# PUBLIC SECTOR SUPPORT TO ADULT JOB TRAINING IN ESTONIA

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### Introduction

Rapid technological change and the emergence of the knowledge society have changed the nature of economy and the demand for labour. There have been changes in the content of work as the specific, narrowly defined and routine tasks have been substituted with less standardized and more varied activities (Eamets *et al* 2003). The employees are not only expected to work productively, but also to be able adjust to the changing circumstances during their whole career (Bainbridge et al 2000). The changes in the demand for labour have created changes in the demand for education. Besides formal education, the importance of lifelong learning has increased significantly. As the demand for skills and knowledge of employees changes continuously, re-training the labour force during the entire working career of employees is necessary. Therefore adult education plays an important role in keeping the skills and knowledge of employees up to the standards required by employers.

Adult education is a wide concept including several types of education and it can be defined as an integral organised study process regardless the content, level and method of study where adults develop their skills, enhance knowledge, increase the level of technical or professional competence or change their behavioural habits with the aim of achieving their balanced development or participating in the processes of society (Jarvis 2002). Adult education can be divided into adult general education, job-related education and liberal adult education. The scope of this paper is limited to job-related education, which is also known as adult job training, as the most important of type of life-long learning. It includes all kinds of training programs, which are aimed at the improvement of adult job-related skills and that kind of training can take place both as on-the-job training or training outside the workplace.

The results of previous analysis on adult education have indicated that the most important barriers, which hinder participation in adult education, are financial and economic. These barriers are associated with the high costs of adult education. In order to overcome these barriers, participation in adult education is supported by public sector in developed countries and Estonia is no exception to this case. But the problem is that in Estonia there has been done little scientific research in the field of public sector financial support to adult education and this paper tries to fill that gap. Therefore the aim of this paper is to analyse the public support to adult job training in Estonia and to propose new measures for subsidising job training.

The paper is organised as follows. First, there will be given an overview of the theoretical background of financing adult education by public sector. It includes analysis of the market failures in adult education as well as pointing out the costs and benefits of it. Next, public support measures to adult education in OECD

countries are reviewed. Following, adult job training and its finance in Estonia will be analysed. In that section, conclusions on the results of previous research of adult job training in Estonia are drawn. Finally, there will be made propositions on improving the public sector support to adult job training.

#### **Theoretical background**

Public support to adult education like any other public sector economic activity can be justified by the presence of the market failures, which do not let the economy to achieve Pareto-efficient allocation. This kind of market failures may be external effects, imperfect competition, public goods, incomplete markets, information asymmetry etc. In case of the private economy individuals and firms will finance adult education only through private resources. As adult education is a certain type of human capital investment human capital theory can be applied to the analysis of adult education.

Probably the best-known external effect associated with human capital is the poaching externality (Ericson 2005). It occurs when a company offers its workers training, as the benefits of the whole society from training are greater than the benefits of that company. The externality occurs when the trained worker leaves the initial firm. In that case the firm that employs that worker benefits also from training regardless the fact that this firm did not pay for the training. The kind of external effect differs from positive external effects associated with physical capital investment by the fact that in that case this effect does not only increase the income of other firms but also decreases the income of the initial firm as the initial firm gets no return from training is the trained worker leaves. The reason for that kind of the difference the fact that in the absence of slavery human capital cannot be owned by firms like physical capital.

Other types of human capital investment external effects are associated with health, children, crime, democracy and innovation. Human capital investment can improve the health of the population and reduce mortality and healthcare costs. This can happen for example in case of job safety training. In that case not only the participants of these training programs benefit from it, but also the other individuals and firms have increased utility or profits (McMahon 2001). The reason for that is the fact that job safety training decreases the risks of accidents, which may harm or cause losses to the third parties. It is also possible that training has an effect of the life style of the trainees, which may become healthier. For example, training may increase the motivation of individuals, which might reduce alcohol abuse.

It is also a known fact that parents' educational level is positively correlated with the children's educational level and performance on the labour market. More educated parents usually provide their children better pre-school care and also give more support to attaining formal educational process of their children. That kind of externality occurs in the field of health too as more educated parents care more for their children's health (Strauss *et al* 1993).

Human capital investment can reduce crime, especially in case of training those individuals, who have insufficient knowledge and skills for making living with legal activities. Human capital investment increases the wage rate of trainees and as punishment for committing crime often entails incarceration and higher wage rates increase the opportunity costs of time spent in prison. Therefore human capital investment increases the costs of committing crime (Moretti 2004). Education can also change the values of individuals; more educated people are usually more risk averse, which decreases the probability of engaging in crime (Becker and Mulligan 1997).

Human capital investment may improve the functioning of the democratic society as more educated citizens are more interested in the political issues, which is necessary for the democratic decision processes. Educated citizens participate more actively in political processes and they make more rational choices on the elections. Investment in education reduces the risk of emergence of undemocratic regimes as countries with high average educational level have democratic governments in most cases (Meja and Posada 2005).

In addition to the previously mentioned external effects human capital is also crucial for the development of science and technology. It will enable innovation and diffusion of knowledge, which are considered as one of the most important factors of long-term economic growth (Lucas 1988).

Public sector activities in the field of adult education can be also justified with the capital market imperfections. Individuals and firms have worse possibilities to get loan from capital markets for financing human capital investment in comparison to borrowing for physical capital investment. Unlike physical capital, human capital cannot act as collateral for loans. Except in the irrelevant case of slavery, there is no equivalent to the possibility of securing the loan by repossessing the human capital in the case of default, the means by which loans are secured in other markets, the housing market being a prime example. Furthermore, different people have different possibilities of financing human capital investment. Wealthier individuals have usually higher savings and better credibility on the capital markets and therefore they can pay for the training to a greater extent. It means that human capital investment increases the income inequality as individuals with higher initial income or wealth make more investments due to better possibilities of financing them (OECD 2001).

Human capital investments include risk, as returns from investments are uncertain. It is not possibly to predict the returns from investment with absolute accuracy, but the decision of making an investment has to be made before the returns are known. During the period of training unpredicted changes in the economy can take place, which can affect the returns from investment. For example, there can be changes in the structure of labour demand. Uncertainty can rise also from the information problems, for example individuals may not have full information about their abilities and therefore they can not be sure whether they can complete the training program or how well will the program match with their abilities. Individuals and firms can be

risk averse and therefore they might not undertake risky investments, which are profitable on the average. Those kinds of risks cause human capital investment to be less than socially optimal (Brown and Taylor 2002)

There can exist additional information problems too as there can occur information asymmetry between the buyer and the seller of a training program. The training company, which sells training, has better information about the contents of the program than the individual or firm, who buys this training. This informational advantage allows the training company to raise the prize of the training above its marginal cost and earn rent on training. The other option for training program is higher than marginal cost, is to lower the quality of the training programs and therefore public regulation and requirement of minimum quality standards can be useful (Malcomson *et al* 2003).

Public sector interaction in human capital investment can also be justified for the reason that taxation of income and profits decreases returns from human capital investment and it distorts economy as taxes lower the incentives to invest in human capital and the level of investment will be less than social optimum. Subsidizing human capital investment can increase investment and increase social welfare (OECD 2001)

Even if there would exist none of the market failures described previously and the Pareto efficient allocation is reached, public policies in that field can be justified by the aim of decreasing income equality. As the social welfare may depend not only on aggregate income but also distribution income then public intervention in human capital investment in order to make the income distribution more equal can increase the social welfare.

If human capital investment causes no externalities then the returns from it will affect only the participants of the training programs and their employers. If the externalities exist then also third parties are affected.

The benefits for the participants from training programs can be divided into indirect and direct benefits. Indirect benefits are the increases in the utility through the increased income. Training can increase both wage income and non-wage benefits. Direct benefits are the increases of utility directly from increased knowledge and skills. Usually indirect benefits have greater importance and therefore indirect benefits have been turned more attention by the researchers. Income increases after the completion of training program can be the cause of increased labour productivity, which can raise the wage of a worker on the present job or will make it possible for him to get a better paid job. Training can also increase the probability of becoming employed for the unemployed and decrease the probability of becoming unemployed for the employed. Non-wage benefits from human capital investment can besides the emotional benefits of finding job or making progress on the career ladder also be increased prestige, better work environment, more satisfying job content and new social contacts (Weisbrod 1962). Direct benefits are increased

satisfaction from new skills and knowledge and the learning process itself can also give positive emotions to the participants although different empirical results have occurred in case of different types of human capital investment. The results of analysis on the U.S. data has shown that acquiring new knowledge increases utility directly in case of higher educational levels, but decreases utility in case of lower educational levels (Lazear 1977). Osterbeek and van Ophem (2000) have found similar results as they point out that the utility increases from attainment of education are greater for those, who had higher initial educational level and who have better social backgrounds. It has also been pointed out that participants of training programs make new social contacts, which increases their welfare directly (Alstadsæter 2004). As in case of adult education the trainees are grown-ups, who have previous experience in learning, it can be assumed that the direct effect on utility is positive but it may be negative for some groups of people for example long term unemployed or those with low formal educational level, who can have low abilities for learning.

Benefits for employers from human capital investment result from the increased labour productivity of their employees. Labour productivity can result in increased output of products and services, reduced time per task, reduced error rate, reduced waste in production of goods and services. There can also be indirect benefits from increased labour productivity such as improved quality of work, better team performance, improved capacity to cope with change in the workplace and improved capacity to use new technology (Bloom and Lafleur 1999). Additionally, investment in specific human capital will decrease the incentives for employees to quit as they are likely to suffer a wage loss in that case as their productivity after the investment in other firms will be lower than in the present firm (Parent 1999).

If there are positive externalities of human capital investment then also third parties benefit from it. That kind of benefits were mentioned before, when describing human capital investment externalities. Public sector belongs also to these third parties. The most important benefits for the public sector from human capital investment are increased tax revenues due to increased productivity and employment as well as reductions of several expenditures like expenditures on healthcare, law enforcement, justice systems, unemployment benefits and other subsidies to the households (OECD 2004)

#### Public support to adult job training in OECD countries

Different alternatives for financing the costs of adult education are possible and different OECD countries use different financing schemes. In most countries a number of schemes are used in a combination. As employees and employers and public sector all benefit from adult education, then the finance is based on the principle that all these three parties should bear some portion of the costs. The measures of finance can be divided into three broad groups: covering direct costs, covering indirect costs and reducing risk (OECD 2004).

Direct costs of adult job training include costs of training courses, training materials and transportation costs associated with training. Following financing schemes are used for covering these costs: individual learning accounts, voucher schemes and direct subsidies, loan subsidies and tax policy measures.

Individual learning accounts (ILA) are employees' accounts in commercial banks or other funds, which can be used for covering the direct costs of training. Both employees and employers can make contributions to these accounts and these contributions are matched with contributions from public sector. Usually not all employees can hold ILA-s, but they are usually allowed for low-skilled workers, unemployed or low-income workers. Not all types of training programs can be financed by ILA-s but in most cases only training outside workplaces is allowed and the training program has to be approved by a public institution. Some schemes allow using ILA-only for covering a portion of direct costs, for example 50% or 70% of it and this portion depends on the characteristics of the ILA owner and type of training program. ILA-s are a new and novel financing scheme, which has been successful in most cases, but in some cases there have been problems with the quality of training programs, for example in UK ILA-s were terminated for that reason (OECD 2005).

Voucher schemes and direct subsidies are similar measures as in both cases training costs are covered directly by public sector. Vouchers are directly given to individuals or firms by public authorities and they can be used for buying training programs. Direct subsidies include covering the costs of training programs directly by public sector. The target groups of these measures are generally similar to the target group of ILA-s, but voucher schemes are in many cases used for subsidising training of young employees. The amount of vouchers distributed can be different in different regions with the aim of supporting human capital investment in less developed regions or regions with high structural unemployment. In Italy voucher schemes are partially financed from European Social Fund. They main problem with the voucher schemes is the lack of quality of subsidised training programs and therefore relevant supervision is necessary.

Loan subsidies include lowered interest rates for individuals for financing training costs and in that case interest costs are shared between individuals and public sector. In some cases government may bear all the interest costs. Loan subsidies lower the costs of training and therefore increase the net benefits from it. Another type of loan subsidies is public guarantees to the loans. That kind of measures counteract the capital market imperfection that human capital cannot be used as a collateral for loans.

Tax policy measures can be targeted to firms or individuals. Measures targeted to firms are tax subsidies on the profit or payroll taxes. In most countries cost of personnel training can be deducted from company's revenues, but in some countries companies are allowed to account these costs greater than they actually are. For example in Luxembourg firms can deduct 110% of training costs from revenues, in Austria and Netherlands 120% and in Italy in case of some training programs up to 150% of actual costs. In Austria companies, which did not earn profits on current

year are allowed to get tax credit to the extent of the training costs. Other possibility is to allow companies additional deductions from the payroll taxes. In some countries like Canada or France companies are required to spend some fraction of labour cost on training and they have to pay extra taxes if they violate that law. Another possibility is to redirect some proportion of the payroll taxes to a special training fund, which is used for subsidising training, in Korea unemployment insurance fund is used for that purpose. The main positive aspects of tax policy measures are the simplicity and low administration costs as introducing these measures does not need creating new institutions. The main drawbacks of tax subsidies are possible dead weight losses as in many cases the companies would train their workers even if those measures did not exist. Tax policy measures targeted to individuals include subsidies on income or other taxes. In most countries training costs can be deducted from taxable income, but in Japan, Korea and Spain social security taxes paid by individuals can be used for covering training costs. In Netherlands individuals can deduct contributions to ILA-s from taxable income.

Indirect costs of adult education consist of the alternative cost of time devoted to training. Participating in training programs decreases the time spent in production for trainees and therefore their income will decrease. If during participation in training the trainee does not work at all then he does not earn any wage income at all. Indirect costs also include decreases in the amount of leisure time. The measures for covering indirect training costs in OECD countries are direct subsidies, training leaves, ILA-s, loan subsidies and collective agreements.

Direct subsidies for covering indirect costs of training are used only in Sweden and UK. Although research results have shown that indirect costs of adult education are often much bigger than direct costs, policy measures for covering indirect costs are much less implemented (Pont 2003). In Sweden direct subsidies for indirect costs are paid for unemployed and workers, whose educational level is less than secondary education. In UK adult education subsidies are paid for that reason to those workers, who need additional qualifications.

In many other countries paid training leaves are used for providing trainees income during the participation in training programs. In most cases individuals are required to have been employed and paid social security taxes before training leave. Payments to trainees can be financed through labour market offices, unemployment insurance funds, general governmental budget or special training funds. The size of the compensation varies across countries from 14.5 Euros per day to full average wage. The extent of implementation of train leave is quite modest as in different countries only from 0.01% to 0.7% of work force are involved in this measure during one year.

ILA-s are used for covering indirect costs only in Sweden. The main argument against using ILA-s for covering indirect costs is the fact that indirect costs are usually larger than direct costs and therefore it would take much longer time to save for covering these costs. Loan subsidies for indirect costs are also rare and they are used only in UK, where career loans can be used for that purpose. In some countries,

for example Germany covering indirect costs is regulated through collective agreements between unions and employers.

Reducing risk of human capital investment is not a wide spread measure and among OECD countries it is currently used only in Australia. It is included in The Higher Education Contribution Scheme, where students are entitled to get loan for financing their studies but they are required to start paying back their loans only if their income exceeds a certain threshold. Therefore this measure reduces the risk of investment because in case if the investment is unsuccessful, i.e. the income of investor does not increase sufficiently then the investor does not pay back the loan.

#### Adult job training in Estonia

There have been conducted several surveys about adult job training in Estonia, some of them at the national and some at the regional level. Differences among these surveys also come from the fact that in some cases individuals and in other cases firms are questioned. The most important surveys are Adult Education Demand and Possibilities Survey, Järva County Enterpises Labour and Training Demand Survey, Euro barometer surveys and Lifelong Learning Requirement Analysis. Following, the main results of these surveys are briefly presented.

The results of these surveys indicate that in 2001 13% of population aged 15-74 years participated in some form of adult education, including general education for adults (Vöörmann 2003). According to the Euro barometer survey 5.2% of population aged 25-64 years participated in job training. As the scope of this paper is limited to adult job training then the latter percentage is more relevant for this paper. The adult education participation rate in Estonia is lower than the average of EU, but it is higher than in the other Central and East European countries (Zelloth 2003). The main motivators for participation in training are self development, career development and increasing competitiveness on the labour market. The most wide spread reasons for not participating training are age, lack of motivation and financial problems. The highest participation rates are among individuals aged 20-29 years and the lowest participation rate is among individuals aged over 60 years. Estonians are slightly more active learners than national minorities. It has also found evidence that participation rates are positively correlated with the formal educational level of individuals. Individuals with higher income participate with greater probability. Also individuals employed on the high-skilled occupations, i.e. managerial workers have higher participation rates. The most popular training programs are language and computer courses and in most cases the training took place during the working hours of employees, which also points to the fact that most of the participants were employed as among unemployed and inactive people participation rates were remarkable lower (Vöörmann 2003).

The results of different employer's surveys point out that 63-75% of companies offer their employees' job training. In most cases only training programs, which are closely linked with the content of job tasks, are provided by firms as only 25% of firms have offered general training programs. Across different economic sector

companies operating in secondary and tertiary sectors offer training to a greater extent than companies operating in primary sector. This result is to a great extent caused by the fact that agricultural companies in Estonia are relatively small. Smaller companies provide training less than big companies. Analysis of the training costs indicates that training costs per trained worker are smaller in companies with bigger number of employees. This result indicates that there exist positive returns to scale in job training. High-skilled workers are more often offered training programs outside the company, whereas low-skilled workers are offered more training inside the company (Leping and Eamets 2005).

The costs of one adult job-training course are about 7000 Estonian kroons per participant (Elukestva... 2005). The employers pay about one half of aggregate training costs. The employers' share of covering training costs has decreased during the last years as earlier studies from 1990s show that employers covered about 60-70% of training costs. In 2001 companies spent 1.8% of their labour costs on personnel training and this share is higher than in majority of Central and East European countries. The trainees pay about 20-30% of training costs. It is worth mentioning that non-Estonians are more likely to pay for their training costs than Estonians (Zelloth 2003).

The remaining part of the adult job training costs is covered by public sector, including EU structural funds. The public sector financing measures for adult job training in Estonia are public sector funded job training for pedagogues and civil servants, job training for unemployed, tax subsidies on training costs, training leave and project-based finance of training through the European Social Fund.

Pedagogues like teachers in the public secondary, vocational, comprehensive or elementary schools and kindergartens, teaching stuff of public universities and teachers in public extracurricular schools are entitle to be offered 160 hours of training each five years. These training costs are covered from central governmental budget and the size of the training costs is 3% of pedagogues' wage costs, which is approximately 50 million kroons per year. The content of the training programs offered is decided at the school level (Õpetajate.... 2000). Civil servants are entitled to job training financed from general government budget and the expenditures on training range from 2 to 4% of the wage bill of civil servants. Civil servants in this meaning are the employees of the following institutions: ministries, State Chancellery, Office of The President, Chancellery of the Riigikogu, Office of the Chancellor of Justice, State Audit Office, The Supreme Court of Estonia, public offices and county governments.

Labour market training is offered to the unemployed and it is the most widespread active labour market policy measure in Estonia. In 2001, about two thirds of active labour market policy expenditures were used for financing labour market training and more than 10000 individuals participated in training programs. In the following years, the extent of labour market training has slightly decreased and in 2004 there were about 8400 participants (Tööturu koolitusele...2005). According to the Labour Market Service Law there are two types of labour market training: occupational

training and adaptation training. Occupational training involves training programs of developing occupational skills and adaptation training is orientated to making the unemployed acquainted with the situation and requirements of the labour market and to prepare them psychologically for job search. Participants of labour market training are entitled to scholarship, which is paid to those trainees, who participate in training programs with duration minimally 80 hours. The government sets the amount of scholarship paid and it must be at least equal to the 150% of unemployment benefit. Labour market training is financed through central governmental budget and it's costs were 53.7 million kroons in 2003. (Töötu... 2005). The average duration of the training programs in 2000 was 37 days and after the completion of training program 67% of the participants became employed. The most popular training programs are computer, entrepreneurship, accounting, sales, driving and construction courses. According to the research results labour market training raises the probability of exit from unemployment to employment for participants about by 7% one year after the completion of training program and by 15% two years after training. The results of the cost-benefit analysis indicate that labour market training is an efficient policy measure as the total benefits are about three times bigger than costs (Leetmaa et al 2003).

Tax subsidies on training cost consist of tax subsidies on income tax as according to the Income Tax Law residents of Estonia can deduct training cost from taxable income. Training costs in that meaning are expenditures on studying in public or municipal schools, universities or foreign educational facilities. Interests on student loans are also accounted as training costs.

Another public sector support measure is project-based finance of job training through the European Social Fund (ESF). ESF is targeted mostly to the training programs, which are necessary for increasing the competitiveness of labour. One of the most important sources of support is measure 1.1. "Educational System Supporting the Flexibility and Employability of the Labour Force and Providing Opportunities of Lifelong Learning for All". The goal of this measure is during a period 2004-2006 to provide training to 26 050 people and 45% of them should be men and 55% women. These training programs should be divided between different types as follows: training of pedagogues (1800 participants), adult training (24 000 participants) and entrepreneurship practice (250 participants). The planned costs of this measure are 629 million Estonian kroons and 25% of them will be covered by Estonian public sector. Measure 1.2 "Human Resource Development Increasing the Competitiveness of Enterprises" offers also support to job training. In the framework of this measure enterprises are paid subsidies for training their employees. The goal of this measure is to offer training to 12 000 people (6000 men and 6000 women.) Project based finance of job training is also organised through measure 1.3 "Inclusive Labour Market". Through this measure training of the unemployed is supported. The aim is to increase the number of participants in active labour market policy measures, including labour market training, to 30000 people, which is 35% of total unemployment. The planned costs of this measure are 517 million Estonian kroons and 20% of them will be covered by Estonian public sector. To lesser extent job training is also supported through measure 1.4. "Enhancing Administrative

Capacity" in the form of training 3600 civil servants and measure 5.2. "Information Dissemination, Publicity and Computerisation", which is used for providing training of clerks and other officials, who are associated with administration the of EU structural funds.

According to the Adult Training Law training leave is provided for the employees working under the job contract or in public service. For the purpose of participation in job training programs employees are entitled to 14 days of training leave per year. During the training leave the employer is required to pay employees their average wage.

# Propositions

According to the theoretical aspects of job training, experiences from OECD countries and the current situation of adult education in Estonia propositions for improving the public sector financing of adult job training will be developed. Several authors, for example Ok and Tergeist (2003) have pointed out as all three parties employees, employers and public sector benefit from the job training all these three parties should cover some proportion of training costs. The priority of public sector activity should be supporting training programs, which public sector benefit the most or where the private financing of training does not lead to socially optimal level of training. At same time it is clear that the resources of public sector support to adult job training should be:

- general training programs should be preferred to company-specific training programs;
- training of individuals with low-income;
- training unemployed should be preferred to training employed;
- training of individuals with low educational level;
- training programs associated with implementation of new technologies.

In order to find public resources for financing adult job training there are three broad possibilities (OECD 2001):

- using the existing resources more efficiently;
- decreasing funding of other public sector activities;
- increasing public sector revenues.

Using the existing resources more efficiently consists of lowering the costs of existing adult training support measures or increasing the efficiency of these measures. One possibility for lowering the costs is increasing competition between different educational facilities, which could result in the decrease of the price of the training programs subsidised by the public sector. In Estonia that kind of possibility can exist in case of the job market training of unemployed as well as training offered to pedagogues and civil servants. The options for increasing competition can be including different training institutions in the programs as well as subsidising individuals or firms instead of training institutions. In the latter case the training institutions have to compete with each other for the training programs bought by individuals or firms. Another option for reducing costs can be decentralizing the

management of training institutions and giving more power to the lower decision levels. If subsidising training institutions is preferred then introducing results-based management can lead to lower costs. Additionally organising supervision and evaluating results of training programs is important for keeping the costs under control.

Increasing public sector costs of adult education at the expense of other public sector costs is a political decision as such choices depend on the priorities of the policy makers. Such decision should not always result in lowering public sector costs in other areas, but it is also possible to increase the costs of adult education faster than some other public sector costs in some areas like unemployment benefits and other transferred payments, expenditures on healthcare, justice system and police protection.

The third possibility is to increase public sector revenues. As the main source of income for public sector is tax revenues, then the solution can be introducing new taxes or increasing the rates of existing taxes. Basically, all kinds of taxes can be used for that purpose, but it would be preferable to use that kind of taxes, which are paid both by employers and employees as both these parties benefit from training. In Estonia, unemployment insurance payments fit to that criterion. Therefore a recommended possibility can be raising the rate of unemployment insurance payments or introducing a new tax, which is similar to unemployment insurance payments.

In the majority of OECD countries several support measures are used parallel by public sector and that is the case for Estonia too. Using different measures in combination makes the system more flexible and suitable for different firms and individuals. At the same time these measure should be integrated into a single system and public policies in the field of adult job training should be harmonised with other public policies. Still it would not be favourable to make the system very complex and to use very large number of measures especially when some of the measures are similar like voucher schemes and direct subsidies. In order to prevent waste of resources and ensure the fulfilment of the policy targets new measures should be introduced gradually and they could be launched as pilot projects. During the same time the efficiency of these measures should be evaluated and if necessary changes to the measures should be made.

Taking into account Estonia's situation as rapidly growing economy undergoing technological change and receiving support from EU structural funds, two different types of policy measures are proposed. The first of these is a long-run measure, which is financed through resources of Estonian public sector. The other one is short-run measure for period from 2007 to 2013 and it will be financed through ESF.

The long-run measure will consist of individual learning accounts, direct subsidies, tax policy measures, loan subsidies and training leave.

Individual learning accounts should be the core of the adult job training support system. These accounts should belong to individuals and they could be held in the banks or other financial institutions and another option is to establish a specific fund for that purpose. The payments to ILA-s from individuals and firms could be voluntary or compulsory. These payments will be matched by the contributions from public sector. Public sector contributions should vary across different individuals, companies and training programs. Such variation will make the system flexible and adjustable according to the policy makers aims. Public sector contributions should have an upper limit and it may not be available for all individuals, but for some special groups of them, who have the most urgent need of training. This option is useful at the starting stages of ILA-s as it helps to keep the expenditures under control. Payments to the ILA-s by individuals and firm should be deductible from the taxable income. ILA-s will act as a savings account in that way, as firms and individuals can save money for future training programs and get their tax reduction before the training actually takes place. This feature will likely to increase the national savings rate and make the behaviour of individuals and companies more forward looking. It is important that ILA-s are used only for the training programs which they are meant for. Therefore it is necessary to introduce a supervision system in order to guarantee that ILA-s are used purposefully and they quality of the training programs is sufficient. The supervision system should be integrated with the general vocational standard system, as it is important that employers acknowledge the qualifications acquired through training programs. There is also a hazard of supervision costs becoming too large and therefore it is important to determine the optimal level of supervision.

Direct subsidies should be an additional support measure for individuals, who have difficulties making payment to ILA-s. Unemployed or inactive individuals belong to this category as they do not have labour income and they also do not have an employer, who could make payments to his/her ILA. Labour market training for unemployed is an example of direct subsidies in present situation but that kind of subsidies should be extended to other groups of individuals. They groups could include new entrants to the labour market, including graduates of universities and vocational schools. It will help them to overcome problems associated with transfer from learning environment to working environment and increase they possibilities of becoming employed. The amount of subsidies paid can be different across regions, training programs, individual characteristics etc. This will make this measure flexible and easily adjustable. Direct subsidies could be also used in case of individuals returning from the maternity leave in order to compensate the human capital depreciation during time away from employment. That kind of measure can increase the confidence of mothers and it can even have a demographic aspect as increase in the birth rate may result from it. Training of released prisoners should also be directly subsidies as it will increase the possibilities for these people to start earning legal income and there for it can reduce crime. It should be turned attention that a major problem with the direct subsidies can be significant dead-weight loss as it can happened that individuals, which training was subsidies, could be trained without the presence of subsidies anyway. Therefore it is necessary to use this

measure to a limited extent and offer it to the individuals, who really need it urgently.

The existing tax policy support measures should be extended. They should be integrated with other support measures and especially ILA-s. As it was mentioned earlier, payments to ILA-s should be deductible from taxable income. One possibility extend tax policy measures is to allow individuals and firms to deduct a greater amount than actual training costs from taxable income. Another option is to increase the effect of income tax subsidies is paying back the income tax on training costs back to individuals immediately after paying for the training program instead of the present system when the excess income taxed paid will be returned on the following year. It will increase the present value of this tax subsidy and give individuals a more clear signal of public support to job training. Tax subsidies alone are not likely to increase participation in the adult job training very much, but they will provide extra incentives for participation especially for middle-class individuals as individuals with low income usually do not have resources for financing their training on their own and the richest individuals' training decisions are probably not significantly influenced by the tax subsidies, which lower the training costs to some extent.

Another additional support measure could be loan subsidies. As the previous support measures were meant more reducing the direct costs of job training, loan subsidies can be applied for indirect costs too. Loan subsidies could appear in the form of lowered interest rate on training loans, which could be used for covering both direct and indirect costs of adult job training. In that case individuals could borrow from commercial banks, but public sector will pay some proportion of the interest costs. Loan subsidies probably have greater effect on the individuals with less comparatively low risk aversion.

Training leave should also be a support measure for reducing indirect costs of job training. At the present situation employees are entitled to14 days of paid training per year, but as the duration of training programs is remarkable longer in many cases, the duration of training leave should be increased. In that case it should be decided, how the trainees are paid during the training leave. The cheapest possibility is to introduce an additional training leave without any pay. It will definitely improve the employees possibilities of participating in training programs to some extent as in that case employers are required to enable their workers additional unpaid leave for training purposes, but paid training leave will be more useful for employees. In case of additional paid training leave there are two possibilities for financing it. The first option is to oblige firms to pay their employees during training leave and the second option is that public sector will cover the costs.

The short short-run measure for a period from 2007 to 2013 will include direct subsidies from ESF, which will be integrated with the companies' training accounts. The aim of this measure is to support adult job training programs, which are necessary for implementation of new technologies and increasing the exports of

Estonian companies. Therefore the main principles of the short-run measure should be:

- training costs should be shared between companies and public sector;
- subsidising small and medium sized companies should be preferred to subsidising large companies;
- subsidising training programs, which are targeted to implementation of new technologies should be preferred.

At present much of the ESF support will be given through training institutions, but it would be more favourable to subsidise the demand-side of training instead of the supply-side. There could be more differentiating in the own finance rates of the companies as it would introduce more flexibility to this measure. It would be beneficial to distinguish between small and medium sized enterprises and to lower the required own finance rates for small enterprises. Additionally the own finance rates could be differentiated on the regional basis, which could help to promote job training in the peripheral and less developed regions.

In order to increase the enterprises' possibilities for getting support from ESF, a system of training accounts should be introduced. These accounts would be similar to ILA-s, except they will belong to firms instead of individuals. As for ILA-s, it should be possible to make contributions to these accounts and use them for financing training. These contributions should be tax deductible and they could be matched with the contributions from Estonian public sector. So training accounts will encourage saving by the companies and give additional support to the companies for financing adult job training. As in case of ILA-s, supervision of using these accounts is necessary in order to avoid using them not purposefully and for guaranteeing the quality of the training programs.

# Conclusions

The aim of this article was to analyse the public support to adult job training in Estonia and to propose new measures for subsidising job training. First, there was given an overview of the theoretical considerations of public sector financial support to adult education. Like any other public sector activity public sector support in that field is justified in the cases when there exist market failures and private economy cannot achieve the social optimum of job training. That kind of market failures can be external effects, capital market imperfections, risks of human capital investment and asymmetric information. Additionally public intervention can be justified with the need to compensate the distortions created by taxation or concerns of lowering the income inequality.

In OECD countries public sector intervention is used for covering both the direct and indirect costs of adult education as well as reducing the risks of human capital investment. The most important types of support measures are individual learning accounts, voucher schemes and direct subsidies, tax policy measures, loan subsidies and training leave. In Estonia the present support measures are public sector funded job training for pedagogues and civil servants, job training for unemployed, tax subsidies on training costs, training leave and project-based finance of training through the ESF. The adult education participation rate in Estonia is lower than the average of EU, but it is higher than in the other Central and East European countries. Employers pay the biggest portion of adult education costs in Estonia.

In the final section it is proposed that as all three parties employees, employers and public sector benefit from the job training all these three parties should cover some proportion of training costs. The priority of public sector activity should be supporting training programs, which public sector benefit the most or where the private financing of training does not lead to socially optimal level of training. Two general support measures for adult job training are proposed. The first of these is a long-run measure, which is financed through resources of Estonian public sector and it will consist of individual learning accounts, direct subsidies, tax policy measures, loan subsidies and training leave. The second is a short short-run measure for a period from 2007 to 2013 and it will include direct subsidies from ESF, which will be integrated with the companies' training accounts.

For future research, it is necessary do go more into the details with these proposed adult job training support measures. The cost-benefit analysis of these measures should be conducted and the implementation strategy should be worked out.

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#### Kokkuvõte

# AVALIKU SEKTORI TOETUS TÄISKASVANUTE TÖÖALASELE KOOLITUSELE EESTIS

# Kristjan-Olari Leping Tartu Ülikooli Pärnu Kolledž

Tehnoloogia kiire areng ja teadmistepõhise ühiskonna tekkimine on avaldanud olulist mõju majanduse olemusele ning muutunud tööjõule esitatavaid nõudeid. Muutunud on ka töö sisu ning ettevõtted ootavad töötajatelt üha enam oskust muutunud olukorraga kohaneda. Seetõttu on oluliselt suurenenud vajadus elukestva õppe järele, mistõttu täiskasvanuhariduse tähtsus on märkimisväärselt suurenenud.

Täiskasvanuharidus on lai mõiste, mis hõlmab täiskasvanud elanikkonna terviklikku organiseeritud õppetegevust, mis ei sõltu õppe sisust, tasemest või meetoditest, see võib asendada või olla jätkuks esmasele koolis, kutseõppeasutuses, rakenduskõrgkoolis või ülikoolis omandatud haridusele. Täiskasvanute koolituse liigid on: tasemekoolitus, tööalane koolitus ja vabahariduslik koolitus. Käesolevas artiklis piirdutakse vaid tööalase koolituse kui kõige olulisema täiskasvanuhariduse liigi analüüsiga. Teistes riikides tehtud täiskasvanuhariduse uuringud on näidanud, et täiskasvanu hariduses osalemist kõige enam takistavad tegurid on majanduslikud. Samas Eestis on täiskasvanuhariduse majanduslikku analüüsi tehtud seni suhteliselt vähe ning täiskasvanuhariduse avaliku sektori poolsete toetusmeetmete teaduslik analüüs puudub üldse. Seetõttu on käesoleva artikli eesmärgiks uurida täiskasvanute tööalase koolituse olukorda ja senist avaliku sektori poolset toetamist Eestis ning lähtuvalt analüüsi tulemustest töötada välja ettepanekud toetusmeetmete muutmiseks ja edasiarendamiseks.

Täiskasvanuhariduse riiklikku rahastamist saab teoreetilist põhjendada turutõrgete olemasoluga, mille tõttu erasektori poolt pakutava täiendkoolituse maht ei vasta sotsiaalselt optimaalsele tasemele. Sellisteks turutõrgeteks on välismõjud, kapitaliturgude ebatäiuslikkus, inimkapitali investeeringutega kaasnevad riskid ja informatsiooni asümmeetria. Lisaks sellele võib olla riiklik sekkumine täiskasvanute koolitamisse õigustatud vajadusega vähendada koolitust saadavate tulude maksustamisega kaasnevaid moonutusi. Samuti võib riiklik regulatsioon vähendada täiskasvanuharidusest põhjustatud sissetulekute ebavõrdsust.

OECD riikides on avaliku sektori poolseteks täiskasvanuhariduse toetamise vormideks koolituse otseste ja kaudsete kulude katmine ning inimkapitali tehtavate investeerinuga kaasneva riski vähendamine. Nimetatud eesmärgil rakendatakse järgmisi toetusmeeteid: individuaalsed õppekontod, vautšerskeemid ja otsesed

toetused, laenusoodustused, maksupoliitika meetmed ja õppepuhkus. Eestis rakendatavateks toetusmeetmeks on pedagoogide ja ametnike tööalane koolitus, töötute tööturukoolitus, tulumaksusoodustus koolituskulude pealt ja kursuste korraldamine projektipõhiste vahenditega ESF kaudu ja õppepuhkuse võimaldamine täiskasvanuhariduses osalejatele. Täiskasvanuhariduses osalemise määr on Eestis EL keskmisest madalam, kuid see on kõrgem kui enamikus teistes Kesk- ja Ida-Euroopa riikides. Kõige suuremas ulatuses finantseeritakse Eestis täiskasvanute koolitust ettevõtete kaudu.

Artikli viimases peatükis pakutakse välja võimalused täiskasvanute tööalase koolituse meetmete täiustamiseks. Kuna täiskasvanuharidusest saavad kasu erinevad osapooled: töötajad, ettevõtted ja riik, siis peaksid nimetatud osapooled osalema ka täiskasvanuhariduse rahastamisel. Eelkõige oleks avaliku sektori poolt on põhjendatud rahastada eelkõige sellist tüüpi täiskasvanuharidust, millest saab avalik sektor kasu ja mida eramajandus ei suuda sotsiaalselt optimaalsel määral pakkuda. Täiskasvanute tööalase koolituse riiklikuks toetamiseks pakutakse välja kaks erinevat meedet. Esimene nendest on pikaajaline meede, mida rahastatakse Eesti avaliku sektori vahenditest ja mis koosneb viiest omavahel süsteemselt seotud alameetmest, milleks on: individuaalsed õppekontod, otsesed koolitustoetused, maksupoliitika, laenusoodustused ja õppepuhkus. Teise meetme puhul on tegemist lühiajalise meetmega aastateks 2007-2013 ja see koosneb ESF kaudu ettevõtetele makstavatest koolitustoetustest ning Eesti avaliku sektori kaudu ettevõtete koolituskontodele makstavatest toetustest.

Järgnevate etappidena täiskasvanuhariduse toetusmeetmete väljatöötamisel on vajalik väljapakutud meetmete võimalike mõjude kulu-tulu analüüsi läbiviimine, mille tulemuste alusel oleks võimlik meetmete detaile täpsustada. Samuti oleks vajalik välja töötada toetusmeetmete rakendamise kava, kuna soovitavalt tuleks meetmed käivitada järk-järgult.