

The rise of hypogamy and its consequences for family life in Austria

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The gender imbalance in education has reversed with major implications for patterns of assortative mating and marriage markets (De Hauw et al. 2017). Demographic trends show a rising share of heterosexual couples in which the woman is more educated than the man — a constellation called *hypogamy* in the literature. In many countries the share of *hypogamic* couples already surpasses the share of *hypergamic* couples that involve a male educational advantage (Esteve et al. 2016). The rise in hypogamy is likely to change power dynamics within couples and the outcome of family-related decisions such as those regarding childbearing and the division of labour within the couple (Van Bavel 2012). Yet, despite the undisputed relevance of this demographic shift (e.g., Van Bavel 2012; Bertrand et al. 2015; Esteve et al. 2016; Matysiak and Nitsche 2016; Nitsche et al. 2018), empirical research on its consequences is still scarce (Esteve et al. 2016, p. 5; Matysiak and Nitsche 2016, p. 4).

In the light of these gaps in the literature, the study aims to further our understanding of the consequences of couples' changing educational composition for parental employment. This is important for several reasons. Couples are important units of analysis in research on inequality. Patterns of couple formation (e.g., assortative mating) are an important mechanism for the creation of *social inequality* in contemporary societies (Eeckhaut and Stanfors 2019) and they are of crucial importance also for *gender inequality* in the home and the labour market.

Data: We use a unique set of register data that include a full sample of all first births that occurred in Austria in the time period 1990-2007. Information on the characteristics of parents include their age and educational attainment at the time of first birth, their employment history, earnings trajectory and occupational career preceding and following first birth. The longitudinal data on parental employment and earnings trajectories is recorded up to the end of the year 2016. This allows for a follow-up of the full sample for nine years and a longer follow-up for earlier birth years (e.g., 15 years for births occurring in the period 1990-2001). We focus on first births that involved mothers aged 18-45 and fathers aged 18 and older. The sample of analysis amounts to about 650,000 first births.¹

The educational attainment of the parents is recorded in five levels: 1-compulsory education or less, 2-apprenticeship training, 3-vocational school, 4-high-school diploma ('Matura'), and 5-completion of tertiary education. Levels 2 and 3 are pooled since they pertain to similar attainment (level 3B in the *International Standard Classification of Education*). Pairing the attainment levels of the partners, we

¹ This compares well with data published by Sobotka (2005) suggesting that the number of total live births in Austria amounted to about 80,000-90,000 per year in the time period 1990-2004 and that about 46% of these were first births.

distinguish between homogamous couples (57.4%, shaded in Table 1), hypergamic couples (he has more education than her, 22%), and hypogamic couples (she has more education than him, 21%).

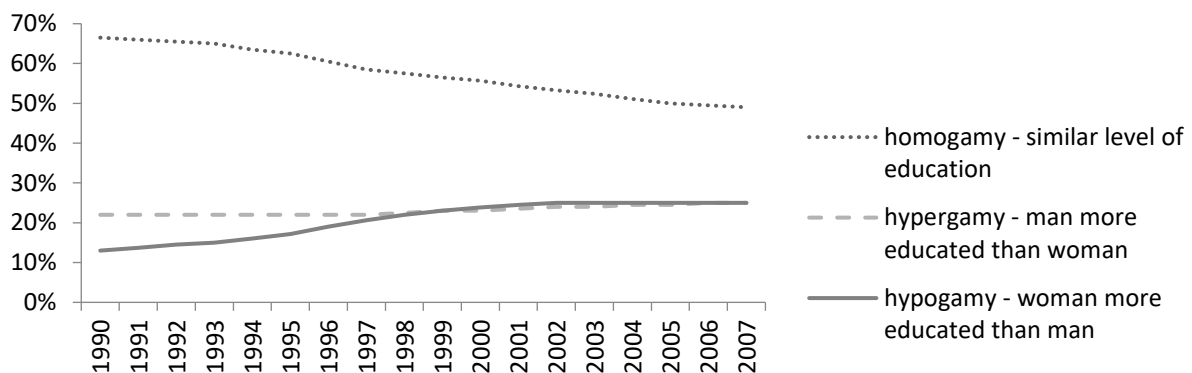
Table 1: Educational pairings (N=646,176)

	Father			
Mother	Compulsory	Vocational	High-School	Tertiary
Compulsory	4.4%	6.6%	0.9%	0.5%
Vocational	2.2%	35.9%	7.7%	2.9%
High-School	0.7%	10.1%	7.1%	3.5%
Tertiary	0.5%	3.9%	3.3%	10.0%

Shaded: *homogamy*, above the diagonal: *hypergamy*, below the diagonal: *hypogamy*

Austria has been described as a conservative welfare state that offers limited support to maternal employment (Steiber et al. 2016). Austrian mothers tend to take long leaves following childbirth and to re-enter the labour market only on a part-time basis (Berghammer 2014). As in many other countries, the share of hypogamic unions has been increasing (Figure 1).

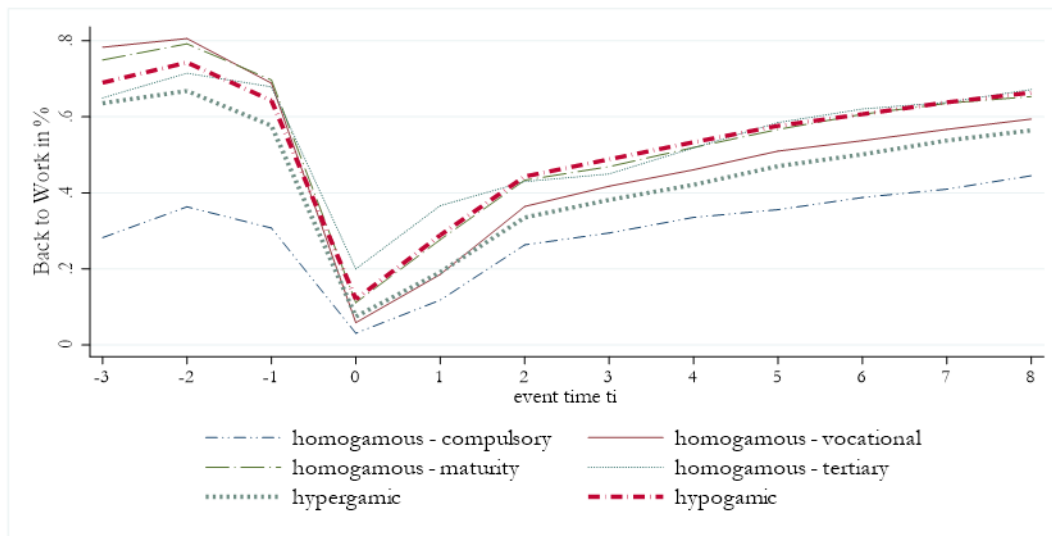
Figure 1: Overview of time trends in educational pairings of parents, Austria



Source: Austrian register data (section 2.2 for detail),
 Sample: parents age 18+ at the time of first birth (N=669,060).

To investigate employment careers preceding and following first birth we organize the data into a panel of yearly observations: starting the first time period (t_0) at the time of first birth, we track the *employment status* and the *earnings* of each parent in 12-months intervals. Given the time-frame of the data, we observe all parents in our sample for at least nine years (i.e., up to t_9), up to a maximum of 20 years (follow-up up of births in 1990-1996 until the end of 2016). We chart the *employment and earnings trajectories* of mothers and fathers around first birth, describing differences between couples that are characterized by different educational pairings (Figure 2 for an example).

Figure 2: Employment of mothers around first birth, by educational pairing of parents



Source: Austrian register data (section 2.2 for detail). Sample: parents age 18+ at the time of 1st birth (N=646,176). ‘Back to work’ is a dichotomous variable that is coded as 1 if mothers are in paid work for at least 180 days in a 12-months period.

From Figure 2 it is not clear if mothers as part of *hypergamic* couples are less likely to be ‘back to work’ at t_8 compared to their counterparts in most types of homogamous couples because her husband is high-educated (negative effect of his high SES), because he is more educated than her and may thus have a higher bargaining power (effect of status-inconsistency), or because she has limited educational attainment herself (effect of her SES). In order to be able to disentangle status *level*-effects from status-*inconsistency* effects, we employ diagonal reference models. Outcome variables measuring *parental employment* and *earnings* include a set of continuous and binary variables measured at different stages of childrearing² (e.g., the binary indicator for being ‘back to work’ used in Figure 2, mothers’ and fathers’ absolute and relative earnings). The central predictors are markers of parents’ SES and of SES-inconsistency before first birth and we control among others for the year of birth (time trends), parents’ age at first birth (and their age composition), and the occurrence of subsequent births. Our first results suggest that the status-inconsistency within the couple (hypogamy as well as hypergamy) exerts a substantial effect on mothers’ employment and earnings trajectory that is independent of the main effects of her and his education.

² We measure outcomes e.g., before the first birthday of the first child (t_1), the time when the first child was aged 2<3 (t_3), the time when the first child was just below schooling age (t_6), and the time when the first child was 8<9 years of age (t_8). Moreover we devise a synthetic family life-cycle that accounts for the age of the youngest child (cf. Steiber et al. 2016).

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