DISTRIBUTION OF DIRECT PAYMENTS IN BULGARIA - POLICY LESSONS AND PROSPECTS BEYOND 2020

Rositsa BELUHOVA-UZUNOVA, Dimo ATANASOV, Mariyana SHISHKOVA

Agricultural University - Plovdiv, 12 Mendeleev Blvd, Plovdiv, Bulgaria, Emails: rosicab_uzunova@abv.bg, d.atanasov@au-plovdiv.bg, mariyana.shishkova@gmail.com

Corresponding author: rosicab_uzunova@abv.bg

Abstract

Direct payments are an essential element of the Common Agricultural Policy Budget. Pillar I plays an important role for Bulgarian farmers' income stabilization and support. The aim of the study is to analyse the direct payments distribution in Bulgaria and on this base to formulate recommendation regarding future policy development. In the paper Lorenz curve is applied as widely used measure of inequality. The results indicate significant disparities among farmers and uneven distribution of the financial support. The allocation of aid under Pillar I leads to serious imbalances in Bulgarian agriculture. There is a substantial transformation in production and trade patterns. The new architecture of direct payments and the greater flexibility of the instrument post 2020 can address some of the existing challenges.

Key words: inequality, capping, structural changes

INTRODUCTION

The Common agricultural policy is one of the main policies in the EU. It is a subject of serious debate and consideration for the next Multiannual Financial Framework. The direct payments are one of the most discussed instruments and account for over 73% of the CAP budget [23].

In 2018, direct payments in Bulgaria are 784 million EUR, 83.5 % of which decoupled [23]. The direct aid plays an important role for income support and stabilization in the country. On the other hand, it is leading to major transformations and generates imbalances in the agricultural sector.

Changes in the CAP after 2020 draw the attention of farmers, policy makers and other stakeholders. The allocation of the financial resources and the uneven distribution are often pointed as a major issue in the European Agricultural Policy. There is a new architecture of Pillar I and proposals for convergence and better targeting. Therefore, the policy lessons from previous programming periods are important to outline Bulgarian strategic plan and implementation of the new CAP.

The aim of the study is to analyse the distribution of direct payments in Bulgaria and,

on that basis, to formulate a recommendation for future policy development.

The paper is structured as follow: The study materials and methods are presented first. A review of surveys on the distribution of direct payments and their impact on farmers' income in EU Member States has also been carried out. Second, the distribution of direct payments is analysed. A comparison is made between Bulgaria and the EU-28. Third, the new architecture of Pillar I is discussed. Based on the analyses, some conclusions and recommendation are highlighted.

MATERIALS AND METHODS

Agricultural subsidies are implemented to support farmers' low and highly variable income. The main reason for legislative action is the discrepancy between the income of agricultural and non-agricultural households [35]. Ciliberti and Frascarelli [3] have stressed that the agricultural policies, rarely lead to of equal distribution of financial aid. On the other hand, there are several major reforms in the direct payments architecture in the EU to overcome these issues.

There is a number of studies that analyse the effect of the distribution of direct payments on farm income and its dimensions [3, 24, 44]. In

addition, based on a thorough literature review, Ciliberti and Frascarelli [3] have indicated that there is no clear consensus on the impact of direct payments to overcome income inequality - some studies [28, 41, 42, 43] consider that direct payments lead to a reduction in income inequality, while other authors believe that financial support increases the concentration of income [1, 4, 40].

Various reports of EU institutions [5, 8, 14, 21] also provide studies on the effects of direct payments on the EU agricultural sector. Lorenz curve and Gini coefficient are widely applied measures of inequality. The Lorenz curve illustrates income distributions as proposed by Lorenz (1905) [30]. The distribution of direct payments is analysed by using the Lorenz curve [3, 44].

Functional relation presented by Rasche et al. [38] is used in the survey to estimate Lorenz curves. The equation 1 show the explicit functional form:

$$y = [1 - (1 - x) \alpha] 1/\beta$$
 (1)

where: $0 \le \alpha \le 1$, $0 \le \beta \le 1$.

The study is based on the data provided by European Commission reports and indicative figures [6, 7, 10, 11, 12, 17,18, 19, 23]. There are twelve classes of farms (x) and they have received direct payments (y). Farms that do not receive direct aid are not included in the assessment. The cumulative proportions are calculated on that base.

RESULTS AND DISCUSSIONS

Direct payments under Pillar I are important for Bulgarian farmers. After the accession to the EU, direct support accounts for a significant share of agricultural farm income (Fig. 1).

According to the European Commission, the total number of beneficiaries of the CAP income support in 2018 is 67, 890. The share of holdings receiving direct payments in Bulgaria is 33.5% compared to 60.9% in EU-28 [18]. The results indicate that the country does not benefit enough from the opportunities present by the CAP.



Fig. 1. Share of direct support in Bulgarian agricultural factor income (%)

Source: Own calculation based on Agri-food data portal, CAP indicators, Farming income support [20].

The lowest share of beneficiaries is in Romania (24.4%), while in Denmark, Czech Republic, Finland and Germany all registered holdings have received direct support. The results are in parallel with farm structure evolution in Bulgaria and Romania. In these countries, the share of small farms under 5 ha is significant. According to Farm Structure Survey 2016 [34], these holdings account for 82.6% of all holdings in Bulgaria and 91.8% of those in Romania.

Some of the small farms do not meet the requirements of the EU for receiving direct payments. However, these structures play an important role in Bulgarian agriculture and generate employment and income in rural areas.

According to Agri-Food portal (CAP indicators) [20], in Bulgaria the share of supported hectares in the utilized agricultural area (UAA) is 75%, which is far from EU-28 average (84%).

Based on the data, it can be concluded that the Bulgarian farms use only partially the potential of the CAP funding, and the main beneficiaries are medium and large-sized holding.

Figure 1 presents the importance of the direct payments to Bulgarian farmers. The data

shows an upward trend, with an increase of 20 percent points. Over the last two years there has been a slight decrease in the importance of direct payments. However, farmers' income in the country is highly dependent on the direct aid.

Bulgaria is not close to the EU-28 average levels (24%). It should be noted that the share of direct payments in agricultural factor income is lower than in some of the EU Member-States (Slovakia 50%, Latvia 42 %, Lithuania 41%, Sweden 39%, The Czech Republic 38%, and Finland 37%). By contrast, in Malta and The Netherland only 8% and 9% of the agricultural income is formed by direct payments.

The main conclusion based on the analysis is that not only Bulgaria, but also a significant part of the EU Member-Statesis highly depended on the direct aid. The key question is whether these holdings can be competitive and viable without the financial support of the CAP? Another important challenge is the allocation of direct payments to lower-income farms.

Figure 2 presents a comparison of the distribution of direct payments over the last 10 years. Financial years 2008, 2013, 2015, and 2018 are calendar years 2007, 2012, 2014, and 2018.

The data shows major changes in the financial support distribution in Bulgaria. The period 2008-2013 marks negative trends. Since the country's accession to the EU, structural changes have exacerbated inequality.

In 2008, 93% of the beneficiaries receive 22% of the support and only 0.2% of the holdings accumulate around 20% of the direct aid. For the period 2008-2013 the level of land concentration increased significantly [25]. In 2013, 70.46% of the holding receive only 4.57% of the support. On the other hand, 1.4% of the farms concentrate 47% of the direct payments. In the transition year 2014, which is 2015 financial year, there are positive changes. However, the distribution of direct payments in Bulgaria is still very unequal. In 2015, 63.69% of the holdings received only 4.32% of direct support. On the other hand, more than 43% of the direct payments were oriented to less than 1.3% of the farms. The difference between 2013 and 2015 is negligible, although the financial support is better distributed in medium-sized farms. The analysis of last year of the period shows several trends. The share of farms below 1,250 euro decreases to 34.78% of all holding. They receive negligible share of the support (1.93%).



Fig. 2. Direct payments distribution in Bulgaria 2008-2018

Source: Own calculation based on European Commission [6, 7, 10, 11, 12, 17, 18, 19].

Smaller farms are disappearing and mediumsized holdings could not play important role in the number of holding and received financial support. By contrast, the large holdings continue to expand and accumulate more financial support. These are the key challenges facing the Bulgarian agricultural structure and the main reasons for the inequality and imbalance among the beneficiaries.

Figure 3 presents a comparison between Bulgaria and the EU-28 for the financial year 2018. According to European Commission [17], direct payments are EUR 41.5 billion and benefit 6.4 million farms in the European Union. The number of beneficiaries of direct payments is declining in the last two year after the increase between 2008 and 2014. The reduction could be explained with structural adjustments in agricultural sector and the new eligibility conditions in the current programming period.

According to European Commission [17] the direct payments support is relatively constant in nominal terms which causes increase the average payment per beneficiary.



Fig. 3. Direct payments distribution in Bulgaria and EU-28, for 2018

Source: Own calculation based on [17, 18].

The Lorentz curve shows a relatively significant difference between Bulgaria and EU average. In Bulgaria almost 50% of the farms receive 4.66% of the support. On the other hand, in the EU-28, only 5% of the support is received by 43% of the beneficiaries. The highest share of support (58%) is oriented towards payments of EUR 10,000 to EUR 100,000. These holdings represent around 15% of all EU beneficiaries. For comparison, in Bulgaria these holdings are only 13% and obtain 35.42% of the funds. By contrast, 2.45% of the farms accumulate 46.58% of the envelope. In the EU-28, only 0.5% of all beneficiaries receive more than EUR 100.000 and concentrate 16% of the total direct payment envelope. This distribution represents the main difference between EU-28 and Bulgaria.

Despite the opportunities after the CAP implementation, the study shows the main challenges in Bulgarian agriculture. The farm structure in the country is characterised by unbalanced distribution and serious dominance of large holdings. By contrast, small holdings are disappearing. They struggle to ensure financial support [26].

The distribution of direct payments in the period 2007-2013 is leading to uneven orientation of financial support and the negative tendencies are continuing in the current programming period.

Although the distribution of the support is more equal in EU-28 compared to Bulgaria, it should be noted that the allocation of the financial aid is still uneven. As it is often stated, 80% of all beneficiaries receive roughly 20% of the total direct payments [17]. The distribution of the direct aid is linked to the specific nature of the support which is based on the area. This type of measures leads to overconcentration of land. The accumulation of the financial resources in large and commercial farms is object of debate by number of studies [22, 37]. The concern related to the efficiency and orientation of the support led to new measures and options in the CAP post 2013. In the period 2014-2020 there are several new instruments aimed to ensure convergence and social cohesion [9]. The new elements in the Pillar I were the reduction of payment and capping. According to Regulation 1307/2013 the reduction of payments applies only to the basic payment and the rate is set at a very low level - 5% reduction from EUR 150,000 of payment [39]. The percent of the reduction is based on the choices of the Member-States and is not optional.

European Commission [14] indicates that the reduction (including capping) in 2015 is EUR 98 Million (only 0.44% of the basic payment envelope). For 2016, the amount is even lower - EUR 79 Million or only 0.36% of the basic payment expenditure. In Hungary, which have similar farm structure to Bulgaria, is registered the highest share of reduction payment in the expenditure (6.6% - 2015 and 5.6% in 2016). In Bulgaria the share is about 1% in 2016 and

is lower than in 2015 mainly due to the increase in the basic payment envelope. The capping and reduction payment are similar (around 1% of the envelope) in Poland, The Czech Republic and Slovakia [14].

Based on the results it can be concluded that the reduction payment and capping do not lead to the expected results. The level of reduction is very low and some of the countries or regions do not implemented the measure at all. In the light of these arguments, reduction payments and capping could improve fairness of the direct payments if the measure includes higher rate or if the capping is more ambitious. **Pillar I Post 2020 - Policy lessons and**

prospects According to some researchers Pillar I remains one of the most discussed and assessed instruments of the CAP, which allocates more than 70% of the budget. Several studies [2, 22,

27, 31, 37] have analysed the main challenges related to the Pillar I implementation.

In this regard, the major issues could be divided into three groups:

Income support. According to Terluin and Verhoog [45], EU support for farmers' income is unevenly distributed and misdirected relatively high-income farmers receive higher payments. It is emphasized that this is contrary to the basic principles of support and lead to inefficient use of public resources. In addition, authors state that the direct payments cause an increase in land prices and prevents the development of young farmer's holdings.

Price variation. European Commission [15] stresses that European agriculture is facing volatile prices, natural disasters and diseases. According to the report policy reforms that aimed to increase market orientation have created opportunities for farmers from global markets, as well as made the sector more vulnerable to international shocks and market imbalances. It is mentioned also that very year, at least 20% of farmers lose more than 30% of their income compared to the average for the last three years [15].

Environment, Climate Change and Biodiversity. According to Thompson [46], the product orientation of the CAP increases productivity and competitiveness, but on the other hand causes environmental stress. In this

regard, European Court of Auditors [21] points out that despite the existence of biodiversity conservation measures, the latter are not sufficiently effective and are often criticized.

The proposed Pillar I changes, regulation and implementation beyond 2020 are still under consideration. The new design of Pillar I is related to five priorities- simplification, modernization, flexibility, new model and budget respectively. There are options linked to the specific objectives like support of small farms, generation renewal, stronger retribution, eco-schemes [16].

There are several instruments aimed to equalise the direct payments distribution. The 2014-2020 voluntary redistribution payments will be compulsory for the Member States. Each country may decide the amount of the additional payments as well as the maximum applied hectares [33].

In order to overcome the imbalances in farmers' support, more serious capping is proposed. However, the deduction of labor costs questioned the effectiveness of the instrument. Although the reduction and capping are not optional, Member States play role in their design significant and implementation. Several studies [29, 36] conclude that Pillar I support plays a positive role in retaining farmers in agriculture, but postpones structural changes and viability.

The proposed capping is likely to be not effective due to the higher labor costs deduction [32]. The capping measure could have better results if the deduction is option rather than mandatory.

CONCLUSIONS

Based on the analysis some conclusions and recommendation can be drawn:

- The new CAP 2021-2027 proposals are oriented to improve targeting on several directions – greening and young farmers. On the other hand, the convergence among farmers' income support and the external converges among Member-states is lagging behind. In this regard, more ambitious capping and higher reduction payments are recommended. Redistributive payments also need to be more efficient and better targeted. - The eco-schemes have been introduced as a new intervention, but their content, requirements and impact are still unclear to some stakeholders.

- The flexibility and subsidiarity proposed by the new CAP, as well as the short terms for developing strategic documents could have a negative impact on Bulgaria.

- The lack of serious change in the basic payments and other elements of Pillar I is a prerequisite for unequal distribution and further polarization of Bulgarian farm structure.

- The capabilities, priorities and ambitions of Bulgarian agricultural policy will determine the efficiency of the CAP implementation.

- The new model and responsibilities of the Member-States, could help Bulgarian agriculture to overcome major issues related to the direct payments and farm income distribution.

ACKNOWLEDGEMENTS

This study is part of the project "AGROIN", financed by the National Fund for Scientific Research at the Ministry of Education and Research, Bulgaria.

REFERENCES

[1]Allanson, P., 2006, The redistributive effects of agricultural policy on Scottish farm incomes. J Agric Econ 57(1):117–128.

[2]Chartier, O., Cronin, E., Jongeneel, R., Hart, K., Zondag, M-J., Bocci, M., eds., 2017, Mapping and analysis of the implementation of the CAP; Final Report. Brussels, European Commission.

[3]Ciliberti, S., Frascarelli, A., 2018, The CAP 2013 reform of direct payments: redistributive effects and impacts on farm income concentration in Italy. Agric Econ 6, 19.

[4]El Benni, N., Finger, R., 2012, The effect of agricultural policy reforms on income inequality in Swiss agriculture – an analysis for valley, hill and mountain regions. J Policy Model 35(4):638–651.

[5]European Commission, 2008, CAP Health checkimpact assessment note no. 1. Directorate-General for Agriculture and Rural Development, Directorate G. Economic analysis, perspectives and evaluations, Brussels.

[6]European Commission, 2008a, Report on the distribution of direct aids to the producers (Financial year 2008).

[7]European Commission, 2008b, Indicative figures on the distribution of aid, by size-class of aid, received in the context of direct aid paid to the producers (financial year 2008).

[8]European Commission, 2010, Developments in the income situation of the EU agricultural sector. Directorate-General for Agriculture and Rural Development, Directorate L. Economic analysis, perspectives and evaluations, Brussels.

[9]European Commission, 2011, Proposal for a Regulation of the European Parliament and of the Council establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy. COM (2011) 625 final/2, Brussels, 19 Oct 2011.

[10]European Commission, 2014a, Report on thedistribution of direct aids to agricultural producers(financialyear2013),

https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/farming/documents/direct-aid-report-

2013_en.pdf, Accessed on 27/02/2020.

[11]European Commission, 2016a, Report on the distribution of direct aids to agricultural producers (financial year 2015).

[12]European Commission, 2016b, Indicative figures on the distribution of aid, by size-class of aid, received in the context of direct aid paid to the producers (financial year 2015).

[13]European Commission, 2016c, Direct Payments: Financial mechanisms in the new system, https://ec.europa.eu/agriculture/sites/agriculture/files/di rect-support/direct-payments/docs/direct-paymenst-

financial-mechanisms_en.pdf, Accessed on 28/02/2020. [14]European Commission, 2018a, Direct payments for farmers 2015-2020- facts and figures, https://ec.europa.eu/info/sites/info/files/food-farmingfisheries/farming/documents/direct-payments_en.pdf,

Accessed on 21/02/2020.

[15]European Commission, 2018b, The CAP 2021-2027; Legislative Proposal 2018; Questions and Answers. Brussels. European Commission, DG for Agriculture and Rural Development, Directorate. Strategy, simplification and policy analysis; C.1. Policy perspectives.

[16]European Commission, 2018c, Proposal for a regulation of the European parliament and of the council establishing rules on support for strategic plans to be drawn up by Member States under the Common agricultural policy (CAP Strategic Plans) and financed by the European Agricultural Guarantee Fund (EAGF) and by the European Agricultural Fund for Rural Development (EAFRD) and repealing Regulation (EU) No 1305/2013 of the European Parliament and of the Council and Regulation (EU) No 1307/2013 of the Parliament European and of the Council (COM/2018/392 final - 2018/0216 COD).

[17]European Commission, 2019a, Direct payments to agricultural producers - graphs and figures (Financial year 2018),

https://ec.europa.eu/info/sites/info/files/food-farming-

Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Vol. 20, Issue 2, 2020 PRINT ISSN 2284-7995, E-ISSN 2285-3952

fisheries/farming/documents/direct-aid-report-

2018_en.pdf, Accessed on 28/02/2020.

[18]European Commission, 2019b, Indicative figures on the distribution of aid, by size-class of aid, received in the context of direct aid paid to the producers (financial year 2018).

[19]European Commission, 2014b, Indicative figures on the distribution of aid, by size-class of aid, received in the context of direct aid paid to the producers (financial year 2013).

[20]European Commission, Agri-food portal, CAP indicator, Farming income support, https://agridata.ec.europa.eu/extensions/DashboardIndi cators/FarmIncome.html, Accessed on 29/02/2020.

[21]European Court of Auditors, 2011, Single payment scheme (SPS): Issues to be addressed to improve its sound financial management. Special report no 5, Luxembourg.

[22]European Court of Auditors, 2018, Future of the CAP; Briefing paper. Luxembourg, European Union, March 2018.

[23]European Union, 2019c, Statistical Factsheet.

[24]Galluzzo, N., 2018, Impact of the Common Agricultural Policy payments towards Romanian farms. Bulg. J. Agric. Sci., 24 (2): 199–205.

[25]Georgieva, T.,2019, Farmland size inequality and land concentration in Bulgarian agriculture, Proceedings 3rd International Scientific Conference – EMAN 2019 – Economics and Management: How to Cope With Disrupted Times, Ljubljana – Slovenia, March 28, 2019, Selected papers, pp.211-217.

[26]Hristov, K., 2011, Institutional problems small farms face when applying for assistance under the rural development program 2007-2013. Trakia Journal of Sciences, Vol. 9, Suppl. 3, pp. 83-87.

[27]Jongeneel, R., 2018, Research for AGRI Committee: The CAP support beyond 2020: assessing the future structure of direct payments and the rural developments interventions in the light of the E agricultural and environmental challenges, European Parliament, Policy Department for Structural an Cohesion Policies, Brussels.

[28]Keeney, M., 2000, The distributional impact of direct payments on Irish farm incomes. J Agric Econ 51(2):252–263.

[29]Koester, U., Loy, J.P., 2016, EU Agricultural Policy Reform: Evaluating the EU's New Methodology for Direct Payments. Intereconomics 51, 278-285.

[30]Lorenz, M.O., 1905, Methods of measuring the concentration of wealth. Quarterly Publications of the American Statistical Association, 9 (new series, no. 70): 209–219.

[31]Matthews, A., 2016, How are CAP Pillar 1 Direct Payments Distributed? Blog post, https://www.arc2020.eu/how-are-cap-pillar-1-directpayments-distributed/, Accessed on 5 January 2020.

[32]Matthews, A., 2018a, Why Capping will be a mirage; Blog Post of May 11, 2018, http://capreform.eu/why-capping-will-be-a-mirage/, Accessed on 5 January 2020.

[33]Matthews, A., 2018b, Why Capping will be a mirage; Blog Post of September 4, 2018, http://capreform.eu/, Accessed on 5 January 2020.

[34]Ministry of agriculture, food and forestry, Agrostatistics, Agricultural Census 2016.

[35]Mishra, A., Paudel, K., 2011, Estimating permanent income and wealth of the US farm households. J Appl Econ 43:1521–1533.

[36]Olper, A., Raimondi, V., Cavicchioli, D., Vigani, M., 2014, Do CAP payments reduce farm labor migration. A panel data analysis across EU regions. European review of Agricultural Economics 41(5): 843-873.

[37]Pe'er, G., Zinngrebe, Y., Moreira, F., Müller, R., Sirami, C., Passoni, G., Clough, D., Bontzorlos, V.,Bezák, P., Möckel, A., Hansjürgens, B., Lomba, A., Schindler, S., Schleyer, C., Schmidt, J., Lakner, S., 2017, Is the CAP fit for purpose? An evidence-based fitness check assessment, 1824 (GermanCentre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig, Leipzig, 2017.

[38]Rasche, R.H., Gaffney, J., Koo, A.Y.C., Obst, N., 1980, Functional forms for estimating the Lorenz curve. Econometrica 48(4):1061–1062.

[39]Regulation (EU) No 1307/2013 of the European Parliament and of the Council of 17 December 2013 establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy and repealing Council Regulation (EC) No 637/2008 and Council Regulation (EC) No 73/2009.

[40]Schmid, E., Sinabell, F., Hofreither, M., 2006, Distributional effects of CAP instruments on farm household incomes. Paper presented at the American Agricultural Economists Association Annual Meeting, Long Beach 23-26 July, 2006.

[41]Severini, S., Tantari, A., 2013a, The effect of the EU farm payments policy and its recent reform on farm income inequality. J Policy Model 35:212–227.

[42]Severini, S., Tantari, A., 2013b, The impact of agricultural policy on farm income concentration: the case of regional implementation of the CAP direct payments in Italy. Agric Econ 44:275–286.

[43]Severini, S., Tantari, A., 2015, The distributional impact of agricultural policy tools on Italian farm households incomes. J Policy Model 37(1):124–135.

[44]Sinabell, F., Schmid, E., Hofreither, M.F., 2013, Exploring the distribution of direct payments of the common agricultural policy. Empirica 40(2):325–341

[45]Terluin, I., Verhoog, D., 2018, Distribution of the payments of the CAP's first pillar to farms in the EU. Wageningen (Verdeling van de toeslagen van de eerstepijlervan het GLB over landbouwbedrijven in de EU. Wageningen), WUR, Report 2018-039.

[46]Thompson, P.B., 2017, The Spirit of the Soil: Agriculture and Environmental Ethics (2nd edition), New York, Routledge.