

VILNIUS UNIVERSITY

Laura
GIRLEVIČIENĖ

The Impact of State Aid for Workers with Disabilities on their Living Conditions

SUMMARY OF DOCTORAL DISSERTATION

Social sciences,
Economics (S 004)

VILNIUS 2021

This dissertation was written between 2014 and 2021 at Vilnius University.

Academic supervisors:

Prof. dr. Algirdas Miškinis (Vilnius University, Social Sciences, Economics, S 004; from the 1st of October, 2020 until the 30th of September, 2021);

Prof. dr. Rimantas Antanas Stanikūnas (Vilnius University, Social Sciences, Economics, S 004; from the 1st of October, 2014 until the 30th of September, 2020.).

This doctoral dissertation will be defended in a public meeting of the Dissertation Defence Panel:

Chairman – Prof. Dr. Gindrutė Kasnauskienė (Vilnius University, Social Sciences, Economics, S 004).

Members:

Prof. Dr. Vincentas Giedraitis (Vilnius University, Social Sciences, Economics, S 004),

Prof. Dr. Ganna Kharlamova (Taras Shevchenko National University of Kyiv, Ukraine, Social Sciences, Economics, S 004),

Prof. Habil. Dr. Borisas Melnikas (Vilnius Gediminas Technical University, Social Sciences, Economics, S 004),

Prof. Dr. Zita Tamašauskienė (Vilnius University, Social Sciences, Economics, S 004).

The dissertation shall be defended at a public meeting of the Dissertation Defence Panel at 14.00 on 22 June 2021 in Room 403 of Vilnius University Faculty of Economics and Business Administration or remotely.

Address: Saulėtekio ave. 9 LT-10222, Vilnius, Lithuania

Tel. +370 5 236 6128; e-mail: evaf@evaf.vu.lt

The text of this dissertation can be accessed at the library of Vilnius University, as well as on the website of Vilnius University: www.vu.lt/lt/naujienos/ivykiu-kalendorius

VILNIAUS UNIVERSITETAS

Laura
GIRLEVIČIENĖ

Valstybės pagalbos neįgaliųjų užimtumui poveikis jų gyvenimo sąlygoms

DAKTARO DISERTACIJOS SANTRAUKA

Socialiniai mokslai,
Ekonomika (S 004)

VILNIUS 2021

Disertacija rengta 2014–2021 metais Vilniaus universitete.

Moksliniai vadovai:

prof. dr. Algirdas Miškinis (Vilniaus universitetas, socialiniai mokslai, ekonomika, S 004; 2020 m. spalio 1 d. – 2021 m. rugsėjo 30 d.);

prof. dr. Rimantas Antanas Stanikūnas (Vilniaus universitetas, socialiniai mokslai, ekonomika, S 004; 2014 m. spalio 1 d. – 2020 m. rugsėjo 30 d.).

Gynimo taryba:

Pirmininkė – **prof. dr. Gindrutė Kasnauskienė** (Vilniaus universitetas, socialiniai mokslai, ekonomika, S 004).

Nariai:

prof. dr. Vincentas Giedraitis (Vilniaus universitetas, socialiniai mokslai, ekonomika, S 004),

prof. dr. Ganna Kharlamova (Taraso Ševčenkos Kijevo nacionalinis universitetas, Ukraina, socialiniai mokslai, ekonomika, S 004),

prof. habil. dr. Borisas Melnikas (Vilniaus Gedimino technikos universitetas, socialiniai mokslai, ekonomika, S 004),

prof. dr. Zita Tamašauskienė (Vilniaus universitetas, socialiniai mokslai, ekonomika, S 004).

Disertacija ginama viešame Gynimo tarybos posėdyje 2021 m. birželio mėn. 22 d. 14 val. Vilniaus universiteto Ekonomikos ir verslo administravimo fakulteto 403 auditorijoje arba nuotoliniu būdu. Adresas: Saulėtekio al. 9 (II rūmai), LT-10222, Vilnius, Lietuva, tel. +370 5 236 6128; el. paštas evaf@evaf.vu.lt.

Disertaciją galima peržiūrėti Vilniaus universiteto bibliotekoje ir VU interneto svetainėje adresu:

www.vu.lt/lt/naujienos/ivykiu-kalendorius

SUMMARY

INTRODUCTION

Relevance of the research. One of the main objectives of economic and social policy of the European Union, as well as of Lithuania and other Member States, is to increase employment of socially excluded persons by fully integrating them into public life. Social exclusion is widely examined in scientific literature. It is characterised by rejection of society, which restricts participation in social, economic, cultural and political activities (Bonanno, Chies, & Podrecca, 2019; K. M. Kim, Kim, Shin, & Yoo, 2016; Mussida & Parisi, 2019; Parodi & Sciulli, 2019; Tobias & Mukhopadhyay, 2017). Research has confirmed that social exclusion is the most likely experienced among people who are below the poverty line, with lower levels of education, low incomes, the unemployed, etc. Mazziota with co-authors (2019) found that people with disabilities experience social exclusion more often than healthy people. Kim et al. (2016) who examined social exclusion among people with disabilities, argue that people with severe disabilities find themselves in social exclusion more often than other people with disabilities. It should be noted that there is a lack of research on the factors influencing the social exclusion of people with disabilities, but research shows that people with disabilities are the most vulnerable population group, who must be given exceptional opportunities to increase their employment and participate in society.

Promoting the employment of people with disabilities can be achieved through a wide range of measures – targeted group training, involving people in public activities, integrating them into national policymaking, and integrating them into the labour market. In order to promote the employment of persons experiencing social exclusion in the labour market, the State for implementing the objectives of this policy, may grant State aid to economic entities contributing to the implementation of this policy. When using the State aid instrument, it is important to assess the impact of State aid on the country's economic and social phenomena.

The impact of State aid may vary depending on the employment model chosen by the States. The employment models of people with disabilities, their relationship with disability recognition attitudes and labour market characteristics were analysed by Blanck, Schartz and Schartz (2003), Callahan (2009), Duff, Ferguson and Gilmore (2007), Froyland, Andreassen and InnvÆr (2019), Gottlieb, Myhill and Blanck (2010), Hao and Li (2020), Hästbacka and Nygård (2019), Inge (2008), Jette (2006), Kregel and Dean (2002), Kvieskienė, Čiužas, Vaicekauskienė, Šalaševičiūtė (2015), Lunt and Thornton (1994), Myhill and Blanck (2012), Parent (2004), Uhunoma et al. (2018), Wehman, Revell and Brooke (2003), Wright (2004).

When State aid for the integration of socially excluded persons into the labour market is provided, it is important to periodically evaluate the effectiveness of the aid provided and, if necessary, to adjust the action plan, of the policy implemented and the use of the measures. In the scientific literature there are not many evaluations of State aid for the disabled workers. Scientists Ferri and Marquis (2011), Majcher-Williams and Foecking (2010), Friederiszick et al. (2006) analyzed the legal basis for State aid for the employment of people with disabilities and the possible impact on distortions of competition. The other authors (Bourreau et al. (2020), Brandtner and Vidoni (2018), Buelens et al. (2007); Crocioni (2006), Ferri (2020), Friederiszick et al. (2018), Haucap and Schwalbe (2011), Iozia (2016), Martin and Valbonesi (2000), Pisapia (2014), Robins (2018), Robins and Geldof (2018), Wright (2018) and others) studied State aid from a competition view, without distinguishing between individual State aid objectives. Authors Jiménez-Martín et al. (2019), Kim et al. (2016), Mazziotta et al. (2019), Parodi and Sciuilli (2019), She and Livermore (2009), Tobias and Mukhopadhyay (2017) and others investigated the social problems of the disabled people without assessing the State aid aspect.

EU countries must contribute to improving the living conditions of their citizens through their strategies, one of the main aspects of which is the reduction of poverty and social exclusion. To this end, Lithuania is also committed to improving the living conditions of the country 's

residents. The State must ensure the sustainability of such investments by allocating investments to address social problems, including the provision of State aid for the employment of people with disabilities, i.e., reducing the exclusion, poverty and material deprivation of the disabled. The Commission's assessment of progress in structural reforms carried out in 2019 noted that Lithuania has made limited progress in income inequality and poverty reduction (European Commission, 2019). This report mentions that in order to meet the national targets set out in the Europe 2020 strategy, Lithuania needs to do more to reduce the number of people at risk of poverty or social exclusion. According to the EC report, taking into account social indicators of disabled people, about 44% of disabled people in Lithuania are at risk of poverty or social exclusion, while the EU's overall rate is 30% (European Commission, 2019). At the same time, the gap between poverty and social exclusion among disabled and non-disabled persons is very large and this rate in Lithuania is among the highest in the EU. Among other things, the EC considers that employment opportunities for people with disabilities who are able to work and want to work are improving, but the achievement of the indicator is not sufficient. The employment gap between disabled and non-disabled people is 31%, whereas the EU's overall rate is 26%. (European Commission, 2019).

The evaluation of the European Commission comments and recommendations reveals the importance of evaluating the implemented policies, which allows to see the sustainability of social investments and the effectiveness of the measures taken. The results of the EC evaluation show that the actions and measures chosen in Lithuania in implementing poverty reduction policies, especially for people with disabilities, are not effective and should therefore be reviewed.

Lithuania, like many other EU countries, provides State aid in order to promote the employment of people with disabilities by including them in the labour market, thus reducing the potential risk of poverty and social exclusion. Among other things, Lithuania has been

implementing for more than a decade a little different support scheme for the integration of disabled people into the labour market, which is considered not to be effective in the light of the EC's assessment. It is important to find ways and methods to ensure the resolution of this sensitive group by means of State aid, while at the same time achieving results that will generate returns for people with disabilities, the state and businesses and organisations operating there.

Scientific problem and the object of research. The thesis examines the impact of State aid, which aim to increase the employment of disabled people, not only on the inclusion of disabled people in the labour market, but also the impact of this aid on the material deprivation of the social exclusion of disabled people, which is reflected through poverty of disabled people. As State aid is evaluated as an object of competition policy and social problems of disabled people are addressed without paying attention to State aid of disabled workers in scientific literature, a new economic-social dimension, which allows to complement the scientific discourse with insights into the social effectiveness of State aid is chosen in the thesis.

Aim and tasks of the thesis. The aim of thesis is to develop and use a State aid evaluation model, which would assess the impact of State aid on disabled workers on solving social problems of disabled people and which would help to provide directions for improving State aid for employment of disabled people. Achievement of the aim allows to identify gaps in social policies, which reduce the exclusion of people with disabilities, and make suggestions for its improvement.

In order to achieve the aim of the thesis, the following tasks are formulated:

1. To carry out an overview of the scientific literature analysing the factors influencing the development of the concept of State aid and reveal the positive features of State aid.
2. To analyse scientific literature on the role of employment policy as an instrument of social policy in addressing the social problems of people with disabilities and distinguishing employment patterns, linking them to the role of people with disabilities in society.

3. To critically evaluate, based on the analysis of the scientific literature, the benefits of State aid for the employment of the disabled.

4. To develop a theoretical model of State aid evaluation in order to ensure effective solution of social problems for people with disabilities.

5. On the basis of the established theoretical model of State aid evaluation, to carry out an assessment of the economic-social impact of State aid granted to employment of disabled persons in Lithuania.

6. To carry out a comparative analysis of the effectiveness of State aid models for the employment of disabled persons in the European Union and to propose guidelines for the improvement of the closed model applied in Lithuania.

7. To submit the findings of the research and proposals for further research.

Research methods. In order to achieve the aim, set in the thesis, the newest scientific works on the topic of State aid and social problems, employment, poverty, material deprivation of the disabled were analysed and summarised. The methods of comparative, logical and systematic analysis, regression analysis methods and multi-criteria analysis decision-making method, which was combined with the simple additive weighting method, were used to analyse the conceptual provisions related to State aid use models and methods for assessing the integration of people with disabilities into the labour market. Methods of concretization, generalisation and graphical analysis have been used to process the results obtained. In regression analysis, data were processed using IBM SPSS application; Microsoft Excel functionalities were used in multi-criteria evaluation; “Survey Monkey” application was used for expert survey to determine simple additive weights.

Defended Statements:

1. The assessment of the effectiveness of State aid has revealed that the State aid granted in Lithuania does not have a significant impact on the employment and living conditions of disabled people.

2. The state applies an open model for the integration of disabled people into the labour market through State aid increases the integration of disabled people and improves the situation of disabled people reflecting the country's social indicators.

3. The improved State aid scheme for the employment of disabled people, based on good EU practice, paves the way for a more effective social policy in the country aimed at creating the social well-being of disabled people.

Scientific novelty and of the thesis and theoretical significance.

Although State intervention and State support in economic science are discussed quite often, there is little comprehensive research, particularly on the impact of State aid on the economy of disabled workers. State aid is generally analysed as a subject of competition policy and assessments are carried out to verify the legality of such aid. Scientific work can also meet the economic impact assessments of a given State aid also can be meet in scientific research, but most of the analysis focuses on State aid for broadband or environment. Scientific articles looking at State aid for disabled workers can also be found, but from a legislative perspective, considering the eligibility of this type of aid. In thesis, State aid is evaluated as an investment that helps solve social problems of disabled people and generates social returns. In order to foresee possibilities and ways of solving social problems related to the employment of persons with disabilities, the thesis assesses the benefits of state support for social exclusion, poverty and material deprivation of persons with disabilities. This is a relatively new and poorly researched aspect of the assessment of State aid for disabled workers. Also, the problems of the disabled people are more often analyzed in the sociology or philosophy, and from the point of economics view the problems of the integration of the disabled into society are less often analyzed.

The evaluation of State aid for employment of disabled persons carried out in the thesis is significant in economic science due to the low level of research on this object. Based on the aspects and methods of State aid evaluation analysed in the scientific literature, a State aid

evaluation model for employment, poverty and material deprivation of the disabled was developed. On the basis of an analysis of the scientific literature investigating the importance of the assessment of State aid, the thesis proposed the specific aspects of the assessment of the State aid, which are assessed in the empirical part of the study. Based on the results of the research, the author also developed a system of evaluation indicators to measure the impact of State aid in reducing the social exclusion of people with disabilities. The impact of State aid on social indicators of disabled persons is determined on the basis of econometric models based on the linear regression method. In the empirical study, the integrated method of expert and multi-criteria evaluation extends the scientific assessment of State aid to determine not only the appropriateness of State aid for the achievement of the policy objectives pursued, but also successful examples of the implementation of social policy of disabled persons at EU level and to identify the directions of improvement of State aid for employment of disabled people in Lithuania, based on the example of politicians implemented by EU Member States.

Practical value of research findings. The evaluation model developed in the empirical study and the results obtained acquire practical significance because of their usability in implementing and improving the objectives of the national policy on employment and integration of persons with disabilities into society. The applicability of the established system of measurement indicators may be extended not only to assess the impact of State aid on employment, but also to assess the effectiveness of other measures aimed at improving the quality of life of people with disabilities. The model for evaluating the impact of State aid on the employment of people with disabilities, using the linear regression method, is used in the thesis to assess the results produced by the policies implemented, but in practice this model can be applied to assess the achievement of the objectives of social policies for people with disabilities, both implemented and already implemented, promoting the employment of people with disabilities. The thesis also evaluates the success of social policy of

disabled people in other Member States, on the basis whereof the adequacy and proportionality of State aid granted in Lithuania is assessed and proposals are submitted for the improvement of the policy implemented in Lithuania with a view to integrating disabled people into society as widely as possible and changing the attitudes of the population with disabilities.

Research limitations and data availability. There have been several types of limitations in the thesis. In Lithuania, the Ministry of Social Security and Labour is responsible for providing State aid to disabled workers, but information about such assistance has not been published consistently. Furthermore, information on all types of State aid granted is collected and published by the EC, but the database of this institution is not regularly updated, and the most recent available annual data is 2018. Moreover, although information on the participation of people with disabilities in public life is fragmented and collected not only in Lithuania but also at EU level, it is fragmented and accumulated only in the selected year (for example, data on the access of people with disabilities to education or data on their access to the labour market were collected in 2011). Therefore, such information cannot be used in the research. Indicators of employment and poverty and material deprivation of persons with disabilities shall be evaluated in order to identify the impact of State aid on improving the integration of persons with disabilities into society. An 11-year timeline is selected for the assessment of the State aid used for the employment of disabled persons in Lithuania. The 9-year time series is analysed when assessing the social indicators of the disabled in the EU countries. The different time series of these two evaluations do not affect the quality of the research, as both assessments are not interdependent and provide separate results for the objects being analysed.

Different treatment of the concept of disability is also seen as a limitation. The statistics treat disability as a subjective perception of a person, i.e., how people perceive restrictions on their own day-to-day activities due to health problems. Providing the State aid, the

institutional approach that recognizes people with disabilities when they are recognized as such by the system is very important. The treatment of the concept of disability is important for the assessment of State aid through regression and multi-criteria analyses.

Another limitation is related to the small range of research topics covered. State aid in research is usually analysed from a competitive point of view, and there is not much research that analyse the main economic and social objectives of State aid. This has an impact on the effectiveness of State aid for the employment of people with disabilities, as it is not possible to draw on the results obtained by other researchers.

The expert evaluation encountered the passive participation of selected experts in answering questions asked to experts. Although a significant group of experts from political, scientific and practical backgrounds was selected for the research, only a few experts answered questions from the questionnaire submitted. Given the representativeness criteria of the expert evaluation presented in the scientific literature, the number of responses received was sufficient and the thesis ensured the appropriateness of this part of the evaluation.

Main data sources. Sources of State aid, social and employment data for people with disabilities include the database of the European Commission, Eurostat, the Department of Statistics of Lithuania, the Ministry of Social Security and Labour of the Republic of Lithuania, the Disability and Working Capacity Assessment Office under the Ministry of Social Security and Labour, the Employment Service under the Ministry of Social Security and Labour. The methodology of expert evaluation (Libby, Blashfield, 1978; Ginevičius, Podvezko, Bruzgé, 2008) and the methodology of multicriteria evaluation (Ginevičius, 2008; Podvezko, 2008) are also applied. The literature review uses sources from different countries to provide a broad basis for comparing results and to reduce the geographical fragmentation of studies due to the low level of research on the subject in the economic context.

Structure of the dissertation. The dissertation consists of an introduction, four chapters, conclusions and recommendations, reference list and 4 annexes. The volume of the dissertation is 144 pages. Text contains 11 tables and 20 figures.

Approval of research findings. The main results of the research have been published in three scientific journals. Also, the results of dissertation have been published at two national and international scientific conferences. The results of the thesis were presented to Ministry of Social Security and Labour, Disability and Working Capacity Assessment Office and non-governmental organizations of disabled persons on 12 March 2021.

1. THE CONCEPT OF STATE AID AND ITS CRETAED BENEFITS FOR THE EMPLOYMENT OF PEOPLE WITH DISABILITIES

The role of State aid in the economy is evaluated in two ways: in one case as a necessary tool to correct market imbalances, in another as a constraint measure on market competition. This approach to State aid has developed over the course of different economic regimes. The special benefits of state involvement and support have been seen not only in solving a country's economic problems, but also in solving its social problems.

The successful implementation of social and employment policies depends on the country's economic growth. At the same time, social and employment policies have a reversal effect on the country's economic level. Increasing the country's employment rate addresses not only wage problems, but also the psychological problems of the population. The health dimension is also of great importance in social policy and special attention must be paid to persons who suffer social exclusion as a result of illness or disability.

When implementing various strategies and pursuing an effective social policy, the state must increase employment not only for healthy

people, but also for people with disabilities, encourage the establishment of their businesses, and ensure that as many employers as possible are interested in creating jobs for people with health impairments, thus contributing to increasing employment for people with disabilities and reducing social exclusion and poverty. Among other things, an important task for the state in designing a social protection system for people with disabilities is to create an employment policy for people with disabilities in a way that encourages them to look for work and not just to receive state benefits and incentives.

By participating in a mainstream work environment, a person with disability acquires and develops certain social skills, changing the stereotypical attitudes of the non-disabled towards people with disabilities. This allows the healthy people to become more aware of who's with health and to accept them with their limitations. In addition, the integration of people with disabilities into the healthy workforce through competitive wages, can have a greater impact on poverty, as people with disabilities are more likely to be poor than the rest of the population due to their low income. Increasing poverty reduces access to social, cultural, or political activities, which increases social exclusion and has a negative impact on people's self-esteem or self-confidence. Growing lack of confidence reduces opportunities for active participation in the labour market. Low levels of labour market participation affect earnings, leaving people with disabilities in poverty and social exclusion. Moreover, the integration of people with disabilities into the work environment alongside non-disabled people has a positive impact on their motivation to participate in society.

Creating a working environment for people with disabilities is linked to society's attitude towards them. Gottlieb et al. (2010) identified the main and most common models of employment for people with disabilities, which have interfaces with disability models (Figure 1).

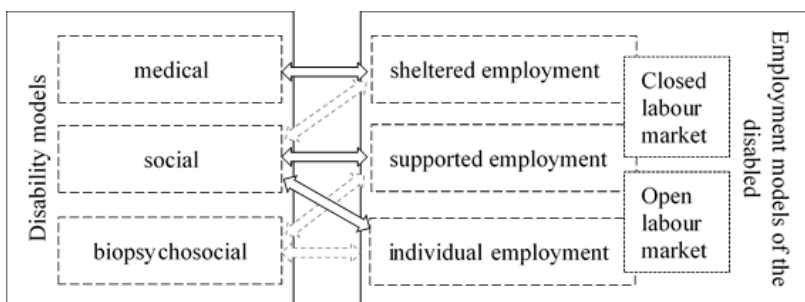


Figure 1. Relationships between disability models and employment models for people with disabilities

Source: created by the author based on Gottlieb et al. (2010)

In order to fully integrate a disabled person into society, the state must create conditions for a disabled person to participate in an open labour market. An appropriate choice of employment model can help address the country's economic and social problems and can also contribute to achieving sustainable policy objectives from a social point of view.

The Inclusion of people with disabilities in the labour market is an effective tool for fighting discrimination and reducing poverty among the most discriminated and excluded. State aid may be granted to companies that employ disabled people to increase the employment of the disabled people,. The provision of such assistance not only solves the employment problems of the disabled, but also solves the socio-economic problems of this people group. In addition, other stakeholders may benefit from targeted State aid. However, it is important to note that in applying the chosen measures for policy implementation, it is important to carry out proper and timely assessments of the benefits of such measures and, if necessary, to take timely decisions on their adjustment.

2. THE CONCEPT OF INTEGRATED EVALUATION OF STATE SOCIAL AID

According to the evaluation aspects highlighted in the scientific literature, granting State aid for the employment of the disabled, when it is provided under a scheme approved in advance by the EC, it is sufficient to estimate its positive impact only (Majcher-Williams & Foecking, 2010). The key elements in this assessment are the impact of State aid on the country's social objectives, the proportionality of the aid, its appropriateness for policy implementation and its incentive effect. All these aspects of the evaluation can be applied at any stage of aid granting as well as in any model of employment of people with disabilities. With this in mind, the thesis develops a conceptual evaluation model that aims to assess the socio-economic effectiveness of State aid in promoting the employment of people with disabilities (Figure 2).

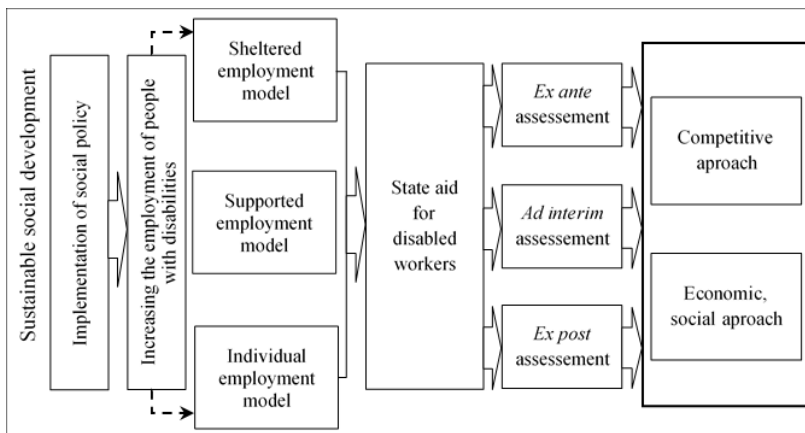


Figure 2. Model for the evaluation of State aid for disabled workers

Source: created by the author based on EC (2014), Gottlieb et al. (2010), Friederiszick et al. (2006), Bourreau et al.

As with any other policy measure, impact evaluations of State aid can be carried out through quantitative or qualitative research,

econometric analysis, pilot studies or surveys. The selection of applied methods depends on the pursued objectives, the available data and other circumstances affecting the evaluation. Regression models can be established for State aid assessment, showing the relationship between the State aid and selected indicators. Considering the variety of collected data, this method is the most appropriate for analysing the impact of State aid on the economic and social phenomena of the country's people with disabilities. The impact of State aid on the selected indicators is quantified by carrying out the regression analysis, and recorded by a mathematical equation. According to the author, this analysis is the most appropriate for assessing the incentive effect and necessity of State aid for disabled workers and for achieving the desired policy goal.

The multi-criteria evaluation method is often used for assessment of different alternatives, which allows comparing the most rational performance of individual groups or countries according to the same indicators. This method is used for the evaluation of various social phenomena, as well as for the assessment of state support. Therefore the method can be applied in order to compare social exclusion and poverty of people with disabilities in different countries, regions through the prism of State aid measures of implementing employment policies for the people with disabilities. Several different approaches may be used in State aid assessments, which have to be coordinated with each other.

In order to properly assess the impact of the use of State aid on the implementation of employment policy for the people with disabilities, it is important to properly select indicators that reflect the problem question. The employment indicators of the target group, which have a direct link to the assistance provided, as well as indicators of social exclusion, material deprivation and poverty, which are linked to employment, are useful in describing the effectiveness of the implementation of the policy on the employment of people with disabilities. Other indicators, such as educational attainment or participation in social and political activities, also reflect social exclusion, but this information is not continuously collected in the context of disability issues.

Taking into account the duration of the aid provided in Lithuania for the employment of disabled persons, the empirical investigation starts with an assessment of the impact of the already used State aid on the employment and social inclusion of people with disabilities. For the analysis, the author uses the methodologies of Brandtner and Vidoni (2018), Friederiszik et al. (2018), Majcher-Williams and Foecking (2010), Robins and Geldof (2018), and Wright (2018). The aspects of the assessment of the economic and social impact of State aid are grouped into distinct categories according to the assessment objectives and methods used, and the analysis is therefore carried out in two stages: aid effectiveness, which covers the aspects of the achievement of the desired policy objective of State aid and the incentive effect and necessity of the aid and is carried out by means of an *ex-post* assessment, and appropriateness and proportionality, which is carried out by comparing the practices of the different countries (Figure 3).

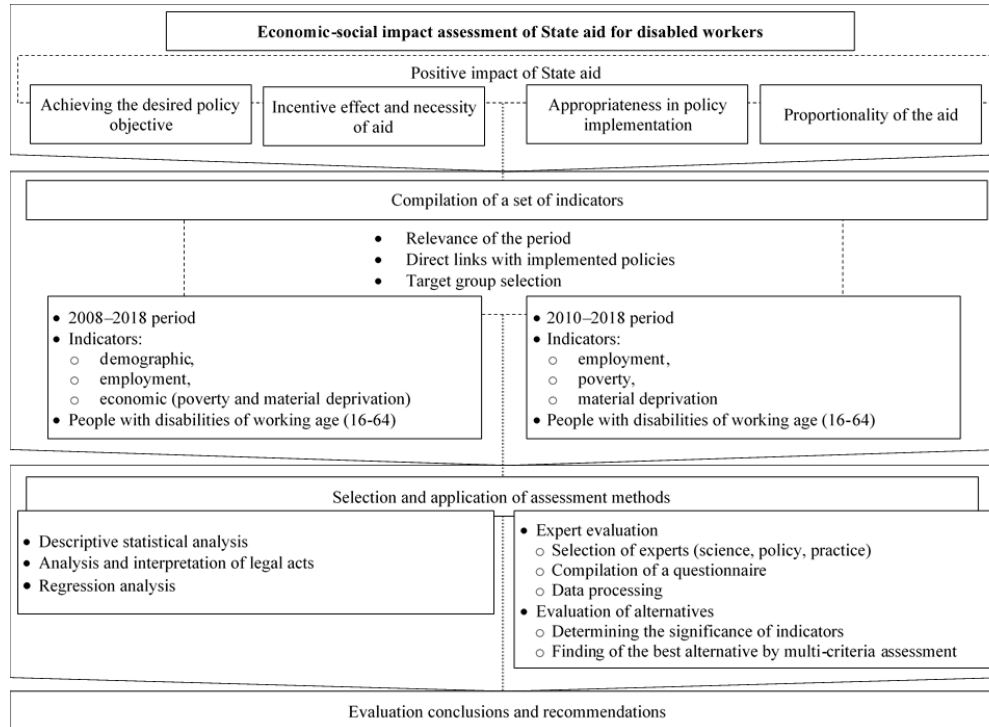


Figure 3. The model for the integrated assessment of the social benefits generated by State aid
Source: created by the author

A regression analysis is carried out to evaluate the effectiveness of State aid. The linear regression method makes it possible to assess the impact of State aid on the employment and social integration of people with disabilities. This method is used to determine whether there is a statistically significant connection between the level of State aid granted and indicators of the employment and economic situation of people with disabilities:

$$Y = \beta_0 + \beta_1 X_i + \varepsilon_i, \quad (1)$$

After verification of the adequacy of the model , variables are selected for which regression equations can be drawn up and mathematical formulas are written for these variables. The results obtained are summarised by assessing the impact of State aid on the economic-social phenomena of people with disabilities.

The evaluation of the impact of State aid on the social exclusion of people with disabilities continues in terms of the appropriateness and proportionality of aid. This comparative assessment aims to determine whether the State aid measure is relevant to address the social problems of disabled people in the country. It also questions whether the State aid is provided at the lowest cost and achieves the greatest positive effect. The evaluation is carried out by comparing State aid schemes in different EU countries. A multi-criteria evaluation method is chosen to achieve the objectives of the assessment. The application of this method also allows to provide directions for the improvement of State aid.

One of the most important steps in multi-criteria methods is the determination of the significance of the criteria, which indicates the importance of a particular indicator for the phenomenon under consideration. The significance of the indicators in the thesis is determined by a subjective indirect method based on expert judgement, where a selected scores system is applied during the evaluation and the sum of the experts' judgements is not limited.

When carrying out an expert evaluation, it is important to ensure the reliability of the assessment by selecting the appropriate experts,

the right number of experts and by drawing up the evaluation questionnaires. Once the survey of experts has been completed and the responses collected, the experts' evaluations are analysed and systematised, and the weights of the indicators (ω) are determined, before calculating the c_{ik} sum s_i of the r ratings of all the experts (Ginevičius et al., 2008):

$$s_i = \sum_{k=1}^r c_{ik}. \quad (2)$$

The weights of criteria are set:

$$\omega = \frac{s_i}{\sum_{i=1}^m s_i}. \quad (3)$$

Once the weights are assigned to each indicator, it is necessary to verify whether a decision can be made on the basis of expert opinion. To this end, an assessment of the compatibility of the experts' opinions is carried out. Where there are more than 2 experts, a concordance coefficient is used to measure the degree of closeness between the individual opinions. The range of values of the concordance coefficient is from 0 to 1. The higher the value of the coefficient, the stronger the consistency between the experts' opinions. The value of the concordance coefficient W is calculated according to the formula (Podvezko, 2005):

$$W = \frac{12S}{r^2m(m^2 - 1)}, \quad (4)$$

here S is the sum of the squares of the deviations of the sum of the ranks of the indicators from the overall mean.

The maximum possible value of S_{max} is calculated, which must be greater than the calculated S (Podvezko, 2005):

$$S_{max} = \frac{r^2m(m^2 - 1)}{12}. \quad (5)$$

The concordance coefficient can be applied in practice if there is a threshold value, in which case the experts' assessments can be

considered to be harmonised. Kendall (1970) showed that if the number of indicators $m > 7$, the significance of the concordance coefficient is calculated using the χ^2 criterion (Podvezko, 2005):

$$\chi^2 = Wr(m - 1) = \frac{12S}{rm(m + 1)}. \quad (6)$$

If the calculated value of χ^2 is greater than χ_{krit}^2 with $\nu = m - 1$ degrees of freedom, then the experts' estimates are considered to be consistent. If $\chi^2 \leq \chi_{krit}^2$, then the experts' opinions are considered to be inconsistent and the expert evaluation cannot be used.

Once the expert value setting process has been completed, a multi-criteria decision-making assessment is launched. The most well-known multi-criteria assessment method and the most used in research is the *Simple Additive Weighting* (SAW) method (Ahsan, Setiyaningsih, Susilowati, Dijaya, & Tjahjanti, 2019; Borissova, Korsemov, & Mustakerov, 2019; Hwang & Yoon, 1981; Krisbiantoro & Baihaqi, 2019; Podvezko, 2011; Saputra, Jonathan, & Warnars, 2020; Wang, 2020). The SAW method integrates the values and weights of the indicators analysed into a single criterion, but, using this method, indicator normalisation step is also very important. For the quality of the study, it is necessary to transform minimising criteria values into maximising ones, as the use of maximising values is a key condition for the application of the method (Ahsan et al., 2019; Krisbiantoro & Baihaqi, 2019; Podvezko, 2008, 2011; Wang, 2020). In multi-criteria evaluation, the criteria evaluated for each alternative are aggregated into a whole, and each alternative is given a level of significance based on the calculated total score, which allows a comparison of the alternatives under consideration.

The weight of the indicator determined by the expert evaluation method shall be combined with the normalised values of the indicators and the total value of the criterion shall be calculated:

$$S_j = \sum_{i=1}^m \omega_i \tilde{r}_{ij}, \quad (7)$$

when S_j – criterion of the SAW method.

The SAW criterion is calculated for all alternatives considered. In order to select the most successful country in implementing an employment of the people with disabilities policy during the period analysed, the SAW criteria calculated for each year are given ranks, which are summed up or a total score is calculated. Countries with the highest scores are ranked as the most successful in implementing employment policies. The obtained results are summarised.

3. APPLICATION OF COMBINED ASSESSMENT MODEL OF STATE AID FOR THE EMPLOYMENT OF DISABLED PERSONS: THE CASE OF LITHUANIA

The empirical study of the thesis is divided into two parts. The first part carries out an *ex-post* evaluation of the implemented State aid for employment of people with disabilities, which assesses the progress and impact of the implemented policy on key indicators measuring poverty and social exclusion. This evaluation determines the effectiveness of State aid in achieving the objectives of the social policy for people with disabilities and the incentive effect and necessity of this aid. The second part, as part of the ongoing assessment of the economic-social impact, analyses the appropriateness of State aid for the employment of people with disabilities for the achievement of the policy objectives and the proportionality of this aid. Based on this analysis, proposals are formulated for improving the integration of Lithuanian disabled people into the labour market.

In the *assessment of effectiveness*, and looking at the dynamics of persons with disabilities, it can be concluded that in Lithuania, state support for workers with health impairments has increased over the period 2008–2018. In Lithuania, State aid for the employment of people with disabilities is granted to social enterprises on the basis of EC regulations, subsidising wage costs and reimbursing the costs of

other necessary measures to improve conditions. The growing number of social enterprises over the period under analysis has been accompanied by an increase in the number of persons with disabilities employed in these enterprises. The largest proportion of the employed population is made up of persons with disabilities that are not very complex or severe (level of incapacity for work 30–55 %). The participation of people with severe disabilities (0–25%) in social enterprises is very sluggish.

The increase in the number of people employed in social enterprises seems attractive without considering the dynamics of redundancies, which are also marked by growth trends. This change in recruitment and dismissals implies the attractiveness of State aid and the desire of social enterprises to reduce their costs. This phenomenon may have a negative effect on the replacement of other workers by persons with disabilities whose remuneration may be subsidised. Moreover, the dynamics of the wages paid in social enterprises show that they fluctuate around the minimum wage threshold, suggesting that State aid is not being used in a targeted manner and does not address the problem of poverty among disabled people. The redistribution of the number of people with disabilities between organisations that employ people with disabilities without public subsidies and that create an open labour market and social enterprises that create the conditions for the existence of a closed labour market, it can also be argued that State aid is being used in an inappropriate way to address the problems of the inclusion of people with disabilities in the labour market (Figure 4).

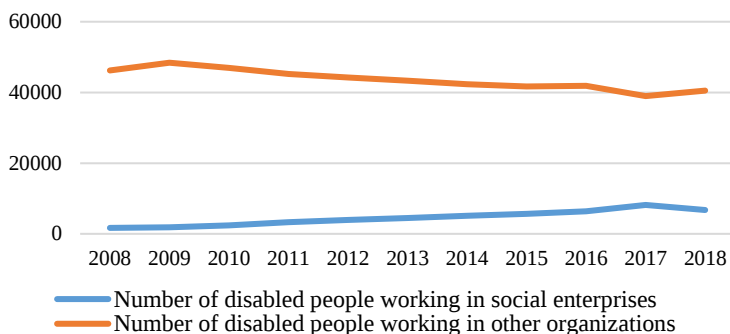


Figure 4. Dynamics of the number of disabled people working in the open labor market and working in social enterprises

Source: created by the author

In order to determine the impact of State aid for the employment of people with disabilities, a regression analysis is carried out. When looking at State aid and employment indicators, correlation coefficients are calculated to mathematically determine the strength and direction of the relation between the data (Table 1). The correlation analysis shows that there is a strong inverse linear connection between the variables analysed, with the exception of the rate of unemployed persons with disabilities. The values of the coefficient of determination show which factors explain the variation in the level of State aid.

Table 1. Results of correlation analysis of employment rates of disabled people and State aid for disabled workers

Dependent variables	Correlation coefficient of variables	Coefficient of determination (R^2)
<i>Working_DP_SI</i>	0.961**	0.793
<i>New_DP_SI</i>	0.948**	0.708
<i>Fired_DP_SI</i>	0.943**	0.787
<i>Wage</i>	0.856**	0.795
<i>Unemployed_DP</i>	-0.442	0.060
<i>Working_DP</i>	-0.843**	0.534
<i>First_disability</i>	-0.943**	0.419
<i>Inactive_DP</i>	-0.943**	0.776

**. Significant at the 0.01 level.

Source: created by the author

For statistically significant indicators, regression models are constructed, whose eligibility is assessed based on the values of the selected indicators: the absolute value of the Student's t-criterion, and the value of the F-criterion. All variables with a strong correlation were positively evaluated during the model eligibility test. They could be subject to linear regression equations, but the Durbin-Watson test showed that the residual errors of many variables (social enterprise indicators and the indicator on first disability) are correlated and therefore not suitable for the model.

Once the statistically significant variables have been selected, regression equations are constructed to assess the impact of State aid for the employment of people with disabilities (X) on inactive people with disabilities(Y):

$$Y = 191285.494 + (-810.555)X$$

and the impact of State aid for the employment of people with disabilities (X) on working people with disabilities (Y):

$$Y = 49309.852 + (-84.662)X.$$

It should be noted that State aid has a linear inverse effect on these variables, so that increasing State aid to promote the employment of people with disabilities would lead to a decrease in the number of inactive people with disabilities in the country. This would have a positive effect on the country's employment policy, albeit a small one, as it would bring into the labour market persons with disabilities who are able but dare not work. It can be argued that State aid has a partly incentive effect.

The analysis shows that increasing state support is having the opposite effect on the number of disabled people in employment. This effect is not seen as positive for employment policy, as the purpose of State aid is to increase the number of employed people in the country.

The impact of State aid on poverty and material deprivation indicators for people with disabilities is analysed, and a correlation analysis is used to determine the mathematical expression and direction of the strength of the relationship. This analysis shows that a

strong linear inverse relationship exists between State aid and the variables *No_Bath*, *Laundry_machine*, *Light_gap*. A moderate relationship was found between the variables State aid for disabled workers and *Computer*, *Food*, *No_WC*. The values of the coefficient of determination indicate which factors explain the variation in the level of State aid. All other indicators do not have a statistically significant direct correlation with State aid for workers with disabilities (Table 2).

Table 2. Results of correlation analysis of economic indicators and State aid for disabled workers

Dependent variables	Correlation coefficient of variables	Coefficient of determination (R ²)
<i>Polluted_environment</i>	0.410	0.328
<i>Poverty_level</i>	0.396	0.147
<i>Taxes</i>	0.228	0.007
<i>Car</i>	−0.041	0.017
<i>Holidays</i>	−0.050	0.001
<i>Heating</i>	−0.064	0.043
<i>Poor_district</i>	−0.096	0.001
<i>Unforseen_expenses</i>	−0.146	0.001
<i>Noise</i>	−0.169	0.049
<i>Housing_condition</i>	−0.334	0.215
<i>Housing_depr_level</i>	−0.430	0.221
<i>Overcrowded_housing</i>	−0.442	0.294
<i>Computer</i>	−0.530	0.352
<i>Food</i>	−0.647*	0.387
<i>No_WC</i>	−0.661*	0.623
<i>No_bath</i>	−0.788**	0.585
<i>Laundry_machine</i>	−0.822**	0.663
<i>Light_gap</i>	−0.856**	0.518
*. Significant at the 0.05 level.		
**. Significant at the 0.01 level.		

Source: created by the author

After testing the fit of the selected statistically significant indicators to the regression model it was found that linear regression equations could be constructed for the variables with the strongest correlation, except for the variable *Computer*. The residual error correlation tests show that there is no autocorrelation only between the State aid for employment of people with disabilities and the indicator showing the proportion of the working age population with health impairments that still does not own a washing machine. A regression equation is therefore constructed for these variables:

$$Y = 7.659 + (-0.158)X.$$

The *assessment of the appropriateness and proportionality* of the State aid is carried out using a multi-criteria method, which aims to establish significance level for the indicators assessed. To determine the relevance of the indicators, experts from different fields with both theoretical knowledge and practical experience in dealing with and solving employment problems of people with disabilities are questioned. The indicators are presented for the assessment and scored by the experts in order of importance. After receiving answers, the concordance of opinions was evaluated and the concordance coefficient $W = 0.862$ was calculated. The significance of the concordance coefficient is checked by calculating the chi-square, which is $\chi^2 = 144.828$, where $\chi^2_{krit.} = 33.924$. Since the value of the mentioned coefficient is close to one and the value of the chi-square is higher than the critical value of the chi-square, it can be concluded that the opinions of the experts are in agreement and the results obtained can be used for further analysis. The coefficients of significance of the experts' assessments are calculated.

The SAW multi-criteria assessment normalises the values of the available indicators for each country in each year and recalculates them by applying the estimated significance coefficients. The resulting amounts are then given a score, which is aggregated to calculate the overall country score. The results show that the most successful countries in terms of poverty reduction and employment

policies for people with disabilities during the analysis period were the Netherlands (240 points) and Finland (240 points) (Figure 5).

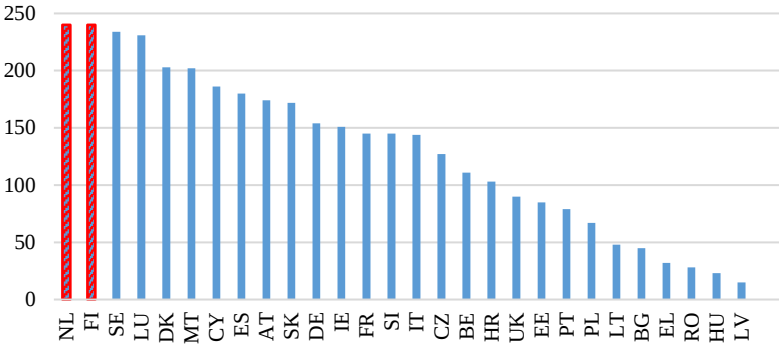


Figure 5. Identification of the best country alternatives by multi-criteria assessment using the SAW method

Source: created by the author

In assessing the appropriateness and proportionality of the State aid for employment of people with disabilities, the features of the employment policies for people with disabilities in Finland, the Netherlands and Lithuania were analysed to identify similarities and fundamental differences in the measures taken. Social enterprises are encouraged, but their main purpose is to provide employment for people with severe disabilities in Finland, as in Lithuania. Among other things, State aid is also granted to other enterprises if they are prepared to employ people with disabilities in Finland. The Netherlands also supports all enterprises that are able and willing to contribute to the state’s objectives but uses State aid for these purposes very limitedly. Finland and the Netherlands also focus on promoting people employed in the public sector. The Netherlands is prepared to impose fines or quotas for the employment of people with disabilities if the joint agreement between the government and private employers is not implemented.

A comparison of the principles of assistance in Finland and Lithuania suggests that State aid in Lithuania is an appropriate instrument for promoting employment of people with disabilities, but its provision could be adjusted. In this context, the targeting of State aid in the country to support only social enterprises does not provide significant benefits, the scheme for such enterprises should be reviewed and amended. The analysis has shown that in Lithuania, on average, the minimum wage of a person with disabilities is compensated, whereas in Finland the wage subsidy cannot exceed EUR 1400. It can be argued that in Lithuania, State aid is provided at the lowest possible cost, but based on the practice in the Netherlands, it is possible to find ways to encourage employment of people with disabilities without using state resources.

Taking into account the country analysis, the author suggests that two reform models could be chosen for the reform of the Lithuanian employment policy for people with disabilities. One model can be focused on the application of strict measures to promote the integration of people with disabilities into the labour market. This could be based on the example of the Dutch policy and the introduction of quotas for employers to ensure the employment of a certain number of persons with disabilities. This model can achieve the expected results without the need for State aid, as the obligation to employ people with disabilities would be enshrined in legislation. The other model would involve the use of softer measures, such as the provision of State aid to all enterprises willing to employ people with health impairments. For that, it would be appropriate to refer on the Finnish experience and to grant State aid to social enterprises for the employment of persons with severe disabilities (0–25% level of working capacity). The role of the public sector, which could be subject to quotas for the employment of people with disabilities, is crucial. This would help to build the image of a socially responsible employer employing people with disabilities.

CONCLUSIONS AND RECOMMENDATIONS

1. State aid is, by its nature, not permissible in most cases, but if it helps to correct market distortions, it is possible. In particular, the role of State aid is reflected in areas that are economically unattractive, such as the employment of disabled people.
2. The effectiveness of employment policies targeting people with disabilities has several positive consequences: active participation of disabled people in the labour market improves their social skills and changes their stereotypical attitudes, addresses the income inequalities, reduces poverty rates and material deprivation, and provides opportunities to meet other needs affecting their self-esteem, self-confidence, and environment.
3. Taking into account the formed attitude of the society towards disability, three employment models are distinguished: cared for, supported, individual.
4. Assessing the effectiveness of State aid targeted at disabled workers, it is sufficient to assess its positive impact on the policies implemented, which also demonstrates the success of the policies implemented. The negative effects of State aid are linked to distortions of competition and should be assessed when the aid is directed towards a very specific economic operator.
5. The positive impact of State aid is characterised by the achievement of a political objective, its policy relevance, its incentive effect, necessity and proportionality. Various methods are used to assess these aspects, the choice of which depends on the objectives of the assessment, the available data and other conditions affecting the State aid granted or the policies implemented. Complex assessments may be carried out using several methods together.
6. In order to ensure effective solution of social problems of persons with disabilities, a two-stage integrated model of assessment of the economic-social impact of State aid for employment of persons with disabilities in Lithuania has been developed. In the first stage,

using the linear regression method, the impact of State aid for disabled workers on the employment and economic (poverty and material deprivation) indicators of disabled people of working age was identified. This assessment made it possible to determine the effectiveness of the State aid granted. Using multi-criteria evaluation method, an evaluation of the social indicators of Lithuania and EU Member States relating to disabled persons of working age, allowing to identify the countries that implement social policies of disabled people most effectively was carried out in the second stage.

7. An analysis of the dynamics of State aid and employment rates for people with disabilities revealed that during the period 2008-2018 analysed, State aid for disabled workers was marked by rapid growth. There is a similarity between trends in State aid trends in the context of changes in social enterprise indicators. Since State aid is granted to social enterprises in Lithuania, the incentive effect of State aid is visible. The rapidly growing volume of State aid has led to an increase in the number of social enterprises and an increase in the number of disabled people employed there, with wages close to the national minimum wage. The same growth was observed in the number of workers made redundant from these companies, which calls into question the targeted use of State aid. The inappropriate use of State aid is also noted due to the stagnant number of working disabled people and the redistribution of labour from an open to a closed labour market.
8. A correlation analysis of State aid and employment between 2008 and 2018 has shown that there is a direct statistically significant link between State aid and people with disabilities working, employed and dismissed in social enterprises. There is an inverse direct statistically significant link between State aid and all disabled people working in the country. This leads to the conclusion that the State aid has not only an incentive effect on employment in social enterprises, but also a negative effect on the replacement of workers. Based on the results of the analysis carried

out, it can also be argued that State aid in Lithuania supports the existence of a closed labour market and does not provide opportunities for the development of integration of disabled people into the open labour market.

9. An analysis of the actual employment rates of State aid shows that State aid, albeit marginally but significantly, contributes to a decline in the number of inactive disabled people in the country, also has a slight impact on the declining number of disabled people working in the country. This effect is not expected from the existing State aid measure and it is therefore considered that the aid is being misused.
10. A correlation analysis of 2008-2018 economic indicators for people with disabilities carried out showed that State aid has a statistically significant impact on only a few indicators that describe the most difficult living conditions. The positive impact of State aid on improving living conditions is manifested through improving housing (communal) conditions, having bright housing, full-fledged diet, and improving household conditions.
11. Regression analysis has shown that the significant impact of State aid can only be observed by improving the housing conditions of people with disabilities, and by acquiring a washing machine. For all other indicators assessed, the significant impact of State aid has not been identified, which suggests that State aid is not targeted and does not address poverty and material deprivation of persons with disabilities.
12. A comparison of State aid schemes in EU countries was carried out to assess the appropriateness and proportionality of State aid. Using multi-criteria and expert evaluation methods, the countries that have most successfully implemented social policies for the disabled have been identified. The evaluation found that Finland and the Netherlands were the most successful implementers of social policies for people with disabilities of working age.
13. The analysis of the situation in the selected countries showed that Finland provides State aid for the employment of disabled people,

which is similar to that of Lithuania, but Finland promotes the integration of disabled people into the open labour market, while in social enterprises it supports only severely disabled persons. The assistance provided in Lithuania is considered to be an appropriate instrument for promoting the employment of people with disabilities, but the conditions of provision should be adjusted. In view of the fact that State aid in Lithuania compensates for the minimum remuneration of disabled persons, it can be argued that aid is granted at the lowest possible cost, but according to Dutch practice, a different scheme for integrating disabled people into the open labour market can be considered, which can be implemented without financial intervention from the State aid.

14. Examples of employment policies for people with disabilities in Finland and the Netherlands allow to suggest directions for the improvement of the employment policy of the disabled people in Lithuania. The author proposes two models for modernising Lithuania's employment policy. A model based on the Dutch example, which is considered rigorous as mandatory employment quotas for disabled people are introduced for businesses. This model and the absence of public subsidies can save public resources, as the legislation obliges businesses to contribute to solving the country's social problems. The second model, based on the Finnish example and implemented through less lenient measures, is that State aid is granted to all economic operators employing disabled people and that quotas are set for the employment of disabled people for public authorities. State aid to social enterprises shall be granted only for the recruitment of severely disabled persons. The economic capacity of the country is important in the implementation of this model due to the large volume of State support provided.

Future research directions

1. When planning the modernisation of the provision of State aid for the employment of disabled persons, it is important to foresee the

benefits generated by future policies using public funds. It is appropriate to carry out an *ex-ante* evaluation of the State aid granted to the employment of disabled persons for the purpose of analysing the expected results, drawing up a comprehensive set of indicators and providing appropriate assessment methods in order to compare the effectiveness of the employment policy under assessment when public support is provided and when no such support is provided.

2. The participation of disabled people in the labour market alone is not sufficient to achieve greater integration of disabled people into society. For the purpose of conducting a systematic evaluation of integration into society, it is appropriate to analyse the activity of persons with disabilities through participation in political, educational, cultural and other social activities. These studies would increase the variety of scientific assessments of the impact of State aid.
3. In order to improve employment policies for people with disabilities, it is important to carry out an integrated assessment of the implemented policy. Therefore, when analysing the employment of disabled persons, it is appropriate to assess the impact of the State benefits provided on the working motivation of disabled persons. Such studies would not only complement the scientific impact assessments of State aid but would also help to identify the direction of improvement of the benefit payment system, to determine the level of income needed, to ensure a quality life for people with disabilities, while at the same time helping to predict the volume of State aid for employment.
4. The model of State aid assessment developed in a dissertation may also be adapted for the impact assessment of State aid granted for the implementation of other policies, which would supplement research with assessments of other types of State aid. When applying the evaluation model, it is important to create an appropriate system of indicators that reflects the objectives of the analysed policy.

Recommendations for further research

1. When conducting assessments of the social exclusion of persons with disabilities, it is necessary to establish a system of indicators to be evaluated. In this thesis, the evaluation of the effectiveness of State aid has encountered several data collection problems. Data relating to people with disabilities are difficult to access or collect, which makes it difficult to assess the impact on different levels of disability, age groups, gender groups, regions, etc. When planning further evaluations, it is necessary to identify in advance the sources on the basis of which the study will be carried out and to envisage actions that will help to gather the information necessary for the analysis.
2. The issue of reducing social exclusion of people with disabilities is equally important from a scientific and political view. In order to achieve not only scientific but also practical applicability of the research results, it is recommended to discuss the research directions with policy makers.

LIST OF PUBLICATIONS

Scientific articles in peer-reviewed scientific journals:

1. Girlevičienė, L.; Kvietkauskienė, A (2021). Valstybės pagalbos neįgalųjų užimtumui vertinimas, remiantis kitų ES šalių praktika. *Socialinių mokslų studijos*, 19(1).
2. Girlevičienė, L.; Kvietkauskienė, A (2021). Evaluation of State Aid and its Created Value for Disabled People in Lithuania. *Journal of Business Economics and Management*, 22(4).

Scientific articles in peer-reviewed conference proceedings:

1. Stanikūnas, R. A.; Girlevičienė, L. (2015). Valstybės pagalbos įtaka Lietuvos neįgalųjų užimtumui. *Lietuvos ekonomikos augimo ir stabilumo strateginės kryptys*, p. 256-266.

Presentations at international and national conferences:

1. Girlevičienė, L. Valstybės pagalbos įtaka Lietuvos inovacijų politikai. Nacionalinė mokslinė konferencija „Socialinė įtrauktis ir švietimo įstaigų veikla: sumaniosios edukacijos link“. Vilnius, Lietuva, 2016 m. lapkričio 24 d.
2. Girlevičienė, L. Valstybės pagalbos vaidmuo skatinant mokslinių tyrimų ir technologinę plėtrą Lietuvoje. Šiaulių universiteto 16-osios Ernesto Galvanausko tarptautinės mokslinės konferencija *Regiono konkurencingumo kaitos tendencijos*. 5 sekcija *Investment and Finance Decisions of Region Competitiveness Development*. Šiauliai, Lietuva, 2016 m. lapkričio 25 d.

BRIEF INFORMATION ABOUT THE AUTHOR

Laura Girlevičienė was born on 17 February 1978 in Ukmergė.

Education:

2015–2021 Doctoral studies. Social Sciences, Economics, Vilnius University.

2012-2014 Master's studies. Social Sciences, Economics, Vilnius University.

2008-2009 Bachelor of Equalization Studies. Social Sciences, Economics, Vilnius University.

2003-2006 Professional bachelor studies. Social Sciences, Economics, Vilnius College.

1997-2001 Bachelor studies. Educational sciences, pedagogy. Vilnius Pedagogical University.

Professional activity:

2007 – present. European Social Fund Agency.

Vilnius University Press
9 Saulėtekio Ave., Building III, LT-10222 Vilnius
Email: info@leidykla.vu.lt, www.leidykla.vu.lt
Print run 20