

# **Iceland's performance as a welfare state during and after the financial crisis**

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## **Abstract**

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The aim of the thesis was to study Iceland's performance as a welfare state during and after the financial crisis in 2007. The research questions of this study are: How did Iceland function as a welfare state during and after the financial crisis? What visible evidence is there of Iceland's measures to support society during and after the financial crisis?

Iceland's financial situation suddenly deteriorated in 2007 when the country's financial sector collapsed and had to be rescued by the state of Iceland. The financial crisis and the rescue operations brought new challenges to the Icelandic people, public finance, employment situation and the public services offered by this Nordic welfare state. This thesis employs quantitative methods to study Iceland's situation during the years 2007-2017. The data has been collected from the Statistics Iceland and Eurostat.

Iceland's public services were studied in terms of expenditures, but also in terms of healthcare staff-patient ratios. This thesis studies unemployment and employment levels between age and gender groups, and in terms of total figures per year. Studying the levels and figures has given a broad perspective on the employment situation, which reflects the welfare of the people of Iceland. One of the questions this thesis addresses is this: how has the employment improved between 2007-2017.

As a welfare state, Iceland has been able to maintain its public sector in spite of the financial difficulties of the years under consideration. Even though the expenditures increased in many parts of the public sector during the crisis, unemployment has remained moderate and has even decreased since. The public finance situation has also improved in terms of expenditures and growth of the GDP. Iceland has been able to maintain its public healthcare services, childcare and pension system. This has had a significant impact on the welfare of the entire population of Iceland.

**Keywords:** Iceland, welfare state, Nordic country, economy, financial crisis, public services

## Tiivistelmä

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Pro gradun tavoitteena oli tutkia Islannin toimintaa hyvinvointivaltiona vuoden 2007 finanssikriisin ja sen jälkeisten vuosien aikana. Tutkimuskysymyksinä olivat seuraavat: Miten Islanti toimi hyvinvointivaltion näkökulmasta talouskriisin aikana ja sen jälkeen? Näkyivätkö Islannin toimenpiteet yhteiskunnan tukemiseksi talouskriisin aikana tai sen jälkeen?

Islannin taloudellinen tilanne huonontui äkisti 2007 vuonna, kun taloudellinen sektori menetti tasapainonsa ja Islannin valtion täytyi ryhtyä toimiin sen pelastamiseksi. Tilanne toi uusia haasteita Islannin kansalaisille, julkiseen rahoitukseen, työtilanteeseen ja Pohjoismaisen hyvinvointivaltion julkisiin palveluihin. Työssä käytettiin kvantitatiivisia menetelmiä Islannin tilanteen tutkimiseen 2007-2017 ajanjakson aikana. Tutkimukseen käytetyt tilastot on koottu Islannin tilastotieteenkeskuksesta sekä Eurostatista.

Islannin julkisia palveluja tutkittiin valtion kulujen sekä terveydenhoidon henkilökunnan ja potilaiden määrän suhteen. Työssä tutkittiin myös työttömien ja työssäkäyvien ihmisten määriä ikäryhmien, sukupuolen ja kokonaismäärän vuosittaisten lukujen mukaisesti. Tällä tavoin tutkimus antaa laajan pohjan työtilanteeseen ja siten ihmisten hyvinvoinnin tutkimiseen sekä siihen kysymykseen, miten tilanne on parantunut vuosien 2007-2017 aikana.

Hyvinvointivaltiona Islanti on onnistunut pitämään julkisen sektorinsa hyvällä tasolla taloudellisesti vaikeista vuosista huolimatta. Vaikka julkisen sektorin kulut kasvoivat finanssikriisin aikana, työttömyys on pysynyt kohtuullisissa luvuissa ja sittemmin laskenut. Julkinen taloustilanne on parantunut tulojen ja BKT:n kasvun myötä. Islanti on kyennyt pitämään kiinni julkisesta terveydenhuollosta, lastenhoidosta sekä eläkkeistä. Tällä on ollut suuri merkitys koko kansan hyvinvoinnin kannalta.

**Avainsanat:** Islanti, hyvinvointivaltio, Pohjoismaa, julkiset palvelut, talouskriisi, talous

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## **Glossary:**

*Collateralized debt obligations (CDO):* a corporate debt market instrument that is used in mortgage-based debt markets.

*Consumer Price Index (CPI):* an indicator of price level changes. This indicator can include energy price, food and other consumer good price changes. The annual increase in percentage is called inflation.

*Financial Supervisory Agency (FME):* a supervisory authority of Iceland's finance sector including banks, insurance companies and private funding companies.

*Eurostat:* a statistical directorate-general branch of the European Commission. Eurostat studies and creates statistics from European Union and other European countries.

*Fiscal:* usually means government or public finance. Fiscal policy refers to use of government expenditures.

*Gross Domestic Product (GDP):* a monetary measure ) of the value of all services and goods produced in a specific period of time and in a specific country. The usual period is one year.

*Icelandic Kronor, króna (ISK):* the currency of Iceland.

*International Monetary Fund (IMF):* an international organization which promotes financial stability, international trade and economic growth.

*Statistics Iceland:* the official central statistics institute of Iceland. Works in collaboration with government ministries and institutes.

# **1 Introduction**

## **1.1 Beginning of the financial crisis and its spread to Iceland**

The financial crisis in Iceland which took place in 2008 was difficult and complicated. The crisis led to several complications in Iceland's operations in the social, economic and legislative fields for several years following 2008. These measures have affected the Icelandic welfare system and the situation of Icelandic households. The purpose of this introduction is to assist the reader in understanding the reasons for Iceland's situation and actions before, during and after the crisis. The thesis studies Iceland as a welfare state during and after the financial crisis. Purpose is to find out how the Iceland functioned as a welfare country during 2007-2017 and how the employment situation developed during that time.

Iceland began to deregulate its banking sector in the late 1990's (Daniloff 2008). Before that, financial sector was highly regulated by the government. According to Iceland's Minister of Finance Steingrímur Sigfússon (2010a), neoliberal ideology became a major political cornerstone of Iceland's financial policies in the 21st century. This meant that majority of the government believed that the private sector was more efficient than public sector and more capable of performing former public tasks such as banking and finance. Iceland also reduced finance regulations so that banks and finance sector providers could work more freely without being interrupted by heavy regulation. Sigfússon (2010a) criticises neoliberal thought, which believes that an 'invisible hand' guides the markets to the right solutions. Further, neoliberal thought holds that if something is wrong, the situation is only temporary. This is because, as in classical economics, it is believed that markets always correct the distortions by themselves (Freixas 2009).

After the deregulation began, Iceland's banking and finance sector turned to foreign investors to raise investments and capital for the Icelandic banks. Daniloff (2008) notes that without regulation, Icelandic banks opened branches all over Europe to provide financial services and savings accounts in European countries such as Finland, the United Kingdom and the Netherlands. These accounts were high interest rate accounts having an interest rate as high as 7% , which is high compared to current global interest rate policy. When Icelandic

banks began having financial difficulties, they had to block these accounts to prevent capital retreat from the banks and from Iceland itself (Daniloff 2008). According to Daniloff (2008), Icelandic banks had assets amounting to over 10 times that of Iceland's GDP. Thus it was impossible for Iceland to pay these assets if banks had financial difficulties due to currency and capital withdrawal. These banks did not have the assets to cover all withdrawals; thus, assets were frozen and accounts blocked (Daniloff 2008).

## **1.2 Difficulties for the lives of Iceland's citizens**

These difficulties started the process in which Iceland began covering its banks' losses and to secure Iceland's economy. All this uncertainty could have affected public welfare (Ólafsson 2011). If these measures had not been taken, Iceland would have faced total currency escape and collapse of trust in its financial system, banks and the economy of the state (Dapontas 2013). According Dapontas (2013), these events affected people's everyday life in such a way that people began to distrust banks and the financial sector, even those in other European countries. People felt that that the welfare system was in danger and needed to be secured (Ólafsson 2011).

The financial crisis itself began building up from several places, but one of its first impacts was in the USA. Since 2001, local real estate markets and mortgages had increasing markets in terms of price and revenue (Adelson 2013). From that year to 2007, housing markets had begun to be even more popular among people who wanted to own their own property. With the support of the US government, US Federal Reserve System (FED) and private banks provided easy access to mortgages regardless of people's incomes.

According to Carey (2009), these subprime-loan packages were able to sell as long as the house mortgages were repaid, but after the increase in interest rates in the USA in 2006 and 2007 it seems that repayments started to show signs of decrease. This decrease in payments led to the situation in which subprime and CDO-loan packages began to lose their value; this in turn increased uncertainty for people. In late 2007 and 2008, these subprime and CDO packages caused losses to banks. Many banks in the USA and Europe banks were nationalised, sold or went bankrupt (Posen & Changyong 2010). These loans and



international market uncertainty they created have direct connections to Icelandic banks and to Iceland's financial markets. Financial sector's difficulties had an effect on Iceland's household mortgages and saving accounts. Increasing interest rates began to impact the financial situation of Icelandic people because they could not make payments anymore. Also, foreign currency loans had their own impact to Iceland's economy due to value changes of the currency.

### **1.3 Impacts of the collapse**

Iceland's economy was fairly small in comparison to its finance sector. In addition, Iceland is a country of only 348 000 citizens. When the economy overheated in 2008, the state finance sector's collapse cost ISK (Icelandic Kronor) 200 billion that year. The entire state GDP amounted to ISK 1500 billion, and the country's annual healthcare budget amounted to ISK 100 billion (Sigfusson 2010b). Sigfusson (2010b) also reminds that the finance sector's collapse was estimated to cost ISK 7000 billion in total. When the government began to finance banks in 2008, the treasury's finance costs increased nearly four times between the years 2007 and 2008, increasing to nearly the size of the nation's healthcare budget of ISK 84 billion (Sigfusson 2010b). This was a huge amount for a country the size of Iceland, whose one main export product was finance and banking. Iceland needed to rethink its employment structure.

The Icelandic treasury's net monetary assets developed negatively between 2007 and 2008. During 2007, the development of Iceland's Gross Domestic Product (GDP) was a positive 1.7 % (ISK 22 billion), but at the end of 2008 the balance was negative by -16.1% (ISK 238.5 billion). This meant that Iceland's economy was in trouble and that there was no certainty regarding how it could improve its situation. The citizens of the country also experienced financial troubles because of the increased interest rates and debt burden of the households. There was also no certainty whether the government and the state of Iceland could manage to keep providing welfare state services such as healthcare and childcare. Interest rates also affected people's lives.

## 1.4 Effects of currency devaluation

According to Sigfusson (2010a), when banks began losing their assets and value other financial issues influenced Iceland's markets. Dapontas (2013) writes that in 2008, the Icelandic Krona (ISK) rapidly began losing its value because there was no trust in the currency's value. Thus, investors and financial markets started selling their Icelandic Kronas. The Krona's value fell so rapidly that the International Monetary Fund IMF and Iceland decided to halt floating the value of the ISK on the international market and determined a fixed price for it. Helsingin Sanomat (2011) also writes that the value of Icelandic Krona was different outside of Iceland from the value within Iceland. In 2011, outside of Iceland it was valued outside of Iceland at ISK 250 to the Euro while inside the country, at ISK 159 to the Euro (Helsingin Sanomat 2011). This is problematic for a country dependent on imports because the price of imports is different for the foreign seller and the Icelandic buyer, even though they are using the same currency. In addition, if foreign sellers and Icelandic buyers were to decide to use a foreign currency such as the euro, it would be difficult to determine the exchange rates involved in the transaction. In some cases, this was an issue because Iceland exports fishes and metals such as aluminium. All such unclarity in pricing could have affected the jobs of the workers and the employment situation in general.

According to Dapontas (2013), Iceland began to exercise strict control over its financial markets in order to prevent capital and financial escape from the country. Iceland's government prevented foreign investors from buying state bonds in 2008 but in 2011 again allowed investments by means of these bonds and later (2012) also allowed property and stock market investments (Helsingin Sanomat 2011). These precautions also allowed Iceland to change its legislation on banking and investments. Without these changes, the value of the Icelandic Krona would have fallen even more rapidly and Iceland might have lost its properties and capital to foreign investors and lenders.

Mark Flanagan, IMF mission chief of Iceland (2010), relates that inflation in Iceland during the economic crisis peaked at up to 18% in 2008 and 2009. Many Icelandic mortgages were tied to inflation, and in some cases mortgages had been taken out from foreign banks in foreign currency. This meant that people could not afford to keep their homes.

Iceland had significant problems in financing its fallen banking sector in 2008 and 2009. It also had problems with its negative budget because it needed foreign debt to cover that budget deficit. Usually, governments borrow money from abroad and from investors to cover budget deficits. However, in Iceland's case it was difficult to do this because its finance sector had collapsed and needed emergency capitalisation (Andersen 2008). Borrowing from abroad was challenging because in 2009 four major credit agencies had lowered Iceland's credit ratings to a low level. If the average rating for Iceland in early 2008 was between A and AAA, by late 2008 it had dropped to BBB on average (Fitch 2008). A lowered credit rating meant increasing interest rates for foreign loans, but also difficulties in getting enough funding from investors, international banks, and financial institutions.

Iceland's Financial Supervisory Agency FME (2008) halted trading in the OMX (Nordic Iceland Exchange) stock market for two days in October 2008 because of the significant changes in the market situation (Dapontas 2013). Trading was halted because stock prices began to fall significantly when markets received information that Icelandic banks had problems with their financing and equity (FME 2008). Share prices had fallen 30 % since the beginning of October 2008; after the two days' closure, OMX Iceland was valued 77% lower than it had been before the closure. This closure was imposed to prevent an even larger retreat of capital from Icelandic shares' and companies' values. If this action had not been taken, there might have been a retreat of all foreign and Icelandic capital and funding. At the same time, the closure also showed that financial authorities had noticed the situation and were ready to take action to save Iceland's economy and the Icelandic model of living.

## **1.5 What steps did Iceland take to manage the crisis?**

In October 2009, Iceland's Prime Minister Johanna Sigurdottir, Minister of Finance Steingrimur Sigfusson and Governor of the Central Bank of Iceland Mar Gudmundson set targets for stabilising and improving Iceland's financial situation (Sigurdottir et al. 2009). Their main objectives were to keep employment steady and to stabilise currency exchange and interest rates. Also, the financial sector was recapitalized and restructured in order to prevent further financial uncertainty.

Using monetary policy, Iceland decided to control the Krona's exchange with a dedicated administrative unit in the Central bank of Iceland dedicated to keep the Krona's value stable (Sigurdottir et al. 2009). The unit knew that an undervalued Krona could lead to capital outflows and overestimated depreciation (Sigurdottir et al. 2009). The price set for the Krona by the unit could control its value steadily; there would not be high or low peaks in its currency rates. Stabilising the currency would lead to growing investments and imports to Iceland because prices would stay stable and interest rates could be determined more accurately than without such stability of currency (Freixas 2009). Stabilising measures also affected interest rates more broadly, because IMF loan money was given under the condition that inflation be controlled.

Iceland has resorted to the use of interest rates to stabilise the Krona's exchange rate (Sigurdottir et al. 2009). According to Sigurdottir et al. (2009), after the banking sector fall in 2008 the Krona had already increased its value by early 2009; in addition, Iceland's international reserve was beginning to stabilise. After realising this, Iceland began reducing its control of policy rates. This was done step-by-step from 2008 to 2012. These steps included lowering the interest rates set by the Central Bank, allowing the Krona to be controlled more by markets and not by the administrative unit, and to let investors invest in Icelandic properties and bonds.

## **1.6 Securing citizens' living**

According to Sigurdottir et al. (2009), Iceland needed a stable and reliable banking sector as soon as possible. This was important because Iceland had no fiscal capacity to absorb more private sector imbalances such as losses or unexpected debts. In addition, Iceland's primary resources were concentrated on protecting domestic deposits and investments (Sigurdottir et al. 2009). Sigurdottir et al. (2009) also confirm that Iceland needed to renew their legislation in order to ensure fair and non-discriminatory treatment of depositors and creditors, even if they were foreigners.

Strengthening the banks was achieved by restructuring the financial legislation and by renewing the structures and finances of three major banks. Finance authorities in government

and Central Bank set up a committee to manage the process of recapitalising the banks, and major decisions were made by a committee. In April 2009, the old assets of three major banks were transferred to the new banks, and new capital was to be transferred if necessary from Iceland's Treasury (Sigurdottir 2009). The government set up an agency to secure the Treasury's deposits to the banks and to ensure that banks maintained their profitability and adhered to regulatory requirements after the restructuring in 2008. Kaupthing, Glitnir and Landsbanki RC had to create new businesses and debt repayment plans to ensure their ability to cover liabilities, but also to secure the value of assets at a specific level. Business plans had to be drawn up to cover the coming three years, and these were to be tested by means of structural benchmarks by the Financial Supervisory Authority (FME). These plans had to be constructed from the macroeconomic perspective as well as cover staffing and customer services. They were prepared from a macroeconomic viewpoint in order to ensure that the Icelandic financial sector could work at the same level as international banks. Restructuring the financial sector included securing the structures of the whole financial system, but its functionality as well, including open and international trading with domestic and international banks (Sigurdottir et al. 2009).

Iceland's financial sector and economy went through huge changes between 2007-2017 but Icelandic society did as well. Iceland is one of the Nordic welfare states, which means that it holds that a responsibility of the state is to take care of its citizens. Iceland has a public healthcare system which covers the majority of the healthcare in the country (Vilhjalmsson 2016). Iceland's education system and childcare are public and covered by state funding (Dýrfjörð & Magnúsdóttir 2016).

But how did Iceland manage to sustain its welfare model during the difficult financial years under consideration here? Was it forced to cut some of its public services to cover the financial situation? And if this was done, what was the level of the cuts and what were their impacts in the decade from 2007 to 2017? Measurements exist that help determine how a welfare state is performing. These measurements will be utilized in the results section of this thesis to evaluate Iceland's policies. But first, it is necessary to define the concept of a welfare state. This is done in the following literature review section, which presents the different meanings of the welfare concept in different decades.

## **2 Literature review**

### **2.1 The Nordic welfare model in the literature**

The Nordic welfare model has been widely covered in social policy literature. Still, there have been discussions about how this model can be defined and compared to other welfare models. Esping-Andersen's (1990) *The Three Worlds of Welfare Capitalism* presents three different welfare state models which will be described here. This description will show how these models are to be differentiated from each other. It is also necessary to review how Esping-Andersen's categories correspond to the case of Iceland.

More up-to-date and relevant studies of the modern welfare states are needed. Raija Julkunen (2017) has studied the latest changes in the welfare state. Julkunen's book asks the most relevant questions related to the modern post-2008 financial crisis welfare state society. There exists a prior question: what is a welfare state? The same question was asked by Hemerijck (2012). These books provide more updated information about the current understanding of the meaning of welfare states.

### **2.2 The Three Worlds of Welfare capitalism**

Esping-Andersen's 1990 book *The Three Worlds of Welfare Capitalism* is one of the foundational works for this study. Esping-Andersen's work is often cited in the field of social policy and in welfare policy publications. There have been updated versions of the theory and additional information, but questions have also arisen about its relevance.

Esping-Andersen (1990) has presented a large amount of quantitative data and has presented many charts that display information about the differences among welfare states. He has categorised welfare states into three categories: Conservative Social Policy, Liberal Social Policy, and Socialist Social Policy. He notes how the Conservative Social Policy has been created or formed in Central Europe, primarily in Germany and Austria. This model combines private funding and public funding. For example, in this way, pensions can be

provided through corporate funds, but in addition employers can provide some welfare services such as childcare.

Liberal Social Policy is in use in Australia and United States. These are corporate-heavy countries but still have their own type of welfare model. These countries believe as much in laissez-faire social policy of laissez-faire as in laissez-faire economics. Laissez-faire is defined as a 'hands free' model: this means no country or corporation should be involved in providing services to all people. People should be seen as free people who have free will. People should be able to choose their own service provider, and for this reason a public service provider is not suitable for the model. In this model, the people pay market-based prices. According Esping-Andersen (1990), the Liberal Social Policy model is highly dependent on the insurance markets. Life insurance is provided to people to cover healthcare costs, but this is still very expensive and not all can afford it. States might cover the costs for the poor and elderly people, but even then insurances might cost something.

The Socialist Social Policy model is created and formed having solidarity in mind (Esping-Andersen 1990). This model is formed on the basis of socialist thought; and this is one reason why the middle class and the working class benefit from it. In Sweden, social democrats were the first to create this model in its current form and it now exists in all Nordic countries (Esping-Andersen 1990). This is a highly state-provided model in which most of the public services such as childcare, schools and pensions are provided by the state. The Socialist Social Policy model is relatively equal for all citizens, but at the same time taxes can be high compared to the other models.

Esping-Andersen (1990) contains several chapters containing information about etatism, liberalism and corporatism. Esping-Andersen's information can be used to study Iceland's model and the question of how or if it changed from 2007 on. For example, questions which can be studied are: does Iceland use the Nordic Social model, or has Iceland implemented something different? In addition: is this model something new which Julkunen's (2017) book might be able to describe or explain more precisely? Esping-Andersen (1990) also writes about pensions in different countries and presents charts and data relating to these. Different countries' pension systems can be compared to Iceland's pension system. Even though the time period is different, it is possible to compare these two models. It might be possible to see which model Iceland really uses and is there similarity to

other forms. Pierson (2011) has also formulated a similar type of categorisation as Esping-Andersen. Pierson's charts and text provide updated information and studies since the article was written in 2011. Pierson also presents comparisons between the liberal, conservative and social democratic models and their cost in terms of unemployment benefits and pensions.

Pierson (2011) writes about Esping-Andersen's theory of vulnerability of social programmes. He suggests that social programmes are too resilient, and that social programmes are not adapting well enough in the changing society. These programmes cannot keep pace with society's challenges and needs. The financial crisis of 2008 proved that many welfare state social programmes could not handle all the challenges created by unemployment. The wave of immigration from Syria and Iraq to Europe in 2015 brought new challenges to social and healthcare networks when the number of refugees suddenly increased significantly in several countries. Pierson (2011) writes that Esping-Andersen's ideas of how the welfare states have rigid structure or relied on old-fashioned society where working career is secured. These rigid structures in working life have started to change, and in modern working life there is no guarantee of secured working hours or length of contract.

### **2.3 Does the welfare model need an update?**

The same questions arise when studying the modern welfare state. These often have to do with how society or the state can afford to keep up the welfare state model. It can be asked, is the welfare state relevant in a modern capitalist society where states' limits have been blurred between public and private sectors?

Julkunen (2017) begins her book with the main question: has the welfare state changed? The question concerns not only the Nordic welfare states but all countries and the whole welfare state system. Has there really been a change in welfare state models in 2017? Julkunen raises this question because there have been public debates in the media and also in journals and literature asking whether these countries have lost the possibility of maintaining the welfare system. It is known that it is not cheap or easy to maintain and debates of the welfare system also almost always brings up the question of taxation. Usually, welfare states such as the Nordic countries have heavy taxation systems.



Julkunen (2017) raises the question of the updating of the welfare state model when she discusses how the welfare model can be supported. When the Nordic welfare state model was started to be created in the 1960's, the Nordic countries' economies grew steadily, and there was often full employment. The economic situation in some of these countries has changed during the last decade because of the 2008 financial crisis. Finland has not been able to increase employment levels except among the cohort of 55 years of age or older, and the budget deficit has become persistent (Tilastokeskus, no date). Even though the situation has improved much in recent years, it can still be questioned whether these countries can afford, or are more likely be able to maintain, their welfare state model. Julkunen (2017) has asked the same questions in her book. The 2008 financial crisis has long term effects on societies because it affected all sectors simultaneously: the public and private sectors and private households.

Because Julkunen's (2017) publication is recent, it also raises the question of the refugee wave that affected Europe, and which was one of the main headlines in the media in 2015-2016. The refugee wave brought the question of the welfare state system to public attention because in some countries the current system had barely been able to support the current population. During a one-year period the Nordic countries had to be able to take care of tens of thousands of more people. The Nordic countries and most of the European countries were able to look after the refugees but it affected costs because the system was not budgeted to meet the needs of the increased population. Julkunen's (2017) book also includes the political economy and political sociology of the topic. She admits that it is very difficult to draw the line between the questions and the crisis of the welfare states, macroeconomy, democracy and capitalist democracy. Julkunen (2017) herself says that still it is difficult to define a welfare state. Even when a welfare state is often defined as a country that has public (or otherwise provided) services such as childcare, schools, healthcare, pensions, it is still difficult to explain how these services are provided. Are all these services provided, or only some? In some countries, these services are state-provided and in some countries all services must be purchased. But common to most of the welfare states is that elderly people usually have some services discounted or provided by the state.

Even though the idea of the welfare state is to provide public services equally to all citizens, always there remains the economic side that determines which services can be provided and

how these are performed. The economy, and especially in the modern world the macroeconomy to a large extent determine how these services can be funded. The 2008 financial crisis is a good example of how a global crisis can affect a local economy in the short and long terms. In addition, the political situation can change due to such crisis situations. During the 2008 crisis, governments and political parties were not able to disregard or cover the aforementioned financial changes, which may have led to situations in which citizens wanted to change the government or ruling parties through democratic elections. Welfare state is part of the macroeconomy, democracy and how these are working together in a global world.

Earlier, Julkunen (2001) had suspected that the word *hyvinvointivaltio* (welfare state) would disappear from publications and in spoken language, but so far that has not happened. Actually, Julkunen (2017) writes about the birth of the welfare state model in Otto von Bismarck's Germany, when he was chancellor from 1871-1890. It was the first time that the state began offering a social security system to the population. But it is known that it was created not only to serve people but also to keep them happy with the current government at that time, for fear of rising socialism and power of the Catholic church. During 1871-1890 Germany was united under one leader who wanted to keep citizens satisfied. The social security system was not easy to create under pressure, and it was expensive even then. The welfare state should serve the good of the people, but it can also serve the good of the country or even of the government. Functional services and support for the citizens mean political stability, support and protection for the state if citizens are satisfied. It can protect from external or internal threats because the united population have their basic needs satisfied. Julkunen (2017) writes that the British literature mentions Temple and Beveridge as creators of the welfare state, but Bismarck's creation was prior to these and was the first to create a social security system.

Julkunen (2017) writes about the "frozen landscape of welfare states". This term coined by Esping-Andersen means that the welfare state is frozen in its current state or mode. Most likely welfare state services such as health care or social services are outdated in light of modern requirements and standards. Reasons for these could be because institutions cannot keep up with the pace of the society's development or change. Julkunen (2017) mentions that some researchers began to use the term "welfare reform" in the 1980's and 1990's. The use of this term did not exactly mean that the welfare states were being reformed, but because this term came from neoliberals and neo-conservatives it meant the reshaping of the entire

welfare system. According to Julkunen (2017), reshaping meant that social security, in the meaning of social benefits and unemployment benefits, was cut or decreased and tax relief was given to low-salary workers. To receive benefits, people had to work or actively apply for work. "Actively looking for work" means sent applications, re-education and counseling for those seeking work. This regime is called "workfare," and has been put into place in some countries. Workfare is technically meant to increase and reward employability, but it cannot increase welfare if there is no work available.

Simpura (2012) writes about the situation of Iceland in the middle of the 2008 financial crisis and shortly after that. Simpura notes that Iceland did almost exactly the opposite from what other European countries did in the middle of the financial crisis and afterwards. Iceland did not save the banks or investors, but rather helped and supported citizens to save their homes and also secured their jobs. In the USA and Europe, the central banks and governments saved some banks' investments when Iceland let banks collapse and only secured citizens' basic savings held in Icelandic banks. Iceland also increased some social benefits such as pensions and unemployment benefits to secure that poverty would not increase in the country (Simpura 2012).

Hemerijck (2012) relates similar things in his book *Changing Welfare States*, but also adds that a mature welfare state usually has a problem in their population's age structure. There are usually more people in the population over 50 years old than there are younger people. These baby boomers have already retired or will retire from working life in the next few decades. Welfare states that support their elderly through pension plans will have a fairly high burden of costs. As well, welfare states offer different services to elderly people, such as care homes and healthcare services. According to Hemerijck (2012), these costs will continue to rise. At the same time there are fewer younger working people than there are pensioners.

In many European countries such as Italy, birth rates have decreased significantly in recent decades (Eurostat 2017). This decrease will cause economic structural difficulties in the future when employees are needed to replace retiring employees. In addition, taxation may require changes in order to cover the costs. Because pensions are mostly paid by people currently working to current pensioners, a disproportion will arise in the future. The scenario

is similar in many European welfare states; and their welfare state structures may also need adjusting.

## **2.4 Iceland's structure is different**

Hemerijck (2012) writes that during the 2008 financial crisis many workers lost their pension savings. This loss will cause rising costs to the welfare system because everyone should be covered. Iceland, on the other hand, has a very different age structure. In Iceland there is a much larger population of young persons than there are elderly people. This has helped Iceland's debt burden in advance because pressure to take a loan to cover age structural costs such as pensions has not existed, and this small country has been able to improve its services according to demand. Iceland's young population brings challenges to health services in other ways. For example, child services such as childcare are in high demand.

There are many studies of the relations of macroeconomics to welfare states' social services (Hemerijck 2012). Hemerijck (2012) writes that countries can control their societies and economic stability by ensuring that unemployment rates are low and that there are safety nets available. Even though in an economic sense it is expensive to maintain safety nets such as unemployment benefits and other social security benefits, they ensure that households can maintain their homes and that people can use health care services. Usually, if these benefits are lost it brings even higher costs to the society and it becomes more difficult for individuals to enter working life again. Even if the costs could have risen, Iceland wanted to ensure that individuals would remain as part of the society and have the possibility of keeping their jobs and homes. Even the International Monetary Fund (IMF), which at first was against this decision, have later started to believe that this was a measure that worked for Iceland.

## 2.5 Economics of the welfare state

What then has happened to welfare states? There are several different factors that caused the changes (Hemerijck 2012). Hemerijck (2012) has reviewed macroeconomic policy, wage bargaining and industrial relations, labour market policy and regulation, social insurance and assistance, old age pensions, family and social services, welfare financing and finally governance and administration of social policy. Macroeconomic policy has changed from the 1970's to the 1980's from a Keynesian policy to a more strictly market-led policy. These policies were partly initiated by Margaret Thatcher's and Ronald Reagan's governments, aiming to reduce debt and to place monetary policy under strict control. After this period, most European countries have been members of the European Monetary Union (EMU), which has led to a stable but restricted monetary policy.

According to Hemerijck (2012), there was a change in wage policies in the 1980's when markets and governments started to offer more generous wages to employees. These were given to unions and workers so that there would be more work to offer; governments supported this policy by means of tax relief. These tax reliefs would lead to less tax funding for the welfare system but would encourage people to work. In addition, Italy, Spain and Portugal also had other restrictive EMU policies because these exporting countries could not devalue or otherwise adjust their currencies after they joined the EMU.

There was also a change in job markets when countries started to activate unemployed workers to look for work more actively or face the prospect of their unemployment benefits being decreased or eliminated. At the same time, governments have introduced a labour market model with flexible social insurance models. This 'flexicurity' is a model standing between full-time, part-time, unemployment benefits and other social security models that should encourage to work, and also to get social benefits if necessary (Hemerijck 2012). The eligibility criteria for social security benefits have been tightened in many countries. These are meant to force people to seek work but at the same time there the possibility can exist that there is no work available or that it is not commensurate with the applicant's education. The availability of work and the availability of employees do not always geographically coincide. There can be growing centers where availability of employees is confined but in the same country there can also exist areas with high unemployment levels.

Old-age pensions bring high costs to welfare states because there is an increasing number of elderly people and the number of working-age younger people will decrease in the coming decades. This has brought the need for some countries to increase the retirement age. It has been increased by several years so that it would be possible to secure enough pension for people and to secure the longest working careers possible. Other benefits such as unemployment benefits have been restricted in some countries to force people to continue working. According to Hemerijck (2012), in Iceland a funded pension plan exists which relies heavily on employers' payments and investments. Thus, the pension is very dependent on the person's employment situation. Iceland's financial crisis in 2007 could have seriously affected the pension system if unemployment had increased significantly. The relationships between unemployment and employment to pensions could be a topic to study. There is available data on state funded pension costs.

Almost everywhere in the European Union, the services of childcare, education, health, family care and care of the elderly have increased together with the percentage of GDP. (Hemerijck 2012). Since the 1990's, countries have increased measures for activation of women's employment. From the perspective of the state, this would lower the costs of benefits and would increase tax incomes. Hemerijck (2012) writes that European countries have introduced plenty of flexibility in childcare services so that working would be possible for women. Dual-income families bring plenty of tax income and decrease social benefit costs. This kind of flexibility has begun to be used in welfare states, and at the same time welfare benefits have become a compensation for working or activation. Public services have also seen flexibility in the form of private-sector provision and public-sector hybrids. Private services are commonly used alongside public ones, and often private services are lent or bought to support public services such as childcare or health care. Another change in financing the welfare state is competitive tax cutting (Hemerijck 2012). Countries have decreased taxes to improve their competitiveness to companies and also to improve flexibility in employment markets.

Hemerijck (2012) writes that several welfare states have moved to centralized welfare services, which could be termed 'one-stop-centres'. This way they are able to provide services in one place and also share professional experience. This model also brings cost savings and labour efficiency. On the other hand, it may lead to prolonged waiting times if

all services are provided in one place. In implementing this type of management systems; these centers have become more like private-sector type centres. These services have managed in a more traditional way than in the public sector's centres and have now been implemented in a more cost-efficient way. Perhaps modern business models and methods are not the best fit for public services, because these cannot be thought of as a cost savings procedure but as public services for individuals. Business models are often cost-efficient and productive but are not particularly created for social care, healthcare or other public services where individual human care is the first priority.

## **2.6 Is there a welfare system beyond growth?**

In 2009, the economist Tim Jackson published a book titled *Prosperity Without Growth: Economics for a Finite Planet*. His work concentrates on the problem of modern economics and societies with limited or nonexistent growth and the rising debt of countries and households. Modern welfare states have faced a dilemma during the last decade and even before the 2008 financial crisis. The dilemma was the increasing costs of their welfare systems and the long, continued slow economic growth that have increased the debt burden of these states (Jackson 2009). Governments have wanted to maintain welfare systems and to secure employment levels. At the same time, tax incomes have decreased because of the economic decline during the last decade. Companies and individuals have not earned as much as expected, which has increased the total financial deficit. These measures have increased the total debt load and, combined with tight monetary policy, have created pressures on welfare systems.

Jackson's (2009) main question is: does economic growth bring welfare? It is well documented that the world cannot take the burden of a growing use of natural resources and human population growth. According to Jackson (2009), there is a limit to increasing productivity, which also limits economic growth in the future. Lack of economic growth affects the current welfare state model, which relies heavily on growth. Jackson (2009) thinks that governments should not rely solely on GDP and growth of GDP because these are not very effective measurements of the state of an economy and, particularly, of a welfare system. GDP and growth of the GDP are specifically meant to measure total production and

export of goods and services. It does not tell much about the state of the country, employment situation, or the welfare of the people. United Nation's Human Development Index (HDI) is more accurate measurement to calculate and compare Iceland's development in education and healthcare. The HDI values life expectancy at birth, years at school, mean years of schooling and GNI (gross national income) per capita together (United Nations Development Programme 2016).

As an economist, Jackson (2009) knows that the current welfare model including the healthcare and social security, rely on economic growth. If the economy does not grow, it will most likely affect the financial situation of the welfare system's performance. If a country's economy grows, are household incomes more likely to increase, and will those households begin using more private systems such as healthcare and decrease the use of social security or unemployment benefits? These are relevant questions, especially in welfare states where the state is a huge element in peoples' everyday lives. It can provide healthcare, education, daycare and social security. In this way, governments have significant effects on people's lives. Jackson (2009) considers how countries must start to think about their future and reshape their social and financial models. He writes that these countries should choose their economic and political model for the future. In this way, countries could find the best ways to collect taxes and finances to secure a sustainable future. For example, carbon dioxide- and pollution-based taxes have already shaped taxation systems and consumption of the society all over the developed countries.

Countries should begin to invest in their future by investing in infrastructure (Jackson 2009). This way, ecosystems, roads, railroads and electricity can be secured for the future. He writes that a working infrastructure will increase countries' own sustainability and productivity. Jackson (2009) raises the idea of creating a new financing and accounting base for these countries. Thus the GDP would not be in the center of attention because it is unable to show the welfare, safety or sustainability of a country. Jackson (2009) thinks that countries can be more sustainable and renew their way of thinking by developing equality in the society. For example, this means good education, flexible working hours and equal opportunities for everyone.



## 2.7 Individual human beings as capital

Hemerijck (2012) writes about social investments as a future welfare state model. This means that public services and welfare-state type social services function as investments in the future society. Today, if a welfare state or any country invests in the well-being of families or individuals, especially youth, this can be viewed as an investment in society because those persons are more likely to become resourceful and productive workers. Esping-Andersen et al. (2002) write that society should prepare individuals for the future in societies undergoing transformation. Citizens need to be prepared to changing careers, social risks and societal risks such as climate changes. Social investments are meant to create a more adjustable platform for families, individuals and societies in a rapidly changing world.

Esping-Andersen et al. (2002) think that the most important investments are: childhood development, education, training, lifelong learning and family reconciliation policy. In this way human beings are thought of as society's capital. Hemerijck (2012) writes that in this model, these people in whom society has invested will more likely work in the future and be a contributing part of the society. They would be more likely to retire later, stay healthy, and be prepared for career changes. This model is also intended to increase productivity and employment in welfare states. Thus, the investments made in society would pay themselves back and secure financial continuity.

Iceland has implemented some elements of the social investment model in their society during and after the financial crisis of 2007. They were already using it before the crisis, but later as well, even when the country's financial situation was weak. Iceland continued to invest in its population so that no person would be left outside of society (Arnalds no date). Simpura (2012) writes that Iceland has used their social security system both as a safety net and as a social investment in the future. Even if the social security is well provided, is important to ask how well the daycare, education and training are financed and provided after the financial crisis. As well, whether or not the government has looked after youth and elderly people during the financial crisis. Studied resources include peoples' views as published in newspapers and journals. For example, Mikkonen (2017) writes that the percentage of Icelandic youth who drink alcohol and who smoke is the lowest in Europe.

The opposite was the case in the late 1990's. This is part of the society's action, but Iceland has been able to do this as a national project.

## **2.8 New information of welfare state in literature**

Esping-Andersen's (1990) book provides an excellent basis for studying welfare states. It categorises welfare states worldwide. Because it was published in 1990, some parts of the book are out of date. Still, it provides useful and trustworthy information. The book's data and charts can be utilized in the thesis to see where Iceland has come from, what it is today, and what it might be in the future. It does not show it directly through charts, but it provides information of other countries which can be compared to the current situation overall and to Iceland in particular. Paul Pierson (2011) has provided more updated information on these models in his books and in his journal articles. He has also categorised welfare states in a similar manner as Esping-Andersen.

Raija Julkunen (2017) has written recently about welfare states and about how they have changed in recent years. She has also provided historical background information on these welfare theories and explains how they have been modified or shaped over the years. The recent changes in welfare states can be hard to find but this book has provided relevant information. It explains what the welfare state is and what kinds of services it provides.

The economist Tim Jackson (2009) has suggested different ideas for the economic side of modern society. He thinks that countries should take more responsibility for its actions and should change its habits and procedures for doing things such as accounting, taxation and encouraging environmental responsibility. Jackson (2009) suggests that governments should invest for the future through infrastructure, decreasing debt and caring for the environment.

Hemerijck (2012) provides information about the economic side of the welfare states. The topic of changes in the welfare states is one of the cornerstones of his book. He provides information about the changes from the 1980's to 2012. He talks about how society has changed and how these changes have affected to welfare states. For example, Hemerijck discusses how EMU monetary policies and Thatcher's hard economic policies changed the

field of economics but also economic life of Nordic welfare states. Flexibility has become more relevant to the modern working life. Also, some researchers have viewed individuals, families and the society as capital and an investment: not an investment in money, but in people to make them more productive for the future. Iceland has done many things contrary to received wisdom, but it has also experienced a more rapid growth in GDP and in welfare state services than many other European countries have.

## **3 Methods**

### **3.1 Research questions and sources of the study**

The study's topic is Iceland's performance as a welfare state during and after the financial crisis. This topic covers the years from 2007 to 2017. The other central topic in the study is the definition of a welfare state. These questions led to the following research questions: How did Iceland function as a welfare state during and after the financial crisis? What evidence of Iceland's measures to support society during and after the financial crisis can be detected? It is not easy to find the answers to these questions, but we have attempted to find them by means of the collection of data, charts, the relevant literature, and then combining these in the argument of this thesis.

This study is based on data collected from Statistics Iceland and from Eurostat. These data were found on the internet through searching reliable sources for the GDP, employment, unemployment and other social policy statistics. Other reliable sources exist, but they exist only in Icelandic. Icelandic language sources are also used if the data and meaning are understandable or if it has been published by a reliable source such as ministries. The data itself is in numerical form; thus, the data can be easily analysed and compared.

Statistics Iceland is the official statistics center that collects and processes data on Iceland's society and economy (Statistics Iceland, No date). It contains four separate departments: social statistics, economic statistics, business statistics and resources. All of these departments have specific purposes and tasks (Statistics Iceland, No date). The purpose of the department of economic statistics is to collect data on imports, exports, various national accounts and indicators of the economy. This department is also responsible for calculation of the consumer price index.

The business statistics division collects and studies the business register of Iceland, fishing statistics relating to the size catches and production (Statistics Iceland, No date). The social statistics division collects data and statistics on the labour market, national health-related

information, and gender statistics. This department is responsible for studying average wages and labour costs and for performing data comparisons. Statistics Iceland also has a resources department, which is tasked with financing, but also to collect data and IT tasks. Statistics Iceland has its own research unit, which has prior access to the data created by their other divisions. Other divisions and research units can create and publish research studies, but are not obligated to do so. They can publish such studies for public use and directly to all Icelandic ministries and public departments.

This independent study of Iceland's welfare situation utilizes different methods. The primary materials used and collected include reports from Statistics Iceland, various ministries of Iceland, IMF and Eurostat. Some of these reports have been created in support of Iceland's loan application to the IMF and include much topical information created by government officials. These have been combined and compared to ensure that figures are objective and commensurate with each other. All the tables and graphs in the thesis have been manually created using these official numbers. Data per capita growth of the GDP and unemployment are given in the form of graphs in order to support the later discussion. These have been done by measuring average economic performance, GDP, unemployment from 2007 to 2017.

Some of the data in this thesis has been collected from Eurostat, which provides statistics from the European Union countries but as well from other European countries such as Iceland. Eurostat provides a similar type of information as does Statistics Iceland: statistics for Gross Domestic Product, unemployment, employment and many other areas such as fisheries and transportation. There are Eurostat databases that can be used to compare statistics between years or countries. These statistics and data are provided by each European country and the European Union. The sources for these statistics and data are reliable, and the European Union updates the data regularly.

Eurostat and Statistics Iceland publish English-language sources, which assisted the author of this study to rely upon and trust these sources because the author does not read Icelandic. Further, ad translation websites and translation engines are not reliable enough for the purposes of this study. The Eurostat and Statistics Iceland sites are used by officials, ministries and universities. The data and statistics provided by both are available to everyone

online. The author also sent a question to Statistics Iceland, the Ministry of Welfare and the Ministry of Finance and Economic Affairs asking if there was unpublished data available. Statistics Iceland and The Ministry of Finance and Economic Affairs replied that all the data was published on the Statistics Iceland website. On the other hand, the Ministry of Welfare sent the author external website links to different studies.

### **3.2 Defining the data**

Quantitative data was used in collecting the information necessary to determine welfare state factors of Iceland. The author did not collect this quantitative data firsthand, but he collected it from Statistics Iceland and Eurostat.

The period for the data was determined by the criteria of usefulness and availability. The year 2007 included because it provides the data for employment, GDP and other factors before the global financial crisis in 2008. This data is necessary for showing that the present study can show if changes had taken place before, during and after the financial crisis. The specific years during and after the financial crisis to be studied were determined by the availability of the statistics. These statistics were limited to the end of 2016. The thesis has some charts that are limited to the time period 2007-2013 because no data was collected after 2014. These data are usually related to information collected especially because of the financial crisis, such as risk of poverty data. The statistics of Iceland from the year 2017 could not complete at the time of writing. Overall, the data and statistics utilized in this study were limited to the end of the 2016 because the analysis of the data began in November 2017.

Data collection began by locating reliable sources, and then locating pertinent data and statistics. The goal was to locate available data for the years of 2007-2017, or as near these years as possible. This enabled comparison of statistics year by year. Another task was locating social studies data such as that pertaining to healthcare and social support. After the

required data were located, the numbers were transferred to Excel files and statistics and graphs were manually produced. Graphs and statistics were made individually for each set of data. If there was available data for each gender or age groups, these were studied individually and as a whole when possible. Charts in the results section of this study combine data such as GDP per year and social expenditures in detail. Figures for total social expenditures and risk of poverty have also been compared to determine the link, if any, between the two. Figures for total social expenditures and risk of poverty have been created specifically for this study.

Graphs were produced in easy to understand and readable formats. All results are clearly presented in percentage, currencies and individuals. The currencies used in the graphs are: Icelandic Krona (ISK), Euro (Euro €) or US Dollar (USD \$).

### **3.3 Challenges and limitations**

There were some restrictions imposed on the data, such as a time limit. Even when it was determined that the end of 2017 was to be the time limit of the study, at the end of January 2018 there was still no data available from Statistics Iceland or Eurostat. If data for all of 2017 was available, it was used. Another restriction in data was that some of the required data was difficult to locate because Statistics Iceland has a large quantity of data available; and it can be combined with different factors such as years, gender, age, educational background, geography etc. To make statistics and graphs these factors must be able to be compared.

The Ministry of Welfare in Iceland recommended what they considered to be useful data and studies that could be used in the present study, or which have been studied previously. Another restriction to the study was that there was not much recent (2015-2018) information on Iceland's recovery available in peer-reviewed journals or literature in support of some of the findings of this study. Even the Icelandic studies primarily covered pre-2014 topics. Due to these limitations the present study thoughtfully utilizes some Newspaper sources but in these cases there has been done extra consideration.

Defining the welfare state and welfare model is challenging. As the literature section of this study shows, the concept of the welfare state does not have an unambiguous definition. There exist several definitions for a welfare state, and the concept can be divided into several parts, as for example the Esping-Andersen (1990) has done. The model of the welfare state has changed over the years, a fact which also makes defining a welfare state challenging. The welfare state studies are considered in much of social sciences, but it is relatively close to economic studies.

There are several indicators that are closer in content to economics than to social studies. For example, these indicators include Gross Domestic Product (GDP) and several budgetary statistics. In these cases, indicators were studied more from the perspective of social studies than from that of economics. The topic of economic performance did not play a significant role in this study of Iceland as a welfare state; social, welfare, and healthcare studies played a more central role in the study. Economics studies were used in budget and spending figures appearing in this study. These have been used to study such questions as: have budgets worked? Has spending increased? What percentage of the total national budget is spent on social security?

The data involved in this study is ethically unproblematic because it does not contain any personal information. There is no possibility to connect specific people to the data or study. All of the information for the data and studies has been collected by statistical departments of the Statistics Iceland and Eurostat which have collected the data in only in numerical form. Even if geographical areas and gender are considered, there is no possibility of connecting these data and information to a specific person or group. Anonymity does help the study. It would be possible to publish this study without fear of breaching ethical standards, because it contains no personal information.



## 4 Results

### 4.1 Gross Domestic Product

Iceland's Gross Domestic Product (GDP) per capita increased before the financial crisis in 2007 by 6,9% from 2006 (Chart 1). During the year 2008 it was -0,9% from 2007, which meant that the GDP had been negative and there was no financial growth in the country. In 2009 the GDP was -6,5% lower than the previous year. In 2010 the GDP had fallen from previous year -3%. It took until 2011 before the GDP started to grow and it was still relatively modest between 1-3% against previous year. During the year 2016 GDP per capita increased 6% compared to 2015. Even though it was difficult to get the GDP to grow because of the financial situation in Europe overall and the currency restrictions in Iceland, Iceland was able to cut the Gross Domestic Products decrease. The government could not affect much to the foreign trade or situation but only to stabilise and support the Icelandic incomes and welfare.

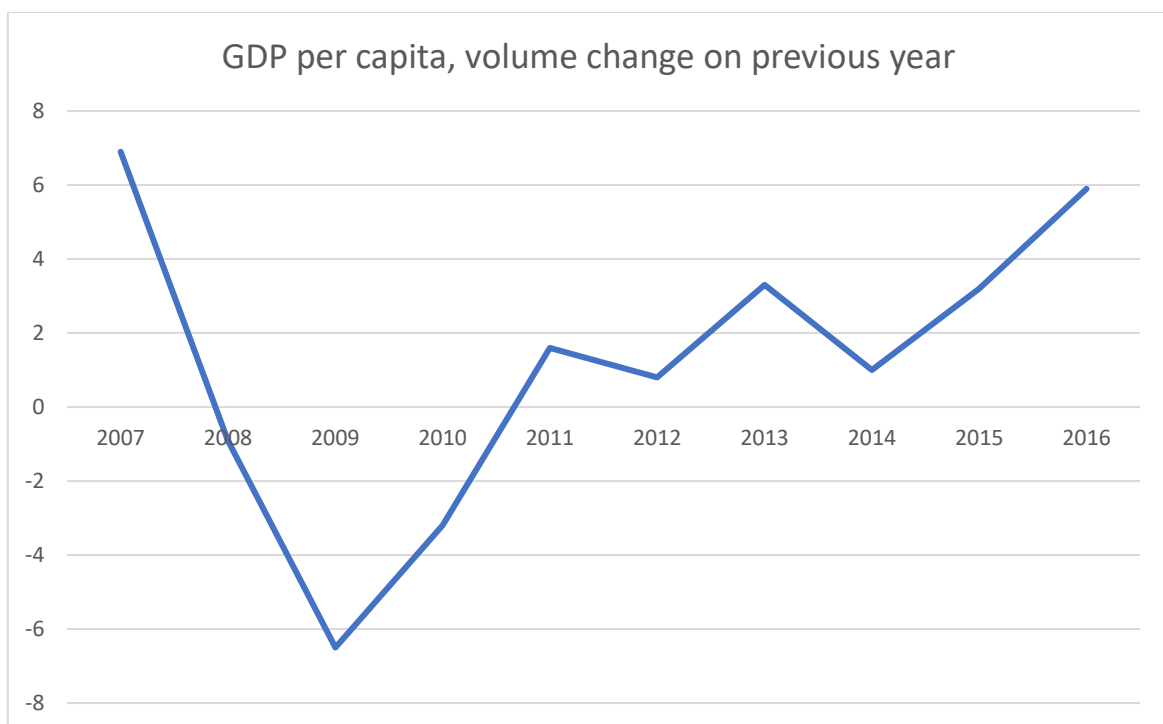


Chart 1. Gross domestic product per capita in Iceland, volume changes between years 2007-2016. Source: Statistics Iceland 2018a.

Iceland's high economic growth in 2007 led to the rising inflation (shown in Consumer Price Index CPI) of 5 % (Chart 2). Financial crisis in 2008 and economic slump were tried to work out partly with currency restrictions. These currency restrictions and some other financial measures led the inflation to rise up to 12,4% in a year 2008 and was still high up to 12% in 2009 (Chart 2). These kind of inflation figures are very high to the western world economies and welfare states. European Central Bank has target inflation of 2% of year. This should cover healthy economic growth and citizens should also be able to afford the increasing prices of this figure. Rising prices has slowed in 2010 to 5,4% and 2011 to the 4%. Only in 2012 it increased to 5,2%. After this has the inflation stayed in more healthier level and after 2014 it has stayed under 2%.

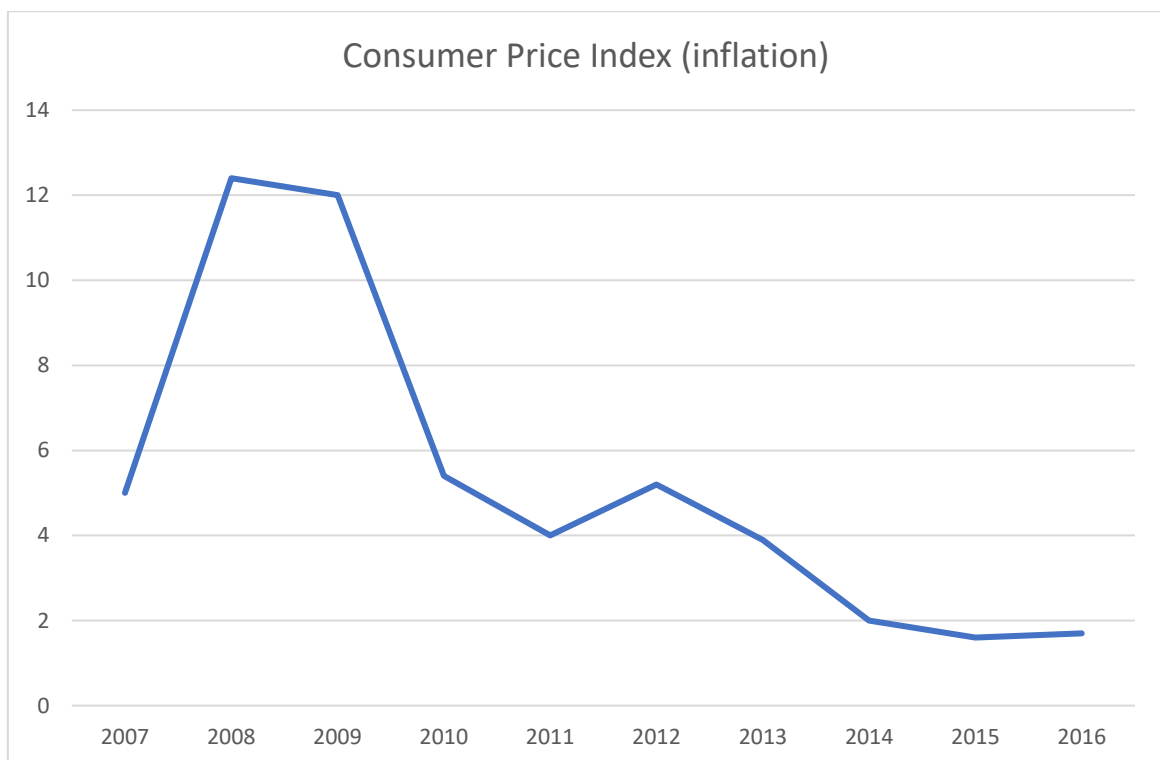


Chart 2. Consumer price index in Iceland, inflation index between years 2007-2016. Source: Statistics Iceland 2018a.

What does this have to do with the basic Icelandic citizen then? Inflation means that prices are increasing to the consumers, public offices and companies. Even the inflation itself can mean that the economy is going well, and moderate price increases indicate ongoing sales, there are several downsides in inflation. High and rapidly increasing inflation means that

prices goes up quicker than consumers salaries possible increase and they cannot buy products as much as before. This can affect to everyday life expenses such as energy, water, food, housing and clothing prices. In Iceland also the restricted currency could not flex if needed in high inflation state.

## **4.2 Public services**

In chart 3 is studied Iceland's total expenditures on social protection between years 2007-2013. Total expenditures have increased every year except in 2010 the expenditure was less than in year 2009. In 2007 the social protection expenditures were 281 156 million ISK and those were increased to the 326 485 million ISK. In 2009 expenditures were 381 861 million ISK (Chart 3). In two years the social protection expenditures increased over 100 000 million ISK which is 36% higher than in 2007. In 2010 the expenditures were in 379 695 million ISK and were increased in every year up to 442 993 million ISK. 2013 expenditures were over 57% times larger than 2007.

The chart 3 shows that the risk of poverty in Iceland was 10,2% of the population during 2007-2009 and was decreased to 7,9% until 2012. This meant that the risk of poverty decreased over 20% during the 2007-2012. On the other hand in 2013 there was a increase in the risk of poverty curve to 9,3% of population.

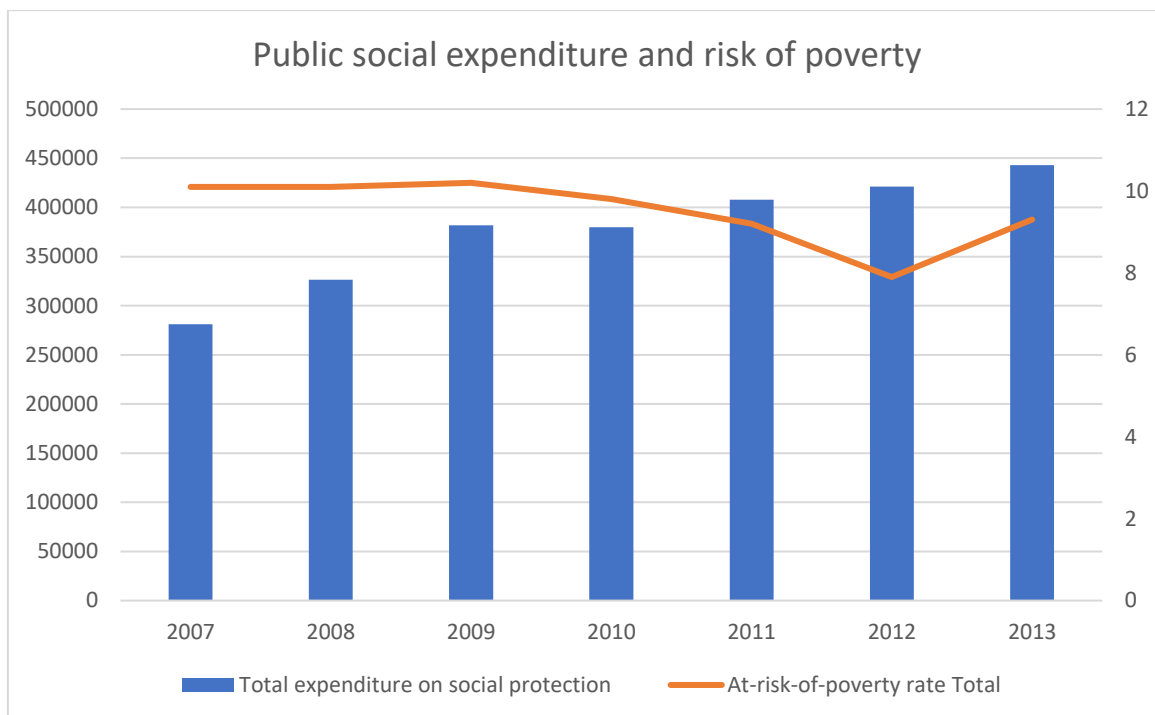


Chart 3. Public social expenditure (Million ISK) and risk of poverty (% of population) between 2007 and 2013. Statistics Iceland 2018a.

During and after the financial crisis Iceland increased their support to the families which has increased the expenditure but helped the families to survive in difficult financial times. Data of the Risk of Poverty shows that the measures in Iceland have been effective because the Risk of Poverty has decreased after the financial crisis to 8% of population (Chart 3). Before and during the crisis the 2007-2010 this amount was 10%. Iceland measures and investments to population have decreased the poverty risk and the employment has increased during the same time.

Chart 4 includes detailed expenditures in social protection. Sickness and health expenditures include all sickness and healthcare expenditures. This statistic shows that expenditures have increased every year except in 2010. Sickness and healthcare expenditures were 115 390 million ISK which is major part of the social protection expenditures. Sickness and healthcare expenditures increased to 136 061 million ISK in 2009 and dropped in 2010 to 132 140 million. In 2013 these were increased to 155 413 million ISK.

Similar type situation was in old-age pensions. These expenditures were increased every year except 2010. Totally the old-age pensions were almost doubled from 2007 57 085 million ISK to 100 127 million ISK in 2013. Chart 4 shows that expenditures in services for elderly people have increased every year from 2007 to 2013. In 2007 these were 5552 million ISK and 2013 these were 8576 million ISK which means 64,7% increase during the time period.

Family or child allowances are increased from 2007 to 2010 but decreased then until started to increase again in 2013. This is related to amount of the children which could be relation to decreased number of birth since 2010 (Statistics Iceland 2018b). Daycare for children expenditure have increased every year from 2007 11 146 million ISK to 2013 16 982 million ISK (Chart 4).

Unemployment benefits expenditures doubled between 2007-2008 from 2347 million ISK to 4642 million ISK. In 2009 these expenditures were 10 times to the 25 237 million ISK compared to 2007. From 2011 to 2013 these expenditures have decreased from 23 642 million ISK to 15 786 million ISK (Chart 4).

Chart 4 also shows that Iceland's GDP (measured in GDP index) decreased from 109 to 108 between years 2007-2008. In 2009 GDP index had decreased to 101 and in 2010 it was near 98. This tells that the GDP had decreased significantly during 2007-2010. In 2011 GDP index had increased to 99,5 and 2012 just over 100. In 2013 this had increased to 103 which told that the economy was growing after years of slow growth.

Chart 4 shows that the Iceland kept social expenditures similar and increased those over the economically severe years. Investments to healthcare and pensions increased almost every year between 2007-2013. Only unemployment benefits decreased during 2010-2013. This could be because of the improved economy during these years and improved employment situation.

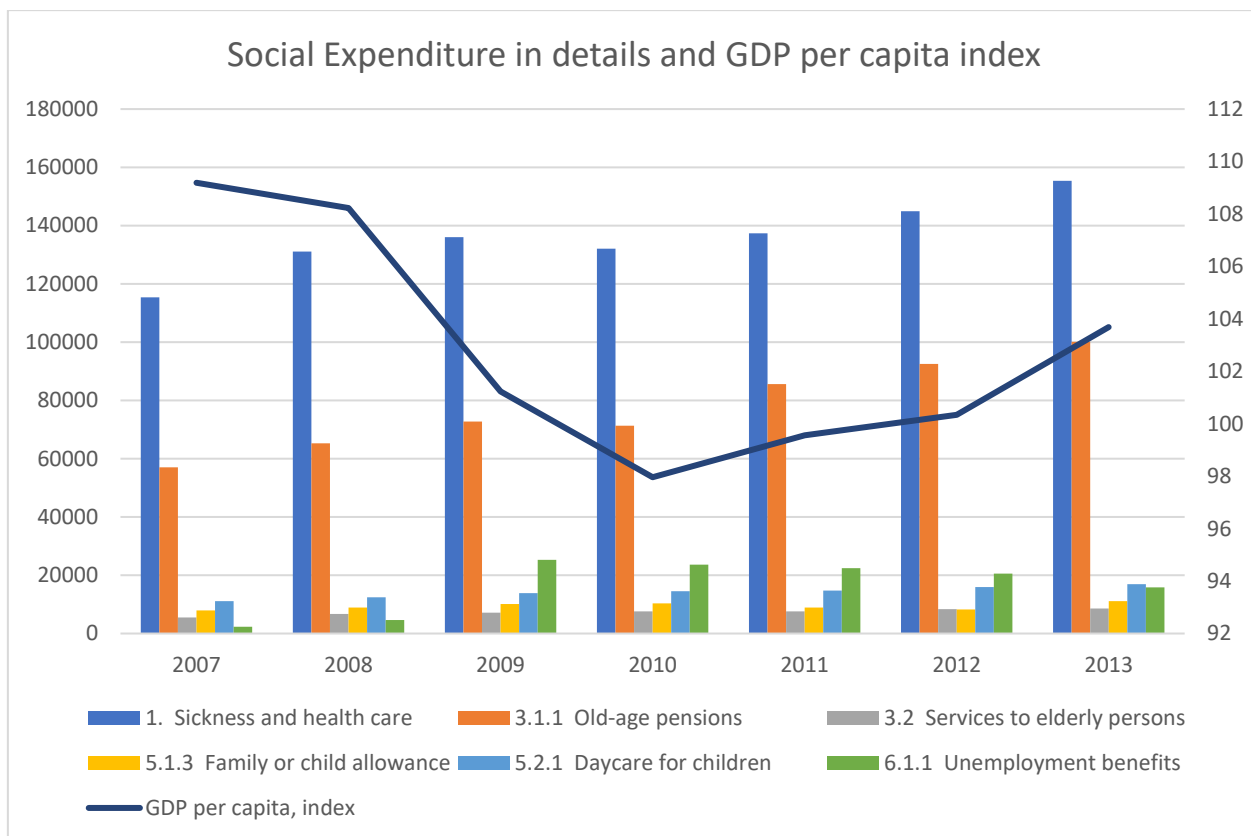


Chart 4. GDP per capita comparison index and social protection expenditures in sickness and healthcare, old-age pensions, services to elderly people, family or child allowance, daycare for children and unemployment benefits in Iceland, 2007-2013. Source: Statistics Iceland 2018a.

Studying expenditures by functions in percentage of GDP reveals the percentages of police services, fire-protection services, street lightning and health services. In Chart 5 can be seen all these functions expenditures by year from 2007 to 2016. There are some changes in health expenditure in 2010 when it drops from 2009 7,8% to 7,5% in 2010 and to 7,3% in 2011. In 2013 it was increased back to the 7,5% where it has been during 2013-2016. 2010 increase could also be explained by inflation rates. During the years 2007-2016 the health expenditures have been around 7,3%-7,8%, changing slightly over the years (Chart 5).

Police services' expenditure is smaller than the healthcare's expenditure (Chart 5). Police services use around 0,7-1,0% of GDP. During years 2009 and 2010 it was increased to 1% of the GDP but in years 2007, 2012 and 2015 it was 0,8%. In years 2008, 2010, 2013, 2014 and 2016 it was 0,7% (Chart 5). There has not been found a reason for the increase of expenditure of police services in 2009 and 2011.

Chart 5 shows that the fire-protection services used 0,13% of the expenditure in 2007 and after that it has been 0,12% every year except 2016 it was 0,09% of the GDP.

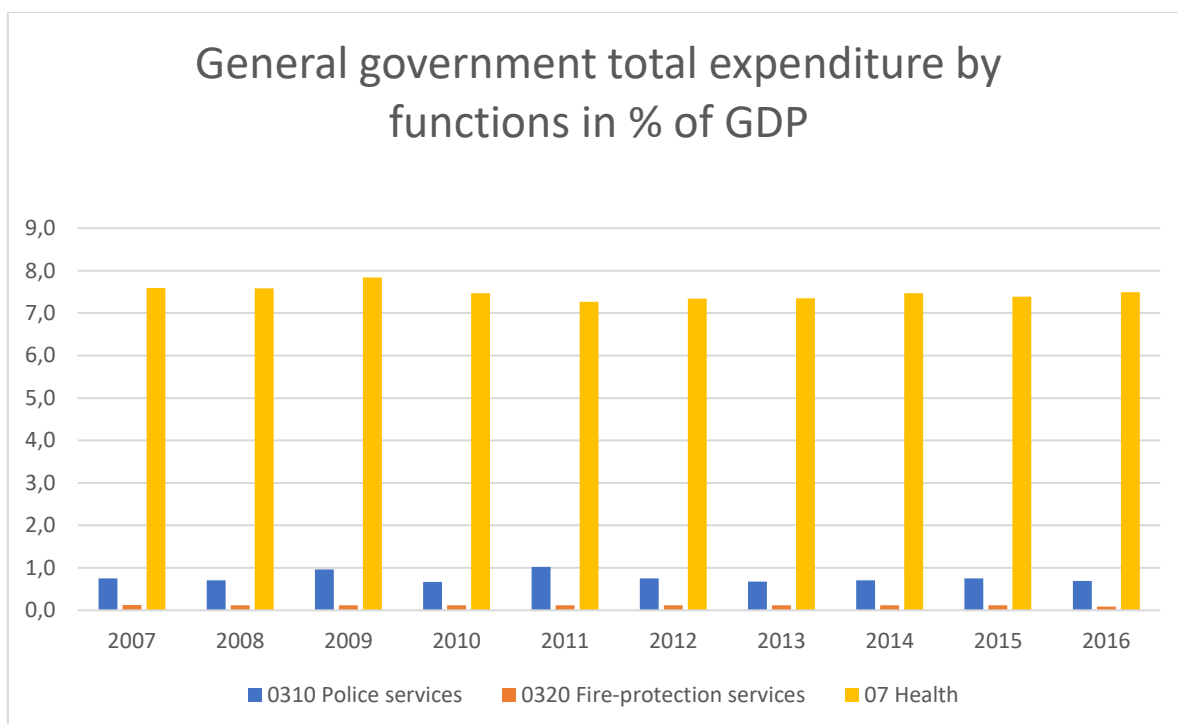


Chart 5. General government total expenditures of police services, fire-protection services and health in 2007-2016. Source: Statistics Iceland 2018a.

Chart 6 shows that has Iceland changed the financing structure of social protection over the years. A data for this statistic was only available for the years 2007-2013. Graph 6 shows that central governments financing increased from 36% to 46% over the most difficult financial years 2007-2009 and was frozen to level 42%-43% in 2010-2012. In 2013 it was decreased to 37%. Local governments part was on the other hand increased every year from 2007 8% to 13% in 2012. In 2013 it was dropped to 12%.

Employer's financing decreased from 39% to 32% in 2007-2008. 2009 it was only 31% but started to cover in 2010 to 34% of all financing (Chart 6). In 2011 it was up to 35% and 2012 in 36%. In 2013 it decreased to the 32%.

Financing of the insured was in 2007 8% and stayed in 7% from 2008 to 2012. In 2013 it was 6%. There could be link between increased unemployment and financial difficulties of households, and between paid insurance policies. Other financing was around 10% in 2007-2008 and decreased to 6% in 2009-2010. After this it was only 3% until 2013 was already 13% of all social protection financing (Chart 6). In this chart can be seen that central governments financing part was decreased over the time and local government's increased. Employers' financing has followed the employment situation overall. Private financing has been fairly similar over the years.

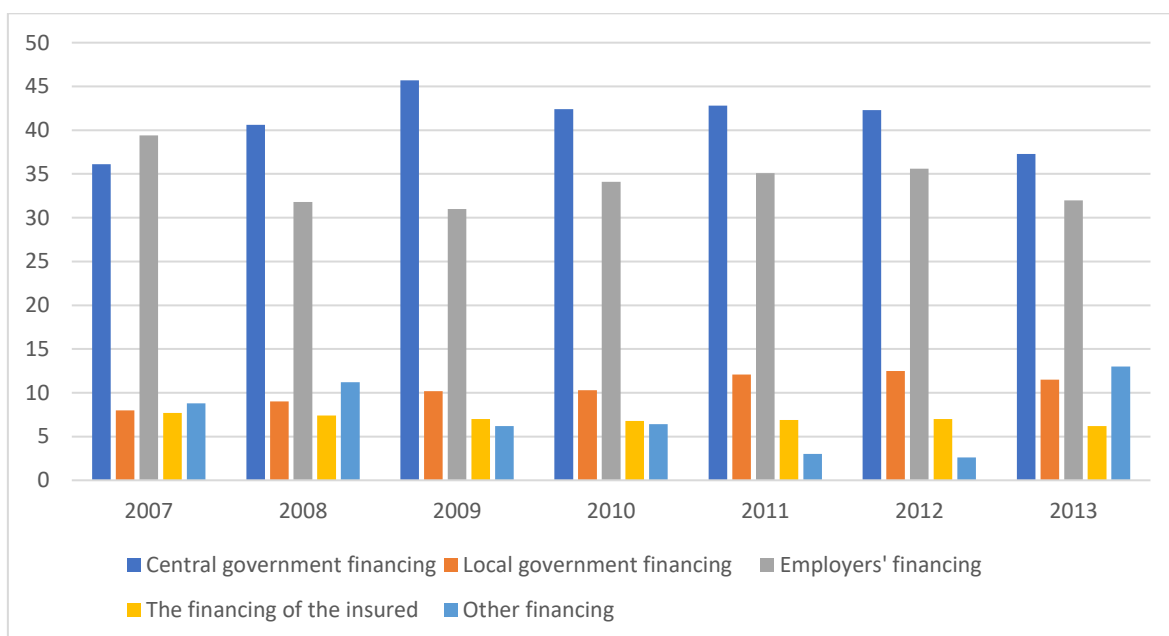


Chart 6. Financing of social protection including central government financing, local government financing, employer's financing, financing of the insured and other financing in Iceland between 2007-2013. Source: Statistics Iceland 2018a.

The graph of health personnel in Iceland has been collected from the Statistics Iceland (Statistics Iceland 2018), which has received the information from the Directorate of Health. This data shows that average amount of population per nurses and doctors in Icelandic healthcare has stayed similar through the years 2007-2015. Statistics Iceland has statistics to show that the amount of the physicians and surgeons has increased during the years (Chart 7). Also, the amount of the population has increased during this time which has lead the ratio



of physician and patients to stay similar during the years. Population in Iceland has increased every year during the years 2007-2015 and is currently 2017 338 349 persons. Even though Iceland had difficult financial situation after 2007 they have kept the amount of physician and nurses steady. And because most of the Icelandic doctors are trained in Iceland's largest higher education institute University of Iceland, the investment in medical training and higher education overall has been stable during the years.

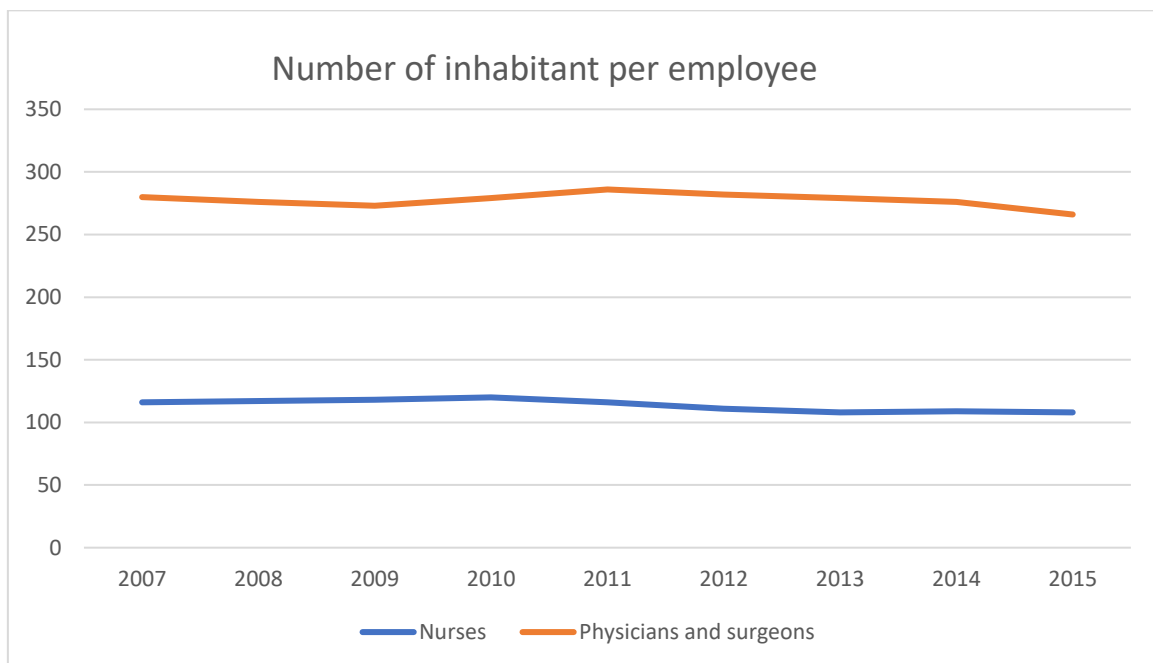


Chart 7. Number of inhabitant per medical nurse and physician and surgeon employee in Iceland between 2007-2015. Source: Statistics Iceland 2018a.

Budgets and amount of staff at the university has stayed similar during the years. The amount of expenditure for the Universities has stayed around 1,4-1,5 % of the annual GDP (Statistics Iceland 2018). These are inflation corrected numbers. Only during the years 2009-2010 this amount was 1,64% - 1,69% which indicates that the higher education and research were valued during the economic slope.

### 4.3 Income support during difficult times

Currency exchange restrictions made the trade difficult, banking sectors difficulties affected to the financial sectors employment and the inflation was over 12% in 2008-2009. Iceland's financial difficulties has had affects also to the households' incomes and earnings. Statistics collected from the Statistics Iceland (2018) show that the amount of the income support receiving households almost doubled between years 2007-2013 from 4280 to 8042 households (Chart 8).

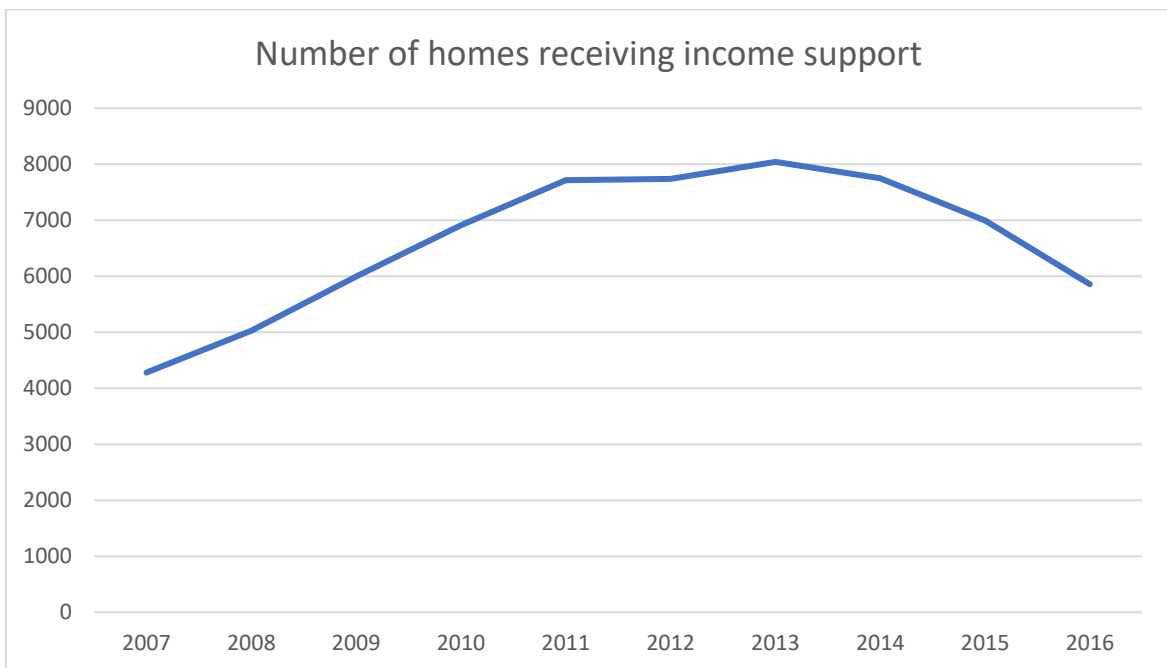


Chart 8. Number of households receiving income support in 2007-2016. Source: Statistics Iceland 2018a.

This indicates that Iceland's financial situation affected households' economic situation as well. Because of this also Iceland's treasury had to increase the total paid amount. In 2007 the amount was around 1 350 000 thousand Iceland's Krona (ISK) and in 2014 this was in highest 4 750 000 thousand ISK. Chart 9 shows that the total amount was 3,5 times higher in 2014 than 2007. Even with fixed inflation it is still high. After 2013 the amount of the households receiving income support decreased and after 2014 the total amount of paid income support also decreased total of 1 000 000 thousand ISK by 2016. Public expenditure in social protection has doubled between years 2007-2016 from 112 000 million ISK to 222 000 million ISK (Statistics Iceland 2018a).

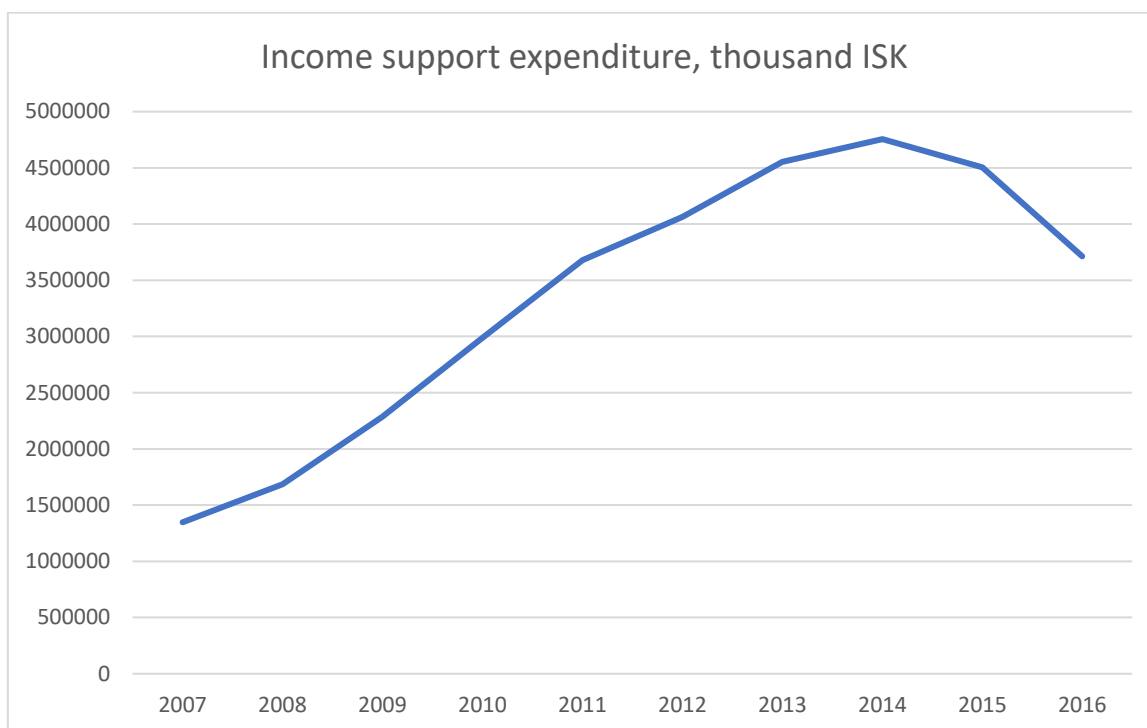


Chart 9. Income support expenditure in Iceland between 2007-2016. Source: Statistics Iceland 2018a.

#### 4.4 Employment

Starting from the financial crisis between 2007-2008 Iceland's financial difficulties started to show in the unemployment statistics (Statistics Iceland 2018a). Unemployment rose from 2,3% to 3% in 2007-2008 and in 2009 it was 7,2% (Chart 10). In its highest peak in 2010 the unemployment was 7,6%. It is high if considering the last decades numbers from Iceland but if comparing these internationally, the unemployment in 2010 was average. It shows that Iceland was able to cover the lost jobs. One thing could be that major difficulties in economy were in banking and financial sectors rather than in industrial sectors.



Chart 10. Total female and male unemployment percentage in Iceland in 2007-2016. Source: Statistics Iceland 2018a.

Unemployment figures between female and males were the same 2,3% in 2007 but after this year these became different when males' unemployment rose to 3,3% and females rose to 2,6% (Chart 11). Unemployment figures for males were at highest in 2009 8,6% and in 2010 for females 6,7%. Male unemployment rose faster and higher than females. 2016 male unemployment decreased into 2,9% and female unemployment 3,1%. Studying the unemployment figures by the age of 16-24, 25-54 and 55-74, can be seen that unemployment hit most severely to the young people between 16-24 years old (Chart 12). Female unemployment within the 16-24 age group rose from the 2007 6,2% to 14% in 2010 and stayed near 12% until 2012. After this it has decreased to 6,4% in 2016. Unemployment between females has similar structure if compared ages 25-54 and 55-74. The younger age is related to higher unemployment rate.

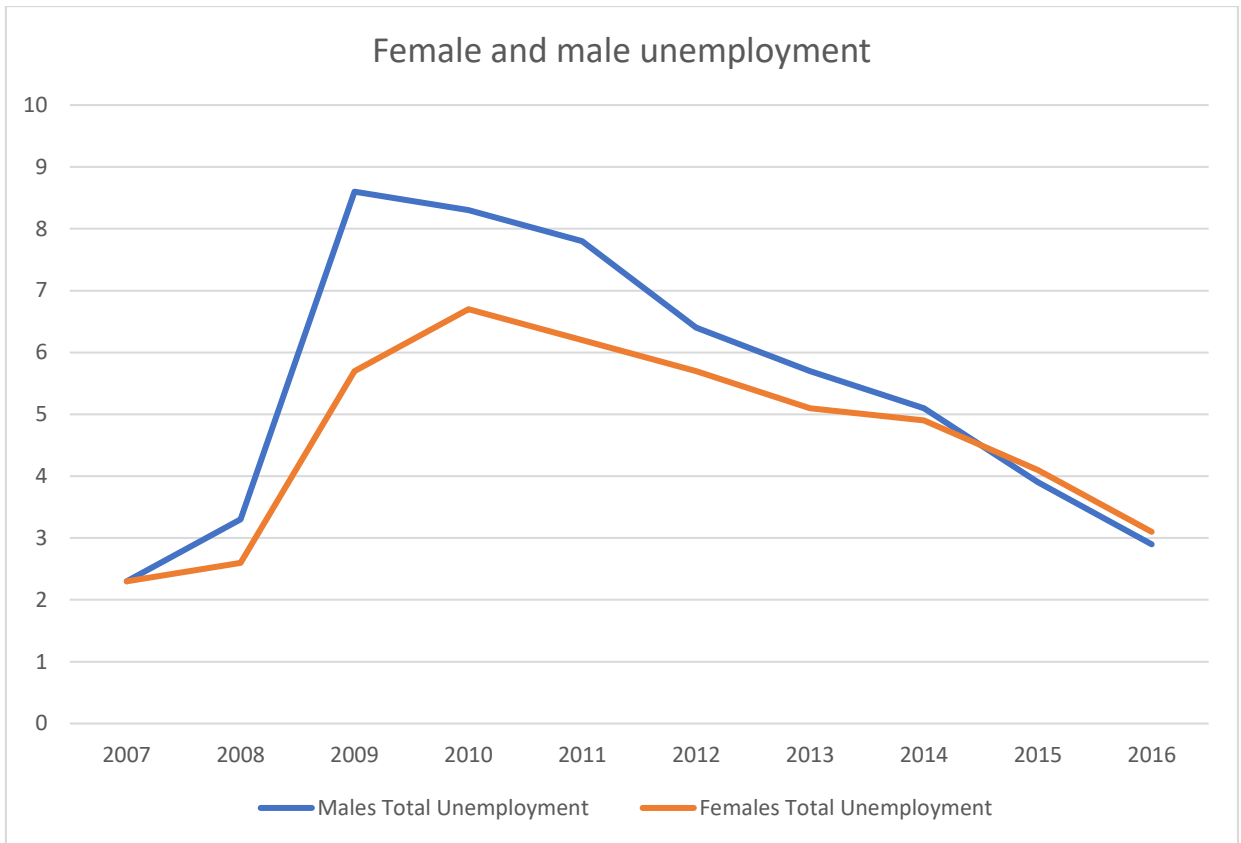


Chart 11. Female and male unemployment percentages by gender in 2007-2016. Source: Statistics Iceland 2018a.

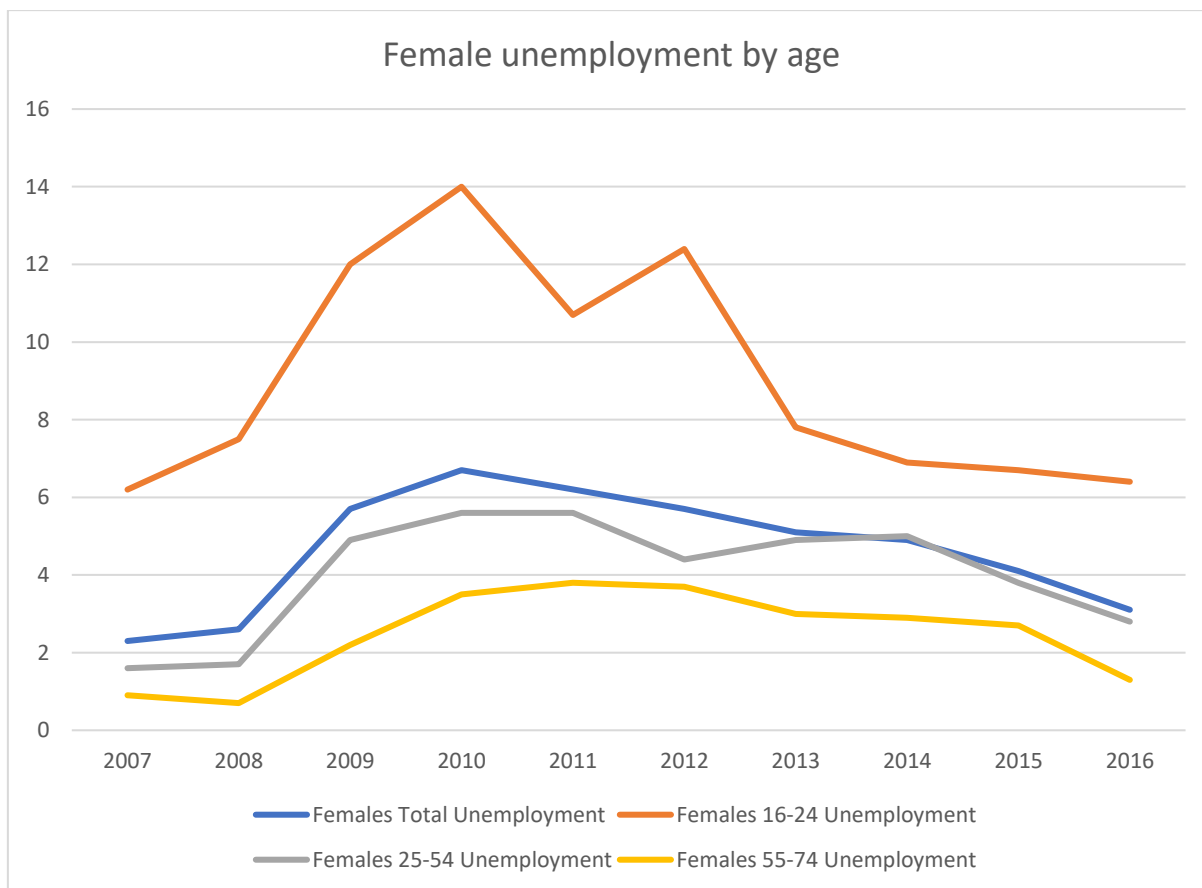


Chart 12. Female unemployment percentage by age groups 16-24, 25-54, 55-74 and total female unemployment in Iceland. Between 2007-2016. Source: Statistics Iceland 2018a.

Situation is similar with unemployed males. Unemployment with males between the age of 16-24 increased from 8% 2007 to 19,9% in 2009 (Chart 13). Unemployment decreased slightly 2009-2010 until it stayed 18,4% in 2010-2011. Males between the age of 16-24 unemployment decreased yearly until 2016 it was 10,7%. In the chart 6 can be seen that older unemployed males have similar structure in increase but only age the of 25-54 increased to 7,2% unemployment. On the other hand, there is a slight increase in age 55-74 in 2011 when the unemployment was a record 6,3%. During that year the unemployment between 55-74 increased slightly over the 25-54 old.



Chart 13. Unemployment by age groups 16-24, 25-54, 55-74 and total male unemployment between years 2007-2016. Source: Statistics Iceland 2018a.



Chart 14. Total employment percentage level in Iceland in 2007-2016. Source: Statistics Iceland 2018a.

Studying the employment in total, including females and males, reveals that the employment levels decreased between 2007 and 2011 (Chart 14). During this time the total employment drop from 83,5% to 80,5%. Years 2011 and 2012 stayed similar in 80,5% but in 2013 had the employment levels already increased to the 81,4% and 2014 to 81,5%. After this has the employment level increased up to 83,6% in the end of 2016 (Chart 14). This is high employment level compared to EU-level 66,9% and Finland's 68,4% in the end of 2016 (Eurostat 2018). Iceland's employment level was back from 2007 pre-financial crisis level in 2016. It took 10 years to employment to reach the previous levels. This could have affected to tax incomes of the country and every people's life finding the work.

#### **4.5 Effects of tourism**

One of the major business sector and a large factor to Iceland's economy is tourism. The economic slump in 2008 did not freeze the increase of the overnight stays in hotels and other accommodation. In 2010 the overnight accommodations decreased slightly from 2009 which on the other hand was year of the grow in accommodations. From the year 2011 started the overnight accommodations increase even more rapidly from 3 248 000 to 8 378 000 customers in 2017 (Statistics Iceland 2018d). This means that in 7 years the overnight accommodations increased 2.5 times. That increased sales but also the infrastructure and building construction had to remain in growth. One of the reasons to this increase could have been the low value of the Icelandic Krona compared to the other currencies such as Euro.

The amount of employees has increase every year since 2008 except in 2009 (Statistics Iceland 2018c). The employee amount has over doubled from about 14000 to over 30000 in 2017. In this statistics only seasonal peaks are studied and seasonal low are about 3000-5000 employees less than peaks (Statistics Iceland 2018c).



## **5 Discussion**

### **5.1 Aftermath of the financial collapse**

Against expectations and studies, Iceland survived the financial collapse even though the banks' debts were many times larger than the size of Iceland's entire economy. Iceland used financial measures such as devaluation to support its economy, but the main changes had to do with Iceland's actions as a welfare state. That is, Iceland utilized and even strengthened its social security networks.

Tourism has had a significant impact on Iceland's employment situation. The employment situation has improved over the years; and employed people are able to pay taxes and have more income, which decreases the number of people dependent on social protection and unemployment allowances. Tourism has a large impact on Iceland's economy because almost one in ten people in Iceland work in tourism. However, tourism alone cannot explain all of the economic growth that has taken place, or provide a single answer as to why Iceland has survived the most difficult times.

### **5.2 Inflation's effects on people's lives**

The financial crisis and its economic effect had an enormous impact on Iceland's citizens. The impact affected to the inflation and the everyday life and also had longer-lasting effects in the following years. One the main impacts of the inflation was that the price of everyday necessities increased at a rate which was rapid for modern western country, especially for a Nordic welfare state. Usually, inflation in Iceland is around 2% per year, a figure which indicates that the economy of the country is growing well, and also that there exists a good employment situation for the country's people. They have work but also can afford to buy their groceries, pay rent, energy and everything related to everyday life expenses. Inflation in 2007 in Iceland was already high (5%), which was an indication of high increased prices. However, in 2008-2010 inflation was already over 10%, which meant that prices increased

even more quickly. This increase affects the everyday life; therefore, people could not afford to spend at a similar rate as before.

Increasing inflation also could have had an effect on Iceland's exports and imports: at the same time the currency of Iceland, the Krona (ISK), ceased to be a floating currency and was given a fixed value. This value was also different inside the country and outside. The value of imported items was now different than before and not able to change flexibly. This could have effected the prices of imported goods in stores; if the inner value was different, people could not afford such items any longer. Iceland's government tried to fix the currency value so that it would not lose its total value during the financial crisis in 2008-2010. These currency value measures were taken during the period 2008-2017.

After the most difficult times in 2008-2009, between the years 2015-2016 inflation has settled near 2%, which makes price increases more humane for average people. Currency restrictions have for the most part been removed, which helps tourism and country's import and export (MTV 2017). This way, employment is able to increase, and foreign currency is also available more easily than it was during the period of restrictions.

### **5.3 Improvements in employment**

Iceland's unemployment rate was 2% percent in 2007, a number which is considered to reflect a full-employment situation in society. After the financial crisis' impact in 2008, in 2010 the unemployment rose quickly to 7.6% percent: thus the unemployment rate was four times larger than before the crisis. This had a significant impact on people's lives. Hemerijck (2012) writes a country needs to maintain its safety nets. If people lose their jobs they can lost their homes as well, if they cannot pay the cost of housing. This leads to the situation in which a country loses a taxpayer, possibly has to pay unemployment benefit and needs to support housing allowance.

Loss of employment may also lead to rising public medical expenses and social security allowances. Iceland's situation in 2008 could have led to a rising amount of unemployed people, raising the costs of paying social benefits but also taking a high toll on peoples' welfare. Iceland began securing its social security network and to ensure that people would not drop out of the society.

Males' unemployment in particular peaked at over 9%, while females' employment still stayed at 6%. It is statistically interesting that females' unemployment kept rising until the year 2010, although the employment situation for males had already begun to recover. The unemployment rate for young men and women has been double that of other age groups. This means that either graduating young people were not hired after the graduation, or that they were first to be dismissed. It could also mean that they did not have long-term contracts, but more temporary ones, or that employers thought they that young persons could find a new job more easily. Because the financial situation continued over several years, this phenomenon could be the result of all of the mentioned unemployment scenarios.

The unemployment situation is similar for all age groups, meaning that the older the employee is, the more likely is that he was employed during 2007-2016. This was the situation for both females and males. The unemployment situation has taken almost ten years (from 2007 to 2016) to recover to the pre-crisis figures, but youth unemployment is still higher than in other age groups. After 2010, females' and males' unemployment was decreasing and in 2016 the unemployment rate was under 3%, which is considered to indicate full employment.

Until 2007, total employment in Iceland was 83,5% but decreased to 80,5% between 2011-2012. This was the lowest employment period between 2007-2016. After 2012, the employment rate recovered to 83,6%. Recovering employment figures have probably helped Iceland's financial situation. Although there was no find a reason to increasing income support for homes, can be seen that income support payments were peaked in 2014. The peak of the financial crisis itself was mostly over after 2010 but why has the income support

increased all the way to 2014? There could be a legislation change which has allowed the payments even more of the homes. Or possibly if mortgage payments have started after a period of non-payments, people find they need support for these. This could need more research, if there is not a clear reason known.

Studying unemployment benefits reveals that from 2007 to 2009 unemployment allowance expenditures grew ten times. This figure shows that the unemployment situation was very difficult for people and that they had to lean on public employment services and their unemployment benefit. To a country of any size, it can be difficult to prepare ten times increasing cost in two years but this would mean that people would not lost their home, which has an enormous difference when people's welfare is considered. Expenditures for unemployment allowances were still higher in 2013 than in 2007, even though economic recovery had taken place. This situation could mean that people relied on temporary jobs which change often, and that they had to rely on unemployment allowance. Another possibility is that part-time workers needed unemployment allowance to support living costs because their income did not cover those costs.

#### **5.4 Iceland's social protection**

Although during the years 2007-2013 Iceland had financial difficulties, the country still wanted to invest in their citizens and families. Hemerijck (2012) writes that countries have begun to demand activity from those who receive social security benefits. The unemployed have to search for work in certain ways or at certain times in order to receive unemployment allowance. The government's aim is to decrease expenditures and avoid debt burden. As Hemerijck (2012) and Jackson (2009) write, countries should take care of and invest in people for the future.

During the period of difficult financial times and increasing of the debt burden, Iceland has increased sickness and healthcare expenditures. Healthcare expenditures have been steady

in comparison to budget of the GDP. When comparing the monetary amount of expenditures, one can see that expenditures have increased almost every year except for 2010. A similar situation obtains with regard to old-age pensions and services to elderly people. Julkunen (2017) writes that it is difficult to define the welfare state. There are some indicators that show how country, or a welfare state has invested into people. Iceland has invested to citizens not only monetary but Iceland has maintained healthcare, services for elderly, services for children and unemployment services and even increased them when needed. Iceland took these steps in order to protect their citizens' welfare and to ensure that the damage done to the country would not increase even further.

There was not done much deeper look to the Iceland's debt problem or how the public financing or funding could change during the coming years. These could be studied more in a future and there is possibility that political climate can change easily during any circumstances.

According to the Hemerijck (2012), the costs of care for the elderly will continue to rise in many European countries because the population is getting older in structure and birth rates have fallen in few decades; for example, such a situation has occurred in Italy (Eurostat 2017). At the same time, there are fewer young working people than there are pensioners. This situation will cause economical structure difficulties in the future, when employees are needed to cover the social security costs of retiring employees. In addition, taxation may also require changes in order to cover all of the welfare state's expenditures. In Iceland, birth rates have been good compared to many other European welfare states. Iceland has invested in the family and child allowances but also in public daycare services. Birth rates in Iceland have fallen in the last decade, probably because of the difficult financial situation and uncertainty of employment. The unemployment situation of young people has made their situation challenging. According the United Nations Development Programme (2016) Iceland has improved their Human Development Index (HDI) over the years of crisis. Improvements in index supports the evidence that Iceland's investments to healthcare and education during the years of crisis have been affective.

Between 2007-2016, Iceland steadily maintained its investments in public's safety. Iceland increased police forces' expenditures in 2009 and 2011, an action which could indicate that the country wanted to maintain safety in society. Expenditures for Fire protection services decreased for some reason in 2016, but no reason was found for this decrease. It decreased about 25% in total from the previous year. There could be structural reasons or the funding changes in budgets but if this continues it should be investigated more closely. Iceland had to rely on income support in a difficult financial period. Iceland's income support expenditures increased from 1 350 000 thousand ISK in 2007 to 4 750 000 thousand ISK in 2014. After 2014 the figure decreased but is still high. This increase indicates that people were in trouble in their everyday life and needed financial support from the government. Increasing income support costs indicates that incomes dropped severely, or that the amount of income support was increased at times. Julkunen (2017) and Hemerijck (2017) write that a welfare state should have social support that can help their citizens when necessary. Iceland's measures indicate that Iceland had their safety net working and that they wanted Icelandic households to survive.

## **5.5 Financing social protection**

Esping-Andersen (1990) describes different welfare states and their structures. According to Esping-Andersen (1990), there are three social policies: Liberal Social Policy, Conservative Social Policy and Socialist Social Policy. Iceland is part of the "Nordic Socialist Social Policy"-type of welfare state, in which the state provides public services such as children's daycare and healthcare. These services are mostly financed from taxes and other public financing.

Studying statistics regarding Iceland's financing of social protection from 2007-2013, it can be seen how the structure of financing the social protection has changed during these years. For the average Icelandic citizen, structure changes could mean more direct payments from them and less through public funds. In Iceland's case, public financing has remained the primary means of financing. The central government's financing was increased during the

years 2007-2009. After this period it was decreased, but at the same time local governments' financing was increased. This seems to have been done in order to compensate the structure, but the financing has remained mostly publicly funded. Employer's contribution to the social financing dropped during the most difficult financial years (2008-2009), which could be because of the decreasing employment situation. In 2013 it still covered over 30% of the financial contribution. Between 2007-2013, Iceland's funding of social protection has retained its similar structure and public funding was the main means of financing the social protection. When people are working, employers can increase social contributions, but this requires a stable employment situation. Employment can also increase the amount of privately-paid insurance because people are able to afford to pay for private and volunteer insurance payments.

In conclusion, Iceland has remained as a country with a Nordic Social Policy welfare system during the difficult years between 2007-2016. They have changed the country's financial structure, but Iceland has still put the people's well-being ahead of country's finances. It has decreased the ratio of patient-healthcare personnel and kept the healthcare expenditures of the GDP at the same level through these years. Even though GDP has decreased and then increased again the main public services have remain intact. People have been offered public unemployment allowances, childcare, healthcare and services for elderly people. Iceland has been able to recover quickly because it did not let unemployment increase severely and the country also invested in public services.

Charts for the thesis have been created from the data of the Statistics Iceland and Eurostat. The data was challenging to collect, and it was brought together by including several factors such as gender, age and available years of the set of data. Also journals and articles were used to bring information for the reasons of the financial crisis and how the crisis was handled in terms of welfare state. Defining the welfare state is done by using the classic and modern literature. Finding relevant journals of the financial crisis was difficult for the study, since these articles were often written between the years 2007-2011. Another challenge was that several articles were altered or removed from the internet during the writing period. Finding the substitutive articles were time consuming and challenging. These challenges raise the importance of this research and its findings.

The main area of the study requiring further research was, what kind of affects the crisis had to Icelandic life in long-term? Is Iceland capable of maintaining welfare state model over the coming years, even if the economy would not grow? Also, social protection expenditures could be studied in a more detailed manner. This could give more information where exactly in social protection contributions has been invested. And could these kind of investments be used to protect other countries from sudden changes in societies?



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