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Overworked or
Underemployed? Actual and
Preferred Household
Employment Patterns in the
Context of the Economic Crisis



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#### **Abstract**

This article revisits work hour mismatches at the couple level. Most of what has been published on actual and preferred employment arrangements of couples in Europe is based on international survey data from the late 1990s. The aim is to present new data on couples' actual and preferred employment arrangements using data from Round 5 of the European Social Survey (2010-2012). The article discusses trends in the degree to which couples' employment arrangements are in line with preferences and how work hour mismatches may be related to the current economic crisis.

#### **Keywords**

Couple employment, European Social Survey, labour supply, preferences, economic crisis

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## Overworked or Underemployed? Actual and Preferred Household Employment Patterns in the Context of the Economic Crisis

Nadia Steiber and Barbara Haas

#### Introduction

The early literature on the mismatch between actual and preferred employment arrangements of couples has emphasised the issue of 'overworked families' who would like to reduce their work hours in order to achieve a better work-family fit (Clarkberg and Moen 2001; Jacobs and Gerson 2001; Jacobs and Green 1998; Moen and Dempster-McClain 1987). It was argued that many couples work more hours than they would prefer to and that such mismatches were in the main tied to the aim of combining paid work with childcare responsibilities (Clarkberg and Moen 2001; Merz 2002). In a similar vein, research on work-family reconciliation tends to invoke the notion of overworked couples who experience work-family conflict due to competing time demands from work and family (e.g., Cousins and Tang 2004; McGinnity 2014; Reynolds 2005; Steiber 2009; Williams et al. 2008). Moreover, reduced hours working is increasingly considered core for sustainable policy development (Knight et al. 2013), some commentators arguing that the spread of part-time work would not only reduce time pressures on those in employment but that it would allegedly also create new jobs and reduce unemployment (Kallis et al. 2013). While there is in fact little evidence supporting the view that work-sharing creates additional jobs and thus helps to counteract rising unemployment levels in times of economic crises (Hunt 1999; Schreiber 2008)<sup>1</sup>, policies involving work hour reductions tend to be introduced in recessionary periods (Alesina et al. 2006). Yet, reduced hours working in times of economic crisis may often not be in line with preferences as this article shows. Instead, we find that in times of slack labour demand, many couples would prefer to increase their working hours. In the current recession, the shares of involuntary parttime workers, who would prefer full-time jobs, have in fact increased in a number of countries, rendering many part-timers underemployed (De Vita et al. 2014; Green and Livanos 2013; Rubery and Rafferty 2013; Veliziotis et al. 2015).

#### The situation in the Late 1980s

The most widely cited comparative European data to study work hour preferences at the couple level date back to the late 1990s. The European Foundation for the Improvement of Working and Living Conditions in Europe carried out the *Employment Options of the Future* (EOF) survey in the member states of the European Union in 1998 and Norway. Respondents were asked to state the hours that they would currently like to work

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<sup>&</sup>lt;sup>1</sup> The view that work hour reductions create new jobs is based on the assumption of a fixed amount of work that can simply be distributed across jobs – the so-called 'lump-of-labour fallacy' fails to take into account that labour demand is co-determined by productivity, wages, and consumption levels.

themselves, and the hours that they would like their partner to work, if they had a free choice, but taking into account the need to earn a living. Calculations based on these micro-data have been widely published (e.g., Bielenski et al. 2002; Fagan and Warren 2001; OECD 2001, p. 136; Väisänen and Nätti 2002). The general gist of the analyses was that the preferences of couples in Europe were in many cases not in line with their behaviour and that dual-earner couples frequently preferred work hour reductions (Väisänen and Nätti 2002), especially in the presence of small children (OECD 2001, p. 136). Similar conclusions were drawn based on labour supply preference data from the European Social Survey collected in 2004/05 (Lewis et al. 2008).

The variation across countries in actual and preferred employment patterns and the degree to which these overlapped had been very large (Bielenski et al. 2002, p. Fig. 16–17; OECD 2001, p. 136). Yet, it proved difficult to reach general conclusions, because the internationally comparative picture varied between studies due to differences in the definitions of employment arrangements applied<sup>2</sup>.

#### An Update Using Data for 2010-12

New data on couples' actual and preferred employment arrangements became available with Round 5 of the European Social Survey, fielded in the years 2010-2012<sup>3</sup>. Similar to the 1998 EOF Survey, respondents were asked 'How many hours a week, if any, would you choose to work, bearing in mind that your earnings would go up or down according to how many hours you work?' and 'If you could choose, how many hours a week, if any, would you like your partner to work bearing in mind that your partner's earnings would go up or down according to how many hours s/he works?'. Moreover, respondents were asked about their and their partner's current employment status and their usual number of working hours (including any paid or unpaid overtime). Using information on the couples' actual and preferred hours of paid work (collected from one respondent per couple), we distinguish between the male breadwinner model (MB, the man works full-time, the woman is not employed), the *modernised male breadwinner model* (MMB, the man works full-time, the woman part-time), the dual breadwinner model (DB, both partners work fulltime), the dual part-time model (DPT, both partners work part-time), the female breadwinner model (FB, the woman works full-time, the man part-time or not at all), and the *no-breadwinner model* (NB, both partners non-employed or only one of the partners works part-time). Following the OECD standard, part-time work is defined as working less than 30 hours per week. The sample is restricted to heterosexual couples who live in the same household and who are between 20 and 64 years of age. We use data from 16

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<sup>&</sup>lt;sup>2</sup> Bielenski and colleagues (2002: Fig. 16-17) show much smaller shares of dual breadwinner arrangements than the OECD (2001), despite the fact that the OECD restricts the sample to parents of children below age 6. This is likely to be due to different definitions of part-time work used. Bielenski et al. use a 35-hour threshold to define full-time work. As a consequence, Bielenski et al.'s findings suggests that only in two countries (Spain and Greece) the shares of couples preferring dual-full-time-earner models have been larger than the share of couples actually living this model (i.e. underemployment), whereas calculations done by the OECD (2001: 136) suggest that this is the case in the majority of countries.

<sup>&</sup>lt;sup>3</sup> In 11 countries, the survey was fielded in 2010/11, in Finland and Hungary field work was restricted to 2010, in Spain and Greece it was restricted to 2011, and in Ireland it extended to 2011/12.

countries, including only those countries that provide data with limited amounts of missing values for both actual and preferred employment arrangements<sup>4</sup>.

In a first step, the shares of couples living and preferring the different employment arrangements are compared (Table 1). In a second step, the preferences of those practising certain arrangements are investigated in more detail (cross-tabulation of preferred and actual arrangements, see Table 2).

<sup>&</sup>lt;sup>4</sup> Some countries provide many missing values on preferred employment arrangements. We consider only countries that provide less than 10% missing values for actual and preferred arrangements. Some missing values for preferred arrangements are replaced by imputed values. These are imputed based on multinomial logistic regression analyses, estimated separately for each country and sex, that use the arrangements as the dependent variable; the age of the woman, the age of the man, the age difference between the partners, the education of the woman, the education of the man, the couples' marital status, the presence and age of children, and gender attitudes as predictors. In case of predicted probabilities of 0.75 or higher for a particular arrangement, the predicted arrangement was used to replace the missing value. After the imputation, missing values for actual and preferred arrangements, respectively, were: Belgium (1.6%; 5.7%), Switzerland (1.7%; 8.7%), Germany (0.7%; 4.2%), Denmark (0.5%; 3.4%), Estonia (1.9%; 7.2%), Spain (0.6%; 4.9%), Finland (1.0%; 1.6%), France (1.1%; 4.9%), Britain (1.6%; 9.9%), Greece (1.8%; 7.7%), Hungary (2.6%; 10.7%), Ireland (0.2%; 1.4%), Netherlands (0.7%; 7.7%), Norway (0.1%; 1.2%), Sweden (0.6%; 2.6%), Slovenia (2.4%; 4.5%).

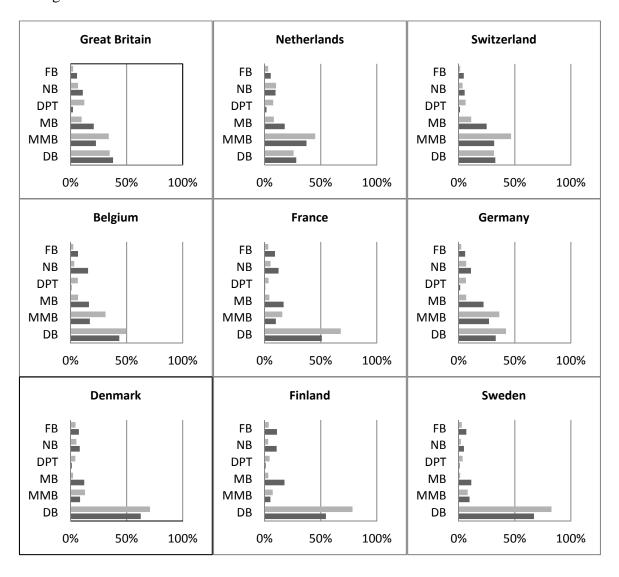
Table 1: Actual and preferred household employment patterns, 2010-2012

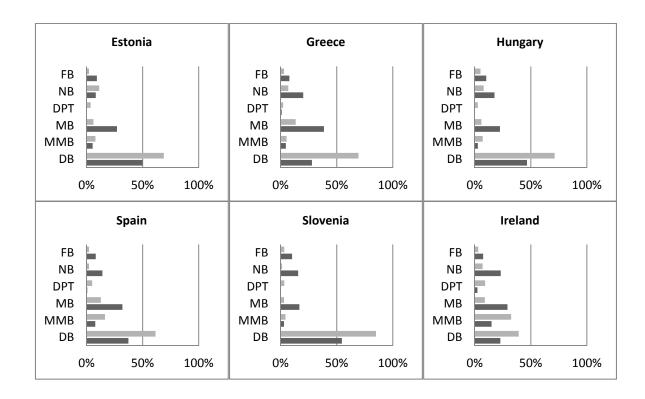
	DB	MMB	MB	DPT	NB	FB	Total	N
Britain								
Actual	37.9%	22.6%	20.7%	2.1%	10.9%	5.8%	100%	838
Preferred	34.9%	34.1%	9.9%	12.3%	6.6%	2.3%	100%	838
Ireland								
Actual	22.8%	15.0%	29.2%	2.4%	23.2%	7.5%	100%	950
Preferred	39.2%	32.5%	9.0%	9.3%	7.0%	3.1%	100%	950
Germany								
Actual	33.0%	27.0%	22.1%	1.3%	10.9%	5.7%	100%	1287
Preferred	42.2%	36.2%	6.6%	6.4%	6.6%	2.2%	100%	1287
France								
Actual	51.0%	10.0%	16.9%	0.5%	12.4%	9.2%	100%	672
Preferred	67.9%	15.8%	4.2%	3.5%	5.3%	3.3%	100%	672
Belgium								
Actual	43.5%	17.2%	16.4%	0.8%	15.6%	6.6%	100%	757
Preferred	49.9%	31.2%	6.7%	6.5%	3.3%	2.4%	100%	757
Netherlands								
Actual	28.2%	37.3%	17.9%	1.6%	9.7%	5.4%	100%	787
Preferred	25.8%	45.1%	8.2%	7.6%	10.2%	3.1%	100%	787
Switzerland								
Actual	32.6%	31.6%	24.9%	1.1%	5.3%	4.5%	100%	623
Preferred	31.5%	46.7%	11.1%	6.1%	3.4%	1.3%	100%	623
Sweden								
Actual	67.1%	9.6%	11.2%	0.8%	4.6%	6.8%	100%	636
Preferred	82.7%	8.0%	1.3%	3.5%	1.9%	2.7%	100%	636
Denmark		0.07.						
Actual	62.6%	8.5%	12.2%	1.1%	8.2%	7.4%	100%	729
Preferred	70.9%	12.9%	2.3%	4.3%	5.2%	4.4%	100%	729
Norway								. = -
Actual	55.5%	15.4%	12.8%	1.2%	8.1%	7.0%	100%	770
Preferred	75.7%	15.7%	1.6%	2.7%	1.1%	3.2%	100%	770
Finland	761776	101770	1.070	<b></b> , o	11170	0.270	10070	,,,
Actual	54.7%	5.1%	17.7%	0.9%	10.7%	11.0%	100%	810
Preferred	78.4%	7.2%	3.3%	4.4%	3.1%	3.6%	100%	810
Spain	701170	7.270	0.070	,	0.17,0	2.070	10070	010
Actual	37.3%	7.8%	32.0%	0.6%	14.1%	8.2%	100%	835
Preferred	61.5%	16.4%	12.7%	5.0%	2.2%	2.2%	100%	835
Greece	01.070	10.170	12.770	2.070	2.270	2.270	10070	055
Actual	27.9%	4.6%	38.6%	0.9%	20.1%	7.8%	100%	980
Preferred	69.4%	5.3%	13.4%	2.2%	6.8%	3.0%	100%	980
Hungary	02.170	2.270	13.170	2.270	0.070	3.070	10070	700
Actual	46.6%	2.8%	22.5%	0.2%	17.6%	10.3%	100%	630
Preferred	71.2%	7.1%	5.9%	2.8%	8.0%	5.1%	100%	630
Estonia	71.270	7.170	3.770	2.070	0.070	3.170	10070	050
Actual	49.9%	5.4%	27.1%	0.3%	8.2%	9.2%	100%	672
Preferred	68.9%	7.9%	6.1%	3.6%	11.3%	2.2%	100%	672
Slovenia	00.770	1.2/0	0.1/0	5.070	11.570	2.2/0	10070	0,2
Actual	54.6%	3.0%	16.7%	0.0%	15.6%	10.2%	100%	540
Preferred	85.0%	4.3%	3.0%	3.3%	1.3%	3.2%	100%	540
1 10101100	05.070	<b>+.</b> J 70	J.U70	J.J70	1.570	J.470	10070	J+U

*Notes*: Own analysis of the European Social Survey, Round 5; results are weighted. A 30-hour threshold is used to distinguish between full-time and part-time employment. The sample involves cohabiting couples in which both the woman and the man are of age 20-64.

As shown in Table 1 and illustrated in Figure 1, the comparison of couples' actual and preferred employment arrangements shows *underemployment* to be fairly wide-spread. In 13 out of the 16 countries investigated, a larger share of couples prefer a DB model than practise it (the exceptions are Britain, the Netherlands, and Switzerland, where similar shares of couples prefer and practise DB models). The gap between the shares of couples preferring and living DB models is largest in Greece (42%), followed by Slovenia (30%), Hungary (25%), Spain, and Finland (24%, see Table 1).

Figure 1: Illustration of actual (dark grey) and preferred (light grey) employment arrangements





Single earner arrangements (MB or FB) are found to be largely involuntary. In all 16 countries, less than 15% of couples prefer the MB model and only 5% or less prefer the FB model (Table 1). Moreover, in all 16 countries, less than a third of the couples in MB arrangements actually prefer this arrangement (less than 10% in Norway, Slovenia, and Sweden, see Table 2). Overall, the 16 countries can roughly be divided into five groups (and are grouped along these lines in Figure 1):

- (1) Great Britain, the Netherlands, and Switzerland: If preferences were realised in these countries, we would observe a move from MB to MMB models with some of the currently non-employed women taking up part-time jobs. More detailed analyses of mismatches between actual and preferred arrangements (Table 2) show, for example, that around 45% of male breadwinners in the Netherlands would prefer a MMB model (46% in Switzerland and 38% in the UK).
- (2) Belgium, France, and Germany: If preferences were realised, more couples would live dual-earner models. In contrast to the first country-group, increasing shares of both MMB and DB models would be observed, while shares of single breadwinner models (MB and FB) would decline. As shown in Table 2, in France only 16% of male breadwinners are content with this arrangement, whereas 50% of those in MB models would in fact prefer to be dual full-time earners (DB) and another 26% prefer a MMB arrangement. In Germany, only 20% of male breadwinners prefer this arrangement, 45% would prefer a MMB model and 26% a DB model. Belgium shows a similar pattern 27% being content MB, whereas 41% would prefer a MMB model and 27% a DB model.

- (3) Denmark, Finland, Norway, and Sweden: In the Nordic countries, the majority of couples are dual breadwinners (DB), and a large share of couples who are not, would prefer to move from no-breadwinner or single breadwinner models (MB, FB, or NB) to a DB model. In Sweden, Norway, and Finland, around 93% of DB hold a preference for this arrangement (83% in Denmark). Moreover, whereas in the country-groups 1 and 2 (except for France), less than 20% of MMB would prefer a DB model, this share amounts to 44% in Sweden and Finland, 40% in Norway, and 26% in Denmark. In some respects, France shows similarities with the Swedish pattern with high shares of satisfied DB (85%) and a large share of MMB preferring to switch to a DB model (43%). France may be viewed as a hybrid type located between groups 2 and 3.
- (4) Estonia, Greece, Hungary, Slovenia, and Spain: In the Southern European and the Central/Eastern European countries that were and are particularly strongly affected by the recession starting in 2007/08, dual-earner arrangements are much more often preferred than realised. Especially the preference for the DB model is strongly pronounced (85% of couples prefer to be DB in Slovenia, 71% in Hungary, 69% in Estonia and Greece, and 62% in Spain), but can often not be realised due to a lack of jobs. For this reason, we find many involuntary single earner and no-breadwinner couples. In Slovenia, for example, more than 80% of male breadwinners (MB) would prefer a DB model and another 7% a MMB model, amounting to a 90% share of involuntary MB (80% in Hungary, 74% in Estonia, 71% in Greece, 66% in Spain). Moreover, there are sizable shares of no-breadwinner couples (Table 1), the majority of who would prefer dual-earner models (Table 2).
- (5) Ireland: Similar to the Southern and Central/Eastern Europe, Ireland has been strongly affected by the recession. This is reflected in high rates of no-breadwinner couples (23%, Table 1). However, in contrast to these countries, Ireland has a tradition of female part-time work, and a sizable share of Irish couples prefer the MMB model (33%). Yet, we observe an acute gap between preferences and behaviour: Whereas 72% of couples hold a preference for a dual-earner model (DB or MMB), only 38% of couples arrive at such a model.

Table 2: Actual and preferred couple employment arrangements, 2010-2012

			Preferred A	Arrangemen	ts			
	DB	MMB	MB	DPT	NB	FB	Total	N
Actual Arrangements								
Britain								
DB	62.1%	21.5%	2.9%	9.3%	0.8%	3.5%	100%	322
MMB	10.2%	65.4%	6.3%	13.0%	5.1%	0.0%	100%	193
MB	22.3%	38.3%	27.4%	5.6%	6.4%	0.0%	100%	162
NB	10.6%	18.9%	10.1%	29.8%	27.9%	2.9%	100%	95
FB	[50.5%]	[9.0%]	[6.3%]	[9.0%]	[13.5%]	[11.7%]	100%	49
Ireland								
DB	66.9%	19.7%	1.7%	5.7%	1.1%	4.9%	100%	227
MMB	18.7%	66.3%	2.9%	8.1%	4.0%	0.0%	100%	131
MB	27.7%	36.0%	21.2%	7.8%	6.6%	0.6%	100%	268
NB	35.6%	23.0%	8.2%	14.8%	15.8%	2.6%	100%	225
FB	58.4%	11.6%	0.0%	6.9%	7.5%	15.6%	100%	78
Germany								
DB	75.4%	15.7%	0.8%	4.8%	2.4%	1.0%	100%	480
MMB	17.6%	68.2%	4.2%	7.0%	3.1%	0.0%	100%	302
MB	25.6%	44.6%	20.0%	3.6%	6.2%	0.0%	100%	263
NB	29.5%	19.5%	6.8%	11.5%	28.7%	4.0%	100%	150
FB	54.3%	4.2%	0.0%	8.0%	8.4%	25.1%	100%	76
France								
DB	85.2%	7.3%	1.1%	1.2%	2.4%	2.1%	100%	340
MMB	43.0%	50.7%	2.5%	1.3%	2.6%	0.0%	100%	70
MB	49.6%	25.7%	15.5%	2.3%	6.1%	0.8%	100%	106
NB	48.4%	15.4%	6.2%	10.3%	16.6%	3.1%	100%	88
FB	61.1%	8.3%	0.0%	3.6%	8.2%	18.9%	100%	64
Belgium	01.170	0.570	0.070	3.070	0.270	10.5 / 0	10070	01
DB	79.0%	13.4%	1.2%	4.0%	0.9%	1.5%	100%	329
MMB	14.6%	<b>78.5%</b>	0.8%	5.4%	0.0%	0.8%	100%	130
MB	26.6%	41.1%	26.6%	2.4%	2.4%	0.8%	100%	124
NB	31.4%	28.8%	11.0%	14.4%	13.6%	0.9%	100%	118
FB	54.0%	8.0%	0.0%	14.0%	4.0%	20.0%	100%	50
Netherlands	34.070	0.070	0.070	14.070	4.070	20.0 /0	10070	30
DB	67.7%	20.9%	1.2%	4.6%	3.1%	2.5%	100%	224
MMB	6.2%	76.1%	2.9%	5.4%	9.1%	0.3%	100%	294
MB	12.2%	45.3%	28.8%	4.0%	9.1%	0.5%	100%	136
NB	6.8%	19.8%	14.1%	18.6%	40.7%	0.0%	100%	77
FB		[13.1%]					100%	44
	[23.3%]	[13.170]	[4.0%]	[11.1%]	[3.1%]	[41.4%]	100%	44
Switzerland	(O 50/	20.70/	2.00/	C 10/	1 00/	0.50/	1000/	202
DB	68.5%	20.7%	3.0%	6.4%	1.0%	0.5%	100%	203
MMB	6.1%	81.2%	4.1%	5.1%	3.6%	0.0%	100%	197
MB	16.8%	45.8%	29.0%	3.9%	3.2%	1.3%	100%	155
NB	[12.1%]	[42.4%]	[27.3%]	[0.0%]	[18.2%]	[0.0%]	100%	33
FB	[53.6%]	[7.1%]	[3.6%]	[14.3%]	[3.6%]	[17.9%]	100%	28
Sweden	02 =01	0.00:	0.50	1.00/	0.00:	1 40	1000	
DB	92.5%	3.3%	0.7%	1.9%	0.2%	1.4%	100%	427
MMB	44.3%	42.6%	1.6%	4.9%	3.3%	3.3%	100%	61
MB	76.1%	11.3%	5.6%	2.8%	4.2%	0.0%	100%	71
NB	[62.1%]	[6.9%]	[0.0%]	[17.2%]	[13.8%]	[0.0%]	100%	29
FB	[67.4%]	[2.3%]	[0.0%]	[4.7%]	[4.7%]	[20.9%]	100%	43

Table 2 (continued)

	,		Preferre	d Arrangeme	ents			
	DB	MMB	MB	DPT	NB	FB	Total	N
Actual Arrangements								
Denmark								
DB	82.9%	6.4%	0.4%	4.2%	3.3%	2.9%	100%	456
MMB	25.8%	62.9%	3.2%	4.8%	3.2%	0.0%	100%	62
MB	58.4%	19.1%	14.6%	3.4%	4.5%	0.0%	100%	89
NB	53.3%	10.0%	0.0%	5.0%	23.3%	8.3%	100%	60
FB	63.0%	1.9%	0.0%	3.7%	5.6%	25.9%	100%	54
Norway								
DB	92.7%	4.7%	0.2%	1.3%	0.0%	1.0%	100%	428
MMB	39.5%	54.3%	1.0%	2.4%	0.0%	2.7%	100%	123
MB	66.9%	23.3%	7.9%	1.0%	1.0%	0.0%	100%	97
NB	53.9%	16.4%	3.8%	12.6%	10.1%	3.3%	100%	61
FB	64.3%	4.0%	0.0%	2.2%	1.9%	27.7%	100%	53
Finland								
DB	93.5%	2.9%	0.5%	1.1%	1.1%	0.9%	100%	443
MMB	[43.9%]	[48.8%]	[0.0%]	[4.9%]	[2.4%]	[0.0%]	100%	41
MB	63.6%	12.6%	16.1%	5.6%	2.1%	0.0%	100%	143
NB	59.8%	4.6%	2.3%	12.6%	14.9%	5.8%	100%	87
FB	64.0%	2.3%	0.0%	7.9%	3.4%	22.5%	100%	89
Spain								
$\overline{DB}$	84.6%	5.8%	2.6%	5.0%	0.3%	1.7%	100%	315
MMB	42.5%	35.6%	6.0%	14.6%	0.0%	1.4%	100%	63
MB	42.3%	23.8%	28.2%	4.5%	0.4%	0.8%	100%	265
NB	50.2%	22.1%	13.2%	0.8%	12.7%	0.9%	100%	117
FB	70.7%	5.7%	4.2%	5.4%	1.5%	12.5%	100%	70
Greece								
DB	85.3%	2.3%	4.3%	0.6%	4.4%	3.3%	100%	280
MMB	[80.3%]	[12.8%]	[1.7%]	[3.4%]	[1.7%]	[0.0%]	100%	47
MB	62.8%	8.2%	18.3%	1.7%	8.1%	0.8%	100%	377
NB	56.2%	2.6%	24.4%	3.0%	10.2%	3.7%	100%	189
FB	77.3%	3.5%	2.0%	0.0%	3.5%	13.6%	100%	77
Hungary								
DB	85.4%	6.8%	2.0%	1.7%	2.8%	1.3%	100%	294
MMB	-	-	-	_	-	-	100%	18
MB	70.0%	10.4%	14.8%	0.7%	2.1%	2.1%	100%	142
NB	42.0%	3.6%	7.2%	7.3%	32.7%	7.2%	100%	110
FB	58.3%	3.1%	3.1%	6.1%	3.0%	26.3%	100%	65
Estonia				0.0,0	213,1			-
DB	75.5%	4.8%	3.0%	1.8%	12.5%	2.4%	100%	335
MMB	[58.3%]	[13.9%]	[2.8%]	[11.1%]	[13.9%]	[0.0%]	100%	36
MB	61.0%	13.2%	13.7%	2.8%	6.6%	2.8%	100%	182
NB	54.6%	10.9%	3.6%	12.7%	18.2%	0.0%	100%	55
FB	75.8%	3.2%	4.8%	1.6%	11.3%	3.2%	100%	62
Slovenia	. 5.0 / 0	2.270	070	2.070	11.570	/ V	20070	02
DB	90.2%	4.1%	1.4%	2.0%	1.0%	1.4%	100%	295
MMB	-	-		,	-		100%	16
MB	83.3%	6.7%	3.3%	4.4%	1.1%	1.1%	100%	90
NB	77.4%	1.2%	4.8%	7.1%	2.4%	7.1%	100%	84
FB	78.2%	1.8%	7.3%	1.8%	1.8%	9.1%	100%	55

*Notes*: Own analysis of the European Social Survey, Round 5; results are weighted. Dual part-timers (DPT) excluded as too low sample sizes in all countries. Values in parentheses to be interpreted with caution due to low sample sizes (below 50).

#### **Determinants of Couple Underemployment and Overemployment**

Comparing couples' actual and preferred employment pattern, we can classify couples into (1) those whose stated preferences match their behaviour, (2) underemployed couples, and (3) overemployed couples. The coding frame for this categorisation is shown in Table A1 in the appendix. The share of couples whose employment pattern matches their preferences amounts to about 52%, while about 34% of couples are underemployed and 11% are overemployed. About 2% of couples are excluded from the analyses because they cannot clearly be defined as under- or overemployed (e.g., those practising a female breadwinner model who would prefer a male breadwinner model or vice versa).

In the aim to identify the determinants of the degree of mismatch or match between couples' actual and preferred employment, we run multinomial logistic regression analyses using the 3-category indicator of preference-behaviour match just described as the dependent variable. The following predictors enter the model: the age and education of the male and female partner, the level of education of both partners (low, medium, high)<sup>5</sup>, residence in rural or urban settings<sup>6</sup>, and the country of residence. A further predictor pertains to couples' stage in an ideal-typical *family life-cycle* that differentiates between a) childless couples, b) couples whose youngest child is below age 6, c) whose youngest child is aged 6-11, d) whose youngest child is aged 12<18, or e) whose youngest child has reached age 18 (for a similar approach, see Steiber et al. 2015). The subjective evaluation of the ease or difficulty with which couples live on their present household income (living comfortably, coping, finding it difficult, or finding it very difficult) is also added as a predictor. Finally, we control for whether the information about the couple's preferred and actual employment has been given by the male or the female part of the couple. The results are reported as marginal effects (see Table 3).

The results suggest that higher levels of education are associated with a lower likelihood of couple underemployment and a higher likelihood of being able to put preferences into practice. Both the woman's and the man's education work in similar ways in this regard, with somewhat stronger effects of the woman's education, however. Moreover, the woman's education shows a positive correlation with the risk of overemployment. The age of the partners in the couple has no significant effect. The estimated effects of the family life-cycle suggest that the risk of underemployment is lower among couples with children aged 6+ compared to childless couples. Couples with children aged 12 and above face a significantly increased risk of overemployment. A supplementary model with an alternative specification including the number of children aged below 18 years as a predictor instead of the family life-cycle (not shown, available upon request) suggests that couples' risk of underemployment decreases when they have more than one child while the risk of overemployment increases. Finally, in support of the contention that underemployment is related to the difficulty of finding paid work, we further more find the risk of underemployment to be associated with less favourable

<sup>&</sup>lt;sup>5</sup> Low education includes less than primary, primary, and lower secondary education (attainment below the general ISCED 3 level). Medium education is defined as upper secondary education (ISCED 3), and high education is defined as post-secondary or tertiary education (ISCED 4-6).

<sup>&</sup>lt;sup>6</sup> The variable distinguishes couples living 1) in a country village, a farm or home in the countryside, 2) in a town or a small city, and 3) in a big city or the outskirts/suburbs of a big city.

evaluations of the household income. Those who report finding it difficult to live on their present income show a reduced probability of being able to realise their employment preferences and to be overemployed, while they are significantly more likely to be underemployment than those reported being able to live comfortably on their present income.

Table 3: Multinomial logistic regression analysis: couple underemployment and overemployment

	Match		Under		Over	
	ME	SE	ME	SE	ME	SE
Female respondent	-0.032***	(0.009)	0.035***	(0.008)	-0.003	(0.006)
Age of the woman	0.001	(0.001)	-0.001	(0.001)	0.000	(0.001)
Age of the man	-0.001	(0.001)	0.001	(0.001)	0.001	(0.001)
Education of the woman (ref: low)						
Medium	0.055***	(0.014)	-0.073***	(0.013)	0.019*	(0.008)
High	0.114***	(0.014)	-0.152***	(0.014)	0.038***	(0.009)
Education of the man (ref: low)						
Medium	0.042**	(0.014)	-0.043***	(0.013)	0.001	(0.009)
High	0.043**	(0.014)	-0.047***	(0.013)	0.004	(0.009)
Family life-cycle (ref: no child)						
Youngest child age<6	-0.030*	(0.013)	0.019	(0.012)	0.011	(0.008)
Youngest child 6<12	0.063***	(0.014)	-0.078***	(0.013)	0.015	(0.009)
Youngest child 12<18	0.066***	(0.014)	-0.104***	(0.013)	0.038***	(0.010)
Youngest child aged 18+	0.024	(0.014)	-0.056***	(0.013)	0.032**	(0.010)
Residence urban/rural (ref: rural)						
Small town	0.000	(0.012)	0.005	(0.011)	-0.005	(0.008)
Big city	0.019	(0.011)	-0.018	(0.010)	-0.001	(0.007)
Household income (ref: living comfortably)						
Coping	-0.106***	(0.011)	0.133***	(0.010)	-0.027***	(0.007)
Difficult	-0.265***	(0.015)	0.324***	(0.015)	-0.059***	(0.009)
Very difficult	-0.404***	(0.021)	0.480***	(0.022)	-0.076***	(0.013)

Sample: 12,098 cohabiting couples in 16 European countries. Method: Shown are marginal effects (ME) derived from a multinomial logistic regression analysis. Country fixed effects are included in the model but coefficients omitted from the output. Standard errors (SE) in parentheses. \*\*\* p<0.001, \*\* p<0.01, \* p<0.05.

#### Comparison of the 1998 with the 2010/12 Data

Comparing couples' actual and preferred employment patterns in 1998 (Table 4) with those in 2010/12 (Table 1) using similar samples and the same definitions of the different employment arrangements (the comparison is restricted to 11 countries for which data from two time points are available), it can be seen that the shares of couples in nobreadwinner models have substantially increased, especially in the countries that have been strongly affected by the economic crisis such as Ireland (increase from 9% to 23%) and Greece (from 13% to 20%). Also in other countries (Britain, Germany, France, Belgium, Finland, Spain, Hungary, Slovenia) the share of no-breadwinner couples amounted to 10% or more in 2010/12. Conversely, the share of DB models decreased by 10%-points in Ireland and by more than 5%-points in Britain, Belgium, Greece, and Finland. The prevalence of couples with part-time working women (MMB) remained fairly stable in most countries.

In 2010/12, in 13 out of 16 countries the share of couples preferring a DB arrangement was larger than the share of couples practising it. The largest preference gaps (more than 15%-points difference between shares of actual and preferred DB models) can be found in Southern Europe (Spain, Greece), the Nordic countries (Finland, Sweden, Norway) and in Central/Eastern Europe (Estonia, Slovenia, and Hungary). Whereas in 2010/12 in the majority of countries more couples prefer DB models than practise it (couple underemployment), in 1998 this has only been the case in five countries and in particular in Greece, where the gap between preferred and actual DB amounted to 33%-points (and between 11 and 15%-points in Germany, France, Sweden, and Finland).

Combining shares of DB and MMB models, it can be concluded that in 2010/12, the share of couples preferring a dual-earner model was higher than the actual share of couples with two earners in all countries – especially in Greece (42%-points difference), Ireland (34%), Spain (33%), Slovenia (32%), Hungary (29%), Finland (26%), France (23%), Estonia (22%), Norway (21%), and Belgium (20%). In 1998, the difference between shares of couples preferring and living dual-earner models has been larger than 20%-points in Greece (37%), France (23%), Ireland (22%), and Germany (22%).

Table 4: Actual and preferred household employment patterns, 1998

	DB	MMB	MB	DPT	NB	FB	Total	N
Britain								
Actual	46.5%	24.5%	17.8%	1.4%	6.4%	3.5%	100%	955
Preferred	41.1%	33.8%	11.9%	7.2%	4.2%	1.7%	100%	955
Ireland								
Actual	33.2%	18.3%	34.5%	0.9%	9.4%	3.7%	100%	666
Preferred	32.8%	40.2%	13.6%	7.7%	2.9%	2.8%	100%	666
Germany								
Actual	33.7%	22.0%	27.4%	0.9%	8.9%	7.1%	100%	1265
Preferred	46.3%	31.8%	10.7%	5.7%	3.5%	2.0%	100%	1265
France								
Actual	46.5%	13.6%	26.6%	1.5%	5.9%	5.8%	100%	1069
Preferred	61.3%	21.6%	5.7%	6.4%	2.5%	2.5%	100%	1069
Belgium								
Actual	52.3%	19.4%	18.5%	1.2%	3.5%	5.1%	100%	511
Preferred	50.4%	31.2%	6.4%	5.5%	2.7%	3.8%	100%	511
Netherlands								
Actual	26.2%	38.3%	27.0%	2.0%	3.7%	2.8%	100%	587
Preferred	24.9%	53.3%	9.2%	9.3%	1.8%	1.5%	100%	587
Sweden								
Actual	60.5%	11.0%	15.6%	1.0%	6.2%	5.7%	100%	545
Preferred	72.8%	16.3%	1.6%	6.3%	1.5%	1.5%	100%	545
Denmark								
Actual	68.0%	8.8%	10.1%	0.4%	6.4%	6.3%	100%	748
Preferred	63.2%	18.0%	1.5%	11.0%	3.3%	3.1%	100%	748
Norway								
Actual	52.7%	23.0%	12.7%	0.3%	5.3%	6.0%	100%	731
Preferred	56.1%	30.1%	1.8%	8.6%	1.3%	2.0%	100%	731
Finland								
Actual	61.3%	6.6%	15.8%	0.0%	4.8%	11.5%	100%	625
Preferred	72.3%	11.2%	2.5%	8.0%	1.9%	4.2%	100%	625
Greece								
Actual	35.1%	6.8%	35.1%	2.1%	13.0%	7.8%	100%	572
Preferred	68.5%	10.7%	10.5%	4.2%	3.8%	2.3%	100%	572

*Notes*: Own analysis of the Employment Options of the Future Survey (1998). Results are weighted. The sample involves cohabiting couples, respondents aged 20-64. A 30-hour threshold is used to distinguish between full-time and part-time employment. Among the 16 countries covered in the survey, only those with less than 15% missing values were included. Data from 4 countries involve less than 10% of missing values: Belgium, Sweden, Denmark, and Norway. Spain is excluded because of very high levels of missing values.

#### **Discussion and Conclusions**

Both in 1998 as well as in 2010/12 we find large shares of underemployed couples who would have preferred to move from a single breadwinner model to a dual-earner model. In some countries the preferred model involved a full-time working woman (e.g., in the Nordic countries, Southern Europe, Central/Eastern Europe), while in others a substantial share of couples preferred the woman to work part-time (e.g., more than 30% in Great Britain, Ireland, Germany, Belgium, the Netherlands, and Switzerland). In prior work, the phenomenon of underemployed couples has mainly been explained with reference to insufficient childcare facilities that do not allow parents to work as many hours as they

would prefer (e.g., Tsang et al. 2014). The present study suggests, however, that couples' risk of underemployment decreases when they have dependent children aged 6 and above; also parents of children below age 6 are not found to face increased risks of either over- or underemployment.

Moreover, in prior studies it has been widely overlooked that in some countries a lack of jobs is key to explaining the phenomenon of wide-spread couple underemployment. The high prevalence of male breadwinner models in some of the more gender traditional societies of Western Europe (where this may be due to traditional gender attitudes and family policy) but also in Central/Eastern Europe — despite the former socialist countries' tradition of female employment integration — has already been shown based on 2001 data (Haas et al. 2006): in the latter countries many women are not employed despite economic conditions (e.g. low wage levels) that created the financial necessity for two full-time earners in a couple. Yet, high rates of unemployment were argued to be an important reason for why high rates of (allegedly *involuntary*) single breadwinner and no-earner arrangements were observed (ibid: 760). The findings presented in the present study confirm that in countries where unemployment rates are high, actual and preferred patterns of employment integration do often not overlap, leaving couples with less employment than preferred. In large parts of Europe, an acute lack of jobs (in addition to persistent barriers to the employment integration of parents such as insufficient childcare infrastructures) has led to a great deal of mismatch between the hours that couples would prefer to work and the jobs that they are able to obtain. The phenomenon of couple underemployment has spread across most of Europe and it is of particular relevance in Southern and Central/Eastern Europe as well as in Ireland, where heavily restricted employment opportunities have resulted in the underemployment of women who would prefer to contribute to the household income but are unable to obtain jobs.

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#### **Appendix**

Table A1: Coding of couple underemployment and overemployment

	Preferred Arrangements								
	DB	MMB	MB	DPT	NB	FB			
Actual Arrangements									
DB	match	over	over	over	over	over			
MMB	under	match	over	over	over	a			
MB	under	under	match	a	over	a			
DPT	under	under	a	match	over	a			
NB	under	under	under	under	match	under			
FB	under	a	a	a	over	match			

Combinations of employment patterns with preferences marked with an 'a' are excluded from the sample (about 2% of the sample, see Table A2), because they cannot clearly be defined as under- or overemployed.

Table A2: Distribution of couple underemployment and overemployment by country

	Match	Under	Over	a	Total	N
						_
Britain	49%	27%	22%	3%	100%	838
Ireland	37%	47%	12%	4%	100%	950
Germany	53%	32%	14%	1%	100%	1,287
France	55%	33%	10%	2%	100%	672
Belgium	56%	31%	11%	2%	100%	757
Netherlands	60%	20%	18%	2%	100%	787
Switzerland	58%	25%	15%	2%	100%	623
Sweden	69%	23%	7%	1%	100%	636
Denmark	63%	24%	13%	1%	100%	729
Norway	64%	30%	5%	1%	100%	770
Finland	61%	32%	5%	2%	100%	810
Spain	46%	43%	8%	3%	100%	835
Greece	35%	56%	8%	1%	100%	980
Hungary	52%	38%	8%	2%	100%	630
Estonia	44%	37%	17%	2%	100%	672
Slovenia	52%	40%	6%	2%	100%	540
ALL	52%	34%	11%	2%	100%	12,516

*Notes*: Own analysis of the European Social Survey, Round 5. Results are weighted. For definition of underand overemployment see Table A1. a see notes below table A1.

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