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**ANALYSIS OF THE MODERN APPROACH TO THE  
HUMANIZATION OF LABOUR BY REDUCING WORK  
HOURS**

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**ABSTRACT**

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<p>Questions regarding the regulation of work and labour activities are of the interest to all the people; moreover, they ensure its existence. The study of trends in changes in views on labour provides an opportunity to see the existing labour system. Each history period corresponds to a certain attitude to work. In the era of post-industrial society, the view on it has changed dramatically. Thanks to new technologies, mechanization, the prevalence of intellectual labour, it is possible to make adjustments to the view on a working day. The current workday is a relic of the past, when the employee lived in a frantic rhythm, performing many tasks. Progress in science and technology has allowed people to get rid of unnecessary duties to reduce employment time. However, the current one still has a 5 day, 8-hour workweek, which for the most part does not contribute to increased efficiency, but rather harms many to employees. As a future applicant, I am interested in changes in labour regulations. In this study, I will describe the methods I used in the research, the history of work timing, for instance - how we came to an 8 hours workday – and give several company examples from different countries that have already tried to change the working time. As the base of this research, I took two different work sectors of Sweden; moreover, I also described completely different an overseas example, which will help me to analyse the current trend of reducing of work hours.</p>		

<b>Key words</b>
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## 1 INTRODUCTION

Questions regarding the regulation of work and labour activities are of the interest to all the people; moreover, they ensure its existence. The study of trends in changes in views on labour provides an opportunity to see the existing labour system. Each history period corresponds to a certain attitude to work. In the era of post-industrial society, the view on it has changed dramatically. Thanks to new technologies, mechanization, the prevalence of intellectual labour, it is possible to make adjustments to the view on a working day. The current workday is a relic of the past, when the employee lived in a frantic rhythm, performing many tasks. Progress in science and technology has allowed people to get rid of unnecessary duties to reduce employment time. However, the current one still has a 5 day, 8-hour workweek, which for the most part does not contribute to increased efficiency, but rather harms many to employees. As a future applicant, I am interested in changes in labour regulations. In this study, I will describe the methods I used in the research, the history of work timing, for instance - how we came to an 8 hours workday – and give several company examples from different countries that have already tried to change the working time. As the base of this research, I took two different work sectors of Sweden; moreover, I also described completely different an overseas example, which will help me to analyse the current trend of reducing of work hours.

### 1.1 Researching, methods, statistics

Researching usually analyzes both organizations and people. However, organizations are usually built by people and for people, and then researching can be described as a branch of social sciences. Researching methods require control in order to be sure everything is relevant and correct. The importance of the controls sometimes may be vital. For instance, data and analytical organisations from time to time make a survey among a small group of people that work for a certain company. In this situation, that group of people expresses their opinion on behalf of all the workers. (Kodituwakku & Perera 2014).

Thus, the importance of the control should be visible here; if it is put correctly, the outcome of the research done is more relevant. Evaluating the data gained from uncontrolled sources may have a bad influence. Even good controls may not be enough, and well-organized researches may be wrong sometimes. There are many reasons why the results can be incorrect. However, usually it all comes down to the process of gathering data, and in particular, problems associated with research validity and reliability. Research validity is connected with the problem of whether the research measures what it claims to measure. The collected data should be relevant when thinking about one organization; if there are only a few respondents from an organization, the results and further actions taken might not be good for all of them. (Kodituwakku & Perera 2014).

It is important not only to know the topic of research but also to get the necessary data to be analyzed. Choosing the right method to collect information is essential, provided that everyone wants to have good results that rely on a reliable source. To make my research I used meta-analysis. Meta-analysis means combining the results of several studies, or of combining the results of the published (secondary) studies which are devoted to one problem, and as follows, building one solution. Meta-analysis has a large number of properties:

- indicates that the sample is more diverse than intended, based on the diversity of samples,
- summaries of several studies,
- controls diversity between studies,
- can explain the diversity between the data,
- increases statistical power,
- works in conditions of excess information - a large number of articles are published every year and
- can detect systematic errors. (Meta-analysis).

My research stages were:

1. Task formulation. To analyse the modern approach to the humanization of labour by reducing work hours.
2. The study of statistical data.

3. Selection of studies. Sweden, as an example including diverse data in different economic spheres and an Australia, New Zealand as an example of a totally different approach to the issue.
4. Differences (discrete data).
5. Average data.
6. Analysis of the latest data on this topic.

I searched for existing quantitative data about time reducing in European countries. Quantitative data is any data that is in numerical form such as statistics, percentages, etc. The researcher analyses the data with the help of statistics and hopes the numbers will yield an unbiased result that can be generalized to some larger population. Qualitative research, on the other hand, inquires deeply into specific experiences, with the intention of describing and exploring meaning through text, narrative, or visual-based data, by developing themes exclusive to that set of participants (Glesne 2011). The next step was to pick one country to use it as an example – Sweden because the biggest number of trials of working time reduction was implemented there. Therefore, the research based on this case is the most precise because it has:

- examples from disparate economical and social groups with a rationale background,
- both positive and negative reviews,
- subjected and statistic information from the different timelines and perspectives (employees' and employer's),
- and the most recent results.

The next step of my research was statistical analysis. Statistics is the science that focuses on methods used to collect, present, and what is the most important, to analyze data gained from a specific area of interest. That “area” can refer to many daily situations, such as the number of students at morning lectures, the satisfaction towards the health care services, or the consumption of sweets over five years. Statistics makes the situation look clearer either for an entrepreneur or anybody who seeks for more informative sources on a certain matter. Statistical analyses are used to illustrate research findings, to support hypotheses, and to make research methodology and conclusion more reliable. It is recommended to comprehend that kind of science either for researchers or consumers so those good

decisions can be made. The most important purpose of statistics is to help us get the most appropriate conclusions and thoughts about a certain situation, area of interest, or a problem in general. (Kodituwakku & Perera 2014).

## 2 HISTORY OF WORKING TIME

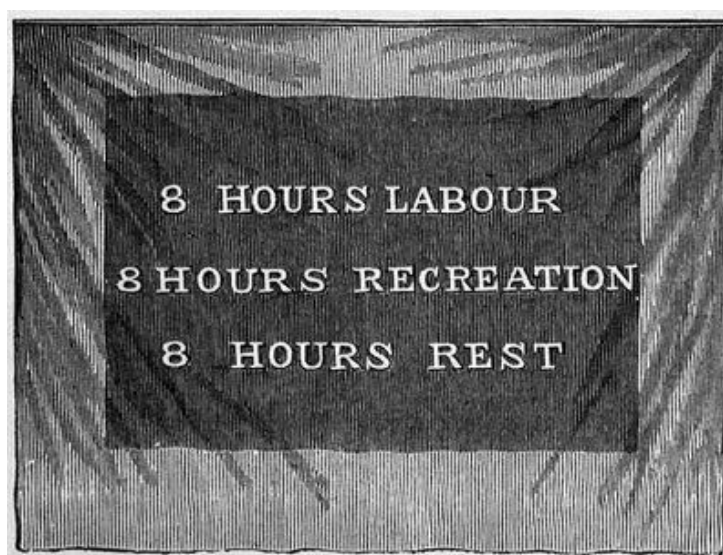
Before talking about reducing work time, it is necessary to understand what working time is. Working time is the period of time that a person spends at paid labour (unpaid labour such as personal housework or caring for children or pets are not considered part of the working week) (Woods 2012). Many countries regulate the work week by law, such as stipulating minimum daily rest periods, annual holidays and a maximum number of working hours per week. Working time may vary from person to person, often depending on economic conditions, location, culture, lifestyle choice, and the profitability of the individual's livelihood. Standard working hours (or normal working hours) refer to the legislation to limit the working hours per day, per week, per month or per year. If an employee needs to work overtime, the employer will need to pay overtime payments to employees as required in the law.

Commonly, standard working hours of countries worldwide are around 40 to 44 hours per week (but not everywhere: from 35 hours per week in France to up to 112 hours per week (Expatica France) in North Korean labour camps (Ryall 2013) and the additional overtime payments are around 25% to 50% above the normal hourly payments. Maximum working hours refers to the maximum working hours of an employee. Basically, an employee cannot work more than the level specified in the maximum working hours law (Ho 2012).

Let us start with what workers have right now: the typical workday is 8 hours, this time gain a foothold in the world from the times of the Industrial Revolution. The Industrial Revolution of the 18th century made it possible for a larger segment of the population to work year-round because this labour was not tied to the season and artificial lighting made it possible to work longer each day. As a consequence, peasants and farm labourers moved from rural areas to work in urban factories, and working time during the year increased significantly. Together with dropping fertility rates leading to fewer hours needed to be worked to support children, the women began equally taking part in making income as opposed to previously being commonly bound to homemaking and childrearing. (History Crunch).

Before collective bargaining and worker protection laws, there was a financial incentive for companies to maximize the return on expensive machinery by having long hours shifts. Records indicate that work schedules as long as 12 to 16 hours per day, 6 to 7 days per week were practised in some industrial sites. These draining long work hours were not sustainable and lead to exhaustion of workers and further discontents. Soon a man called Robert Owen started a campaign to have people work no more than 8 hours per day. His slogan was “Eight hours labour, eight hours recreation, eight hours rest.” (PICTURE 1).

Robert Owen was a Welsh textile manufacturer, philanthropic social reformer, and one of the founders of utopian socialism and the cooperative movement. Nowadays, Owen is best known for his efforts to improve the working conditions of his factory workers and his promotion of experimental socialistic communities. In 1824, Owen travelled to The USA, where he invested the bulk of his fortune in an experimental socialistic community at New Harmony, Indiana, the preliminary model for Owen's utopian society. The experiment was short-lived, lasting for about two years. Other Owenite utopian communities met a similar fate. In 1828, Owen returned to the United Kingdom and settled in London, where he continued to be an advocate for the working class. In addition to his leadership in the development of cooperatives and the trade union movement, he also supported the passage of child labour laws and free, co-educational schools. (Galkin 1976).



PICTURE 1. Magazine sketch of Robert Owen's campaign slogan. (Adopted from Quartet 2017)

It was not until much later that Henry Ford actually implemented the 8-hour workday and changed the standards. One of the first businesses to implement shortened working day was the Ford Motor Company, in 1914, which not only cut the standard workday to 8 hours but also doubled their workers' pay in the process. To the shock of many industries, the productivity of Ford's workers did not decrease with fewer working hours but, oppositely, increased significantly and Ford's profit margins doubled within two years. (Ford 1989). This encouraged other companies to adopt the shorter, 8-hour workday as a standard for their employees.

Over the 20th century, work hours shortened by almost half, mainly due to rising wages brought about by renewed economic growth, with a supporting role from trade unions, collective bargaining, and progressive legislation. The workweek, in most of the industrialized world, shortened steadily, to about 40 hours after World War II. The limitation of working hours is also proclaimed by the Universal Declaration of Human Rights (Universal Declaration of Human Rights), International Covenant on Economic, Social and Cultural Rights (International Covenant on Economic, Social and Cultural Rights), and European Social Charter (European Social Charter). The decline continued at a faster pace in Europe: for example, France adopted a 35 hour workweek in 2000 and 2005 (Bouvier & Diallo 2010.), China adopted a 40 hour week, eliminating half-day work on Saturdays (though this is not widely practised). Working hours in industrializing economies like South Korea remains to be much higher than the leading industrial countries (Ho 2012).

Modern overview of work time in European countries shows that in most European Union countries, working time is gradually decreasing. The European Union's working time directive imposes a 48 hours maximum working week that applies to every member state except the United Kingdom and Malta (which have an opt-out, meaning that UK-based employees may work longer than 48 hours if they wish, but they cannot be forced to do so) (European Commission 2019; UK Employment Law; Malta Employment Law). France has enacted a 35 hour workweek by law, and similar results have been produced in other countries through collective bargaining. A major reason for the lower annual hours worked in Europe is a relatively high amount of paid annual leave. Fixed employment comes with 4 to 6 weeks of

holiday as standard. In the mid-2000s, the Netherlands was one of the first countries in the industrialized world where the overall average working week was shortened to less than 30 hours (Eurofound Europa).

Technology has also continued to improve workers' productivity, permitting standards of living to rise as hours decline. In developed economies, as the time needed to manufacture goods has declined, more working hours have become available to provide services, resulting in a shift of much of the workforce between sectors (APPENDIX 1/1; APPENDIX 1/2). Economic growth in monetary terms tends to be concentrated in health care, education, government, criminal justice, corrections, and other activities that are regarded as necessary for society rather than those that contribute directly to the production of material goods.

### 3 KEY STUDIES

Recent articles supporting working time reducing argued that decreased work hours would increase consumption and invigorate the economy (Schor 2011). However, other articles state that consumption would decrease (Chapman 2017). Other arguments for the reduced working time include improvements to workers' level of education (due to having extra time to take classes and courses) and improvements to workers' health (less work-related stress and extra time for exercise). Reduced hours also save money on day-care costs and transportation, which in turn helps the environment with less carbon-related emissions. These benefits increase workforce productivity on a per-hour basis (Coote & Marecha 2018).

In the year 2000, France as an experiment reduced the legal (or statutory) working time of the employees in the private and public sector from 39 hours a week to 35 hours a week, with the stated goal to fight against rampant unemployment at that time. According to the Law 2000-37 on working time reduction, also referred to as the Aubry Law, (according to the name of the Labour Minister at that time), employees can work more than 35 hours a week, however, in this case, firms must pay them overtime bonuses. If the bonus is determined through collective negotiations, it cannot be lower than 10%. If no agreement on working time is signed, the legal bonus must be of 25% for the first 8 hours, then goes up to 50% for the rest. Including overtime, the maximum working time cannot exceed 48 hours per week, and should not exceed 44 hours per week over 12 weeks in a row. (Bilous 2000). According to the official statistics (Dares; Woods 2012), after the introduction of the law on working time reduction, actual hours per week performed by full time employed, fell from 39.6 hours in 1999, to a trough of 37.7 hours in 2002, and then gradually went back to 39.1 hours in 2005. In 2016 working hours were of 39.1 (Askenazy 2013).

Every significant change starts with a small attempt, that at first seemed to be ridiculous, as Henry Ford's working condition change, that led to improving the labour environment and the work timing world widely, or the working hours shift, that been legalised in the entire country of France and become to be an example for entire Europe. It is possible to see the impact of those changes to the labour conditions of nowadays through the prism of history, but to

improve them even more without casualties to current, fast-developing and easily affected, economy or defying the law of one's country, it is needed to gather, overview and analyze more available statistical information. To see what working time reduction attempt does on practice, let me take Sweden as an example. Sweden has made few tries to change working time in two different sectors – public (in 2015) and private (in 2016). The examples that I overview in following chapters contain the history of the experiment, why it was decided to make it, different points and ways of viewing it (both positive and negative aspects, employees' and employer's feedbacks) and additional information on this matter. All of that information allows us to estimate the outcome fully.

### 3.1 Public sector in Sweden

The public sector (also called the state sector) is the part of the economy composed of both public services and public enterprises. Public services include public goods and governmental services such as the military, Law enforcement, infrastructure, public transit, public education, along with health care and those working for the government itself, such as elected officials. Public enterprises are self-financing commercial enterprises that are under public ownership which provide various private goods and services for sale and usually operate on a commercial basis. Organizations that are not part of the public sector are either a part of the private sector or voluntary sector. The private sector is composed of the economic sectors that are intended to earn a profit for the owners of the enterprise. The voluntary, civic or social sector concerns a diverse array of non-profit organizations emphasizing civil society (InvestorWords).

Life expectancy in Sweden is among the highest in the world: 81 years for men and 84 years for women. Most elderly care is funded by municipal taxes and government grants. In 2014, the total cost of elderly care in Sweden was SEK 109.2 billion (EUR 11.7 billion), but only 4 % of the cost was financed by patient charges. Healthcare costs paid by the elderly themselves are subsidised and based on specified rate schedules. (Official Webpage of Sweden).

In Sweden and other western European countries, a fifth of the population has passed their 65th birthday (Sanandaji 2014; APPENDIX 2/1; APPENDIX 2/2). Besides Japan, where a

quarter of the population is over 65, no other part of the world has such a high share of elderly people (World Population Review; APPENDIX 3). Over the next two decades, the number of those aged over 80 in Sweden is expected to increase from around half a million to 800,000. The demographic change is arguably one of the most important long-term societal changes occurring in Sweden. In the few instances where the trend towards longer life spans is discussed, it is inevitably brought up as a disaster waiting for the Swedish welfare model. At first glance, there is a reason for concern. As the share of the elderly increases, so does the need for welfare services. It is not an easy task to find resources for additional health care and elderly care. After all, the public sector already spends half of the economic value created in Sweden. These questions must be taken seriously. At the same time, it is important to keep in mind that previous projections about the detrimental effects of an older population have been misleading. Moreover, the government still struggles with attracting people to work in public health and elderly health care. (Crouch 2015).

In April 2015 the Gothenburg government started an experiment with nurses working shorter shifts at nursing houses; in February 2015, Gothenburg's City Council voted to run an 18 months experiment at "Svartedalen" elderly care home. The staff transmitted from a standard 8-hour working day to just 6 hours a day without pay cut (Congregalli 2018). Gothenburg is the second-largest city in Sweden, fifth-largest in the Nordic countries, and the capital of the Västra Götaland County. It is located by Kattegat, on the west coast of Sweden, and has a population of approximately 570,000 in the city centre and about 1 million inhabitants in the metropolitan area. (Statistics Sweden 2015).

The fact that the Gothenburg experiment had "Svartedalen" care home as a testing ground is not a coincidence. Healthcare workers — traditionally women (APPENDIX 4/1; APPENDIX 4/2) — are often forced to work gruelling shifts with significant repercussions on their health and productivity.

According to Daniel Bernmar, a Gothenburg City Councillor with the Left Party, who was one of the first people behind the experiment with reduced working hours carried out between 2015 and 2017, the initial aim of this campaign was to see if it was possible to improve the way nurses take care of their patients by reducing the number of hours per shift; because the

most recent relevant and positive change in working time - a shift from a 48 hours workweek to a 40 hour week, occurred a few decades ago. In this regard, the results were impressive, he confirmed that reports showed the improvement of day-to-day interactions because the staff was better rested as a consequence the guests and the staff were more engaged, the number of daily activities organised for the guests have risen by 60 % and the number of sick leave days plummeted, too. (Congregalli 2018). Same positive results were reported directly by nursing home's workers, for example by Emilie Telander who was one of the 68 assistant nurses who had their days shortened for the experiment, during the trial, all the staff had more energy, seemed to be less fatigue and more efficient (Savage 2017).

A shorter working day did not only benefit individual workers. According to data analysis, it could also have major upsides for the government's welfare expenditure. According to the Bernmar, if the plan was implemented widely, the fiscal impact could be highly positive. As an example that he gives – hiring more people lowers unemployment, which is a social cost; also, reduced less stressful work shifts lead to fewer cases of sick leave, which translates into a smaller burden on the healthcare system. (Congregalli 2018).

Despite the fact that the project was designed and executed on a local level, the national government in Stockholm could also reap the benefits of a wider implementation of a shorter working day. Benmar explained that the costs for the execution of the project were indeed shouldered by the local authority, but the financial benefits were for the central government that could see a reduction in healthcare and welfare costs. (Congregalli 2018).

Nevertheless, Gothenburg City Councillor confirmed that the experiment associated with higher costs, so it was too expensive to carry out a general shortening of working hours within a reasonable time frame. Despite the setback, Bernmar is still supportive of the principle of decreased work hours, he believes in shorter working hours as a long-term solution. His way of thinking concludes that the richer Sweden becomes, the more government need to take advantage of that wealth in other ways than through a newer car or higher consumption. (Chapman 2017; Crouch 2015).

The immediate costs associated with a shorter working day were indeed a factor preventing the labour market from seriously considering a 30 hour week. According to Joa Bergold, Welfare and Equality Policy Investigator at LO, the Swedish Trade Union Confederation, the resistance that a 6-hour workday has encountered was also a matter of priority and vision. Currently, for Bergold, the government's policy focus seems to be on putting more people to work according to the traditional model of employment. (Congregalli 2018; Crouch 2015).

Bengt Lorentzon, the lead researcher for "Svartedalen" care home project, said that the concept of 6-hour days also jarred with the strong culture of flexible working promoted by many Swedish businesses, that many offices were already working almost like consultancies, that they did not need any managers to have all their workers in the office at the same time, they just wanted to get the results and people have to deliver. Compare that to the assistant nurses - they could not just leave work and go to do their personal business as to go to the dentist or the doctors or the hairdressers. (Savage 2017).

Bengt did not think that people should start with the question of whether or not to have reduced hours. First, companies should consider making the working environment itself better. Moreover, maybe different things can be better for different groups. It could be related to working hours and working times, but it could be a lot of other things as well. Nevertheless, it was not all the pluses; overall, hiring more people drives costs up by 20% or 30% for the local authorities, although, the long run drives down collateral costs associated with unemployment and healthcare by 15%. (BBC 2014).

Despite the potential to scale up what was tried out in Gothenburg, even nowadays a shorter working day remains a sensitive matter in the political arena. The pilot was first passed and implemented under the leadership of Gothenburg's mayor Ann-Sofie Hermansson, a former LO official. The Left Party managed to pass the scheme with the key support of its coalition partners. However, the pilot was not spared a barrage of criticism from the opposition groups, particularly because the immediate costs had almost outweighed the perceived benefits. The centre-right opposition filed a motion to disrupt the experiment earlier than expected, highlighting what they saw as the unfairness of spending taxpayers' money on a project that was not economically viable. (Congregalli 2018).

Despite the incoming monetary issue, the pilot managed to stay within the budget with a total expenditure of 12 million Swedish kronor (roughly €1.2 million). However, since the end of the experiment, the political makeup of the city council has changed greatly, the coalition partners lost their seats. Bernmar accepted that they are now in a minority rule, making it difficult to renew the programme further. (Congregalli 2018).

For Daniel Bernmar, the biggest achievement of “Svartedalen” experiment was beyond its positive practical impact. The ensuing public debate about the validity of the standard Swedish workday seemed to be the total success. Also, he claims that there was and still is a sprawling world of people that were/are interested in reducing work hours; since the plot had received a lot of attention from the international media and non-political actors who were interested in his experiment (Congregalli 2018).

In spite of the end of the care home experiment, the campaign for a shorter day is far from over. Bernmar told “Equal Times” that even at first they planned to apply the same sort of experiment to smaller groups of social workers, another professional category under intense strain in Sweden; the campaign is still trying to continue to experiment and collect data on a small scale in order to build a real case. The findings of the Gothenburg experiment were published in August 2016, according to what Bengt Lorentzon said, one of the researchers who spoke to “Equal Times”, the results yield the potential for a radical shift in the way Swedish and European work culture is conceived and how the traditional 40 hour a week could only be a convention made valid by tradition more than because of its efficiency. (Congregalli 2018).

During the first 18 months of the trial, the nurses working shorter hours logged less sick leave, reported better-perceived health and boosted their productivity by organising 85% more activities for their patients, from nature walks to sing-a-longs. (Savage 2017). However, the project also faced tough criticism from those concerned that the costs outweighed the benefits. Daniel Bernmar said that it would be too expensive to repeat the experiment with the entire municipality. However, he seldom argued that the experiment proved "successful from many points of view" by creating extra jobs for 17 nurses in the city, reducing sick pay

costs and fuelling global debates about work culture. Council claimed that in the past 10, 15 years there's been a lot of pressure on people working longer hours and such an experiment is totally contrary of that, so the entire trial period was fascinating and there are lessons to learn from. (Savage 2017). On a national level, the Left Party was the only parliamentary party in favour of shortening basic working hours, backed by just 6% of voters in Sweden's 2014 general election (APPENDIX 5; BBC 2014).

Nevertheless, a cluster of other Swedish municipalities followed in Gothenburg's footsteps, with locally funded trials targeting other groups of employees with high levels of illness and burnout, including social workers and hospital nurses. The Gothenburg experiment had not only impacted the public sector. Corporate culture, especially in younger companies and start-ups, also seemed to be changing because a number of private employers had introduced a shorter working day. (Crouch 2015).

### 3.2 Private sector in Sweden

The private sector (or civil sector) is part of the economy, which is managed by individuals or groups, usually as a means of business for profit, and is not controlled by the state. Although, the states legally regulate the private sector. Enterprises operating in the country must comply with the laws of this country. The private sector is formed by households and privately owned firms (Investopedia). Despite the fact that the private sector in Sweden is less developed than the public sector, it still plays a highly important economical role, not only for Sweden but The European Union (Eurostat 2018; APPENDIX 6).

The 40 hour workweek for a full-time employee has been trimmed to 30 hours at some Swedish firms, and studies have found that the result is more productivity and better morale (Savage 2017). In the following chapter, I will analyze several business and company examples both with positive and negative responses.

### 3.2.1 Toyota

Toyota Services in Gothenburg switched to a 6-hour workday 17 years ago and reported higher profits and happier staff (Bhattacharya 2015). Car manufacturer Toyota was a long-time leader on the matter of work-time reduction. Although, it is not mandatory for employers in Sweden to only have their employees work 6 hours per day (Labour law and work environment), a growing number of them are doing so by choice. People in Sweden clarify the 8-hour workday is still most common, but there are many other companies of all types and sizes following Toyota's lead. In order to make the 6-hour workday feasible, Swedish employees have to avoid attending non-essential meetings and checking social media accounts while at work. One success has come at Toyota's Swedish service centre where shifts were cut 17 years ago, sparking an immediate boost to productivity and increased profits. The company has kept the shorter shifts ever since (APPENDIX 7).

### 3.2.2 A start-up: Brath AB

Maria Bråth, the CEO of the specialist start-up "Brath AB", Digital Marketing SEO and SEM company, which shifted to 6-hour days three years ago wrote in her blog that the reason to shorten the working hours was that the company wanted to take better care about their employees - they let to prioritize own workers' time with their family, cooking or doing something else they love doing. (Brath AB - Digital Marketing; Crouch 2015; Alderman 2016).

When Bråth founded the company with her brother in 2013, she introduced a 6-hour working day from the very beginning. They expected that there definitely would be benefits of working a bit less every day but more efficiently. The founders decided to start introducing it with the easiest idea of drawing a list of pros and cons and then confirming the idea to give the shorter days a shot. Bråth and her employees had to work on how to enhance productivity despite having fewer hours at their disposal. The company built dedicated software that helped workers to schedule their work in the most efficient way possible. The company work towards scheduled production targets; the employees are always a part of the discussion on how to improve the workflow. (Alderman 2016).

However, productivity and efficiency are not granted during a shorter day in the office, or at least not from the very start. Bråth confirms that the company did not reach the peak of their productivity right away, it took time; they were not as productive five years ago as they are now (according to the CEO). In order to implement the shorter working hours well, employees must reduce their personal business, such as checking Facebook, and non-essential meetings must be eliminated. (Peters 2015; Alderman 2016).

### 3. 2. 3 Other companies in Sweden

Other companies venturing into the uncharted new world of shorter hours were not as satisfied as Bråth. Erik Gatenholm, the CEO of the Gothenburg-based 3D bio-printing company "Cellink" also made an attempt to reduce working hours down to 6 after he read about the success of "Brath AB". Nevertheless, his company decided to transition back into a normal working day within a matter of weeks. Considering that none of the workers took this idea seriously, it was predictable that the company would have to return to the standard workday. (Savage 2017).

Another person who did not support the idea of reducing working time was Linus Feldt, the CEO of Filimundus, an application developer based in the capital city of Stockholm. He says that the 8-hour workday is not as effective. To stay focused on a specific work task for 8 hours is a major challenge. In order to cope with it, his company mixes in things and pauses to make the workday more endurable. Moreover, Feldt says that at the same time, they find it hard to manage their private life outside of work. (Chapman 2017).

Erik Gatenholm, the chief executive of a Gothenburg-based bio-ink company supports the opinion of Feldt: he highly doubts that the 6-hour day fits with an entrepreneurial world or the start-up world. He had tested the method on his production staff after "reading about the trend on Facebook" and musing on whether it could be an innovative draw for future talent. However, the firm's experiment was ditched in less than a month, after bad feedback from employees, for example, Gabriel Peres reported that the experiment did not meet her

expectations and instead of making her feel easier at the workplace it made her even more stressed. (Congregalli 2018).

#### 4 SWEDEN KEY STUDY CONCLUSION

The analyse showed that in the public sector the time reduction solves one of the main problems – the lack of people involved in the social related working sector. It also improves the well-being of workers. Nevertheless, even the plot of the plan required much money from the government budget so the implementing also would. As we could see above, most of the politicians still have to reconsider such monetary issues.

The private sector succeeded better with reducing working time because companies were more flexible to changes and the ways of their implementations, they had less monetary and labour responsibility i.e. in all the cases that I overview the time reduction experiment was voluntary and supported by the entire work team. Despite that companies find 6-hours working days either a great innovation or a great waste of time even on trying. Concerning technical related companies, it all depends on management styles. If the management team works well and each worker understands their responsibilities and tasks the 6 hours work shift could work. If the company has issues in the management team or the lack of efficient workers, the 6 hours workday will not work and people, for instance, will do their work at home, spending the two reduced hours on that. Moreover, it could be a sign that the company has inner structural problems, and fixing those will improve the company and give it more space for further development.

## 5 OVERSEA EXPERIMENT: AUSTRALIA AND NEW ZEALAND

The reduction of working time by decreasing daily working hours is only one option. There are many more ways to shift the working time and make it more suitable for both companies and workers, for example, flextime, remote work or telecommuting work, reducing work time with age:

- Flextime is a flexible hours schedule that allows workers to alter workday start and finish times. In contrast to traditional work arrangements that require employees to work a standard 9 to 17 o'clock (8 to 16 o'clock) daily, flextime typically involves a "core" period of the day during which employees are required to be at work (e.g., between 10 or 11 and 14 or 15 o'clock), and a "bandwidth" period within which all required hours must be worked (e.g., between 5:30 and 19:30 o'clock). The working day outside of the "core" period is "flexible time", in which employees can choose when they work, subject to achieving total daily, weekly or monthly hours within the "bandwidth" period set by employers, and subject to the necessary work being done. The total working time required of employees on flextime schedules is the same as that required under traditional work schedules. A flextime policy allows staff to determine when they will work, while a flexplace policy allows staff to determine where they will work. Advantages include allowing employees to coordinate their work hours with public transport schedules, with the schedules of their children, and with daily traffic patterns to avoid high congestion times such as a rush hour. Some claim that flexible working will change the nature of the way we work. (Owen 1977).
- Remote working is a situation in which an employee works mainly from home and communicates with the company by email and telephone (Cambridge Dictionary).
- Telecommuting work is quite similar to remote work, but telecommuting employees are usually to be asked to attend regular meetings or to be present in the office one day per week. This ensures employees and a manager stay in touch, allows for in-person regulations, and can help the telecommuting worker feel like they are truly part of the team. (Marzullo 2019).
- Reducing work time with age is a situation when the elderly workers that are close to a pension may work less hours per day (the closer to pension, the less work).

Moreover, one Australian company found another innovative way of shifting working hours, it made one additional day off for the employees.

### 5.1 Australian labour situation

In Australia, between 1974 and 1997 no marked change took place in the average amount of time spent at work by Australians of “prime working-age” (between 25 and 54 years of age). Throughout this period, the average time spent at work by prime working-age Australians (including those who did not spend any time at work) remained stable at between 27 and 28 hours per week. This unchanging average, however, masks a significant redistribution of work from men to women. Between 1974 and 1997, the average time spent at work by prime working-age Australian men fell from 45 to 36 hours per week, while the average time spent at work by prime working-age Australian women rose from 12 to 19 hours per week. In the period leading up to 1997, the amount of time Australian workers spent at work outside the hours of 9 o’clock to 5 o’clock on weekdays also increased. (Bittman & Rice 2002).

In 2009, a rapid increase in the number of working hours was reported in a study by The Australia Institute. The study found the average Australian worked 1855 hours per year at work. According to Clive Hamilton of The Australia Institute, this surpasses even Japan. The Australia Institute believes that Australians work the highest number of hours in the developed world. (Sedgman 2004). From January the 1st, 2010, Australia enacted a 38 hours workweek in accordance with the Fair Work Act 2009, with an allowance for additional hours as overtime (National Employment Standards). The vast majority of full - time employees in Australia work additional overtime hours. A 2015 survey found that of Australia's 7.7 million full - time workers, 5 million put in more than 40 hours a week, including 1.4 million who worked more than 50 hours a week and 270,000 who put in more than 70 hours. (Martin 2015).

### 5.2 “Versa” and “Perpetual Guardian”

The Australian marketing company “Versa” reduced working hours by making Wednesday a day off for all the workers, keeping the full working time salary. However, there is one

condition – during this Wednesday day off all the workers must answer all the work phone calls and emails they receive, and if a customer wishes to make, for example, an appointment the worker must serve it. According to employee Tiffany Schrauwen, a smaller number of working days stimulate reasonable spending of working time. (Palko 2019, Ribeiro 2019).

Since the summer of 2018, the company's revenue has grown by 46%, and its profit has increased almost three times. At the same time, according to the director of the company Kath Blackham, a break in the middle of the week allows employees to go to the gym, do household chores, and look after the children. In addition, the number of sick leaves has decreased. (Ribeiro 2019).

A similar schedule was introduced by a company from New Zealand. Perpetual Guardian, a company which manages trusts, wills and estate planning, trialled a 4 day working week over March and April, working 4/8-hour days, but getting paid for 5. Academics studied the trial before, during and after its implementation, collecting qualitative and quantitative data: 78% of employees felt they were able to successfully manage their work-life balance, an increase of 24 percentage points; in comparison to November 2018 when only 54% (hardly over half) of staff felt they could effectively balance their work and home commitments. (Roy 2018).

The founder of Perpetual Guardian, Andrew Barnes decided to introduce such a change in order to give his employees better work-life balance - to help them focus on the business while in the office on company time, and manage life and home commitments on their extra day off. Moreover, after such a success Andrew would take the results of the trial to the board to open up a discussion on how a 4-days workweek could be implemented long-term in his company. (Roy 2018).

## 6 OVERSEAS EXAMPLES: CONCLUSION

Experiments that took place in Australia and New Zealand showed that there are many more ways to manage working time. Time management was especially an issue for Australians because they statistically overwork dramatically. To justify the regular hazardous habit of overworking the government pays extra for those who overwork. “Versa” company created another way of shortening the work timing by mixing flextime conditions and an additional day off on Wednesday for its workers; which means that employees should not work in the office on Wednesday unless they have to deal with customers. Perpetual Guardian, on the other hand, also implemented a similar schedule, but they were more careful and only work like that for 2 months gathering data to be able to prove the effectiveness of the work schedule and, in future, to be able to keep implementing it to other facilities.

## 7 CONCLUSION

To sum it up, the starting point of the humanization of labour had started from Henry Ford's shortening of working hours per day which happened thanks to the industrial revolution and which led to the expiration of female emancipation at workplaces. Further economical development and the ruination of the world after World War II become another important mark in the development of human rights in every life sector (including workplaces), furthermore that led to the increase of living standards and number and well-being of people who were able to work. Another innovative use of shortened work hours was found in France in the year 2000 when the reduction of working hours from 39 hours per week down to 35 hours per week led to an improvement of unemployment rates.

After the world stabilised after the biggest economical crises of 2008 – 2018 the need of development appeared again. Sweden as one of the most economically successful countries (Dhiraj 2019) took a chance and made an experiment with working time reduction at the elderly health care institution. Such experiment did not only showed the realistic economical and social image of what is needed to successfully implement work time reduction, what struggles and issues appeared but also provided a wide range of information to analyse. Furthermore, few companies from the private sector had tried to implement similar change. Although, those attempts showed that any work time changes clearly will not suite all the work sectors. However, it certainly can meet the requirements of businesses of the private sector, for instance, consulting type of companies and their workers. When the company is truly interested in a productive, humane and modern approach to the working environment the issue of time management and time reduction appears (Matilla-Santander, Lidón-Moyano, González-Marrón, Buncha, Martín-Sánchez & Martínez-Sánchez 2019). Many researches show the inexpediency of overworking and statistics prove the positive trends, which come right after reforming of work timing.

Moreover, the study examined the association between long working hours and cognitive function in middle age (Hayes, 73-75 2012). The data were collected in 1997–1999 (baseline) and 2002–2004 (follow-up) from a prospective study of 2,214 British civil servants

who were in full-time employment at baseline and had data on cognitive tests and covariates. A battery of cognitive tests as short-term memory, Alice Heim 4-I, Mill Hill vocabulary, phonemic fluency, and semantic fluency was measured at the baseline and at the follow-up. Compared with working 40 hours per week at most, working more than 55 hours per week was associated with lower scores in the vocabulary test at both the baseline and the follow-up. Long working hours also predicted a decline in performance on the reasoning test (Alice Heim 4-I). Similar results were obtained by using working hours as a continuous variable; the associations between working hours and cognitive function were robust to adjustments for several potential confounding factors including age, sex, marital status, education, occupation, income, physical diseases, psychosocial factors, sleep disturbances, and health risk behaviours. This study showed that long working hours may have a negative effect on cognitive performance in middle age. Reducing of working hours is a key for attracting a worker's attention to their labour field and increasing overall productivity and the level of competitiveness.

Nevertheless, as Maria Bråth, the CEO Swedish Digital Marketing company, has said, it is important to have all other management issues fixed; so implementing the reduced working day/week should be in the company from the very beginning of its existence or be one of the steps of overall management development of the company. (Crouch 2015, Peters 2015). However, it is highly important to understand that all shifts and changes the company would have to do require not only "a routine" change, but many investments, including, the well-being of workers and, of course, monetary. Additionally, we should not forget that the implementation ways for public and private sectors are different and the public sector will always face more struggles, especially from the authorities.

However, Swedish companies only followed one "working time reduction" pattern. Companies from Australia and New Zealand tried other ways of shortening working hours and improving employees' well-being. They approached the issue of work time shortening from the perspective of reducing the general work time not daily, they made an additional day off.

As we can see one experiment had triggered further changes in trivial working conditions. We can claim that the further development of humanization of labour is possible and it has multiple variations to work with and to try out. However, it should be done thoughtfully: either from the very beginning of a company as Brath AB did, to forwardly face and solve possible appearing issues, or with reconsideration and fixing the existing management structure as a part of the company developing process, which would include time reduction as one stage of the entire process. Not understanding that any change within a company requires preparations was the main issue for Cellink and Filimundus companies when they tried to reduce work timing. Moreover, as the CEO of Filimundus noticed by the time the company had a tryout of shorter working days, workers had already been struggling with balancing their personal and working lives.

In my opinion, we should keep researching the ways of humanization of labour conditions and for many companies, the work-time reduction is the best way. Moreover, the working time shorting should be the very last step of making labour conditions better and it is necessary to consider and solve all possible labour issues. I should mention one more time that it is still quite impossible to analyze, for instance, the case of factories and its workers, who work 12/16 hours shifts, implementation of any time management change should begin differently and involve increasing the number of workers to steadily maintain the manufacturing. In such case, people in charge of the factory and the company itself should decide if they are ready to hire more workers to improve the employees' well-being or do not take a risk, which stands by any innovation, and look for other paths of improving the labour environment.

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# APPENDICIES

## APPENDIX 1/1

Average annual hours actually worked per worker <sup>1</sup>

→ Employment status		Total employment					
→ Frequency		Annual					
Unit		Hours					
→ Time		2013	2014	2015	2016	2017	2018
→ Country							
Australia <sup>1</sup>		1 690	1 683	1 683	1 672	1 676	..
Finland <sup>1</sup>		1 565	1 562	1 563	1 560	1 556	..
Germany <sup>1</sup>		1 362	1 368	1 368	1 363	1 356	..
Japan <sup>1</sup>		1 734	1 729	1 719	1 714	1 710	..
Korea <sup>1</sup>		2 093	2 067	2 084	2 071	2 024	..
Sweden <sup>1</sup>		1 470	1 470	1 471	1 482	1 470	1 474
United Kingdom <sup>1</sup>		1 541	1 547	1 531	1 545	1 543	1 538
United States <sup>1</sup>		1 782	1 784	1 785	1 781	1 780	..
Russian Federation <sup>1</sup>		1 980	1 985	1 978	1 974	1 980	..

Data extracted on 16 May 2019 21:40 UTC (GMT) from OECD.Stat

FIGURE 1. Average annual hours actually worked per worker from 2013 to 2018 (total employment). (Adapted from OECD).

## APPENDIX 1/2

Average annual hours actually worked per worker <sup>1</sup>

→ Employment status		Dependent employment					
→ Frequency		Annual					
Unit		Hours					
→ Time		2013	2014	2015	2016	2017	2018
→ Country							
Finland <sup>1</sup>		1 506	1 504	1 504	1 506	1 506	..
Germany <sup>1</sup>		1 291	1 300	1 301	1 298	..	..
Japan <sup>1</sup>		1 746	1 741	1 734	1 724	1 721	..
Korea <sup>1</sup>		2 071	2 057	2 071	2 052	2 014	..
Sweden <sup>1</sup>		1 419	1 418	1 419	1 432	1 419	1 424
United Kingdom <sup>1</sup>		1 509	1 515	1 502	1 515	1 515	1 513
United States <sup>1</sup>		1 789	1 790	1 790	1 787	1 786	..
Russian Federation <sup>1</sup>		2 002	2 003	1 997	1 996	1 994	..

Data extracted on 16 May 2019 21:41 UTC (GMT) from OECD.Stat

FIGURE 2. Average annual hours actually worked per worker from 2013 to 2018 (dependent employment). (Adapted from OECD).

APPENDIX 2/1

Population in Sweden from 2008 to 2018, by age group (in thousands)

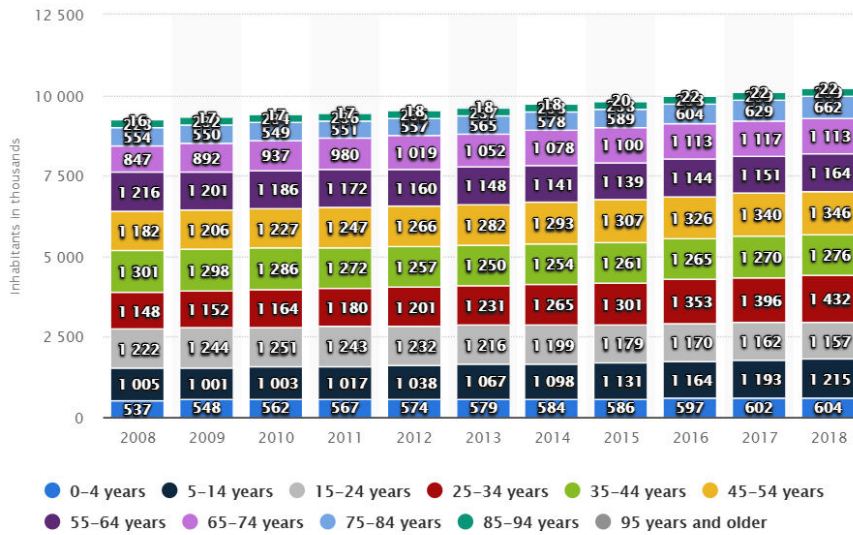


FIGURE 3. Population in Sweden from 2008 to 2018, by age group (in thousands). (Adapted from Statista).

APPENDIX 2/2

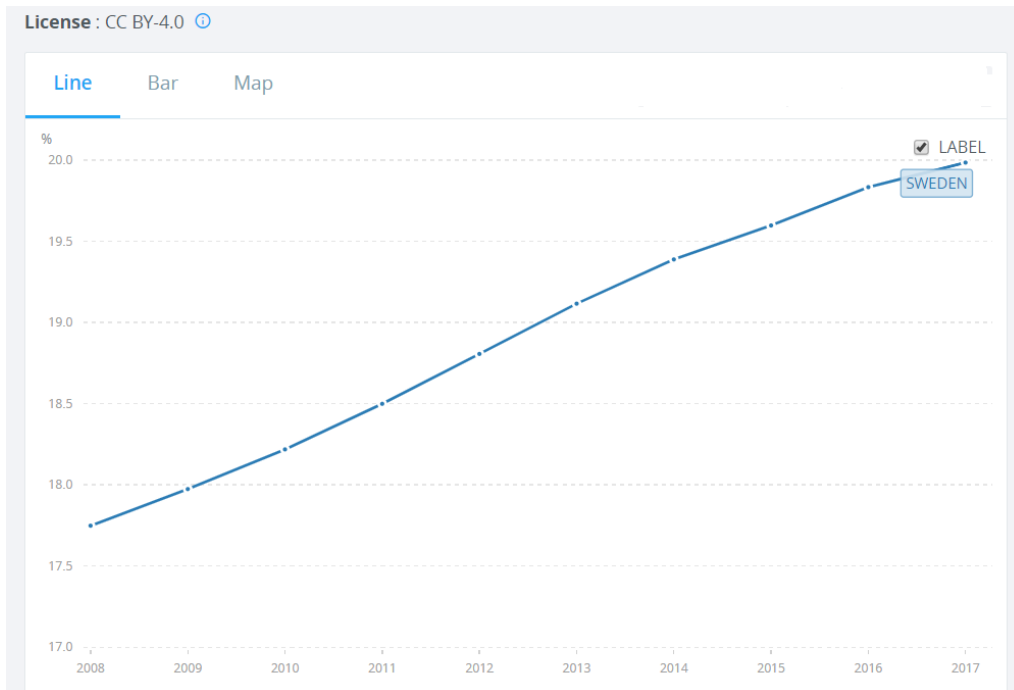


FIGURE 4. Population of people over 65 years old in Sweden from 2008 to 2018 (in percentage). (Adapted from The World Bank).

### APPENDIX 3

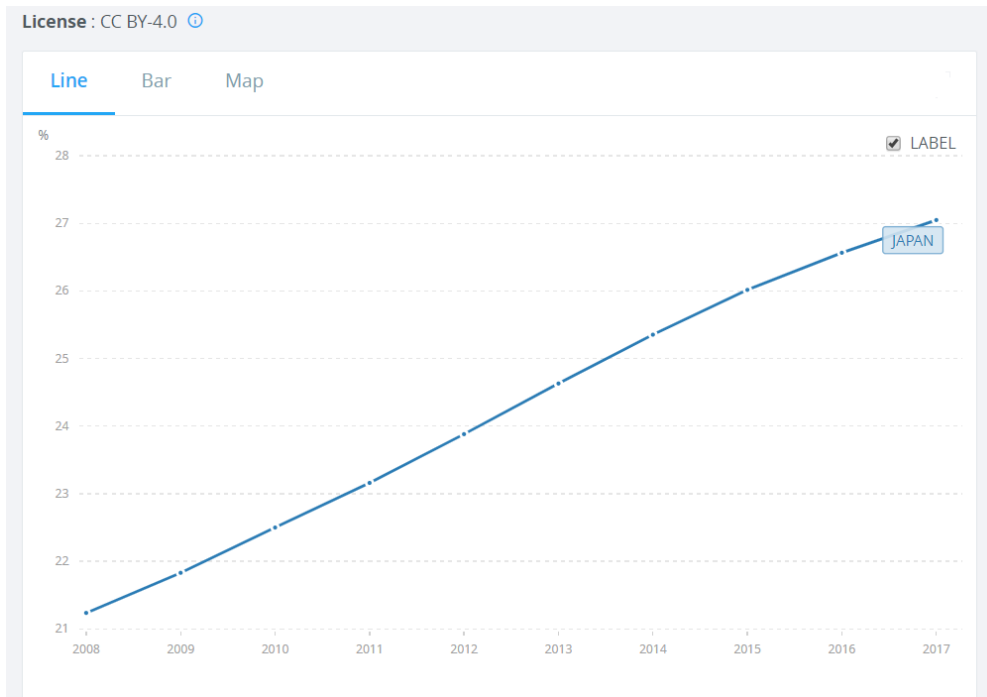


FIGURE 5. Population of people over 65 years old in Japan from 2008 to 2018 (in percentage). (Adapted from The World Bank).

### APPENDIX 4/1

Employees 16-64 years by occupation (SSYK 2012), industrial classification NACE Rev. 2, age, sex and year						2015	2016	2017
Elderly care management human health and social work establishments	16-24	16-24 years	men			1	5	4
			women			21	36	32
	25-29	25-29 years	men			32	54	48
			women			197	221	214
	30-34	30-34 years	men			68	92	108
			women			355	427	443
	35-39	35-39 years	men			93	99	111
			women			473	521	540
	40-44	40-44 years	men			117	125	128
			women			830	841	751
	45-49	45-49 years	men			111	119	126
			women			920	976	949
	50-54	50-54 years	men			103	98	118
			women			1002	1019	1055
	55-59	55-59 years	men			109	103	102
			women			927	936	909
	60-64	60-64 years	men			105	92	88
			women			685	711	708

FIGURE 6. Employees 16-64 years in elderly care management at human health and social work establishments in Sweden (including, age, sex, from 2015 to 2017). (Adapted from Statistics Sweden).

## Footnotes

From 2014 reported occupational data for the revised standard for Swedish Occupational Classification 2012 (SSYK 2012). SSYK 2012 replaces the previous version, SSYK96. This means that comparison between 2014 and previous years should not be done.

For employees aged 16-64 in 2014 relates most occupations, 74 percent, conditions in the reference year or the year after. 19 percent of the data is imputed using a model based on the occupational code (according SSYK 96) the individual had in the register previously. This means that there may be jobs in industries or sectors where they appear abnormal. The previous code used can be up to five years old.

### Information

**Official statistics**  
Yes

**Unit**  
number

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**Latest update**  
2019-03-07

**Data type**  
Flow

**Day adjusted**  
No

**Seasonally adjusted**  
No

**Creation date**  
2019-05-16

**Responsible authority**  
Statistics Sweden

**Matrix**  
000000R9

PICTURE 2. Confirmation on the legitimacy of FIGURE 6.

## APPENDIX 4/2

Employees 16-64 years by occupation (SSYK 2012), industrial classification NACE Rev. 2, age, sex and year						
Health care managers	human health and social work establishments			2015	2016	2017
	16-24	16-24 years	men	3	3	0
			women	10	6	5
	25-29	25-29 years	men	12	30	35
			women	72	86	107
	30-34	30-34 years	men	80	101	106
			women	270	322	356
	35-39	35-39 years	men	178	209	245
			women	558	644	681
	40-44	40-44 years	men	319	341	348
			women	1022	1076	1108
	45-49	45-49 years	men	378	430	483
			women	1418	1543	1600
	50-54	50-54 years	men	318	357	372
			women	1566	1699	1773
	55-59	55-59 years	men	377	374	341
			women	1616	1674	1610
	60-64	60-64 years	men	356	382	342
			women	1212	1311	1304

FIGURE 7. Employees 16-64 years in health care management at human health and social work establishments in Sweden (including, age, sex, from 2015 to 2017). (Adapted from Statistics Sweden).

## Footnotes

From 2014 reported occupational data for the revised standard for Swedish Occupational Classification 2012 ( SSYK 2012). SSYK 2012 replaces the previous version , SSYK96 . This means that comparison between 2014 and previous years should not be done.

For employees aged 16-64 in 2014 relates most occupations , 74 percent , conditions in the reference year or the year after . 19 percent of the data is imputed using a model based on the occupational code (according SSYK 96 ) the individual had in the register previously . This means that there may be jobs in industries or sectors where they appear abnormal . The previous code used can be up to five years old.

## Information

### Official statistics

Yes

### Unit

number

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### Latest update

2019-03-07

### Data type

Flow

### Day adjusted

No

### Seasonally adjusted

No

### Creation date

2019-05-16

### Responsible authority

Statistics Sweden

### Matrix

000000R9

PICTURE 3. Confirmation on the legitimacy of FIGURE 7.

## APPENDIX 5

Summary of the 14 September 2014 Swedish Riksdag election results

Party	Vote			Seats	
	Votes	%	±pp	Won	+/-
Swedish Social Democratic Party (S)	1,932,711	31.01	+0.35	113	+1
Moderate Party (M)	1,453,517	23.33	-6.74	84	-23
Sweden Democrats (SD)	801,178	12.86	+7.16	49	+29
Green Party (MP)	429,275	6.89	-0.45	25	±0
Centre Party (C)	380,937	6.11	-0.44	22	-1
Left Party (V)	356,331	5.72	+0.11	21	+2
Liberal People's Party (FP)	337,773	5.42	-1.63	19	-5
Christian Democrats (KD)	284,806	4.57	-1.03	16	-3
Feminist Initiative (FI)	194,719	3.12	+2.72	0	±0
Pirate Party (PP)	26,515	0.43	-0.22	0	±0
Enhet ("Unity", ENH)	6,277	0.10	+0.09	0	±0
Party of the Swedes (SVP)	4,189	0.07	+0.06	0	±0
Animal Party (DjuP)	4,093	0.07	<i>New</i>	0	±0
Christian Values Party (KrVP)	3,553	0.06	<i>New</i>	0	±0
Independent Rural Party (LBPO)	3,450	0.06	+0.03	0	±0
Swedish Senior Citizen Interest Party (SPI)	3,369	0.05	-0.13	0	±0
Direktdemokraterna ("Direct Democrats", DD)	1,417	0.02	+0.02	0	±0
Classical Liberal Party (KLP)	1,210	0.01	+0.01	0	±0
Vägval ("Crossroads; Path choice", VägV)	1,037	0.02	<i>New</i>	0	±0
Socialist Justice Party (RS)	791	0.01	-0.01	0	±0
Communist Party of Sweden (SKP)	558	0.01	±0.00	0	±0
Parties with fewer than 500 votes	693	0.01	-	0	±0

FIGURE 8. Summary of the 14 September 2014 Swedish Riksdag election results. (Adapted from Wikipedia).

## APPENDIX 6

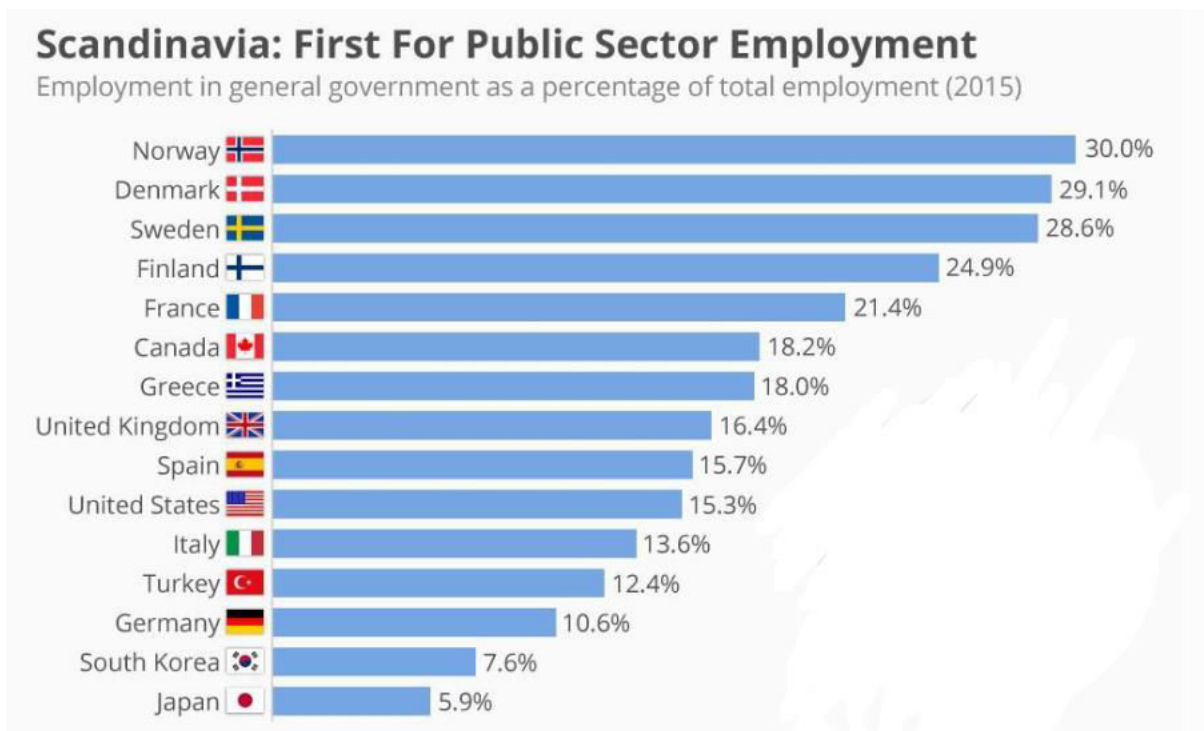


FIGURE 9. Public Sector Employment rate. (Adapted from McCarthy 2017).

APPENDIX 7

**Number of Toyota cars sold in Sweden from 2008 to 2018**

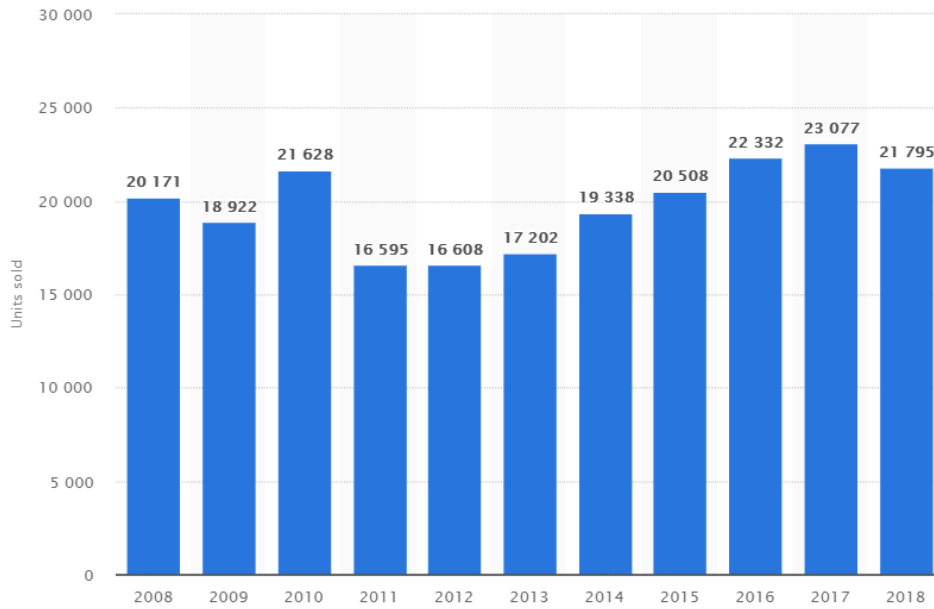


FIGURE 10. Number of Toyota cars sold in Sweden from 2008 to 2018. (Adapted from Statista).