

Demography and Immigration

Alicia Adsera
Woodrow Wilson School, Princeton University
adsera@princeton.edu

Memo prepared for the conference on “Europe and the Management of Globalization”,
Princeton University, February 23, 2007.

“By 2050 the number of Italians may have fallen from 57.5m in 2000 to around 45m; Spain's population may drop from 40m to 37m. Germany, which currently has a population of around 80m, could find itself with just 25m inhabitants by the end of this century...Deutsche Bank adds.. Even assuming (no doubt unrealistically high) annual immigration of 250,000, Germany's population would decline to about 50m by 2100.” Europe's Population Implosion
The Economist, Jul 17th 2003.

“...the median age in America in 2050 will be 36.2. In Europe it will be 52.7. ... At the moment, the median age is 35.5 in America and 37.7 in Europe. In other words, the difference in the median age is likely to rise from two to 17 years by 2050. (W. Frey, U of Michigan). *The Economist*, August 22nd, 2002

The current demographic transformation of the advanced world is arguably the most pressing issue faced by Europe. On the one hand, natural population growth has either stagnated or become negative. Average total fertility rate in OECD countries has fallen from 2.9 in 1960 to 2.0 in 1975 and then to 1.6 in the late 1990s (reaching 1.25 in Southern Europe). With the exception of the United States and Iceland, all advanced countries have now fertility rates below the replacement rate of 2.1. (Within this generalized fall, cross-national differences in fertility behavior have remained significant. By 2000, fertility rates ranged from 2.1 in the United States and over 1.8 in France and Norway to less than 1.3 in Greece, Italy and Spain.) On the other hand, Europe is starting to witness substantial immigration flows from the developing world. The most recent estimates put the population of (both legal and illegal) immigrants in several EU countries close to 10 percent of total population. Without these inflows the European welfare state may well become unsustainable. Yet immigration may

create its own social and political problems: more immigration may mean more social and economic heterogeneity (at least if labor markets and educational systems do not function properly). In this memo I offer some reflections on both questions. In part I, I show how and why fertility patterns have changed. In part II, I present some preliminary evidence on the integration of non-EU nationals in European labor markets.

I. A SHRINKING POPULATION?

Most standard accounts attribute the fall in fertility rates to a shift in personal preferences over the size of the family due to either changes in religious beliefs or growing female participation in the labor market. Yet, even though the ideal number of children for men and women 20- to 34-years old has declined, it is fairly similar across the European Union at around the replacement level of 2.1 (Eurobarometer 2001). Hence, the sources of cross-national variation in fertility behavior must lie somewhere else. As women have joined the labor force, fertility rates have adjusted as a function of the institutional structures that shape the job market and determine its long-run unemployment rate. Exploiting the considerable variation of fertility rates and employment conditions across industrial countries, the current demographic transition is ultimately associated with the constraints of the labor market where fertility decisions are taken.

The Puzzle: Labor Markets and Fertility

Starting in the 1960s the massive entry of women in the labor market was coupled with a fall in fertility rates. Female labor participation in OECD countries went up from 40 percent in 1960 to about two thirds today. Figure 1, which displays total fertility rates and female participation

rates for 23 OECD countries in 1975, shows that fertility was lower in countries where women had entered the job market ($R^2 = 0.18$). The sharp decrease in fertility rates could be explained as the logical outcome of competing demands for women's time and the rise in the opportunity cost of having children (William Butz and Michael Ward 1979, Gary Becker 1981).

However, as female labor participation kept growing that negative relationship reversed. By the late 1980s it became positive. Figure 2 reproduces fertility and participation rates in 1996 ($R^2 = 0.43$). Those countries with the lowest levels of participation, such as Greece, Italy or Spain, also showed the lowest fertility rates, around 1.2-1.3.

The change in the sign of the correlation between fertility and female participation coincides with a sharp rise in unemployment. Unemployment was less than 3 percent before 1975 and went up to about 10 percent in the 1990s. Long-term unemployment became particularly substantial. By 1990, around 50 percent of those unemployed in the European Union had been out of work for more than 12 months. The long-term unemployment rates ranged from around 10 percent in Nordic countries to over 60 percent in Southern Europe.

The increase in unemployment hit women particularly hard. In the European Union the average female unemployment rate rose from 2.5 percent in 1970 to 6.5 percent in 1980 and then to around 11 percent from the mid 1980s to the late 1990s. In countries with high female unemployment, the gender gap in both short-term and long-term unemployment rates was large for the young and for married women, especially those with young children (Ghazala Azmat et al. 2006). In Southern Europe, female unemployment rates climbed above 15 percent in Greece and Italy and above 20 percent in Spain by the mid 1990s, 7 to 12 points higher than their male counterparts. The rapid feminization of the labor force in countries with traditionally low female participation collided with rigid labor market institutions geared toward prime-aged

male workers and resulted both in relatively higher female unemployment rates and in lower fertility. Giuseppe Bertola et al. (2002) show that countries with high employment protection have lower unemployment rates of prime-aged individuals compared to younger workers and that union wage-setting institutions “lower the male unemployment rate relative to the female unemployment rate by 4.4 to 6.2 percentage points”(p.29). Strict regulation has also led to the expansion of temporary employment that hampers long-run family planning (see special issue of *Economic Journal*, June 2002). Figure 3 shows that, among OECD nations in 1996, the total fertility rate was lower the larger the gap between female and male unemployment rates.

A standard microeconomic model of fertility predicts that the associated fall in opportunity costs makes a temporary unemployment spell a good time for childbearing. Yet persistent unemployment, particularly hitting young workers and female workers of all ages, should have the opposite effect. Joblessness in this context carries a large lifetime income penalty. Its associated drop in human capital accumulation significantly increases the risk of future unemployment and leads to lower future wages and benefits. This negative income effect is particularly severe when the market exit happens early in a career. Since maternity demands may require a short (partial) withdrawal from the market, women would rather postpone childbearing until they accumulate sufficient human capital. In addition, long-term aggregate unemployment also endangers spousal earnings and trims down expected household income. This further reduces overall fertility.

In previous work, I have used the 1994-2000 waves of the European Community Household Panel Survey to reconstruct fertility histories of around 48,000 women in 13 European countries (Austria, Belgium, Finland, France, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the United Kingdom).

Relying on proportional hazard models, Table 1 presents the predicted proportion of women who would have different numbers of children in different settings.¹ In a country with no gender gap in unemployment and a moderate 20 percent long-term unemployment rate (under the 30 percent average), around 82 percent of women would have become mothers by age 35. By contrast, in countries with a 10-point difference between female and male unemployment rates and a 60 percent long-term unemployment rate, only slightly over two-thirds of women would have had a child by age 35. Similar differences persist into the transition to a second child. The negative effect of persistent female unemployment is particularly large in the case of the third birth. Eight years after the birth of her second child only one in four women will have had a third child in countries with hysteretic unemployment and a large gender unemployment gap. Once they become mothers, women are likely to plan for a two-child family but, under harsh economic conditions, very few venture into larger families.

The predicted proportions of women with one, two and three children in each column of Table 1 combine to calculate a raw estimate of the total number of children for an average woman facing different labor market conditions. Where male and female unemployment rates

¹ The sample is limited to women 40 years old or younger at the time of each interview. Older women would be more likely to have children living outside the household who would not be counted by the survey. Transitions to the first three births are estimated with a Cox proportional hazard model. The dependent variable is months to a birth from either the previous birth or, for the first birth, from age 16. While synthetic indices such as total fertility rates can be subject to temporary over- or under-estimate if there are sudden shifts in the timing of births, the analysis of the transition to each birth produces a more accurate account of the underlying changes in behavior. I use two measures of job uncertainty for female workers, the difference between a country's female and male unemployment rates and the percentage of all unemployed that have been out of work over 12 months. I control for birthplace, education, mother's age at first birth, and gender of previous children. Additional controls of country conditions include prevalence of self-employment, the share of public sector employment, GDP per capita (in PPP 1995), an index of maternity benefits and time dummies. Data on the structure of the labor market was obtained from the OECD *Labour Force Statistics* and that on maternity benefits from *Social Security Programs Throughout the World* (US Department of Health and Human Services). The sample starts in 1980. Time-varying economic conditions are lagged one year. Results are robust to the inclusion of country dummies.

are similar and joblessness is short-lived, fertility rates are around 1.81 - or close to the current rates of the Nordic countries and Ireland. However, when unemployment rates are particularly high for women and unemployment is highly persistent, the estimated fertility is only around 1.28 - similar to that prevalent in Southern Europe. These simulations closely match the high and low ends of the distribution of fertility rates within Europe and their underlying labor market conditions.

Inadequate Labor Market Institutions

Table 2 shows the (simulated) effects of the employment protection legislation index (EPL) on fertility rates. The simulated number of children for a country with very flexible legislation (EPL= 0.5) and small share of government employment (15 percent) is around 1.72 –closely matching the UK in 1995. In those with a moderate EPL of 2.3 but an extensive public sector (30 percent), predicted fertility is 1.71 –similar to Sweden in 1995. In countries with tight labor markets (EPL= 4.1) and scarce government jobs it falls to 1.36 –close to Southern Europe in the mid 1990s.

The positive correlation between fertility rates and female participation shown in Figure 2 is a result of the way labor market institutions jointly affect childbearing and participation decisions (Adsera 2004). A low gender gap in unemployment and certain contractual arrangements create a favorable environment for combining family and work. Among those arrangements, an abundance of government jobs (tenured positions in Europe) provides strong incentives for women to transit on average faster to motherhood while remaining employed (Sherwin Rosen 1996). Also, flexible labor legislation and widespread part-time employment facilitate the dual role of mother-worker (Adsera 2003)

Not surprisingly, fertility behavior has changed most dramatically in nations with low (but rapidly growing) female participation where joblessness has been more prevalent and persistent –particularly among women. Strict regulations that favor traditional full-time male employment in these countries, notably in Southern Europe, hinder part-time employment availability (OECD 1995). As women continue to enter the labor force, labor market institutions need to be adapted to these new workers to minimize the trade-offs connected with childbearing to encourage fertility.

II – IMMIGRATION

As its population has aged, Europe has received large inflows of migrants from outside Europe and from Eastern Europe (from countries now in the European Union) during the last couple of decades. Immigration has become a central socioeconomic and public policy issue in the European Union. Understanding how well immigrants adapt across Europe and whether labor market outcomes, such as earnings, occupation or unemployment among immigrants, differ cross-nationally is central to devise any policy recommendation on how to manage this sometimes forgotten face of globalization – the mobility of the labor factor. In ongoing work (Adsera & Chiswick 2007), I have considered the following questions:

- How well immigrants adapt to diverse labor markets?
- To what extent is any systematic variation in the labor market performance of immigrants related to gender, duration in the destination, schooling, age at immigration, country of origin, or country of destination?
- How important are the differences of the immigrant-native gap when other sources of income are included besides work income?

- How do the different welfare systems across Europe work to narrow the income distribution and how much immigrants benefit from those programs across European destinations?

Table 3 presents some preliminary analysis of the differences in work earnings of foreign born versus native workers in the 15 European Union countries during the 1994-2001 period.² The data is obtained again from the European Community Household Panel (ECHP). I estimate a simple OLS model with a few demographic controls. There are two dependent variables of interest

1. Natural log of individual net earnings from work (PPP terms) (wage and salary earnings, self-employment income).
2. Total net income includes net income from work (wage and salary earnings, self-employment income), non work private income (capital income, rental, private transfers) and social insurance receipts (unemployment benefits, old-age survivors, family, sickness, education, housing and social assistance allowances).

Both analyses are limited to working adults. Of course a more complete understanding of the situation of migrants should include non-working adults and total household income as well as data on non-working native adults (retirees, disabled...). Further work will also have to include hours, sectors of work and an analysis of selection into the market.

Table 3 presents two sets of results, for males and females, separately. Model A includes only one dichotomous variable for foreign birth and Model B distinguishes whether the foreign-born individual was born in another country in the European Union or outside the European Union. In the pooled sample, without country variables, the earnings of foreign-born

² After deleting cases with missing values for any of the explanatory variables, the sample consists of 547, 639 observations on individuals aged 18 and older– 231,457 women and 316,182 men. Most individuals appear repeatedly in different years because of the panel structure of the data. Thus, the standard errors are adjusted for this by clustering of observations.

men and women at the time of arrival are estimated to be around 40% and 36%, respectively, lower than those of natives. When foreigners are split among those born in the European Union and those born outside it, the EU-born men and women experience only 30% and 31% lower earnings at arrival with respect to natives, whereas men and women born outside the EU have around 45% and 39% lower earnings than natives, respectively. When destination country variables are included, foreign birth is associated with a slightly larger decrease in earnings, around 42% for both men and women. Interestingly, whereas the inclusion of destination country fixed-effects hardly changes the estimates for men and women born outside of the European Union, it implies much lower earnings associated with birth in another country within the European Union --38% for men and 42% for women lower than natives at arrival.

The second part of Table 3 presents the analysis of differences in net income for those same individuals as compared to natives. When foreigners are split among those born in the European Union and those born outside it, the EU-born men and women experience only 6.4% and 12% lower earnings at arrival with respect to natives, whereas men and women born outside the EU have around 16% and 13% lower earnings than natives, respectively. When country dummies are included, the differences with respect to natives are halved as compared to those in terms of work earnings. Among those born in other EU countries, the difference with respect to natives is of the order of 18% for men and 24% for women and among those born outside the EU, 21% for men and 22% for women.

Tables 4.1 and 4.2 present predicted differences in earnings and total net income of all foreign-born and of those born outside the EU as a percentage of the earnings of natives of the same gender in each of the 15 destination countries, for individuals with a given set of characteristics. These characteristics are 10 years of experience, a high school diploma,

married and with one child, and, for the foreign born evaluated at the time of arrival. Table 4.1 and 4.2 columns (1) and (4), for men and for women respectively, report the predicted percent difference in earnings between immigrants and natives. Columns (2) and (5) are the predicted percent differences in net income. The third and sixth columns include the percentage of the gap that is closed when transfers, taxes and other types of income besides work are considered. In Table 4.1 foreigners born in another EU country are compared to those of the country of destination. In Table 4.1 natives are compared to foreigners born outside the EU.

To sum up, the main preliminary findings of the analysis follow. Immigrant individual work earnings are 40% lower than natives at the time of arrival but the difference is only around 20% in net income. There is a great variation across country of destination: in Germany and Portugal immigrants are faring the best relative to natives; in Sweden, Denmark, Luxembourg or Spain the worst –particularly non-EU born.³ Among non-EU born, women do relatively better than men. Income differences are notably lower when total income is the dependent variable.

For total net income, the immigrant-native gap is not as large in Nordic countries as when only work earnings are considered but continues to be large in Southern European countries. This finding denotes important differences in the workings of the welfare state in both groups of countries. Figure 4 shows the simple relation between the share of the GDP devoted to cash benefits for families in each European Union country (as of 2001) and the reduction in the gap from work earnings to net income among female migrants born outside the EU. The simple correlation of both variables is 0.31. Similarly the following figure shows the

³ In absolute terms, migrants in Luxembourg, Germany, Netherlands and Austria have the highest earnings. After 19 years of migration, earnings of immigrants revert to mean earnings of natives, with higher earnings thereafter. By continent, Asian men followed by Latin-American and Eastern European are those with lower earnings. Latin-American and Eastern European women are at the bottom of the women's distribution.

relationship between the reduction in the gap for the same group of women and the size of the public sector (as an employer) in each country. Again the relation is positive and of similar size 0.31.

Conclusions

Europe's welfare state was (at least in part) conceived as a tool to manage and soften the inherent volatility of market economies – their growth and 'creative destruction' cycles as well as the impact of international shocks. As a vast literature has shown, its redistributive effects have been positive and impressive. The direct economic effects of generous welfare spending are still being debated (Alesina et al. 2006; Lindert 2004). In this memo I have insisted, instead, on the demographic challenges European GM institutions are facing. First, not all welfare state solutions have proved to be economy- and demography-neutral in their effects. Welfare states with flexible labor markets (via public provision or private job creation) have not eroded the incentives and/or ability of families to have children. As a result, their financial foundations are much more solid than the rest. Second, they seem to have important consequences on the level, quality and integration of immigrant populations: wage differentials and net disposable incomes of immigrants vis-à-vis native populations vary substantially depending on the former's country of destination. Migration inflows may have two additional effects that may be worth debating: first, they may affect wage dispersion (see Borjas 2003 for evidence on the USA); second, they may transform the societal basis upon which the European welfare state has been built over the last century.

References

Adsera, Alicia. "Where Are the Babies? Labor Market Conditions and Fertility in Europe."

Mimeo, Population Research Center, University of Chicago, 2003.

_____. "Changing Fertility Rates in Developed Countries. The Impact of Labor Market Institutions." *Journal of Population Economics*, February 2004, 17(1), pp. 17-43.

Adsera, Alicia and Barry R. Chiswick. 2007. "Are There Gender Differences in Immigrant Labor Market Outcomes across European Countries?," *Journal of Population Economics*, Special Issue - Ethnic and Racial Communities, forthcoming.

Azmat, Ghazala; Guell, Maia and Manning, Alan. "Gender gaps in unemployment rates in OECD countries." *Journal of Labor Economics* 24 (1), pp.1-37, 2006.

Becker, Gary S. *A Treatise on the Family*, Cambridge, Mass: Harvard University Press, 1981.

Bertola, Giuseppe; Blau, Francine D. and Kahn, Lawrence M., "Labor Market Institutions and Demographic Employment Patterns." National Bureau of Economic Research (Cambridge, MA), Working Paper No. 9043, July 2002.

Borjas, George. 2003. "The Labor Demand Curve is Downward Sloping: Reexamining the Impact of Immigration on the Labor Market," *Quarterly Journal of Economics*, November, pp. 1335-1374.

Butz William P. and Ward, Michael P. "The Emergence of Countercyclical U.S.Fertility." *American Economic Review*, June 1979, 69(3), pp.318-28.

OECD, *The OECD Jobs Study. Implementing the Strategy*. Paris: OECD, May 1995.

Rosen, Sherwin. "Public Employment and the Welfare State in Sweden." *Journal of Economic Literature*, June 1996, 34(2), pp. 729-40.

Table 1. Predicted proportion of women having experienced a birth according to the proportion of unemployed workers who have been out of work for more than one year and to the difference in female and male unemployment rates.

	<i>Fem.- Male Unemp. Rates =0</i>		<i>Fem.- Male Unemp. Rates=10</i>	
<i>Long-Term Unemployment Rate</i>	20	60	20	60
By age 35	0.819	0.770	0.744	0.691
By 8 years since first child	0.832	0.778	0.740	0.679
By 8 years since second child	0.460	0.352	0.331	0.248
Number of children	1.81	1.58	1.48	1.28

Notes: Simulations from Proportional Hazard Models of transitions to births that include the education, birthplace and fertility history of each individual, year dummies, as well as maternity benefits, log income per capita and shares of government employment and self-employment in each country. Sample size is 49.607 women in 15 European Union countries. All other covariates are set at the sample mean. The number of children is obtained by adding the predicted proportion of women at different parities in each column.

FIGURE 1. FEMALE ACTIVITY RATE AND TOTAL FERTILITY RATE IN OECD, 1975

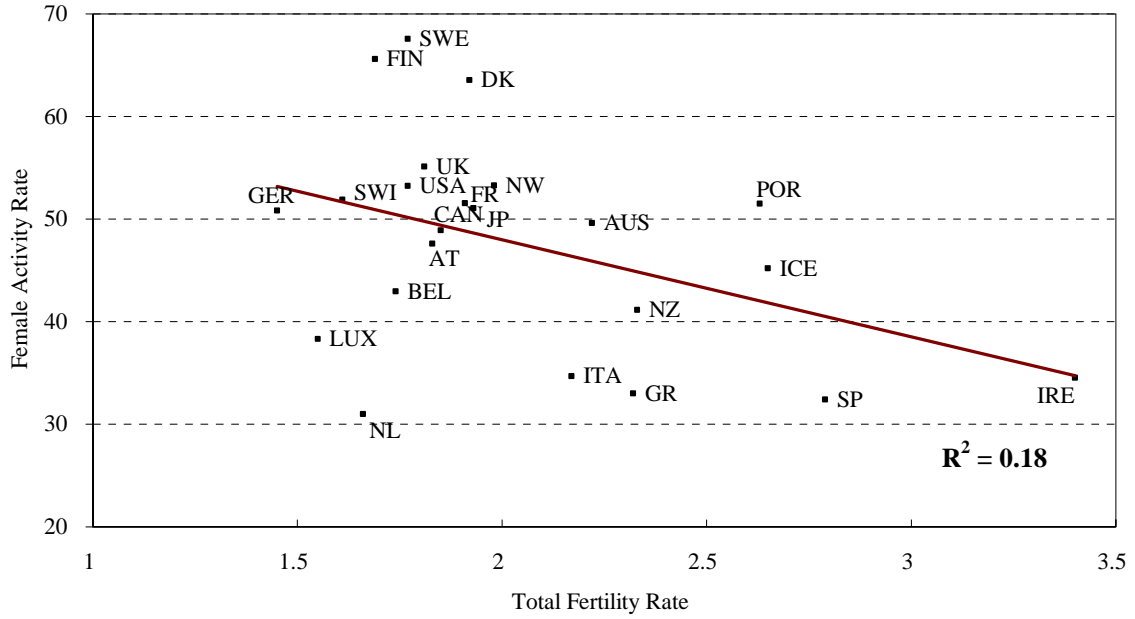


FIGURE 2. FEMALE ACTIVITY RATE AND TOTAL FERTILITY RATE IN OECD, 1996

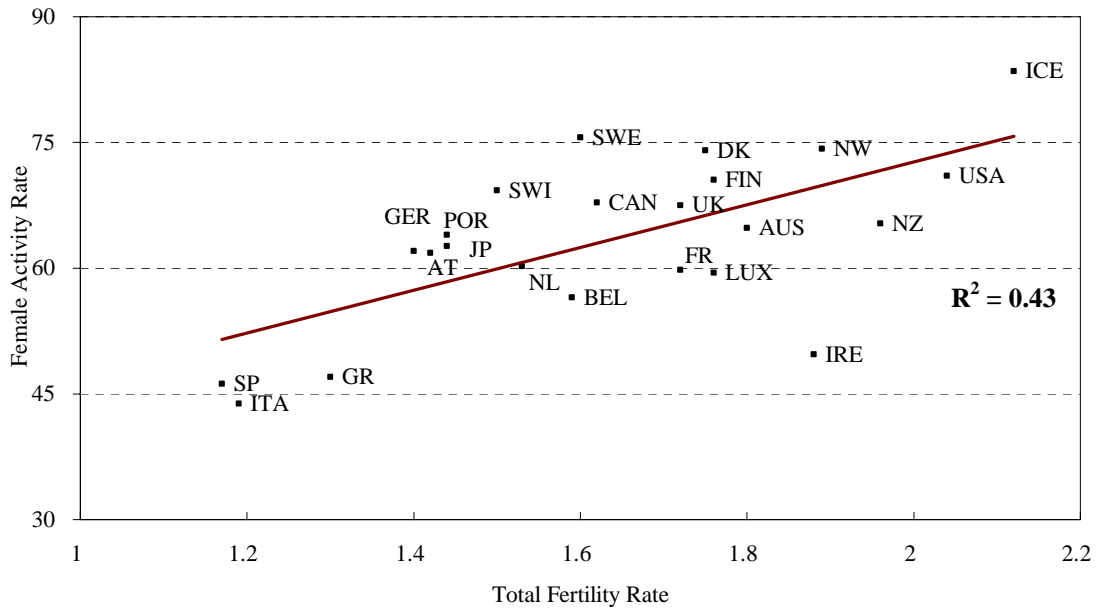


FIGURE 3. DIFFERENCE IN FEMALE AND MALE UNEMPLOYMENT RATES AND TOTAL FERTILITY RATE IN OECD, 1996

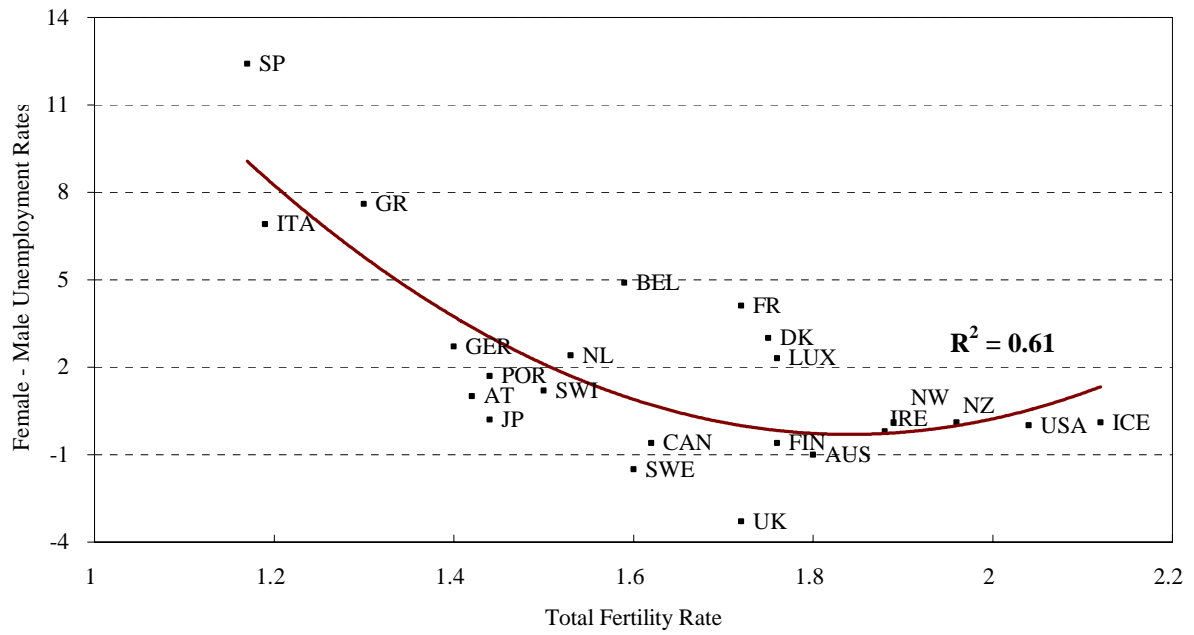


Table 2. Predicted Fertility rate according to strictness of Labor Regulation and Share of workers in the Public Sector.

	% Public Sector over Total Employment	
Labor Regulation	15%	30%
Flexible	1.73	1.88
Medium	1.54	1.71
Strict	1.36	1.54

Table 3 Partial effect of foreign birth, either in the EU or outside the EU, at arrival on work earnings (or net Income) compared to native as percentage of the earnings of natives, by gender.

	Men	Women	Men	Women
Work Earnings				
<i>Model A:</i>				
Foreign	-0.401** (0.042)	-0.362** (0.056)	-0.424 (0.040)**	-0.427** (0.053)
Adj. R-Sq	0.25	0.18	0.28	0.20
<i>Model B:</i>				
EU	-0.296** (0.046)	-0.311** (0.059)	-0.378 (0.044)**	-0.416** (0.057)
Non-EU	-0.450** (0.042)	-0.391** (0.056)	-0.445 (0.040)**	-0.432** (0.055)
Adj. R-Sq	0.25	0.18	0.28	0.20
Net Income:				
<i>Model A:</i>				
Foreign	-0.128** (0.030)	-0.128** (0.042)	-0.198** (0.028)	-0.229** (0.041)
Adj. R-Sq	0.28	0.20	0.34	0.23
<i>Model B:</i>				
EU	-0.064** (0.035)	-0.120** (0.047)	-0.178** (0.031)	-0.241** (0.044)
Non-EU	-0.158** (0.030)	-0.132** (0.042)	-0.206** (0.028)	-0.222** (0.041)
Adj. R-Sq	0.28	0.20	0.34	0.23
Destination fixed-effects	No	No	Yes	Yes
N. Obs	316,182	231,457	316,182	231,457

Note: Dependent variable: natural logarithm of work earnings or of net income (among working adults). Robust standard errors clustered by individual are below coefficients. Full regression equations include interview year dummy variables as well as individual characteristics. + significant at 10%; * significant at 5%; ** significant at 1% .Source: ECHP- Waves 1-7.

Table 4. 1 Partial Effect of Foreign birth in other EU country at arrival compared to Native as percentage of the earnings of natives in that country, by gender.

	MEN			WOMEN		
	Work Earnings	Net Income	% reduction	Work Earnings	Net Income	% reduction
EU-Born						
Germany	-0.081	0.029	135.8	0.038	0.024	-36.8
Denmark	-0.45	-0.173	61.6	-0.342	-0.282	17.5
Netherlands	-0.243	-0.129	46.9	-0.377	-0.161	57.3
Belgium	-0.167	-0.019	88.6	-0.337	-0.155	54.0
Luxembourg	-0.485	-0.3	38.1	-0.457	-0.321	29.8
France	-0.376	-0.181	51.9	-0.305	-0.224	26.6
U.K.	-0.083	-0.015	81.9	-0.16	-0.066	58.8
Ireland	-0.496	-0.194	60.9	-0.392	-0.192	51.0
Italy	-0.301	-0.062	79.4	-0.496	-0.376	24.2
Greece	-0.288	-0.132	54.2	-0.468	-0.333	28.8
Spain	-0.484	-0.266	45.0	-0.286	-0.084	70.6
Portugal	-0.142	-0.024	83.1	-0.272	-0.134	50.7
Austria	-0.27	-0.128	52.6	-0.414	-0.238	42.5
Finland	-0.599	-0.353	41.1	-0.607	-0.54	11.0
Sweden	-0.373	-0.2	46.4	-0.478	-0.213	55.4

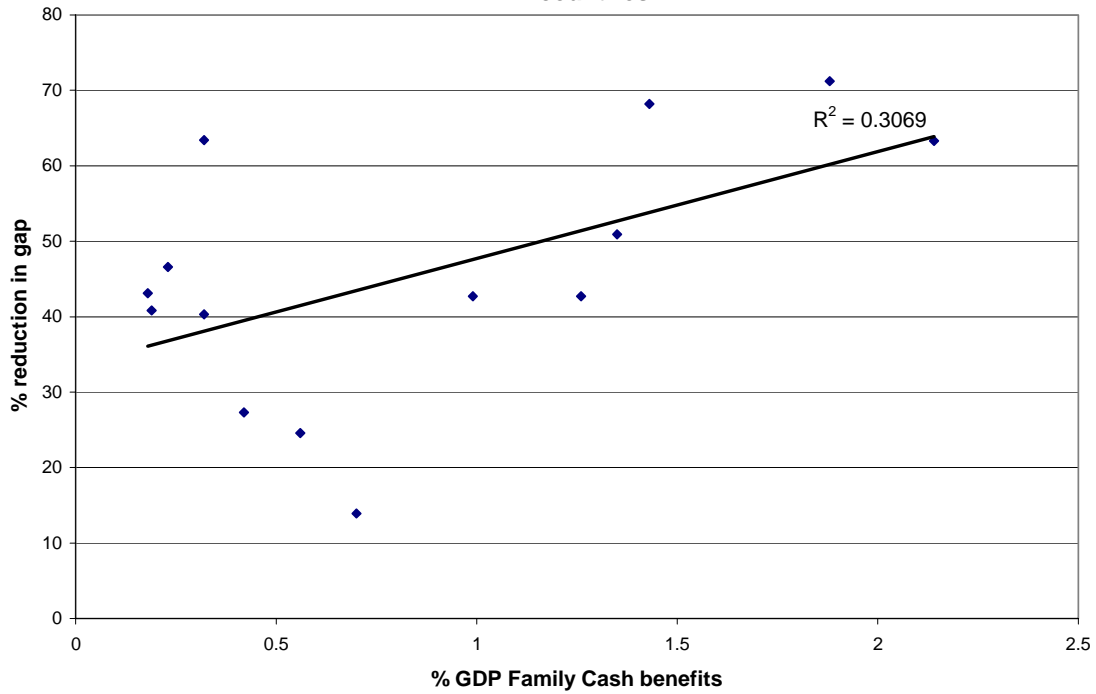
Note: Dependent variable: natural logarithm of work earnings or of net income. Sample includes only working individuals. Robust standard errors clustered by individual are below coefficients. Complete estimates also include interview year dummy variables as well as individual characteristics

Table 4.2 Partial Effect of Foreign birth in a non EU country at arrival compared to Native as percentage of the earnings of natives in that country, by gender.

	MEN			WOMEN		
	Work Earnings	Net Income	% reduction	Work Earnings	Net Income	% reduction
Non EU-Born						
Germany	-0.115	0.021	118.3	-0.059	-0.067	-13.6
Denmark	-0.562	-0.209	62.8	-0.439	-0.161	63.3
Netherlands	-0.513	0.067	113.1	-0.065	-0.037	43.1
Belgium	-0.425	-0.259	39.1	-0.386	-0.206	46.6
Luxembourg	-0.579	-0.436	24.7	-0.62	-0.451	27.3
France	-0.462	-0.235	49.1	-0.314	-0.18	42.7
U.K.	-0.462	-0.226	51.1	-0.326	-0.16	50.9
Ireland	-0.285	-0.046	83.9	-1.123	-0.643	42.7
Italy	-0.35	-0.198	43.4	-0.477	-0.285	40.3
Greece	-0.262	-0.152	42.0	-0.467	-0.402	13.9
Spain	-0.626	-0.425	32.1	-0.551	-0.326	40.8
Portugal	-0.173	0.031	117.9	-0.123	-0.045	63.4
Austria	-0.383	-0.21	45.2	-0.268	-0.202	24.6
Finland	-0.441	-0.149	66.2	-0.45	-0.143	68.2
Sweden	-0.808	-0.367	54.6	-0.692	-0.199	71.2

Note: Dependent variable: natural logarithm of work earnings or of net income. Sample includes only working individuals. Robust standard errors clustered by individual are below coefficients. Complete estimates also include interview year dummy variables as well as individual characteristics

FIGURE 4. % Reduction in gap from work earnings to net income among female migrants born outside de EU and % GDP in Family Cash Benefits across EU countries



Size of Public Sector and the reduction in gap among non-EU women

