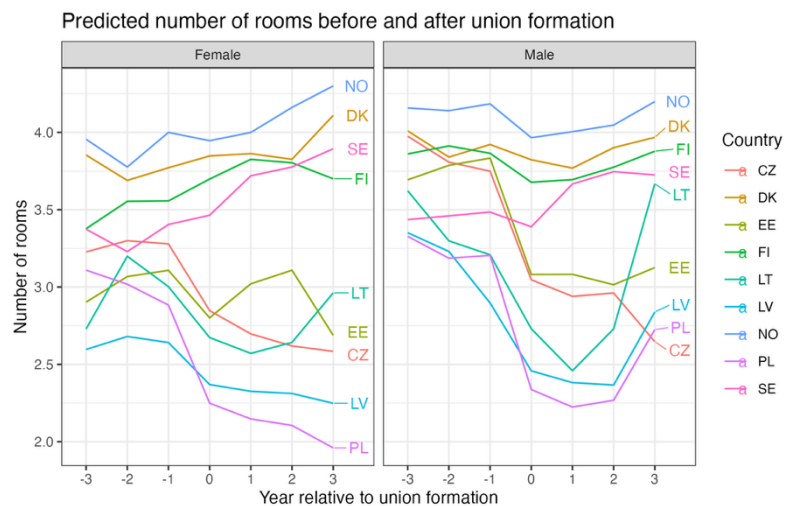
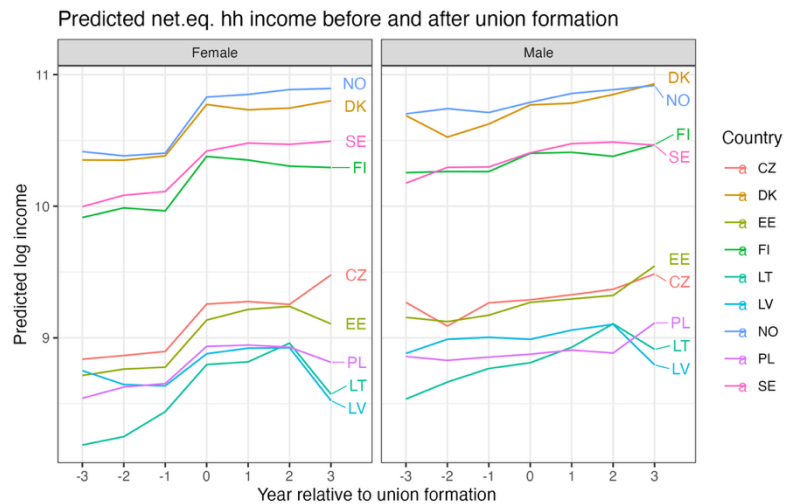
	CZ	DK	EE	FI	LT	LV	NO	PL	SE
Has a partner	-0.323*** (0.034)	0.200*** (0.040)	-0.406*** (0.039)	0.055 (0.037)	-0.205* (0.107)	-0.015 (0.038)	0.112*** (0.025)	-0.305*** (0.029)	0.188*** (0.037)
Observations	2,599	3,145	2,554	4,929	987	2,754	11,071	4,023	5,030
R ²	0.158	0.134	0.180	0.221	0.106	0.093	0.181	0.201	0.174

Note: control variables not shown—household size, marital status, employment status.

Second, we pool all countries and apply linear regression using dummies for panel years before and after union formation to estimate interaction effects between relative time to union formation, gender, and country.

Model-predicted results suggest that in all countries women gain in terms of net equivalized household income, more than men (upper Fig.).

Regarding the number of rooms there is a clear regional difference: men and women in East-Europe have fewer rooms available after union formation, while in the Nordics the number is stable or even increases for both men and women (lower Fig.).



Third, after applying multinomial regression to pooled data to model homeownership, the results suggests that partnership formation increases the probability of being a homeowner with a mortgage, as opposed to being an outright owner or renter (Table 3). Separate models for each country (not shown here) indicate that this is more prominent in the Nordic countries, where having a mortgage is more prevalent regardless of the partnership status.

Table 3 Multinomial regression of homeownership status (ref=Owner with mortgage)

	Owner	Renter/free
Has a partner	-0.779*** (0.049)	-0.233*** (0.041)
Female	-0.186*** (0.045)	0.151*** (0.036)
Constant	0.700*** (0.088)	1.100*** (0.086)

Note: variables not shown—education, employment status, household size, country.

To summarise, our preliminary results suggest that, in terms of MWB, union formation is associated with some general but also with some context-specific outcomes when Nordic and East-European countries are compared. Partnership formation generally increases the equivalized household income, more distinctly for women. The change in the housing conditions, however, is more dependent on the context: in the Nordic countries the number of rooms in the household is stable or increasing, while in East-European countries there is a clear decline. In terms of ownership, becoming partnered is associated with a higher probability of becoming a homeowner with mortgage, more so in the Nordic context.

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