



Comparative Analysis and Evaluation of the Effectiveness of Demographic Policies in EU Countries (2009-2010)



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Abstract

Purpose: This article contains a comparative analysis and evaluation of the effectiveness of population policies in European Union (EU) countries, using multivariate analysis.

Data and Methods: To study these differences, it is primarily necessary to have the relevant data. The most recent database available was developed by the OECD in 2007 and currently covers OECD countries and most EU Member States. We used multivariate analysis to categorize the indicators into the following groups: (a) economic indicators, (b) indicators reconciling work and family life, and (c) demographic indicators.

Results: The results of measuring the degree of coherence of factors reveal that the four most important factors influencing the effectiveness of population policy are (i) the average maternal age at first childbirth, (ii) social protection expenditure, (iii) GDP, and (iv) public spending for benefits. Based on the data from the evaluation of the correlation matrix of variables and data, the classification of countries, according to the values of the coefficients of analysis, appears as follows: the Nordic countries (together with France and the United Kingdom), the Southern European countries and the Northern countries: Estonia, Latvia, Lithuania (by a very slight margin Romania), and Bulgaria, Poland, Slovakia (and, marginally, Malta).

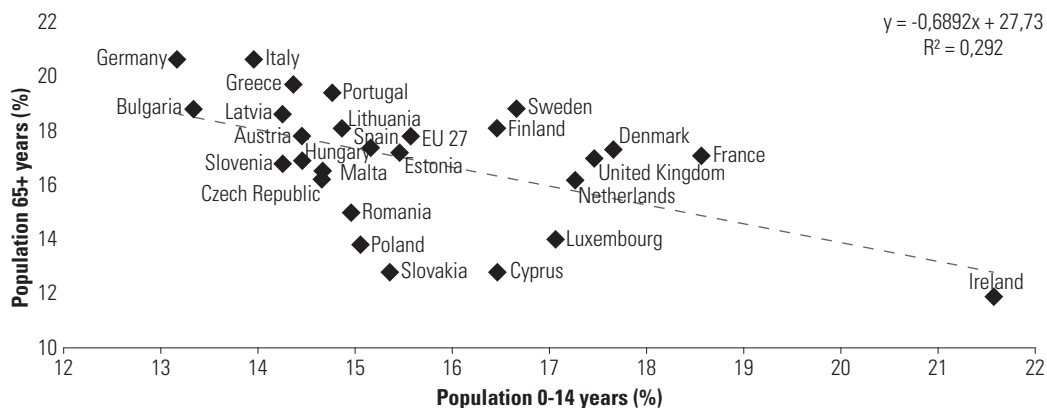
Conclusions: The key comparative findings from benchmarking best practices in the context of the European experience are the following: The EU is being demographically transformed as a direct result of an increase in average life expectancy and immigration and a decrease in fertility. Demographic factors are influenced by specific features, in contrast with economic factors which seem to be less stable.

Introduction

Over the last few decades, the European Union (EU)'s demographic structure has changed dramatically. Population growth has slowed considerably and aging has accelerated. Three major trends characterize this population pattern. First, as the baby-boom generation approaches retirement age, the share of older people is rising significantly; second, fertility rates have remained low – below replacement level for several decades; and thirdly, EU populations are experiencing greater longevity and healthier lives.

A continuous increase in the elderly population (usually those aged 65 years and over) and a simultaneous decrease in the young population (usually those aged 0–14 years) characterize the process of population aging. This has an impact on almost all European countries, but those most strongly affected are Germany, Italy, Greece, Portugal and some Eastern European countries, including Bulgaria (Figure 1).

Figure 1. Population 65 years and over and population 0–14 years, EU-27 Member States, 2012



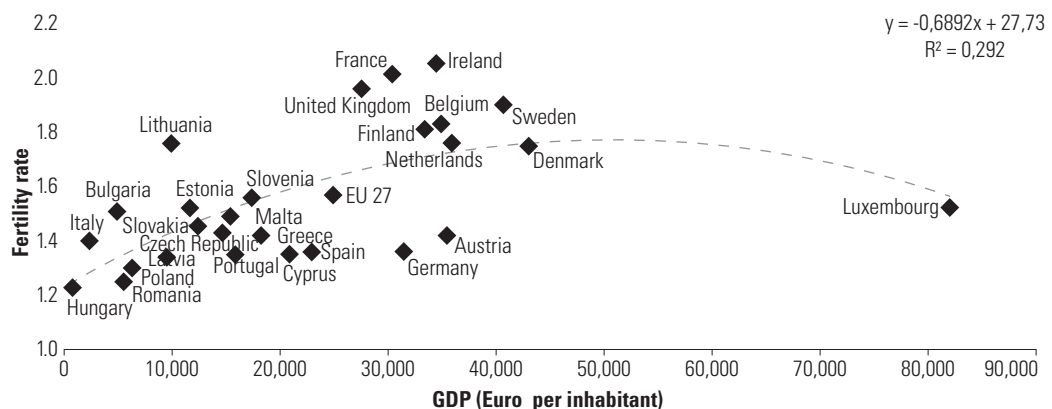
The fertility rate in EU countries has been declining since 1965 and was at its lowest at the beginning of the present century. Since then, there has been a slight increase; there are indications though that the fertility rate has begun to fall again during the current economic recession. It is estimated that in the following decades the fertility rate in the EU-27 will be no more than 1.6 per woman in the population and therefore well below the rate of 2.1 necessary to replace each generation (European Commission 2012).

As stated in a report from the Council of the European Union (2011: 3),

Lowest-low fertility – below 1.3 children per woman – has ended in all Member States and the most recent figure for EU-27 was 1.6 and could rise to over 1.7 if adjustments for the postponement of births (the so-called tempo effect) are taken into account. This small adjustment does not make up for the shortfall in relation to the replacement ratio of 2.1, but it could contribute to a slower rate of population decline in the medium/longer term, in conjunction with a possible further increase in fertility as EU Member States become wealthier. There are significant differences in fertility trends among Member States, and in 2009 the birth rate was still below 1.5 in 12 of them.

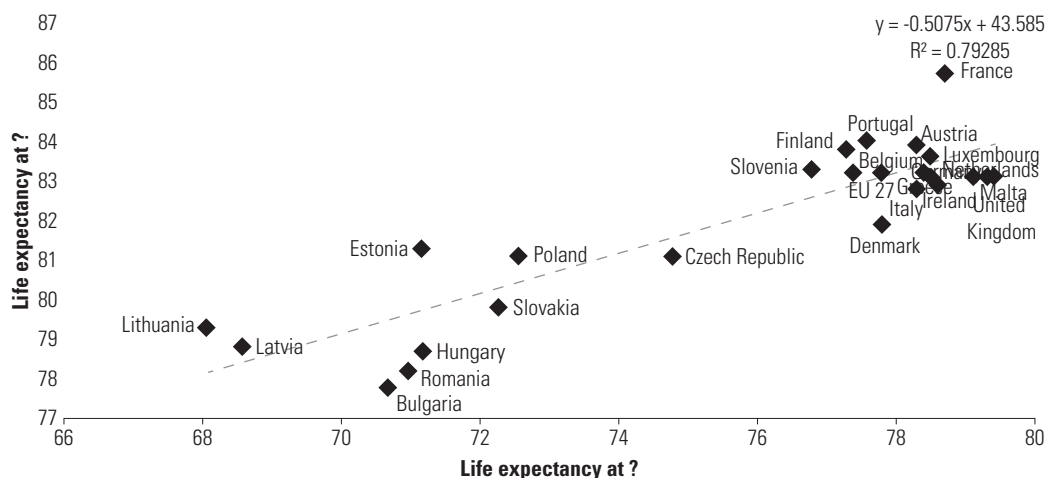
The demographic–economic paradox, that is, the inverse correlation between GDP per capita and fertility, is found in a number of EU countries. In Figure 2 we see that the higher the GDP per capita of a country, the fewer children are born. This is actually the case for Luxembourg, Germany and Austria. However, the relation is far from linear, as in other countries with similar GDP levels (Luxembourg is an outlier as far as GDP is concerned). Fertility is significantly higher in Sweden (1.90 children per woman), Finland (1.83 children per woman) and Belgium (1.81 children per woman). The modest change in fertility results from somewhat new family building patterns: countries with fewer marriages, more cohabitation, more divorces and an older average age of women at childbirth tend to have higher fertility rates. Fertility is just below replacement level in Ireland (2.05 children per woman), France (2.01 children per woman) and the United Kingdom (UK; 1.96 children per woman). Furthermore, almost all Eastern and Southern European countries have among the lowest fertility rates – also a paradox, as among them there are countries hardly affected by the financial crisis.

Figure 2. Fertility rate and Euros per inhabitant, EU-27 Member States, 2011



Life expectancy at birth in the EU-27 averaged 80.3 years in 2011, reaching 83.2 years for women and 77.4 years for men. Improvements in living standards and the establishment and improvement in health systems across Europe have led to a continuous increase in life expectancy at birth (see Figure 3).

Figure 3. Life expectancy at birth, EU-27 Member States, males and females, 2011



Significant differences in life expectancy at birth are nevertheless observed among EU Member States. European men on average enjoy the longest life span in Italy (80.1 years), Sweden (79.9 years), Spain (79.9 years), Netherlands (79.4 years) and the UK (79.1) (2011 data for the majority of countries). In Central Europe, life expectancy is lagging behind the EU-27 average by 4 to 12 years. A woman born in 2011 is expected to live between 77.8 years (Bulgaria) and 85.4 years (Spain), a range of 7.9 years. Some new EU Member States, however, in particular the Czech Republic, Slovakia and Slovenia, are clearly catching up. Since infant and child mortality have now reached very low levels, this essentially translates into a gain in life expectancy above the age of 50.

Migration is also a significant key driver of population growth in EU Member States. In recent years, the increase in the population of the EU-27 has mainly been due to high net migration rates (Table 1). As stated in the report from the Council of the European Union (2011), immigration is not only increasing the total population, but is also bringing in a much younger population. Countries with positive migration, that is, receiving countries, include those in Northern and Western, as well as, quite recently, Southern Europe (Spain, Portugal, Italy and Greece). Countries of Eastern and South-eastern Europe, as sending countries, have a negative migration balance.

Table 1. EU-27 Member States by contribution of natural change and net migration to population growth/decline, 2009

Growth, due to	
Only natural change	IE, PL
Mostly natural change	CY, ES, FR, NL, SK, UK
Mostly net migration	BE, CZ, DK, EL, LU, SI, FI, SE
Only net migration	IT, AT, PT
Decline, due to	
Only natural change	HU, EE
Mostly natural change	BG, DE, LV, RO
Mostly net migration	LT
Only net migration	MT

Source: European Commission, Eurostat 2011, p.60.

AT = Austria; BE = Belgium; BG = Bulgaria; CY = Cyprus; CZ = Czech Republic; DE = Germany; DK = Denmark; EE = Estonia; EL = Greece; ES = Spain; FI = Finland; FR = France; HU = Hungary; IE = Ireland; IT = Italy; LT = Lithuania; LU = Luxembourg; LV = Latvia; MT = Malta; NL = Netherlands, the; PL = Poland; PT = Portugal; RO = Romania; SE = Sweden; SI = Iceland; SK = Slovakia; UK = United Kingdom.

The impact of family policies on these trends is difficult to isolate and assess. The European Commission (2006) has identified five key policy areas where actions would be needed in order to meet the demographic challenge. These policy areas are (i) promoting demographic renewal in Europe through better support for families; (ii) promoting employment by, among other strategies, promoting active aging; (3) introducing reforms to increase productivity and economic performance; (4) attracting and integrating migrants in Europe; and (5) promoting sustainable public finances.

We restrict our analysis to family policies that may have an impact on fertility. The central questions examined in this paper are: To what extent can the differences in fertility levels among European countries be explained with existing family policies? Is there evidence that better policies can help parents cope with the constraints of a modern society? Are there significant differences between the Northern European countries and the so-called South European cluster?

The first part of the paper is devoted to a discussion of the theoretical determinants of family policy and fertility, in order to improve our understanding of the relationship between vital demographic trends and policy responses. The second part describes an evaluation framework for different policies and assesses the role of several national factors. Then, data from the OECD data base are used and factor analysis is applied for a comparative analysis between different countries in the EU context. The article concludes with a discussion of future avenues of research.

Theoretical Framework

Fertility and Childbearing

Fertility has been investigated since the first post-war decades, because of the contribution of economics and, later, of sociology and psychology (Becker 1988). In the context of the socio-economic approach, children are considered “capital goods,” expected to yield future benefits by supporting their parents either financially (in developing countries) or emotionally (in developed countries).

In that sense, children assume special importance and usefulness in the micro-socio-economic function of the household. The number of “children – capital goods” depends on a wide range of economic, social, psychological and cultural factors – variables affecting parents’ decisions regarding the desired and the actual family size. Parents’ decisions about the family size they desire and the one they can actually have further depend on the expected future benefit–utility they may derive, seeking the best possible balance between cost and quality of the “children – capital goods” (Robinson and Bianchi 1997).

Modern economic theory on the household is based on the premise that a family can be seen as a small financial entity that produces and consumes basic and durable goods. Based on the assumption that children constitute commodities, the cost of children refers to the input of resources required for their upbringing, while benefits relate to the outputs and outcomes arising from the children themselves at a later time during their development. In this sense, the benefits of children are more long-term than short-term.

Obtaining features that resemble those of “durable goods,” children are determined, in terms of number, by their “price” or cost in relation to the disposable income of the family. The cost is divided into two components: the direct cost (cost of education, healthcare, clothing, etc.) and the indirect or opportunity cost, which traditionally has burdened the spouse–mother (child care, upbringing and non-participation in the labour market). If the spouse–mother has high potential to earn a salary, higher “relative prices” or higher opportunity costs emerge, respectively, provided that social norms and social values are excluded from the analytical mechanism, as they remain unaltered for long periods of time. This cost “is saved” by the couple by designing a strategy that limits the number of children (Willis 1987).

In this context, it is argued (Earsterlin 1978) that parents postpone childbearing until convinced they can afford to assume their responsibilities and financial burdens. Since fertility is an irreversible fact, depending on the economic conditions (phases of the economic cycle) of the family, an

informal competition between fertility and “lost consumer” opportunities of childbearing seems to exist. Furthermore, it is stated (Oppenheimer 1988) that premarital cohabitation causes parents to delay their formal marriage as well as their decision to have children, until they feel more confident about their own career path.

Esping-Anderson states that due to the maturation of the welfare state, the current standard form of the nuclear family, which becomes institutionally and socially legitimate through marriage and marital fertility after undergoing a state of destabilization and crisis (“de-familization” is the term used) (Esping-Anderson 1999, Bambra 2007), enters into another state dominated by dispute and diversity. Countries in which the incentives and opportunities for women’s professional integration are numerous, that is, where the cost of “non-working” is high, confront an inevitable family crisis. If the services of the welfare state are inadequate, fertility is severely affected. Through Esping-Anderson’s approach, it becomes evident why in many Northern European countries fertility tends to stabilize, given that the importance of opportunity cost is being downgraded. In contrast, Southern European countries and Germany have reached a record in birth rate decline, since the opportunity cost is extremely high. In general, fertility seems to be chosen according to rational criteria and reflects diverse, flexible, multi-figured or single-figured families – households.

Basic Socio-economic Determinants of Fertility

A family must take into account the cost–benefit ratio of its members by focusing on minimizing the costs and maximizing the benefits in order to plan its range of family size and obtain the desired number of offspring. Therefore, the size of this micro-socio-economic unit depends on investing in the perceived quality of the offspring, disposable family income, the current price of the services required for the offsprings’ upbringing, and the maximization of benefit, which, either in the form of children’s future employment and income or in the form of parents’ and children’s psycho-emotional security and satisfaction, constitutes a key incentive of fertility.

This way, the family expects and strives to maximize its long-term benefits. The available economic resources seem at first to be one of the key elements taken into account when planning the size of the family, because their sufficiency allows the purchase of accompanying services and products for the qualitative development of children. Thus, the association of income and fertility is positive, while the increase in prices of goods and services has a negative impact. Certainly, the positive association of income and fertility is not always confirmed, as it has been noted that income growth per se does not necessarily lead to the increase of fertility.

Additional factors, such as parents’ education, as well as their social and cultural capital, seem to exert considerable influence over their decision about the size of family they wish to obtain (Macura et al. 2007). These factors may have a negative effect on fertility, because they increase the requirements for a better quality of life for children and family life (Van Groezen 2003). Better quality of life for children requires adequate resources, tangible and intangible (high income, high educational level, social perceptions of gender roles, satisfaction with management of working and leisure time and many other factors), which have been identified as leading to a negative association between income and fertility (Robinson 1997; Cigno et al. 2004). Presented below are some key indicative determinants, which, along with many others, compose and structure the multi-factorial and multi-dimensional scope of fertility.

Income

Fertility generally depends on the increase in family income (increase of women’s salary), which decreases when the cost of children’s upbringing rises. Nevertheless, the size of family may be positively or negatively correlated with income, particularly when their relation is examined in connection with the educational level of parents and especially with that of the mother.

Women’s Employment

Women’s employment constitutes a key determinant of childbearing. In developed countries, the correlation between fertility and women’s employment may be positive, on the condition that

income earnings and childcare services are available. However, recent studies show that the relation between fertility and female employment is not always distinct, especially when changes in fertility can be explained only by changes in women's salary (Andersson 2000; Kravdal and Rindfuss 2008).

Cost and Quality of Childcare

The cost of the child's upbringing and development depends on the number of offspring (family size) and the quality of child care (level of education and literacy, health, nutrition, clothing, leisure activities, entertainment, etc.). The association between cost of children and fertility is expected to be negative: high cost of children corresponds to reduced births. Family support through quality childcare services, benefits and welfare at work reduces the cost of children and may constitute a positive determinant of family size. Nevertheless, key determinants that can affect the cost of children either positively or negatively are the following: women's employment opportunities, the wage differential between men and women, the perception of women/men and the general population on gender roles, and women's concern for their work (professional career).

Opportunity Cost of Mother

The opportunity cost refers to the income that the mother (Gauthier 2007) is deprived of because she gives up her job or reduces her working hours to bring up her children (McDonald 2000). The opportunity cost of the mother is calculated on the basis of her salary, her working time and the time of absence from work. If the mother is unemployed, it is calculated according to her educational level, which is considered a parameter of her potential salary (Craig 2006). The ratio between the opportunity cost of the mother and the number of children is estimated to be negative: the larger the opportunity cost, the smaller the family size.

Maternal Age and Birth Interval

The age of mother at first childbirth has an impact on family size, which in addition depends on the value parents ascribe to children as "durable goods", the structure of the labour market and changes in the opportunity cost of the mother.

Furthermore, age at marriage and age of parents at first childbirth affect birth interval, since it has been noted that a large time gap between births is positively correlated with high educational level, high income, and mother's high-flying career.

Birth interval is also affected by women's employment, given that (a) short intervals between births facilitate the return to employment, and (b) large intervals between births favour work experience. Thus, the relationship between birth interval and women's employment can work in both directions, either positively or negatively.

Desired and Actual Number of Children

Family size also depends on the desired versus actual number of children a family is planning to have. The relationship between the desired and actual number of children is affected by factors such as income, maternal age, duration of marriage, number of existing children, housing conditions, and incentives from family policies (benefits, tax exemptions, working facilities, etc.) (Symeonidou et al. 2000).

Time Management

The distribution of human time is an important factor affecting fertility. The allocation of time between labour, housework and rest or leisure (free time), according to the theory of the allocation of human time, affects fertility and is directly linked to women's employment (Bratti 2003; Del Boca et al. 2005).

Social Roles of Men and Women

Attitudes and perceptions of social roles of men and women regarding the mother–wife–worker constitute a key factor positively or negatively affecting the size of the family. If these roles are understood and exercised on a basis of conflictual behaviour within a competitive ideological–cultural framework of values and principles between both parents, then they have a negative effect on fertility. In this case, family size is limited for the sake of career opportunities and the pursuit of a higher salary/income, resulting in female employment affecting fertility in a negative way.

On the other hand, if these roles are perceived by both parents on a basis of consensual behaviour (mutual acceptance of mother and father, working parents, spousal roles), female employment may have a positive effect on fertility due to the equal allocation of housework (e.g., child care), thus achieving a reconciliation and harmonization between professional and family life.

To sum up, relevant studies on fertility highlight the importance and special significance of certain determinants, such as the opportunity cost of mother, social roles of men and women, reconciliation and harmonization of family and professional life, and value ascribed by the working mother to her professional career.

Through women's employment, the aforementioned determinants may have a positive effect on fertility and hence on the size of the family (Symeonidou 2002).

Thus the main determinants affecting fertility are not only economic factors, such as family income, female employment, the cost of children and the alternative or occasional cost of mother, but also socio-cultural factors, such as the desired and actual number of children, mother's age, time management between professional and family life, and attitudes and perceptions of the social roles of men and women.

Fertility and Family Policy

Fertility policy is perceived as the framework of family protection policies, which are addressed to couples and single-parent families (Gauthier 2002). The implementation of these policies is achieved through a series of direct measures, such as benefits or allowances, tax discount, maternity benefits, in-kind benefits, parental leave, and child care benefits.

In some cases, family policy is also related to a wider range of accompanying measures that refer to employment, education, health, culture, immigration, media, leisure and so forth, and have an overall impact on family welfare (Sleeboos 2003).

However, the approach of the aforementioned broader framework of direct and indirect family policy measures is not always achieved. Studies indicate that the basic family policy is closely related to fertility and includes measures such as (i) parental absence (maternity protection, parental leave), (ii) child care services, and (iii) family benefits (Neyer 2003).

The first category comprises the institutional measures for the working mother, such as leave of absence from the workplace to meet basic needs of the children. The second category comprises measures related to the provision of crèche and child care services, which include reception and accommodation areas for preschool-age children. The third category refers to family benefits and aims at increasing the family income in order to reduce the cost of child care. The amount of family benefits usually depends on the number of children and the type of household. Tax relief and allowances related to the number of children, or certain other benefits provided for the improvement of the housing conditions of households and so forth, are also considered family benefits.

Evaluation of Different Policies

Methodological Framework

Family policies vary considerably from one country to another. Some countries have traditionally been designing and implementing policies to influence fertility, while some focus on protecting families and children. Other countries have only recently implemented family policies and therefore have a differentiated set of measures for child and family welfare. They also have different goals and different priorities, such as support of birth rate increase, support for work,

reconciliation with family life, decrease of income inequality, reduction of family and child poverty, child education, gender equality or development of child care services.

According to Lohmann et al. (2009), theoretical analysis of family policy programs for the most part supports the general division of countries into universalist (social democrat), residual (liberal economic) and social insurance (conservative) welfare regimes as originally formulated and further developed by Esping-Andersen (1997). These groupings often correspond to regional country clusters.

The first welfare regime is known for its universal state support for families, high commitment to gender equality in work and care, and strong support for working parents. The Nordic countries are examples of this. The social insurance regime is characterized by a medium level of support for families, mainly in the form of cash benefits related to working status. This regime tends to support a traditional male breadwinner model, where the man works full-time and the woman works occasionally and is mostly responsible for the domestic area. Countries belonging to this model include Germany, France and the Netherlands. In the residual welfare regime, there is low support for families, and policies are targeted mainly at vulnerable groups. In this regime, we find among other countries the UK. There may also be a fourth model comprising the Southern European countries (Greece, Italy, Portugal and Spain). This model is characterized by fragmentation along occupational lines, a low degree of state penetration of the welfare sphere and a highly collusive mix between public and non-public actors and institutions.

To study whether there are significant differences concerning family policies aimed at affecting fertility among EU countries, we used relevant data developed by the OECD. This dataset currently covers all OECD countries. It is a relatively new database; the first indicators went online in December 2006. It contains socio-demographic contextual data as well as indicators on support programs, allowing comparisons of different configurations of family policies, their context and their outcomes (Thévenon 2008).

More precisely, the aim of the database is to provide cross-national data regarding the situation of families and children. The OECD family database has four broad categories: (i) indicators on the structure of families, (ii) indicators on family formation (e.g., fertility trends), (iii) the “labour market situation of families,” for example, how the presence of children in households may affect the parental labour market, and (iv) measures that exist to support families and children.

The methodology for OECD family data collection, which builds on past and ongoing OECD work, is based on specifically developed questionnaires taken from different OECD sources. The OECD family database is not linked to any specific point in time, thus updating it is an ongoing process (Adema et al. 2009).

In particular, the available indicators make it possible to compare policies on parental leave, child care and education facilities, and financial support. This information is supplemented by data on the structure of families, fertility indicators and the impact of having children on employment and on child welfare. Family policies can thus be compared in relation to the context in which they are implemented (Thévenon 2008).

Factor Analysis

The technique of factor analysis is based on the interrelationship of variables. Different methods are used to extract the factors. One of the best known and most established methods is the analysis of key factors or, stated differently, analysis of common factors. The inputs in a factor analysis are the coefficients of correlation between the selected variables. We usually choose different models to reach the appropriate number of factors for the final system. A factor analysis of the OECD data makes it possible to identify the main similarities and differences in family policies among European countries (Thévenon 2008). The variables included in the analysis are all described in Table 2.

Table 2. Selected indicators for the comparison of family policies

(a) Economic indicators	(a) Social protection expenditure (% GDP), 2007, (b) Public expenditure (2005) for family allowances, services and tax relief (total) as % of GDP, (c) GDP (Euro per capita), (d) Real GDP per capita growth rate, 2007
(b) Indicators reconciling work and family life	Employment rate of women, 2007; unemployment rate of women, 2007; long-term unemployment rate of women, 2007; % of women as % of the total number of students in tertiary education
(c) Demographic indicators	Marriage rates in 1000 residents, 2006; divorce rates in 1000 residents, 2006; average age of mother at first birth, fertility, 2007; rough infant mortality rate

Results

The main similarities and differences in fertility, female employment and family policies among European countries are likely to be identified through factor analysis of the OECD data. All variables included in the analysis are described in Table 3.

Table 3. Definition of variables and their correlation with factors (Rotated Component Matrix)^a

	Component ^b	
	1	2
Economic indicators		
Social protection expenditure (% GDP), 2007	0.903	-0.062
GDP (Euro per capita)	0.74	0.352
Public expenditure (2005) for family allowances, services and tax relief (total) as % of GDP	0.674	0.122
Growth rate real per capita GDP, 2007	-0.839	0.067
Indicators reconciling work and family life		
Employment rate of women, 2007	0.252	0.76
Long-term unemployment rate of women, 2007	-0.152	-0.864
Unemployment rate of women, 2007	0.073	-0.879
Students (ISCED 5-6) by sex aged 20–24 as % of corresponding age population, females	-0.263	-0.126
Demographic indicators		
Fertility, 2007	0.556	0.567
Gross infant mortality rate	-0.805	-0.052
Marriage rates in 1000 residents, 2006	-0.502	0.381
Divorce rates in 1000 residents, 2006	-0.09	0.461
Average age of mother at first birth, fertility, 2007	0.872	-0.064

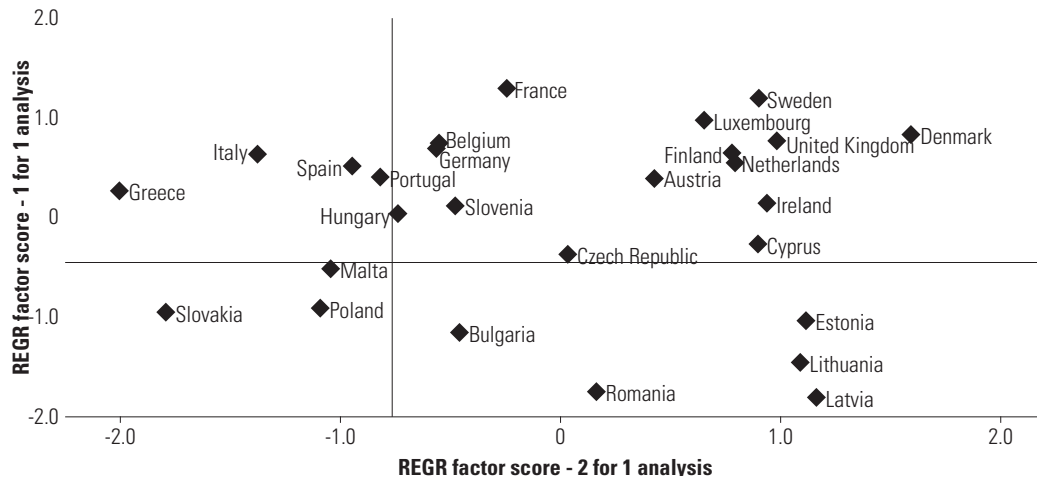
Note: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

^a Rotation converged in 3 iterations.

^b The variables loaded to each factor are underlined.

The results of measuring the degree of coherence of the factors show that the first factor is strongly affected by economic–demographic indicators: social protection expenditure (% of GDP); GDP (Euro per capita); public expenditure for family allowances, services and tax relief (as % of GDP); average age of mother at first birth and infant mortality. We also see that women's employment rate, unemployment rate and long-term unemployment rate; fertility, and divorce rates are substantially loaded on factor (component) 2.

Figure 4. EU-27 Member States ranked according to their fertility, family policies, female employment and other socio-economic characteristics



REGR = Regression

Based on data from the assessment of the rotated component matrix and on data in Figure 4, the classification of countries according to the rates of the coefficients of factor analysis is evident. The horizontal axis shows the classification of the countries with respect to variables included in factor 1, while the vertical axis shows the respective classification with respect to the variables included in factor 2.

1. Four distinct groups of countries represent the first focus of analysis in the upper right edge of the diagram. Those are the Nordic countries (along with countries such as France and the UK), while Luxembourg, Austria and the Netherlands are in close proximity
2. The Southern European countries (upper left): Greece, Spain, Portugal, Italy

The acceding EU countries are divided into two separate groups, consistent with their geographical segmentation. Accordingly:

3. The Northern countries: Estonia, Latvia, Lithuania, Romania, Bulgaria in the bottom right part of the diagram
4. Poland and Slovakia (along with Malta, marginally) in the bottom left.

This variation can be attributed mainly to the size of fertility, female employment and education, as well as the size of social protection expenditure and the differences in child care systems for working parents. Female employment is consistent with higher fertility in the Nordic countries, which have a lower unemployment rate among women and satisfactory GDP growth rates. Their neighbouring countries or more distant neighbours (Latvia, Estonia, Lithuania), who do not have similar characteristics, have, for instance, lower fertility and family-child protection.

In the opposite part of the diagram are the Southern European countries (Greece, Italy, Spain and Portugal), with generally less support for work and family reconciliation, weak family policies and considerably lower fertility and female employment (such as Poland, Bulgaria and Slovakia in the bottom left of the diagram). Poverty rates are higher than the respective ones in the Nordic countries, and these countries are characterized by a family policy deficit. The benefits are relatively low, while the parental leave may be relatively long but counterbalanced unsatisfactorily by the salary.

Compared to other Eastern European countries (e.g., the Czech Republic, Poland and Slovakia), Hungary provides more comprehensive support to parents through a balanced combination of policies; for instance, the compensation payment for parental leave is twice as much as in Poland and the Czech Republic. Furthermore, public expenditures on child care services and coverage of

expenses for preschool children are also higher (87% of children) than in Poland (36%), while families are also supported through relatively generous benefits corresponding to 2% of GDP, compared to only 1% in Poland. Perhaps it is for these reasons that Hungary is somewhere in the middle, close to the intersection of the two axes of the diagram and a long distance from other Eastern European countries, for example, Romania.

Conclusions

Family and child policies cover a wide range of services related to actions and measures to support and strengthen the family and ensure the welfare of the child. Fertility is partially affected by these policies and is mainly dependent on the generosity of the system and on other factors such as the degree of reconciling work and family life. Below are the key findings of the comparative research of good practices in the framework of the European experience:

The EU is transforming demographically, as the average lifespan increases, fertility declines and immigration rises. In terms of funding, social welfare appears as the most neglected pillar of social protection, at least in Southern Europe. Nevertheless, it represents an aspect of the social state reflecting the state's commitment to intervene in order to support the most vulnerable groups of the population. These forms of intervention present significant particularities compared to the other social protection mechanisms, since they are not intended to cover standard future risks such as social security systems, nor do they focus on addressing a clearly defined field of problems such as health systems. However, they are encouraged to approach heterogeneous, unpredictable and current situations and needs with a high degree of differentiation and generally personalized features. This aspect of the social welfare state reveals the full importance of the principle of social solidarity and collective responsibility.

In order to enhance and support fertility, the family policy has set a number of multi-dimensional targets with a special emphasis on child protection, promoting the reconciliation of professional and family life, enhancing large families and single-parent families, and supporting families at risk of poverty

Therefore, by creating the appropriate conditions and incentives for couples, the family policy aims primarily at enhancing fertility and, at the same time, improving child development and the quality of child care.

References

- Adema W., M. Huerta, A. Panzera, O. Thévenon and M. Pearson. 2009. "The OECD Family Database: Developing a Cross-National Tool for Assessing Family Policies and Outcomes." *Child Indicators Research* 2: 437–60.
- Andersson, G. 2000. "The Impact of Labour-Force Participation on Childbearing Behaviour: Pro-cyclical Fertility in Sweden during the 1980s and the 1990s." *European Journal of Population* 16(4): 293–33.
- Bambra, C. 2007. "Defamilisation and Welfare State Regimes: A Cluster Analysis." *International Journal of Social Welfare* 16: 1–13.
- Becker, G. 1998. "Family Economics and Macro Behaviour." *The American Economic Review (A.E.R.)* 18(1) 1–13.
- Bratti, M. 2003. "Labour Force Participation and Marital Fertility of Italian Women: The Role of Education." *Journal of Population Economics* 16(3): 525–54.
- Cigno, A., A. Luporini and A. Pettini. 2004. "Hidden Information Problems in the Design of Family Allowances." *Journal of Population Economics* 17(4): 645–55.
- Council of the European Union. 2011. *Demography: Changing Face of Europe*. Background note from the Presidency. Luxembourg: EPSCO June, 2011
- Craig, L., 2006. "Children and the Revolution. A Time-Diary Analysis of the Impact of Motherhood on Daily Workload." *Journal of Sociology* 42(2): 125–43.
- Del Boca, D., S. Pasqua and C. Pronzato. 2005. "Employment and Fertility in Italy, France and the UK." *Labour* (19): 51–77.
- Earsterlin, R. "The Economics and Sociology of Fertility: A Synthesis." In C. Tilly, ed, *Historical Studies of Changing Fertility* pp. 57–133. Princeton University Press, 1978.

- Esping-Andersen, G. *Welfare States at the End of the Century. OECD, Family, Market and Community*. Paris: OECD. 1997
- Esping-Andersen, G. 1999, *Social Foundations of Postindustrial Economies*, Oxford: Oxford University Press.
- European Commission 2006. Commission Communication of 12 October 2006 “The demographic future of Europe – From challenge to opportunity” [COM(2006) 571 final – Not published in the Official Journal]
- European Commission. 2012. *Demography, Active Ageing and Pensions. Social Europe Guide, Volume 3*. Luxembourg: Publications Office of the European Union.
- European Commission. 2012. Directorate-General for Employment, Social Affairs and Inclusion 2012. *Social Europe Guide, Volume 3*. Luxembourg: Publications Office of the European Union
- European Commission, Eurostat. 2011. “Demography Report 2010. Older, More Numerous and Diverse Europeans.” Eurostat, the Statistical Office of the European Union, Unit F.1.
- Gauthier, A.H. 2002. “Family Policies in Industrialized Countries: Is There Convergence?” *Population* 57(2): 447–74.
- Gauthier, A.H. 2007. “The Impact of Family Policies on Fertility in Industrialized Countries: A Review of the Literature.” *Population Research and Policy Review* 26: 323–46.
- Kravdal, Ø. and R.R. Rindfuss. 2008. “Changing Relationships between Education and Fertility: A Study of Women and Men Born 1940 to 1964.” *American Sociological Review* 73(5): 854–87.
- Lohmann, H., F.H. Peter, T. Rostgaard and C.K. Spiess. 2009. *Towards a Framework for Assessing Family Policies in the EU Final Report*. DIW Berlin and SFI Copenhagen, April 2009.
- Macura, M., Y. Mochizuki-Sternber and J. Lara Garcia. 2007. “Eastern and Western Europe’s Fertility and Partnership Patterns: Selected Developments from 1987 to 1999.” In M. Macura and G. Beets, eds, *Dynamics of Fertility and Partnership in Europe: Insights and Lessons from Comparative Research*, Vol 1 pp. 27–55. New York and Geneva: United Nations.
- McDonald, P. 2000. “Gender Equity, Social Institutions and the Future of Fertility.” *Journal of Population Research* 17(1): 1–16
- Neyer, G. 2003. “Family Policies and Low Fertility in Western Europe.” *Journal of Population and Social Security (Population)* 1 (Supl.): 46–93.
- Oppenheimer, V.K. 1988. “A Theory of Marriage Timing.” *American Journal of Sociology* 94(3): 563–91.
- Robinson, W.C. 1997. “The Economic Theory of Fertility over Three Decades.” *Population Studies* 51(1): 63–74.
- Robinson, J.P. and S. Bianchi. 1997. “The Children’s Hours.” *American Demographics* 20: 22–24.
- Sleebos, J. 2003. *Low Fertility Rates in OECD Countries: Facts and Policy Responses*. OECD Social, Employment and Migration Working Papers, 15. Paris: OECD.
- Symeonidou, H., M. Cavouriaris, E. Kandilorou, M. Magdalinos, G. Mitsopoulos, J. Tsahalides and K. Vezyrgianni. 2000. *Expected and Actual Family Size. Life-Cycle Events: A Follow-up Survey 1983–1997*. Athens: National Centre for Social Research. (in Greek)
- Symeonidou, H. 2002. *Fertility and Family Surveys in Countries of the ECE Region. Standard Country Report – Greece*. New York and Geneva: United Nations.
- Thévenon, O. 2008. *Vienna Yearbook of Population Research*. Vienna: Vienna Institute of Demography (VID) of the Austrian Academy of Sciences in Vienna.
- Thévenon, O. 2008a. *Family Policies in OECD Countries: Contrasted Models. Population and Societies*, 448, Paris
- Van Groezen, B., T. Leers and L. Meijdam. 2003. “Social Security and Endogenous Fertility: Pensions and Child Allowances as Siamese Twins.” *Journal of Public Economics* 87(2): 233–51.
- Willis, R. 1987. “The Family. What Have We Learned from the Economics of the Family.” *American Economic Review* 77: 68–81.