AALBORG UNIVERSITY

Master Thesis

Unemployment and neoliberal policies in Estonia: success or failure?

Analysis of macroeconomic and labour market policies

by

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Aalborg – Denmark

June, 2012

Abstract

Estonia, a former Baltic Tiger and among the ten most liberal economies in the world, has been struggling with high rates of unemployment for over the past twenty years. By using a Classical Theory of Unemployment and its complementary macroeconomic principles, this thesis aims to prove a success of neoliberal macroeconomic and labour market policies implemented by the Estonian government to reach labour market equilibrium.

Acknowledgements

Dedicated to my dear mum and dad….

Special thanks to my university supervisor Zank Wolfgang, Maket Tiits, the Chairman of the Board of the Institute of Baltic Studies and Heli Sepping, a civil servant at the Ministry of Social Affairs in Estonia for inspiring and assisting me during the research of this paper.

Additional thanks to Nina Lizunova, a legal English language translator for proofreading my work, and Anastassija Tschajkovskaya for her help and support.

Kristina Presis

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Introduction

Since the collapse of the Soviet Union in 1991, unemployment has been one of the major social problems in Estonia. From an unemployment rate of one percent in 1990, by 2000 the unemployment rate reached fourteen percent, and after a promising recovery hit again at almost twenty percent in 2010 (Eurostat, 2012).

In late 90s Estonian government introduced the most free market policies among post-Soviet countries. With the lowest national debt, fastest growing gross domestic product (GDP) and strongest budget position, Estonia's nevertheless became a leader in increase of unemployment rate which was registered the third highest in the European Union in 2010 after Latvia and Spain (Estonian Investment and Trade Agency, 2012). The unemployment rate in Estonia was last reported at 11.5 percent in the first quarter of 2012 (Statistics Estonia, 2012).

Despite the visible signs of relatively fast recovery, high unemployment rate still remains one of the most worrying concerns for Estonian policy makers. Continuous high unemployment creates huge costs for individuals and for the economy as a whole such as putting a pressure on governmental finances through higher benefit payments and failing revenue from income taxes or value added taxes (VAT). Additionally, it can decrease consumer confidence and spending which might have a negative effect on the development of the domestic market and demand. Social costs can also lead to social deprivation and in fact cause the rise of crime, divorce rates, worsening of health and life expectancy. Not surprisingly the unemployment rate is often used as an important indicator of the economic health and political stability (Hinnosaar, 2004).

The current paper aims to look at the overall macroeconomic and labour market policy course taken by the Estonian government in order to regulate the labour market and tackle unemployment. An applied classical model of labour market equilibrium is used for this purpose. The focus of this model is to describe labour supply and demand, wage formation, taking into account the relevant market institution policies such as taxation, minimum wages and benefits. Say's Law, the Quantity Theory of Money and NAIRU concept would add to the explaining the need to control inflation, stimulate growth, industry innovation and restrict the role of government to regulate the market.

The contribution of the current paper is that it applies a theoretical neoliberal macroeconomic and labour market model into a practical case of Estonia in order to test whether these policies are as universal and as successful as it has been widely praised in the mainstream academic literature and practice.

Methodology

Motivation

This thesis is going to analyze macroeconomic performance and labour market policies in Estonia in order to explain its persisting high rate of unemployment from 1991 till the present

time. Following the EU enlargement programme in 1998 Estonia has introduced one of the most liberal free market policies in comparison to other ten Central and Eastern European states (Eamets, 2011). Despite all attempts to follow a classical neoliberal model of economic growth and development recommended by the World Bank, Estonia nevertheless remains the country with one of the highest rate of unemployment in the EU (Eurostat, 2010).

Objectives

The main research purpose of this thesis is to discover the underlying reasons of the persisting high rate of unemployment in Estonia with the emphasis on the macroeconomic and labour market policies.

The main hypothesis is the classical economists' assumption which states that if a free-functioning economy was left to itself it would naturally move towards a state of full employment equilibrium (Hahn, 1982).

The main research questions concerning this research are as follows:

- How a sudden growth of unemployment in Estonia after the collapse of the Soviet Union can be explained?
- What macroeconomic and labour policy course did Estonian government take to tackle the growing unemployment since 1991?
- What types of unemployment are prevailing in Estonia?
- What is the role of the state to deal with unemployment issues and how it evolved over time?
- What are the main challenges Estonia is facing to tackle unemployment?
- What are the labour market measures Estonian government took to combat unemployment and to what extent are they considered to be effective?

Structure of the thesis

The thesis consists of theoretical, empirical and analytical complementary blocks. The theoretical part creates an overall perspective which frames the analytical conduct of the paper. In order to assess and measure the success of the neoliberal policies that Estonia was implementing since it gained independence in 1991, the classical liberal model of development was taken as a basis of the analysis. The first "Big Bang versus Gradualism" theory aims to introduce the reader the pace and the sequence of the structural reforms Estonian government was introducing to shift from the socialist planned to the free market economy during the transition period. The following classical theories of unemployment, the correlation between wages, prices and inflation and the concept of NAIRU tend to explain Estonian policy-makers'

course towards economic growth and development for the next twenty years. The theories focus on explaining the behavior of markets, the role of the state and the impact of both these factors on the labour market and the unemployment trends.

The second part of the paper aims to present overall macroeconomic and labour policy characteristics of Estonian development process from the beginning of the transition period till present day. The historical timeline embraces two timelines: before and after millennium as it symbolizes the end of the transition period and the beginning of the integration process into the EU and two highest peaks of unemployment: during the transition period in 90s and during the global recession in 2008. According to the European Central Bank (2003) consisting unemployment in Estonia has been a consequence of the rapid process of structural change. This assumption underlines the importance of looking at the transition period and the impact it had on further development of Estonian labour market. The overview of Estonian macroeconomic environment and labour market policies will provide a reader with a solid factual base for the further analytical research and assessment of the success of neoliberal policies towards tackling unemployment. This part is going to be rather descriptive than analytical and will briefly cover four major aspects of transitional and integrative changes in Estonia:

1) microeconomic factors such as the creation of markets and the process of privatization

2) the creation of the institutions and policies of the macroeconomy

3) the creation of new arrangements for the conduct of international trade

4) the safety net or "free services" that includes education, pension and unemployment benefits.

Finally, the analytical part is going to serve as a synthesis of two previous theoretical and empirical blocks which is expected to conclude whether neoliberal full employment equilibrium policies on the labour market in Estonia during last twenty years had a positive impact towards combating unemployment. The analysis will aim to evaluate the actions taken by the Estonian government in order to reduce the rate of unemployment and examine to what extent these actions could be considered effective.

Approach

In order to increase the validity and reliability of the analysis, the conduct of this research is going to be equally based on qualitative and quantitative method. Both techniques are believed to be important as they comprise the factual and the theoretical base for the final analysis of the thesis paper. The qualitative approach is mainly applied in the theoretical framework as it focuses more on understanding and explaining the major principles of the Classical School of economics. The quantitative approach is also widely present in the paper. This approach is used to analyze the empirical data of the macroeconomic performance in Estonia and give the reader a practical tool to assess the economic side of the policy outcomes. This method was mainly used to interpret statistical data and other economic indicators which are expected to serve as a reliable tool to support the theoretical arguments in the analytical piece of the paper.

The ability of the researcher to speak various languages including Estonian and personal experience of living in Estonia during the last twenty years contributed to the performance of a more profound and objective analysis, especially regarding the socio-economic impact of the transitional policies on the economic growth and development. The personal knowledge of the situation in the country helped to better understand the scope of the structural changes in Estonia which makes the research of this paper more critical and less bias from the official neoliberal standpoint currently dominating the International Community.

Literature

First two parts of the thesis are going to be primarily descriptive as it aims to express already existing knowledge and data. The empirical research is going to be mainly based on the primary sources such as numerical raw data taken from official statistical offices such as Eurostat, the World Bank Reports and the Organization for Economic Cooperation and Development (OECD) Annual Outlooks. These references however were mainly applicable to conduct a numeric analysis of the economic performance and unemployment tendencies in Estonia. The theoretical part and the analysis were essentially retrieved from the secondary sources such as books, academic journals, electronic library sources and online news articles. Due to an economic nature of the analysis, the author's choice was predominantly determined by the works written by respectful and well-known liberal economists and academics such as Irving Fisher (1911), Milton Friedman (1968) and Jeffrey Sachs (1990).

Finally, the data present in this project paper was exclusively taken from the official source databases. This is considered to be of a great importance as it minimizes the risk of falsification and bias. Moreover it represents the official posture of the political leaders and governmental institutions. Because the topic of this paper is relatively new and has not been widely discussed inside the academic circles, the author does not make any precise conclusions and therefore leaves the reader space for further discussion, research and analysis.

Limitations

Unemployment rate versus Inactivity rate

Although this project paper is going to focus on the activities and characteristics of people in the labour force, it is essential to point out the existing difference between unemployment and inactivity rates[1]. While unemployment rate includes persons registered in the labour office and actively looking for a job up to a maximum of six months, inactivity rate represents individuals once surpassed this timeframe. More precisely, the inactivity group does not belong to neither employed nor unemployed group and that is not actively seeking for a job. There are many

[1] **Inactivity rate**- proportion of the population that is not in the labour force. When added together, the inactivity rate and the labour force participation rate will sum to 100 percent (OECD, 2002).

reasons why some persons decide not to participate in the labour force. The part of this group can consist of people who are in education, looking after family, retired, sick or disabled. It, however, also can be people who became discouraged to find a job due to the poor labour market opportunities (Eurostat, 2011). Therefore it is of a great importance to note that the unemployment rate can be actually higher than presented, as it excludes the "long-term" unemployed who have been unable and therefore discouraged to look for work, those who are self-employed, people who got retired before the official retirement age but would still like to continue to work, the disabled people who are not possessing full health but still wish to work in occupation suitable for their medical conditions and finally part-time workers who would like to work full-time (Maclowski, 2010). It is recognized that the measures of employment or unemployment may be "too low" or "too high". In some countries, the availability of unemployment benefits can influence statistics since some of them give an incentive to register and stay unemployed. This is not the case for Estonia. On the contrary, during the early stages of development of the labour market the employment offices were highly ineffective and disorganized, so many people did not have incentives to get registered and therefore preferred to search for jobs through personal contacts and newspaper advertisements. It means that the unemployment rate might actually not reflect the real picture and there was in fact more people unemployed or in some cases underemployed (Arro, 2001).

Why Unemployment rate?

There has been a lot of discussion present in the academic literature about the best measurement methods of unemployment. Due to the above mentioned unemployment rate measurement deficiencies, some labour market economists including a well-known respectful American non-profit research organization National Bureau of Economic Research (NBER) prefer to look at alternative economic statistics in order to evaluate situation on the labour market. Among them is a participation rate[2], a raw number (not a percentage) of people seeking work, total number of full-time jobs in an economy, or the total number of hours worked in a month per person compared to the total number of hours worked in a month a person would prefer to work. Despite the number of alternative ways to measure unemployment, this thesis paper is going to take a classical unemployment rate as a fundamental indicator for its research and analysis. Due to the poor statistical data available on the Estonian labour market, especially in the early years of the transition period, it has been decided to stick to a traditional indicator of unemployment as it often was the only indicator available. Moreover, the lack of statistical and analytical data exceptionally devoted to Estonia and its labour market development was also considered as another obstacle for the profound analysis. Estonia joined OECD only in 2010, therefore the previous information available on the labour market was mainly taken from Estonian Labour Force Survey which presented little information on some indicators especially in the early 90s (Eurofound, 2008).

[2] **Participation rate** - ratio for the labour force to the working age population, expressed in percentages (OECD, 2006).

Theoretical Framework

What is Unemployment?

The most common definition of unemployment is the inability of a person, who is willing and able to work, to obtain a job (Black, 2002).

Measuring Unemployment

In most countries statistics on unemployment are collected and analyzed by the government labour offices (Encyclopedia Britannica, Updated 2012). The most frequently measurement of unemployment is the unemployment rate expressed as a percentage. This is the number of unemployed persons divided by the total number of people in the labour force (i.e. employees and unemployed).

$$\text{Unemployment rate} = \frac{\text{Unemployed workers}}{\text{Total labour force}}$$

Many different variations of the unemployment exist which define who is an "unemployed person" and who is the "labour force". The two most common official statistical bureaus, which measure the condition and extent of joblessness within a national economy, are Bureau of Labour Statistics (ILO) traditionally used in the United States and the Statistical Office of the European Communities (Eurostat), which was created in 2000 to calculate "standardized" unemployment rates for member states in the European Union. Eurostat defines unemployed as those persons aged fifteen to seventy-four who are not working, have searched for work in the last four weeks, and ready to start work within two weeks, which differs from ILO standards. Eurostat conducts the European Union Labour Force Survey (EU-LFS) every three months based on the record of each member state, as well as their monthly calculations provided by national surveys and registers from their employment offices (European Commission, 2012).

Types of Unemployment

Unemployment can take different forms and has been divided into various categories, corresponding to different causes, which in turn do not operate independently but rather interact with each other.

There are many types and subtypes of unemployment that exist in the economics literature but the most commonly recognized are frictional, structural and cyclical.

Frictional Unemployment

Frictional unemployment is a "search unemployment" when workers are unemployed while looking for a suitable job. It usually happens because either employers lay off workers or workers quit themselves as their individual characteristics do not fit the particular characteristics of the job as well as employers' personal taste or the employee's lack of work effort. In this case there is enough quantity of unemployed people and open vacancies to match them, but the process of connecting them is slow and inadequate. Sometimes, however, it can be a part of a management strategy such as in fast-food restaurants and chain stores where a rapid turnover of employees is a usual phenomenon. Thus, frictional unemployment is created "on purpose" in these sectors. One of the most typical types of frictional unemployment is "seasonal unemployment" when an occupation is not in demand at certain seasons. Examples include workers employed at the ski resorts during winter or those employed at summer camps, swimming pools, etc. during summer time (Lozes & Murray, 1995).

Structural Unemployment

Structural unemployment occurs when there is a mismatch between the skills, experience, education and geographical location of unemployed workers and unfilled vacancies. As in the case of frictional unemployment even if there is an equal number of vacancies and persons (individuals) seeking employment, the unemployed people lack the skills needed for the jobs available or simply these people are located in the wrong part of the world/country which is often also called a *regional unemployment*. This type of unemployment is usually a result of sectoral shifts and change in patterns of market demand, where employment in some sectors falls while employment in other sectors rises. Structural employment is hard to separate empirically from frictional employment except the fact that it usually lasts much longer. One possible example could be a problem related to an excess labour supply of economists in rich countries and a lack of nurses. Thus, economists cannot easily become nurses as special training, consequently time and their personal willingness to change a profession is required (Cleveland, 2006). Ones of the most common types of structural unemployment are technological and transitional. The first usually occurs due to the major change in the way the economy is organized, for instance when there has been a transitional shift from central planning to market economy. In this situation it is likely that managers and qualified and innovative workers will be needed to set up new systems and production and less low skilled workers will be needed to operate them. As a result, the low skilled workers are in the most vulnerable position in the transition period. It can consequently lead to a technological unemployment which is caused by the replacement of workers by machines or other advanced technology. This, however, is not the only case for the transition economy but a concern for people all over the world (Black, 2002).

Cyclical Unemployment

Cyclical employment (also called situational or demand deficient unemployment) becomes a result of macroeconomic fluctuations and arises during the recession phase of business cycle which can autonomously disappear during the next economic boom. Cyclical unemployment as a rule occurs when Gross Domestic Product (GDP) is not as high as potential output because of the drop in the aggregate demand, possibly due to pessimistic business expectations which discourages private fixed investment spending. Governmental austerity programmes, high taxes, underconsumption and/or trade imbalance may also lead to this result. Hence, unlike in the case of frictional and structural unemployment, cyclical unemployment occurs when the number of people seeking employment exceeds the number of job vacancies. While some amount of frictional unemployment seems inevitable and sometimes even useful and structural unemployment affects only some sectors of the economy, cyclical unemployment can provoke a spill-over effect broadly throughout the whole economy and cause significant economic hardship to all classes of the society. Consequently, it seems that preventing or minimizing the scope of cyclical unemployment should be on a priority list of economic policies of the states (The New World Encyclopedia, 2008).

Voluntary/Involuntary Unemployment

Voluntary unemployment is often being a result of an individual's personal choice caused by a rejection of low wage jobs or unfavorable working conditions. The best example is *frictional unemployment* as it reflects individual search behavior and preferences.

Involuntary unemployment by contrast happens against the individual's will and is caused by poor socio-economic environment in which individuals operate. Most of the time it includes workers fired due to an economic recession, industrial decline, company bankruptcy or organizational restriction. Thus, *cyclical* and *structural unemployment* are involuntary by nature.

The difference between two definitions of unemployment is however hard to draw as it can be argued that sometimes the existence of *structural unemployment* may reflect choices made by the employed in the past. The most suitable example of involuntary employment is the situation when there are job vacancies available but their number is smaller in comparison to the number of people looking for a job, even when the wages are allowed to adjust. This is usually a clear case of *cyclical unemployment* when macroeconomic forces have an impact on (un)employment tendencies on the micro level (Velupillai, 2004). Neoliberal economists however reject the existence of the involuntary employment explaining it by the failure of prices and wages to adjust freely. The more detailed discussion will follow below.

Transition: Bing Bang versus Gradualism

When the Soviet Union collapsed in 1991 Estonia entered the era of transition which led to a replacement of the administrative command economy by the market-oriented one. Due to the absence of the previous experience there was little theoretical or practical knowledge on the transition process to rely upon. Therefore, the conceptions about transition have evolved over time, with considerable variations depending on the case study. During the early years of transition a lot of emphasis was put on the differentiation of sequencing and speed, which later determined the initial apparent dichotomy between two economic schools of transition, so-called "Big-bang" and "Gradualist" (Gregory & Stuart, 2001, p. 253).

On one hand economists argued on a radical and comprehensive economic programme in which macroeconomic stabilization, privatization, the liberalization of domestic trade and prices, current account convertibility and a creation of a social safety net are simultaneously implemented with a fundamental institutional restructuring. Stability and credibility are the central positive effects believed to be achieved through radical policy implementation. According to Lipton and Sachs (1990) partial reforms would only disorganize and hamper the economy.

One the other hand, a more gradual approach has been labeled to favor a spread of changes over an expanded period of time. However, it is not necessarily the case. The major importance was put on the appropriate sequencing of the reforms and it has been pointed out the costs that could arise from reforms carried out in the wrong order (Roland, 1997).

In the early 1990s, the Washington Consensus revealed its broadly shared view on transition policies held by international institutions and university advisors such as the International Monetary Fund (IMF), the World Bank and Jeffrey Sachs, the director at Harvard University for International Development. The table 1 below represents major reform policies and the timing of implementation to constitute a "standard" reform recipe for crisis-ridden countries represented by the Washington Consensus.

Table 1
Washington Consensus: Reform Policies and Timing of Implementation

Policy Type	1–2 yrs	2–5 yrs	5+ yrs
Macroeconomic stabilization	implementation	continuation	continuation
Price and market reform	implementation	continuation	continuation
Trade liberalization	implementation	continuation	continuation
Labor market reform	preparation	implementation	continuation
Financial reform	preparation	implementation	continuation
Small privatization	implementation	implementation	continuation
Private sector development	implementation	implementation	continuation
Large privatization and governance	preparation	implementation	continuation
Legal: tax, property rights, commercial codex, etc.	implementation	continuation	continuation
Institutional reform (administration, regulation)	implementation	implementation	implementation
Unemployment insurance	implementation	continuation	continuation

Source: Adapted from Stanley Fischer and Alan Gelb, "The Process of Socialist Economic Transformation," *Journal of Economic Perspectives* 5, no. 4 (Fall 1991).

Although the Washington Consensus was never formally adopted in explicit terms, it presents the following points of policy advice.

In order to recover and resume economic growth, stability of the currency is needed. Therefore the first task of the government of the country in transition should be a reduction of inflation to rates consistent with a recommencement of the economic growth. At the initial shock of liberalizing prices caused by the excessive printing of money to finance budget deficits, it is strongly recommended to follow a strict fiscal policy to lower fiscal budgets. The second task is to rapidly privatize state-owned enterprises in order to get rid of the unremunerative inefficient production and avoid budget constraints. A mass privatization would also create a lobby for private companies to prevent a communist comeback and promote a rational economic decision making. The following step is a control over monetary and fiscal discipline meaning establishing a fixed exchange rate of the national currency. The fixed exchange rate will prevent the state from printing out too much money or running too large deficits because the outcomes of these actions would be a demise of the value of the exchange rate. Lastly, transition process comprises much more aspects than the ones mentioned above such as reforms in corporate governance, the creation of pricing institutions and capital markets and introduction of a new safety net. The founders of Washington Consensus did not neglect the fact that these steps were necessary, but they supposed that macroeconomic stability and stabilization would automatically bring changes in other areas. The general argument was that market institutions could thrive only when macroeconomic stability had been achieved (Gregory & Stuart, 2001, p. 265).

Talking about the speed of reforms, there has been five brief major arguments in favor of the Shock Theory (or the Big-Bang). First, regarding the privatization, a big bang approach offers a critical scale for privatized sector in the economy to increase the efficiency and profitability of privatized enterprises. Second, radical approach is believed to increase the credibility of the reforms. Third, due to a high speed of reforms, a big bang approach does not give the time to opponents to organize themselves to resist the changes. Fourth, in the context of price reforms, a big bang approach would avoid an undesirable intemporal speculation (goods hoarding) in comparison to gradual approach. Finally, a big bang approach tends to bring positive changes faster (Lenger, 2008, p.5).

Gradualist advocates on the contrary argued that in order to achieve a macroeconomic stability and growth the market institutions have to be founded first. They also argue that it would gain more political credibility. In addition, a slower pace of introducing reforms would give policy – makers more measures towards experimenting and adjusting new reforms taking into account the particularities of the country. Finally, a coherent implementation of reforms would avoid excessive costs as for the government budget as well as for the living standards of the population, especially in the beginning of the transition process (Wei, 2008, pp. 1235-1237).

Although ‘Bing Bang versus Gradualism’ Theory has been criticized for being over simplistic, this model nevertheless allows two possible interpretations of governmental action course during the transition period. This debase is based on different approaches regarding the speed and sequencing of reforms. The government may be reform-minded committed to radical changes

and quick actions or on the contrary, it may be a social planning government facing an optimal decision making problems when the outcome is uncertain (Eamets, 2001, pp. 19-22).

As the topic of this thesis is going to cover social policies, mainly labour market policies and unemployment, it is important to note the fundamental changes in the social contract between the state and households the country in transition has to go through. During the Soviet times, the "benefits package", whether it was child or medical care, retirement benefits, graduate school or higher education, was provided by the state, usually through the state-enterprise employer. Hence, the question is how the safety net would be handled during transition?

It is evident that with the demise of the role of the state, the social contract and benefits traditionally provided by the state would have to shrink. The major challenge was to change the package that existed under the older order and to find other finances to create a new one. The second major difficulty was to deal with the new nature of demands. For instance, while medial and retirement requirements remain, a new set of demands such as unemployment, training and other benefits will emerge. Therefore the question arises how these demands are met under transition?

There are three essential aspects of the safety net that have to be under the focus. Firstly, new needs have to be identified and a methodological framework established to measure it. For example, the retirement age and all related requirements including medical services have to be established. A lot of attention also has to be focused on the composition and level of income, the meaning and measurement of poverty, including both the incidence and the depth of poverty. Secondly, it is vital to develop the infrastructure to deliver social services. Although existing institutions could still serve to some extent, the decision-making arrangements of the old era have to be changed. Thirdly, new sources of funding had to be established. Finally, the system of benefits had to be changed from one which was available to all citizens to the one which is exclusively available to the ones in need. Therefore a mean-testing system had to be created in which recipients of welfare benefits must demonstrate a need for the social services and the lack of sufficient income. This system requires a reliable reporting of income which is expected to be largely absent during the chaotic years of the beginning of the transition period. Furthermore, given the fact that most income data will be collected for the purpose of levying income taxes, statistical authorities will find it complicated to obtain reliable figures on enterprise profits and on small-scale entrepreneurial incomes (Gregory & Stuart, 2001, p. 264).

Theories of Unemployment

There are three mainstream economic theories that consider the causes of unemployment: Classical/Neoclassical, Keynesian and Marxian. While the Marxian school blames the overall exploitative nature of capitalism which aims to keep "the army of the unemployed people" to be able to maintain work discipline in jobs, keep wages low and protect business profitability, Classical and Keynesian economists mainly focus on the full-employment disequilibrium phenomenon and the role of the state and the markets in the economy. The Keynesians believe that unemployment emerges as a consequence of the insufficient effective demand for goods and services in the economy to provide jobs for all the workers available such as in the case of *cyclical unemployment*. Others point to structural inefficiencies that could prevail in the labour markets in the form of *structural unemployment.* The Classical theorists, however, tend to reject these explanations and focus their criticism on the excessive intervention of the state into the economy by imposing different types of regulations such as minimum wage laws and taxes which discourage the businesses to hire more workers. They believe that the primary reason for unemployment is when real wages are too high relative to productivity for it to be profitable to employ all the labour force. Yet some of the economists see unemployment as sometimes inevitable as in the case of *frictional unemployment* when a person is driven by a voluntary choice to be unemployed (Artus & Muet, 1997).

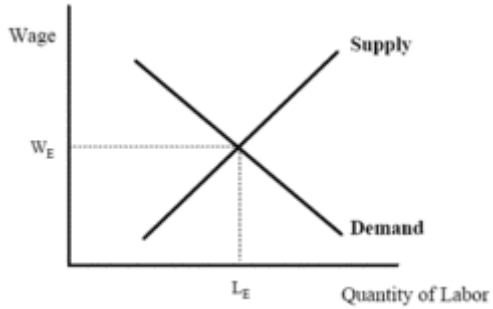
The Classical Theory of Unemployment

Classical theorists mainly look at the role of markets in the economy. They stand for the freedom of markets and a restrictive role of the government to regulate them. In other words they believe that state should ensure the freedom of markets and only use some exceptional policies to smooth the markets' imperfections such as controlling the inflation rate. They assume that if the economy was left to itself, it would tend to self-adjust and thus reach full employment equilibrium (Toporowski, 2005).

According to the Classical Theory one of the main causes of unemployment in a free market economy is the fact that the supply and demand model is not really applied to the price to be paid for employing people. In other words, in the *classical* unemployment the number of job seekers exceeds the number of vacancies available. However, the problem is not the failure of the aggregate demand but real wages that are higher than the market equilibrium wage. The classical theorists believe that the government regulations such as the introduction of the minimum wage can put off the employers to hire all of the available workers because the cost would exceed the marginal product of labour. Therefore, they suggest that this type of unemployment could be reduced by making the wages more flexible and dynamic. It is suggested that state measures such as abolishing minimum wages or employee protection could highly contribute to that, so the labour market would be similar to a financial market. The current problem however is that in the

situations of falling demand for products and services the wages for all employees are not automatically reduced by the necessary percentage to make business viable. Hence, the employers have to lay off workers in order to maintain their business. Other classical economists suggest that it is the market that determines the wages based on the desirability of the job. The more people are qualified and interested in the job, the lower the wages for that job is going to be offered. Hence, the profitability of the company is not a determining factor whether or not the work is going to bring profit to the employee. They lay off workers because pay reductions would reduce the number of people willing to take this job. With fewer people interested in a particular job, the employees bargaining power would actually rise to stabilize the situation. In the classical framework this sort of unemployment might exist due to the legal interferences restrictions such as labour unions imposed by the government (Bénassy, 2011).

Figure 1: A Supply and Demand Model for Labour.



Source: GDAE

The Classical approach assumes that markets behave as described by the idealized Supply-and –Demand Model. The labour market is seen as a single and static market ruled by a perfect competition, spot transactions and institutions by double-action bidding. In this case "quantity of labour" is not the number of things but rather the number of labour services -for instance the number of persons working full day over a given period of time. "Wage" in this figure is price for each worker per day. Thus, workers supply labour, while employers demand it. It is assumed that every unit of labour service is the same, and every worker in this market will get exactly the same wage. The equilibrium wage in this example is WE and the equilibrium quantity of labour supplied is at IE.

According to the Figure 1. where the market is free to adjust, there is no involuntary unemployment. In other words everyone who is willing to get a job at the going wage gets one. As the proportion of the supply curve to the right of LE demonstrates, there may be people who would offer their labour services on this market if the wage were higher. But, given the currently offered wage rate, these people have consciously made their choice not to participate in the labour market (Bénassy, 2011).

Figure 2: Classical Unemployment

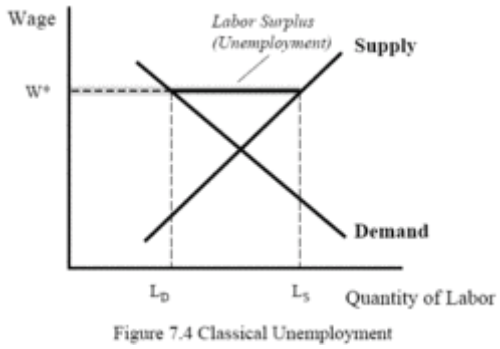


Figure 7.4 Classical Unemployment

Source: GDAE

Within the Classical model, involuntary unemployment can exist if something is restricting the market forces. The presence of a legal minimum wage is often presented as one of the factors. As illustrated in Figure 2, if employers are required to pay a minimum wage of W* that is higher the equilibrium wage, this model suggests that they will hire less workers. At an over high wage W*, employers would only want to hire LD workers. However at that wage, LS people want jobs. There is a situation of surplus. In this situation there are people who want a job at the going wage but cannot find one. Therefore, they are left in substantial unemployment (Bénassy, 2011).

The minimum wage affects only a part of the workforce, usually relatively unskilled and without any work experience. However unemployment tends to affect other layers of the working population too. In this respect classical economists suggest that there are other reasons for unemployment coming from the state interference. They believe that the economy might provide less jobs that the optimal number because the state has put regulations on business that reduce the growth and therefore the demand for labour; labour-related regulations such as safety regulations and restrictions on layoffs and firings together with the labour unions activities cause employers to turn towards labour-saving technologies. Moreover a strong public "safety net" policies such as disability or unemployment insurance tends to reduce employment as people lose incentives to seek work (Pissarides, 2000).

In sum, the major idea of the Classical Theory on Unemployment is to get rid of all sorts of regulations and social programs which are believed to obstruct the smoothly-functioning of the market and therefore leave the market forces perform freely. In fact, it is believed that intervention can be simply destabilizing and inflationary. According to classical economists the key solution to long-term stable economic growth is to ensure free markets with no imperfections through supply-side policies[3] and control the growth of the money supply to keep the inflation low.

[3] **Supply- side policies**- policies that improve the workings of markets. In this way they improve the capacity of the economy to produce and so shift the aggregate supply curve to the right. This should enable the economy to grow in a non-inflationary way. Supply-side policies may include improving education and training, reducing the power of trade unions, removing regulations and so on (Biz/Ed, 2011).

The supply-side policies imply improving education and training to make the work force more occupationally mobile, reducing the level of benefits to increase the incentive for people to work, reducing the taxation to encourage enterprises to hire more workers, introducing policies to make people more geographically mobile such as ending rent controls, simplifying house buying, diminishing the power of trade unions to allow wages to be more flexible, remove any capital controls and remove necessary regulations.

The principal idea of classical economists is that under the condition of wages and prices being flexible a competitive market economy would always operate at full employment. Thus, market forces would generate so, as to ensure that demand for labour was always equal to its supply (Bernard, 1996).

Say's Law

Say's Law or the law of markets is an economic principle of classical economics attributed to a French businessmen and the liberal economist Jean-Baptiste Say (1767-1832). Say was an advocate of laissez-faire economics and was heavily influenced by Adam Smith. Opposed to the ideas of John Maynard Keynes, the main argument of his research and work was that recessions and the associated high level of unemployment were never the consequence of demand failure and/or the lack of money (Kates, 1997). On the contrary, he believed that there cannot be demand without supply. The more goods (for which there is demand) that are produced, the more those goods (supply) can constitute a demand for other goods. Thus, prosperity and full employment should be increased by stimulating production, not consumption. Say believed that creation of more money would simply result in inflation adding that more money demanding the same quantity of goods does not represent an increase in real demand (Say, 1821).

The interpretation of Say's law was a subject of many discussions among Keynesian and classical economists. Oscar Lange (1942) suggested that the central idea of Say's law is a preposition that there can be no general oversupply of commodities because the total supply of all commodities is identically equal to the total demand for all commodities. This means that everything produced will be sold. Thus, Lange concluded that for Say there is no recession or involuntary unemployment as total supply is always equal to total demand. Despite the fact that supply and demand are always balanced by a rapid and powerful equilibrating mechanism, Say, however recognized that the distortions (or as classical economists call it a miscalculation or disproportionality) is still possible (Kates, 1997). He claimed that recessions were due to cumulative errors in the production process. McCulloch made it clear interpreting Say's argument:

> *"Setting apart for the moment the influence of sudden changes in the value of money, and of political regulations, if the market be encumbered and a difficulty be experienced in effecting sales, we may be satisfied that the fault is not in producing too much, but in producing articles which do not suit the tastes of*

> *buyers, or which we cannot ourselves consume…..Say was the first who showed, in a full and satisfactory manner, that effective demand depends upon production" (1965, p.155- 156).*

In other words it means that one made the purchases with the money received from the sale of one's own production. If saleable goods were produced, then an income with which to buy other goods was earned. Such principle would continue indefinitely. Nevertheless once errors were made in the production process, so that what producers had produced did not correspond to what buyer wished to buy, then some goods, in what was referred to as a "partial glut", would remain unsold. Income then would fall below expectations, employment level would be reduced and the demand for other products would decrease. The consequences of partial glut in some parts of the economy could thus spreads out through the economy as a whole and would often end in recession. Thus, Say sees recession as a structural problem which occurred not due to the level of demand, but the structure of demand relative to the structure of supply. When more goods are produced than demanded in certain sectors, suppliers in these sectors lose revenues. This loss of revenue lowers demand for products in other sectors causing a general reduction in output and lowering the demand for labour. This results in what contemporary economists call structural unemployment opposed to Keynesian cyclical unemployment cause by the inadequate aggregate demand.

According to Lange (1970), the central issue of Say's Law was the demand for money. In his book "Say's Law: a Restatement and Criticism" he states that Say's implies a peculiar nature of the demand for money where all individuals taken together are satisfied with the existing amount of money and they never wish to save it. This comment was addressed to Say's statement that "a glut can take place only when there are too many means of production applied to one kind of product and not enough to another" (1803, p. 153). Hence, Say's assumption is that the economic system is always operating up to its full capacity, so that a new activity is always in substitution for, and never in addition to, some other activity. That is to say products are paid with products and money plays an intermediary role for exchanging products and services.

Although the law of markets is considered to be Say's merit, he however was not the originator of the central proposition denying the possibility of demand deficiency. It was the Scottish economist James Mill (1807), the actual founder of Say's Law who was being in the correspondence with William Spence arguing whether supply or demand side was at the heart of the wealth creation process. He stated that a key to wealth growth was spending, not saving. The idea of spending one's way to prosperity was the worst sort of nonsense to Mill as well as for the entire classical school. As Say, Mill denied a failure of the demand side but he did not exclude the possibility of all produced goods not finding a market at cost covering prices. He claimed that market equilibrium would only reach the perfect state if the goods produced were the goods that would be demanded. Recessions were not due to insufficient demand but to the wrong goods and services having been produced. Modern macroeconomics calls it a cause which creates a structural unemployment as opposed to cyclical unemployment proposed by the Keynesian School.

Later on Frank William Taussig (1927) adds on this theory denying the possibility of the overproduction on the supply. He believed that the recession is caused due to the breakdown in the machinery of the exchange such as the lack of confidence on the markets, distortion of credit and the shock of the usual course of production and sale. He did not see people hoarding the money as a problem anymore as financial institutions would balance the flow of money in the cycle supplying loanable funds, adjusting interest rates and investment. Whenever there was a demand of liquidity in the system, the financial institutions could lower the interest rates, encourage giving out loans thus increasing borrowing and spending. Classical economists such as Robert Torrents and John Stuart Mill saw the loss of confidence in business or collapse of credit as a source which would provoke the demand failure for goods. In their view this would lead to demand and supply to move out from the equilibrium state which would consequently end in an economic downturn in the same way as miscalculations in production described by William H. Beveridge.

Such economic losses and unemployment was seen by some economists as an intrinsic property of the capitalist system. Division of labour leads to the situation where one always has to predict what others will be willing to buy, and this might lead to miscalculations. However this theory alone does not explain the existence of cyclical phenomena in the economy because these miscalculations would happen with constant frequency and to such a large scale that thousands of businesses in multiple sectors would simultaneously miscalculate as during an economic bubble.

Economists of the Austrian School, notably Carl Menger, have linked these fluctuations in business cycles to the creation of a central banking system and its monopolized control of fiat money[4] and prime interest rates. According to their view, credit expansion, with central banking altering interest rates beyond what the free market would normally bear leads the market into malinvestment[5]. This malinvestment creates the overheating of the economy, especially in long-term sectors of the economy, such as in the recent United States housing bubble which has been related to the Federal Reserve money/credit expansion of the 2001- 2004. According to laissez-faire economists such as Friedrich von Hayek, massive waves of unemployment, as in economic recessions and depressions, can be traced back to state intervention in the market, which effectively blocks the natural balance in means of production achieved through Say's law (Nobelprize, 1974).

Modern advocates of Say's Law believe that avoidance of gluts and shortages and maintenance of full employment can be reached through automatic price and labour market adjustment: if wages are allowed to fall, employers can afford employing more people which would lead to the full employment. More interventionist economists (such as International Monetary Fund) quite practice this approach also advocating the use of state power to demise the role of labour unions and minimum wage laws. They believe that by making the labour market flexible they can attain

[4] **Fiat money**- Currency that a government has declared to be legal tender, despite the fact that it has no intrinsic value and is not backed by reserves. Historically, most currencies were based on physical commodities such as gold or silver, but fiat money is based solely on faith (Investopedia, 2012).

[5] **Malinvestment**- the action or fact of investing money in an ill-judged or wasteful way (Oxford Dictionary, 2012).

an idealized vision of it assuming that the governmental intervention results to be counterproductive (Frost, 2012).

The Quantity Theory of Money

1. Quantity Theory of Money

The notion of the quantity theory of money (QTM) was discovered by the anti-deflationist economist Henry Thornton in 1802 who assumed that more money equals more inflation and that an increase in money supply does not necessarily mean an increase in economic output (Murrphy, 2009).

The principal idea of QTM is that there is a direct relationship between the quantity of the money in the economy and the level of prices of goods and services sold. In other words, if the amount of money in the economy doubles, prices levels also double, causing inflation[6]. The consumer therefore pays twice for the same amount of good or service.

Another explanation of this theory can be a recognition that money is like any other commodity. It means that increases in its supply decreases its marginal value. Hence, an increase of money supply causes prices to rise, in other words provokes inflation, as they compensate for the decrease in money's marginal value. (Heakal, 2010).

Later, an American economist Irving Fisher (1911) developed an "equation of exchange" or "Fisher identity" based on the tautology that the stock of money multiplied by its rate of turnover (the velocity of circulation) over a particular period of time (MV) equals to the value of transactions during that period (PT).

MV = PT

Each variable denotes the following:

M = Supply of money

V = The velocity of circulation of money. This number represents the number of times that a unit of currency was used as a medium of exchange to buy goods and services in a given period of time. It is normally calculated by dividing the money value of national output by the money supply.

P = The general price level

T = The volume of transactions (or GDP as it is the most widely used measure of the value of the economy's total transactions).

In the basic theory of monetarism expressed using the equation of exchange, Fisher (1922) assumes that the velocity of circulation is determined primarily by the institutional arrangements

[6]**Inflation** - increase in the supply of money in relation to the amount of goods available resulting in a rise in prices (Babylon Online Dictionary, updated in 2012).

of the banking and payment systems. Although these arrangements can sometimes change, Fisher considers this variable as sufficiently stable enough to be treated as constant at any one point in time. According to his principle, the growth of a country's productive capacity depends on production conditions in relations to consumer preferences; the relative values and prices of different goods and services are believed to be determined by these 'real' givens. Fisher sees all these 'real' factors as independent from the stock of money, therefore GDP (or the volume of transactions) was also considered to be constant. Hence, if QTM assumes that V and Y are *constant* in the short term, then changes in the rate of growth of the money supply will equate to changes in the general price level. Because the classical economists assumed that labour was always at full employment, there are no labour resources that could be devoted increasing output.

$$\uparrow M \rightarrow P \uparrow$$

The QTM implies that some interactions are not possible. First, the theory supposes that changes in spending do not cause proportional changes in the money stock. On the contrary, it is money stock which is the cause, not the effect. Secondly, changes in velocity are not dependent on either the price level or the money supply. Changes in the velocity are possible, but due to exogenous causes such as new financial institutions, changes in transportation and etc. Finally, GDP, or the number of transactions, is also determined by external factors such as labour, capital, natural recourses, knowledge and organization.

Essentially, QTM assumptions suggest that the value of money is determined by the amount of money available in the economy. An increase in the money supply causes a decrease of money value because the increase of money supply causes inflation. It therefore will cost more to buy the same amount of goods and services.

Therefore it can be concluded that the advocates of the quantity theory assume that markets naturally aim to be in equilibrium and that any adjustments problems aretoo small to ignore. If the economy is not in the equilibrium and there are unemployed recourses, this means that the prices of those recourses should be dropping. Only when the price in each market has reached a state when the quantity supplied equals quantity demanded the economy will be in equilibrium and there will be no recourses that cannot find employment. In other words, QTM states that in the long run the economy tends to reach a full employment (Dow, 1985).

2. Monetarism

Milton Friedman (1956), the Nobel Prize-winning economist and the advocate of the principle of "equation of exchange" has rebuilt his own version of the theory. According to his assumption, amount of money in the economy multiplied by the velocity of circulation over a given period of time equals the total spending during this time (Velupillai, 2004).

Amount of Money x Velocity of Circulation = Total Spending

Unlike Fisher he modified the assumption of constant velocity, allowing velocity to adjust to changes caused by inflation and the returns obtained from other assets such as equities and bonds. The tendency for velocity of circulation to rise as expected inflation rises reflects people's

incentives to get rid of depreciating currency before its purchasing power corrodes. It means that the growth of money supply will certainly lead to the increase of the velocity of circulation. Controversially, in case of deflation people tend to hold their money longer as they recognize that the same funds will buy more goods and services over time if prices continue to decline. Thus, it is more likely that the velocity of circulation declines.

Friedman also believed that the economy's output level also affects the demand for money. If the output rises, money demand should rise too as increased production generates more employment, more money and as a consequence more spending power. That in turn would put a pressure for prices to rise. If the money supply overpasses the money demand and the economic output, the inflation will occur. The same reversed tendency of deflation will occur if the money supply will be insufficient to follow the money demand and the economic output.

According to the monetarist school, which emphasizes the importance of the money supply as a long-run determinant of prices and GDP, stable prices could be achieved by simply tying the rate of money supply growth to the long-run rate of growth of output. This would keep money demand and money supply in balance as velocity is stable (Burdekin, Richard C. K., Weidenmier M. D, 2001).

Like other mainstream monetarist Friedman believed that a rapid increase of money supply leads to a rapid increase of inflation. In his view, money growth that surpasses the growth of the economic output triggers inflation as there is too much money behind too little production of goods and services. In order to curb inflation money growth has to fall below growth in economic output.

Mainstream monetarists sated that the increase in the money supply does not necessarily lead to any effects on the real economic activity (like spending, employment level or production). Therefore, instead of governments continually adjusting their economic policies (i.e. government spending and taxes), it is more rational to introduce non-inflationary policies (i.e. tight control of money and credit) to help the economy reach an equilibrium state and full employment. The only fiscal policy which needs the government to control is its own borrowing. The key for the monetary policy is to be credible that is why it is important to keep the money issue in the hands of the private independent banks to control the inflation (Stein, 1974).

A Natural Rate of Unemployment Theory

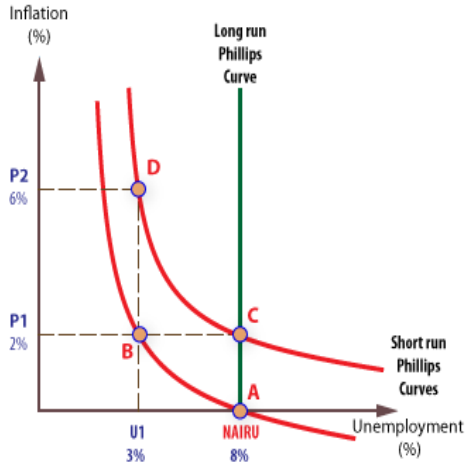
In the 20th century a British economist William Beveridge (1944) attributed an unemployment rate of three percent to a full employment. He defined full employment as where the number of unemployed workers equaled the number of vacancies available. He however preferred the economy kept slightly above the zero percent of unemployment level in order to maximize production. Later on a more theoretical definition of classical full employment is presented by John Black (2002) in the Dictionary of Economics. It states that:

> *'**Full employment** is a situation where the labour market has reached a state of equilibrium, so that those in the active labour force who are willing and able to*

work at going wage rates are able to find work, and the only remaining unemployment is frictional unemployment'.

Hence, full employment does not mean 'zero unemployment', but rather that all the people willing and able to have jobs at the current wage rate. Full employment is the quantity of labour employed when the labour market is in the equilibrium.

Attempting to address a growing unemployment and a growing inflation the 20th century economists have observed a reverse relationship between both tendencies which is clearly illustrated in the Phillips Curve.



Source: economicsonline.co.uk

This graph shows that when the unemployment rate grows, the inflation is low while when the unemployment rate is falling "too low", the inflation accelerated in the absence of wage and price controls. This mechanism made the classical economists suggest that a certain percent of unemployment is not only negative, but actually healthy for the overall state of the economy. Notably, it may help to help to avert runaway inflation, which as discussed above affects almost everyone in the effected economy and has unpredictable serous long-term economic costs.

The concept of the unique "natural rate of unemployment" or "the equilibrium rate of unemployment" was first acknowledged by Abba Lerner with William Fellner in 1950s, and later developed by Edmund Phelps (1968) and Milton Friedman (1968). It must be one of the longest sentences Friedman has ever written, he explained:

> *'**The natural rate of unemployment** is the level which would be ground out by the Walrasian system of general equilibrium equations, provided that there is embedded in them the actual structural characteristics of the labour and commodity markets, including market imperfections, stochastic variability in demands and supplies, the cost of gathering information about job vacancies and labour availabilities, the costs of mobility and so on'.*

According to Friedman, the labour market is a market with a high speed of traffic, with large flows of workers who either lost their jobs or are looking for the ones that better suit their preferences. This by itself justifies a certain rate of voluntary "frictional unemployment".

Often a natural rate of unemployment is associated with NAIRU, a Non-Accelerating Inflation Rate of Unemployment when the real gross domestic product equals potential output. Hence, it is considered to be no unemployment above the level of NAIRU. It is to say there is no cyclical or deficient- demand unemployment. If the unemployment rate stays below NAIRU level for couple of years, it is posited that the inflation will rise if the wages and prices are not controlled. Similarly, the inflation will decelerate if unemployment rate stays below the "natural" level for a long time. The theory suggests that the inflation will stay stable when the unemployment equals the natural rate therefore economists often call NAIRU as an "inflation barrier". Hence, the concept of NAIRU is the lowest rate of unemployment that can be maintained without causing the economy to "overheat" or in other words causing inflation. According to Llaudes (2005) and Gianella (2008) NAIRU can be also influenced by a number of labour market features such as the minimum wage, the tax wage, the unemployment benefit replacement, product market regulations, employment protection legislation (EPL), the efficiency of labour market policies, job and skill matching, and the rate of long-term unemployment (OECD, 2011).

Finally, Friedman believes that instead of trying to reach a zero unemployment, policy- makers should try to keep the prices stable (meaning a low or even a zero inflation rate). If this policy is respected, he suggests that the economy will gravitate to its "natural" rate of unemployment automatically.

If the world was as simple as the figure presented above, the "natural rate of unemployment" and NAIRU would be synonyms. Unemployment rate surpassing NAIRU would be associated with low production and a sluggish economy. Unemployment rate that is lower than NAIRU would mean inflation and higher production. The historical economic observations however demonstrated that NAIRU, if existed at all, can change over time. It happens mostly due to an unpredictable nature of free markets or economic policies (Ball & Mankiw, 2000).

Empirical Data

Overview of macroeconomic environment and labour policies in Estonia from 1991- 2012

Transition period and macroeconomic factors

Before Estonia gained its independence in 1991 it constituted a part of the Soviet economy and was closely linked with production and raw material markets of the former Soviet Union (Eamets, Philips & Annus, 1999). Estonian economy was deeply integrated within the specialization in the Soviet economy, making it strongly dependent on its markets, its supply and demand (Eamets, 2001).

Open unemployment as itself was practically non-existent during that time as the communist labour policies aimed to provide everybody with employment opportunities, and even persecuted the ones who refused to work (Cerami & Vanhuysse, 2009). Thus, the employment structure and the labour demand and supply were not the product of a natural development but rather an artificially shaped structure and policy coming from the economic needs of the Soviet Union (Eamets, Philips & Annus, 1999).

Post communist transition from central planning to a free market system and following political, economic and social reforms led to a drastic change in Estonia's labour market which led to a sharp decline in the demand of labour (Eamets, Philips & Annus, 1999).

The collapse of the Soviet economy and consequently the collapse of a common market had a large impact on the Estonian economy. The separation of markets immediately caused widespread disruptions in trade and financial arrangements, which often led to a shortage of goods and raw materials, and a loss of exports to Russia which constituted more than ninety percent of Estonian trade (Knöbl, Sutt & Zavoiko, 2002).

Economic circumstances became even more dramatic for Estonia when Russia liberalized its prices including prices for energy and raw materials. This led to an immediate hyperinflation in Estonia, at the peak of which, in 1992, the inflation was 1076 percent. (Pre-accession Economic Programme, 2001). As a result, Estonia's terms of trade fell by about twenty percent of GDP meaning an enormous loss of real incomes in comparison with other Central and Eastern transition economies that experienced only three to five percent of their GDP deterioration. (Knöbl, Sutt & Zavoiko, 2002).

Hence, the combination of external shocks and accelerated political and economic reforms immediately led to sharp production losses and pulled the economy into a long transition crisis.

However, from the beginning of the millennium to 2007 Estonian economy experienced the fastest economic growth among the European Union countries with an increase of seven percent

of real GDP per year on average (OECD, 2010, p. 30). The very rapid economic growth in Estonia was mainly fuelled by a massive flow of foreign capital. The record low interest rates in Western Europe and the United States in combination with the EU enlargement process, led to a high flow of foreign investment to the Central and Eastern part of Europe. According to the estimations presented by the Institute of Baltic Studies (2010), in per capita terms Estonia particularly proved to be an attractive location for foreign direct investment. In addition to this there was a significant flow of debt financing mainly coming from the Scandinavian banks, which were fighting for their market shares in the Baltic States. As a consequence, it led to a fast increase of the gross external debt in Estonia. Almost all of the external debt was mounted by the private sector while the public debt was virtually non- existent. In fact, the public sector ran a surplus budget from 2001 to 2007 which amounted to 2.7 percent of GDP (Action Plan for Growth and Jobs, 2008, p. 14). As a result, the inflow of capital, available at record low interest rates together with increased competiveness and foreign demand, generated asset and consumption booms in Estonia which led to a large current account deficit reaching 17.8 percent of GDP (2007). The rise of standard of living and an increase of domestic consumption resulted in a rapid asset and wage inflation. In 2008, consumer prices grew more than ten percent and the annual average growth of gross wages and salaries was 12.6 percent during 2000- 2008, reaching twenty percent in 2007 compared to the previous year. In 2006 nominal growth in wages was 15.8 percent. Real growth in wages reached 10.9 percent. In 2007, gross wages went up by 20.4 percent and real wages by 13 percent. Given the slowdown in economic growth, the growth in productivity only reached 5.6 percent, meaning that wages increased about twice as fast as labour productivity, which has been the case for the last two years (Action Plan for Growth and Jobs, 2008, p. 11). There were also external factors that could provoke a rising inflation such as high fuel prices, but there is also an assumption that the crisis could also be partially triggered by the domestic factors when especially after 2005 wage growth have outpaced significantly the productivity growth in industry. According to OECD Report, unit labour cost (ULC) increased by thirty- seven percent from the period of 2005 till 2008 in Estonia. This rise was significantly sharper than in the Euro area which only experienced a growth of four percent during the same period. Labour and skills shortages, especially in the construction sector were under an unsustainable level that raised its wages much more than its below-average productivity growth justified. The resulting wage inflation spilled over to other sectors (OECD, 2010, p. 36). In 2008, the earlier economic boom turned into a severe recession. Overheating domestic demand and an eroding cost position of exports contributed to a trade deficit of between thirty to forty percent of GDP between 2000 and 2008. Due to the scale of the global economic financial and economic crisis, Estonia's exports have also declined by around twenty- five percent in 2009 compared to the previous year. The gap between wage and productivity levels became even more significant during the recession. According to the report of the Institute of Baltic Studies (2010) it would have been preferable to close the gap between revenues and salaries by increasing the productivity of the businesses. In the exchange rate regime another alternative way would be to cut wages at around twenty to twenty- five percent to keep the profitability for the businesses. However, the hourly wage in Estonia declined very little by 2009 while the enterprises decided to reduce their labour costs by lying off the personnel. This as a result led to a very rapid rise of unemployment (State of the Region Report, 2010, p. 72).

Unemployment trends

Since the collapse of the Soviet Union the unemployment rate rose steadily from less than one percent in 1991 reaching 13.7 percent in 2000 (See Figure 1). In the meantime employment was reduced from 835 000 work force in 1989 to 640 000 work force in 1998 or from 78.5 percent to 65.4 percent (The World Bank Report, 2000).

The number of inactive individuals has also increased. While there was 255 000 inactive individuals of working age in 1989, their number increased to over 330 000 in the second half of the 1990. In sum the labour force in Estonia shrunk from 841 000 in 1989 to 74 000 ten years later, or by fifteen percent. This led to a strong fall of labour force participation, from sixty- nine percent in 1989 to sixty- one percent in 1998 (The World Bank Report, 2000).

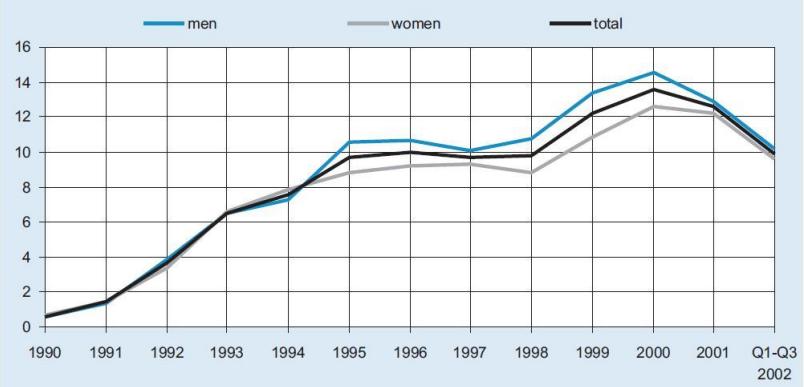


Figure 1. Unemployment rate in Estonia (aged 15–74, %)

Source: the Homepage of the official web-site of Statistical Office of Estonia (SOE) www.stat.ee

Post millennium economic growth prior to the crisis however had a strong positive effect on the labour market. Unemployment fell to a historical minimum of 5.5 percent in 2008, a rate slightly lower than the OECD average of six percent. Labour shortages even have been registered in several regions in Estonia (OECD, 2011). However due to the global financial crisis and collapse of the world trade Estonian GDP fell twenty percent and the unemployment rate sharply increased and reached twenty percent in early 2010, as indicated to be one of the highest unemployment rates in the European Union after Spain, Latvia, Lithuania and Ireland (Rinok truda, p. 31). Simultaneously the number of employed persons decreased by about 100 000 (sixteen percent of employment decline) and the number of employed people increased to 137 000, constituting 19.8 percent of the labour force in merely two years (OECD 2010, 2011).

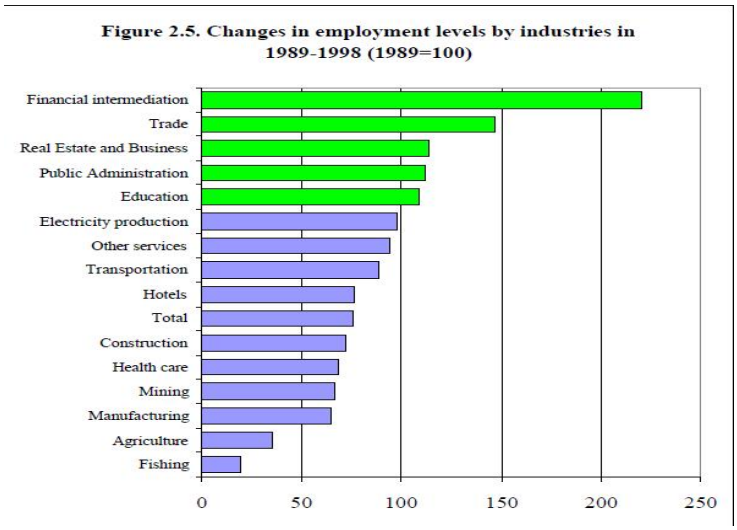
Table 2: Wages and Unemployment in Estonia (aged 15- 64).

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Annual wage of average gross wages %		12.3	11.5	9.4	8.4	10.8	16.5	20.5	13.9	-2.9
Unemployment among aged 15- 74	13.6	12.6	10.3	10.0	9.7	7.9	5.9	4.7	5.5	13.8

Source: Statistics Estonia, Institute of Baltic Studies

Unemployment by sectors

The transition process brought fundamental changes by the composition of employment by sector and by branches. Serious employment losses were experienced in the "old- fashioned" industries such as manufacturing and agriculture. The major rise of unemployment was registered in the agriculture sector causing a decline of employment share by 65.1 percent in 1998 compared with 1989. There has been also an 80.4 percent decline in fishing and 33.3 percent in mining industries. Manufacturing sector was less affected but also went through some decrease of employment by 35.8 percent (See Figure 2.5).



Source: Eamets, 2001

The decrease of primary and secondary sector was mainly due to the fact that the volumes of manufacturing and agricultural production were too big for Estonia's domestic market and were not competitive and credible enough for the exports to the West. Russia, in turn, the biggest

traditional Estonian trade partner established the double customs duties on the Estonian goods in the mid 1990s. In addition, the introduction of Estonian national currency (Kroon) in 1992 together with the crisis of the ruble zone made financial arrangements and trade even more complicated. As a result, the Russian share in foreign trade has since declined from more than eighty percent to ten percent in 2000 (Arro, 2001).

Table 3: Sectoral Employment of total population (15 – 69) by gender (%)

Year	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**
Primary	21.2	21.1	20.4	19.1	16.6	14.6	10.5	9.5	9.3
Secondary	37.1	36.9	36.4	35.6	33.1	32.4	34.3	34.2	33.5
Tertiary	41.7	42.1	43.1	45.3	50.3	52.9	55.2	56.3	57.2

**Source: Estonian Force Survey*

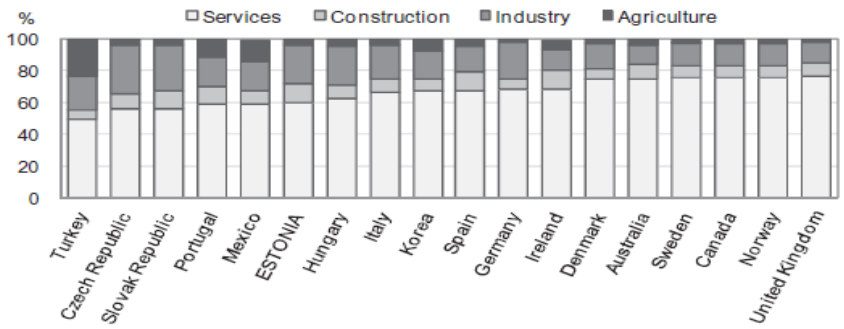
Liberalization of foreign trade and a sharp decline of trade links with Russia stimulated Estonia to re-orient its trade links to the West. In order to be competitive and efficient on the international market Estonia focused on the improvements of the technology, organization and product innovation. The lack of constant pressure from users in the Soviet period has left Estonia far behind its new Western counterparts on the technological side (Arro, 2001). Hence, there has been an increase of employment in the service sector which grew from forty three percent in 1991 to fifty eight percent in 1998. For instance, the biggest growth was estimated in the financial sector where employment rate increased by 120,7 percent in 1998 compared with 1989. Employment in trade was also rapidly growing by 46.5 percent (Eamets, 2001).

Following the tendency where the employment has been falling in agriculture and industry and the net job creation was concentrated in the service sector and construction, the share of total employment in the service industry reached sixty percent in 2008. The investment boom of the late 2000s attracted many firms and workers not only to the construction sector, but also to the party to the higher market segments of finance and business services. Employment in construction almost doubled from seven percent of total employment in 2000 to over twelve percent in 2008, a higher share than any OECD country. Many low- skilled workers have until now been employed in the manufacturing sector, often in the export- oriented firms whose profitability depended on low wages (EHDR, 2008). Estonia's economic structure is also characterized by a lack of industrial and technological innovation. Apart from the highly innovative companies, such as Skype, economic growth in Estonia has been more investment driven than innovation driven (OECD, 2007). Research and development share of GDP in one percent- a half that of the OECD average. Equally, the major part of the private service sector instead of finance and business services remains concentrated in low- skill market segments like catering, trade and transport. Only 3.6 percent of the employees in Estonia have been registered

as high- tech and knowledge intensive, compared to the EU average of 4.4 percent (Eurostat, 2010). Estonia's trade pattern is focused on low- tech production and services with lower shares of high- tech and medium- high- tech exports compared with the average OECD member (OECD, 2009). Eighty percent of Estonian GDP amounts in trade in goods and services with the European Union, mainly Finland and Sweden as trading partners. One third of the exports are services, particularly in transport and tourism, but also telecommunication, construction and financial services. Electrical equipment and machinery contain the largest share of goods exports, usually based on subcontracting between foreign and local companies (OECD, 2010, p. 38).

Eighty percent of lost jobs in 2008 belonged to construction and manufacturing sector. The major part of these jobs is unlikely to appear. It is suggested that despite the possibility of cross-border work in Finland, without retraining, a high proportion of the unemployment will become structural (OECD, 2011).

Figure 1.6. Employment by economic sector in Estonia and selected OECD countries, 2008



Source: OECD Labour Force Surveys and Eurostat.

Unemployment by regions

The reallocation of labour and a demand of new skills required a high mobility of work force and a flexibility of a labour market in Estonia. According to estimations published by the Estonian Ministry of Social Affairs during the period between 1991 and 2000 nearly every second person had to change his/her job and his/her job status (Arro, 2001). A shift towards the service sector and a dramatic loss of jobs in the agricultural and manufacturing sector in rural areas or mono-structural regions caused a *regional unemployment.* Despite a relatively small size of the country and short distances there have been deep regional disparities due to the uneven allocation of new jobs. High unemployment rates mostly hit Southern and North- Eastern parts of Estonia where there has been a large concentration of heavy industry. The situation was even worse in some small cities which had only one or two sources of jobs coming from big former Soviet enterprises. The bankruptcy of those led to a massive lay- off of workers and consequently to a high rate of unemployment (Eamets, Philips & Annus, 1999). By 2001 the rate of unemployment differed nearly three times ranging from 7.7 percent in Hiiumaa to 18.1 percent in Ida-Viru and

20.6 percent in Jõgeva County (Rõõm & Viilmann, 2003). Despite big regional differences in unemployment, the mobility of workers remained modest. According to International Monetary Fund Report (2001), only 1.8- 2.7 percent of the Estonian population moved into a new region since 1995.

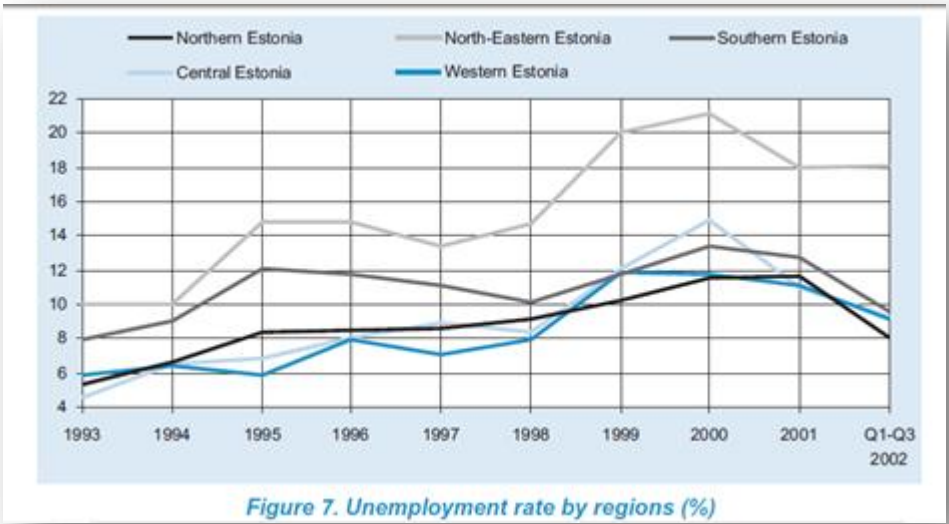


Figure 7. Unemployment rate by regions (%)

Source: Rõõm & Viilmann, 2003

It is suggested that the main reason for the low regional mobility in a big difference of housing is prices of property and housing cost prices (communal services, rent and etc). There was not also a formed real estate market in rural areas or small cities therefore it was hard to sell the property and move to a different region.

Due to the state's privatization programme, there has been a sharp decrease of employment in a state sector which mainly consisted of low- skilled labour. Thanks to a free privatization policy of state enterprises and a creation of a favorable investment environment Estonia became the greatest concentration of private ownership in 1990s. Ninety percent of the economy has been privatized by the end of the millennium. Hence, many new jobs were being created in the private sector. Large- scale privatization was an integral component of Estonian liberal free market policy to attract foreign direct investments (FDI) which made Estonia the most successful country at attracting FDI among other transition post- Soviet countries (Kostecki, Zukrowska & Goralczyk, 2000). According to the United Nations Investment Advisory Report (2011) the major part of FDI inflows came from Estonian Nordic neighbors (Finland, Sweden, Denmark and Norway) and were mainly directed to the financial, real estate and business services sector. A shift from a heavy industrialized economy towards knowledge- based economy, technological change and an increase of share in service sector required extensive retraining and reorientation of labour. The Statistical Office Survey shows that the unemployment was directly linked to the level of education. The highest unemployment rate was registered among the people who had primary or basic education and the lowest rate among those who had a university, master or

doctor degrees (See Figure 4). To retrain peasants and manufacture workers to produce knowledge and provide services required a relatively long period of time. After all, a substantial regional and occupational mismatch of vacancies and unemployed people took form of a long-lasting *structural unemployment* (Rõõn & Viilmann, 2003).

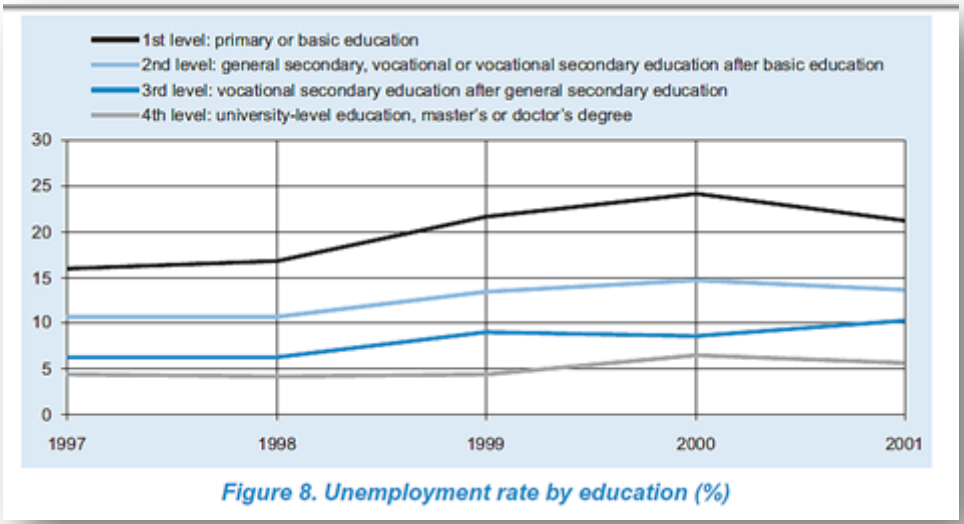


Figure 8. Unemployment rate by education (%)

Source: Rõõm & Viilmann, 2003

Despite a great fall of unemployment after 2000 the persistent large differences of unemployment rates between regions in Estonia, especially North- East lagging behind have remained. According to the table on regional disparities in 2008 presented below, the unemployment rate in Northeastern Estonia is twice as high as the rest of the country in the third quarter of 2010 reaching 25.4 percent (OECD, 2011). As noted in OECD Report in 2005, much of the regional disparities can be explained by differences in employment by sectors and educational background. Regions with higher output shares from high- tech sectors and knowledge- intensive services are mainly concentrated in Tallinn, the Northern region which is characterized by lowest unemployment and highest employment rates. By contrast, the Northeast region has a concentration in low- tech industry and a work force with primarily secondary of vocational education. The persisting high rate of unemployment is also explained by the lack of investments and little private- sector development.

Table 1.3. Regional disparities, 2008

	Population	Unemployment rate (age group 15-74)	Share of employment in tertiary sector	Average monthly gross wages, EEK	At-risk-at-poverty rate (2007)
Northern Estonia	523 277	4.4	68	14 473	11
Central Estonia	140 267	5.7	51	10 738	23
Northeastern Estonia	170 719	10.0	48	10 263	32
Western Estonia	161 078	4.5	57	10 355	24
Southern Estonia	345 594	5.7	60	10 595	23
Total	1 340 935	5.5	61	12 912	20

Source: Statistics Estonia and OECD calculations.

Other factors

Despite a gradual growth of unemployment since the collapse of the Soviet Union Estonia has nevertheless managed to maintain unemployment rate at a relatively low pace in comparison with other CEE countries (Rõõm, 2002, p.5).

The evaluation literature suggests that an easening rate of unemployment has been predominantly caused by the fall of labour participation during the transition period. First of all the employment force has been reduced due to an active net- migration and a demographic change in Estonia. The main reason for population change has been a large number of departures from Estonia simultaneously with the decreasing number of arrivals. Meanwhile the population growth in Estonia has been negative too. The number of deaths has exceeded the number of live births. To some extent the decrease of births can be also associated with the large out-migration.

Table 4: Estonia – population trends 1991- 98 (thousands)

Year	**1989**	**1990**	**1991**	**1993**	**1995**	**1997**	**1998**	**Change 91-98**	
Numbers								**No.**	**%**
Male	731.4	735.1	734.9	713.3	695.9	680.7	679.6	-54.8	-7.5%
Female	834.3	836.6	835.5	813.2	795.7	781.4	777.2	-57.1	-6.8%
TOTALS	1565.7	1571.7	1570.4	1526.5	1491.6	1462.8	1453.8	-111.9	-7.1%
Male	46.7%	46.8%	46.8%	46.7%	45.7%	46.6%	45.5%	-	-
Female	53.3%	53.2%	53.2%	53.3%	53.3%	53.4%	53.5%	-	-

Source: Statistical Office of Estonia (in 1989 population census data)

As result, by 2009 the population has declined by fifteen percent which is expected to decrease even further by 0.1 million by 2050 according to the United Nations projections of 2008. Life expectancy has declined in the transition period and is still seventy- nine years for women and only sixty- seven years for men. Consequently, the fertility rates in the recent past- 1.4 or lower for the past twenty years- the dependency ratio, which relates the number of children and senior persons to the 15 -64- year working- age population, reached the low value of 0.5 (EHCD, 2009).

The international migration balance has continued to be negative with -0.2 percent over the past decade. This data is not exact as many outward flows go unreported but the average age of the emigrants is estimated being thirty- five. Around seventy- two percent are believed to left to Finland, five percent to Russia and other countries, essentially Europe (EHCD, 2009).

Labour Market Institutional Framework

Since the rate of unemployment was almost down to zero under the Soviet command economy, a new regulatory framework for market policies and a network of state employment offices where the unemployed could register, access labour market services and receive unemployment benefits had to be created from a scratch. In order to manage labour demand and supply effectively, felicitate the creation of jobs and reallocate workers to the jobs where they would be mostly productive at, it was agreed to create a necessary institutional framework that would deal with these labour market issues (Eamets, 2001).

The governing labour market institution is the Ministry of Social Affairs (Sotsiaalministeerium[7]). It was formed in 1993 as a result of unification of three ministries: the Ministry of Health, the Ministry of Social Security and the Ministry of Labour. The Ministry of Social Affairs was mainly responsible for elaborating policies in the spheres of employment, health protection and social security (Eamets, Philips & Annus, 1999).

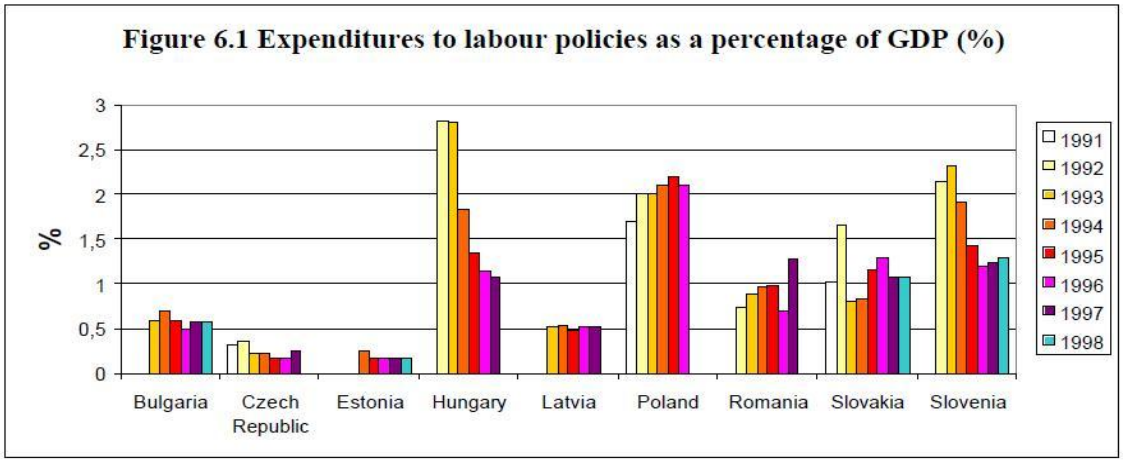
The Estonian Labour Market Board (ELMB), established in 1990, is also an important institutional organ which functions under the jurisdiction of the Ministry of Social Affairs. Its role is more executive as it deals directly with the implementation of active labour policies, registration of the unemployed and the allocation of unemployment benefits. There were fifty offices of ELMB in Estonia in 1999 (Leetmaa & Võrk, 2003).

According to statistical analysis on the public service workload in 1997- 1999 there was a lack of stuff personnel working in labour offices. There were 3 276 labour force allocated to one stuff member. This number is very high and is estimated to be three times more than in the rest of CCE countries. Hence, because of the overload of administrative work, the stuff workers did not really have time to recruit and train new personnel and also failed to advertise their activities to the job seekers and employers. As a result, only sixty- one percent of jobseekers resorted to the state employment offices in 1998. The rest preferred to find jobs through search and vacancy announcement, personal networking and direct contact with employers (Arro, 2001).

[7] Official web- site: http://www.sm.ee/

The relative failure of state employment offices and a low attractiveness of labour market programmes could be a direct consequence of a serious lack of recourses and state financial support. In comparison with other CEE countries, the public expenditure on labour policies was five to ten times less measured as a percentage of GDP (See Figure 6.1 below).

Figure 6.1 Expenditures to labour policies as a percentage of GDP (%)



Source: Eamets and Arro, 2000

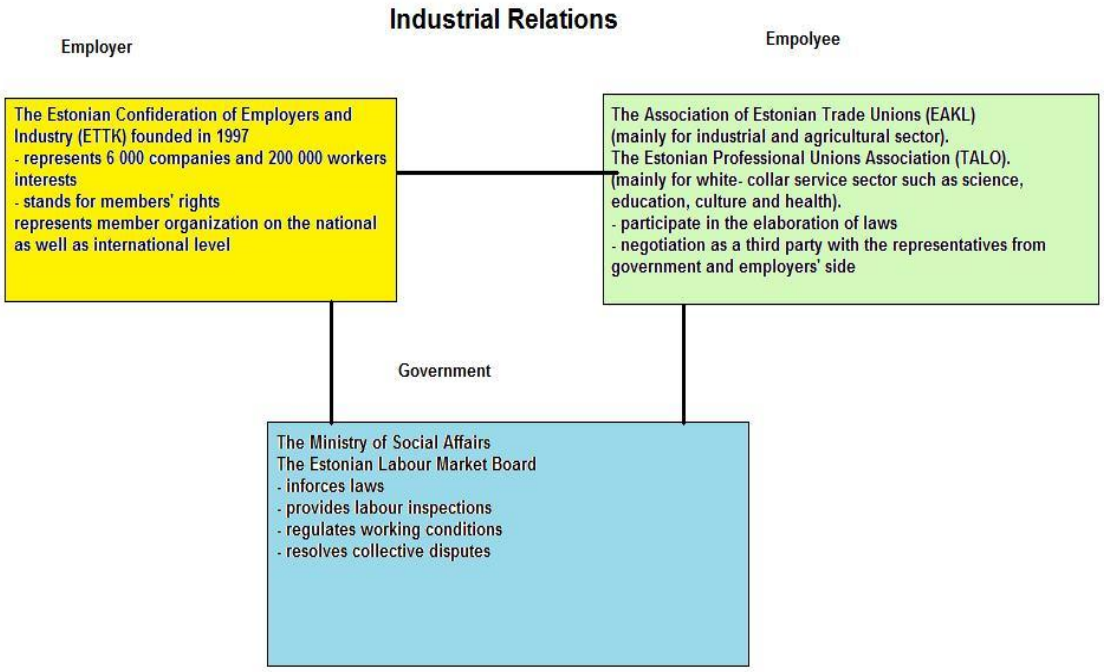
Before the economic downturn in 2008, Estonia's flexible market had performed very well, with rising productivity and a steady growth of employed notably for youth, women and elderly since 2000. Nevertheless the current recession has again exposed the weaknesses of the country's employment services and the social safety net. Inspired by the international debate about the *flexicurity* [8], Estonia drastically reformed its labour market institutions and employment legislation in mid- 2009, a decision that provoked a decade of discussions between the government, trade unions and employer federations. The principal aims were to encourage the reallocation of labour to more productive jobs and improve the social protection of the unemployed. However due to the economic crisis and a pressure to keep fiscal deficit under three percent, the envisaged increase in spending on labour market policy has been largely postponed if not cancelled.

Taking into account of Estonia's recent labour market reforms, the country now comes closer to a Aglo- sacson high- flexibility model (the one that is in the US and New Zealand) than to flexicurity (Denmark and the UK).

[8] **Flexicurity**- a labour market model, first implemented in Denmark by the social democratic Prime Minister PoulNyrup Rasmussen in the 1990s, which combines combination of easy hiring and firing (flexibility for employers) and high benefits for the unemployed (security for the employees) (Eurofound, 2008).

Industrial Relations

In order to have a clear image and understanding of the development of industrial relations in Estonian labour market formed in the transition period the author offers to look at the illustration below.



As it is shown on the scheme labour market in Estonia is managed by the cooperation of three parties: Government, Employee and Employer. In the beginning of the elabouration and restructuralization of the labour market, Estonian government played an active role in legislative, administrative and jurisdiction processes. Trade unions used to be very strong and influential in the Soviet times due to the close collabouration with the government agencies. They were granted an executive power over some labour market policies such as social insurance and a distribution of employment advantages. After the collapse of the Soviet Union however trade unions had to give up their power, decentralize from the Central Soviet Central Organization and create a new national independent central union. As a consequence the role of trade unions has significantly diminished from hundred percent employment membership before 1991 to thirty percent ten years later. One of the strongest arguments for the fall of employees' participation in trade unions is sectorial shift of employment from manufacturing sector (where trade unions were relatively strong) to the service sector (where trade unions used to be quite weak). There is also an aspect of the change of ownership from public to private sector. Trade unions found it difficult to gain recognition especially in small and foreign- owned firms. New liberal market employment strategies, technological change and other aspects are believed to be added as a negative effect too (Eamets, 2001).

Along with the demising role of the government and trade unions' policies, employers' confederation seems to be on the contrary gaining influence in the negotiation process over labour market policies.

There have been some additional changes in the institutional framework in the labour market. In 2002 Estonia was the only CEE country that introduced a complex unemployment insurance system. The main objective of creating the Unemployment Insurance Fund is to provide unemployed a financial support that would consist of saving previously paid by the employee and the employer. In 2002 the contribution rate for the employee was one percent of his/her monthly ratings and 0.5 percent on gross payroll for employers. The contribution rate in a subject to change proposed by the Unemployment Insurance Board to the Government. Due to the economic rising and a rising number of people who lost their jobs, the contribution rate for the employee got raised to 2.8 percent, and for employer to 1.4 percent (European Comission, 2011).

In 30 April 2009 the Estonian Labour Market Board that was responsible for the registration of the unemployed, reallocation of benefits and the provision of the labour market services delegated its authority to the Estonian Unemployment Fund (Töötuskassa) which previously only dealt with administrative tasks. The highest body of the Fund is the Supervisory Board composed of six members. According to the Unemployment Insurance Act, the Government of the Republic of Estonia appoints two members of the Supervisory Board. The Confederation of Estonian Trade Unions and the Estonian Employees' Unions' Confederation both appoint one member and the Estonian Employers' Confederation appoints two members. A three-member Management Board is responsible for managing the operations of the Fund[9].

One of the most significant issues concerning the labour relationship became the introduction of the Employment Contract Act. The new law follows the principle of flexicurity (Estonian Labour Market Report, 2009).

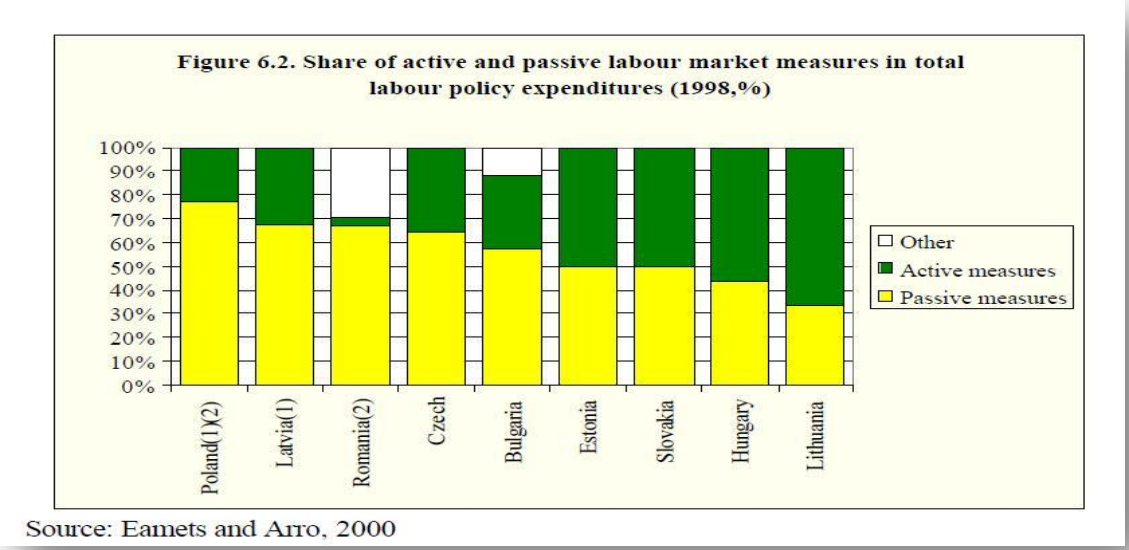
The new Employment Contract Act entered into force on 1 July 2009. Hence, Estonia's protections regulations became more flexible than in any OECD countries except the English speaking ones (OECD, 2010, p. 56). The main targets established by the new Employment Contract Act to increase the flexibility of employment relationships, employment protection regulations in particular (Estonian Chamber of Commerce and Industry, 2012). The rules were liberalized on many points, 'reducing Estonia's overall index of employment protection from 2.4 to 1.65 according to OECD measure. For instance, the previously relatively long notice periods for workers with short tenure were reduced, the possibilities for dismissed workers to obtain re-employment or compensation became more limited, and the use of fix-term contracts was facilitated' (OECD, 2010, p. 57). While in the most of OECD countries the main focus in put on liberalizing temporary contracts, Estonian government focused on liberalizing temporary

[9] More information on the official website of the Estonian Unemployment Fund see http://www.tootukassa.ee/index.php?id=11723

contracts and it will discourage employers to use temporary contacts to get around strict regulations of regular contracts (OECD, 2010, p.56).

Passive Labour Market Measures

The only passive measure observed in Estonian labour market policy is the payment of benefits to persons who are under the status of unemployed. The funding comes from the state budget, the revenue in which basically consists of tax payers. It is shown in the Figure 6.2 that around half of labour policy expenditures were allocated to this type of measures in 2000.



In the beginning the unemployment benefit depended on the minimum wage. For example in 1992 the rate was fixed to 180EEK (11.50EUR[10]) which at that time made up sixty percent of the minimum wage. The rate remained the same till 1996 and then got raised to 240EEK (15.40EEK), 300EEK in 1998 and 400EEK in 1999. In 1999 it amounted to less than eight percent of the average wage, extremely low indicator when compared by both Eastern and Western European standards (Eamets, Philips & Annus, 1999).

The advantages of remaining unemployed were generally very low. Eligibility lasted six months, with a three months extension in some exceptional cases. When this term expired, an unemployed person could apply for social assistance e.g. subsistence and housing allowances.

Some scholars believe that a poor state social protection benefits could be a direct reason for the relatively high rate of employment mobility (Noorkoiv & Ozarem, 1997). It is suggested that a

[10] Exchange rate 1EEK= 0.0658EUR

person about to get unemployed had nothing to do but more actively look for a new job as the unemployment benefits could hardly cover basic living expenses.

To improve the conditions of the unemployed the registration of the unemployment and job seekers, the provision of labour market services and the payment of benefits started to get regulated by The New Labour Market Services and Support Act that entered into force on 1 January 2006. The objective of this Law was to reach a high rate of employment of the working age and prevent a long-term unemployment. There are thirteen different services that the new Act is covering, including four services for the people of medical restrictions. The unemployment benefit is paid during 270 days, and the unemployment benefit rose from 400EEK to 1000EEK in 2006. The unemployed person could also apply for the free medical insurance (Philips, 2007).

Active Labour Policy measures

Active Labour Policy measures include such programmes as employment training, public work placement, subsidies to employers to hire less competitive workers and subsidies to start a new business. As demonstrated in the Table 8.3 the most popular active labour policy measure (ALPMs) among job- seekers is employment training accounting for sixty- three percent in 1998 of total number of participants. It was also the most expensive measure in the list of ALMPs list of expenses amounting for 28.8 percent of the total ALMP budget. Retraining allowance was 450EEK in 1998 which was 1.5 times more than the unemployment benefit. It was eligible to maximum six months.

The attractiveness of community placement opportunities has been however diminished over time. The main reason was the wage conditions. The average wage for public works has been 2.6 EEK (0.17EUR) while average hourly wages increased from 4EEK to 7.35EEK in 1996- 1999.

Despite an increase of interest in employment training Table 8.3 shows that the overall number of persons participating in ALPM programmes has decreased considerably from 16130 persons to 11575.

Table 5: Number of participants in different active labour market programmes

Programme	**1995**	**1996**	**1997**	**1998**
Total number of participants	16130	14228	13568	11575
Participants in employment training (%)	60.8	66.3	60.7	63.0
Employment with subsidies to employer	0.8	1.8	1.6	1.2

(%)				
Employed with subsidies to start a business (%)	2.8	3.2	3.3	3.3
Participants in community placement (%)	35.6	28.7	34.4	32.6

Source: Estonian Labour Market Board

The criticism of the ALMP programmes and its diminishing attractiveness among people was its exclusive nature which only allowed people under the unemployed status to participate in ALMP programmes. This means that the people who knew that they would be laid off in the near future or the people who surpassed six months of the unemployment benefit and became long-term unemployed were not eligible for labour market service. There were not also special programmes that have been elaborated for particular groups of unemployed such as young or disabled people (Arro, 2001). The funding for ALMPs also leaves much to be desired. With the new wave of rising unemployment after Russian crisis in 1998 the share of ALMPs in the labour policy budget decreased by thirty- four percent in 1999.

Since ten years Estonia's total spending on active labour measures remained low by OECD standards. For example, in 2010 only 0.4 percent of GDP was spent on it compared with OECD average of 0.57 percent (OECD, 2010). Funds spent on training increased four times from 2008 to 2009 to 0.1 percent of GDP while the number of participants more than tripled to 17 000 (seventeen percent of the unemployed in 2009).

Since entering the EU market and the government strategy to increase the competitiveness of the economy Estonia has focused more on improving the efficiency of state employment offices to provide active labour measures. The major change took place during the recession when spending on training of the unemployed increased four times from 2008 to 2009, however still left its share in GDP a bit below the 2008 OECD average. The participation in activation measures and training became compulsory if a Public Employment Service (PES) counselor indentified the need. This measure mainly concerned the language training for non-Estonian speaking population which was necessary to obtain employment. Despite the fact that PES staff number was increased, their clients still account for a small proportion of new hires and the proportion of registered unemployed who found a job through PES is very low. Moreover registration at the PES is also very low according to OECD standards. According to 2009 OECD Labour Market Review of Estonia assessment, PES is still lacking recourses for the efficient functioning such as physical space and IT recourses.

In 2008 the most popular service was career consulting (sixteen percent) and training (six percent). Then it goes the entrepreneur activity.

The financial assistance from the European Social Fund helped to finance the active labour measures but the expenses for the passive labour measures has been increased due to the increase of the unemployed during the crisis. In 2008 the Government spent 396,6 mln EEK- twenty nine percent for passive measures and seventy one percent for active measures (Estonian Labour Market Report, 2009, p .32).

Tax policy

Estonia followed a liberal approach as recommended by the World Bank, with few barriers to labour market dislocation or new job creation, low support of the unemployed, flat tax rates, low taxation of labour and privatization methods that would strengthen corporate governance and thus encouraged labour shedding (The World Bank Report, 2000).

The Estonian labour market policies impose few costs on new hires and fires. Unemployment benefits are paid from a state budget and not from an experience rated tax. It means that firms do not have to deal with insurance costs if they fire workers. They also do not have to preoccupy of their workers' retraining, jobs placement or mandatory severance packages.

Wage costs are also modest. Minimum wage is so low that prevailing wages were higher than the minimum wage.

Moreover there is no state support for trade unions which could more effectively negotiate for wage rises. Finally there are no policies that would support firms to avoid lay- offs and bankruptcy.

Estonia has a proportional income tax rate (twenty-six percent) both for enterprises and individuals. The rate of social tax (or a payroll tax) is thirty- three percent and is paid by the employers. Twenty percent of it goes to social security budget and the rest thirteen percent goes to medical insurance budget (Eamets, Philips & Annus, 1999). Despite having an old population compared with other transition countries, Estonia has the seventh lowest proportion of GDP in pensions. Since pensions had to be paid from a general fund, firms face relatively low taxation burden for pension support. The pension benefit was so low that there were little incentives to retire. By 2012 Estonian government has reduced an income tax rate from twenty- six percent to twenty- one percent. The pensions benefits have increased since 2000 but still remain low comparing with other OECD countries.

Despite of the governmental measures to ease the labour market and make it more flexible to adjust, there is still a very high proportion of full- time employment in total employment. Hence, a New Employment Contract was put into force from mid- 2009 to simplify the procedure to use fixed term contracts however requiring the employer to pay for the loss of income in case of the early contract termination except of bankruptcy. 2011 OECD Economic Survey indicated that

one of the prevailing obstacles towards reducing unemployment could be a relatively high labour tax wedge[11] which was only a subject to reduction for low paid and disadvantaged groups.

[11] **Labour tax wedge** - the difference between before-tax and after-tax wages. The tax wedge measures how much the government receives as a result of taxing the labor force (Investopedia, 2012).

Analytical Framework

Economic growth and a social cost

The empirical evidence presented above clearly demonstrates Estonian's government commitment towards radical and rapid reforms after gaining its political independence in 1991. The Estonian Government and The Bank of Estonia cooperated closely with the advisors from the International Monetary Fund (IMF) and the European Bank of Reconstruction and Development (EBRD) (Eamets, 2001).

Following the Big-Bang approach the main priorities for Estonian policy-makers was to achieve macroeconomic stabilization and credibility on the international markets. In order to recover and resume economic growth Estonia was the first transition economy to abandon the Russian ruble and introduce its own national currency. Later, the IMF would confirm the accuracy of this decision by linking Estonia's early embrace of the currency board mechanism towards relative success of the stabilization and reform programme including achieving a rapid real growth (IMF, 2002).

Due to the currency reform, Estonia managed to undervaluate its national currency – "kroon" which granted Estonian goods a comparative advantage to be sold cheaply and helped to find new domestic firms to find new markets.

The control over its own currency is also believed to avoid a long lasting hyperinflation which as a result fell from 1076 percent in 1992 to eleven percent in 1997 and 3.4 percent in 1999 and prevent the speculation of Estonian currency (Eamets, 2001).

The breakdown of the common Soviet market followed by the demise of exports and a shortage Soviet goods and raw materials made Estonia search actively for new trade partners on the opposite side of Europe.

Basing on the assumption that foreign investment would bring development, growth and generate employment, Estonia became one of the most free market economies among other fifteen CEECs. In 1991 Estonia passed the Law on the Privatization of State-Owned Trade and Service Enterprises. This legislation was amended in the early 90s to allow the sell-out of all small enterprises, so by the 1993 less than twenty percent of all service establishments were state-owned and in 1998 almost all banking was privatized (Mickiewitz, Radosevic & Varblane, 2000).

The liberalization of prices, openness to competition, mass privatization and a strict control over monetary and fiscal discipline brought Estonia credibility and investor confidence. From the mid- 90s Estonia became one of the most attractive foreign investment locations (Kostecki, Zukrowska & Goralczyk, 2000).

Although it was obvious that during the economic transition it will not be possible to maintain the level of employment from the socialist period Estonian policy-makers had high expectations

towards FDI. They suggested that foreign investors would not only bring new technologies and capital to accelerate structural changes but also generate employment. The question was whether FDI was generating job creation and job destruction (Mickiewitz, Radosevic & Varblane, 2000).

Despite the fact that the largest share of total employment now belonged to the foreign owned firms instead of domestic producers, the unemployment rate was still growing. A high pace of economic and social reforms together with the mass change of ownership of enterprises led to a rapid restructuring of the employment by branches and sectors. The job creation was registered in the service sector which grew from forty three percent in 1991 to fifty eight percent in 1998, especially in trade and the financial sector (Eamets, 2001). At the same time the mass drop of employment rates were estimated in the agriculture and manufacturing sector. According to Estonian Statistical Office only between 1995 and 1997 8371 jobs were lost in the manufacturing sector (Mickiewitz, Radosevic & Varblane, 2000).

Employment sector shifting has also caused regional unemployment which sometimes differentiated three times depending on the county. Big state enterprises which were sometimes the only source of employment (especially in the North-East of Estonia) were closed down due to the commercial impracticability and the new private investors were not interested enough to take over the business (Rõõm & Viilmann, 2003).

Despite structural and regional problems in employment, Estonia however managed to keep on growth of unemployment slightly moderate [12] comparing with other Central and Eastern European countries. All the listed above macroeconomic policies Estonian government was following during the transition period are believed to contribute to this success.

Estonian government also introduced very liberal labour market policies characterized by low social protection and high labour market flexibility. By using low taxation, flat tax rates, few legislative barriers to labour market dislocation or new job creation and extremely low minimum wage Estonian government aimed to increase the flexibility of the labour market.

A poor social security system and a little public financial support however had a dual effect towards combating unemployment in Estonia. On the one side, low unemployment benefits and pensions managed to ease the pressure on public budget and encourage people to more actively search for other employment possibilities. On the other side however it led to the growth of poverty in some regions and a sharp drop of employment participation rate.

Based on these arguments it can be noted that by demising the role of government and the bargaining power of trade unions to control the labour market, Estonian government gave the power in the hands of market forces which according to the Classical model should bring the labour market into an equilibrium state or "full" employment.

Taking effective quick measure towards open economy and flexible labour market, Estonian policy-makers however ignored the "supply" side of the model. Meanwhile the tax policy and price liberalization insured the flexible prices and facilitating the conduct of the business

[12] Check Estonian annual unemployment rate statistics in http://www.stat.ee/29958

(employers), the labour (employees) needed more time to adjust to new labour market conditions.

Estonia's failure to introduce effective active labour measures to retrain and reallocate labour and a lack of public recourses to support them has been the major subject of concern and criticism by Western policy-advisors (OECD, 2010).

By making labour market and tax policy flexible as well as opening up domestic market for mass privatization and liberalization, Estonian government underestimated the social costs it could bring as a result of introducing highly intensive quick reforms. As practice shows labour market is not as flexible and mobile as the financial one. It actually takes time for people to adjust to new market demands.

As a consequence along with economic and demographic shocks, the re-endorsement of a market economy has also brought many social problems such as growth of unemployment, a rise of crime, decreasing life expectancy, lower birth rates, an increase of suicides and alcoholism and stratification of Estonian population. According to Human Development Index[13] (HDI), Estonia has fallen from the 29th to the 68th place in the ranking table during 1994 and 1996 (Council of Europe, 1997). The minimum wage was estimated so low that it did not cover minimum living costs. Even the family with one child could not survive for this money (Eestipäevaleht, 1996).

Flexible labour markets and less flexible labour market actors

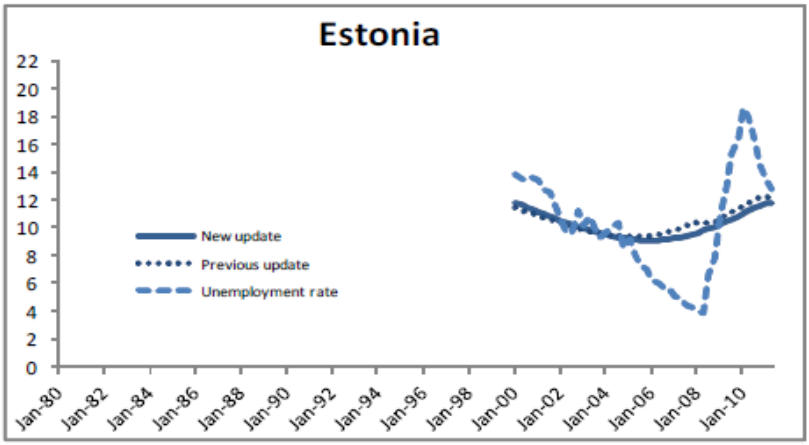
After 2000, extreme painful adjustment reforms finally started to bring fruits. Estonia has been estimated to have the fastest growing GDP of seven percent among the European Union countries (OECD, 2010). Open macroeconomic policies ensuring the liberalization of domestic trade and prices and a credible strict fiscal discipline to control inflation together with the accession to the European Union kept attracting foreign capital into Estonian economy.

With the rise of GDP, the unemployment rate simultaneously started to fall and reached its historical minimum level of 4.7 in 2007 (Statistics Estonia, 2008). As it is illustrated below in Table 3 with the falling rate of unemployment between 2000 and 2007 NAIRU was also slightly decreasing. Then from 2008 it can be seen with the rising unemployment rate it also started to increase. Hence, a clear direct correlation between growing inflation and unemployment can be noted. However, according to the dominant view of economic analysts there is not a long- term trade- off between inflation and unemployment: in the long run, unemployment depends first of all on structural variables, whereas inflation is a result of a monetary policy. In the short term, however, a trade-off exists such that if unemployment falls below the NAIRU, inflation will rise

[13] **Human Development Index**- a tool developed by the United Nations to measure and rank countries' levels of social and economic development based on four criteria: life expectancy at birth, mean years of schooling, expected years of schooling and gross national income per capita (Investopedia, 2012).

until unemployment returns to the NAIRU, at which time inflation will stabilize at a permanently higher level. Therefore the existence of a NAIRU has immediate impact on the conduct of economic policies. It means that macroeconomic stimulus alone cannot permanently reduce unemployment; and any short-term improvements relative to the NAIRU resulting from simulative policy actions will be reflected in progressively higher rates of inflation (Turner, D. & Boon, L, 2001).

NAIRU in Estonia



Source: Guichard, S. and E. Rusticelli (2011).

Estonian government nevertheless took all possible measures to slow down the growing inflation rate. It kept the fiscal deficit under control and in fact was running a surplus budget from 2001 and 2007 which amounted to 2.7 per cent of GDP (Action Plan for Growth and Jobs, 2008, p. 14). Making a reference with the Quantity Theory of Money, rising wages and prices did not necessarily mean its rising value therefore it was important to keep an eye on the inflation rate.

Hence, despite all the governmental attempts to keep inflationary rates under control by keeping for instance fiscal budget discipline, the private sector was willingly indebting by borrowing capital from foreign banks at extremely low interest rates (Action Plan for Growth and Jobs, 2008).

Decreasing unemployment, consequently rising standards of living and domestic consumption inevitably led to the increase of wages and prices. However, according to the Institute of Baltic Studies (2010) the paradox was that growing prices and wages outpaced the growing productivity. It was particularly linked to the construction boom in Estonia when the lack of labour in the real estate and consequently rising wages in this sector surpassed their actual productivity value. The unsustainable rise of wages in this sector had a spill-over effect on other sectors of the economy.

In 2008 overheating economy, a fall in domestic demand and the declining cost position of exports resulted in a severe secession and a speedy growing rate of unemployment. In 2010,

Estonia changes its previous status from being the country with the fastest growing GDP to the country with the fastest growing rate of unemployment.

Going back to the Classical Theory of Unemployment and a concept of Labour Market Equilibrium it can be concluded that an overheating market led to the increase of wages which due to the rising inflation got higher that the market equilibrium wage. According to the Institute of Baltic Studies (2010) it would have been logical to decrease wages to maintain the labour market equilibrium state; however the practical case in Estonia demonstrated that in real life the labour market is not so responsive to market fluctuations. The decrease in wages was necessary to make the business viable and maintain the working personnel. In real life however the employers preferred to lay- off extra workers as they were scared that cutting wages would encourage talented employees to quit in search of better paid job opportunities (State of the Region Report, 2010).

According to Swedbank's calculations (2010) two years later since the start of the recession gross wages fell by five to ten percent but evidently the labour market reacted too slowly to the market turbulences. As a result, around 100 000 people lost their jobs (OECD, 2010).

Certainly it can be argued by referring to the Say's law that the crisis did not happen to the cyclical fluctuations of the markets but rather on the oversupply of the wrong products and services. This principle can be actually linked to the overgrowing real estate and construction sector. Instead of investing capital in more productive and knowledge- intensive assets and generating jobs, the money flow was excessively directed to the construction sector. As a result of the recession, the sky rocking unemployment and consequently the inability of many people to pay off the bank credits, house prices fell by more than forty percent since 2007 which made the indebted population pay off the credits for assets with a lost value and make the government provide the social security for the unemployed previously collected by the same people- tax payers.

Hence, the destructive role of the government in regulation of the market so supported by mainstream classical economists can be argued. In the case of Estonia it is clearly seen that due to the limited influence of the government on the financial markets, Estonian government was basically unable to prevent the bad ending. Not only that the governmental intervention can be harmful to the self- adjusting perfect markets, on the contrary the market actors themselves, such as foreign private banks can be the "disequilibrating" factor in the perfect market model.

Despite being inspired by the flexicurity model of the labour market, Estonia nevertheless took a neoliberal course.

One of the most characteristic features of the neoliberal labour market model is the demise of the role of trade unions and their bargaining power. Although the falling influence of trade unions can be justified by the shift of ownership from public to private, an increasing number of foreign and small- scale enterprises during the transition period, the governmental legislative reforms facilitated this trend. Having introduced the New Employment Act in 2009 Estonian policy-makers made the labour relations even more flexible but not secure.

It can certainly be argued that these attempts can have a positive impact, as flexible labour markets would be able to react faster on the market signals and better respond to its demands. The other side of the coin however is that the principle of neoliberal market policy to restrict the role of the government in the regulation of the labour market also brings the insecurity and vulnerability for the working population and like any other asset on the market they can lose their value due to the oversupply (too many people having the same profession), be uncompetitive and outdated due to the lack of modern skills or necessary education.

Granting favorable legislative rights to employers, Estonian government however did not pay sufficient attention at stimulating labour market measures to help the employees adjust to the market. Since ten years Estonia's total spending on active and passive labour measures remained low by OECD standards. For example, in 2010 only 0.4 per cent of GDP was spent on the active labour market measures compared with OECD average of 0.57 per cent (OECD, 2010). Funds spent on training increased four times from 2008 to 2009 to 0.1 per cent of GDP while the number of participants more than tripled to 17 000 (seventeen per cent of the unemployed in 2009).

Hence, despite the improving conditions and the reorganization of the management of state employment offices towards more individual approach, state employment offices are still criticized for its inefficiency and a lack of recourses to provide high- quality services. This failure proves a low registration of unemployed persons and a small share of people hired later through these offices (OECD, 2011).

In overall, the economic crisis and prevailing structural, regional and long- term unemployment originated in the transition period clearly demonstrates the failure of the Estonian labour market measures to reduce unemployment. Some improvements have already been made but Estonia needs to invest more in its social capital to ensure that its labour resources are as flexible and mobile as they let the markets demand it from them.

A low minimum wage and the introduction of the Unemployment Insurance Fund have not only eased a spending burden on the public budget, it actually gave up its responsibility to provide social protection in to the hands of private sector.

Conclusion

The conducted research proved that the introduction of pure labour market neoliberal policies in the open market system does not necessarily guarantee full employment. In fact, it demonstrated a spontaneous nature of market behavior to predict and prevent rising unemployment and the governmental inability to influence the situation.

The transition experience showed that labour market cannot be seen as a perfect supply and demand side model set by the equilibrium wage. The practical case in Estonia demonstrated that the supply side (employees) of the model is not as flexible and mobile as the demand side (capital and businesses: employers). This estimation is based on the prevailing high rate of structural and long-term unemployment since the transition period in the 90s. A labour force educated and oriented to serve the Soviet industrial market did not manage to rapidly adjust to the high velocity of the introduction of neoliberal reforms and the changing the nature of market demand. The recent crisis has also revealed the labour market imperfections under the neoliberal policy rules. As practice showed the supply and demand side of the labour market model did not manage to react in time not to surpass the equilibrium wage to avoid inflation and as a consequence prevent rising unemployment. Moreover, the limited role of the government to control the markets is not necessarily beneficial as the external threats such as private financial institutions can also expose a threat to the (labour) market equilibrium. A poor social protection and the relative absence of the role of trade unions leave the employees in a vulnerable position which has a very negative cost on the society.

On the other hand it can also be argued that the open market policies had created a favorable environment to attract foreign capital and investment, find new trading partners, re- orient export and start new businesses that generated employment in Estonia. It is especially believed to be a determinant factor during the early years of the transition period that allowed Estonian government to avoid an excessive grow of unemployment and in fact create new jobs in the beginning of millennium, especially in the service sector. As a result, Estonia reached the highest GDP per person than any other former Soviet country and is listed as the High-Income by the World Bank and a high-income OECD member (the World Bank, 2008).

A strong support for active labour measures prescribed by neoliberal economists have however not been efficiently complemented with Estonian labour market policy. The lack of state financial support and the inefficient activity of the state employment offices proved to be a failure towards tackling long-term unemployment and the efficient use and allocation of human recourses.

Due to a large scope of factors influencing the rate of unemployment and the overall activity on the labour market there is no a precise answer whether neoliberal policies implemented by Estonian government was the best solution to take. The growing economic growth achieved for the last twenty years cannot certainly be ignored but the social cost of these achievements does not also have to be underestimated. While the markets are being in search of the equilibrium

state, the real people are carrying losses. A more active governmental intervention would in fact help to smooth these losses by providing more social protection and legal support.

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