Interplay between labor trajectory and family reproduction: the case of immigrants in Spain

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APPROACH

The aim of this paper is to analyze the interference between the labor trajectory of migrants and their family reproduction, in two ways:

• To analyze the effect of labor trajectory on family reproduction

• To analyze the effect of family reproduction on labor trajectory

Different studies have shown the interconnection between labor trajectory and family reproductive: labor participation is stated as a factor affecting family formation, and at the same time, the formation of the family affects the labor market participation of its members.

Our working hypothesis focus on the immigrant population and consider that depending on the family situation on arrival and labor background will prioritize labor trajectory or family reproduction. Furthermore, being an immigrant population with a predominance of the patriarchal family and in accordance with the literature we expect that men tend to prioritize their working career over the family, while for women the opposite is true, in general tend to sacrifice their working life in favor of family reproduction. Moreover, we define particular hypotheses about career path considering the marital status on arrival (single, married, separated / divorced) and the number of previous children. Similarly, we define different hypotheses about the reproductive trajectory according to the career path, taking into account the initial occupation in destination and working experience in origin. These paths are controlled primarily by the time of residence, as well as by different socio - demographic and socioeconomic characteristics upon arrival (age, sex, education, reason for migration, nationality, region / country of origin, ...).

For our analysis, we use multi-variable models (logistics and multinomial) with occupational mobility and number of children in Spain as a dependent variables. The data are from the National Immigration Survey 2007.

The preliminary results allow us to point to different behaviors by sex. In general, women seem to favor family over work, since most of them tend to leave work or not to work directly. But there are no significant differences in the upward or downward labor mobility between men and women. Furthermore, family status on arrival (number of children and marital status) plays a key role in the career path.

ANALYTICAL FRAMEWORK

The framework for this paper is articulated around the relationship between family and work in the case of the immigrant population, which leads to pose a double relationship. On the one hand, we emphasizes the close link between reproductive behavior and employment, particularly in women. On the other hand, we highlight the strong interconnection between labor migration and family formation processes.

Firstly, several studies in different societies have found that labor participation of women is a key factor in the reproductive behavior change. In general, there is a negative relationship between female labor participation and fertility level, noting for example the opportunity cost of having children (Becker, 1993) or greater economic independence of women from the perspective of the second demographic transition (Van de Kaa, 1987; Lesthaeghe, 1992). However, since the 1980s in European countries with the highest labor force participation rates of women also recorded the highest fertility rates (Engelhardt et al., 2004), considering a new relationship between fertility and well-being (Myrskylä, Kohler & Billari, 2009). These opposite relationships between labor participation and fertility led to consider to Engelhardt et al (2004) what causes what, i.e. what is the correlation between labor force participation and fertility? and even led them to consider the existence of spurious relationships caused by common antecedents of both variables. The results of their study indicate relationships in both directions. Similar results point Matysiak and Vignoli (2008) from an extensive review of the literature about the relationship between fertility and female labor force participation.

Secondly, other studies have shown how labor migration affects family formation process (Goldstein and Goldstein, 1983; Massey and Mullan, 1984; Carlson, 1985; Stephen and Bean, 1992; Carter, 2000; Cerruti and Massey, 2001; Toulemon and Mazuy, 2004; Andersson, 2004; Parrado and Flipen, 2005). The highest labor force participation of migrants takes place during the ages of family formation, generating different interference between each path. On one hand, it has been observed in different papers that labor migration affects the family reproduction process. Thus, many migrants delay or postpone the birth of their children due to labor migration (Alders, 2000; Cerruti and Massey, 2001; Parrado and Flipen, 2005), since they prioritize work over family formation. On the other hand, participation in the labor market depends on the migration profile, such as work experience or education among others (Long, 1974; Alwin, Braun and Scott, 1992; Liefbroer and Corijn, 1999). Thus, according to the migration profile they can prioritize family formation on work and vice versa, work over family.

Although the analysis of fertility and family reproduction and its implications and consequences, has focused almost exclusively on the study of women, having a child is usually a couple's decision (Beckman 1984; Corijn, Liefbroer, Gierveld and de Jong, 1996; Bauer and Kneip, 2012; Vignoli, Drefahl and De Santis, 2012; Jalovaara and Miettinen, 2013; Begall, 2013). Some of these studies highlight the close relationship between the status of men and women in the labor market with the decision of having a child (Vignoli, Drefahl and De Santis, 2012; Begall, 2013; Jalovaara and Miettinen, 2013). Moreover, considering that most of the migrations are the result of family strategies (Stark and Levhari, 1982; Stark, 1991; Taylor 1999), it is essential to take into account women and men to understand the interference between labor and reproductive trajectories.

METHODOLOGICAL STRATEGY

For this work we use the National Immigration Survey 2007 conducted by the Spanish National Institute of Statistics. We have included only migrants in reproductive age, with 16 years or more at the moment of arriving and less than 49 years in 2007, arrived all of them between 1990 and 2005. We built separately labor trajectory and reproductive trajectory of immigrants since arriving in Spain.

The *labor trajectory* has been defined taking into account his first job in Spain and his work at the time of the survey in 2007. Taking the ISEI index (International Socio-Economic Index), an indicator of labor mobility that considers the occupation level and salary, we built a proper indicator to measure labor mobility of immigrants in Spain. To do this, we have used the national classification of occupations (CNO, similar Spanish version to the International Standard Classification of Occupations, -ISCO -) that takes into account the level and sector of occupation, and wages of immigrants. Finally, we have defined five occupational categories: high, medium-industrial, medium-services, low-industrial, and low-services. In addition, we have considered unemployed, housewives and students. These categories have been defined the following trajectories:

- *Up*: recorded an improvement in their employment. A special case are the unemployed who have achieved employment
- *Non-change* in their employment
- *Down*: recorded a worsening of their employment
- *From employment to non-employment*
- *Unemployment*: never worked in Spain

Table 1. Descriptive data: Labor mobility in Spain by sex

	Total		**Men**		**Women**	
	N	%	N	%	N	%
Up	1.344	15,89	743	19,31	601	13,04
Non-change	4.629	54,74	2.399	62,36	2.230	48,37
Down	385	4,55	193	5,02	192	4,16
Employment to Unemployment	1.348	15,94	407	10,58	941	20,41
Unemployment	751	8,88	105	2,73	646	14,01
Total	8.457	100,00	3.847	100,00	4.610	100,00

The *reproductive trajectory* is defined from the fact of having children or not in Spain. Among women who have had children, we distinguish between those who have had a child and who have had two or more children.

• Childless: not have had children since coming to Spain

• With children: 1 and 2 or more children.

Table 2. Descriptive data: Number of children in Spain by sex

	Total		Men		Women	
	N	%	N	%	N	%
Childless	5.423	62,26	2.493	62,59	2.930	61,98
1 child	2.315	26,58	1.052	26,41	1.263	26,72
2 or more children	972	11,16	438	11,00	534	11,30
Total	8.710	100,00	3.983	100,00	4.727	100,00

The study of causality between family and reproductive trajectories would require the use of longitudinal models that allow ordering the sequence of events along the length of stay in Spain. This would allow us to see the effect of the birth of a child in the labor trajectory or the effect of a change in employment in family formation. However ENI 2007 survey only provides detailed information to reconstruct the reproductive history of each migrant, but not the history of labor mobility. In the latter case, we have only information from the first job on arrival and employment at the time of the survey. This is the reason why we can only use the cross-sectional models, although we propose the double causality between labor force participation and family formation. In both paths the time of residence in Spain is included as an explanatory variable. We also consider the socio-demographic and family characteristics of the migrant as explanatory variables.

PRELIMINARY RESULTS

Preliminary results allow us to observe significant relationships between labor and reproductive trajectories among the immigrant population .

- In the reproductive trajectory, this is the birth of a child after emigrating (table 3), the first thing to note is that certain career paths as stop working or never worked favor family reproduction at the destination. On the contrary, to have had an upward or downward mobility in Spain does not affect the probability of having a child. Second, to highlight the effect of family status on arrival in the reproductive trajectory , i.e. marital status and number of children significantly affects the probability of having a child. Finally, to note that the sex of migrant and emigration reason do not affect the probability of having a child after emigration, once the labor trajectory and family status are controlled.

- In the labor trajectory (table 4), the sex is not significant for up and down labor mobility, but on the contrary is very significant in the path that goes from employment to non-employment and in the case of women that have never worked in destination. Having a child after emigrating has a similar effect on labor mobility: it is not significant for those with upward or downward labor mobility, but is very significant among women who stop working or have never worked. Finally, among women who have never worked in destination, employment status before emigrating is a significant variable, and in particular study or household duties favor this path. Therefore there is a close relationship among being out or leave the labor market with being female, having children and not having worked before emigrating. But having or not having children is not associated with upward or downward labor mobility.

Table 3: Reproductive trajectory. Logistic regression models: to have a child in Spain.

		Model 1		Model 2		Model 3	
Sex	Women (men)	0.099		0.018		0.079	
Origin	EU15/developed economies						
	Eastern Europe	-0.075		-0.363	***	-0.412	***
	Latin America and Caribbean	0.278	**	0.243	**	0.242	*
	Africa	0.586	***	0.252	*	0.177	
	Asia and Oceania	0.502	**	0.239		0.248	
Year of arriving		-0.184	***	-0.161	***	-0.173	***
Age at arrival	16-24	0.012		0.127	*	0.207	**
	25-34						
	35 or more	-1.116	***	-1.135	***	-1.113	***
Education attainment	Primary or less	0.153	*	0.188	**	0.148	*
	Secondary						
	Tertiary and more	-0.113		-0.199	**	-0.137	
Spanish nationality at birth	Yes (Non)	-0.199		-0.141		-0.157	
Economic reasons	Yes (Non)	-0.142	*	-0.060		-0.040	
Family reason	Yes (Non)	0.278	***	0.049		0.081	
Children before arriving	Yes (Non)			-0.541	***	-0.576	***
Marital status at arrival	Single			-1.431	***	-1.398	***
	With partner: arrived before						
	With partner: arrived after			0.401	***	0.298	**
	With partner: at same time			0.167	*	0.172	*
	With partner: live apart			-0.652	***	-0.642	***
Labor trajectory in Spain	Up					0.032	
	No-change						
	Down					0.135	
	Employment to Unemployment					0.387	***
	Never worked					0.608	***
Occupation at origin	Upper occupations						
	Middling industrial					-0.029	
	Middling services					0.063	
	Lower industrial					0.067	
	Lower services					-0.154	
	Unemployed					-0.104	
	Study					-0.400	***
	Household duties					-0.002	
First occupation in Spain	Upper occupations						
	Middling industrial					0.319	*
	Middling services					0.022	
	Lower industrial					0.198	
	Lower services					-0.046	
	Cons	367.837	***	323.343	***	346.422	***
	N	8710		8710		8346	
	r2_p	0.12		0.19		0.20	
	legend:	* p<0.05;		** p<0.01;		*** p<0.001	

Table 4: Labor trajectory. Multinomial regression model: labor mobility in Spain

Refer. categ.: Non-change		Up		Down		Employment to Unemployment		Never Worked	
Sex	Women (men)	-0.094		-0.106		0.947	***	1.415	***
Origin	EU15/developed economies								
	Eastern Europe	0.659	***	0.229		0.356	**	-0.683	***
	Latin America and Caribbean	0.686	***	0.440	*	0.232		-0.582	***
	Africa	0.552	***	0.128		0.745	***	1.091	***
	Asia and Oceania	0.667	**	-0.147		-0.218		0.765	**
Year of arriving		-0.089	***	-0.082	***	-0.016		0.275	***
Age at arrival	16-24	0.180	*	0.103		0.169	*	0.229	
	25-34								
	35 or more	-0.245	*	-0.291		-0.123		0.283	*
Education attainment	Primary or less	-0.397	***	-0.301	*	0.012		0.315	
	Secondary								
	Tertiary and more	-0.048		-0.126		-0.292	**	-0.017	
Spanish nationality at birth	Yes (Non)	-0.059		0.152		0.042		-0.086	
Economic reasons	Yes (Non)	0.100		-0.126		-0.219	**	-1.287	***
Family reason	Yes (Non)	-0.111		0.247		0.145		0.474	***
Children before arriving	Yes (Non)	0.051		0.101		-0.097		-0.089	
Marital status at arrival	Single	-0.143		0.360	*	-0.078		-0.391	**
	With partner: arrived before								
	With partner: arrived after	-0.095		0.238		-0.048		0.220	
	With partner: at same time	-0.054		-0.144		-0.043		-0.107	
	With partner: live apart	-0.105		-0.038		-0.213		-0.936	***
Children in Spain	Yes (Non)	0.021		0.146		0.383	***	0.503	***
Occupation at origin	Upper occupations								
	Middling industrial	0.013		-0.376		-0.161		-0.460	
	Middling services	-0.002		-0.013		0.021		-0.014	
	Lower industrial	-0.214		-0.142		-0.074		-0.398	
	Lower services	-0.313		0.158		0.073		0.055	
	Unemployed	-0.073		-0.074		0.310	*	0.371	
	Study	-0.136		-0.169		0.133		0.664	***
	Household duties	-0.519	**	-0.161		-0.044		1.123	***
	Cons	176.060	***	161.144	***	30612311		-553.383	***
	N	8710		8710		8346		8346	
	r2_p	0.12		0.19		0.14		0.20	
		legend:		* p<0.05;		** p<0.01;		*** p<0.001	

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