TALLINN UNIVERSITY OF TECHNOLOGY School of Economics and Business Administration Department of Finance and Economics Chair of Theoretical Economics

Jekaterina Trunin

COMPARATIVE ANALYSIS OF PARENTAL BENEFITS IN THREE SETS OF EUROPEAN STATES AS RELATED TO THE INCOME TAX RATE

Master's Thesis

Supervisor: Tatjana Põlajeva, Ph.D.econ

Tallinn 2015

I declare I have written the master's thesis independently.

All works and major viewpoints of the other authors, data from other sources of literature and elsewhere used for writing this master's thesis have been referenced.

Jekaterina Trunin Student's code: 051215TARM jekaterina.trunin@gmail.com

Supervisor Tatjana Põlajeva, Ph.D.econ: The thesis conforms to the requirements set for the master's theses

Chairman of defence committee:

Permitted to defence

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ABSTRACT

The thesis examines an important topic that concerns the most of the population –most commonly used aspects of family policy (parental leave and financial family allowances) and demographic situations in Europe. The central idea of the thesis is the comparing total fertility rates (TFR) in the related countries of Europe and to look whether there is a positive correlation between total fertility rate, levels of taxation and duration and coverage for parental leave.

There are three sets of states chosen for study: Baltic group (Estonia, Latvia and Lithuania), Nordic group (Norway, Sweden and Denmark) and "old" EU member states (France, Italy and Spain).

The prime claim would be that the more there are economic incentives in the form of longer and better compensated for parental leave and family benefits, the higher is TFR in that particular country. Author concluded that some other variable is very important that affects people's judgement concerning children: purely financial benefits have proved to be not entirely efficient in raising fertility rates in the related countries.

The second hypothesis relates to taxation – that there is a positive correlation between the level of taxation and the benefits people get in return through policies – also didn't find confirmation. Progressive taxes manage to ensure support to low income families. Moreover the wealth is being reallocated, but it cannot be said to ensure higher TFR as well as higher benefits for all and longer period of paid leave.

States under discussion could also use the experience of each other to improve their policies, for example "old" states of Europe (and to lesser extent Baltic states) could improve the role of fathers in childcare as it is done in Nordic states.

The methods that are used in this paper are: case study, comparative analysis and statistical analysis.

Key words: total fertility rate, comparative analysis, family policy, parental leave, parental benefits, income tax, Estonia, Latvia, Lithuania, Norway, Sweden, Denmark, Italy, Spain, France

INTRODUCTION

The main topic of this master's thesis concerns demographic situation in Europe. Since people are very important resource for any country it is highly significant to hold the resource on the adequate level. This has vital economic significance as well as concerns the issue of preservation of cultural heritage of different groups.

Justification of the choice of topic

Recent years have been marked by very low total fertility rates in Europe. The term refers to the average number of children that a woman has over her lifetime. The level has to be sufficient enough for generations to replace themselves. In Europe, though, the total fertility rates are below (sometimes far below) replacement level.

The state could provide incentives for people to have more children. This is mostly done using the so called family policies. These are special social programs and benefits that are designed for families and are there to support them. Moreover, they are usually designed to help families find balance between their private and work lives. Family policies may significantly vary from country to country, but they are essentially there in every European state. Moreover, since the total fertility rate has been very low and falling over past decades, one of the main purposes of family policies in Europe is to raise total fertility rates.

There are many ways in which family policies could try to affect the demographic situations in their respected countries. The most common parts of family policies are paid maternity leave and family benefits paid by the state or local institutions. There are of course many more aspects that are accepted in different states, like place in day-care pre-school facilities, medical care and many more. In order to narrow the topic in the context of this thesis it was decided to concentrate mainly on the two most commonly used family policy aspects, namely paid parental leave and financial family allowances. Concerning the parental leave it has to be pointed out that in certain states the leave is offered only to mothers whereas

in some states the leave could be shared between parents. The coverage for the leave may also vary. Thus all of these aspects will be taken into consideration.

Research problem and hypothesis

The main idea of this research is to look at the total fertility rates in states of Europe and whether there is a positive correlation between total fertility rate, levels of taxation and duration and coverage for parental leave. First hypothesis is thus – the more there are economic incentives in the form of longer and better compensated for parental leave and family benefits, the higher is TFR in that particular country. The second hypothesis relates to taxation – whether there is a positive correlation between the level of taxation and the benefits people get in return through policies. Of course this correlation cannot be claimed to be absolute, because the thesis concentrates mainly on two aspects of family policies although there is definitely more of them. Despite that, author finds this correlation quite important and it could show that the monetary incentive is the most important. In case the main thesis is disproved and the analysis shows that there is no direct correlation between the variables, it could prove that monetary incentives are not the most important, thus the additional research could find the aspects that could be the most important in stimulating the rise of total fertility rates in Europe.

As it was mentioned above the other important aspect that will be taken into consideration as part of this discussion is the one concerning taxation. Higher taxes, but shorter times of parental leave and lower family benefits could signal that the states do not consider the family and demographic issues as the most important. And this could also show the areas where certain improvements could be made. Especially concerning the experiences of other European states.

In order to look at the demographic situation and also examine taxation and family policies, the European Union (EU) average is not the best variable. Since European Union comprises of many states which differ substantially the EU-28 average may be misleading. For this analysis there were chosen three sets of states, each of which has different cultural and economic traits. First one is the Baltic group, which is represented by Estonia, Latvia and Lithuania. The second set of states is the so called Nordic group: Norway, Sweden and Denmark. The third group comprises of the populous states of Europe, which are also the first members or relatively old members of the European Union: Spain, Italy and France.

What is also important is to find a way to compare the sums paid as a benefit in each state. The sums may differ substantially, what is also very important is that the sums in absolute terms have different value. Thus 1,000 euro in France may be very different from the same sum in Latvia. One of the variables that will be taken into consideration is the net average wage, as well as net annual wage for a two-earner married couple with two children both 100% of average worker.

Objective of research, research questions and tasks

The benefits and longer parental leave could stimulate people to have more children and thus to stabilize the total fertility rate above the replacement level. In relation to this the other aspect is what correlation is there between level of taxation, amounts of parental benefits as well as length of compensated parental leave and total fertility rates in each country under discussion.

The main objective is to analyse the amount paid as taxes and the scope of parental benefits gained in return by parents in different states of Europe. In the course of this discussion author will also identify main strengths and weaknesses of different systems and find solutions using the experience of other states.

The main methods used in this master's thesis are case study, comparative analysis and statistical analysis.

The first chapter will focus on the main theoretical assumptions and the theoretical background as a whole. Main terms will be explained in detail as well as main economic and demographical theories touched upon. The justification of choice of states is also presented in the first chapter.

The second chapter will focus on family policies in the states chosen for examination: Baltic states (Estonia, Latvia, Lithuania), Nordic countries (Norway, Denmark, Sweden) and "old" states of Europe (Italy, Spain, France).

The third chapter will mainly analyse the information and data collected in the first two parts of the thesis. The analysis will compare the data and its correlations. The answer to the thesis question will also be provided as to whether there is a positive correlation between taxation levels, family benefits and parental leave and total fertility rate.

1. THEORETICAL ASSUMPTIONS RELEVANT FOR THE SUBJECT MATTER

This chapter is examining and explaining all the main theoretical issues, claims and definitions that are very important for his Master's thesis. The main issue of present thesis is the demographic situation in three sets of states, namely: Baltic states (Estonia, Latvia, Lithuania), Nordic countries (Norway, Denmark, Sweden) and European "old" states (Italy, Spain, France). In this respect it is essential to explain the main theories of demography and its relation to economic well-being of a particular country.

1.1. Total fertility rate and replacement level: definition and statistics

The thesis takes into consideration such variable as total fertility rate. This is an important indicator since the rate shows number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years conforming to the fertility rates by age of a given year. This rate is therefore the completed fertility of a hypothetical generation, computed by adding the fertility rates by age for women in a given year (the number of women at each age is assumed to be the same). The total fertility rate is also used to indicate the replacement level fertility; in more highly developed countries, a rate of 2.1 is considered to be the replacement level (Total ... 2015).

In short it could be claimed that total fertility rate is the average amount of children per woman. In order to ensure the generation renewal the rate has to be 2.1 children per woman or above as it was already stated before.

Unfortunately this level is not reached in almost all states of the European continent. Thus in Estonia and Lithuania the total fertility rate in 2013 was 1.6 children per woman, In Latvia – 1.4. In the Nordic group the rates are a bit higher: Norway – 1.9; Sweden – 1.9; Denmark – 1.7 children per woman. Whereas in the big states of Europe the situation is even more worrisome: France – 2.0; Italy – 1.4; Spain – 1.3 children per woman (Fertility rate ... 2015). Over the recent 30 years TFR in Europe has shown declining trends (Figure 1). Despite that chart shows significant fluctuations of nine different countries over last three decades, author sees undisputable decline of TFR in all the countries over considered period of time.



Figure 1. Total fertility rates 1961 - 2013 in the related states Source: (Fertility rate ... 2015)

As could be seen from statistical data none of the states reaches the replacement level nowadays. What is even more important is that "below replacement fertility on a period basis has a direct effect on future population size" (Smallow 2005, 17).

Moreover it could be seen from the same source that total fertility rates in the above mentioned countries have been low for several decades. This leads to the other important phenomenon, which is also important for this thesis - the issue of ageing population as well as population decline. This is especially important for such relatively small countries like the Baltic states. Their resources are limited and this is especially true for the human resource. There are many negative implications that are associated with this problem. To name the few it could be mentioned that "concerns have been expressed about providing pensions and the shortage of new entrants into the labour force. As a population ages, each person of working age will have to support more aged dependants. Not only could this put a strain on the pension and health systems, but it has also been hypothesised to potentially have many other negative effects on the economy and productivity" (Ibid.,17-24).

This trend could be slowed or even reversed by migration. Despite that, it has to be pointed out that migration has other effects on the population. First of all it changes the correlation between people of one nationality thus social cleansing could occur. In addition, the preservation of national heritage may be at stake. What is also significant is that The United Nations Department of Economic and Social Affairs has named the population ageing "unprecedented", and added that there are no "parallel in human history" to this phenomenon (World population ... 2001). All that was mentioned above indicates importance of demographics to both economics and sociology. And since the changes are unprecedented there may be a need to search for new methods to solve the issues. The basic methods used by the states and their application are going to be examined below.

1.2. Justification of choice of states

The three sets of states that have been chosen for examination: Baltic states (Estonia, Latvia, Lithuania), Nordic countries (Norway, Denmark, Sweden) and "old" states of Europe (Italy, Spain, France). The justification of choice of states is presented below.

The Baltic states were chosen for closer analysis since these are small states that used to be part of the Soviet Union and are relatively new members of the European Union. The demographic situation is especially critical for small states, where the population is not very large and thus there are not many human resources available. With steadily low total fertility rates, the economic prosperity may be at risk, thus it is especially important for the Baltic States to keep the total fertility rates on substantial levels.

Nordic group: Norway, Sweden and Denmark are very important case studies as these are the states with higher levels of social security; moreover the states are stable and wealthy. Finland and Iceland also could easily been chosen, because they share the same traits, despite that as only three states were selected, they were left out of the discussion. Norway, Sweden and Denmark geographically lie west and are all neighbouring states, thus they were first to be chosen. But there is no specific indication as to why Finland or Iceland wouldn't fit into this particular discussion. It is just that as the thesis has certain requirements, additional states would have made the topic too broad.

In the third group there are the populous states of Europe, which are also the first members or relatively old members of the European Union: Spain, Italy and France. The states have traditionally valued families and family ties. Other European states could also be part of this discussion. Like for example Germany, although Roger Bootle in his book "The trouble with Europe" examines the connections between European states and their aspirations. The author points out that there are certain tensions in the relations of France and Germany due to the fact that these states take economic and monetary issues quite differently. Moreover, looking at the euro crisis, the author even points out, that there could be a possibility to form a monetary union between such states like France, Spain, Italy and Greece. Those latter three countries he calls the periphery economies of EU. In this respect France is definitely closer to Italy and Spain and not to Germany. Greece was chosen not to be included into the list of states, largely due to its economic difficulties. Since these were quite severe, many social programs were changed or terminated, thus this could distort the conclusions. This is another reason why Italy, France and Spain were chosen for closer examination. These are close economically and similar in size and population (2015, 92, 180-186, 224-229).

1.3. Demographic theories important for thesis analysis

This master's thesis concentrates on issues of demography thus it is vitally important to touch upon main theories of demography and the trends of its correlation.

Probably the best known theory was developed by Thomas Malthus. He is well known to argue about population increase. Although in Europe the situation is quite different as it was mentioned above, despite that it is not the case in many African and Asian states. Malthus claimed that the population tends to increase and the increase reaches beyond the means of subsistence (Malthus 1992, 15). Moreover, the researcher claims that the population can rise in geometrical progression, whereas the subsistence could rise and expand only in arithmetical progression. Malthus' theories are the best when the discussion concerns countries with very high total fertility rates. As it was pointed out above, in Europe this is not the case, and thus the Malthus theory is less of a support. Moreover Malthus' theory is largely criticised. To name just one point it could be said that "in so many cases the theory of the growth of the means of subsistence in arithmetical ratio was not proved" (Sharma 2007, 33).

Despite that the Thomas Malthus' theory has proved not to be useful for this topic, the neo-matlhusianism could prove otherwise. The theory supports family planning in order to stop the uncontrolled increase of population. The theory distinguishes between sex desire and desire for children, something Malthus didn't consider (Sharma 2007, 34). Although the theory largely spoke about the birth control as of a method to stop population from reaching extreme levels this popularization of chemical and mechanical methods of birth control did contribute to declining birth rates. What the theory also claims is that desire for children depends upon moral cultural as well as social values. It is important that it is "not inherent, but a product of socio-economic conditions" (Ibid.,35). This is a very crucial point for this topic. It basically says that socio-economic conditions could stimulate people to have (more) children. In this respect the socio-economic conditions could be improved by the government (family) policies that are in place in all European states. Of course neo-malthusianism is far from being free of criticism. The argument basically concerns birth control and it is claimed to be immoral and unhealthy (Ibid.).

The classical and neoclassical schools of thought should also be examined because of their importance. The classical school of thought is represented by such thinkers as Adam Smith, David Ricardo, John Stuart Mill and others. In short it could be said that they are economists and "believed that economics functions better under a free and private initiative with keen competitions" (Ibid.). Whereas neo-classical school emphasizes "mathematical economics and the analysis of the psychological background and consumer demands, decisions and actions" and the school is basically represented by William Jensons, Carl Manger, Akfred Marchall, Irwing Fisher and others (Ibid.). Both schools are concerned with the correlation between such variables as population and production. Some claimed that increase in population leads to an increased production, whereas others claims just the opposite. The main principle that resolved the "conflict" was the economic principle of diminishing returns. John Stuart Mill and H. Sidgwick claimed that "many countries would be better off with smaller numbers since their population had already reached the point of diminishing return" when as Gray, Chamers, Burn and several others "pointed out that increasing number of people stimulate production". It was also realized that "the total and the per capita production not only depend upon population but also upon resources, labour, capital and technology" (Ibid., 36-37). David Ricardo "has theorised the process as follows: due to the absolute scarcity of land, the law of diminishing returns implies that in the long run the price of the means of subsistence must necessarily increase" (Charbit 2009, 21).

Although these schools of thought have come to the conclusion that the population is not the only important factor for economic well-being, it is still an essential variable that is well-worth considering.

The other very important theory of population is the Marxist socialist theory. It is somewhat consistent with the neo-malthusianism as it also supports birth control. For Marxism it is of course important only as part of the woman emancipation and the notion that there has to be harmony between the individual and the society. Moreover, the theory could be applied to modern socialist states of Europe (Ibid., 38-39).

The other very important theory that is touched upon is the theory of demographic transition. The theory claims that each country passes several stages of development. For example, C.P. Blacker has pointed out five stages/phases of demographic transition: high stationary stage (high birth rates and high death rates); early expanding stage (falling birth rates and rapidly decreasing mortality); late expanding stage (falling birth rates and rapidly decreasing mortality); low stationary stage (low birth rates and low mortality (balance)) and finally declining stage (low mortality and deaths exceeding births) (Blacker 1947, 88-101). These stages are very important in illustrating the changes in demographic situation over time. Looking at the demographic situation in Europe today it could be claimed that most states have reached the fourth and the last fifth phase of development.

These stages presented by Blacker are nevertheless not the only ones, since there are also other thinkers that offer their views on the same topic. Thus Frank W. Notestein has offered to divide countries between three categories based on their stage of development (Social Gerontology 1998, 4-6):

- Low birth rates and low death rates thus the population does not grow very fast. (Northern and Western Europe as well as USA)
- Declining birth and death rates, despite that the death rates are declining faster thus the population continues to grow fairly rapidly. (Italy, Spain and Slavic people of Central Europe)
- 3. Little control over both death rates and birth rates. This group has very high potential for growth.

There are also other authors that have pointed out the five stages, but have named them differently. Thus, Dunald Olen Cogwill claims that the five stages are: Primitive Cycle, Modern Cycle, Future Cycle or in other words Baby Boom period, Probable Cycle and Population Cycle. Karl Sax on the other hand has pointed out only four stages. According to him "the second and third stages in population growth are the stages of Population Explosion" (Sharma 2007, 42).

The transition theory also is not free from criticism. Probably the best known point is that this theory was based on the experience of western states and it does not quite explain the patterns all over the world. Thus this theory becomes "a broad generalization". Moreover the theory fails to explain such phenomenon as the Baby Boom which occurred after the World War II (Ibid.).

The last theory that is related to the topic of this master's thesis is the theory of rationalism. The theory has developed by Ungern-Sternberg and is famous due to the fact that the author stated that the fertility rates could also be lower among poor. For him the "real cause of birth rate is not biological but psychological". He claims that "the woman does not wish to be only wife, sweetheart, or, still less, a machine giving birth to children. She has become more conscious and self-reliant, not dependent upon marriage as an alms-house, as formerly, but "masculinized" in the sense of greater material independency" (Ungern-Sternberg, 42). Moreover, "there is a correlation between economic development and lower birth rate. It is the capitalist mentality that induces low fertility" (Sharma 2007, 45). Basically the author claims that women emancipation and the whole capitalist system lead to lower birth rates. And this could happen among all layers of population.

As it was pointed out above the thesis will focus on the family policy and how it could affect total fertility rates. Family could be seen as both the ends and the means of the policy process (Strach 2007, 151-173). Policy is thus "a plan or course of action carried out through a la, rule, code, or other mechanism in the public or private sectors" (Bogenschneider 2014, 221). Linda Hantrais and Marie-Therese Letablier offer such definition to the family policies: "social policies in which the family is the deliberate target of specific actions, and the measures initiated are designed so as to have an impact on family resources, and, ultimately on family structure" (International encyclopaedia ... 2006, 454). Such definition also supports the main claim of this thesis that the family policies are the instruments that are used by the states to meet their goals which for the most states of Europe is higher total fertility rates.

In some states the term as such is not used due to the fact that "family is seen as part of the private sphere, which should not be treated as an object of a policy" (Ibid.). Nevertheless,

in those countries there are still policies that directly or indirectly affect families. To name the few: employment policies, social policies targeted at children and many more. It has to be pointed out that even before the term family policy has become widely known and accepted the governments realized the need to support families and to "reduce the costs for all families with children by "subsidizing" childbirths through family allowances" (Ibid., 454-455). This became important as the birth rates fell below replacement levels and the challenges and negative effects of that were already discussed above.

Each state is generally free in designing their family policies, despite that, most of the states still use same methods, whether or not to a greater extent. All the states under discussion in this master's thesis use family policy instruments such as monthly or yearly child or family allowances and paid parental leave. These are definitely not the only instruments established by local legislation, which could be used to support families, despite that, in order to narrow down the topic it was decided to examine these two nuances in detail. The reason for such choice is that these instruments are applied to all families (with several differences based on the number of children and so on) and these are fairly easy to measure and compare. This is especially important in order to avoid confusion and formulating wrong assumptions. In addition it has to be mentioned that the family policy instrument of parental leave is a very important aspect which allows people to find balance between their family and work lives. This has become especially important with the notion of women emancipation and the fact that more and more women are in the workforce, thus supporting economic growth (OECD, 2012).

The family policy instrument of parental leave is also becoming more and more important, as it significantly contributes to the balance between the work and family lives of people. As Margaret O'Brien mentioned, referring to the World of Work Report 2011, the "work-family balance remains a central issue for employed parents and employers alike" (2012). As it was mentioned above one of the reasons is that women are more often working thus they have to combine the need/wish to care for the children and their working responsibilities. Moreover, the International Labour Organization admits that work has largely intensified over the last decade and this change has been facilitated thanks to spread and development of information technologies and the scope of their application, moreover the speed of communication has risen as well as the speed of production (2006). What adds to the difficulties is that "heightened work-load and worries about job security can lead to stress and

health problems with emotional "spill-over" to home." (O'Brien, 2012). In this respect the national family policies could be helpful. Paid parental leave could ease the tensions and let the parents to devote all their attention to children when they most need it (infantry).

What is also important is that although states are free to determine the length and the compensation for the parental leave that they provide, there is a minimum level set by an international organization – International Labour Organization. Maternity Protection Convention, 2000 (No. 183) Article 4 states that: "On production of a medical certificate or other appropriate certification, as determined by national law and practice, stating the presumed date of childbirth, a woman to whom this Convention applies shall be entitled to a period of maternity leave of not less than 14 weeks." (R191 ... 2015).

There is a great difference between countries all over the world and not all of them have met the requirements. Despite that, many countries have ratified the convention (Ratifications, 2015).

1.4. Taxation theory

The other important aspect that this thesis is focusing on is taxation and the main form is the direct tax, namely the income taxes. Income taxes are the direct taxes "consisting of current taxes on income and wealth" (Tax revenue ... 2015). Direct taxes are one of the ways in which the governments collect revenue, which later is used for social, economic and other programs as well as investments. States may choose between several income tax systems. The first one to mention is the flat income tax system. This basically refers to the system in which "the same marginal tax rate applies at every income level" (Mankiw ... 2015). Such system has several strong points, first of all it provides a sense of equality, and moreover its advocates point out its "administrative simplicity, enforceability, and transparency" (Ibid.,12). In other words it could be pointed out that a flat "tax can increase tax compliance and reduce tax evasion" (Paulus 2008).

Despite these obviously positive aspects of flat tax system it nevertheless has important drawbacks. The main one concerns "distribution of tax burdens" and this could be the reason why the system has not found that many supporters in economically developed states with considerable middle-class. Flat income tax system is mostly applied Eastern Europe (Ibid.). The other income tax system is the gradual or progressive income taxation arrangement. In states where such system is used, people pay taxes based on their income and the higher the income the higher the taxes. The reason why this system is more popular (it is adopted in most Western states) is that it promotes income equality, which should in theory lead to a lower income gap between the rich and the poor. This is the case because such system should in fact be "redistributing income from the upper class to the lower and middle class" (Progressive Tax ... 2015).

Among other positive matters of the progressive tax system is that it is consistent with the social justice notion, namely the ones that are capable of paying more, are obliged to do so, in addition the system provides more revenue for the government. Among the negative issues concerning such system is the fact that it opposes equality, as the tax rate is applied based on the level of income. Moreover, such system may be the reason why workers are not interested in promotions as this will result in higher taxes. What is also well worth mentioning is that progressive taxation push workers to hide income surpluses and possessions (Ibid.).

In addition to the different tax systems that were discussed above, states may also have income tax set at different levels. These levels may differ significantly from country to country as well as change over time in the context of one particular state. In this respect it is very important to establish the optimal tax system which will guarantee the best economic and social outcome and optimal tax theory is therefore worth examining. Despite that it should be pointed out that the theory examines not only income taxation (or so to say direct taxes, but also the indirect ones). The theory, which is mostly built on works of Ramsey (1927) and Mirrlees (1971) suggests "that a tax system should be chosen to maximize a social welfare function subject to a set of constraints." Mirrlees has worked out a framework in which "the optimal tax problem becomes a game of imperfect information between taxpayers and the social planner. The planner would like to tax those of high ability and give transfers to those of low ability, but the social planner needs to make sure that the tax system does not induce those of high ability to feign being of low ability" (Ibid.). The researcher also points out the main aim that this planner has to keep in mind, which as N. Gregory Mankiw has put it "the social planner has to make sure the tax system provides sufficient incentive for high ability taxpayers to keep producing at the high levels that correspond to their ability, even though the social planner would like to target this group with higher taxes." (2015).

The theory of optimal taxation has also evolved in the last decades and it has provided certain generalizations that offer a relevant overview of the field: (Ibid., 2)

- 1. Optimal marginal tax rate schedules depend on the distribution of ability;
- 2. The optimal marginal tax schedule could decline at high incomes;
- 3. A flat tax, with a universal lump-sum transfer, could be close to optimal;
- 4. The optimal extent of redistribution rises with wage inequality;
- 5. Taxes should depend on personal characteristics as well as income;
- 6. Only final goods ought to be taxed, and typically they ought to be taxed uniformly;
- 7. Capital income ought to be untaxed, at least in expectation;
- 8. In stochastic, dynamic economies, optimal tax policy requires increased sophistication.

The generalizations listed above need to be discussed in the light of their utility and usefulness when planning an actual tax policy. The first point "is too broad and nonspecific to be of direct help to practical policymakers", although it is important as a ground for all the other points. The second point seems to be accepted in practice, since "public policy over the last three decades has steadily moved toward lower marginal tax rates on high earners" (Ibid. p 8). The next point seems to be also mostly accepted by the actual policymakers due to the fact that they have set the rate closer to the flat one, although the theoretical material does not provide a straightforward answer as to how far from flat is the optimal level. The fourth point was also worth taking into consideration due to the fact that just "as theory recommends, greater inequality is associated with more redistribution" (Ibid.).

The same could be said concerning the fifth point, as it is being actively put into practice and there are several important ways in which people are so to say tagged in economical respect. This is especially true for families with children, as they receive special treatment. This point is especially important for this discussion because the thesis in concentrating on the family policy and its efficiency in promoting higher fertility rates. The next point is fairly well established in practice with the help of the Value Added Tax (VAT). This is exactly what the theory is implying. Nevertheless, the use of this tax is often distorted as the theory doesn't suggest that it should. To name an example: the food is often exempted from the tax or in some cases the tax is severely lowered thus distorting the theory. The seventh point is less helpful for practical reasons as "regardless of whether capital taxes are decreasing or increasing, a large gap remains between theory and policy. Both statutory tax rates on capital and measures of effective tax rates remain far from zero, the level recommended by standard optimal tax models." (Ibid., 22). The last but not least point implies that "optimal taxation in dynamic economies depends on the income histories of individuals and requires interactions between different types of taxation, such as taxes on capital and labour". Since these aspects have been theoretically formulated relatively recently they have not found much reflection on the actual taxation policies, thus the effect "has been modest" (Mankiw ... 2015, 25).

In short it could be said that the optimal tax theory has proved to be somewhat useful and it has found practical application and thus the theory has been partially proven. Despite, that the theory is not universally applicable. Moreover certain points may raise significant debate. For example one of such debatable and controversial points is the one about tagging. In the today's era of women emancipation these tagging practices may become significant obstacles as they could lead to discrimination and it would be quite difficult to apply them in democratic societies.

2. INFORMATION CONCERNING DEMOGRAPHIC SITUATION IN EUROPE

As it was pointed out above the second chapter concentrates on information concerning demography and family policies. In this chapter the factual and statistical information will be provided, which form the basis for the analysis and support or disapprove the main thesis statement.

2.1. The demographic situation in Europe – total fertility rates in specific countries

The European Union (28 member states) had the total fertility rate of 1.55 children per woman in 2013 and there has been a declining trend for the last five years (Total ... 2015). This thesis is discussing the issue of declining birth rates in Europe concentrating on three groups of states.





Source: (Total ... 2015)

The first group - the Baltic states have the average total fertility rate of 1.54 children per woman based on data from 2013 (Estonia – 1.52; Latvia – 1.52; Lithuania – 1.59). It could be noted that the rate is quite homogeneous, and the difference is small, thus the situation in these states is very alike. The Nordic group has a higher average total fertility rate (TFR) - 1.78 (2013: Norway – 1.78; Sweden – 1.89; Denmark – 1.67). In this group the difference is more apparent. It is not remarkable but still 0.2 is notable, and the average is considerably higher than in the Baltic States. The third group the European "big" states have the lowest TFR of the three groups; and that is 1.55 children per woman (see Figure 2) (Total ... 2015). These statistical numbers are a bit different from the ones mentioned above and taken from the World Bank data. There the numbers were rounded up, because small differences are not particularly important in case the rates are compared to the world average. Rounded numbers give an adequate review in this respect, despite that, in order to see even the slightest difference is important as we look closer at the states, where the TFR is similar, especially compared to the states, with very high TFR levels. This is exactly the reason why non rounded statistical indicators were introduced.

Interestingly, the average could have been much lower in the "old" states of Europe if it wasn't for France which has a TFR of 1.99; whereas in Spain it is 1.27 and in Italy 1.39 (Total ... 2015). The high total fertility in France could be partly explained by the countries strong ties with former African colonies, which were regarded as part of France and where the fertility rates have traditionally been very high (Meredith 2003, 45-58). It still has to be pointed out that even France with its TFR of almost 2, does not reach the replacement level, which means that in Europe the new generation does not fully replace the former. Moreover as it was pointed out above the situation is furthermore worsened by the population ageing phenomenon.

2.2. Family policies: scope of application

This thesis aims also to look at the family policies that are in place in the above mentioned states to support families in their decision to have more children. In order to narrow down the topic it was decided to focus on two aspects of family policies, namely the parental leave and family benefits. There is no universally fixed duration of parental leave, thus each state can choose on the length and compensation paid for parents during this time. Despite that it still has to be mentioned that European Commission set the minimum period of maternity leave (14 weeks), and specifies that this period must be uninterrupted (Directive 92/85/EEC, 1992). What is also significant is that "male and female workers have individual entitlement to parental leave on the grounds of the birth or adoption of a child, enabling them to take care of the child for at least four months; at least one of the four months cannot be transferred to the other parent under any circumstances, i.e. it is reserved for each parent" (Directive 2010/18/EU). Such note is very important from the point of view of the non-discrimination. Men have also right to spend time with their children and the parental leave is not reserved specifically for mothers.

Moreover, in EU "workers are protected from discrimination on the grounds of applying for or taking parental leave; at the end of parental leave, workers must have the right to return to the same job or to an equivalent or similar job consistent with their employment contract or relationship" And all EU member states have to "apply the rules by March 2012 at the latest" (Ibid.).

This of course concerns only European Union member states, thus these rules don't apply to Norway, which is not a member of the Union. In additional it could be said that these requirements are the minimum that the states have to provide, and thus the maximum limit is not set and can be decided in each country independently. In this respect it is especially interesting to examine what period have individual states decided on and does it have any reflection on the total fertility rates in their respected countries.

2.3. Baltic group: Estonia, Latvia and Lithuania: parental leave and family benefits

2.3.1. Estonia

In Estonia the Parental Benefit Act §2.1 specifies that "permanent residents of Estonia and aliens residing in Estonia on the basis of a temporary residence permit or temporary right of residence (hereinafter residents of Estonia) have the right to receive the benefit. A resident of Estonia who has residence in several states has the right to receive the benefit if he or she is a resident within the meaning of subsection 6 (1) of the Income Tax Actor if he or she resides permanently in Estonia within the meaning of the Aliens Act or the Citizen of the European Union Act. 4. §4.4 specifies that "The benefit shall be granted for the period of 435 days as of the date on which the right to receive the benefit arises. If the mother of the child does not have the right to receive maternity benefit, parental benefit shall be granted until the day the child attains eighteen months of age (Parental Benefit Act, §4). Moreover until the child is 70 days of age the time is specified exclusively for mothers and get compensated from the Health insurance fund. All in all mothers are entitled to 140 days of pregnancy leave. The calculation of the benefit is also important. These 435 days are compensated 100% based on the "income subject to social tax earned in the calendar year prior to the day on which the right to the benefit arose. Income from work on which social tax is paid in Estonia is considered income. If the state pays social tax on behalf of a person, this is not considered to be work income. Nor is income earned abroad which is not subject to social tax in Estonia taken into consideration." In case the parents did not work a year prior to the child birth, are still entitled to the minimum pay (base rate) which changes every year. In 2015 the amount was set at 355 euro per month. In case the parents' salary was lower than minimum wage, he/she is still entitled to the sum which equals the minimum wage, and in 2015 it was 390 euro per month. The benefit is also subject to maximum limit, thus the parent cannot receive more than 2,548.95 euro (limit as of 2015) (Parental benefit ... 2015). Parental leave comparisons and compensations for it in the related countries see in the Appendix 4.

In Estonia there are also special family allowances which are paid monthly or just one time. It has to be pointed out that several municipalities have special allowances for their residents, despite that these will not be discussed here or taken into consideration. Only the benefits paid by central authorities will be mentioned. Thus in Estonia state family benefits are paid to: permanent residents of Estonia as well as to aliens residing in Estonia who have temporary residence permits or right of residence. There are also different categories of family benefits.

Childbirth allowance is a single benefit paid in case of birth. The amount of benefit is 320 euro. In the case of a multiple birth of three or more children, the amount of childbirth allowance is 1,000 euro for each child (Family benefits ... 2015).

Adoption allowance is a single allowance paid to an adoptive parent from whom an adopted child does not descend and who is not a step-parent of the child, if childbirth allowance has not been paid to the family for the same child earlier. The amount of adoption allowance is 320 euro (Ibid.).

Child allowance is a monthly allowance paid from the birth of child until he or she attains 16 years of age. If the child goes to basic school, high school or vocational school which operates on the basis of basic education or if the child with no basic education goes to vocational school, he or she will be paid the allowance until attaining 19 years of age. When the child attains 19 years of age, the allowance shall be paid until the end of the school year. Child allowance is paid for the first and second child in a family in amount of 45euro. Child allowance is paid for every third and consequent child in a family in amount of 100 euro. (Ibid.).

Child care allowance is a monthly allowance paid to one of the parents: at one-half of the child care allowance rate for each child of up to 3 years of age if the parent raises one or more children of up to 3 years of age, or to a person other than a parent who uses parental leave (38.35 euro); at one- quarter of the child care allowance rate for each child between 3 and 8 years of age if the parent raises also children between 3 and 8 years of age in addition to one or more children of up to 3 years of age (19.18 euro); at one-quarter of the child care allowance rate for each child between 3 and 8 years of age if the parent raises also children between 3 and 8 years of age in addition to one or more children of up to 3 years of age (19.18 euro); at one-quarter of the child care allowance rate for each child between 3 and 8 years of age if the parent raises three or more children who are at least 3 years of age and who receive child allowance for three or more children (19.18 euro). The child care allowance rate is 76.70 euro in 2015 (Ibid.).

There are also several benefits other benefits for example foster care allowance (240 euro per month for each child), single parent allowance (19.18 euro) and so on, but these concern smaller groups in the country and are less relevant for this discussion (Family benefits ... 2015).

Taking all this into consideration it could be said that Estonia has fairly generous views towards parental leave. The period is over a year and paid 100%. Moreover, even parents who were not working receive certain amounts.

2.3.2. Latvia

In Latvia maternity benefit is paid before and after childbirth, and it is provided to mothers who are employed, self-employed or share social insurance with their self-employed husbands. The benefit is paid in two parts one before and the second after birth. Both are for 56 or 70 days (more is paid to women who have had a medical supervision starting from 12th week of pregnancy). Thus the maximum pay is for 140 days (same as in Estonia). In contrast to the Estonian system the compensation amounts for 80% (of the average insurance

contributions salary) (Maternity Benefit ... 2015). The same rate of compensation is also set for the Paternity Benefit. The fathers of the new-born children have also the right for a leave, which is total 10 days and it must be taken before the child reaches the age of two months. (Child Birth ... 2015).

This is also different from the Estonian system since there the fathers have the right to receive a total of 10 days of leave 2 months before the supposed delivery date and/or 2 months after. Moreover the compensation in Estonia is 100% of taxable salary (Parental benefit ... 2015). In Latvia there is also a child birth benefit and it can be received by citizens, non-citizens of Latvia, foreigners, and stateless persons living in Latvia who have received a personal identification code, but people with temporary residence permit are not entitled. The benefit sum is 421.17 euro and it is granted o parents once the child has reached the age of 8 days and has a personal identification number (Child Birth ... 2015). The parental leave in Latvia is not that generous as in Estonia. The law specifies that "any socially secured person taking care of a child or several children born in the same labour, if this person is employed on the day of granting of the benefit (is considered to be an employee or a self-employed person according to the Law On State Social Insurance). In October 2014 the system has been somewhat changed and now "the parents' benefit is also granted to employed parents (other persons), who continue their work and are not on the parental leave. The system is not as fixed as in Estonia, thus the parents can choose between two possibilities, to receive 60% of the recipient's average wage subject to insurance contributions until the child is one year old, or to receive 43.75% until the child is 1.5 years old. Once the parents have made the decision it cannot be changed. The amounts for parents who are working and are not on parental leave are different. Once the parent receiving the benefit resumes work, thus ending parental leave or starts gaining income as a self-employed person, is entitled to 30% of the benefit granted (Ibid.).

Same groups of people who are entitled to the child birth benefits are also entitled to the state family benefit, which is given to each child from the age of one to 15. There is one exception still: "if the child after reaching the age of 15 years continues to study in a general or professional education institution and does not receive scholarship then the benefit is paid until the age of 19 years (if he or she has not entered into marriage)". In 2015 the benefit rate is based on the number of the children in the family. Thus for the "first child in the family the benefit is 11.38 euro a month. The benefit for the second child is 22.76 euro (twice the

amount), for the third and any next child - 34.14 euro (three times the amount for the first child)." (Family State ... 2015). Compared to the system applied in Estonia, in Latvia the system is less generous, despite that it is much more flexible in use. Nevertheless, the families loose substantial amount of earnings once they are on parental leave, even in case they choose the shorter period with higher compensation. Such system clearly is lacking certain fundamental traits in order to stimulate parents have more children. At the same time, the TFR in this state is same as in Estonia, where the system is much more generous. There could be different explanations to that one of them that the Estonian system doesn't have had a full effect yet. The other possible explanation could refer to other indirect ways in which national policies are supporting families, but due to the reasons discussed above these aspects were not added to this topic.

2.3.3. Lithuania

In Lithuania "Women can have pregnancy and maternity leaves: 70 days to and 56 days after the birth (in case of a complicated birth or if two or more children are born, 70 days are given)." What is also significant is that this "leave is calculated and granted fully, regardless of the number of days that were actually used before giving birth." (Maternity Leave ... 2015) Maternity leave is also subject to a particular threshold, which means that is has to fall into the specific boundaries. Maternity allowance cannot be lower or higher than the threshold. The numbers are defined by the government and are approved annually by the current year's insured income (in 2015 as of 1 January equal to 431 euro, since 2015 1 July - 434 euro). Thus the minimum and maximum maternity leave sums are defined by these numbers and minimum maternity allowance per month is 1,388.73 euro (3.2 for the current year insured income). In case the salary of a working woman falls into these boundaries, they are entitled to 100% income, although it has to be pointed out that this particular allowance is paid only for working days (meaning for 5-day working week) (Expecting ... 2015).

In short it can be said that all mothers that are employed and who "have paid at least 12 months of social insurance contributions during the last 24 months are eligible for Maternity leave. Self-employed women qualify for maternity benefit on the same conditions as workers" (Braziene, 2014).

There is a significant difference between the amount of days that the fathers are eligible to take once the child is born (or when the child is soon to be born) in Estonia, Latvia and Lithuania. The latter grants 28 days of paternal leave and it can be used until the baby is one month old. The compensation for this leave is 100% and it is subject to the same threshold as maternity leave and it is also paid for working days (5-day week). In Lithuania the families have also the right to be on a parental leave and it is compensated for. It is particularly specified that the right to maternity (paternity) has one of the parents, adoptive parents or guardians. This benefit is paid until the baby is 2 years old. But one of the parents can take an unpaid leave until the baby is three. Aside from the Estonian system for example, the Lithuanian system is somewhat flexible in use and parent can choose between two options. Parent can choose to get benefits until the child reaches the age of one year - then they are paid 100% of the compensatory wage. There is also an option to receive benefits until the child reaches the age of two years old. Once the parents choose this option then from pregnancy and childbirth or end of parental leave until the child reaches the age of one year shall be paid 70% and then on until the baby is two - 40% of the compensatory wage (Maternity (paternity) ... 2015).

The birth of several children is also additionally specified. "In the event that you are born with two or more children, and these children are in care leave, maternity (paternity) benefit increases according to the number of children born, but the total you paid on the amount cannot be higher than 100%. If the two child care leave is granted both to individual parents to supervise children - maternity (paternity) benefit is paid to each of them in the general procedure. The parental leave allowance is also subject to same threshold that was specified above (Ibid.).

In Lithuania there is also a child-birth allowance. "Every child born receives a lumpsum benefit of 11 basic social benefit (hereinafter BSB, since 1 January 2015–418 euro). The same amount is also granted to adopted children (Ibid.).

Monthly child benefits are also in place in Lithuania. "Every child, raised in a family or placed under guardianship in a family and who is between 0 and 2 years old, receives a monthly benefit of 0.75 BSB (since 1 January 2015–28.5 euro), if the monthly income per family member is less than 1.5 times the amount of the state supported income (hereinafter SSI, since 1 January 2015 thus 153 euro) (Parental benefit ... 2015).

Every child raised in a family or placed under guardianship in a family and who is between 2 and 7 years old (or between 2 and 18 years old in a families raising and/or fostering three or more children), receives a monthly benefit of 0.40 BSB (since 1 January 2015 - 15.2 euro), if the monthly income per family member is less than 1.5 times the amount of the SSI (since 1 January 2015 – 153 euro)." There are also special provisions for military personnel: "every child of a soldier in mandatory primary military service receives, during the father's or mother's service, a monthly benefit of 1.5 BSB (since 1 January 2015 - 57 euro) (Ibid.).

Same as was said about Latvia seems to be also true concerning Lithuania. Here also families loose substantial amount of earnings once they are on maternity leave thus adding pressure. Concerning the bright sides of Lithuanian system it has to be pointed out that it is also flexible and thus parents can adapt the system better to their particular needs. Parents can also stay with their children longer, receiving at least some percentage of compensation and thus this could contribute to the child's emotional and physical education. What has to be also indicated are the low parental benefits (looking plainly at the numbers) in Latvia and Lithuania.

2.4. Nordic group: Norway, Sweden and Denmark: parental leave and family benefits

The next group under discussion are the Nordic countries: Norway, Sweden and Denmark.

2.4.1. Norway

In Norway it is specifically mentioned the main idea of parental benefits. These are in place "to ensure parents an income in connection with the birth or adoption of a child." (Parental benefit. Norwegian ... 2015). In Norway parents can receive the benefit in case they were working and had a pensionable income for the period of at least six months of the 10 month period prior to the date since when one could receive it. What is also significant is that all the days when the person was working are included. "Idle days are also included, provided that the working period has lasted at least four weeks, and that there are no more than 14 idle days between each day of work." The annual income must exceed at least half of the National Insurance basic amount (often called G) (Ibid.).

This basic amount is used in order to calculate benefits. It is revised every year and in 2015 the amount was set at 90,068 Norwegian Krone (ca 9,772 euro) per year and 7,506 Norwegian Krone (ca 814 euro) per month (The Norwegian ... 2015).

In case parents are self-employed or a freelance worker, the benefit is calculated based on pensionable income for the last three years before parents become eligible for the benefit (Ibid.). As in case with Lithuania, in Norway the benefit is also being calculated based on 5 day week. Just as in Lithuania the system of parental leave in Norway is also flexible and the parents can choose between two possibilities. First one is 100% coverage for a period of 49 weeks and the second -80% coverage for a period of 59 weeks. When you apply for parental benefit, you must choose between 100% or 80% degree of coverage. These weeks are divided into special quotas, special ones for mother and father and a period which can be shared. For the mother though there are special provisions. For example, "3 of the weeks (15 Business Days) in the Parental benefit period are reserved for the mother and must be used prior to the due date. These weeks cannot be used after the child is born." Moreover, the first six weeks once the child is born are reserved for the mother and it is part of the maternal quota. And in general the quotas are 10 weeks for mother and father. The rest is the shared period. Depending on the wish of mothers they may start receiving benefits 12 weeks before the child is due to be born. This amount is then calculated from the shared period (Parental benefit. Norwegian ... 2015).

In case parents have not met the rules to receive the parental benefit they may be granted a lump sum to support them and their children (Lump-sum ... 2015). Parents of children under 18 who live in Norway are eligible for a child benefit. "The purpose of child benefit is to help cover the costs of raising children. Single parents are entitled to child benefit for one child more than they actually live with (extended child benefit)." The benefit is granted for a period starting one month after the child is born till one month before the child turns 18 years old. The annual rate is 11,640 Norwegian Krone (ca 1,263 euro) for each child, i.e. 970 Norwegian Krone (ca 105 euro) per month per child (The Norwegian ... 2015). There is also additional and very important grant that the parents are entitled to - special allowance for parents of small children who do not attend day-care facilities. In order to receive this benefit the child has to be 13-23 months old. In case the child does not attend any day care facility during this time parents can receive 6,000 Norwegian Krone per month (ca 651 euro). Once the child attends the facility up to 19 hours per week, the parents are eligible to receive

3,000 Norwegian Krone (ca 326 euro) (Ibid.). Special circumstances are also taken into consideration and special allowances paid for single parents and parents who are adopting children.

Generally it could be said that the Norway family policy is fairly generous. Parental leave may be not as long as in Estonia for example, despite that the system is quite well thought through. Parents are entitled to a special benefit in case children don't go to a child care facility and thus they are supported during the time the parental leave is over but the child is not in a formal education system.

2.4.2. Sweden

In Sweden the system of family benefits and parental leave seems to be one of the most generous compared to the ones discussed above. The Parental Leave Act stipulates that mothers and fathers can be on parental leave until the child is 18 months old. This right to parental leave is in place no matter whether the parent receives benefits or not.

Parents in Sweden are entitled to 480 days of parental benefits for one child. The father can have paid 10 days of leave once the child is born. The system in Sweden is quite flexible since 60 days of the 480 are reserved for each parent, the rest can be transferred to each other although initially the parents with joint custody are entitled to half of those days each. It is also important that the leave must not necessarily be consecutive and thus parents may choose to be on a leave later. Although there is a set limit that the days have to be used until the child is 8 years old or has concluded the first year of school. The 480 days of parental leave are compensated for, but not based on a single quota. Thus for the first 390 days the amount of the benefit is the same as the sickness benefit level and it is based on benefit qualifying annual income (Parental leave. The Swedish ... 2015). What is significant about this system is the sickness benefit is ca 80% of the annual income and it is subject to upper limit - 333,700 Swedish Krona (ca 35,986 euro) (Sickness benefit ... 2015).

The remaining 90 days of the leave the payment equals the minimum level - 180 Swedish Krona (ca 19 euro) per day (Parental leave. The Swedish ... 2015).

Special child allowance is also paid in Sweden, and children living in the country are entitled to it. It is paid starting from (and including) the month after birth till the quarter the child is 16. Child allowance is 1,050 Swedish Krona (ca 113 euro) per child. For families with two or more children there are special provisions. Families with two children get an additional

150 Swedish Krona (ca 16 euro); with three children – additional 604 Swedish Krona (ca 65 euro); with four children - 1,614 Swedish Krona (174 euro); five children – 2,864 Swedish Krona (ca 309 euro). It has to be additionally pointed out that these sums are paid additionally to the child allowance paid for all children (Child allowance ... 2013).

After children turn 16 they may also receive the same amount of money in the framework of study allowance or extended allowance. It happens when a child attends secondary school, compulsory or special school (Ibid.).

Author wants to point out, that Sweden definitely stands out due to its high total fertility rate (compared to other states under discussion) moreover it has a fairly balanced system of benefits and parental leave. What is also significant is that the child benefit depends on the number of children in the family. This is close to the system adopted in Estonia and clearly is aimed at supporting families with more children, thus trying to stimulate families to have more children. Families may lose certain amount of earnings, but the difference is not as gradual as in Latvia and Lithuania. In this respect the system has better balance.

2.4.3. Denmark

In Denmark parents have the right to a "total of 52 weeks leave with maternity leave subsistence allowance in connection with pregnancy and birth". The mother is entitled to 4 weeks leave prior to giving birth and 14 weeks after. The father is entitled to two weeks in connection with the birth. The remaining 32 weeks can be divided between the parents according to their wishes and needs." In this respect the system is close to the one in Norway with the exception that there is just one form of duration. As to the entitlement the system is close to those examined above and maternity benefit is granted in case one has worked the last thirteen weeks prior to leave. There is a different measure for self-employed people as then one has to work for a month prior to leave and at least 6 months over the past year before the maternity leave. People receiving unemployment benefits are also entitled to the pay. Fathers can have paternity leave with maternity leave for a period of two weeks. The 32 weeks mentioned above are compensated for, despite that one could have a total of 64 weeks, thus 32 of them compensated for and 32 with no pay (Denmark: Creating ... 2015).

The compensation of maternity leave in Denmark is quite complicated, and it may differ substantially. It can be said that the amount that the parents are entitled to is less than their average salary. Despite that, many private companies in Denmark have special arrangements that they will pay an employee a full salary. Thus the government pays its share to the company, and the company in its turd adds certain sum of money to get a full salary and then pays it to the employee (Working in Denmark ... 2015).

In Denmark people who were not working and thus don't have the right to paid maternity leave, can get a maternity maintenance from their municipal authority. This however is not of the primary importance for this thesis because it is concerned with the taxation and benefits that the families get in return, since unemployed people don't pay taxes, the issue is not a priority (Ibid.).

Families are also entitled to family allowance benefit which is paid to every child under 18 years old. It is remarkable that none of the state discussed above has a child benefit that changes depending on the child's age. For 0 to 2 year old children the sum is 1,481 Danish Krone per month (ca 198 euro); 3-6 years old – 1,173 Danish Krone (ca 157 euro); 7-17 years old – 923 Danish Krone (ca 123 euro). There is also a special case for multiple births, and an additional amount is 2,208 Danish Krone (ca 296 euro) per child, except the first, per quarter until the child's seventh birthday. Additional sum is also paid to single parents. "As a supplement to the ordinary Child benefit, single parents who have the child living with him/her are paid an extra child benefit. Only one extra child benefit is payable irrespective of the number of children. The extra child benefit is 1,365 (ca 183 euro) Danish Krone per quarter (2015)." (Denmark: Creating ... 2015).

Moreover, the child allowances discussed above, from 2014 were made dependent on income of parents. It is made "so that the scaled down by 2% of that part of the income in 2015 exceeds 723,100 Danish Krone. ... Phasing it represents the tax base for the upper bracket." (Ibid.).

Generally speaking the maternity leave system in Denmark is quite scarce. The leave is 32 weeks and in order to receive a total of 52 weeks certain conditions have to be met. TFR in Denmark is also the lowest of states in this group and the state could expand the parental leave to try to increase the rate. Parents also lose substantial amount of earnings especially in case they decide to have all 64 weeks of leave (32 of them with no pay in case certain requirements are not met). Taking into consideration everything that was mentioned above, the system in Denmark is not eliminating the pressures on families with children as well as other states in the group do.

2.5. Group of "old" states of Europe: France, Italy, Spain: parental leave and family benefits

The third group of states that is going to be focused on are the "old" members of the European Union. This is of course relative assumption, but it is quite important in order to focus on the similarities of the countries. The states are France, Italy and Spain. These are also relatively big and populous states.

2.5.1. France

In France as well as in other states discussed above, people have to qualify to receive maternity leave payments. The claimant must have made certain contributions or have worked for a set period of time. Thus it is stated that: "to qualify for two years' ... maternity care, the claimant must: 1. have worked for at least 60 hours, or have paid contributions on an amount equal to at least 60 times the hourly SMIC (*Salaire minimum de croissance* -the salary minimum inter (SMIC) - legal minimum wage in France) over a period of one month; 2. or have worked for at least 120 hours, or have paid contributions on an amount equal to at least 120 hours, or have paid contributions on an amount equal to at least 400 hours, or have paid contributions on an amount equal to at least 400 hours, or have paid contributions on an amount equal to at least 400 hours, or have paid contributions on an amount equal to at least 400 hours, or have paid contributions on an amount equal to at least 400 hours, or have paid contributions on an amount equal to at least 400 hours, or have paid contributions on an amount equal to at least 400 hours, or have paid contributions on an amount equal to at least 400 hours, or have paid contributions on an amount equal to at least 400 hours, or have paid contributions on an amount equal to at least 400 hours, or have paid contributions on an amount equal to at least 400 hours, or have paid contributions on an amount equal to at least 400 hours, or have paid contributions on an amount equal to at least 400 hours, or have paid contributions on an amount equal to at least 400 hours, or have paid contributions on an amount equal to at least 400 hours, or have paid contributions on an amount equal to at least 400 hours the hourly SMIC

In France mothers have to take at least 8 weeks of maternity leave, but they can take up to 16 weeks. Usually these are divided in a way that 6 weeks are taken before child birth and 10 weeks after. In case there are certain complications concerning mother's health the mothers can have two additional weeks before the supposed delivery date. What is very new and uncommon in France (considering that his thesis has already discussed 6 states and has not seen this) is that for a third child the maternal leave is longer: 26 weeks (usually divided - 8 weeks before the child birth and 18 after). Moreover special conditions are for mothers expecting twins - 12 pre-natal weeks) and triplets (this applies also to mothers waiting for more than three babies) – 24 weeks. Moreover the post-natal period is also longer and it is 22 weeks (Ibid.).

Paternity leave is also applied in France and it is 11 days, which must be taken at a time (consecutively) and for multiple births fathers are entitled to 18 days of leave. These maternity and paternity leaves are compensated for from the government. And "the amount of

the daily maternity, adoption or paternity benefit payment is equal to the average daily wage of the three-month period preceding pre-natal leave up to the quarterly social security ceiling (9,510 euro in 2015), after deduction of the employee's share of statutory social contributions and taxes (flat rate of 21%). As of 1st January 2015, the daily payment cannot be lower than 9.26 euro) and cannot exceed 82.33 euro (I - Sickness, 2015).

What is also important is that some parents may receive as much as their salary in case it is bigger than the pay they are entitled to by the law, due to the collective agreement made between employees and the company they work for. "Some firms have arrangements to make up the difference between the statutory leave pay and your actual salary."(Parental leave, 2010).

In France several family benefits are also paid. Thus section L. 512-1 of the Social Security Code reads "any French or foreign person residing in France with one or more dependent children also residing in France, is entitled to family benefits for those children" (Code ... 2012). Family benefits are given for all dependent children. Family benefits have quite an uneasy structure in France. All the benefits are calculated as a percentage of a base fare (BMAF) it is a monthly sum and it is being revised each year taking into consideration anticipated average annual consumer price index. At the moment the BMAF is 406.21 euro. Family benefits in France can be divided into several categories: basic benefits for maintenance, benefits to offset childcare costs and the costs incurred due to the arrival of a child which have been combined under the early childhood benefit programme (PAJE), benefits for special purposes. Basic maintenance benefits include child benefits. It is very unusual that "family benefits are paid from the 2nd dependent child residing in France", thus for two children the fare is 129.99 euro it is not related to the income of the parents and this sum is also subject to social tax deductions (CRDS 0,5% - Contribution au Remboursement de la Dette Sociale – contribution to the repayment of social debt; social charge in France). 296.53 euro is paid for three children and the same rules apply. There are also additional rates for additional children in the family (born before 01 May 1997) - increase for each child over 16 - 64.99 euro. Children born after 30 April 1997 - increase for each child over 14 - 64.99 euro. All these sums are also subject to tax deductions. Flat-rate allowance is another form of maintenance benefits. For these benefits families are eligible, where there are at least three children, and the families benefit is reduced due to the fact that one or more of the children has reached the age of 20 which is the limit for child benefit. The allowance is paid for a total of 24 months. The sum is 20.234% of the BMAF, or 82.19 euro per month. It is also subject to social tax deductions and it may be divided to 2 or four depending on the household income. There is also a family income supplement paid for families with 3 or more children - 41.65% of the BMAF, i.e. 169.19 euro (base amount) 45.82% of the BMAF, i.e. 186.13 euro (increased amount paid to families whose income does not exceed a certain ceiling). It has to be additionally pointed out that this benefit is means tested which means that families with lower income are likely to qualify. Family support allowance is paid to all orphans or half orphans (IV – Family benefits ... 2015).

The second set of benefits is early childhood benefits. These include birth or adoption grant. There are certain requirements that the parent have to fulfil in order to receive this benefit. The mother has to perform her first pre-natal examination before the 14th week of pregnancy. The amount of the grant is 927.71 euro for a birth and 1,855.42 euro for an adoption. There are also certain material standards to pass thus, "the income ceiling depends on the number of children in the family and the number of babies expected. The ceiling is higher when both parents are working and for single parents. As of 1st January 2015, the family's annual income for 2013 must not exceed 35,729 euro for a family expecting one child or 45,393 euro for two working parents or a single parent. One very important part of early childhood benefit is the basic allowance. It is paid after the birth grant. "It is paid from the date of the child's birth to the last day of the month preceding their third birthday", moreover medical examinations have to be passed at a due time. Basic allowance full rate is 185.54 euro and half-rate is exactly 50% of that (Ibid.).

A very big part of this early childhood benefits is the shared child-rearing benefit (PreParE) supplement for free choice of working time (CLCA) and optional supplement for free choice of working time (COLCA). "The shared child-rearing benefit (granted for children born or adopted from 2015) and the supplement for free choice of working time (granted for children born or adopted prior to 2015) are not means-tested and are intended to allow a parent to stop working or work less in order to look after their child. These are paid either as a separate benefit or, when the parent fulfils the income conditions, on top of the basic allowance. It is payable as of the first child and is conditional on the parent having worked for at least two years during a given period which will depend on the child's order of birth in relation to their siblings." COLCA can be claimed by families raising at least three children
and the youngest must be born or adopted after 1st July 2006. To quality one of the parents has to give up work completely. The other condition is that the parent has had to work for two years prior to the delivery of the first child. The sums depend on the amount of hours that the parent is working and whether or not they receive the basic allowance. The sums are quite significant comparing to the ones mentioned above, for example if the basic allowance is not paid the full rate is 579.13 euro. Duration of these benefits is also statutorily limited and the "shared child-rearing benefit (PreParE) is paid to each parent for six months for a first child, 24 months to each parent for a second child and 48 months for any additional children." (IV – Family benefits ... 2015).

And these are not means tested allowances, despite that they are subject to social tax deductions. Moreover, since they are designed only for big families they are not going to be discussed in length, but the table is in the Appendix 1.

One other important allowance is supplement for free choice of childcare. "The supplement for free choice of childcare is paid to a couple or parent using the services of a registered child-minder or a child-minder in the home to care for a child under age 6. It is awarded either as a separate benefit or, if the parent(s) fulfil(s) the income conditions, on top of the basic allowance" (Ibid.).

The benefit is made up of two different components: a component covering part of the child-minder's wage and varying according to household income and the child's age, and a component consisting of payment by the direct settlement system ("tiers payant") of all or part of the social security contributions payable as employer of the child-minder (100% of the contributions payable for a registered child-minder and 50% for a child-minder in the home, up to a ceiling of 442 euro per month for a child under age 3 and 221 euro for a child between ages 3 and 6). The supplement is paid at the full rate up to the child's third birthday, then at a reduced-rate until the child's sixth birthday." These sums are income dependent and if care is hired by family and the income of the family equals or is below 20,427 euro the benefit is 463.24 euro, if the income is from 20,427 till 45,393 euro benefit is 292.11 euro. If income is over 45,393 euro benefit is 175.24 euro. The sums are much higher in case the child care is provided by association or company. For example, compensation for child-minder if income equals or is below 20,427 euro is 701 euro (Family benefits. The French ... 2015). The third group of allowances concerns benefits for special purposes like to care for a disabled child,

family housing, and moving allowance and so on. Since these concern are not applicable at all terms these will not be much focused on (IV – Family benefits ... 2015).

This system allows parents to return to work and not having to worry about where to place the child and how to pay the bills for childcare, or to stay at home and be compensated for such choice. It seems that the system was designed to stimulate families to have more children and to make easier for families to balance between personal and work life. Although the different purposes and the extent of the allowances and benefits is quite remarkable, although the duration of the maternity leave is not very long. Despite that the government is taking part in many aspects of family life and has a benefit to fit any occasion. Such system must be quite expensive financially and it would be very interesting to compare the level of taxation in different states that will be discussed below.

What is also well worth mentioning is that fathers have quite limited role in the French system especially compared to Sweden for example. Fathers only have the 11 or 18 days of paternal leave and the maternal leave is reserved exclusively for mothers. This is probably one part to pay attention to, because mothers could then return to work earlier and thus their careers are less likely to be affected (Ibid.).

To sum up it could be said that France has a quite complicated system of family benefits, but at the same time it also very broad and big families with children and disabled children get special treatment. The parental leave is very short compared to the one in the Nordic and Baltic States. Notwithstanding the comparatively high TFR, the family and demographic issues in France still have to be on the agenda due to the fact that the high rates are supported by migration and thus the issue is still there. The system in France is clearly built by a different principle than in the previous two sets of states. The government takes more care of those who cannot cope with certain issues themselves and also the state has set a broad net on benefits for special purposes that could really come in handy in cases the families are below the middle class. In this case it could be claimed that in France the system is easing pressures on bigger and less wealthy families in a much greater way than for others.

2.5.2. Italy

In Italy there is also a system of maternity leave. It is somewhat different from everything that was discussed earlier. There is a difference between so called compulsory maternity leave and optional. The compensation for these different types and their duration varies significantly. According to Italian legislation the compulsory maternal leave is 2 months prior to the delivery and three months after. Sometime before these rules were not flexible in use, despite that recently it has been allowed for mothers to take one month of leave prior to the delivery and then four months after (Maternity, 2015).

For the mandatory period of maternity leave mothers are entitled to receive 80% of earnings for salaried workers. "For home helps, self-employed workers and agricultural temporary labourers, earnings are 80 per cent of conventional earnings determined each year by the law; for non-fixed term workers, Maternity leave depends on accredited contributions, though each professional sector has the possibility to determine, with approval by the Ministry of Labour, Health and Social Policies, a higher ceiling, after considering income and contribution potential of the professional sector and compatibility with its financial." (Addabo ... 2015).

Parental leave which is optional in Italy allows each parent to take up to six months off. The optional paid maternity leave (30%) lasts for 3 years (the 6 months can be taken till the child is three) and unpaid leave till the child is 8. The leave has been actually extended to 6 years, compared to previously 3 years.

What is also significant is that now there is such program in place as 2015 Experiment. It is in place till December 2015, but may be extended and made permanent. This experiment has made some important changes, for example optional leave is extended from 8 to 12 years of child's life (Parental Leave in Italy ... 2015).

Moreover, paid optional maternity leave (30%) has been extended till 6 years, and unpaid leave - extended till the child is 12. The period of compulsory maternal leave was not changed, despite that, it has been made more flexible especially concerning premature births and situations when child is hospitalized (Ibid.).

Fathers in Italy are entitled to one day of compulsory leave that is paid 100% of the salary (Addabo ... 2015).

In Italy there is also such thing as family benefits. They are income related and depend on number of members in the family. These allowances are designed for citizens and immigrants. The most important criteria is the family total income and the number of people in the family. From July 2015 to June 2016 the allowance for a three membered family (both parent and one child) in case their total income is between 14,383.38 euro and 14,498.43 euro per year is 136.73 euro. With the same income family of 8 would then receive 773.04 euro. Special sums are also given to families with only one parent. The basic principle is that more of given to the families that need it most, and probably this is why the sums are income related (Tabelle ... 2015).

Parental benefits in Italy are also quite complicated as it was the case with France. And since these are income related the system could be said to be close to the French one. The main assumptions are the same in the sense that government supports families with lower income in a greater way. The parental leave is also comparative to the one adopted in France. Since Italy's TFR is very low, the state could increase the period to stimulate people to have more children. The system of compensation is also such as to put parents into a position when they lose part of their income, which does not lessen pressure on families. The system could definitely be improved, despite that all the economic variables also have to be taken into consideration as all the improvements will require substantial resources.

2.5.3. Spain

In Spain there is also a system of parental leave set in place. Generally it applies to mothers who have been working and thus made financial contributions to the social security system. What is different from all the states, discussed above is that the working period depends on the mother's age, three periods are recognized. Thus the mother's age is below 21, 21-26 years old and over 26 years old. For example for mothers 21-26 years old must be working "90 days within the 7 years immediately prior to the start of the period of leave or, alternatively 180 days of contributions over the course of their working life prior to said date." (Maternity. Economic ... 2015). For mothers over 26 on the other hand the numbers are 180 and 360 days respectively. In case the mother is not working but fell short of meeting the minimum requirements mentioned above, the maternity leave benefit could be transferred (Ibid.).

In Spain there is also such thing as part-time maternity leave, and these can be taken by "workers employed by another person who take periods of Maternity Leave can do so either full time or part time, self-employed workers can also take part time maternity leave, for which the subsidies paid and reduction in activity can only be split 50/50". In such cases very important role is given to the agreement between employer and employee made before the maternity leave. There is also a limit to this form of maternity leave, in case the mother have given birth she cannot use the above mentioned maternity leave for first six weeks of child's life (Maternity. Economic ... 2015).

The mothers may leave work up to 10 weeks prior to the estimated delivery date. And from this date the right to maternity benefit comes into effect. Maternity benefit lasts for 16 weeks (must be taken in one block) and it can be extended by two weeks (per child starting from the second) in cases of multiple births. What is very important and new to this discussion is that in Spain at the request of the mother parents can share (simultaneously or successively) the period of leave, and it is possible only if both meet the requirements mentioned above (Ibid.).

Financially maternity leave is also supported. It 100% equals the "base pension that will be equal to the base pension established for temporary disability benefits resulting from common contingencies, taking into account the start of the period of leave." (Ibid.). This explanation is quite complicated and it then could be said that the workers receive 100% of the wage for the month immediately prior to the date of the beginning of leave. In case mothers choose the part-time regime, the benefit will be reduced taking into consideration the time that the mother is still working. The benefit for mother working part time is also different from the one designed for full-time mothers: "by dividing the sum of the contribution bases certified with the company during the 12 months immediately prior to the base pension of employment, by 365. If the worker has been with the company for less time, the base pension will be calculated by dividing the sum of the corresponding number of calendar days." (Ibid.).

In case mothers do not qualify for the benefit, they are still not left completely without support. Thus there is a special maternity rate set for such cases. This benefit is then provided for a total period of 42 days (in case of multiple births and certain others could be extended to 56 days). This pay is then calculated based on the IPREM (Public Income Rate of Multiple Effects - an index used as a reference in Spain for granting aid, scholarships and so on) and benefit equals it (Your ... 2013).In 2015 the sum is 532.51euro per month (Iprem, 2015).

Paternal leave is also granted to fathers. It is 13 days, and could be extended by 2 days in case of multiple births. Fathers who are employed under Basic Public Employee Statute are entitled to 15 days of consecutive 100% paid leave. In case with large families, the time may be extended to 20 days (Paternity ... 2015).

In Spain there is also a child benefit. It is paid to children less than 18 or to older ones in case they have severe disability over 65%. The annual allocation is 291 euro, thus it is 24.25 euro per month. This sum is granted in only in case the "beneficiary's income does not exceed the set limit of 11,547.96 euro a year. " For large families the maximum is higher. What should also be pointed out is that once the annual income of beneficiary exceeds the set maximum limit no allocation will be levied (Workers ... 2015). More information concerning the numbers and allocation can be found in the Appendix 2.

What is also significant in Spain that children with disabilities have priorities, and the sums paid to them are many times larger than the ones paid for healthy children (Ibid.). In this respect the need to support families with children who have certain percent of disability is morally understandable and moreover it may help them recover with the help from the family.

Spain has the lowest TFR in the respected set of states and also the lowest among the states that were discussed in this thesis. The length of parental leave is quite modest, despite that mothers receive 100% compensation. As in case with other big states in Spain very little attention is devoted to the role of fathers. In Norway there is special quota whereas in Spain mostly women take care of children. In this respect the leave could be extended using a fathers' quota. This could also ensure that women don't necessarily have to make long breaks that could affect their careers in a negative way.

3. COMPARATIVE ANALYSIS

In this chapter the author is comparing different systems in order to find strengths and weaknesses and also to offer probable solutions to problems taking into consideration certain policies adopted in other states. One of the main ideas of this master's thesis is to compare the benefits, the duration of parental leave and compensation for it, to the contributions paid by workers in the form of income taxes. In this respect the author finds it really important to examine the correlation between the level of taxation and the benefits that the parents are entitled to. Simple logic would support the notion that the more the people contribute the more they are expected to receive from the government.

Thus the author adds this statement for examination. Of course it has to be mentioned that this thesis is concentrating only on two aspects of family policy and there may be many more indirect ways in which governments support families. This could be a perfect topic for future research. Unfortunately the limits of this thesis do not allow the author to examine all the details.

3.1. Taxation

Tax systems vary greatly from country to country and, as it was mentioned above, there can be two main systems pointed out - flat tax and progressive tax. In Estonia, Latvia and Lithuania the system of income taxation is fairly easy and understandable. Personal income tax rates in the related countries are presented in the Table 1 below. In all countries where progressive tax system is applied is shown an average income personal tax in 2014.

In Estonia income is 20% (2015) and it is subject to annual basic exemption (non-taxable amount) - 1,848 euro (per year in 2015). There are also other percentages withheld from the salary: unemployment insurance 1.6% (2015) and an additional 2% - funded pension payment (same since 2012) (Tax rates 2015). In Latvia individuals pay 23% of taxable earnings. There are also certain tax allowances for and deductions that individuals have the

right to for certain expenditure. These are of limited application and will not be examined in length (Income ... Latvia 2015).

	Income tax rate
Estonia	20%
Latvia	23%
Lithuania	15%
Norway	39% *
Sweden	57% *
Denmark	56% *
Italy	48% *
Spain	52% *
France	50% *

Table 1. Personal income tax rates in the related countries (%)

* Average Personal Income Tax Rate in 2014

Source: compiled by author using (Income Taxes abroad ... Your Europe) data

In Lithuania the income tax is set at 15% and as it was mentioned above it is also a flat rate. Into the taxable income one must also include all the allowances and deductions one is entitled to there is also such indicator as TEA (Income ... Lithuania 2015). It is a basic tax-exempt amount and it "is applied only to income related to employment relationships under the following procedure: 2.1. the basic TEA applicable to resident's income related to employment relationships or equivalent relationships not exceeding 800 Lithuanian Litas (ca 232 euro) per month is 470 Lithuanian Litas (ca 136 euro) per month" (Personal 2015) ; the other states that were chosen to be discussed in this thesis on the other hand have implemented the progressive tax, meaning that for higher income the percentage deducted is higher. The implications of that system were closely discussed in chapter one. In this respect calculating the income tax rate in these countries is much more difficult. In order to understand the real numbers, later on the average income tax figure will be introduced.

In Norway the income tax comprises of several seductions. It could be done in three steps: "1. Work out your taxable income by subtracting any applicable allowances or deductions for expenditure 2. Work out the rate that applies to it by combining these 3:

combined national and municipal income tax — 28%, (24.5% in Finnmark and Nord-Troms counties), top tax - 0 -12% (depending on your income), social security contribution (NIS) - 7.8%; for self-employed: 11%" (2013) (Income ... Norway 2015). As it was mentioned earlier, there is a need to introduce an average percentage that people are paying, and in 2014 it was 39% this is clearly much higher than in Baltic states (Norway 2015). And since the percentage is the average, and there is a progressive tax system it could be said that certain groups with very high income are paying even more. In Sweden the income tax level is also quite different from anything seen in the Baltic states. The total tax comprises of a government and state income tax. The lowest is 29%, but most pay 49-60 % since their income is higher that a set minimum threshold (Fouché 2008). The average rate also proves this calculation as in 2014 it was 56.9% (Sweden 2015).

In Denmark the tax system is also quite complicated and there are several numbers that have to be added up and taken into consideration. These are: "a labour market contribution of 8% of your entire income (employees and self-employed workers); a deduction before any tax is due: personal allowance of 43,400 Danish Krone (under 18 -32,600 Danish Krone; ca 5,810 and 4,364 euro respectively) for municipal taxes, health contributions of 5% and bottom-bracket tax of 8.08%, highest tax bracket of 15% on income above 459,200 Danish Krone (ca 61,473 euro); municipal income tax and church tax payable at flat rates, which vary depending on where you live (average 2015 rate: 24.9%); social security contributions." (Income ... Denmark 2015). What is also interesting about Danish income tax system is that "everyone has a personal allowance. If a person does not have an income greater than his or her personal allowance, he does not have to pay income tax. Personal allowance is 41,000 Danish Krone (young people under 18 years have a personal allowance of 30,000 Danish Krone; 5,489 and 4,016 euro respectively)" (Ibid.). In 2014 the average tax rate in Denmark was 55.6% (Denmark ... 2015). As this statistical information indicated the taxation levels are much higher in Nordic countries than in Baltic states. In Denmark and Sweden the % are especially high, whereas in Norway the number is far higher compared to Baltic states, but it seems fairly moderate compared to other states in its group.

The third set of states: Italy, Spain and France also have progressive tax systems. The system is probably as complicated as the one just discussed concerning Nordic group. The tax rates in Italy could be seen in the below Table 2. Moreover, there is a regional tax (up to

3.33%) and a municipal tax (0.1-0.9%). National law lays down the limit and by that sets the framework in the boarders of which the municipalities and regional authorities are free to set the rates (Income ... Italy 2015). The average tax rate in Italy in 2014 was 47.9% (Italy ... 2015).

Table 2. Five income groups in Italy. Table for calculating Irpef.

Taxable Income	Rate	IRPEF (Gross)
up to 15,000 euros	23%	23% of income
more than 15,000 and up to 28,000 euros	27%	3,450 + 27% on the part exceeding 15,000 euros
more than 28,000 and up to 55,000 euros	38%	6,960 + 38% on the part exceeding 28,000 euros
more than 55,000 and up to 75,000 euros	41%	17,220 + 41% on the part exceeding 55,000 euros
more than 75,000 euros	43%	25,420 + 43% on the part exceeding 75,000 euros

Source: (Income ... Italy 2015)

In Spain the average personal income tax rate in 2014 was 52% (Spain 2015). The progressive income tax rises in certain stages (2015) - 20% (earnings up to 12,450 euro); 25% (12,450 up to 20,200 euro); 31% (20,200-35,200 euro); 39% (35,200-60,000 euro); 47% (over 60,000 euro) (Taxation ... 2015). Just as in Denmark, in Spain there are basic personal allowances. "The basic personal allowance for everyone under the age of 65 is 5,550 euro. If you have children under 25 living with you, earning an income of less than 8,000 euro, you can claim an allowance of 2,400 euro for the first child, 2,700 euro for the second and 4,000 euro for the fourth. If you have a parent or grandparent living with you, with an income of less than 8,000 euro, you can claim an allowance of 1,150 euro if they are over 65 and 2,550 euro if they are over 75." (Ibid.). In Spain certain tax deductions are also available for "payments into the Spanish social security system; pension contributions; the first 1,500 euro of dividend interest, the costs of buying and renovating your main home; charitable donations." (Ibid.).

In France the average individual income tax is 50.3% (2014) (France ... 2015). Income taxes are also subject to progression and it is also done in stages as in the two states mentioned earlier. The stages are as follows: 0% for earnings up to 9,690 euro; 9,690-26,764 euro – 14%; 26,764-71,754 euro – 30%, 71,754 – 151,956 euro - 41%; over 151,956 euro - 45% (Income ... France 2015). Moreover, there are also social charges of 8% (Social Security ... 2015). Once calculating the taxable income all the allowances must also be taken into account, as well as possible deductions (Income ... France 2015).

Looking at the taxation systems discussed above, it could be mentioned that the first set of states namely the Baltic states all have a flat income tax. This system is relatively easy to comprehend and apply, despite that, this also limits the transfers of wealth from the upper to the lower classes. Taking into consideration the length of parental leave and the parental benefits applied in those states, it could be concluded that the family policy is fairly generous. Parental leave is long and well compensated for. The sums paid for parental benefits are not very high, but since they rise when the family has three or more children it is aimed at raising the total fertility rates. Moreover, the percentage paid as social contributions and income taxes are low, comparing to the Nordic and the "old" states of Europe. Thus based on the factual and statistical data presented above, the parents in Baltic states are fairly well off, they have a decent safety net and system of social support from the government, whereas the taxes they pay are relatively low.

Comparing the Nordic and the Baltic states, a great deal of difference could be pointed out. The parental leave is much shorter and the pay is also limited. And what is remarkable is the difference in taxes paid. People in Nordic states pay more than twice as much taxes as their Baltic counterparts do. Same applies to the "old" states of Europe, since in Nordic and there the progressive tax system is in place. Looking at the parental benefits it could be mentioned that the wealth reallocation is the main theory applied. Wealthier people pay more taxes, whereas poorer with more children gain more in benefits. In this respect it is clear that the Nordic group and France, Spain and Italy all have common traits. The length of parental leave is clearly shorter than the one applied in Baltic states.

The sets of states that were discussed clearly have common traits as well. Visibly the longest period of parental leave is in Estonia. Moreover, it is also compensated for 100% of the average salary. At the same time the flat income tax is 23.6% (income tax + unemployment insurance + pension contribution). In Latvia and Lithuania the paid parental

leave is also quite long (at least a year depending on the rate of compensation), despite that the compensation is not 100% as in Estonia. In this respect Lithuanian system is somewhere between the ones adopted in Estonia and Latvia. What is interesting though is that the total fertility rate in Lithuania is 1.59 children per woman, whereas in both Latvia and Estonia it in only 1.52 (Total ... 2015). Such difference may seem significant, despite that it has to be mentioned that the total fertility rate for replacement is 2.1 children per woman (Ibid). This puts the TFR of their countries in perspective and looking at this disparity the difference between TFR of Baltic states stops seeming that significant. What is also noteworthy is that the income taxes in Latvia and Estonia are very close, and at the same time Lithuania has set it ca 7% lower, namely at 15% (Income ... Lithuania 2015). In this respect the Lithuanian experience still stands out, as people pay less in taxes and at the same time are entitled to higher and longer periods of leave compared to Latvia. The family system also seems to be working better in Lithuania compared to other Baltic states as the TFR is still higher.

As it could be seen the Baltic states pay more in child benefits in case there are more children in the family (Estonia and Latvia), this is thus aimed at raising the total fertility rate and support bigger families. The sums are not necessarily high especially taking as a measurement the sums that are paid to families in the Nordic countries. The real numbers seem low, despite that it has to be pointed out that economically the Nordic and Baltic states are very different and numbers may vary significantly when taking into consideration different economic indicators. It is essential to link the benefits to some kind of economic indicator otherwise it is difficult to say whether the numbers are high or low and what do they mean in each particular country.

For the length of parental leave and the compensation paid for it do not need such link due to the fact that time is comprehended in the same way, moreover all compensations are mentioned as a percentage of the annual or any kind of income (whichever system is applied in each particular state under discussion). Some sums were mentioned to show the sums paid in case mothers were unemployed, but since such cases are not in the focus of this thesis, these were not examined in detail and thus no link to economic variables is essential.

3.2. Baltic group

The first economic indicator that is important for this thesis is the average net wage in each of Baltic states. In the second quarter of 2015 the average net wage in Latvia was 600 euro, in Estonia - 871 euro and in Lithuania 554 euro (In Latvia ... 2015). What should also be pointed out is that GDP per capita significantly varies among such relatively similar countries as the Baltic states. Thus in 2014 GDP per capita index in Estonia was 73, in Lithuania 74 and in Latvia 64 (when 100 is set at the EU-28 average) (ABVolume ... 2015).

As this indicates, the average net wage of Latvia and Lithuania is quite similar, whereas the difference GDP per capita between Estonia and Lithuania is only 1 point, moreover Latvia falls behind. Thus these statistical data indicates that economically the Baltic states are still different, although their family policies have certain common traits.

As it was mentioned in chapter two, in Estonia there is a child benefit which is a fixed sum of 45 euro and it is paid every month. This family benefit is 5.17% of the average salary in the country. It has to be mentioned though that this benefit is raised starting from the third child and then it is 100 euro, which is already 11.48% of the average salary. Still as the total fertility rate in the country is much lower than two, the families receiving this type of benefit is limited. Latvian system of child benefits is a bit more complicated as there are different rates for first, second a third child. Thus for the first child parents are eligible to receive 1.9% of the average salary, for the second -3.79%; and for the third -5.6%. The benefits under discussion are not taxed. In Lithuania the amount of the benefit depends on the age, thus till the child is two the rate is 5.14% and later until the child is 18 - 2.74%. Moreover, as it was pointed out above all the allowances are also added to the taxable income, thus in this respect the actual numbers are even lower. As the numbers show the family benefits in all Baltic states do not form a gradual part of income for the families. In Estonia the rate is higher, despite that for the first and second children the rate is just over 5% of the average salary. Due to the system of flat taxation, the benefits allocated are transparent and are fair from the standpoint that every child is paid for, notwithstanding the rate of family income. It has to be mentioned that Lithuania stands out because of its very low income tax (15%) and benefits somewhat similar to the ones in Estonia. Estonia on the other hand stands out due to its longest and 100% compensated for parental leave as well as relatively high child benefits, as a percentage of the average net wage.

3.3. Nordic group

Examining the systems of parental leave and benefits in Nordic states, certain common traits could be seen. These states have always been famous for good and broad social security schemes and large family support mechanisms. What is also significant is that in Nordic states the average total fertility rate is much higher than in the Baltic states (1.54 vs 1.78 children per woman) (Total ... 2015). In this group Sweden stands out as there the parental leave is the longest among all the states that were discussed in the thesis. The level of compensation is also high (390 days - 100% and later the minimum rate, which all together makes ca 80% of the earnings) (Parental leave. The Swedish ... 2015). What is also remarkable that Sweden has the highest TFR (1.89) in the Nordic group of states (Total ... 2015). Norway has also a fairly long period of parental leave (49 or 59 weeks) (Parental benefit. Norwegian ... 2015), and its TFR is 1.78 which is also quite high compared to many European states. (Total ... 2015). Denmark has taken a bit different approach thus only with certain qualifications the parental leave could be up to 52 weeks with compensation. Otherwise it is 32 weeks (Denmark: Creating ... 2015). Country's total fertility rate is also lower only 1.67 children per woman (Total ... 2015). In this respect Denmark could try to use the experience of its neighbours and extend the period of parental leave. Although such steps all have serious economic and budgetary constraints. More resources will have to be diverted to cover for the extended period of leave and moreover parents will be excluded from workforce for longer time, thus this could have an effect on their careers in the company. These are very serious and important topics, unfortunately since this particular thesis has its limitations it is not possible to discuss them in length, although these are relevant issues which future research could be built on.

The family benefits in Nordic states are higher looking at just the numbers. But as it was pointed out above, there is a need to link them to certain economic criteria to have a more adequate picture. First of all it has to be mentioned that GDP index per capita in Norway in 2014 was 179, in Sweden and Denmark 124 (calculated based on EU-28 average, which is set at 100) (ABVolume ... 2015). In this respect Norway stands out due to its high GDP per capita. At the same time the length of parental leave as well as its compensation is fairly modest, especially compared to the system adopted in Sweden. At the same time in Norway there is a system of payments to parents who take care of their children till the child is two years old and the child is not enrolled in a formal childcare institution (cash for care benefit)

(Cash-for-care ... 2015). This is not an extension of the parental leave, despite that this could be added to a calculation taking into consideration the main framework of this thesis. This makes the system of parental leave in Norway much more generous. Although such scheme is available to parents, at the same time in Norway the children enrolment in day-care facilities, (also supported by the state) is very high – up to 54% of children under three years old attend kindergartens or other facilities of this kind (Enrolment ... 2014).

Moreover, keeping in mind the minimum parental leave set by the EU at 14 weeks, (Directive 92/85/EEC, 1992), the Nordic as well as Baltic states definitely have set their standards much higher, although the prices that the working populations have to pay also vary significantly. The tax rates in Nordic and Baltic states are substantially different. The first difference is that the Baltic states have a flat tax rate, whereas Nordic countries have adopted the progressive tax.

The systems in various states are very different and taxes may also vary based on the region. In order to be able to make any kind of comparisons it was decided to look at the average tax level paid in 2014. In Norway the rate was 39%, Sweden - 56.9%; Denmark -55.6% (see Table 1). This puts the issue of parental benefits and leave into a whole new perspective. In Norway thus the parental leave is relatively long, and at the same time the percentage in taxes paid by working population is remarkably smaller. Unfortunately, the total fertility rate in Norway falls behind the rate of replacement (2.1 children per woman) at the same time; none of the states under discussion in this research reach that target. Comparing the three Nordic states it could be concluded that taking into consideration the length and compensation for the parental leave, the Norwegian parents are better off, as they pay much less in taxes as their counterparts, receiving a substantial amount of social welfare. This research of course takes into consideration only limited amount of family and social policies that the state is active in. There may also be additional policies and programs, like medical assistance, unemployment benefits, pre-school and formal school education and many more, and it may be the fact that through those sources the families are gaining more, than this research anticipates. Despite that, since the scope of this research is limited, all the aspect of social policies concerning families cannot be examined and taken into account.

Just as it was for Baltic states in order to realize what do the sums paid as child benefits mean for the family in that particular country they will be examined as a percentage of the net average wage in the country. In this research the most recent statistical data available is used. Since no adequate statistical information from a relevant source was available concerning the average net wage in Nordic countries, other variable needs to be introduced. The economic variable to link the sums paid as parental benefits in different states is annual net earnings of 2014. These are calculated for several groups of people. Since no variable fits exactly into the framework of this thesis, it was chosen to take into account the net annual wage for a two-earner married couple with two children both 100% of average worker. Of course nowadays not in all families people are married, and since the total fertility rates are quite low in Europe, not all families have two children. Despite that this is something that gives some kind on overview on the wage level in the country. Moreover, since this variable is going to be applied to all states, the distortion will be limited. In addition, it has to be pointed out that both parents working - is a situation, which is extremely relevant in 21st century. It has been said that "the economic empowerment of women across the rich world is one of the most remarkable revolutions of the past 50 years." (Women ... 2009). Taking this into consideration it is very interesting to look at exactly the economic variable pointed out above.

In Sweden the annual net earnings for a two-earner married couple with two children both 100% of average worker was in 2014 70,781 euro (Annual ... 2015). In Sweden the benefit for one child is therefore 1.92%, for two children 2.19%, for three - 3.02%, for four -4.87%. In Denmark the sums paid are somewhat different and the state has also taken another approach. It is based on the same principle as in Lithuania. Once the child is small parents receive more in benefits and later the sums shrink. Although in Lithuania there are just two periods distinguished, in Denmark there is three. In 2014 the net average earnings specified above were 69,465 euro thus for a child 0-2 years old the benefit comprises 3,42% the wage, 3-6 years old -2.71%, 7-17 years old -2.12% (Annual ... 2015). In Denmark these benefits are not taxed. In Norway the benefit is flat and it is not dependent on children age or how many children are there in the family. Thus the indicators for Norway are 95,196 euro and 1.33% (Ibid.). Moreover in Norway the benefit is subject to taxation. Thus the percentage is really even lower. In Denmark the benefits may be reduced in case parents receive over a set upper limit, which also lowers the percentage. Looking at the rates it could be concluded that these do not rise over 5% of the net wage in a two earner family. Thus the family benefits don't compose a significant addition to the earnings of the family. In addition it has to be pointed out that Norway has the highest annual average net wages compared to all other states

discussed in this thesis. In this respect Norway in order to try to raise its TFR could use the child benefit schemes more widely and try to raise these.

Estonia, Latvia and Lithuania were already discussed above, despite that there the indicator was the average net wage in the respected country. It is also interesting to apply the same method of comparison as for the Nordic group. In Estonia the specified earnings were 20,805 euro, Latvia – 13,905 euro, Lithuania – 12,066 euro (Annual ... 2015). And the percentages are in this case for Estonia – 2.6% and 5.77%; Latvia – 0.98%, 1.96% and 2.95%; for Lithuania – 2.83% and 1.51%. The rates are also quite low and don't compose a significant part of household expenditure. Estonia stands out as its benefit starting from the third child is over 2.5% than the other states have, moreover the states average earnings are also substantially higher. Of course, this kind of benefit is not paid to many families, because the total fertility rate in the country is just over 1.5 children per woman. For the generalized information and comparison with other countries refer to the table in the Appendix 3.

3.4. "Old" EU member states

The "old states" of Europe also show a very interesting tendency and have taken a different approach, than the two groups examined earlier. What stands out looking at the duration of maternity leave is that these are very low compared to the ones adopted in Nordic and Baltic states. In Italy with the longest period it is 5 months, just over 20 weeks (Maternity, 2015). In other states the length is just over minimum set by the EU - 14 weeks. (R191, 2015). What is also important is that only in France the total fertility rate is getting closer to the replacement level and it was 1.99 in 2014 (Total ... 2015). Italy and Spain on the other hand have extremely low TFR (Ibid.). In this respect these states could use more such family policies as parental leave. This could be done, increasing the role of fathers. At the moment these states focus on mothers, whereas Norway for example has special quota set especially for fathers. This is an important notion, which could be said to be the other side of the women emancipation movement. From one side women are more active in the workforce, and from the other - raising children is not solely women's responsibility, but as the experience of Norway shows fathers could also play an important role. The discussion concerning these changes has been active in France. Moreover, the EU has proposed to extend

the maternity leave to 20 weeks, although the French government was against that proposal, due to its cost to the countries' budget (Parental leave, 2010).

France is also relatively well-off concerning that the countries' TFR is close to two. This is mostly the fact due to immigration. Certain parts of French African colonies (in Algeria) for example have traditionally enjoyed the same status as parts of mainland France. (Meredith 2003, 45-58). Due to such close ties with African states, where TFR has traditionally been very high.

As the research has indicated the states are also similar in their views towards family policies. Economically though the states are somewhat different. The GDP per capita in 2014 was: Italy – 97, France – 107 and Spain – 93, taking EU average as 100 (ABVolume ... 2015). Furthermore, annual net earnings for a two-earner married couple with two children both 100% of average worker in 2014 for Spain was 41,260 euro, Italy – 43,697 euro, France – 56,431 euro (Annual ... 2015). As it was pointed out above, these indicators were brought to the discussion in order to compare the family benefits paid in each state and to compare these to the annual net earnings. With Baltic states and Nordic states, it was fairly easy to make calculations, although it is rather impossible to make such comparisons applicable to France, Italy and Spain. The states have a progressive income tax and most benefits are income related. Moreover, the more children there are in the family and the lower the income, the more the family could receive in different benefits. In this respect these states definitely follow the theory of income redistribution. It claims that "assistance for families at risk of poverty is well integrated in the French benefit system" (France ... 2015).

Looking at the average taxes paid in Spain, Italy and France and comparing these to the duration and compensation paid for parental leave, it could be said that wealthier families pay much more contributions than they get in return in benefits. At least this concerns the types of benefits that are in the focus of this discussion. This fits into the idea of income redistribution, at the same time such systems may be dangerous, as people will have less incentives to work and earn more. In addition, such short periods of maternity leave, could cause disparity in income as well as impose pressure leading to a misbalance between work and family life. As the experience of Italy and Spain show (to a lesser extent this also applies to France) the broad benefit system is not a guarantee to high TFR. From one standpoint lower career breaks allow mothers to make a career, but at the same time this makes it difficult to combine two responsibilities. Extensions of the maternity leave or giving more weight to the role of fathers could improve the situation with low total fertility rates. Nevertheless, the issues of budgetary constraints have to be examined.

To sum up it should be said that "old" states of Europe have relatively short maternity leaves and concentrate only on mothers and fathers are completely ignored. These states also show a tendency of redistribution of the income. The states have a progressive tax system, which redistributes the income in a way, that high earner pays a higher tax rate than a low income earner. In addition to that the more children are there in the family and the less is the income, the more parental benefits could be received. The experience of these states (to the greater extent of Italy and Spain) shows, that the broad benefit system does not guarantee the higher TFR levels in the countries.

CONCLUSIONS

Present master's thesis is handling an important issue that concerns most of the population and it is important to the well-being and prosperity of any country. The issue is demography and most specifically the diminishing total fertility rates in European states, taking into consideration the population ageing phenomenon.

States can create certain incentives for people to behave in a certain way using different governmental policies. Such family policies are also applied in different states of Europe, to support people in their decision to have children, although scope of application of such procedures varies significantly. The states are fairly free to determine their policies, although in some aspects there are set minimal international standards. Since the issue could be examined in many different ways, in the context of this master's thesis only two basic aspects of family policies were chosen for a closer analysis. These are the parental leave and compensation for it, and family benefits. Europe as a continent is not particularly homogeneous, thus average indicators may be misleading. Thus above three sets of states were examined in detail.

The Baltic states have proved to have generous family policies especially concerning the fact that they have a system of flat income tax and it is low. This becomes especially apparent once comparing the Baltic states to the "old" states of Europe, where the progressive tax is very high and parental leave is close to the minimum requirements. Taking into consideration only the two aspects of family policy that were mentioned above, it could be said that people in Baltic states are better off than those in "old" states of Europe. People's contributions are smaller and at the same time the returns through policies are generous.

Nordic states have also fairly good system of parental leave, but there is also a much higher price that the population has to pay in form of taxes. At the same time Nordic group shows important notion, as their total fertility rates are comparatively high, whereas in Baltic states with it generous policies the TFR didn't show remarkable rise. The experience of the three groups of states chosen for examination disprove the hypothesis that higher benefits and longer period of parental leave could significantly raise fertility rates. Of course once again it has to be pointed out that the thesis didn't examine all the forms and procedures of family policies, but those discussed still provide and important insight.

The second hypothesis that the more people invest into the system in form of taxes, the more they should be getting in return also didn't find confirmation. Progressive taxes, especially in the form they are applied in the "old" states of Europe manage to ensure support to low income families. Moreover the wealth is being reallocated. This system could lead to higher total fertility rates, although in Italy and Spain these remain extremely low. In France with its large system of support, the rise of TFR may be due to rising number of children in low income families, especially of African origin. Whether this is an actual trend needs to be researched further. Despite that, such system in theory may lead to a formation of certain groups of population that cannot manage bringing up their children without significant help from the state. From one standpoint since the TFR is very low, the state may willingly take that burden in other to ensure there is enough taxpayers in the future. On the other hand such transfers of wealth to the ever growing number of recipients may lead to social cleansing and ever more expanding share of funds being devoted to social welfare programs and not to ensure the stability and growth of the economy of the particular state.

States definitely could learn from each other, for example in Nordic countries, especially in Norway and Sweden fathers are actively involved into process of taking care for the child and share parental leave with mothers. This could lower the burden on mothers and diminish the time they are away from work thus safeguarding their careers. In Estonia there has been and partly still is a problem with formal day care facilities, where children could be enrolled to once the maternity leave is over. The experience of Norway with its cash for care benefit could solve many problems that Estonia has been experiencing for decades. Since the TFR in Spain and Italy are very low, these states could try to prolong the maternity leave and maybe introduce a quota for fathers who could be more on the picture.

Looking at the analysis it could be concluded that some other variable is very important that affects people's judgement concerning children. Possible variables could be stability in the country, its traditional prosperity and care for citizens. Or it could be the faith that the people have in their countries and economies. The author could imagine that it is far easier to raise children in a stable environment, where economic shocks are levied by government policies and people feel that there is a true safety net behind them, or that the economy is so strong and multidimensional, that there will always be a job to do. Since purely financial benefits have proved to be not entirely efficient in raising fertility rates in Europe, perhaps strong and stable economies could.

RESÜMEE

LASTEGA PEREDE TOETUSEID VÕRDLEV ANALÜÜS NING SEOTUS TULUMAKSUMÄÄRAGA EUROOPA KOLME RIIKIDE GRUPI NÄITEL

Jekaterina Trunin

Käesolev magistritöö käsitleb perepoliitikaga seotud olulisi teemasid. Eesmärgiks on uurida perepoliitika vahendeid, nende mõju sündimusele ning seost tulumaksumääraga. Töös ei analüüsita perepoliitakaid tervikuna, vaid eelkõige kontsentreerutakse selle põhimeetmetele: lapsehoolduspuhkuse pikkus ja vanemahüvitis selle perioodi jooksul ning lastetoetused. Analüüsi teostatake kolme Euroopa riikide grupi näitel. Esimeseks grupiks on endised Nõukogude Liidu liikmesriigid ehk "Baltikumi grupp": Eesti, Läti ja Leedu. Teiseks grupiks on skandinaavia grupp: Norra, Rootsi ja Taani ning kolmas grupp on "vanad" Euroopa Liidu liikmesriigid: Itaalia, Hispaania ja Prantsusmaa. Analüüsi käigus selgitatakse välja sündimust ja perepoliitika põhimõtted ülalpool mainitud riikides ning võrreldatakse neid tulumaksumääraga.

Esimene hüpotees põhineb loogilisel ning teooriaga kinnitatud väitel - mida rohkem toetatakse lastega peresid ning mida pikem on lapsehoolduspuhkus, seda suurem on sündimus (summaarne sündimuskordaja: sündimus ühe naise kohta tema fertiilses eas) - ei leidnud kinnitust. Autor leiab, et on ka muid tegureid, mis mõjutavad lapse saamise otsust: ainuüksi lapsehoolduspuhkuse pikkus ja toetused ei ole piisavalt tõhusad meetmed sündimuse suurendamiseks.

Teine väide puudutab maksustamist – tulumaksumäärad on positiivses seoses toetustega, mida inimesed saavad vastutasuks läbi perepoliitika meetmete – ei leidnud samuti kinnitust. Progressiivne maksusüsteem kindlustab kaudselt vähekindlustatud perede

toimetulekut: maksukoormus jaotatakse vaestelt rikastele. Diskussioon käesoleva magistritöö raames aga näitab, et praktiline tõestus sellele, et kui inimesed maksavad riigile rohkem makse siis saavad ka rohkem toetusi, puudub.

Magistritöö teoreetilises osas peatutakse mõningatel erinevate demograafia- ja maksundusega seotud teooriate aspektidel ja perepoliitika meetmetel, samuti antakse ülevaade summaarse sündimuskordaja ja rahvastiku taastootmise tasemete defineerimise lähtekohtadest ja käsitlustest ning selgitatakse, miks riikide valimisse on sattunud just need riigid. Töös on kasutatud võrdleva analüüsi (*comparative analysis*), juhtumiuuringu (*case study*) ja statistilise (*statistical*) meetodeid.

Järgmises peatükis on analüüsitud üheksa Euroopa riigi põhilisi perepoliitilisi vahendeid: ühekordne sünnitoetus ja/või igakuised maksed ning tasustatud vanemapuhkus. Lisaks on toodud ka statistilised andmed summaarse sündimuskordaja kohta vaadeldavates riikides ning Euroopa Komisjoni poolt paika pandud raamistik, mis puudutab lapsehoolduspuhkuse perioodi.

Kolmandas peatükis võrreldakse erinevate riikide perepoliitika meetmeid ja tulumaksumäärasid ning nende mõju sündimusele. Läbiviidud analüüsi käigus selgus, et perepoliitika puhul on väga suur tähtsus mitmetel teguritel - isegi finantsiliselt vanemasõbralik perepoliitika (pikk kompenseeritud lapsehoolduspuhkus ning kõrged lastetoetused) ei pruugi omada märkimisväärset efekti sündimuse osas. Autor leiab, et see on koht edaspidisteks uuringuteks. Tõenäoliselt on veel teisi tegureid, mis mõjutavad inimeste laste saamise otsust. Näiteks skandinaavia riikides sündimus on suhteliselt kõrge, mis võib olla tingitud riigi tugevast majandusest ja stabiilsusest.

Riikide perepoliitiliste meetmete võrdlemise tulemusena saab välja tuua aspektid, mille puhul on võimalik üksteise kogemustest õppida kui ka neid üle võtta. Näiteks "vanad" Euroopa Liidu liikmesriigid (ja mingil määral ka Balti riigid) võiksid jagada vanemapuhkuse perioodi mõlema vanema vahel (viia sisse isapuhkuse määr), nagu on tehtud skandinaavia riikides. Samuti võiksid "vanad" Euroopa Liidu liikmesriigid pikendada lapsehoolduspuhkuse perioodi, Balti riigid võiksid sisse viia *cash-for-care* toetusi, nagu see on kasutusel tänapäeval Norras.

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APPENDICES

Appendix 1. Family benefits in France

Family benefit rates from April 1st 2015 to March 31 2016 before deduction of

	Monthly	BMAF%*	Means-	Subject to
Benefit type	amounts	*	tested	the CRDS
Family benefits	1			
- 2 children	129.99€*	32 %	no	yes
- 3 children	296.53 € *	73 %	no	yes
- for each additional child	166.55€*	41 %	no	yes
Children born before 01/05/1997				
- increase for each child over 16	64.99€*	16 %	no	yes
Children born after 30/04/1997				
- Increase for each child over 14	64.99€*	16 %	no	yes
Flat-rate allowance	82.19€*	20.234 %	no	yes
Family income supplement				
- Base rate	169.19€	41.65 %	yes	yes
- increased rate	203.06€	49.99 %	yes	yes

the CRDS

the CRDS				
	Monthly	BMAF%*	Means-	Subject to
Benefit type	amounts	*	tested	the CRDS
Family support allowance		<u></u>		
- full rate	134.05€	33 %	no	yes
- partial rate	100.58€	24.76 %	no	yes
Education allowance for a		-	-	
disabled child				
- Basic allowance	129.99€	32 %	no	no
- Supplement - 1st category	97.49€	24 %	no	no
- Supplement - 2nd category	264.04€	65 %	no	no
. Single parent increase	52.81 €	13 %		
- Supplement - 3rd category	373.71€	92 %	no	no
. Single parent increase	73.12€	18 %		
- Supplement - 4th category	579.13€	142.57 %	no	no
. Single parent increase	231.54€	57 %		
- Supplement - 5th category	740.16€	182.21 %	no	no
. Single parent increase	296.53€	73 %		
- Supplement - 6th category	1103.08€	-	no	no
. Single parent increase	434.64€	107 %		

	Monthly	BMAF%*	Means-	Subject to
Benefit type	amounts	*	tested	the CRDS
Daily parental attendance		<u>.</u>		•
allowance				
- Couple	43.18€	10.63 %	no	yes
- Single Parent	51.30€	12.63 %	no	yes
Supplement for expenses (monthly	110.45€	27.19 %	yes	yes
amounts)				
EARLY CHILDHOOD	-	-	-	-
BENEFITS PROGRAM				
- Birth grant	927.71 €	-	yes	yes
- Adoption grant	1 855.42 €	-	yes	yes
- Basic allowance				
. Full rate	185.54€	-	yes	yes
. Partial rate	92.77 €	-	yes	yes
- Supplement for free choice of				
working time and Shared child-				
rearing benefit				
(child born or adopted prior to April				
1, 2014)				

	Monthly	BMAF%*	Means-	Subject to
Benefit type	amounts	*	tested	the CRDS
If the basic allowance is not paid		<u></u>	<u></u>	
. Full rate	579.13€	142.57 %	no	yes
. Partial rate (Employment \leq 50%)	440.37 €	108.41 %	no	yes
. Partial rate (Employment between	333.01€	81.98 %	no	yes
50% and \le 80%)				
If the basic allowance is paid				
. Full rate	392.48€	96.62 %	no	yes
. Partial rate (Employment \leq 50%)	253.72€	62.46 %	no	yes
. Partial rate (Employment between	146.36€	36.03 %	no	yes
50% and \le 80%)				
(child born or adopted from April 1,				
2014)				
. Full rate	392.48€	96.62 %	no	yes
. Partial rate (Employment \leq 50%)	253.72€	62.46 %	no	yes
. Partial rate (Employment between	146.36€	36.03 %	no	yes
50% and \le 80%)				

	Monthly	BMAF%*	Means-	Subject to
Benefit type	amounts	*	tested	the CRDS
Optional supplement for free				
choice of working time (COLCA)				
(child born or adopted prior to April				
1, 2014)				
. If the basic allowance is paid	641.53€	157.93 %	no	yes
. If the basic allowance is not paid	828.18€	203.88 %	no	yes
(child born or adopted from April 1,	641.53€	157.93 %	no	yes
2014)				
Supplement for free choice of				
childcare***				
(child born or adopted from April 1,				
2014)				
Care hired by family				
. If income \leq 20.427 \in	463.24€	114.04 %	yes	yes
. If income between 20.427 and	292.11€	71.91 %	yes	yes
45.393 €				
. If income > 45.393 €	175.24€	43.14 %	no	yes

the CRDS					
	Monthly	BMAF%*	Means-	Subject to	
Benefit type	amounts	*	tested	the CRDS	
Association or company			-		
- Childminder					
. If income \leq 20.427 \in	701.00€	172.57 %	yes	yes	
. If income between 20.427 and	584.17€	143.81 %	yes	yes	
45.393 €					
. If income > 45.393 €	467.34€	115.05 %	no	yes	
- Home child carer					
. If income ≤ 20.427 €	847.07€	208.53 %	yes	yes	
. If income between 20.427 and	730.20€	179.76 %	yes	yes	
45.393 €					
. If income > 45.393 €	613.38€	151 %	no	yes	
Back-to-school allowance		-	-	-	
(ARS)***					
If income < $24.306 \in$ with one child					
or $< 29.915 \in$ with 2 children					
or < $35.524 \in$ with 3 children					
or $< 41.133 \in$ with 4 children					
For each child aged 6 to 10	364.45€	89.72 %	yes	yes	
For each child aged 11 to 14	384.56€	94.67 %	yes	Yes	

Benefit	t type	Monthly amounts	BMAF%* *	Means- tested	Subject to the CRDS
For each child aged	l 15 to 18	397.88€	97.95 %	yes	yes
Moving	allowance				
(lump-sum	payment)				
Maximum for three	e children	974.90€	240 %	yes	no

* As of July 1, 2015, family benefits for households or people with dependent children are meanstested. The listed amounts apply to families whose annual income for year N-2 does not exceed $67,140 \in$ (for a family with 2 children), $72,735 \in$ (for a family with 3 children), $78,330 \in$ (for a family with 4 children) + 5,595 \in per additional child (for a family with more than 4 children). Family benefits for families whose annual income exceeds these amounts are divided by 2 or 4 depending on their income bracket. However, a supplement can be paid on a sliding scale if household income for calendar year N-2 is slightly higher than the applicable income ceiling (for more information).

** The monthly family benefit base (BMAF) is set by decree. As from the 2012 Social Security financing law, the BMAF is uprated on 1st of April each year. The BMAF was set at 406.21 \in on April 1, 2014 (no increase on April 1st, 2015).

*** Income limits effective as of January 1 2015.

Source: (Family benefits. The French ... 2015)

Appendix 2. Amounts and	principles of allocation of parental benefits in
Spain	

SMALL FAMILIES					
DEPENDENT CHILDREN (n)	MINIMUM LIMIT (mL) Income < = mL (1)	FULL ANNUAL ALLOWANCE (A)(1)	MAXIMUM LIMIT (ML)Income > mL< ML (2)	ANNUAL DIFFERENTIAL ALLOWANCE (D) (3) (4)	MAXIMUM INCOME LEVEL (5)
1	11,547.96	291.00	11,838.96	11,838.96 - I>= 24.25	11,814.71
2	13,280.15	582.00	13,862.15	13,862.15 -I>= 48.50	13,813.65
3	15,012.35	873.00	15,885.35	15,885.35 -I>= 72.75	15,812.60
4	16,744.54	1,164.00	17,908.54	17,908.54 -I>= 97.00	17,811.54
5	18,476.74	1,455.00	19,931.74	19,931.74 -I>= 121.25	19,810.49
6	20,208.93	1,746.00	21,954.93	21,954.93 -I>= 145.50	21,809.43
7	21,941.12	2,037.00	23,978.12	23,978.12 -I>= 169.75	23,808.37
8	23,673.32	2,328.00	26,001.32	26,001.32 -I>= 194.00	25,807.32
9	25,405.51	2,619.00	28,024.51	28,024.51 -I>= 218.25	27,806.26
10	27,137.71	2,910.00	30,047.71	30,047.71 -I>= 242.50	29,805.21
N	Ml = 11,547.96+1,732.19 (n - 1)	A = 291.00 n	ML = mL + A	D = ML - I provided that D > = 24.25 euros/year/child	Maximum level = ML - (24.25 n)

LARGE FAMILIES					
DEPENDENT CHILDREN (n)	MINIMUM LIMIT (mL) Income < = mL (1)	FULL ANNUAL ALLOWANCE (A)(1)	MAXIMUM LIMIT (ML)Income > mL < ML (2)	ANNUAL DIFFERENTIAL ALLOWANCE (D) (3) (4)	MAXIMUM INCOME LEVEL (5)
3	17,380.39	873.00	18,253.39	18,253.39- I> = 72.75	18,180.64
4	20,195.53	1,164.00	21,359.53	21,359.53- I> = 97.00	21,262.53
5	23,010.67	1,455.00	24,465.67	24,465.67- I> = 121.25	24,344.42
6	25,825.81	1,746.00	27,571.81	27,571.81- I> = 145.50	27,426.31
7	28,640.95	2,037.00	30,677.95	30,677.95- I> = 169.75	30,508.20
8	31,456.09	2,328.00	33,784.09	33,784.09- I> = 194.00	33,590.09
9	34,271.23	2,619.00	36,890.23	36,890.23- I> = 218.25	36,671.98
10	37,086.37	2,910.00	39,996.37	39,996.37- I> = 242.50	39,753.87
N	MI = 17,380.39 + 2,815.14 (n-3)	A= 291.00 n	ML = mL + A	D = Ml - I provided that D >= 24.25 euros/year/child	Maximum level = ML - (24.25 n)

APPLICATION RULES:

- (1) The full annual allowance (A) is granted if the annual income (I) is less than or equal to the minimum limit (mL) based on the total number of originators.
- (2) Maximum limit (ML) calculated to establish whether the differential allowance (D) is applicable. Maximum limit (ML) is the minimum limit (mL) plus €291 for each able-bodied originator under 18.
- (3) An annual allowance (D) equal to the difference between the maximum limit (ML) and income (I), will be granted on the provision that said difference is equal to or greater than €24.25 per year per originator.
- (4) The annual difference allowance (D), will be distributed amongst the originators.
- (5) If annual income (I) exceeds these amounts, no allowance will be granted.

Source: (Maternity. Economic ... 2015)

Appendix 3. Related countries' statistical data and child benefits' comparison

	TFR (2013)	∆ TFR vs replacement level (2.1)	Incom tax	ie	GDP (2014) index per capita, taking EU average as 100	net annual wage for two- earner married couple with two children both 100% of average worker, 2nd quater 2015	child benefits as percentage to the earning specified earlier in this table (see previous column), 2015
Estonia	1,52	0,58	20%		73	20 805 €	1st and 2nd child 2,60% 3rd child 0,48%
Latvia	1,52	0,58	23%		64	13 905 €	1st child 0,98% 2nd child 1,96% 3rd child 2,95%
Lithuania	1,59	0,51	15%		74	12 066 €	0-2 y** aged 2,83% 3-18 y aged 1,51%
Norway	1,78	0,32	39%	*	179	95 196€	every child 1,33%
Sweden	1,89	0,21	57%	*	124	70 781 €	one child 1,92% 2 children 2,19% 3 children 3,02% 4 children 4,87%
Denmark	1,67	0,43	56%	*	124	69 465 €	0-2 y** aged 3,42% 3-6 y aged 2,71% 7-17 y aged 2,12%
Italy	1,39	0,71	48%	*	97	43 697 €	Rather impossible to make generalizing calculations. The states have a progressive
Spain	1,27	0,83	52%	*	93	41 260 €	income tax and most benefits are income related. Moreover, the more children thare are in the family and the lower the income, the more the family could receive in different
France	1,99	0,11	50%	*	107	56 431 €	benefits.

* Average Personal Income Tax Rate in 2014

** y= years

Source: compiled by author using the data referenced in the chapter 2.

duration of parental leave	compensation for parental leave
435 days + 140 days	100%
112 or 140 days **	80%
126 or 140 days ***	100%
343 or 413 days	100% for 343 days or 80% for 413 days
480 days	390 days -100% and later the minimum rate (all together ca 80% of earnings)
364 days if certain qualifications are met, overwice 224 days	amount that the parents are entitled to is less than their average salary *
mandatory: 2 months prior the delivery and 3 months after (total ca 150 days) *****	mandatory leave: 80%
70 days (can be extended by 14 days per child starting from the second in case of multiple birth)	100%
at least 56 days, max. 112 days. ****	100% *****
	435 days + 140 days 112 or 140 days ** 126 or 140 days *** 343 or 413 days 480 days 364 days if certain qualifications are met, overwice 224 days mandatory: 2 months prior the delivery and 3 months after (total ca 150 days) ****** 70 days (can be extended by 14 days per child starting from the second in case of multiple birth)

Appendix 4. Duration of parental leaves and compensation for them in the related countries

* maternity leave compensation is quite complicated and may differ substantially. It can be said that the amount that the parents are entitled to is less than their average salary. Despite that, many private companies in Denmark have special arrangements that they will pay an employee a full salary. Thus the government pays its share to the company, and the company in its turd adds certain sum of money to get a full salary and then pays it to the employee (Working in Denmark ... 2015).

** more is paid to women who have had medical supervision starting from 12th week of pregnancy (Maternity Benefit ... 2015). *** in case of a compicated birth or if two or more children are born

**** In France mothers have to take at least 8 weeks of maternity leave, but they can take up to 16 weeks. Usually these are divided in a way that 6 weeks are taken before child birth and 10 weeks after. In case there are certain complications concerning mother's health the mothers can have two additional weeks before the supposed delivery date. What is very new and uncommon in France (considering that his thesis has already discussed 6 states and has not seen this) is that for a third child the maternal leave is longer: 26 weeks (usually divided - 8 weeks before the child birth and 18 after). Moreover special conditions are for mothers expecting twins - 12 pre-natal weeks) and triplets (this applies also to mothers waiting for more than three babies) – 24 weeks. Moreover the post-natal period is also longer and it is 22 weeks (I - Sickness, 2015).

***** the amount of the daily maternity, adoption or paternity benefit payment is equal to the average daily wage of the three-month period preceding pre-natal leave up to the quarterly social security ceiling (9,510 euro in 2015), after deduction of the employee's share of statutory social contributions and taxes (flat rate of 21%). As of 1st January 2015, the daily payment cannot be lower than 9.26 euro) and cannot exceed 82.33 euro (I - Sickness, 2015).

***** Parental leave which is optional in Italy allows each parent to take up to six months off. The optional paid maternity leave (30%) lasts for 3 years (the 6 months can be taken till the child is three) and unpaid leave till the child is 8. The leave has been actually extended to 6 years, compared to previously 3 years.

What is also significant is that now there is such program in place as 2015 Experiment. It is in place till December 2015, but may be extended and made permanent. This experiment has made some important changes, for example optional leave is extended from 8 to 12 years of child's life. Moreover, paid optional maternity leave (30%) has been extended till 6 years, and unpaid leave - extended till the child is 12. The period of compulsory maternal leave was not changed, despite that, it has been made more flexible especially concerning premature births and situations when child is hospitalized (Parental Leave in Italy ... 2015).

Source: compiled by author using the data referenced in the chapter 2 and 3