Childcare and Population Ageing

How Increased Funding Could Lead to a Rejuvenation of the Workforce





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Executive Summary

The average age of the population is gradually increasing in most Western countries. Therefore, the population over 65 is no longer in proportion to the working population. Some causes are a decrease in birth rates over the past decades and an increase in life expectancy. This can have consequences for the economy such as a shortage of workers and high costs of pensions. A possible solution is an increase in the funding of childcare services, which could encourage more women to work and couples to have (more) children. A higher number of mothers who are willing to work could reduce costs of population ageing. In addition, the rising fertility rate might lead to a decrease in the average age of the population in the future.

According to existing studies, many factors influence couples' decisions to have children. The cost of having children is one of these. Studies also conclude that increasing childcare funds lead to a higher use of childcare facilities and it is likely that more women will work since many of them consider high childcare costs to be hindering their career. Moreover, research shows that low childcare costs could have a positive influence on the fertility rate although there is no convincing evidence.

The European Union does not have the power to make binding policy decisions in the field of childcare. Most EU guidelines concerning childcare facilities aim to achieve gender balance and higher employment rates among women and do not focus on population ageing. The commission has set Barcelona Objectives for the number of children that childcare should be provided for, but only a few countries complied with them by 2010. Structural funds were allocated to member states in order to help them achieve targets set by the European Union.

The childcare systems in Denmark and the Republic of Ireland are compared in this report. Denmark has complied very well with the Barcelona Targets while Ireland did not comply with any of them. A possible reason could be that the costs of childcare are much higher in Ireland. Irish couples spend 26% of the family income on childcare while Danish parents spend 9%. The low costs in Denmark seem to translate into a high employment rate among women compared to Ireland. On the other hand, the birth rate is much higher in Ireland than in Denmark, even though childcare is more expensive. The reason is probably that there are more women in their childbearing years in Ireland than in Denmark. Furthermore, Ireland is very religious and abortion is not allowed.

Therefore, there appears to be a connection between funding childcare facilities and a high employment rate. There is insufficient evidence for the assumption that low childcare costs can lead to a higher birth rate since many factors influence fertility decisions. More research should be conducted on the ways in which governments can encourage couples to have (more) children. Furthermore, the EU should obtain more power to be able to regulate childcare effectively in all its member states. Policies regulating childcare should be expanded to include informal childcare as well as for children in primary schools. Moreover, maternity leave and the availability of part-time work could encourage couples to have children.

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1. Introduction

The population in most Western countries is ageing. Several processes led to a slow rise of the average age of the population. Governments agree that something should be done but there is no consensus on the most effective solution. Ever since welfare increased and women became better educated and started working, fertility rates dropped. Emancipation is a good concept, it ensures equality between the sexes and it gives a boost to the economy. Therefore, a solution is required to let women have it all, the possibility to have a nice job and to have children. Many will say that the earth is already to full and that there should be less instead of more children. However, if European countries do not take steps to increase fertility rates, they will most likely experience serious economic problems in the future. The aim of this study is to assess in what ways funding childcare systems can contribute to a rejuvenation of the workforce and therefore reduce population ageing.

Childcare facilities take care of children while their parents are at work. Children are educated and learn how to communicate with others, while parents can continue to do their jobs. It seems like a win-win situation. Since parents do not have to quit their jobs, the employment rates could go up and the possibility to combine work with family life could persuade couples to have (more) children. However, in many countries childcare is expensive. Therefore, funds are needed to make childcare facilities more accessible for all income groups. The EU could play a role in this process by adopting rules that apply to all member states.

In this report it will be assumed that having a child is a choice, so it is supposed that parents chose to have children and pregnancies were not unplanned. The study will focus on child care services for two age groups; children aged 0-3 and children aged 3 up to the mandatory school age. There are many types of childcare arrangements and a distinction is made between formal and informal childcare. Most policies focus on formal childcare and so will this study. The employment committee of the European Commission has defined formal childcare while developing the Barcelona Objectives as "pre-school or equivalent, compulsory education, centre-based services outside school hours, a collective crèche or another daycare centre, including family daycare, professional certified childminders" (European Commission, 2013). Since childcare systems differ greatly across the European Union, this thesis will describe the situation in the European Union as a whole and several individual member states.

First of all, the causes, consequences and solutions to population ageing will be described in order to get an overview of the situation and possible solutions. After that, existing studies on the decision to have a child and the effects of childcare subsidies on the amount of users, working women and the effects on the birth rate will be discussed. Then, the role of the European Union regarding childcare facilities and EU policy on childcare facilities will be analysed. Finally, the effects of childcare policies on fertility rates and employment rates among women in Denmark and the Republic of Ireland will be assessed.

Methodology

This study will be based on existing literature on the effects of childcare subsidies on fertility rates and participation rates among women. Many studies have been conducted on population ageing. These will be interpreted to get an overview of the causes and consequences of population ageing. Studies have also been conducted on the effects of childcare subsidies on employment. However, not all studies on childcare funds connect childcare policy to population ageing. Therefore, these studies will be analysed by applying knowledge on theories on population ageing. Statistical evidence will be used in order to provide an overview of the demographic and economic situation in several EU member states. For example, statistics of Eurostat on birth rates and employment rates will be assessed. Since current data on these topics is already available for all countries within the European Union, it is not necessary to create new data. Furthermore, it is difficult to acquire new data in multiple countries that provide a complete and reliable insight on demographics and population ageing.

Still, the study can lead to new insights since raw statistical data of two countries (Ireland and Denmark) is compared and interpreted in relation to national circumstances and theories on population ageing. Furthermore, existing studies on population ageing often do not research the effects of childcare policy on fertility.

2. Population ageing in general

2.1 Introduction

Population ageing is a complicated problem. Before going into one particular solution, it is important to have a good overview of all causes and consequences of population ageing. This knowledge is needed in order to understand the need for a good solution and to indicate why child care support can contribute to combat population ageing.

Population ageing seems to be a problem of wealthy countries. Throughout the centuries people wanted to get older and cure diseases. Without considering the consequences, it seems to be a good development that people can become older and disease after disease can be cured since every person desires a long and healthy life. Furthermore, due to emancipation and an increase in the use of contraceptives having children became a choice and fewer children were born.

However, there are also negative consequences of population ageing and falling birth-rates. Most consequences are economic and nowadays they are slowly becoming more eminent. Costs for pensions and health care are rising and there are fewer workers to cover for them. Furthermore, as birth-rates are low, it seems like there will be no improvement in the near future. Since the economic crisis of 2008 hit Europe, countries have had to make huge cuts in their spending. Their prime interest became fighting the consequences of the crisis and not stopping the process of population ageing. The process of population ageing has been going on for decades and now it is time to take adequate measures to stop the process.

2.2 Population ageing in general

2.2.1 Definition

There are many definitions varying from 'the rising of the average age' (Engelen, p53) which is rather limited, to the definition of the World Health Organisation which states 'In almost every country, the proportion of people aged over 60 years is growing faster than any other age group, as a result of both longer life expectancy and declining fertility rates' (WHO). Simply said, population ageing is a slow process in which the average age of the population is going up and the amount of seniors is not in proportion to the amount of young people. It is a process that affects almost all countries in the world.

2.2.2 Old Age Dependency Ratio

The Old Age Dependency Ratio is used to measure population ageing; it indicates the economic pressure which is placed on the working population to pay for the costs of the population ageing. The Eurostat website describes the Ratio as "the ratio between the total number of elderly persons of an age when they are generally economically inactive (aged 65 and over) and the number of persons of working age (from 15 to 64)" (Eurostat). It expects the Old Age Dependency Ratio to rise from 25.4% in 2011 to 53.5% in 2060 (Giannakouris, 2008). This is an extensive increase. It seems like the pressure would double. However, it should be taken into account that an increasing amount of scholars and organizations share the opinion that this formula is no longer accurate. According to Jeroen Spijker and John McInnes it is no longer correct to assume that all people above 65 are inactive. "The model "overlooks" the fact that the increasing life expectancy means older people are now healthier and fitter, compared with older people included in previous cohorts" (Whiteman, 2013). Furthermore, they also say that not all people that are below 65 are active. Therefore Spijker and McInnes have developed a new ratio which is called the Real Elderly Dependency Ratio. They state that the problem and costs of population ageing are exaggerated. However, the general consensus is that the population is ageing and measures should be taken to stop this process. Even though the Old Age Dependency Ratio has its flaws, and some say it is inaccurate, it is used in most population ageing studies since the Real Elderly Dependency Ratio is relatively new.

2.3 Causes of Population Ageing in Europe

2.3.1 Increased life expectancy

Nowadays, people live longer than they did in the past. "The future paths of population ageing result from specific combinations of declining fertility and increasing life expectancies in different parts of the world" (Lutz, Sanderson, & Scherbov, 2008). It is a fact that people are getting older, and when people live longer it can be concluded that the average age is going up, and there will be more pensioners. According to Eurostat, the life expectancy at birth in the European Union was 77.4 years for males 83.2 for females in 2011 (Eurostat, 2013). The life expectancy has increased with more than 20 years in the past 100 years. According to the article 'changes in life expectancy between 1900 and 1990' the life expectancy for males in the Netherlands went from 48.6 in 1900 to 74.2 in 1990 (Kinsella, 1992). In 2011 it was even higher, namely 79.4 (Eurostat, 2013) and the life expectancy is likely to rise even further in the future. However, an increased life expectancy does not just have negative consequences for the economy. People are ageing in a healthy way, and since people are staying healthy for a longer period of time, they might also be able to work for a longer period of time. According to Lutz, Sanderson

and Scherbov there is a difference between a person aged 60 in the 1900s and a person of the same age in 2000, since the person in 2000 is likely to live longer. So, even though a person is 65 he is capable of doing more than a person of the same age in the 1900s. Therefore, he is able to work for a longer period of time to cover for the shortage of labour that is likely to rise due to population ageing.

2.3.2 Generation of Baby boomers is ageing

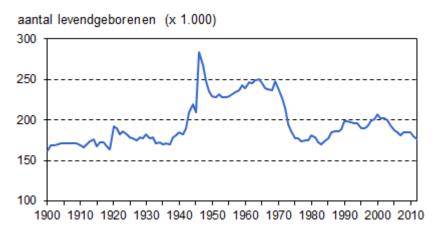


Figure 1: Amount of babies born alive in the Netherlands x1000 (source: CBS Bevolkingsstatistiek)

A growing amount of baby boomers is about to retire and this is likely to increase pressure on the welfare system. Fertility graphs which show the amount of children per woman over the years clearly show an increase in the amount of births in the period after the Second World War across Europe. The 'baby boom' is clearly visible in the graph displayed above of fertility in the Netherlands; a clear peek can be seen between 1945 and 1970 in the amount of births. By now the people that were born in this time are all above forty, and some have already retired. In the years to come many more will retire and this places a large amount of pressure on health care and social security systems.

2.3.3 Decline in fertility

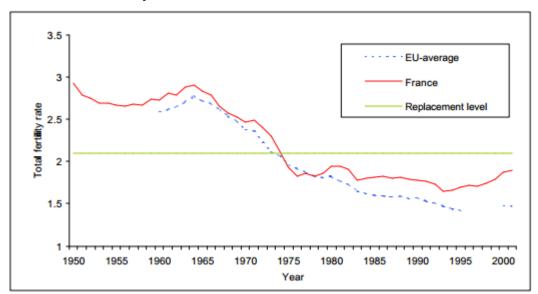


Figure 2: Fertility rate in France and the EU, amount of children per woman. Source: (Grant, et al., 2004, p. 73)

People are having fewer children and they are having children at a later age. As seen in the graph above, the fertility rate in France and the European Union is below replacement level. The average age at which women are having children in the European Union is also increasing. According to the Guardian, the average age of mothers when their child is born in the United Kingdom is 29.7 and 49% of all mothers is over 30 when their baby is born (Meikle, 2013). Having children at a later age has certain risks. Furthermore, as stated in another article of the Guardian, an increasing amount of women is not having children at all. "Thirty per cent of German women have not had children, according to European Union statistics from 2005, with the figure rising among female graduates to 40%" (Harding, 2006). Even though these figures only indicate the situation in a few countries in the European Union, the situation is to some extent the same in all member states. The numbers are very high, and this indicates that falling birth rates are a serious problem. "Eurostat's trend scenario for population projections suggests that by 2050 the EU-25 will have 15 million fewer children (aged up to and including 14) compared with 2005" (Eurostat, 2007). This group is almost the size of a small country like the Netherlands. Measures should be taken on short notice to ensure that birth-rates will at least be brought back to replacement level to limit the consequences of population ageing.

2.4 Consequences of Population Ageing in Europe

2.4.1 Decrease of the labour force

According to Engelen, the combination of a decrease of fertility and an increase in life expectancy led to the current situation where the active part of the population is not in proportion to the non-active part (Engelen p53). Currently, we do not notice the decrease of the labour force or a shortage of workers since Europe is still recovering from the financial crisis of 2008. The crisis led to high unemployment rates and according to Eurostat the unemployment rate in the Eurozone was 12.2% in September 2013, which is still relatively high (Eurostat, 2013). So, the opposite seems to be true, there is no shortage in labour but a surplus. However, when more people are becoming pensioners and start to rely more on social security systems and health care systems the size of the labour force will decrease. In a report by Rand cooperation it is stated: "as the workingage population decreases, countries experience declines in human capital,

which potentially reduces productivity" (Grant, et al., 2004, p. xiii). Furthermore, costs for the working population to support the retired part of the population will rise since they will have to contribute to pensions and health care costs.

Eurostat predicts that "By 2045, the EU-25 is likely to have a significantly higher proportion of older persons than its main global competitors" (European Communities, 2007). A large proportion of pensioners could lead to a shortage of labourers in the European Union. This could lead to reduced productivity which has a negative influence on the competitive position of the EU. However, as stated on the website Econfuture, automation and the relocating of businesses to low wage countries can compensate for the decrease of the labour force (Econfuture, 2010). It is therefore hard to estimate what the exact consequences will be of the decrease of the active working population. It is likely that there will be economic consequences since the labour force will decrease, but the influence of technological developments is yet unknown.

2.4.2 Increase in costs for social security systems

As more people are ageing, an increasing part of the population will be unable to work in the future and will have to rely on social security systems. Pension costs will rise and it should be decided how those costs will be covered. According to the European Parliament, most European countries have a pension system that exists of three pillars: a public pension system, occupational systems and private savings plans (Eichhorst, et al., 2011).

However, not all pillars are equally important in all countries. The public pension system is also called the 'pay as you go system' which means that taxpayers pay for the pensions of the retired. This poses a problem since the amount of pensioners in increasing and the amount of workers is decreasing. Therefore, additional private pension schemes exist. As said before, the Old Dependency Ratio will rise to 53.5 in 2060 which means that there will be two workers for every retired person. Therefore, taxes will increase eventually, unless alternative solutions will be found.

2.4.3 Increase in the costs for health care systems

Even though life expectancy has increased, people will not stop getting sick. "Older people have limited regenerative abilities and are more prone to disease, syndromes, and sickness" (Disabled World). Therefore, since the amount of older people rises it seems likely that the costs for health care will also rise in the future. So taxpayers not only have to pay for increasing costs of pensions, but also for the increasing costs of healthcare.

However, not all authors agree on this point. Several articles state that health care costs will not rise as much as some say. Anderson and Hussey state that data of the past years show that ageing has relatively little influence on healthcare costs (Anderson & Hussey, 2010). Moreover, according to an article by Alastair Gray, it is better to look at life expectancy than age and many factors should be taken into account when estimating future health costs (Gray, 2005). So instead of stating health costs will rise, this source claims that people are not only living for a longer period of time than in the past, they are also staying healthy for a longer period of time. Again, technological developments can also lead to a decrease in the costs for healthcare and people are ageing in a healthier way.

Future developments are hard to predict, opinions differ on the question whether, and how much, health care costs will rise due to population ageing. It can be agreed that the amount of senior citizens will rise and that they are currently more susceptible to diseases. It cannot be assumed that technological developments and a healthier lifestyle ensure that the costs stay the same since the effects are hard to predict. Therefore, it should be taken into account that costs might rise in the future.

2.5 Solutions to population ageing

There are many different ways to tackle the problem of population ageing but there is no consensus on the best solution. For most measures, the effects will not be eminent on short notice. Since demographic developments take a long time, solutions for them will also take a very long time.

All solutions have advantages and disadvantages. In the next paragraphs the following solutions will be briefly outlined:

- Encourage migration
- Elevate taxes
- Lower pensions
- Raise the retirement age
- Implement policy to encourage people to have children

2.5.1 Encourage migration

Migration could be a possible solution to ensure that there are enough workers on the labour market. It seems like it could solve the problems caused by population ageing rather quickly. However, the public is often not in favour of this solution. Moreover, migrants have to adapt to the rules, customs and language of the country and this takes time. According to a report of the United Nations, migration can lead to social tensions, and it has economic, political and cultural consequences (United Nations, 2001). Furthermore, the problem is simply relocated; the country of origin might suffer from labour shortages.

2.5.2 Elevate taxes

Raising taxes is often also not favoured by the population and it is only a way to pay for costs of population ageing, it does not lead to a solution on the long term. It is a fast and efficient way to increase government revenues, and it could help pay for the increasing costs of pensions. However, there are some consequences to the economy. Higher income taxes lead to a loss of purchasing power among consumers and a decrease in consumer spending has a negative effect on the economy. Using taxes to pay for pensions is part of the pay as you go pension system. Pay as you go systems, or also called public pension systems, are often not the preferred way to cover for costs since it is estimated that the amount of working citizens will not be able to pay for the large amount of pensioners. However, most pension systems are a mix of different forms and therefore in most countries part of pensions will be paid for by tax revenues. According to a report by the European Parliament pension systems should be less, instead of more dependent on taxes since there are fewer workers compared to the amount of pensioners (Eichhorst, et al., 2011). An article by Judd about 'the Impact of Tax Reform in Modern Dynamic Economies' describes the impact of taxes on the economy. It states: "Eaton (1981) showed that taxation of capital income reduces an economy's long-run growth rate" (Judd, 2001). Therefore, raising taxes is not the favoured way to decrease population

ageing. It is seen as a last resort to reduce the government deficit but it is no long term solution for population ageing.

2.5.3 Lower pensions

Lowering pensions is sometimes necessary for private pension schemes to comply with mandatory coverage rates which prevent schemes from not having enough funds to pay for the pensions of its members. Especially since the amount of pensioners increases, and pension schemes invest money which carries certain risks, there are sometimes no other solutions than to lower pensions. Governments can also lower public pensions to reduce government spending to be able to pay the increasing amount of pensioners. However, pensions cannot be lowered indefinitely. People should receive an income that is sufficient to maintain an adequate lifestyle. Lower pensions lead to a decrease in purchasing power. Furthermore, many pensioners are unsatisfied when their pensions are lowered since they feel that they saved money for their pensions all their lives and they are often used to a certain luxury.

2.5.4 Raise the retirement age

In many countries, the retirement age will probably have to be raised in the future. As noted before, there is not only an increase in the amount of elderly; there is also an increase in life expectancy. Due to developments in medicines and health care and people maintaining a healthier lifestyle, people are staying healthy for a longer period of time. Therefore, many scholars are of the opinion that retirement ages can be raised. The OECD has published a report about raising retirement ages to combat population ageing: 'Live Longer, Work Longer'. In its report it is claimed: "One of the most significant sources of additional labour supply is older people who are currently inactive" (OECD Publishing, 2006). However, raising retirement ages only reduces the costs. It limits the consequences but it is not a permanent solution since the amount of pensioners will still not be in proportion to the amount of workers in the future. In several countries in Europe, protests occurred when retirement ages were raised. Some examples are France and Greece. In November 2011 the Greek protested against the raising of the retirement age and the lowering of pensions (Albert, Lemaître, Morel, & Salles, 2012). A part of the population of the France has also protested against raising the pension age in September 2013 (Moody, 2013). However, the measure is necessary since increasing fertility will not have an extensive effect on the short term.

2.5.5 Encourage people to get (more) children

The main cause of population ageing should be tackled: birth rates should go up to make sure the problem will be solved on the long term. People are having fewer children for several reasons which will be discussed in the next chapter. Encouraging parents to have more children can be realised by several policies. Simply abolishing contraceptives seems drastic and is probably not in the best interest of the population. People should be encouraged to have children and policy makers should provide them with a solution which allows them to continue the lives that they had before they had children. By providing adequate and affordable childcare the costs of having children will go down and this could stimulate parents to have more children.

2.5.6 Encouraging women to work more

Many women think having children will interfere with their careers and this seems to lead to low employment rates among women. By providing a sufficient amount of weeks of parental leave and by funding childcare systems, parents can maintain a good balance between taking care of their families and their jobs. People can be encouraged to have (more) children and at the same time mothers that stopped working because they had children can be encouraged to start working again. In the long term, population ageing can lead to a shortage of workers. If the amount of working mothers could be increased, it could help to reduce the labour shortage.

2.6 Conclusion

Population ageing is a serious problem across the European Union. It does not affect all countries in the same way, but all member states experience the consequences or will experience them in the future. The causes are clear; people are having fewer children than in the past and that the life expectancy has gone up. Consequences could be severe, the costs for health care and pensions can go up and it is likely that there are not enough workers to pay for the increasing costs. Furthermore, there is no consensus on the best solution. Increasing subsidies for childcare could encourage women to have (more) children and encourage more women to work. In the next chapters it will be assessed whether increasing childcare subsidies could lead to an increase in fertility and employment among women and therefore be an effective solution to slow down the process of population ageing.

3. Existing studies on the relation between childcare funding and a decrease in population ageing

3.1 Introduction

Out of the many solutions to stop population ageing, encouraging the population to have more children seems to be a positive and permanent solution. Even though each couple has its own reasons to decide to have or not have children, there are some factors that they might have in common. Therefore, it is important to study the factors that influence the decision to have children. Since having children costs a lot of money it is possible that reducing the costs of having children, for example by increasing subsidies for childcare, can stimulate couples to have (more) children. In this study the main focus lies on the question whether an increase in the subsidies for childcare will lead to a decrease in population ageing. Increased childcare subsidies could have two separate effects on population ageing; it could lead to an increase in the birth rate and an increase in women's employment rate.

Studies have been conducted on the effects of childcare subsidies on population ageing and these studies will be analysed. First, the factors that affect women's decisions to have children will be studied in order to search for a connection between the costs of having children and the decision to have a child. Secondly, it will be assessed whether more women will use childcare facilities if they become more affordable. After that, studies on the relation between affordable childcare and employment rates among women will be interpreted. Finally, studies on the effects of affordable childcare facilities on fertility will be analysed to assess whether subsidies for childcare facilities will lead to an increase of birth rates. Many studies only focus on one or a few countries, therefore examples of national studies on the funding of childcare facilities in EU countries will be stated.

3.2 What factors affect women's decisions to have children

Nowadays the general opinion in the West is that having children is a choice, and the decision of parents to have children is often influenced by several factors. Often, women have children at a later age, or decide not to have children at all. It is important to consider why this is the case.

Society has changed, it is no longer the case that men go to work and women stay home to take care of the children. Often both of them have to work to earn an adequate living to support their lifestyle. In developing countries and in the past, children were needed to contribute to the income of their families and to take care of their parents when they grow

old. In the modern Western World this is no longer the case. According to an article of the Daily Mail of 2009 on the General Household Survey, a large amount of women decide to stay single and "millions of women have turned their backs on the traditional pattern of marriage and children before the age of 30" (Doughty, 2009). So, fewer women decide to have children and several factors influence their decision, some of those factors that influence fertility in the European Union will be briefly outlined below.

3.2.1 Career

A study of women's views on the balance between their career and their life has concluded that 81 percent of all women believe becoming a mother will harm their career (Nawrockyi, Swiszczowski, Saunders, & Colquhoun-Alberts, 2014, p. 10). This means that many women are convinced that they have to choose between having a good career and having children. Moreover, according to the same study many women 'Half of female respondents thought working opportunities are not equal between mothers and non-mothers' (Nawrockyi, Swiszczowski, Saunders, & Colquhoun-Alberts, 2014, p. 11). These beliefs do not have a positive effect on women's decisions to have children. Nowadays, many women have a proper education and they are afraid having children will have a negative influence on their career.

3.2.2 Finances

Having children requires sufficient finances. Examples of the costs of having children are the costs of nutrition, clothes and toys, sometimes a bigger house but also education and, in case both parents work, childcare. According to a study carried out by Demographic Research on birth-rates of women in the 1990s in Sweden, "First-birth rates increased with a woman's earned income" (Hoem, 2000). In a report on fertility by the RAND Cooperation it is stated that even though people might have the wish to have children, they delay their wish due to financial, unemployment and housing problems (Grant, et al., 2004). Therefore, it seems like finances play an important role in the decision to have a family.

However, there is no substantial evidence that suggests people tend to have fewer children when they have fewer financial resources. In fact, developing countries and countries where many people live in poverty have on average larger families than their more wealthy counterparts in the west (Schultz, 2005).

The Helsinki Times published an article on the municipality of Lestijärvi in Finland which grants 'baby bonuses'. In 2013, 14 babies were born while the year before only one baby was born. This rise in the amount of births is attributed to the 'baby bonus' and good schools and child health care services in the area (Rautakoura, 2014). The baby bonus is a bonus of €1,000 per year for a period of 10 years for parents that decide to have a child. The article also states that 'About one in five municipalities honour newborns with a gift' and an increasing amount is handing out baby bonuses (Rautakoura, 2014). The example of Lestijärvi shows that finances play a role in fertility decisions. By providing parents with a bonus, they seem to be having more children. This indicates that an increase in the income of parents can lead to a higher birth rate. However, the bonuses have only been distributed on a small scale and it is also possible young parents moved to the area to profit from the bonuses. So, although finances play no conclusive role in the decision to have children, they do play some part.

3.2.3 Personal factors

A study in the Netherlands by the online journal, Demographic Research, states several reasons that influence couple's decisions to have a child. People have gotten used to a certain lifestyle and they want to 'enjoy their freedom' for a longer period of time. Furthermore, partners consider whether they and their partners are 'suitable' and willing to become parents and whether they are in a stable relationship. Religion, culture and family of origin also play an important role in the decision making process (Rijken & Knijn, 2009, p. 770). Of course there are many more factors that differ from person to person. So, not only economic factors are important; most factors which influence fertility decisions are difficult to influence by governments. Making child care financially more accessible might remove a few of people's concerns about having children but not all of them.

3.3 The relation between affordable childcare and the amount of users of formal childcare facilities

3.3.1 The costs of childcare

Currently, millions of children across the European Union are enrolled in childcare facilities, the types of facilities and the ages from which children go to school differ greatly from country to country. Due to these differences statistics of countries are hard to compare. According to the European Commission, the use of childcare facilities in most EU countries is below EU targets. Furthermore, many parents consider childcare to be too expensive. The costs of childcare are a problem for many parents in the European Union. In the United Kingdom costs for childcare have risen and according to 'the Telegraph'

childcare facilities were in 2008 'among the most expensive in the world' (Paton, 2012). It is likely that more people will use childcare facilities if they were to become more affordable since many parents are currently not able to afford them (Keck & Saraceno, 2011, p. 6).

3.3.2 Childcare reform in the Netherlands 2005-2009

From 2005 to 2009 the Netherlands reformed its childcare system in order to provide affordable childcare to its citizens. Reports about the reform are useful to find out whether increasing child care funds will actually help to increase the fertility rate and employment among women. In this period the amount of formal childcare users increased according to a document of the 'Netherlands Bureau for Economic Policy Analysis' (CPB) (Jongen, 2010). However, many of those people transferred from informal to formal childcare: they were using a form of childcare before the reform and they transferred to a formal childcare facility. The document states that the policy had a positive effect on the amount of young working mothers although this effect was not extensive.

Another discussion paper about the childcare reform published by the CPB states that government spending on childcare subsidies increased with 3 billion Euros, so it seems to be a rather costly policy (Bettendorf, Jongen, & Muller, 2012, p. 27). Nevertheless, according to the paper the maternal employment rate increased by 3% and the average hours that mothers work per week increased on average by 1.1 hours (Bettendorf, Jongen, & Muller, 2012, p. 1). It seems like the reform has not led to an increase in the birth rate, according to figure 1 there was no clear increase in the amount of births in that period.

3.4 Affordable childcare and the amount of working women

Population ageing will eventually lead to a shortage of workers. By increasing childcare subsidies, more women could be tempted to work (more). As said before, the increase in subsidies in the Netherlands between 2005 and 2009 only led to a small increase of working mothers and the amount of hours worked.

Many women consider childcare costs to be an obstacle to their career. Italy is a country with a low fertility rate where a relatively small part of the amount of women is employed. In 2002, a report was written on a study carried out in Italy on the effect of the availability of child care facilities and part time jobs on participation of women and the decision to have a child. According to the study "The limited availability of part-time employment and the limited availability of affordable child care services increase the costs of working for mothers, making it difficult to participate in the labour market without other relatives'

support" (Del Boca, 2002, p. 20). Moreover, the European Commission states in its memo on childcare provision in member states that "53% of mothers do not work or work part-time because they consider childcare services too expensive" (European Commission, 2013). In some countries such as the Netherlands 70% of all mothers think the high price of childcare is hindering them in doing their job (European Commission, 2013). Costs are highest in the United Kingdom and Ireland (European Commission, 2013). Therefore, the costs of childcare influence women's' decision not to work. If childcare were to become more affordable, it is likely that more women would use childcare facilities and more women would work. Even though the effect on the amount of working parents might be small compared to the costs, the policy could have a double effect since fertility might also be encouraged.

3.5 Relation between an improved funding of childcare facilities and parents' decision to have children

Many studies have been carried out on the relation between childcare subsidies and fertility decisions. According to Del Boca, the availability of public child care facilities and part time jobs have a positive effect on parents' decisions to work and have a child in Italy (Del Boca, 2002, p. 20). So it is possible that people decide to have a child, since they will have to worry less about child care fees or the loss of the income of one of the parents, especially since expensive child care is seen as an issue by parents in several countries. However, as said before, people with less money do not have fewer children.

Hank and Kreyenfeld studied fertility decisions in Western Germany in the 1980s and 1990s and found that informal childcare has a positive influence on fertility but they did not find any statistical evidence that suggests that the availability of formal childcare has the same effect (Hank & Kreyenfeld, 2003, p. 584). The study is extensive and reliable and facts and figures are clearly stated. However, it is slightly outdated since it is about the last 20 years of the 20th century and a lot has changed since then.

In a different report, 'Low Fertility and Population Ageing' by RAND Corporation, it is stated that "there is sufficient evidence to suggest that government policy can have an impact on fertility" (Grant, et al., 2004, p. 136). However, the report does conclude that there is "not a single policy that can be recommended" (Grant, et al., 2004, p. 138). Furthermore, it should be noted that family policy can be costly. In some countries a large investment is needed to have an effect on fertility and countries might not have sufficient funds.

The OECD has published a report in 2005 about the influence of government policies on fertility rates in its member states. The report suggests that fertility rates are higher in countries with "wider childcare availability, lower direct costs of children, higher part-time availability and longer leaves" (d'Addio & d'Ercole, 2005). Furthermore the report suggests that "...a package of policies relaxing some of the constraints to childbearing may significantly raise total fertility rates and, thereby, the size of the population and of the labour force" (d'Addio & d'Ercole, 2005). The OECD also states in a different document that figures show that an investment in formal childcare can lead to an increase in the amount of births (OECD, 2011, p. 13).

So even though the opinions differ on the question whether affordable childcare will lead to an increase of fertility it is generally believed that it has a positive effect. Most studies that have been examined state that next to an increase in the funding of public childcare systems, additional measures should be taken.

3.6 The effects of an increase in childcare funding and an elevated birth rate on population ageing

A report by the OECD states that "Increased parental employment will further economic growth and improve the financial sustainability of social protection systems in the face of population ageing" (OECD, 2011, p. 3). If childcare funds will increase it is likely that more parents will work since they are able to afford childcare and children will no longer hinder their career. Therefore, if more people will retire the shortage on the labour market will be counterbalanced by the increase in working parents. Furthermore, it is likely that parents will sooner decide to have children and this will help to lower the average age. Many governments across Europe see family policy and funding child care systems as a way to slow down population ageing. China, which has the largest population of the world, had a one child policy for decades. However, it decided in August 2013 to ease it by allowing more families to have more children in order to combat population ageing (Associated Press Beijing, 2013).

There are also studies that contradict the statement that encouraging fertility will slow down population ageing. An article of the Dutch newspaper 'NRC Handelsblad' states that the Dutch CPB concludes that funding childcare is costly, will have minimal effects on the amount of working parents and the costs of an increasing amount of children will also rise in the years to come (Vollaard, 2008). Therefore, according to the article, encouraging fertility is too costly and it will lead to an increase in the costs of population ageing. Counterarguments can be found for most measures which combat population

ageing and all policies to combat population ageing are costly but in general, many policy makers and researchers are of the opinion that increasing the funds for childcare to encourage fertility will have a positive effect on population ageing. The extent of the effect, on the other hand, is hard to predict.

3.7 Conclusion

Many women feel like having children will be an obstacle to their careers. Furthermore, it seems like finance plays some kind of a role in the decision to have children. By providing affordable childcare some of these concerns could be taken away, especially since parents consider childcare to be too expensive. It seems likely that childcare subsidies have a positive effect on the employment rate and some studies conclude that government policy can also have a positive effect on fertility although there is less conclusive evidence for this statement. Since it is likely that childcare subsidies lead to an increase in the employment rates among women, in theory, it is possible that childcare has a positive effect on reducing the effects of population ageing by increasing the working population.

4. Current EU policy on population ageing

4.1 Introduction

Population ageing and falling fertility rates are a problem across the European Union. Even though childcare systems and government policies differ from member state to member state, the EU has taken interest to set general guidelines. Some countries have better developed childcare systems than others, and some countries have more money in the public treasury to spend on childcare facilities than others. Moreover, school ages, school times, types of child-care facilities and types of preschool arrangements differ greatly from country to country. The amount of hours children spend in child-care facilities also differ from country to country, some childcare facilities are only open for a limited period of time such as 'playgroups' in the Netherlands. All these differences make it hard to compare childcare systems to one another, and to set up guidelines that apply to all member states.

The European Union set targets and developed strategies for its member states in order to ensure access to affordable and good quality childcare, improve gender equality, establish an increase in the employment of women and increase fertility rates in all member states. Some say high quality childcare facilities can even reduce poverty and improve the development of children (Waldfogel & Garnham, 2008). Most childcare guidelines have the aim to boost employment rates and are not part of strategies to combat population ageing. According to the European Commission, investing in childcare will help boost employment among women and reduces the risk of poverty and social exclusion (European Commission, 2013). Furthermore, it provides a better start in life for children and will reduce early school leaving (European Commission, 2013).

4.2 The role of the European Commission

The Commission has several tasks concerning childcare policy. It monitors progress on the Barcelona objectives, it promotes the exchange of national experiences, encourages research and it informs member states of funds (European Commission, 2013). In order to achieve the Barcelona Objectives the commission adopts recommendations to member states. Furthermore, it cooperates with member states while it programmes European funds (European Commission, 2013).

However, the European Union and the Commission do not have any binding policy making powers in the field of childcare yet. Coordinating childcare policies is not within its

article 153-1 of the TFEU indicates that:

exclusive competence, which means that it does not have the sole power to legislate this area. According to article 6 of the Treaty on the Functioning of the European Union, "The Union shall have competence to support, coordinate, or supplement the actions of Member States. The areas of such action shall, at European Level, be: (e) education, vocational training, youth and sport" (TFEU article 6). So the European Union has a coordinative role but cannot adopt binding policy measures, the main power to introduce

policy regarding childcare facilities lies with the governments of member states. Moreover,

"1. With a view to achieving the objectives of Article 151, the Union shall support and complement the activities of Member States in the following fields: (i) equality between men and women with regard to labour market opportunities and treatment at work (j) the combating of social exclusion" (TFEU article 153-1).

Since improving child care facilities is part of the policy to improve gender equality the commission can support memberstates but, as noted before, according to EU law creating policy is not within its sole competence. Furthermore, paragraph 4 of article 151 TFEU mensions: "The provisions adopted pursuant to this article: -shall not affect the right of Member States to define the fundamental principles of their social security systems and must not significantly affect the financial equilibrim thereof" (TFEU 153-4). Therefore, adopting binding measures at EU level that completely change the welfare system in member states is not allowed. According to Article 156 TFEU, the Commission does not have the sole power to coordinate employment policy, and child care policy is often part of employment policy guidelines. In article 156 TFEU it is stated "With a view to achieving the objectives of article 151 and without prejudice to the other provisions of the Treaties, the Commission shall encourage cooperation between the Member States to facilitate the coordination of their action in all social policy fields in this Chapter, particularly in matters relating to: -employment..." (TFEU article 156). So again, the commission does not have the sole competence to act in the area of employment policy; however it can facilitate 'the coordination of the actions of member states'.

Member States must first give up their sovereignty by transferring power to the European Union to act in certain areas of law. By including those areas in treaties and signing them they officially transfer their power to legislate to the European Union. Countries seem reluctant to transfer power to the EU to coordinate social policies including childcare services at an European level. The fact that the EU does not have any real policy-making

power indicates that member states do not consider it necessary to introduce policy coordination at a supranational level. It is also possible that there is no EU coordination yet, because childcare systems differ greatly across the European Union and it is difficult and costly to coordinate and unify them.

The principle of subsidiarity ensures that decisions are taken as close to the citizens as possible, according to the book 'Understanding European Union Law' it means:

"Specifically, the TEU states that in areas which do not come within the exclusive competence of the Union, the Union may only act if the objectives of any proposed act cannot be effectively achieved at national level and those objectives can be better achieved when action is taken at Union level" (Davies, 2011, p. 30)

It could be possible that countries invoke the principle of subsidiarity and that policy coordination can be arranged more effectively at the national level. However, population ageing, expensive childcare services, falling birth rates and low participation rates among women occur across the European Union. Furthermore, countries struggle to meet EU objectives concerning child care. As will be elaborated on later, many countries did not achieve the Barcelona Targets and therefore it seems like binding policy coordination at EU level is necessary.

4.3 Barcelona targets/objectives, Barcelona Summit 2002

The Barcelona targets have been adopted by the European Council in 2002 during the Barcelona Summit, and member states were to comply with them before 2010 (European Commission, 2013, p. 4). Targets were set on the availability of child care services for children aged 0 to the mandatory school age (European Commission, 2013, p. 4). The objectives were introduced in order to establish equal career opportunities for men and women (European Commission, 2013, p. 4). Moreover, the commission states "Member States which currently have the highest birth rates are those which have also done most to facilitate the work-life balance for parents and which have a high rate of female employment" (European Commission, 2013, p. 6). This statement indicates that a work-life balance is important and childcare could contribute to a better work-life balance and therefore a higher birth rate. According to a paper of the European Parliament on the Barcelona targets the following objective is set: "Member States agreed to provide childcare by 2010 to at least 90 % of children between 3 years old and the mandatory school age and to at least 33 % of children under 3 years of age" (Plantenga, Scheele, Peeters, Rastrigina, Piscová, & Thévenon, 2013).

As said before, there are many differences between childcare systems and therefore it is sometimes difficult to assess whether countries actually comply with the Barcelona targets. For example, in some countries a large proportion of the amount of parents is using informal childcare systems and those are often not included in studies on the use of childcare. Therefore, it is possible that the amount of children that is using a form of childcare is in reality higher. According to a publication by the European Parliament, in 2010 only 10 member states complied with the Barcelona target stating that the use of childcare facilities should be above 33% for all children below 3 years of age (Plantenga, Scheele, Peeters, Rastrigina, Piscová, & Thévenon, 2013). Furthermore, only 10 countries have complied with the obligated coverage rate of 90% for children between 3 and the mandatory school age in 2010 (Plantenga, Scheele, Peeters, Rastrigina, Piscová, & Thévenon, 2013).

However, it should be noted that preschool arrangements are seen as formal childcare facilities and they are often only taking care of children for a few hours per week (European Commission's Expert Group on Gender and Employment Issues, 2009). So even though many children might be enrolled in preschool facilities, additional childcare facilities that take care of children after or before the hours they are in preschool might not be available.

Parental leave also differs from country to country and, as said before, many parents use forms of informal childcare, such as care by grandparents, and those are not taken into account when considering whether countries comply with the criteria. On the other hand, it should be noted that grandparents often only take care of their grand children on a part-time basis. So, some countries have enough child-care facilities to facilitate children but parents do not use them since they choose to make other arrangements or due to for example unemployment (European Parliament, Policy Department C, Gender Equality, 2013, p. 17). This can result in lower percentages on the use of childcare facilities.

Even though countries agreed to comply with the criteria by 2010, many were not able to do so. Therefore, additional measures are needed. Binding policy and effective sanctions could stimulate countries to make more effort to reach the targets.

4.4 Lisbon strategy (LISBON SUMMIT)

The Lisbon Strategy was adopted in March 2000 by the European Council. The strategy was a ten year plan and the predecessor of the 2020 strategy. The strategy was described as a "new strategic goal for the Union in order to strengthen employment, economic reform and social cohesion as part of a knowledge-based economy" (European Council, 2000). It was developed to improve the competitive position of the EU and to improve its knowledge economy in general.

According to a report by the European Parliament, parts of the European Employment Strategy have been included in the Lisbon Strategy. One of the targets was "70% in overall employment and 60% for women, complemented in 2001 with a 50% target for older workers" (European Parliament, Employment and Social Affairs, 2010). The report states that the strategy was reviewed and changed in 2005 since some targets did not turn out to be feasible. Even though significant improvements were noted, the targets were not met in 2010. Improving child care is stated as a way to increase labour participation among women (European Parliament, Employment and Social Affairs, 2010, p. 48).

The report of the European Parliament stated that establishing gender equality became less important as the time period of the Lisbon Strategy passed. The study notes that France has a good childcare provision, complies with the 60% employment rate of women and had a high fertility rate in 2008 of 2 children per woman. The study therefore concludes that a good childcare system contributes to employment among women and an increase in the fertility rate. It is also stated that population ageing is a serious problem and demography should be taken into account while deciding on future EU policies (European Parliament, Employment and Social Affairs, 2010, p. 20). Population ageing is even stated among the main inspirers of the Lisbon Strategy (European Parliament, Employment and Social Affairs, 2010, p. 30). The report by the European Parliament states about population ageing that:

"An increase of both labour participation and labour productivity were considered to be essential prerequisites to tackle these problems. Given the fact that the MS had different social and economic traditions and institutions, some forms of supranational coordination appeared to be necessary" (European Parliament, Employment and Social Affairs, 2010, p. 30)

No alternative targets to combat population ageing are set in the Lisbon Strategy. However, during the time period of the Lisbon strategy, the need for further measures was emphasized and measures for active ageing are included in the employment guidelines (European Parliament, Employment and Social Affairs, 2010, pp. 36,39).

4.5 The ten commandments of the European Employment strategy

The European Employment Strategy was introduced in 1997 and aimed to "... provide coordinated guidance of national employment policies..." (Calpant, 2006). As said before, child care policy is often part of policies that aim to reduce unemployment, and therefore it was included in the European Employment strategy. The Council of the European Union adopted "10 commandments" which member states were to follow in order to achieve the employment objectives of the European Union. Several commandments have the objective to create jobs but there are also some objectives related to solutions for population ageing. The 5th commandment states that "promotion of active ageing" should be accomplished. Several measures are proposed to ensure employees will work for a longer period of time such as an increase in the average retirement age. It is also stated that it should be taken into account that immigration can have a positive effect on the reduction of the consequences of population ageing. The 6th commandment of the ten year strategy is about the "promotion of gender equality by reducing gender gaps" and it is stated that the number of childcare facilities should be increased in order to promote gender equality (Council of the European Union, 2005). Furthermore, the commandment states that the Barcelona objectives should be reached by 2010 (Council of the European Union, 2005). Therefore, the strategy contributes to a certain extent to a reduction of population ageing.

4.6 Gender Equality

4.6.1 Roadmap for equality between women and men (2006-2010)

The roadmap for equality between women and men "supports the objectives of the gender equality agenda" and contains six policy areas which require action by the European Union (European Commission, 2006). The policy areas were not specifically about childcare policy but improving childcare is part of the area "Enhancing reconciliation of work, private and family life" (European Commission, 2006). In order to improve childcare the commission has presented a communication, it has supported the achievement of the Barcelona targets and supported research on health and social care professions.

4.6.2 Strategy for gender equality between women and men (2010-2015)

In 2010 the commission adopted a new five year strategy which continues in the scope of the roadmap and also contributes to the achievement of the goal of the Europe 2020 strategy to establish a female employment rate of 75% in 2020 (European Commission, 2010). Making childcare facilities more accessible is stated as a way to achieve the employment rate set by Europe 2020. According to the website of the European Union regarding legislation "The Commission will undertake initiatives aimed at: assessing workers' rights with regard to leave for family reasons and assessing Member States' performance with regard to childcare facilities" (European Union, 2011). In general the roadmaps help to achieve other, larger EU targets and objectives.

4.7 Europe 2020 Strategy

Europe 2020 is an economic ten year strategy to help the European Union recover from the economic crisis of 2007. The 2020 strategy is the successor of the Lisbon Strategy. The European Commission describes Europe 2020 in a report from 2010: "Europe 2020 sets out a vision of Europe's social market economy for the 21st century" (European Commission, 2010, p. 3). It is an economic strategy to help Europe recover from the economic crisis of 2007, in the report it is stated: "What is needed is a strategy to turn the EU into a smart, sustainable and inclusive economy delivering high levels of employment, productivity and social cohesion" (European Commission, 2010, p. 8). The report affirms that national systems differ from each other and therefore targets of the strategy should be translated to national strategies. Since it is a strategy, it is not an universal and binding measure. Therefore, member states have some freedom in the interpretation of the strategy.

Even though increasing the funds for childcare is not part of the five 'headline targets', increasing employment rates (also among women and older workers) is part of the targets. The first target states: "75 % of the population aged 20-64 should be employed" (European Commission, 2010). In order to achieve the employment rate proposed by the 2020 strategy more women should work. The European Commission states that childcare is the main influence on the participation of women (European Commission, 2006). Therefore, many employment strategies set targets related to childcare in order to raise employment rates.

The strategy will be implemented at EU level and at member state level. The EU will try to assist member states in the development of strategies and guidelines to recover from the financial crisis of 2007. Furthermore, it will issue country specific recommendations and

policy warnings if necessary (European Commission, 2010, p. 4). The report also describes the consequences of population ageing, it states that "The combination of a smaller working population and a higher share of retired people will place additional strains on our welfare systems" (European Commission, 2010, p. 5). The need to act collectively to improve parts of the economy of the European Union is emphasized throughout the report. In the report it is stated that member states should invest in education systems, including preschool facilities. Furthermore, the report emphasizes the importance of access to childcare facilities to increase employment rates.

The report underlines the notion that governments should focus on the long term, it states: "This will involve the progressive withdrawal of short-term crisis support and the introduction of medium- to longer-term reforms that promote the sustainability of public finances and enhance potential growth" (European Commission, 2010, p. 24). However, the need to bring down public deficits is also underlined. Next to investing in childcare systems and recovering from the economic crisis of 2007 it seems challenging for some countries to bring down their deficits as well.

4.8 Structural Funds

There are certain funds that can help member states to achieve targets of the European Union. Of course states are mainly responsible for the implementation and costs. The most important funds are the Structural Funds. There are two different funds, the European Regional Development Fund and the European Social Fund. The website of the European Union describes the structural funds in the following way:

"The Structural Funds and the Cohesion Fund are the financial instruments of European Union (EU) regional policy, which is intended to narrow the development disparities among regions and Member States. The Funds participate fully, therefore, in pursuing the goal of economic, social and territorial cohesion" (EU)

According to a report of the European Commission about the Barcelona Objectives, several funds were available to support member states financially in order to reach the objectives proposed by the European Union. In the report it is stated:

"In the 2007–13 period, it is estimated that EUR 2.6 billion from the Structural Funds was allocated to actions aiming to promote the employment and sustainable participation of women in the labour market and a work-life balance,

including measures to facilitate access to care services for dependants" (European Commission, 2013, p. 17).

Therefore, even though the structural funds do not cover for all costs of the implementation of the targets, they can be very supportive. The funds are especially helpful to member states which are less developed compared to other European states. The funds can take away some of the economic objections and obstacles that member states might experience towards measures which aim to improve childcare systems.

4.8.1 European Regional Development Fund

According to a document by the European Commission, money from the European Regional Development Fund was allocated to member states in order achieve the Lisbon objectives. In the document it is stated that in the time period of 2000-2006: "€ 5.8 billion on social infrastructure and public health (including childcare facilities and hospitals) and a further € 1,2 billion on labour market (including social inclusion and workforce flexibility)" (European Commission, 2005). After 2006, another sum of money of the European Regional Development Funds was allocated to member states to assist them in the remaining time period of the Lisbon Strategy. It is stated on the website of the European Commission that: "In addition, around EUR 616 million from the European Development Fund was made available to Member States between 2007 and 2013 to finance childcare infrastructures" (European Commission, 2013, p. 17).

4.9 Conclusion

So, the European Union has adopted many guidelines that have the objective to increase gender equality and female employment. Improving access to childcare is included in those guidelines. Up to now, the EU has not introduced any guidelines that are directly intended to increase fertility rates or decrease population ageing. Considering that fertility rates in most countries are below replacement level, the European Union could decide to coordinate, or at least define specific guidelines regarding fertility policy. Nonetheless, the EU has adopted objectives that could help to boost employment, but they are part of other policy areas such as employment policy.

Currently, the commission does not have any binding policy making power concerning employment and childcare facilities. In order to increase the power of the European Union to adopt legislation concerning childcare funds and facilities, treaties should be changed in order to grant power to the Union concerning employment strategies and social welfare systems. Countries have been reluctant to give up power in these areas in the past and since Euroscepticism is eminent and countries would like to please their voters, it is

unlikely that there will be a majority of votes in favour to transfer more power to the European Union. Furthermore, member states could invoke the principle of subsidiarity, meaning that matters regarding childcare can be implemented more effectively at the national level.

Even though Euroscepticism is on the rise and countries have less money to spend due to the economic crisis, it is important to minimise differences between childcare systems. The EU remains a political and economic union and therefore it seems logical to harmonize childcare policies as well. However, minimal ages for school and childcare facilities and types of childcare facilities differ greatly. If the EU were to harmonise childcare systems, all school systems should be harmonised as well. This is a very expensive and complicated process, therefore harmonisation seems difficult to achieve. Governments are reluctant to invest large sums of money since they are still recovering from the economic crisis of 2007. Furthermore, Euroscepticism is on the rise and it is likely that public support will be lacking for harmonisation of European child care programmes since people are used to the current systems.

5. Case study: Denmark compared to Ireland. The relation between child care funds and birth rates and participation rates among women

Two countries that differ greatly in terms of childcare funds and the use of childcare are Denmark and Ireland. These countries will be studied and compared since Ireland reached none of the Barcelona Targets on childcare while Denmark complied very well with both targets. In this chapter, it will be assessed whether increasing childcare funds and low childcare costs contribute to a higher participation rate among women and a higher fertility rate in practice. However, it should be noted that childcare funds are not the only factors that influence participation rates and fertility rates. There are many factors that influence participation rates such as economic factors, cultural factors, religious factors and the corporate environment. As noted before, the costs of childcare is only one out of many factors influencing fertility decisions, those factors differ from person to person. First of all, a general introduction on the two countries will be provided. Afterwards, data of Denmark and the Republic of Ireland on childcare costs, funds and additional measures will be compared. Finally, the fertility rate and employment rate in both countries will be compared and interpreted in the light of information discussed earlier on the childcare systems

5.1 The countries in general

5.1.1 Ireland

The Republic of Ireland has a relatively young population and it did not comply with any of the Barcelona targets. The country was close to achieving both targets but only 21% of all children below 3 and 82% of all children between 3 and the mandatory school age were enrolled in formal childcare services in 2011 (Ireland – committed to promote child welfare). Furthermore, Ireland is stated in a report by the European Parliament on the Barcelona Targets as an 'extreme case' among countries that have arranged formal childcare services mainly on a part-time basis (European Parliament, Policy Department C, Gender Equality, 2013). According to the Central Statistics Office of Ireland, the Irish population consisted of 4,588,252 people in 2011 and 97,9590 of the total amount of inhabitants were aged 0-14 (Central Statistics Office, Ireland, 2011). The average age of the population was 35.5 in 2013 (Eurostat, 2014). The old age dependency ratio was 18.6 in 2013, which is the second lowest in the European Union (Eurostat, 2014). The website of the World Bank states that the GDP Per Capita was 45,951 US\$ in 2012 (The World Bank, 2012).

There are several authorities that regulate childcare in the Republic of Ireland. National programs are managed by the Department of Children and Youth Affairs and City or County Childcare Committees manage local childcare programs (Department of Children and Youth Affairs, 2014). Funds are managed by Pobal. It is stated on the website of Pobal that "Pobal is a not-for-profit company with charitable status that manages programmes on behalf of the Irish Government and the EU" (Pobal, 2013). Childcare is regulated by the Child Care Act of 1991 and the Child and Family Agency Act (Citizens Information Board, 2014). School is obligatory from the age of 6; there are special infant classes and preschool facilities available for children under 6 (Citizens Information, 2013).

5.1.2 Denmark

Denmark is a social welfare state which considers the accessibility to childcare to be important. The Danish population consists of 5,627,235 people, 968,670 are aged 0-14 (Statistics Denmark, 2014). According to Eurostat, the average age of the population is 41.0 and the Old Age Dependency Ratio is 27.6, slightly above the EU average (Eurostat, 2014). According to the World Bank, the Danish GDP per capita was 56,364 US\$ in 2012 (The World Bank, 2012). Scandinavian countries are generally seen as social welfare systems. Denmark in particular seems to have a good functioning, well used and rather affordable childcare system and it complies very well with both of the Barcelona targets. In 2011, 98% of all children aged 3-6 were cared for by formal arrangement and 74% of all children under 3 (European Parliament, Policy Department C, Gender Equality, 2013, pp. 28,30). Childcare is regulated by the "Day-Care Facilities Act" of 2007 in which it is stated that the local council is responsible for day care (Folketing, 2007). Public schools are free of charge and children are obliged to attend school from the age of 6 (Københavns Kommune Børne- og Ungdomsforvaltningen, 2009). Some child care facilities even take care of children at night or during the weekend if parents can document the need for such child care places (Københavns Kommune Børne- og Ungdomsforvaltningen, 2009, p. 14). There are public childcare facilities such as kindergartens and private facilities, and parents receive a financial contribution to childcare costs (Københavns Kommune Børne- og Ungdomsforvaltningen, 2009, p. 16). There is even a subsidy for parents who are taking care of their own children while they are on the waiting list for a childcare facility.

In Denmark it is prescribed by law that all children are entitled to a child care place. It is stated in article 23.1 of the Day-Care Facilities Act that "All children under school age shall be entitled to be admitted to a day-care facility" (Folketing, 2007). Therefore, it could be stated that childcare is seen as a social right; the European Parliament declares that

this seems to lead to a high use of childcare facilities. In its report about the Barcelona Targets, the European Parliament claims that "Especially in Denmark, the social right to childcare seems to translate into a high full-time coverage rate" (European Parliament, Policy Department C, Gender Equality, 2013, p. 13).

5.2 Childcare costs

Childcare facilities in the Republic of Ireland are relatively expensive. A survey by the Irish Independent from December 2012 found that parents in the Republic of Ireland pay sometimes more on childcare than on the average monthly mortgage payment (Aideen, 2012). The newspaper states that "Our nationwide survey found that families are paying up to €1,100 a month to have just one child minded" (Aideen, 2012). However, the costs should be compared to the average income in order to calculate the exact financial consequences of high childcare costs. According to a report by the OECD: "Costs to parents are among the highest in Europe and average over 30% of disposable income for the Average Production Employee (Country Note for Ireland, 2004)" (OECD, 2006, p. 355). According to a report by Indecon on participation among women in Ireland between 1997 and 2007, the average costs per week of childcare for pre-school children were €133 per child (Russell, McGinnity, Callan, & Keane, 2009). The report also states that "The significance of the cost of childcare can be seen by noting that the average costs of centre based childcare is 30% of mortgage repayments and around half of household expenditure on food" (Russell, McGinnity, Callan, & Keane, 2009).

In Denmark, the costs are significantly lower and subsidised by the government. The costs per month of most full time childcare facilities were DKK 2,985 (€399.89) for children under three and DKK 1,879 (€251,72) for children over three (Københavns Kommune Børne- og Ungdomsforvaltningen, 2009, p. 24). Parents can receive a reduction of the childcare costs in case they have more than one child attending childcare facilities, or in case children are only attending facilities part-time. Some parents were even entitled to a free place based on their income (Københavns Kommune Børne- og Ungdomsforvaltningen, 2009, p. 24).

4. REDUCING BARRIERS TO PARENTAL EMPLOYMENT

Panel A. Couple where male earns 100% of average wage and female earns 100% of average wage Childcare benefits Childcare fee Tax reductions Other benefits % of net family income Net cost Childcare-related costs and benefits, % of AW 70 60 50 40 30 20 10 0 -10 -20 -30 -40 -50 -60 Finland Spain United States Szech Republic nited Kingdom Net cost 29 30 38 41 12 % net family 10 12 12 income

Figure 4.A2.1. Components of net childcare costs, couple families, 2008

Note: The childcare cost calculations for Austria reflect the situation in Vienna; for Belgium, the French community; Canada, the province of Ontario; the Czech Republic in villages and towns with more than 2 000 inhabitants; for Germany, Hamburg; for Iceland, Reykjavík; for Switzerland, Zürich; for the United Kingdom, England; and for the United States, Michigan. These results do not represent the situation in the rest of the country. For example, net childcare costs in the Canadian provinces of Alberta or Quebec will be different from Ontario.

Source: OECD (2011), Benefits and Wages.

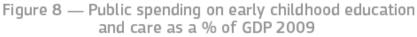
StatLink http://dx.doi.org/10.1787/888932393426

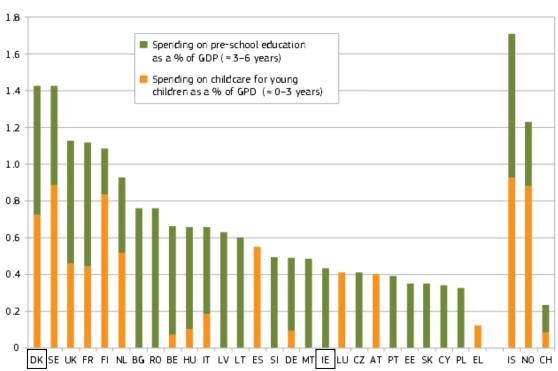
Figure 3: Components of net childcare costs, couple families 2008 (OECD, 2011, p. 168)

The proportion that childcare costs take up of the average income is significantly lower in Denmark than in Ireland. Figure 3 displays the percentage of childcare costs compared to the average wage of parents in OECD countries in 2008, it also shows childcare benefits. On average, parents spend 26% of the average net family income on childcare in the Republic of Ireland. In Denmark, this was significantly lower, Danish parents spent 11% of their income on childcare facilities. So, according to Figure 3, Irish parents spent the second highest part of the average income on childcare of all OECD members in 2008. The difference in the percentage that childcare costs take up in the average income in Ireland and Denmark might be explained by the difference in income between the two countries. However, the average household disposable income is only 6% higher in Denmark than in Ireland. Since the difference in percentages of the average wage is much more substantial, it is more likely that the costs of a childcare place are simply much lower in Denmark than in Ireland (OECD).

Even though time has passed, costs remain high in the Republic of Ireland. An article of the Irish Times published on 22-04-2014 states that "Yet new figures from the Organisation for Economic Co-operation and Development show that a family with two children in Ireland spends 40 per cent of the average wage to meet childcare costs, compared with an OECD average of 12 per cent" (Wayman, 2014). Denmark, on the other hand is still seen as an example in the area of affordable childcare. All parents receive a reduction of costs and low-income families pay either nothing, or a small proportion of the price that matches their income (Københavns Kommune Børne- og Ungdomsforvaltningen, 2009).

5.3 Childcare funds





Source: OECD Family database, Indicator PF3.1 2009).

Note 1: CY refers to Southern Cyprus only.

Note 2: Figures for Spain cannot be disaggregated by educational level.

Note 3: Pre-primary spending as a % of GDP not available for Greece and Luxembourg.

as traditional care for children aged from 3 to 5 inclusive).

Public expenditure on childcare and early educational services includes all public financial support (in cash, in-kind or through the tax system) for families with children participating in formal daycare services (e.g. crèches, daycare centres and family daycare for children under 3) and pre-school institutions (including kindergartens and daycare centres which usually provide educational content as well

Figure 4, public spending on early childhood education as a % of the GDP in 2009, (European Commission, 2013, p. 15), created by: OECD

Government spending on childcare differs as well from country to country. According to figure 4 on public spending on childcare by the OECD (Figure 4), Denmark spends, next

to Sweden, the highest amount of its GDP on early childhood education. It spends more than 1.4% of its GDP and its contribution is equally divided between childcare for children under 3 and childcare for children aged 3-6. Ireland only spends a little more than 0.4% on children aged 3-6 and none on childcare for children under three. This is a notable difference; Ireland spends only 29% of the amount Denmark spends on Childcare.

5.3.1 Programmes

There are several funds allocated by both the Irish and the Danish government to improve the quality and accessibility of childcare services. Some are allocated to childcare facilities while others are allotted to families. In the past, government money was invested in childcare facilities to increase the number of places for children.

In Ireland, funds are awarded to improve the quality of childcare centres. In 2014, the Irish government has spent €2.5 million in order to achieve the objectives of the Early Years Capital programme. According to the website of Pobal, the funds will be allocated to Childcare Services that have received funds in the past (Department of Children and Youth Affairs, 2014). The funds are allotted "To provide for critical works that ensure that childcare facilities are 'fit for purpose" (Department of Children and Youth Affairs, 2014). Applying childcare centres must submit a proposal explaining what they would like to improve and how this will benefit the children. After an extensive selection process, funds will be allocated to those childcare facilities that comply best with the criteria set by the Department of Children and Youth Affairs, 2014).

Furthermore, the Republic of Ireland also provides government money to reduce the burden of childcare costs compose on the incomes of parents. Childcare Education and Training Support is a programme that provides 2,500 free childcare places to parents that are enrolled in 'eligible training courses', 600 after school places to certain kinds of working parents (for example seeking a job or starting a new job) and 1,800 places for children under the age of five of parents that are taking part in Community Employment programmes (Department of Children and Youth Affairs, 2014). A different programme, the Early Childhood Care and Education Programme, provides one free pre-school year for eligible children. According to the website of the DCYA: "Children are eligible to avail of the programme where they are aged between 3 years 3 months and 4 years 6 months on 1st September each year" (Department of Children and Youth Affairs). The funds are awarded directly to child care facilities and provide for 'free' preschool care 3 hours a day, 5 days a week (Department of Children and Youth Affairs). There is also a fund for

children from low-income families, the Community Childcare Subvention programme which partially funds childcare costs (pobal). The participating childcare facilities apply for the funds and around 20,000 families receive a reduction of costs. Funds depend on the income situation of the parents and range from €8.50 for a half session payment to €95 for a full day (DCYA, 2014). There is a special arrangement for childminders, an alternative to child care centres, "A childminding tax relief applies to people who mind up to 3 children in the minder's own home" (Citizens Information Board, 2014). This tax relief means childminders do not have to pay any tax over their earnings unless they earn more than €15,000 (Citizens Information Board, 2014).

In Denmark, it is prescribed by law to what that childcare should be subsidised by local councils. Parents should not pay more than 25% of the total operating costs of childcare facilities, it is stated in article 31.2 of the Day Care Facilities act that "Subsidies in pursuance of subsection (1) above shall constitute at least 75 per cent and the parents' own payment shall not exceed 25 per cent of the budgeted gross operating costs of using day-care facilities except for any property expenses, including rent and maintenance" (Folketing, 2007). According to article 57.2, parents should not pay more than 30% for after school facilities (Folketing, 2007). Moreover, there is a special 'sibling discount' for parents that have more than one child enrolled in a childcare facility and are eligible for subsidies (Folketing, 2007, p. article 43.i 63.i). Parents will only have to pay the full price for the child with the most expensive place; all other children in the household get a reduction of 50% (European Union, 2014). This measure could encourage parents to have more than one child, since childcare is cheaper for a second child. Moreover, parents can receive an income related subsidy or a free childcare place in case their income is insufficient to pay for childcare costs (Folketing, 2007, p. Article 63.ii).

5.4 Additional measures (maternity leave etc.)

In the Republic of Ireland, women are entitled to 26 weeks of paid maternity leave (Citizens Information, 2014). In exceptional circumstances, women can receive up to 16 weeks of additional leave (Citizens Information, 2014). According to the website of Citizens Information, "Employers are not obliged to pay women on maternity leave. You may qualify for Maternity Benefit which is a Department of Social Protection payment you have sufficient PRSI contributions" (Citizens Information, 2014). However, Maternity Benefits for working mothers in Ireland only consists of 80% of the income in the previous year (Citizen Information, 2014) while parents in Denmark receive their full income up to €537 per week (Bloksgaard & Rostgaard, 2013). Often, in case the Maternity Benefit is

lower than the income before the pregnancy, Danish employers compensate the loss by providing additional funds (Bloksgaard & Rostgaard, 2013).

In Denmark, the parental leave scheme is organised in a different way. Mothers have the right to 18 weeks of maternity leave around the time of the birth, 4 before and 14 after the birth (Bloksgaard & Rostgaard, 2013). Moreover, women are granted free maternity care (European Commission, 2013, p. 12). Danish fathers are entitled to two weeks of parental leave and in addition, each family can take 32 weeks of parental leave until the child is 48 weeks of age (Bloksgaard & Rostgaard, 2013). Irish fathers, on the other hand, are only allowed leave when the mother dies (Citizens Information, 2014). In Denmark, the role of the father in having and raising a child is therefore publicly recognised. Allowing fathers to take paid paternity leave, contributes to gender equality. So, in total each Danish family is authorized to take 52 weeks of paid parental leave. This amount is significantly higher than in Ireland, where average families only get 26 weeks. The amount of weeks of maternity leave can have a positive influence on fertility decisions, but on the other hand it can have a negative impact on employment since the return of women in the labour market will be postponed.

Some notable private initiatives have been introduced in Denmark to boost the fertility rate. In September 2012, the Telegraph published an article stating that "A group of Danish nurseries has come up with a novel way to help the country's low birth rate – offering parents an evening of free child care so they can go home and make more babies" (Kaznowska, 2012). Furthermore, a travel agency called Spies recently launched a campaign called 'do it for Denmark'. According to the website, Spies wants people to have more children "to save the future of Denmark" and so there are more people to book a holiday with them (Spies Rejser, Thomas Cook, 2014). Therefore, it offers an ovulation discount and when mothers submit prove of their pregnancy they can win prizes like a family vacation, a pram or 3 years of diapers (Spies Rejser, Thomas Cook, 2014). It seems like these initiatives mostly aim to attract publicity. Nonetheless, they attract attention from the population to the fact that fertility rates are low and something must be done to change this.

5.5 Participation rate among women

The participation rate of women in Ireland has increased, but the increase was smaller among mothers with young children. A report about participation rates among women in Ireland between 1997 and 2007 by 'the equality authority' and 'ESRI' suggests that participation rates among women increased due to the economic growth the country

experienced during this period. However, the report also states that "The low rate of increase for mothers of young children and the stagnation of participation rates among lone parents in a period of rapid economic growth suggest persistent barriers to employment among these groups" (Russell, McGinnity, Callan, & Keane, 2009, p. xi). Therefore, it is possible that one of these barriers is the high costs of childcare influencing mothers' decisions to stay at home instead of finding a job. In Denmark, the participation rate for both women and men has been stable and rather high throughout the years.

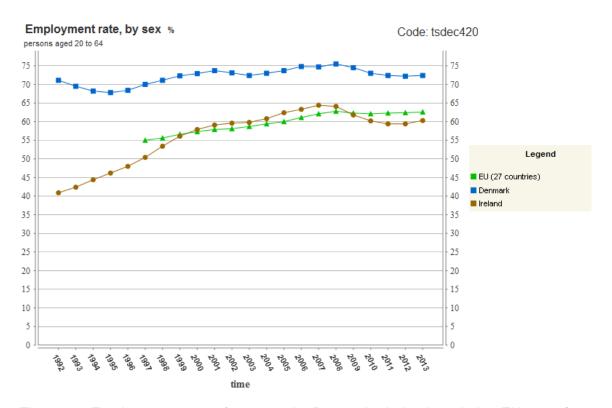


Figure 5, Employment rate of women in Denmark, Ireland and the EU 1992/2013, (Eurostat, 2014)

The participation rate among women could be lower among women in the Republic of Ireland due to expensive childcare. In figure 5, which shows the participation rate of women in Denmark and Ireland, it can be seen that the participation rate in Denmark is currently 72.4% which is substantially higher than in Ireland (60.3) and the EU average (62.5). Since the participation rate in Ireland is lower than the EU average and the average rate of Denmark, it is possible to conclude that this participation rates are higher in countries where childcare costs are relatively low. Especially since the employment rates of men in Ireland and Denmark were almost at the same level in the period between 1999 and the economic crisis of 2007. This position is also supported by figure 6 which shows mothers' reasons to decide not to work, or work part-time because of the childcare

system. The figure suggests that 85% of all Irish women with children below the mandatory school age state that they are dissatisfied with the childcare system because they consider childcare to be too expensive. Unfortunately, there are no data available for Denmark but it can be concluded that the percentage is relatively high in Ireland compared to other countries.

Countries	Not available	Too expensive	Insufficient quality	
EU-27	25	53	4	
BE	62	32	Ou	53% of women
BG	30	35	13	(aged 15-64 and
cz	47	10u	3u	with children up
DK	:	:	:	to the mandatory
DE	25	31	:	school age) who do not work or work
EE	:	63u	:	part time because
IE	8	85	3	of inadequate
EL	21	67	6u	childcare services
ES	18	60	2u	in the EU report
FR	33	57	:	that childcare is
ΙΤ	37	57	5	too expensive.
CY	:	57	:	
LV	27u	35	:	
LT	:	:	:	
LU	34u	28u	:	
HU	32	25	20	
MT	:	:	:	
NL	13u	71	:	
AT	57	22	:	
PL	35	57	4u	
PT	:	60	:	
RO	13	08	6u	
SI	:	46u	:	
SK	29u	36u	:	
FI	27u	:	:	
SE	:	:	:	
UK	10	73	4	
HR	48	34u	:	
MK	22u	59u	:	

Source: EU-LFS data 2010, ad hoc module 'Reconciliation between work and family life'.

Notes: EU-27 without DK and SE; u: not reliable: ':' not available.

Figure 6, Main reasons for women (aged 15-64 and with children up to the mandatory school age) not working or working part time by perceived shortcomings of childcare (European Commission, 2013)

The impact of becoming a parent on employment is higher in Ireland than in Denmark. According to figure 7 which displays the impact of parenthood on employment, the difference in the employment rate between women with a child and without a child was a bit higher than -10% in the Republic of Ireland. Even though the difference is not as extensive as in other OECD countries, it is still significant. Furthermore, the difference is notably smaller in Denmark where it is around 2%.

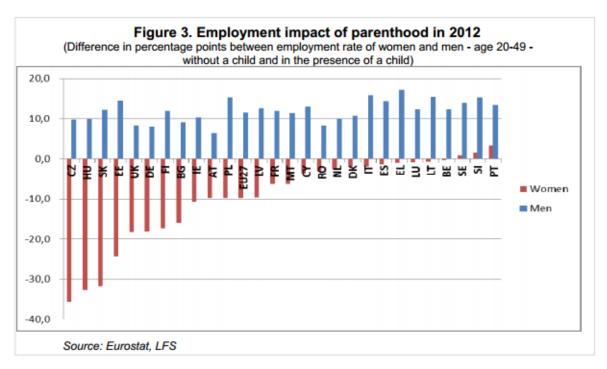


Figure 7, Employment impact of parenthood in 2012, (European Commission (cited from OECD), 2013)

5.6 Fertility Rate

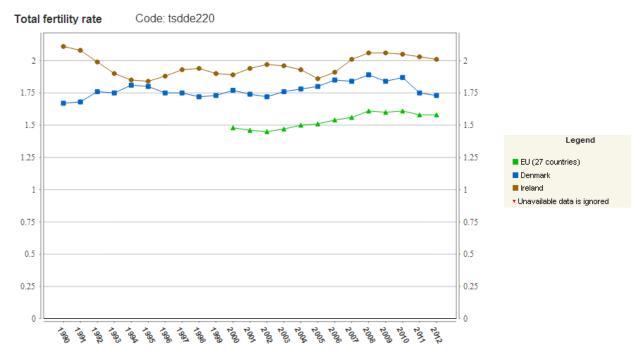


Figure 8: Total fertility rate in Denmark, Ireland and the EU as a whole 1990-2012 (Eurostat, 2013)

Even though childcare costs are rather high and many women in Ireland state that they consider these costs to be an obstacle to their career, fertility rates in Ireland are much

higher than in Denmark and the European Union as a whole. This could indicate that there is no relation between childcare funds and birth-rates. It is also possible that the Irish government does not feel the need to fund childcare systems since the birth rate is already high. However, the employment rate in Ireland remains low and providing affordable childcare could change this. Furthermore, often childcare is not seen as a means to increase fertility but to encourage employment and gender equality. Therefore, it is likely that the high birth-rate is not a cause of the high childcare costs.

Many factors can influence fertility rates. First of all, it should be noted that decisions to have (more) children are motivated by many factors, not just cheap childcare facilities. It could be part of the Irish culture to have many children but it is also likely that that there are religious and demographic causes. It is possiblet is possible that there is a demographic reason for the difference in fertility rates in Ireland and Denmark. In an article by the Irish Times it is stated that according to professor Miriam Wiley of the ESRI: "The high number of births over recent times can be explained by the high proportion of women in their childbearing years, rather than by a trend for women to have more children" (O'Brien, 2013). The article also reports that immigration is likely to be one of the reasons since 25% of all mothers were born outside Ireland (O'Brien, 2013). An article by the Copenhagen Post states that the situation in Denmark is opposite of the situation in Denmark, there are fewer women in their childbearing years (Weaver, 2013). Furthermore, they wait longer to have children. In figure 9 it can be seen that the proportion of the population aged 25-44 is 5% higher in Ireland than in Denmark. Furthermore, the percentage is also higher than the EU average. Even though this is not a complete explanation for the difference in the fertility rate, it is most likely part of it.

Population on 1 January: Structure [demo_pjanind] indicators

Last update: 12.03.14 Source of data: Eurostat

INDIC_DE: Proportion of population aged 25-44 years

TIME	2013
GEO	
European Union (27 countries)	27.5
Denmark	25.2
Ireland	30.9

Figure 9, proportion of population aged 25-44 (Eurostat, 2013)

Another possible explanation of the high fertility rate in Ireland is that the country is very religious. According to figure 10, 85% of the population is Roman Catholic and only 6% is non-religious. An article by White states that the Ireland used to be one of the most religious countries in Europe (White, 2007). Nonetheless, this has changed "The Irish continue to be dedicated to the Catholicism as a badge of national identity, but a consumer orientation to the religious world undermines the Church's capacity to shape individual values (Garvin 2004, 268-70)" (White, 2007). Religion also continues to play a role in Irish law; abortion is for example still illegal unless the life of the mother is in danger (The Irish Times, 2014). The strong Christian identity could influence fertility decisions and therefore the fertility rate. On the other hand, in Denmark a large proportion of the population is religious as well: 78% of the population is member of the National Church (Statistics Denmark, 2014).

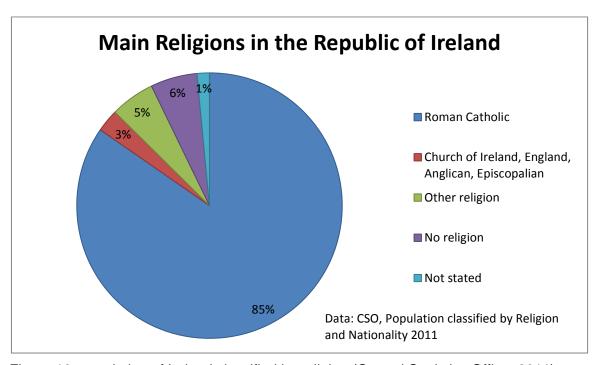


Figure 10, population of Ireland classified by religion (Central Statistics Office, 2011)

5.7 Conclusion

	Denmark	Ireland
Population	5,627,235	4,588,252
GDP US\$ (The World	56,364	45,951
Bank, 2012)		
Old age dependency ratio	27.6	18.6
(Eurostat, 2014)		
Average age (Eurostat,	41.0	35.5

2014)		
Complied to Barcelona	Yes 2	no
targets		
Costs of childcare (net	11%	45%
costs of the average wage)		
(OECD, 2011, p. 168)		
Participation rate among	72.4	60.3
women (Eurostat, 2014)		
Fertility rate (2012)	1.73	2.01
(Eurostat, 2013)		

Table 1, data from chapter 4 compared

It seems like there is no clear relation between the costs of childcare and the fertility rate. In Denmark, childcare costs are relatively low, the system is well organised and parents are entitled to a substantial period of maternity leave. This seems to translate into a high employment rate among women compared to the one in Ireland. Nonetheless, the fertility rate is significantly higher in Ireland than in Denmark even though the costs of childcare in Ireland are comparatively high. This indicates that the costs of childcare have little effect on fertility in Ireland but they do prevent a large proportion of mothers from working. Cultural and demographic factors seem to be playing an important role in fertility decisions. Therefore, after comparing childcare systems in Denmark and Ireland it can be concluded that childcare subsidies have little effect on fertility, but can improve employment rates. It should be noted that this comparison only assesses the situation in two countries; it is no guarantee for the rest of the European Union.

6. Conclusion

Childcare subsidies can have a positive effect on population ageing. Population ageing could lead to a shortage of workers. Many women think having children could form an obstacle to their career or think childcare is too expensive. By funding childcare, more women could be motivated to go (back) to work. This is shown by the example of Denmark; childcare is relatively cheap and the employment rate among women is high compared to the one in the Republic of Ireland and the EU average. Some scholars also state that funding childcare could have a positive effect on birth rates. However, high costs of childcare do not necessarily lead to a lower birth rate, as can be seen in Ireland. The birth rate in Ireland is higher than the EU average and the birth rate in Denmark, where childcare is more affordable. So, this study confirms the theory that providing childcare can lead to an increased labour participation rate among women and shows that many factors contribute to the level of the birth rate. Countries with expensive childcare places do not necessarily have a lower birth rate, even though many women state that they consider high childcare costs to be an obstacle.

Even though funding childcare facilities will not offer a complete solution to population ageing that will have immediate effect, it seems like the perfect solution is not yet found. Funding childcare facilities has many beneficial effects, it can lead to an increase in the employment rate among women and in some cases it might have a small positive effect on parents' decision to have children. Moreover, it can improve gender equality and could provide education for young children. Therefore, funding childcare facilities can have a positive effect on population ageing since it encourages more women to work. What better way to facilitate population ageing than to focus on children, after all they are the future.

7. Recommendations

Funding childcare seems to have a positive effect on employment rates among women, therefore this should be continued and in some countries expanded in the future. Since the effect on fertility rates seems to be small, more research should be conducted on factors that influence the decision to have children and how governments can facilitate this decision. It is recommended that more small scale experiments should be conducted like the experiment in Lestijärvi (P13) and small scale solutions in areas with a particular low fertility rate should be encouraged. It is particularly useful to look at the effects of EU policy in different countries. In Ireland and Denmark it is clear that the costs of childcare play a relatively small role in fertility decisions. It is difficult to influence these factors.

Additional measures should be taken, for example creating part-time working opportunities and extending maternity leave. Even though this might temporarily lead to a decrease in the labour force it is also important to stimulate fertility on the long time. The policy should be reviewed; it might have different effects in different parts of Europe. It should be noted that it might take a long time before the policy has any visible effects. In order to stimulate all women to work and facilitate the balance between work and family, childcare subsidies should not just be awarded to the lowest incomes, but also to middle class and high income families. Countries should cooperate and exchange knowledge on policy measures and other programmes that can make child care more affordable.

It should be studied in what way funds can be awarded for informal childcare services. Informal facilities can provide stability and reliability. Moreover, they are often more flexible than formal facilities.

Most policies focus on two age groups: 0-3 and 3 to the mandatory school age. School hours are often not the same as working hours and therefore the targets should be extended to include care for all children, also the ones attending primary schools.

Already, the EU has introduced many strategies and targets to increase the capacity and use of childcare services to increase employment among women. However, most policies are not binding and are not focussed on increasing funds for childcare. Therefore, the EU could set targets for the maximum costs of childcare. Furthermore, member states should be motivated to comply with childcare targets. If the power of the EU is increased in the field of childcare, it could adopt sanctions in case countries do not comply with childcare targets.

In my opinion, the ideal situation would be that school types, ages and levels are equal across the Europe Union. Students and workers are already free to move, work and study anywhere in the European Union but diploma's and school levels differ. So it would be ideal if childcare and school systems are the same as well. This would not only make it more convenient for citizens to move, but it would also make it easier to coordinate childcare policy at an EU level. However, nowadays Euroscepticism is eminent and widespread and many countries experience a shortage of money. Therefore, it is not realistic to push for these changes currently. Patience is necessary and eventually it could be the perfect solution to unify childcare and school systems across the European Union to get closer to a truly unified European Union.

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