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How to solve the unemployment problem?

Comparing the Job Guarantee model to other unemployment policies

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Abstract

Unemployment has been a persistent problem in our society, especially lately as the unemployment rate in Finland has been growing rapidly. The existing unemployment policies do not seem to be effective enough to reduce the problem, and thus there is space for new models. Combining the ideas of unemployment insurance and active labor market policies, the new model, Job Guarantee, presents a more holistic and possibly more effective tool against unemployment. This review compares three unemployment policies, including Job Guarantee, trying to give an insight on which is the most optimal policy.

Keywords unemployment, labor economics, Job Guarantee, full employment

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Tiivistelmä

Työttömyys on vaivannut yhteiskuntaamme jo pitkään. Varsinkin viime aikoina Suomen työttömyysluvut ovat olleet kasvussa, eivätkä nykyiset käytössä olevat työttömyyspoliittiset keinot eivät vaikuta vastaavan ongelmaan tarpeeksi tehokkaasti. Uusi malli työttömyyttä vastaan, Job Guarantee, yhdistää työttömyysturvan ja aktiivimallien ominaisuuksia ollen kokonaisvaltainen ja mahdollisesti myös aikaisempia malleja tehokkaampi. Tämä kirjallisuuskatsaus tarkastelee työttömyyttä ja vertailee mallia Job Guarantee olemassa oleviin työttömyyspoliittisiin keinoihin pyrkien selvittämään, mikä olisi toimivin ja tehokkain keino työttömyyttä vastaan.

Avainsanat työttömyys, työmarkkinatalous, Job Guarantee, täystyöllisyys

Table of contents

1 Introduction

Unemployment is a widely discussed topic, not only in economics but also in various fields of other social sciences. Lately it has also been brought up in news and different medias in Finland as the number of unemployed people is increasing and the unemployment rate is rapidly growing, even faster than in other EU-countries (Taskinen, 2024).

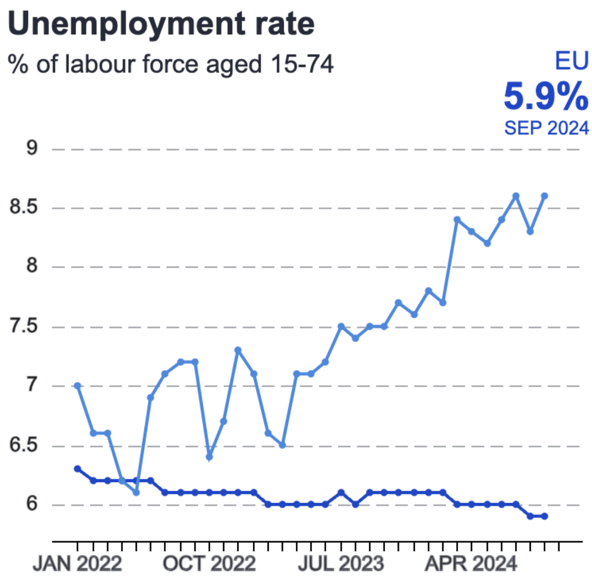

Figure 1. Unemployment rate in Finland compared to EU. Source: Eurostat, (2024)

Unemployment has been shown to have a negative impact on both the economy and society, especially the longer the unemployment period is. When the unemployment rate is already high and still increasing, it is often followed by a decreasing economic growth. Similarly, decreasing economic growth has been found be accompanied with increasing unemployment. This negative correlation between unemployment and GDP (gross domestic product) growth has been tested in various studies which have shown it to exist (Chand et al., 2018; Roşoiu & Roşoiu, 2014). This relationship is called Okun's law in economic literature.

The output loss of unemployment can be calculated, too. In Australia Watts and Mitchell (2000) found that when the unemployment rate was reduced to 2%, the total output increased by 30-40$ billion per year. They calculated that by approximating the direct measure of output per worker and multiplying that by the number of possible additional workers. Hidden unemployment and underemployed are included into the additional workers, thus making the approximation of 30-40$ billion quite optimistic. However, even though the calculation is only an estimate, it provides a signal of the economic significance of solving unemployment.

Besides all the negative economic impacts, unemployment has also vast social burden. It has been found that unemployed people are more often mentally affected due to the stress of their financial situation (Pekkala et al., 2012) and even the risk of committing a suicide is elevated among the unemployed (Pensola & Martikainen, 2004).

The adverse effects caused by unemployment have been found to get more significant as the unemployment period lengthens. Deepening the problem, long-term unemployment causes a self-reinforcing cycle, where the longer the individual has been unemployed, the harder it is to get a job, due to the stigma around the unemployment. That is called the negative duration dependence (Marinescu & Skandalis, 2021) which will be discussed more in Section 3. When deciding to hire someone, firms are shown to consider nine months of unemployment to be equal of four years of lost work experience (Eriksson & Rooth, 2014).

When creating policies to solve the unemployment problem, it is important to first find the root cause of the problems listed above, whether it is purely the stress of the lost or diminished income or also the loss of the job. Political measures around unemployment are often focused on securing the basic income for the citizens, for example in the form of social security and unemployment insurance. While those measures are beneficial for relieving some of the financial stress, they do not acknowledge the importance of employment for the individuals. In our modern society working is considered to be one of the purposes of life, meaning that in the absence of work the unemployed can feel disconnected from the society (Mäkilä, 2021).

The new unemployment model, called Job Guarantee, is focused on securing a job instead of only money for the unemployed. That could be socially more sustainable and a longer-term solution to the unemployment than the active labor market policies now in use. The idea behind JG is that the government will offer a job to all the unemployed who are willing to get one. In this thesis, I will present JG program more precisely in Section 3.

The approach of this paper is a literature review. I am focusing on understanding the phenomenon of unemployment through economic theory and applying this theory to evaluate JG program compared to other policies used in fighting against unemployment. With my research question "*Can Job Guarantee be more efficient way to solve unemployment than other active labor market policies?*" I am aiming to give a comprehensive discussion on the positive and negative effects different unemployment policies have.

The thesis proceeds as follows. Section 2 will discuss the theoretical background of unemployment quite thoroughly. Then Section 3 will introduce the models used to reduce unemployment and go through some empirical studies of them. Section 4 will evaluate the models from Finland's point of view, and Section 5 will compare the models with each other. Finally, Section 6 will conclude.

2 Defining unemployment and full employment

2.1 Unemployment

For measuring the unemployment rate, the population is divided into labor force and the people outside of the labor force. The labor force includes individuals that are between ages of 16-64 and that are able to work. The labor force is further divided into employed and unemployed. To be considered unemployed, the individual must fill in certain criteria. In Finland, the definition of unemployed person is someone who is between ages of 16-64, does not have a job but has been actively looking for one for the last four weeks and could start in a new position in two weeks (Tilastokeskus, n.d.). However, people aged 15 years are sometimes included and some of the studies referred in this thesis use that definition.

After defining the unemployed, the unemployment rate can be calculated by dividing the number of unemployed people by the number of the labor force (unemployed + employed) of the country.

2.1.1 Types of unemployment

The unemployment can be divided into three categories, frictional, cyclical and structural (McConnell et al., 2010). Frictional unemployment occurs when there are natural time lags between quitting one job and finding a new one. Even though there was enough aggregate demand to employ all unemployed, it would take some time to match right employers and employees.

Cyclical unemployment is caused by adverse shocks in the aggregate demand for output. Assuming that wages are relatively sticky, it can be shown that when real output declines, unvoluntary unemployment increases (McConnell et al., 2010).

Structural unemployment is often seen as the most problematic type of unemployment as it is the most difficult one to be reduced. It is caused by the mismatch of labor supply and demand. Either the skills of the available workforce do not match the skills required in the available jobs or the suitable workers and workplaces are geographically impossible to be matched (McConnell et al., 2010). The structural unemployment may easily turn into long-term unemployment as it can take a while for the laid-off workers to learn new skills and train for the new positions.

Structural unemployment is also connected to cyclical unemployment. If the economy is in a boom and rapidly expanding, the firms will more likely employ workers which do not acquire certain skills but must be trained while working. During recessions firms are unlikely to employ such workers as it is less profitable. Furthermore, those already employed can be laid-off, which increases the structural unemployment.

The unemployment rate is in reality often higher than it would be when these three types of unemployment are measured, because some unemployment is undercovered and difficult to be examined. Only the workers that are actively seeking for a job are in the labor force and therefore considered unemployed. But for the long-term unemployed, it is twice as likely to leave the labor force and discontinue job seeking as it is to find a full-time job (Krueger et al., 2014). Statistically, an individual leaving the labor force would be counted as a decrease in unemployment, even though the real unemployment is still high but now the unemployed do not anymore try to find a job.

2.2 Full employment

In economics, the term full employment is not used literally, thus it does not mean that the employment rate would be zero. However, there are some differences in the studies regarding the lowest possible unemployment rate.

It is a common knowledge that the unemployment rate can never reach zero, because there will always be some frictional unemployment as people are quitting their jobs and waiting for the next contract to begin and entering in or dropping out of the labor force (McConnell et al., 2010).

However, if all unemployment in the society was frictional unemployment, would the unemployment rate be much lower than many of the economic theories would target at the moment.

2.2.1 The Steady-State rate of Unemployment

The full employment that unemployment policies are aiming at can be called the steady-state rate of unemployment or the natural rate of unemployment. That rate can be defined by demand and supply in the labor market, or the inflation rate associated with the unemployment rate. The first definition means the steady-state rate of unemployment occurs when the labor market has no excess supply nor excess demand. According to the second definition, the steady-state rate of unemployment is the rate at which the expected and actual rates of inflation are equal in the long run (McConnell et al., 2010). It is agreed that if the unemployment rate was too low, it would produce accelerating inflation. Therefore, it is not aimed to reach the full employment that would contain only the mandatory frictional unemployment.

When the steady-state rate of unemployment is discussed from the point of view of inflation, the term used is NAIRU (the non-accelerating inflation rate of unemployment). It is used as a tool when simultaneously fighting against inflation and unemployment. There are lots of studies about NAIRU, many of which are contradicting the others due to the challenging nature of measuring it (Ball & Mankiw, 2002; Blanchard, 2018; Tcherneva, 2020).

The contradictions and challenges make it also unplausible to use the accelerating inflation as an argument why there should be a certain amount of unemployed. First, NAIRU is changing over time as the conditions in the economy change, for example, increases in productivity are found to appear as a decrease in NAIRU (Ball & Mankiw, 2002). Considering the productivity as one extra component, makes NAIRU even more complicated to research.

Furthermore, as the economists find it hard to measure the inflation-unemployment relationship, it has raised the question if it even is a causal one

(Blanchard, 2018). That leads to suggestions to relax NAIRU completely (Tcherneva, 2020) or to use it as the null hypothesis when making new policies (Blanchard, 2018).

2.3 Efficiency wage

The economics sees unemployment as a tool to keep the existing workforce productive and to prevent them from shirking, in addition to keeping the inflation under control. Assuming that monitoring the employees is costly for the firm, it is more profitable to offer wage high enough to make the unemployment seem unprofitable. That is called the efficiency wage theory. Depending on the existing unemployment rate, the wage offered for the workers needs to be higher the lower the unemployment rate is, because if the shirking workers are fired, they would face only a short unemployment spell making the thought of unemployment less intimidating (Borjas, 2010).

Thus, according to efficiency wage theory, full employment in the labor market would lead to workers having no incentives to be productive as in case of getting fired, they could easily find a new job. The only way to reduce unemployment would be to lower the wages, which then would decrease the productivity of the existing workers causing output losses for the firms. Therefore, the involuntary unemployment caused by this model is necessary and profitable for the firms.

Efficiency wage theory thus states that unemployment cannot be reduced as it exists naturally in competitive markets. This theory has been challenged, however.

When the studies have been expanded to working conditions, productivity and efficiency, it has been found that it is possible to reduce unemployment while maintaining high wages. In fact, if the high wage levels are correlated with efficiency in the long run, they would be associated with higher employment rates, too (Altman, 2006).

2.4 Asking wage

How can we estimate if the individuals accept or reject a job offer, i.e. what keeps them unemployed? In labor economics, it is assumed that an individual seeking for a job has a certain asking wage leading to that decision (Borjas, 2010). To be able to determine the asking wage, it is assumed that a job seeker knows the job market's wage offer distribution, called frequency distribution of potential job offers. Thus, the unemployed worker knows the most probable wage range to get a job offer.

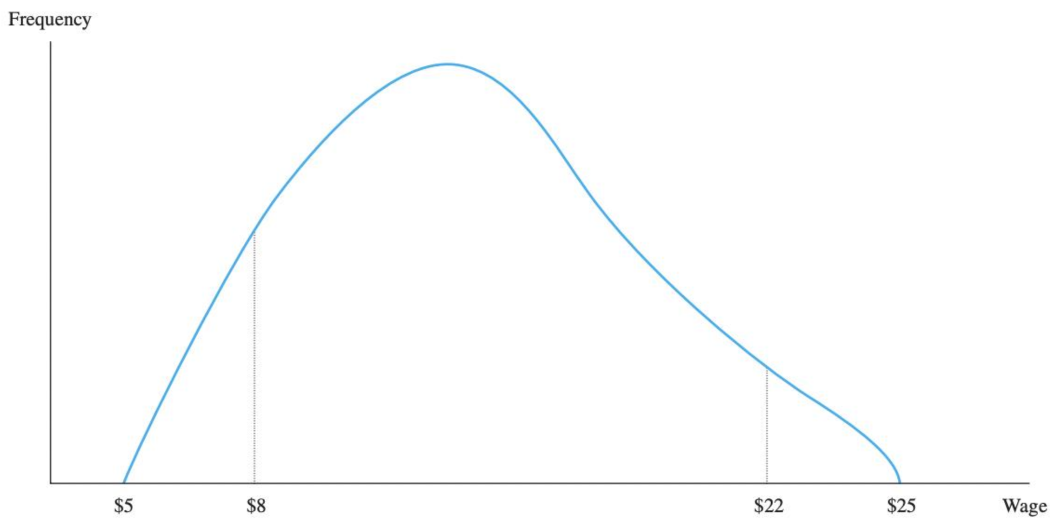

Figure 2. The wage offer distribution. Source: Labor Economics, Borjas G. J., (2010).

The asking wage takes also into account the direct and opportunity costs of job search. The direct costs mean that every additional apply to a new job adds to the expenses, in a form of transportation, time and other possible fees. The opportunity cost of job search illustrates the money lost as instead of being unemployed and searching for a better position, the individual could accept some lower paying job and be working there the whole time. It can be shown that the asking wage is not constant over time, but it is typically decreasing as the unemployment period has lasted at least two months (Kasper, 1967).

Besides the wage offer distribution and costs of job search, the individual's decision making on their asking wage is affected by the unemployment insurances (UI), too. It has been shown that the higher the UI benefits are, the higher the asking wage will also be (Borjas, 2010; Nordlund & Strandh, 2008). That is because increase in the unemployment benefits decrease the marginal cost of the job search thus increasing the asking wage. UI-system and its effects on the job search will be discussed more thoroughly in the Section 3.2.

To determine whether the unemployed worker will accept or reject the job offer, we must derive the marginal revenue and marginal cost curves for job search and see where those two equate. That is, where the asking wage lies.

The marginal revenue curve is downward sloping, as the gain from an additional search is diminishing as the job search continues for longer. Simultaneously the marginal cost curve is upward sloping because as the job search continues, the greater the opportunity cost of an additional search will be (Borjas, 2010). It is then assumed, that the job search continues until the marginal cost and marginal revenue are equal.

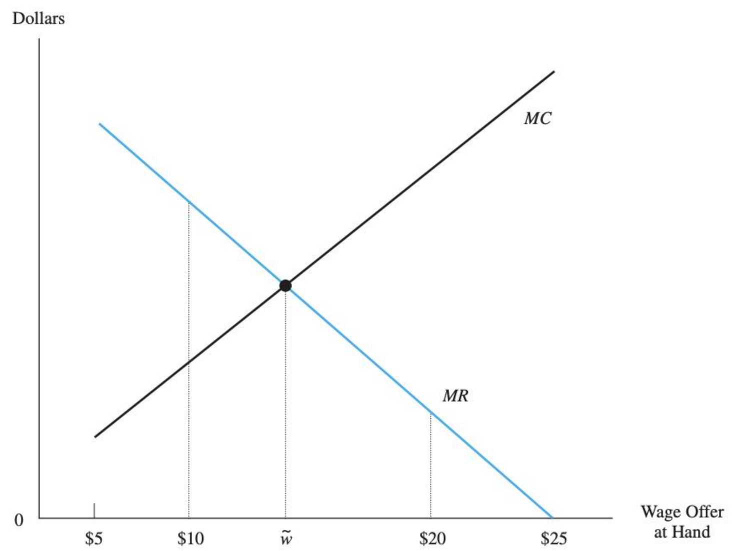

Figure 3. The determination of asking wage. Source: Labor Economics, Borjas G. J., (2010)

This assumption is a prerequisite for another assumption that is, the higher the asking wage is, the longer the unemployment spell will be (Borjas, 2010). When the asking wage is falling with time, the probability to be employed is rising the longer the unemployment period has lasted. This partially implies the long-term unemployment to be caused by individuals having too optimistic expectations regarding their future wages.

Surprisingly the data about asking wages and unemployment give contradictory results. A study by Brown and Taylor (2011) shows that an individual can actually increase one's probability to get employed by having an asking wage higher than the predicted wage. One explanation for this could be the positive signaling effect of high asking wages, that is the employees can show their motivation and engagement to the job search process by keeping their asking wages high.

Additionally, by having the high asking wage the unemployed is more likely to end up with positions that match better their knowledge and skills, which helps to preserve the human capital resources (Nordlund & Strandh, 2008).

It is clear that both unemployment theories, the efficiency wage and asking wage, simplify the complex problem of unemployment reducing the labor force to a more homogeneous mass than it really is. Not every worker is a rational job seeker nor are their skills or job search intentions the same. Additionally, modeling re-employment prospects through wages does not give sufficient weight to other factors affecting the job search, further simplifying the conclusions. Consequently, empirical results do not always align with the theories.

3 Models to reduce the unemployment

3.1 Job Guarantee

Differing from the other unemployment policies that are going to be presented in this section, Job Guarantee (JG) is not actively in use at the moment. However, it has been experimented for example in Finland, which I will discuss in the Section 4.1.

According to its name, Job Guarantee will guarantee every unemployed individual a job at a basic wage. For the individuals, it is not mandatory to accept the job offer but the guarantee will work as a safety net against unemployment and an alternative to the most undesirable job options (Tcherneva, 2020).

As JG is a publicly funded program, the jobs included are mostly from the public sector or subsidized publicly. To make the administration easier and more flexible, the program is locally administered by municipalities, non-profitable organisations and social enterprises. It can also provide training and education for the workers enabling them to transition easier back to private sector in future (Tcherneva, 2020).

There have been some studies on what kind of jobs JG program should offer. A study by Daniel Haim (2021) gathers the ideas of the economist Hyman Minsky concluding that the jobs should have the following qualities:

> 1) jobs increasing socially useful output, providing all of society better public services and goods; 2) jobs guaranteed by the public sector on a project-by-project basis at a minimum wage; 3) jobs in the places where people need them; and 4) jobs taking the people that need them as they are. (2021, pp. 11).

To ensure the social usefulness of the jobs offered, JG creates jobs to the sectors that are lacking employees or are not respected. Most of the jobs that have a shortage of workers in the public sector are from the service and healthcare sectors. Those sectors are also in many countries underpaid (Macdonald et al., 2018). Thus, JG would help to raise the wage floor to the living wage for the existing workers, too. Other possible jobs the program could offer would be different infrastructural, environmental and cultural projects (Wray et al., 2018).

The jobs offered in JG programs are mainly jobs that require only lower education or that offer the required training while working. In developed countries it has been studied that the unemployment rates are higher among the low educated people than the high educated people (Feng et al., 2024). Thus, in theory the targeting of JG could be effective.

3.1.1 Macroeconomic effects of Job Guarantee

One of the concerns risen from JG is that by trying to reduce the unemployment rate effectively near zero, it causes inflation, as discussed in Section 2. However, JG would actually work as a stabilizer for both prices and the economy (Tcherneva, 2020; Wray et al., 2018). Government spending on JG would be countercyclical, aligning with economic cycles so that it expands in recessions and shrinks in expansions. Thus, JG would help stabilize both inflationary and deflationary pressures.

A group of economists have conducted a large-scale simulation of JG in the United States economy, which showed a slight increase in inflation in the first phase but afterwards the effects were insignificant. The other conclusion from the simulation was that JG would raise the real GDP significantly and add more than two million jobs to the private sector (Wray et al., 2018).

3.2 UI-system

Unemployment insurance system (UI-system) is also known as unemployment benefits. The system varies between countries to some extent, but the basic idea exists. Unemployed worker may be eligible for the unemployment benefits, depending on the duration of the employment period and on the reason the employment ended (Borjas, 2010). When measuring the effects of UI-system on job search, it is relevant to discuss the workers' replacement ratios rather than merely the number of benefits. The replacement ratio is the fraction of worker's weekly income that the benefits replace.

In Finland, the unemployment benefits are based on several facts like searching for full time job, being able to start working immediately and being employed for a certain period of time under the past two years. The unemployed can also be required to participate in different activation programs such as trainings (Kyyrä et al., 2017). The active labor market policies will be discussed more in detail in the Section 3.3. Besides the unemployment benefits paid by Kela (Social Insurance Institution of Finland) the unemployed can also be a member of unemployment fund and receive earnings-related allowance. That is funded by the fund's members and employers who pay the earnings-related part of the payments and the government that pays for the basic income insurance part (A-kassa, n.d.).

The duration of the benefit entitlement depends mainly on the length of the working history but the unemployed can also get extra payment days if they fall under a category that entitles them to those (Ministry of Social Affairs and Health, n.d.).

3.2.1 The effects on job search

According to Borjas (2010), the UI-system has three main effects. It extends the time spent unemployed, increases the unemployment rate but also leads to higher wages once the unemployed is employed again. It is also stated that the replacement ratio correlates with the period of unemployment so that the higher the ratio, the longer the unemployment period.

Considering the effects of unemployment benefits to employment, it is shown that during the last year before the benefits exhaustion, the search effort of unemployed increases by 51% and the asking wages decrease, increasing overall the re-employment rate (Marinescu & Skandalis, 2021). But as the search effort does increase, the same study shows that when getting close to the exhaustion, the quality of the jobs applied to decreases in relation to the job seekers skills and education. This is consistent with the decreasing asking wages and conversely with the positive restoring effect of human capital that higher asking wages and further higher replacement ratios have.

The negative duration dependence, briefly introduced in the introduction, can be seen as a part of the reason to explain the decrease in the asking wages and job qualities. As the likelihood of receiving a callback from the job applied declines with the unemployment period (Kroft et al., 2013), the job seekers must adjust their search process. While decreasing the asking wage and applying to jobs below the applicant's education level worsens the quality of the future jobs, they do not even necessarily help to secure one. That can be because of the stigma associated with long-term unemployment or the depreciation of the skills over the unemployment period (Marinescu & Skandalis, 2021).

Studying the positive effects of longer UI-period or higher UI benefits, we find that the longer benefit period increases the expected wage of the next job as well as the duration (Kyyrä & Pesola, 2020). As discussed in the last paragraph, the overall effect of these findings is the increased job quality. These effects lead to positive fiscal effects as longer job duration and higher wages contribute to higher tax revenues. Recent studies have shown that the higher tax revenues might overrule the spending on the UI-system pointing out the importance of maintaining it (Kyyrä & Pesola, 2020; Nekoei & Weber, 2017).

When evaluating the positive and negative effects of the UI-system, as well as other unemployment policies, it is important to note the emphasis on the job seeker's side that many studies and theories have. The focus is often, directly or indirectly, on the supply side of labor markets but as for example the negative duration dependence shows, it is not due the changes of employees' job seeking behaviours if they are hired or not.

The business cycles and firms' incentives to hire should also be considered. If there are not enough jobs available or the firms do not see it profitable to hire at the given moment, it is not in the hands of the employees whether they are employed. Thus, the reduction in unemployment insurance with the idea of increasing the incentives to seek jobs does not change the unemployment spells if the employers do not have any positions open (Åberg, 2001). In the Contemporary Labor Economics (McConnell, Brue, Macpherson, 2009) it is stated that "*Thus most of the variation in the rate of exiting from unemployment results from variations in the rate at which workers receive offers, not from variations in acceptance rates*." (2009, pp. 469).

3.3 Active Labor Market Policies

Active labor market policies (ALMPs) are used widely to reduce unemployment, the program varying across countries. The basic structure of ALPM programs is, however, quite similar, including job search assistance, training programs and subsidized jobs (Crépon & van den Berg, 2016).

The ALMP measures can be divided into different categories depending on the target of the measures. There are at least four categories identified from European ALMPs by Crépon and van den Berg (2016) that are:
1) the measures aiming to increase workers productivity and salary, such as training programs
2) the measures to incentivize private sector hires, such as wage subsidies
3) the measures for directly employing the workers, as public sector jobs
4) the measures that are aiming to improve the job search efficiency, as assistance, counselling and monitoring

3.3.1 The effectiveness of ALMPs

While the ALMPs are quite costly, it is difficult to say whether they are effective or not. The impacts of the programs differ depending on which previously mentioned category the program is classified, the time period worker participates in it, and demographic factors of workers.

Various studies have found that the least effective programs are direct employment programs, especially when targeted the public sector, and that those programs have insignificant or negative impacts on employment (Card et al., 2018; Kluve, 2010). However, the study of Card et al. (2018) shows that the effects are stronger two or three years after completing the program, that is in the medium or long run.

The direct employment programs can also be accompanied with training or education to preserve the human capital and to increase the productivity. Training programs have found to have limited effects to employment rates in the short run but more significant effects in the long run (Card et al., 2018; Kluve, 2010). The effects are also more significant among female participants and long-term unemployed, even though it is debatable if the programs only increase employment or the future salaries, too (LaLonde, 1995). Additionally, besides the female participants, the training programs seem to be especially effective for those who are disadvantaged or suffer from any life course shocks (Katz et al., 2022).

It has been found that the programs offering job search assistance and employment subsidies as well as having strict monitoring systems for the workers have the most significant effects on re-employment (Dolton & O'Neill, 2002; Kluve, 2010; LaLonde, 1995). The study of Kluve (2010) found that these kinds of programs have up to 50 percent higher probability of having positive effects than the earlier mentioned training programs. Apart from the other studies, the one of Dolton and O'Neill (2002) focused on the long-term impacts of these programs, finding that 5 years after the participation to the program, the unemployment rate was significantly lower among the participants, considering especially male participants.

The employment subsidies not only reduce unemployment, but also help unemployed to remain active members in the society thus preventing or reducing crime and violence (Crépon & van den Berg, 2016; LaLonde, 1995). The training programs have this same effect, especially on young unemployed men (LaLonde, 1995).

The effects of different programs are sometimes overlapping. Similarly different programs can use measures from the four different categories, listed in Section 3.3., in mix and match style, causing difficulties when evaluating the impacts. Neither can the programs be separated from the economic situation of the labor market, as there has been found to be a cyclical correspondence between periods of economic growth and effectiveness of ALPMs. According to the study of Card et al. (2018), the ALMPs have greater impacts when the economy is in a state of slow growth and high unemployment.

4 Results from Finland

In Finland, there are some labor market features and disparities that need to be considered when discussing the most efficient labor market policy. In general, the unemployment rate as well as the rate of marginally attached workers have been higher than in average in other OECD and Nordic countries. Marginally attached workers mean workers that do not actively seek a job but would be willing to start one if such would be offered to them (OECD, 2023).

The gender disparities in unemployment have not been as significant in Finland as in other OECD and Nordic countries, with female unemployment rate being lower than men unemployment rate in 2021 (OECD, 2023). The trend is still existing in 2024 as the unemployment rate for women is 2,2 percentage points lower than for men (Tilastokeskus, 2024).

The unemployment is at the highest level among the young people and the unemployment rate for 15-24 years old workers has been increasing (Tilastokeskus, 2024). Among the older workers, the unemployment rate is relatively high, too. Lastly, the education level has a significant impact on the unemployment rates as the individuals below upper secondary education face the highest unemployment penalties (OECD, 2023).

4.1 Paltamo case study – Työtä Kaikille

A full employment experiment, similar to JG, was conducted in Finland in Paltamo between 2009 and 2012. Paltamo is a small municipality located in Kainuu region. In this experiment, the unemployed were transferred to paid jobs offered by the municipality of Paltamo. Thus, instead of receiving unemployment benefits, they would receive wages and pension based on the employment contract. The basic idea was to make the income transfers such as unemployment and housing benefits unnecessary. One of the main goals of the experiment was to improve the employment opportunities of the long-term unemployed, especially through physical and mental well-being (Hämäläinen et al., 2013).

After the experiment, a comprehensive report on the outcomes and different social and economic costs was conducted by experts from various fields. In this chapter, I will go through the economic effects of that experiment, thus focusing on the chapter 8 of the report. The effects evaluated here are mainly short-term effects, as the report was conducted shortly after the experiment had ended. However, the experiment was planned to have long-term effects, too thus a full understanding on the effectiveness of this kind of labor policy could not be reached.

To be able to evaluate the economic costs of the experiment, Hämäläinen et al. created a synthetic municipality to compare Paltamo to. The synthetic municipality was created by compiling the information of various other municipalities from Finland and giving them the optimal weights so that the synthetic municipality would have similar historical development with Paltamo.

The costs of the experiment were 11,8 million euros altogether and the revenues 7,9 million euros. Thus, the experiment paid back over 60% of the money that was invested to it (Hämäläinen et al., 2013). Mainly the costs consisted of the wages and other expenses associated with them. The costs and revenues can be divided into subcategories to ease a more detailed evaluation.

I will first go through the effects the experiment had on social benefits. The number of individuals receiving unemployment benefits was decreasing significantly already before the experiment due to positive economic cycle around years 2005-2008. However, the number of individuals receiving earnings-related allowance was decreasing more rapidly than the number of those receiving unemployment insurances paid by Kela. The unemployed who are entitled to earnings-related allowance are people with recent work experience, thus they are often quite newly unemployed. Therefore, they are also easier to be re-employed which explains partly why the number of individuals getting the allowance was rapidly decreasing among them.

After starting the Paltamo experiment, between 2009 and 2012, also the number of individuals receiving unemployment insurances i.e. often long-term unemployed, decreased significantly and even more than the decrease among earnings-related allowance. Comparing to the synthetic municipality created by Hämäläinen et al., the number of unemployment benefits paid would have increased without the experiment (Hämäläinen et al., 2013).

In economic terms, the experiment decreased the unemployment insurances paid by Kela by 1,9 million euros and the number of earnings-related allowances by 3,8 million euros. Thus, the experiment can be seen to have a significant positive impact on the unemployment benefits.

The experiment had slight or no impact on social benefits like housing allowance and income support. The housing allowances paid by Kela decreased slightly during the experiment, but only the decreases between 2010 and 2012 are statistically significant. It is also important to note that in Paltamo it is common to own the house and therefore the housing allowances paid to Paltamo had not been high before the experiment either. Similarly, the impact to income supports is not statistically significant. One reason behind this might be that housing allowance is paid considering the household as a whole and not based on one individual's situation. Therefore, the change in one person's employment situation does not necessarily change the economic situation of the whole household (Hämäläinen et al., 2013).

Regarding the tax revenues, the Paltamo experiment was expected to increase them. However, the wage paid in the experiment was on average 11500 euros per year and the tax revenues corresponding to that were 1300 euros. The difference to the tax revenues from unemployment benefits were on average only 200 euros as the average unemployment benefits paid yearly were 6500 euros and the corresponding tax revenues 1100 euros. Therefore, the impact on income tax revenues was not significant. Neither was the impact on value-added tax revenues which was measured through the changes in consumption opportunities (Hämäläinen et al., 2013).

One significant impact the experiment had was the effect on the participation in the activation programs. The number of unemployed participating into the programs decreased straight after the experiment had started and compared to the synthetic municipality, the effect was statistically significant. The savings from this were around 170 000-375 000 euros and 51 full-time equivalent (FTE) years. (Hämäläinen et al., 2013).

The displacement effects of the experiment were difficult to evaluate, and the results were not statistically significant. However, based on the observations and the data, it seems that there would have been 1,5-2 percent higher population share on the private sector job positions had the experiment not been conducted (Hämäläinen et al., 2013).

To conclude the economic effects, the most significant savings from the experiment were the savings from the earnings-related allowances. The effects on other social benefits or tax revenues were not as significant as assumed but, the effects were possible to be examined only in the short run. It could be hypothesized that the effects of this kind of policy would become more positive and significant only in the long run.

4.2 UI-system and ALMPs in Finland

The UI-system and active labor market policies in Finland are connected to each other. As discussed briefly in the UI-system section, the unemployed worker might have to participate to different activation programs to be eligible for unemployment benefits. The participation to ALMP programs also increases the benefits paid (Kyyrä et al., 2017).

However, the effects of UI-system and ALMP programs can also be evaluated separately. This section will first briefly discuss the UI-system and its effects in Finland and after that go through a report of ALMPs and their effects.

As discussed in Section 3, it has been found that the UI-system in Finland has significant positive effects in terms of job matching quality and the length of the next job contract (Kyyrä & Pesola, 2020). Shortening the benefit period might lead to lower unemployment rate and faster re-employment. Lower unemployment rate can, however, be due to workers leaving the labor force instead of finding a new job. Furthermore, if they were to be re-employed, the new position might be less stable and only for a short-term (Kyyrä et al., 2017).

To evaluate the ALMPs in Finland, I will go through a report on Finland's active labor market policies, conducted by OECD (2023). According to that report, Finland spends 0,86% of the GDP to ALMPs which is distinctly more than the average on other EU countries. Almost half of that spending (0,36%) goes to training programmes, and therefore the report focuses on evaluating the two main training programs from Finland that are the labor market training (LMT) and self-motivated training (SMT). The latter allows the unemployed to keep their unemployment benefits while simultaneously being educated in the program.

LMT programs offer the unemployed vocational trainings, mainly organised locally by employment offices. The aim of the short trainings is to improve the re-employment prospects of the unemployed. The SMT programs are longer, and they offer education leading to a degree. After the year 2022, to be eligible to participate in SMT programs, it became obligatory to be an active job seeker and apply for certain number of jobs for every quarter (OECD, 2023).

The SMT programs have positive impacts on employment on long-term and negative on short-term. One explanation for the negative short-term effects can be a lock-in effect that SMT programs have; the workers enrolled to the programs are not looking for or even willing to take a job until they have completed the program (OECD, 2023). This conclusion and the other findings of the report by OECD are in line with the studies of Card et al. (2018) and Kluve

(2010) presented in the Section 3. The SMT programs in Finland benefit more females and older job seekers while high-educated individuals might have negative effects such as the worsening of the job quality. Lastly, the SMT programs do not in average lead the workers to move upwards in the occupational ladder (OECD, 2023).

The effects of LMT programs are quite similar to the effects of SMT programs. Similarly, the effects are more significant in the long run, increasing the worker's probability to be employed. The effect on salary is not significant in the short run but in the long run it may be slightly positive (OECD, 2023). These conclusions align well with the study of LaLonde (1995) discussed in the Section 3. Furthermore, while the LMT programs do not have an effect to the upwards mobility of a worker, they influence the job quality. The participants to the programs are more likely to shift occupations than the non-participants, leading to increase the frequency of occupational quality (OECD, 2023).

5 Comparing the models

When comparing the policies, it becomes clear that ALMPs and JG are very similar in terms of their design and impacts. However, JG is much more holistic and has therefore features that ALMPs do not. The UI-system differs from the two other policies by being a passive policy and securing only the income for the unemployed. Because of the passive nature of the UI-system, there is a risk of discouraging the unemployed from job search process. However, as discussed in the earlier Sections, the UI-system has also positive effects such as restoring the human capital in the form of higher asking wages and higher job quality. Therefore, it is not to say that the UI-system should not exist, instead, it could be transformed into an active income support as in JG.

One of the major differences between ALMPs and JG is the potential stabilizing effect on the economy that JG has. The effectiveness of ALMPs is closely connected to the business cycles and economic conditions but JG could be able to create a buffer stock of employed which would stand against the business cycles by employing all unemployed. During economic downturns, the private sector decreases spending causing layoffs, while the public sector could increase spending to JG program thus working countercyclically and stabilizing the economy (Wray et al., 2018).

While stabilizing the economy by creating jobs to the public sector, JG could have an adverse impact to the private sector. According to Hämäläinen et al. (2013), the JG experiment from Paltamo might have had a decreasing effect to the job positions of private sector. When applying the economic theory of efficiency wages, the increase in public sector employment could lead to forced increase in wages in private sector, causing private sector layoffs and disappearance of jobs. A study by Behar and Mok (2019) found that the public employment has a complete crowding-out effect on the private sector employment, the effect being even stronger in advanced economies. However, Behar and Mok claim that the results cannot be applied in a long-run, thus it is not certain if there will always occur a significant crowding-out effect.

A bit contrary to that conclusion, a study by Faggio and Overman (2014) found that in the short run, between 2003 and 2007, there was no effect on private sector. Separating the different working sectors into tradable (services and construction) and non-tradable (manufacturing), they were able to show that there was a slight multiplier effect to non-tradable sector and crowding-out effect to tradable sector, and thus the different effects counteract each other. In the long run, that is between 1999 and 2007, Faggio and Overman found that the multiplier effect was weaker and displacement effect for tradable sector was stronger causing overall crowding-out to the private sector. These differences were not statistically significant, but they can still be used as an economic interpreter of the challenges to make a comprehensive conclusion on crowding-out effects.

Lastly, the most positive findings from the crowding-out effect are found from the report by Wray et al. (2018). According to their simulation, JG would increase private sector job opportunities significantly due to the multiplier effect and economic stimulus the stabilization feature would have.

Apart from the impacts to the whole economy, JG as well as ALMPs have significant and quite similar impacts to the individuals. The ALMPs are found to be effective especially against long-term unemployment and for preventing criminality and marginalization from society (Crépon & van den Berg, 2016; LaLonde, 1995). The Työtä Kaikille–experiment, was found to have a highly likely positive effect on preventing the youth marginalization (Kokko & Koskinen, 2013).

The ALMPs as well as JG can also help participants to restore their skills thus preventing the loss on the human capital and possibly increasing the job quality when re-employed. When concluded the feedback from the participants of the Työtä Kaikille–experiment, it was found that the self-confidence and experiences of empowerment increased, supporting the assumptions and other studies of positive mental effects (Kokko & Koskinen, 2013).

Another positive features that JG has and that was found from the Työtä Kaikille–experiment were the improved health services for unemployed, as they were transferred to occupational healthcare, and the savings from unemployment benefits, as discussed earlier in Section 4.1. The JG as well as at least partly the ALMPs were also effective on activating the unemployed and involving them to participate in society more (Kokko & Koskinen, 2013). It could also be possible that a JG kind of policy would be more effective than the ALMPs in activating the marginally attached workers.

One difficulty regarding the implementation of JG is the targeting, as the programs would be targeted at every unemployed. It has been discussed that the policy could be more effective if targeted only at those that would need it the most, that is the long-term unemployed, disadvantaged workers and youth as well as the older workers (Kokko & Koskinen, 2013). But regardless of this, the Työtä Kaikille-experiment still managed to employ unemployed evenly from every age group, receiving positive feedback especially from the young (15-25 years old) participants (Kokko & Koskinen, 2013). Thus, it seems that JG could be a more effective way to activate the young job seekers than ALMPs, as the average age among the participants of ALMPs in Finland is 34 years (OECD, 2023). But the comparison is slightly unplausible as the Työtä Kaikille-experiment was only conducted in one small municipality and the data from OECD report is from the whole country.

Another difficulty of the activation programs, both ALMPs and JG, is how to give people enough incentives to participate in them. When studying the ALMPs, it has been found that there occurs a stigma associated with participating in different training programs (Crépon & van den Berg, 2016; LaLonde, 1995). According to the study by Crépon and van den Berg (2016), the stigmatization is caused by a negative signaling effect of the job trainings and subsidies. By participating in those kinds of activities, the unemployed can be seen to be less competent or productive. It could be hypothesized that JG could cause less stigma by being more comprehensive and targeted everyone and that way normalizing the participation in the program.

6 Conclusion

The unemployment is a persistent problem in our developed economy and a wide range of measures and policies are designed to reduce it. This review focused on discussing three different policies - Job Guarantee, UI-system and active labor market policies – to find differences on how effective they really are. The structural unemployment is often considered the most difficult type of unemployment to reduce as it easily develops into long-term unemployment. Therefore, one of the main questions around unemployment policies is "how to activate the long-term unemployed?”.

ALMPs and JG might be able to answer that question better than UI-system by being active policies, thus requiring the participants active measures. However, the UI-system is beneficial for securing the income and financial support during the unemployment and it is a good complement to ALMPs. JG, on the other hand, could combine both UI-system and ALMPs enhancing the labor market policies as everything would be under the same roof.

The solution to the unemployment problem is not always on the hands of the workers, instead it could often be seen as a problem of the demand side. The unemployment policies now in use do not seem to be very effective against cyclical unemployment and the fiscal stimulus against economic downturns is quite costly. In theory, JG could work as an economic stabilizer and thus reduce the cyclical unemployment while simultaneously paying itself back.

However, more research on JG is needed to draw more reliable conclusions. Based on the literature thus far, it is difficult to evaluate the true direction of crowding-out effects and overall, the effectiveness to transfer workers from the program back to the private sector jobs. Furthermore, the experiments of JG would initially be costly as many of the positive effects are to be found in the long run.

References

Åberg, R. (2001). Equilibrium unemployment, search behaviour and unemployment persistency. *Cambridge Journal of Economics*, *25*(2), 131–147. https://doi.org/10.1093/cje/25.2.131

A-kassa. (n.d.). *Operation and financing of the unemployment fund*. Retrieved November 7, 2024, from https://a-kassa.fi/en/operation-and-financing-of-the-unemployment-fund/

Altman, M. (2006). Involuntary unemployment, macroeconomic policy, and a behavioral model of the firm: Why high real wages need not cause high unemployment. *Research in Economics*, *60*(2), 97–111. https://doi.org/10.1016/J.RIE.2006.03.001

Ball, L., & Mankiw, N. G. (2002). The NAIRU in Theory and Practice. *Journal of Economic Perspectives*, *16*(4), 115–136. https://doi.org/10.1257/089533002320951000

Behar, A., & Mok, J. (2019). Does public-sector employment fully crowd out private-sector employment? *Review of Development Economics*, *23*(4), 1891–1925. https://doi.org/10.1111/rode.12613

Blanchard, O. (2018). Should We Reject the Natural Rate Hypothesis? *Journal of Economic Perspectives*, *32*(1), 97–120. https://doi.org/10.1257/jep.32.1.97

Borjas, G. J. (2010). *Labor Economics* (Fifth). McGraw-Hill/Irwin.

Brown, S., & Taylor, K. (2011). Reservation wages, market wages and unemployment: Analysis of individual level panel data. *Economic Modelling*, *28*(3), 1317–1327. https://doi.org/10.1016/J.ECONMOD.2011.01.009

Card, D., Kluve, J., & Weber, A. (2018). What Works? A Meta Analysis of Recent Active Labor Market Program Evaluations. *Journal of the European Economic Association*, *16*(3), 894–931. https://doi.org/10.1093/jeea/jvx028

Chand, K., Tiwari, R., & Phuyal, M. (2018). Economic Growth and Unemployment Rate: An Empirical Study of Indian Economy. *PRAGATI : Journal of Indian Economy*, *4*(02). https://doi.org/10.17492/pragati.v4i02.11468

Crépon, B., & van den Berg, G. J. (2016). Active Labor Market Policies. *Annual Review of Economics*, *8*(1), 521–546. https://doi.org/10.1146/annurev-economics-080614-115738

Dolton, P., & O'Neill, D. (2002). The Long-Run Effects of Unemployment Monitoring and Work-Search Programs: Experimental Evidence from the United Kingdom. *Journal of Labor Economics*, *20*(2), 381–403. https://doi.org/10.1086/338686

Eriksson, S., & Rooth, D. O. (2014). Do employers use unemployment as a sorting criterion when hiring? evidence from a field experiment. *American Economic Review*, *104*(3), 1014–1039. https://doi.org/10.1257/aer.104.3.1014

European Statistical Monitor. (2024, November). https://ec.europa.eu/eurostat/cache/dashboard/european-statistical-monitor/?topic=people

Faggio, G., & Overman, H. (2014). The effect of public sector employment on local labour markets. *Journal of Urban Economics*, *79*, 91–107. https://doi.org/10.1016/j.jue.2013.05.002

Feng, Y., Lagakos, D., & Rauch, J. E. (2024). Unemployment and Development. *The Economic Journal*, *134*(658), 614–647. https://doi.org/10.1093/ej/uead076

Haim, D. (2021). *What Jobs Should a Public Job Guarantee Provide? Lessons from Hyman P. Minsky* (981). https://doi.org/10.2139/ssrn.3769488

Hämäläinen, K., Hämäläinen, U., & Moisio, A. (2013). *Työllisyys, terveys ja hyvinvointi - Paltamon työllistämismallin vaikutusten arviointitutkimus 2009-2013*. Eds. R-L. Kokko., T. Nenonen, T. Martelin, S. Koskinen, 231-268. THL.

Kasper, H. (1967). The Asking Price of Labor and the Duration of Unemployment. *The Review of Economics and Statistics*, *49*(2), 165–172. https://doi.org/10.2307/1928224

Katz, L. F., Roth, J., Hendra, R., & Schaberg, K. (2022). Why Do Sectoral Employment Programs Work? Lessons from WorkAdvance. *Journal of Labor Economics*, *40*(1), 249–291. https://doi.org/10.1086/717932

Kluve, J. (2010). The effectiveness of European active labor market programs. *Labour Economics*, *17*(6), 904–918. https://doi.org/10.1016/J.LABECO.2010.02.004

Kokko, R.-L., & Koskinen, S. (2013). *Työllisyys, terveys ja hyvinvointi - Paltamon työllistämismallin vaikutusten arviointitutkimus 2009-2013*. Eds. R-L. Kokko., T. Nenonen, T. Martelin, S. Koskinen, 303-326. THL.

Kroft, K., Lange, F., & Notowidigdo, M. J. (2013). Duration Dependence and Labor Market Conditions: Evidence from a Field Experiment*. *The Quarterly Journal of Economics*, *128*(3), 1123–1167. https://doi.org/10.1093/qje/qjt015

Krueger, A. B., Cramer, J., & Cho, D. (2014). Are the long-term unemployed on the margins of the labor market? *Brookings Papers on Economic Activity*, *Spring 2014*, 229–299. https://doi.org/10.1353/eca.2014.0004

Kyyrä, T., & Pesola, H. (2020). The effects of unemployment benefit duration: Evidence from residual benefit duration. *Labour Economics*, *65*, 101859. https://doi.org/10.1016/J.LABECO.2020.101859

Kyyrä, T., Pesola, H., & Rissanen, A. (2017). *Unemployment Insurance in Finland: A Review of Recent Changes and Empirical Evidence on Behavioral Responses*. https://doi.org/10.2139/ssrn.2921065

LaLonde, R. J. (1995). The Promise of Public Sector-Sponsored Training Programs. *Journal of Economic Perspectives*, *9*(2), 149–168. https://doi.org/10.1257/jep.9.2.149

Macdonald, F., Bentham, E., & Malone, J. (2018). Wage theft, underpayment and unpaid work in marketised social care. *The Economic and Labour Relations Review*, *29*(1), 80–96. https://doi.org/10.1177/1035304618758252

Mäkilä, A. (2021). Diagnoosina työtön. *Historiallinen Aikakauskirja*, *119*(2), 238–251.

Marinescu, I., & Skandalis, D. (2021). Unemployment insurance and job search behavior. *Quarterly Journal of Economics*, *136*(2), 887–931. https://doi.org/10.1093/qje/qjaa037

McConnell, C. R., Brue, S. L., & Macpherson, D. A. (2010). *Contemporary Labor Economics* (Ninth). McGraw-Hill/Irwin.

Ministry of Social Affairs and Health. (n.d.). *Työttömyysturva*. Retrieved October 29, 2024, from https://stm.fi/tyottomyysturva

Nekoei, A., & Weber, A. (2017). Does Extending Unemployment Benefits Improve Job Quality? *American Economic Review*, *107*(2), 527–561. https://doi.org/10.1257/aer.20150528

Nordlund, M., & Strandh, M. (2008). Göra Illa För Att Hjälpa Eller Hjälpa till Att Göra Illa? — Arbetslösas Reservationslöner, Jobbchanser Och Återanställningsinkomster / Hurting to Help or Helping to Hurt? —The Reservation Wages of Unemployed, Job Chances and Reemployment Incomes in Sweden. *Sociologisk Forskning*, *45*(3), 32–54.

OECD. (2023). *Evaluation of Active Labour Market Policies in Finland*. https://doi.org/10.1787/115b186e-en

Pekkala, J., Kujala, V., & Kaikkonen, R. (2012). Työttömyyden yhteys psyykkiseen kuormittuneisuuteen ja somaattisiin pitkäaikaissairauksiin Pohjois-Pohjanmaalla. *Sosiaalilääketieteellinen Aikakauslehti*, *49*(3), 220–231.

Pensola, T., & Martikainen, P. (2004). Life-course experiences and mortality by adult social class among young men. *Social Science & Medicine*, *58*(11), 2149–2170. https://doi.org/10.1016/J.SOCSCIMED.2003.08.014

Roșoiu, I., & Roșoiu, A. (2014). The relation between unemployment rate and economic growth in USA. *International Journal of Economic Practices and Theories*, *4*(2), 162–167.

Taskinen, P. (2024, August 13). *EU:n työmarkkinat pääosin nousujohteisia – Suomessa työttömyyden kasvu selvää*. https://stat.fi/tietotrendit/artikkelit/2024/eun-tyomarkkinat-paaosin-nousujohteisia-suomessa-tyottomyyden-kasvu-selvaa

Tcherneva, P. R. (2020). *The case for a job guarantee*. Polity Press.

Tilastokeskus. (n.d.). *Työtön*. Retrieved October 14, 2024, from https://stat.fi/meta/kas/tyoton.html

Tilastokeskus. (2024, March 26). *Työllisten ja työttömien määrä kasvoi helmikuussa 2024 edellisvuoteen verrattuna*. https://stat.fi/julkaisu/clm-hqnhxn0meq0bvxultmarty

Watts, M. J., & Mitchell, W. F. (2000). The Costs of Unemployment in Australia. *The Economic and Labour Relations Review*, *11*(2), 180–197. https://doi.org/10.1177/103530460001100203

Wray, L. R., Dantas, F., Fullwiler, S., Tcherneva, P. R., & Kelton, S. A. (2018). *Public service employment: A path to full employment. Research Project Report*. Annandale-on-Hudson, NY: Levy Economics Institute of Bard College, April