

Eurasian Studies in Business and Economics 13/1

Series Editors: Mehmet Huseyin Bilgin · Hakan Danis

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Gökhan Karabulut

Giray Gözgor *Editors*

Eurasian Economic Perspectives

Proceedings of the 23rd Eurasia
Business and Economics Society
Conference



Springer

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Series Editors

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and Economics Society Conference

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Preface

This is the Volume 1—Eurasian Economic Perspectives of the 13th issue of the Springer's series *Eurasian Studies in Business and Economics*, which is the official book series of the Eurasia Business and Economics Society (EBES, www.ebesweb.org). This issue includes selected papers presented at the 23th EBES Conference—Madrid that was held on September 27–29, 2017, at the *Faculty of Economics and Business, Universidad Complutense de Madrid in Madrid, Spain*.

Distinguished colleague *Giuseppe Ciccarone* from *Sapienza University of Rome*, Italy, joined the conference as keynote speaker. During the conference, participants had many productive discussions and exchanges that contributed to the success of the conference where 301 papers by 519 colleagues from 53 countries were presented. In addition to publication opportunities in EBES journals (*Eurasian Business Review* and *Eurasian Economic Review*, which are also published by Springer), conference participants were given the opportunity to submit their full papers for this issue.

Theoretical and empirical papers in the series cover diverse areas of business, economics, and finance from many different countries, providing a valuable opportunity to researchers, professionals, and students to catch up with the most recent studies in a diverse set of fields across many countries and regions.

The aim of the EBES conferences is to bring together scientists from business, finance, and economics fields, attract original research papers, and provide them with publication opportunities. Each issue of *the Eurasian Studies in Business and Economics* covers a wide variety of topics from business and economics and provides empirical results from many different countries and regions that are less investigated in the existing literature. All accepted papers for the issue went through a peer-review process and benefited from the comments made during the conference as well. The current issue covers fields such as public economics, regional studies, finance, economics of innovation, risk management, inequality, tourism, and international trade.

Although the papers in this issue may provide empirical results for a specific county or regions, we believe that the readers would have an opportunity to catch up

with the most recent studies in a diverse set of fields across many countries and regions and empirical support for the existing literature. In addition, the findings from these papers could be valid for similar economies or regions.

On behalf of the series editors, volume editors, and EBES officers, I would like to thank all presenters, participants, board members, and the keynote speaker, and we are looking forward to seeing you at the upcoming EBES conferences.

Istanbul, Turkey

Gokhan Karabulut

Eurasia Business and Economics Society (EBES)

EBES is a scholarly association for scholars involved in the practice and study of economics, finance, and business worldwide. EBES was founded in 2008 with the purpose of not only promoting academic research in the field of business and economics but also encouraging the intellectual development of scholars. In spite of the term “Eurasia,” the scope should be understood in its broadest terms as having a global emphasis.

EBES aims to bring worldwide researchers and professionals together through organizing conferences and publishing academic journals and increase economics, finance, and business knowledge through academic discussions. Any scholar or professional interested in economics, finance, and business is welcome to attend EBES conferences. Since our first conference in 2009, around 11,157 colleagues from 98 countries have joined our conferences and 6379 academic papers have been presented. ***EBES has reached 2050 members from 84 countries.***

Since 2011, EBES has been publishing two journals. One of those journals, *Eurasian Business Review—EABR*, is in the fields of industrial organization, innovation, and management science, and the other one, *Eurasian Economic Review—EAER*, is in the fields of applied macroeconomics and finance. Both journals are published quarterly by *Springer* and indexed in *Scopus*. In addition, EAER is indexed in the *Emerging Sources Citation Index (Clarivate Analytics)* and EABR is indexed in the *Social Science Citation Index (SSCI)*.

Furthermore, since 2014 Springer has started to publish a new conference proceedings series (**Eurasian Studies in Business and Economics**) which includes selected papers from the EBES conferences. The 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, and 20th (Vol. 2) EBES Conference Proceedings have already been accepted for inclusion in the *Conference Proceedings Citation Index – Social Science & Humanities (CPCI-SSH)*. The 20th (Vol. 1), 21st, and subsequent conference proceedings are in progress.

We look forward to seeing you at our forthcoming conferences. We very much welcome your comments and suggestions in order to improve our future events. Our success is only possible with your valuable feedback and support!

With my very best wishes,

Klaus F. Zimmermann
President

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Part I

Public Economics

Cooperation Model of Public Employment Services and Private Stakeholders: Evidence from Poland



Ewa Rollnik-Sadowska

Abstract In the era of aging of European society, there is a need to rationalize public expenditures. As a result, it is crucial to increase the efficiency of public policy. It significantly refers to labor market policy, as on the one hand, it is responsible for activation of the unemployed, passive resources, increasing employability and optimal usage of labor supply. On the other hand, public entities conducting labor market policy (mainly public employment services—hereafter PES) are obliged to efficient management of public funds. The effectiveness of PES is strongly determined by the engagement of employers in realization of labor market instruments. Cooperation of PES with relevant stakeholders is needed to build up alliances for active policy. There are different models of such cooperation, with variant levels of partnership, communication channels, and mutual services. The main objective of the article is to determine the perspective cooperation model of PES and private companies in Poland. The quantitative study was realized among large companies in Podlaskie province. It is one of the Polish peripheral regions characterized by lower than average labor demand, lower purchasing power, and higher unemployment rate.

Keywords Labor economics · Labor market policy · Employers · Public employment services

1 Introduction

Labor market situation in the EU is not homogenous (Rollnik-Sadowska 2016a). It differs in terms of both unemployment levels as well as employment potential. However, currently there can be noticed some common trends of the EU labor market, which prove the gradual improvement of indicators and formation of the employee labor market. Unemployment rate of the EU-28 has been dropping as it

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was 9.2% in 2010 and in August 2017 the indicator reached 7.6%. At the same time, the employment rate has been increasing. In 2016, the EU-28 employment rate for persons aged 20–64 stood at 71.1%, the highest annual average ever recorded for the EU (Eurostat 2017a). The increase of labor demand can be also noted by the analysis of job vacancy rate, which measures the percentage of vacant posts compared with the total number of occupied and unoccupied posts. The job vacancy rate in the EU-28 was 2.0% in the second quarter of 2017, up from 1.9% recorded in the previous quarter and from 1.8% in the second quarter of 2016 (Eurostat 2017b).

While the unemployment rate is lowering, and employment is improving, serious problem is the inactivity of labor resources and scarcity of labor supply. It is severe issue in the area of aging society and, as a result, decreasing labor force. In 2016 the number of inactive persons as a percentage of the working age population (15–64) in the EU-28 reached the level of 27.1% (Eurostat 2017c). Even though the indicator has been continuing the downward trend, inactive population remains a heterogeneous group, e.g., as regards age, the level of attachment to the labor market and reasons for inactivity (Eurostat 2017c). Inactive population is mainly young people as more than 50% of men and women aged 15–24 are outside the labor force in the EU-28. The main reasons for youths' inactivity are education and training but the serious problem is also NEET phenomena when young people do not participate in any professional and educational activity (Rollnik-Sadowska 2016b). The likelihood of staying out of the labor market is also more than three times greater for the low educated than for highly educated people. Family responsibilities are still the main cause of inactivity and it mostly concerns women (Eurostat 2017c).

The creation of the employee labor market and the shortage of labor supply also redefine the tasks of public entities (like PES) implementing labor market policies. PES are not only responsible for coordination frictions on the labor market and reduction of unemployment (Petrongo and Pissarides 2001; Weber 2016). The significant role of PES is also the support of employers in the field of reaching to a scarce workforce and complementing the labor force with professional qualifications that meet the needs of local labor demand.

In the paper, there was presented the example of Poland, one of the Central and Eastern European transition countries where the public structures are still under transformation process and adjustment to the market demands. The main objective of the article is to determine the perspective cooperation model of PES and private companies in Poland. The undertaken scientific method was desk research analysis to present the main assumptions of labor market policy in Poland. Moreover, the primary research was carried out among 38 large companies from one of the Polish provinces—Podlaskie region. The research results and secondary data analysis were the basis of construction of perspective cooperation model of PES and private stakeholders in Poland.

2 Public Employment Services: Its Role and Functions

PES role is related to human resource management as it is concentrated at improving social welfare through the following three channels: increasing labor market effectiveness; promoting equal access to labor market; mitigating the negative consequences of cyclical and structural changes in labor demand (Kalvāne 2015). Even though the PES main mission concerns labor supply, it cannot be realized without engagement of social partners. Participation of social partners in decision-making of PES can contribute to increasing efficiency of public entities. The implementation of labor market instruments may be less troublesome because these partners are able to create support among their respective stakeholders, namely employers and employee organizations (Leroy and Ludo 2014).

According to the study by Thuy et al. (2001), there can be determined four main functions associated with PES as job broking, providing labor market information, administering labor market adjustment programs, and administering unemployment benefits. The first function of PES is providing placement services. Job broking is the process through which the PES arrange for jobseekers to find jobs and for employers to fill vacancies. The rationale for job broking is that since neither employers nor jobseekers have full information about vacant jobs and candidates, there is a need for a service which can help with making the links between the two sides. The PES try to fill this lack of information and put employers and jobseekers in touch with each other (Thuy et al. 2001, p. 41). However, currently the counterparts to PES in terms of job broking are private employment agencies.

Through second function (labor market information) PES provide registered job seekers with information about job offers and registered vacancies with information about potential applicants. When operating efficiently, PES reduce search costs of both, job seekers and firms, thereby increase the labor market's matching efficiency and positively affect welfare (van Ours 1994; Yavas 1994; Fougère et al. 2009). The third of PES's functions (labor market adjustment programs) can be defined as comprising job-search assistance programs, training and education programs, and direct job creation programs. Job-search assistance programs are treated as orientation and career counseling as they include self-help provision, group activities (in the form of job clubs, job fairs, and workshops), and individual assistance (in the form of vocational guidance and intensive counseling programs) (Thuy et al. 2001, pp. 71–90). Additionally, PES administer benefit payments, monitor the job seekers' search efforts, and assign job seekers into training measures or jobs.

Increasing the efficiency of PES may have even larger effects on unemployment than reducing unemployment benefits (Launov and Wälde 2016). The European Commission (2010, 2015) therefore assigns PES a central role in its "Europe 2020 Integrated Guidelines." It recommends its member states to adopt policies that improve labor market matching and to implement performance measurement systems for their PES. The role of the PES in developed countries has shifted from that of traditional job broker or labor exchange to that of the executor of employment policy and labor market programs (Thuy et al. 2001). European Commission for

implementation of Europe 2020 strategy developed “PES 2020 Strategy.” According to this strategy, PES services are divided into five groups, which are oriented to different PES clients. They include services for employers, services for alignment between labor market supply and labor market demand, services for improving workforce skills and competences, the unemployed sustainable activation services, and services for improvement of career of the unemployed.

3 Labor Market Policy in Poland: The Selected Issues

Labor market situation in Poland has been currently following the trend of creation of employee labor market and approaching to full employment. The unemployment rate in Poland reaches the lower level than the EU c (Eurostat). At the same time, employment rate notices gradual growth (from 58.3% in 2005 to 69.3% in 2016) (Eurostat).

The labor market situation in Poland is a component of many factors that affect demand and supply of labor. Significant determinants are demand factors like increasing competitiveness of Polish economy and development of SME sector or inflow of the EU structural funds. The supply factors are the relatively low price of labor as well as high level of education and skills of labor force (Kumpikaite-Valiūniene et al. 2016).

Labor market policy in Poland is based on the law provided by the Act on the promotion of employment and labor market institutions from April 20, 2004, (with later amendments). It determines, among others, the tasks of PES, the rules of financing of these entities. Moreover, the Act specifies the labor market instruments provided by the county labor offices. Those instruments are targeted at groups in a special situation on the labor market (like e.g., young people below 25, long-termed unemployed, the unemployed aged more than 50, the unemployed with low qualifications, and disabled unemployed).

Labor market instruments in Poland are divided into two main groups—active labor market policy tools and passive supports. Active labor market policy tools consist of supply and demand oriented (Wiśniewski and Zawadzki 2010). Instruments for labor supply support are primarily training, internship, employment counseling, and partly job broking (by providing the unemployed with information on vacancies). Demand-driven instruments include all forms of subsidized employment and partly job broking (in terms of providing employers with recruitment services).

PES in Poland play an important role in implementation of labor market policy. They include 338 county and 16 voivodeship labor offices, the Ministry of Family, Labor and Social Policy, and 16 voivodeship offices performing the tasks specified by the law. The entities, which are responsible for implementation of labor market policy, are mainly county labor offices. They are decentralized and they are managed on the level of local authorities. Those units fulfill all four functions mentioned

above but the increasing impact is put on the third function by realization of active labor market instruments—both supply and demand oriented.

The effective implementation of these instruments would not be possible without the involvement of employers. Supply oriented instruments require providing the place for realization of internships and trainings. Demand oriented instruments are directed to current and future employers. The representatives of public authorities who administer Polish PES notice the significance of development of cooperation with private stakeholders and it is the reason of organizational changes in those entities. In 2014, among others, it was implemented, by the amended Act on the promotion of employment and labor market institutions, the new position in county labor offices—the counselor of institutional clients. That specialist provides the services for employers by offering labor market instruments. Communication channels of PES and private companies depend on the solutions implemented in the separate county labor offices but they are based on both indirect contact—mainly telephone communication as well as direct meetings (Kobylińska et al. 2016).

4 Cooperation of PES and Private Stakeholders in Poland: Current Situation and Perspectives

Primary research was conducted in the second half of 2017 to deepen the analysis of the current model of cooperation between PES and private companies as well as to distinguish the prospective model. Quantitative research was carried out using the Pencil and Paper Interview (PAPI) technique. It was realized on the sample of 38 large enterprises of Podlaskie province (Poland). The size of enterprise was assessed according to the number of employees (250 and more) or turnover (30 million PLN or more).

The respondents represent quite balanced gender structure as 58% were male and 42% female. They are well educated, the majority (80%) have higher education and 17% of respondents hold an MBA diploma. They represent the top management of large companies (47% are senior managers, 26%—owners or co-owners, 19%—chairman of the board and 8% represented members of the board). The researched companies came mainly from the industry (63%), the minority represent construction sector (11%), transport (8%), trade (6%), and agriculture (3%). The enterprises represented by the respondents have a good situation with prospects of development. Forty percent of researched managers state that the company is intensively developing and 42% that it is developing. Only 13% of respondents indicate that their business is poorly developed and 5% identify it as stagnant. 82% of respondents have already cooperated with PES during the last 3 years (mainly with county labor offices). However the average rating of PES is below 4¹ and county labor offices are assessed even lower—3.35.

¹The scale was from 1 (the lowest rank) up to 5 (the highest rank).

Employers use mainly instruments that provide them with a reduction in the cost of running the business. The most popular forms of cooperation with PES are subsidized training (used by 68% of respondents, rating 3.88) and subsidized internship (61%, rating 4.09). However, respondents also appreciated other services offered by PES, which provide for employers better access to new employees and improving skills in the workforce. Representatives of large enterprises from Podlaskie province positively assess dissemination by PES of the job advertisement issued by the employer (used by 61% of respondents, rating 3.14); trainings organized by PES (47%, rating 3.22), and recruitment services by PES (39%, rating 2.93). It is worth noting that subsidized forms are quite highly rated by employers but other services have an evaluation slightly above 3 or even below that level.

The representatives of large Polish companies also indicated the main barriers of cooperation with PES, which is lack of flexibility in terms of target groups and funding areas (71% of respondents supported the statement); bureaucracy and complicated procedures (58%); extended waiting time for getting support (53%), granting support only within a given calendar year (50%). The above inconveniences result mainly from systemic solutions, legal regulations which set out the scope and procedure of applying for support. The researched managers when analyzing the barriers, indicated the aspects of cooperation which make it difficult for entrepreneurs to choose for them the convenient area of support in a favorable period of time and additionally are complicated and time consuming.

The respondents were also asked to identify the perspectives of cooperation with PES which would be adjusted to the needs and capabilities of employers. Firstly the representatives of large Polish enterprises from Podlaskie province determined the expected forms of support—Fig. 1. The most desirable labor market instruments which in the opinion of employers are the most favorable in the future cooperation

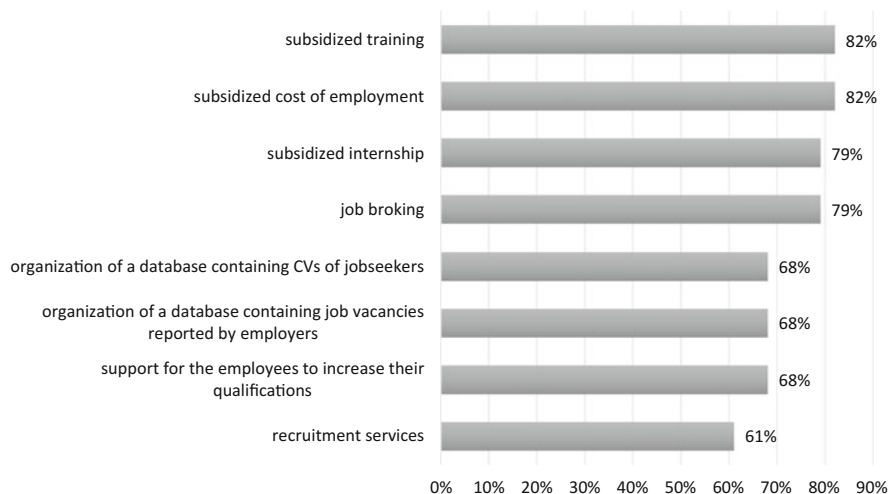


Fig. 1 Expected forms of support. Source: Own study

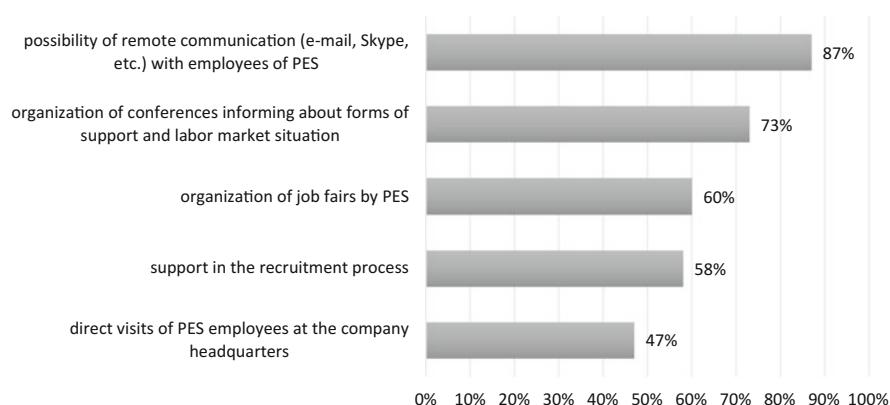


Fig. 2 Expected actions. Source: Own study

with PES are mainly subsidized forms (training—82% of respondents selected that instrument, employment—82%, internship—79%). Another instruments are also appreciated by respondents like job broking (79% of followers), organization of databases useful in recruitment process (68%), and support for employees to increase their qualifications (68%). Simultaneously, recruitment services are assessed as the ones relatively less appreciated by the large enterprises (61% of respondents regarded them as expected forms of support). Large companies often contain in their structure HR Departments responsible for recruitment process, which could be the reason that they do need external support. At the same time, as it was already mentioned, existing recruitment services provided by PES are poorly rated by researched large enterprises.

Moreover, respondents assessed the expected actions, which should be taken by PES in the future to improve the cooperation—Fig. 2. The most important for employers are changes of communication channels. Eighty-seven percent of representatives of large enterprises would appreciate the possibility of remote communication (via e-mail, Skype). On the contrary, direct visits of PES employees at the company headquarter are expected by only 47% of respondents. Other desirable activities are organization of conferences (73%), job fairs (60%), and support in the recruitment process (58%).

Summarizing the above research results, there can be identified three crucial areas of cooperation between PES and private stakeholders—Fig. 3. The first one is legal systemic solutions assuring long-term planning of expenses, lower bureaucracy, and higher flexibility of usage of labor market instruments. Longer (than 1 year) budgeting of funds by county labor offices would allow for planning long-term cooperation with employers. The individualization of support and the limitation of formal procedures would ensure a greater involvement of entrepreneurs in realization of labor market instruments.

The second area of cooperation between PES and private stakeholders is the variety of instruments offered by PES. Beside subsidized forms of training, internship, and employment, it is also expected to develop recruitment services and

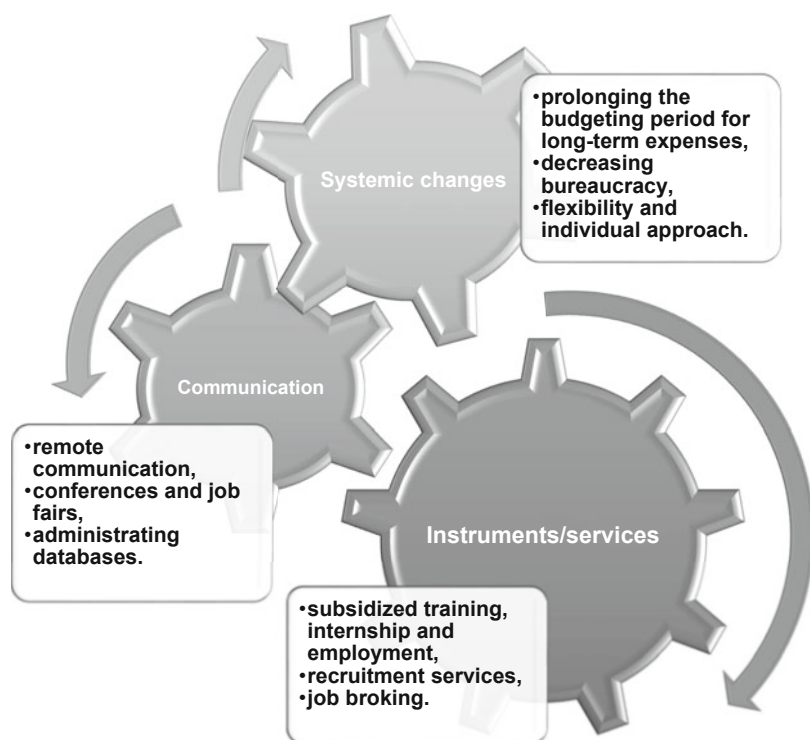


Fig. 3 Perspective model of cooperation of PES and private stakeholders in Poland. Source: Own study

maintain job broking. It is crucial to offer customer-oriented services, which on the one hand they are adjusted to the needs of the job seekers and simultaneously are tailored to employers' requirements. The research results prove that poorly developed aspect of support is offering recruitment services for entrepreneurs. The current PES offer in that area is poorly rated by the recipients of these services. The experience of Western European countries shows that recruitment services are an important aspect of cooperation with private stakeholders (Marklund and Rollnik-Sadowska 2016). The crucial issue of cooperation model is also expansion of communication channels. The desirable forms are remote communication, dissemination activities by organization conferences and fairs as well as providing databases for the exchange of recruitment information.

5 Conclusion

In the face of current labor market developments, which are approaching full employment, there is a need to redefine priorities of PES and as a result, adjust governance and business model of the PES. Such situation concerns also Poland.

There is a growing need to develop cooperation with employers to effective implementation of labor market instruments. The results of the research prove that Polish PES offer wide variety of labor market instruments for private companies. Although the subsidized instruments and job broking are well assessed by employers, the recruitment services need implementation of improvements as their rating is low.

Despite the variety of labor market instruments, employers are not respectively aware of PES offer because of limited communication channels, especially in terms of insufficient remote contacts. Moreover, due to bureaucracy, private stakeholders limit their application for support. In addition, there are some systemic restrictions, which reduce the flexibility of the cooperation and possibilities of long-term planning.

PES can anticipate and influence labor market changes proactively by information exchange with policy-making bodies, local authorities, and working with the private sector. However, as the labor market is a subject of continuous transition, PES should evolve to adjust their structure and offer to those changes.

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References

- European Commission. (2010). *Council decision on guidelines for the employment policies of the member states – Part II of the Europe 2020 integrated guidelines* (Tech. Rep). Brussels.
- European Commission. (2015). *Council decision on guidelines for the employment policies of the member states – Annex integrated guidelines* (Tech. Rep). Brussels.
- Eurostat. (2017a). *Employment statistics*. Accessed August 06, 2017, from http://ec.europa.eu/eurostat/statistics-explained/index.php/Employment_statistics
- Eurostat. (2017b). *Job vacancy statistics*. Accessed August 10, 2017, from http://ec.europa.eu/eurostat/statistics-explained/index.php/Job_vacancy_statistics
- Eurostat. (2017c). *People outside the labour market*. Accessed August 10, 2017, from http://ec.europa.eu/eurostat/statistics-explained/index.php/People_outside_the_labour_market
- Fougère, D., Pradel, J., & Roger, M. (2009). Does the public employment service affect search effort and outcomes? *European Economic Review*, 53(7), 818–833.
- Kalvāne, I. (2015). Business model choice for Latvian public employment service: What is the best for labour force competitiveness? *Procedia – Social and Behavioral Sciences*, 213, 99–104.
- Kobylińska, U., Kozłowski, A., Rollnik-Sadowska, E., & Samul, J. (2016). *Sytuacja osób młodych na rynku pracy w województwie podlaskim* [The situation of young people on the labor market in the Podlasie voivodship]. Białystok: Politechnika Białostocka.
- Kumpikaite-Valiūniene, V., Rollnik-Sadowska, E., & Glińska, E. (2016). Education and future work attitudes of students in Poland and Lithuania: A comparative analysis. *Proceedings of International Conference: Society, Integration, Education*. Rezekne Academy of Technologies.
- Launov, A., & Wälde, K. (2016). The employment effect of reforming a public employment agency. *European Economic Review*, 84(C), 140–164.
- Leroy, F., & Ludo, S. (2014). *Buildins bridges. Shaping the future of public employment services towards 2020*. Brugge: die Keure Professional Publishing.
- Marklund, H., & Rollnik-Sadowska, E. (2016). The role of private companies in the Danish active labour market policy. *Economics and Law*, 15(2), 209–218.

- Petrongolo, B., & Pissarides, C. A. (2001). Looking into the black box: A survey of the matching function. *Journal of Economic Literature*, 39(2), 390–431.
- Rollnik-Sadowska, E. (2016a). *Labour markets in the central and eastern Europe – comparative analysis, 21th international scientific conference: Economics and management 2016: ICEM 2016: Proceeding of Selected Papers*, Brno University of Technology.
- Rollnik-Sadowska, E. (2016b). Young people in the European Union labour market. *Latgale National Economy Research*, 1(8), 80–92.
- Thuy, P., Hansen, E., & Price, D. (2001). *The public employment service in a changing labour market*. Geneva: International Labour Organisation.
- van Ours, J. C. (1994). Matching unemployed and vacancies at the public employment office. *Empirical Economics*, 19(1), 37–54.
- Weber, M. (2016). *The short-run and long-run effects of decentralizing public employment services* (Ifo Working Paper, No. 209).
- Wiśniewski, Z., & Zawadzki, K. (Eds.). (2010). *Aktywna polityka rynku pracy w Polsce w kontekście europejskim* [Active labor market policy in Poland in the European context]. Toruń: Wojewódzki Urząd Pracy w Toruniu, Uniwersytet Mikołaja Kopernika.
- Yavas, A. (1994). Middlemen in bilateral search markets. *Journal of Labor Economics*, 12(3), 406–429.

Public Expenditure on Social Protection in the Light of the Europe 2020 Poverty Objective



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and Agnieszka Wałęga

Abstract The problem of poverty and social inequality has become extremely important as a consequence of the 2008 financial and economic crisis. Taking into consideration, the Europe 2020 targets lifting at least 20 million people out of the risk of poverty and social exclusion compared with 2008 it seems necessary to check to what extent the member states of the European Union are capable of meeting their imposed requirements. The main aims of the paper include: the description of the EU strategy concerning fight with the poverty and social exclusion, its objectives and the methods used in their implementation in the Member States, analysis of European measures of poverty and social exclusion in Poland against the background of European Union countries and correlation between the level of public expenditure on social protection and indicators of poverty contained in the Europe 2020 strategy. Panel data models (longitudinal data) were used in the research. EU countries will also be subdivided into relatively homogeneous groups in terms of selected poverty rates. The study finds that the variation in the level of spending on social protection was reflected in the degree to which individual EU countries have achieved benchmarks. A higher level of GDP per capita results in a reduction in poverty while an increase in the unemployment rate raises the level of the analyzed poverty rates.

Keywords Europe 2020 strategy · Public expenditure · People at risk of poverty or social exclusion · Social protection

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