

Economic Management Aspects of Cooperatives

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It has been defined that not all aspects of classical theory of cooperatives can be applied to agriculture during the transitive period to the market economy. Some of them must be newly created. The most important conditions for successful establishment and development of cooperatives are economical management aspects: the accumulation of the primary stock capital (the size of the share), the rules of profit distribution, the right to vote, etc.

One peculiarity of the agriculture of post-communist countries of this period that influences and hinders the activity of the cooperatives is the variety of farm sizes. In Lithuania thousands of small farms (with 2-3 ha of land) producing large part of the production exist beside the big farms (not numerous yet) and the agricultural communities with several hundred or even thousand ha of land, the great number of cattle, large green houses and manufacturing lots of produce. This stops the foundation and development of the cooperatives, because the small farmers without enough capital for the investments are unable to establish cooperatives. Big farmers and other agricultural subjects being more powerful economically and technically are not willing to cooperate with the small producers, because the cooperative regulations of Lithuania (like the rest countries) require that one member of the cooperative can have only one vote despite the size of his share. Besides the main part of the profit is distributed in accordance with the turnover, and only 10 per cent of the after-tax profit can be paid as dividends in accordance with the law (the maximum amount of the dividend is defined in the cooperative regulations).

The traditional definition methods of the size of the members' share (the amount of the member share is equal to all the cooperative members, as well as the number of votes, etc.) are peculiar to the cooperatives (the amount of the share of the member is equal to the value of the paid advances), and are successfully used in all the classical cooperatives in the world. Such cooperatives have been founded at the same time as the rest enterprises of various kinds, they have created good material basis and many of them are united in strong cooperative structures. They are economically strong and competitive in modern market. But not all the aspects of cooperative theory can be applied in agriculture during the transient period to market economy. Some of them must be newly created.

The paper describes the ways enabling to theoretically differentiate the share of the cooperative members in dependence on the turnover. The ways can be group, individual, mixed and striped. The mechanism of applica-

tion of the proposed methods for the cooperatives where the property of the members differs greatly is given.

The share differentiation enables to comprise the member groups: the smallest group number is two – the stimulated and the overloaded members. When the groups are compiled, the turnover sum total of every individual group is the most important criterion. The share coefficients are also chosen in accordance with the turnover sum total of the group members, and the share is calculated and the profit is divided in accordance with the individual member turnover. The first and the last member of every group are the boundary members, and their turnovers are estimated as boundary turnovers. The sums of the overloaded and stimulated turnovers should not vary significantly. The less the turnover of the stimulated members, the easier is to divide their discount to the rest members of the group, because the same share value should be accumulated in either case.

Theoretical assumptions are given and the proposed method for the definition of the distribution of the differentiated share value for the cooperative members enables to achieve: the smaller ratio between the share to be accumulated and the whole cooperative turnover; the bigger possibility to get the share paid in kind; the more speedy increase of the profit; the more simple way to get the loan.

Keywords: cooperative, share, differentiation, distribution, members' turnover.

Introduction

After the brake-down of the social system, in East and Middle East European countries the complex transformation processes in economy began. These processes are especially complicated and manifold in agricultural sector. In most of these countries the former state agricultural farms were demolished and the process of the land return to the owners started. Bigger and smaller individual farms and agricultural communities substantially reorganize themselves into various organizations rendering the services to agricultural production. Under such conditions special attention should be paid to the collaboration of farmers, agricultural communities and organizations rendering the services as well as the preparation of the general strategy and its fulfillment. In the variety of these collaboration forms special attention should be given to agricultural cooperatives (Domagalska-Grędyś, 2004; Information, 2005; Kurzawinski, 2004; Чаянов, 1919).

Some aspects of the cooperative movement in agricultural sector are amply discussed by the world economy

science. Unfortunately, most of the conclusions of such research are almost inapplicable for the specific conditions of economy under transformation. These investigations are important and topical issues (Fahlbeck, 1996; Heines, 1987; LeVay Clare, 1983; Ratchford, 1985; Sapiro, 1993; Sexton, 1986; Stefanson, 1995).

The choice of the cooperative activity depends on many reasons, the most important being – the benevolent solution of the social problems of the cooperative members. But economic profit when such members cooperate is also very important. Agricultural subjects after cooperation can more easily accumulate the capital for investments and still remain competitive, and expand their activity more speedily. The cooperative can produce big quantities of agricultural production which enables to maximize the demand and cost of such produce. Thus the farmer, the member of the cooperative, can get bigger income. Besides farmers can more easily sell their produce and get cheaper services and production means (equipment). In the cooperatives of various types and different activities, and the relationships of the organization members are particular.

One peculiarity of the agriculture of post-communist countries of this period, that influences and hinders the activity of the cooperatives is the variety of farm sizes (Ramanauskas, 1998; Ūkininkų..., 2004). In Lithuania thousands of small farms (with 2-3 ha of land) producing large part of the production exist beside the big farms (not numerous yet) and the agricultural communities with several hundred or even thousand ha of land, the great number of cattle, large green houses and manufacturing lots of produce. In small farms more than 67 per cent of all the potatoes, 59 per cent of the vegetables, 25 per cent of meat, 36 per cent of milk, 39 per cent of eggs and 9 per cent of cereals are grown (Lietuvos statistikos ..., 2005; Lietuvos žemės..., 2005).

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The traditional definition methods of the size of the members' share (the amount of the member share is equal to all the cooperative members, as well as the number of votes, etc.) are peculiar to the cooperatives (the amount of the share of the member is equal to the value of the paid advances), and are successfully used in all the classical cooperatives in the world. Such cooperatives have been founded at the same time as the rest enterprises of various kinds, they have created good material basis and many of them are united in strong cooperative structures. They are economically strong and competitive in modern market. But not all the aspects of cooperative theory can

be applied in agriculture during the transient period to market economy. Some of them must be newly created.

Investigations showed that the main assumption to the development of the agricultural cooperative movement is the formation of the relevant conditions for the cooperative activity and the elimination of the factors suppressing the cooperative movement. One of the most important pre-conditions for the cooperative establishment and development are the economical management aspects: the formation of the main capital (the share amount), the rules of the profit distribution, the right to vote, etc.

The **object** of this work is to propose the ways how to differentiate the share amount of the cooperative members in relation to their turnover. The practical application of the proposed method will enable to quicken the creation of new cooperatives and to improve the financial results of the existing cooperatives, as the resources needed for investment will be easier to collect and to maximize the turnover.

Investigation methods. The state of cooperatives has been investigated by social, monographic, inquiry and expert investigation methods; the classification of the ways to differentiate the share amount and the graphs of the proportion coefficients of the share were calculated in accordance with the science of mathematical logics. During the investigation the cooperatives of Lithuania were given 34 questionnaires, the analysis of which enabled to make reliable conclusions.

Results

When the cooperative is founded the most important question that arises is the determination of the capital demand and the way to accumulate it (Charnes, 1991; Ollila, 1899; Ramanauskas, 2000). The cooperative members are unable to accumulate the whole capital at once. Their advances mostly comprise a small part of the cooperative demand. At small economic potential of the farms, big enough capital advances become the barrier of the cooperative establishment. It is true, that some farmers or agricultural communities have the necessary facilities and equipment which are estimated as the material contribution, but most of the members are unable to install the share (in cash or material kind). The biggest part of the capital is taken from the credit institutions (banks) or from the cooperative members (their profit). The cooperative members can accumulate the share in various ways:

- the first method – all the members make contributions in cash or other material values useful to the cooperative in accordance with their estimated share. Thus all the primary stock capital of the cooperative consists of the personal means, i.e. the mandatory initial contributions of the members. If any of the members does not have enough means, he has to borrow the lacking sum and pay the due share. At present this method is practically impossible to fulfill because cooperative members do not have enough means;
- the second method – the member shares are accumulated from the cooperative profit. All the neces-

sary means are borrowed from credit institutions and from cooperative members;

- the third method – is the combination of the two above mentioned methods. The agreed part of the stock capital, i.e. 30 per cent is paid in cash or material values, while the rest part of the share (70 per cent in this case) is accumulated from the profit. All the members have to pay the obligatory initial advance of the share. The greater the share, the easier to begin the activity of the cooperative and the smaller is the amount of the loan.

The situation of the cooperative activity shows that the first and the third methods are unpopular in Lithuania at present. On one hand the cooperative members are unable to pay even some part of the share at once. On the other hand the advancements of the separate cooperative members are not normally promoted. The cooperative uses its capital and the received profit is used to return the loan. Thus the cooperative profit is allotted to the members who did not pay the advances because the part of the profit unpaid as advances has been borrowed.

When the cooperative capital is accumulated from the profit, it is very important to rationally choose the calculation method of the part of the profit and the share of each member. The methods used are as follows (Ramauskas, 1998; 2000):

- all the members receive equal part of the profit and equal shares. This method is recommended only to those cooperatives where the members are of equal or similar economical power and their turnover with the cooperative is practically the same;
- the profit part and share of every member are in proportion with the farm size and production potential. But these indices are not always proportional to the member turnover (the productivity of the animals is different, as unlike is the production amount used in the separate household and so on). The farm size and its production facility allow defining only the amount of the advance used to contribute the expenditures of the cooperative foundation (document preparation, registration, etc.);
- the profit part and the share of the members are in proportion with the planned turnover with the cooperative. This calculation method has the best correspondence with the cooperative principles, as the turnover is the measure of the profit of every separate member of the cooperative.

The distribution of the profit and the share to the cooperative members in accordance with their turnover with the cooperative enable to stimulate separate members or their groups to increase the turnover with the cooperative and to make it more attractive to the financially powerful members (Deiningger, 1994; Fauquet, 1938; Garoyan, 1983; Ismail, 1986; Marvin, 1980; Чаянов, 1919).

Very often the cooperatives cannot be founded because the most economically powerful farmers refuse to join cooperatives as their turnover with the cooperative usually is much greater than that of the average member. When the margin of the share into the cooperative activity is very big, such members should get some stimulus.

The value or amount of this incentive should depend on the usefulness to the cooperative. Stimulated must be not only the members or the member groups whose turnover with the cooperative is big, but also those who have made big contributions at the beginning of the cooperative activity.

The differentiation of the share value enables to achieve:

- the greater profitability of the cooperative activity, because the smaller expenditures of the turnover unit could be achieved (less cost price of production and services);
- smaller ratio of the share to be accumulated and all turnover of the cooperative, because after the powerful members enter the cooperative, less means are required to begin the cooperative activity than the increase of the turnover;
- greater are the possibilities to get the share in material form, because only powerful farmers possess the facilities and equipment;
- the profit will increase much quicker, i.e. the profit of anticipated value will be achieved much quicker;
- the shorter period of the share accumulation, because the profitability increases and the share coefficient decreases;
- the increase of the competitiveness due to the maximization of the cooperative turnover;
- the easier acquisition of the loans from the banks.

The share differentiation enables to comprise the member groups: the smallest group number is two – the stimulated and the overloaded members. When the groups are compiled, the total turnover sum of every individual group is the most important criterion. The share coefficients are also chosen in accordance with the turnover sum total of the group members, and the share is calculated and the profit is divided in accordance with the individual member turnover. The first and the last member of every group are the boundary members, and their turnovers are estimated as boundary turnovers. The sums of the overloaded and stimulated turnovers should not vary significantly. The less is the turnover of the stimulated members, the easier is to divide their discount to the rest members of the group, because the same share value should be accumulated in either case.

The purposefulness of the share differentiation greatly depends on the difference of the economic power of the members. The greater is the margin between the turnovers of the separate members, the bigger is the possibility to achieve the usefulness of the differentiation.

The work describes group, individual, mixed and stripe method for the share differentiation (see Figure).

Group method differentiation, when the members have been distributed into several groups.

Individual differentiation, when every member knows his individual coefficient of the share proportion from the turnover.

Mixed differentiation method is the combination of the group and individual differentiation. Some members are differentiated by the group method while others individu-

ally. Various combinations of these methods are possible.

Stripe differentiation of the share value is quite different, because the turnover of the powerful members is

divided into two or three stripes and every stripe has different coefficient of the share proportion from the turnover.

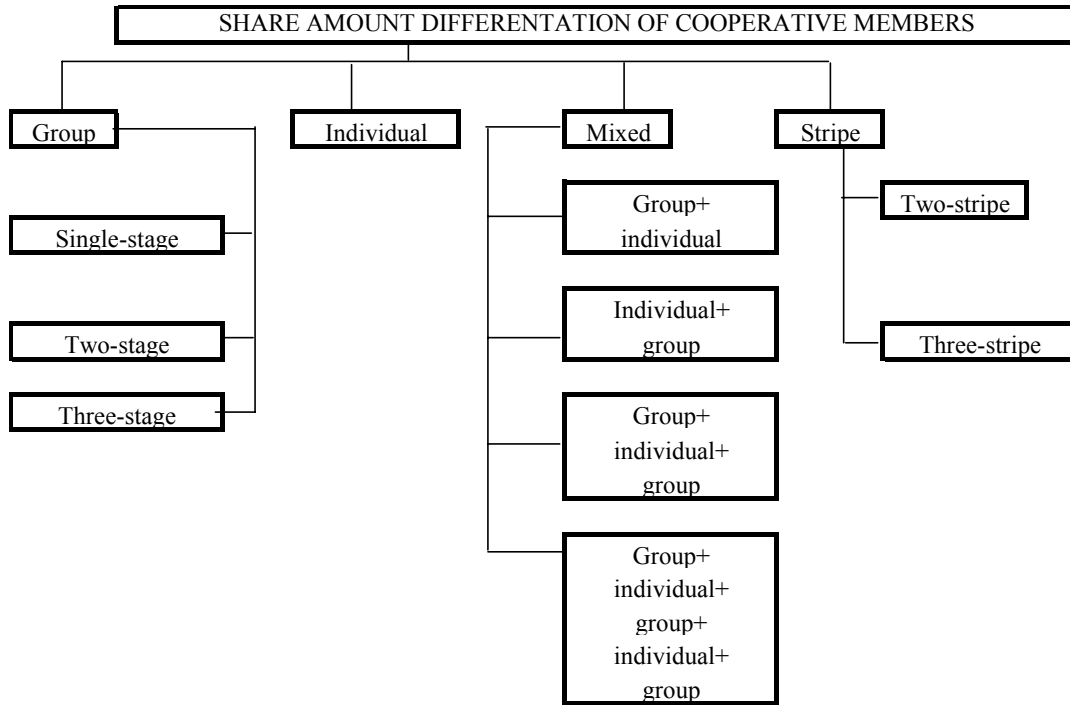


Figure. Classification of the share value differentiation methods

The share value is differentiated changing the proportion coefficient of the share k_p . When the group differentiation is used, three coefficients are calculated: the biggest, average and the smallest. The choice of the individual differentiation enables to calculate the proportion coefficient of individual member in accordance with his turnover. In this case, first of all we find the average (k_{pv}), maximum (k_{pmax}) and minimum (k_{pmin}) coefficients. The average coefficient is not the average of maximum and minimum coefficients. It shows the general need of the share and its boundary that separates or distinguishes the overloaded members (the ones whose duty is to pay the enlarged obligatory advance share in order to join the cooperative) from the stimulated members (the ones whose duty is to pay the minimized obligatory advance share in order to join the cooperative). The members whose share proportion coefficient to the turnover is less than k_{pv} are stimulated and their share is minimized, and the members, whose share proportion coefficient is greater than k_{pv} are overloaded and their share is enlarged. The whole sum of the shares remains unchanged. The coefficient k_{pv} becomes the average of maximum and minimum coefficients only when the sum turnover of the stimulated members is equal to the sum turnover of the overloaded members.

The increase of the coefficient k_{pv} is defined as Δk_{pd} and its decrease as Δk_{pm} . Then:

$$k_{pmax} = k_{pv} + \Delta k_{pd} \quad \text{and} \quad k_{pmin} = k_{pv} - \Delta k_{pm}. \quad (1)$$

The limit degree of one of these coefficients (the share differentiation degree) a per cent is chosen and the second coefficient is calculated. The stimulated members

get k_{pmin} and the overloaded members get k_{pmax} :

$$k_{pmin} = k_{pv} \cdot \left(1 - \frac{a}{100}\right) \quad \text{and} \quad k_{pmax} = k_{pv} \cdot \left(1 + \frac{a}{100}\right) \quad (2)$$

The coefficient k_{pmax} is calculated from the choice of the limit turnover A , which separates the overloaded and stimulated members. If the three stage differentiation is used, such limits will be two: A_{r1} and A_{r2} .

The choice of the limit turnover A_r enables to calculate the planned sum turnover of every member group.

When the two groups are chosen:

$$A = \sum_{i=1}^x A_i + \sum_{i=x+1}^n A_i, \quad (3)$$

where: $\sum_{i=1}^x A_i = A_{rd}$ is the sum turnover of the overloaded members, in Lt ;

$\sum_{i=x+1}^n A_i = A - A_{rd} = A_{rs}$ is the turnover of stimulated members, in Lt , x is the number of the overloaded members; n is the total number of the cooperative members.

The original computer program Microsoft Excel has been created to make the calculation of the value of the share for the cooperative members easier. This program is useful not only for the estimation of the constant repetitive calculation of the share value of the cooperative members, but to determine the payment terms of the member share, because these values constantly change (new members join the cooperative, the turnover of the individual members changes, etc.).

There is a share differentiation theory presented in

the article that is used for the calculation of shares for members of a newly established cooperative.

5 cooperatives and 27 farmers from fruits and berries sector in the northern part of Lithuania are establishing a big cooperative, that could be acknowledged as organiza-

tion of producers and receive the support from EU. It has been estimated that the investments of 306 thousands of Lt are necessary for the establishment of such cooperative; the planned total turnover of all members is 1530 thousands of Lt a year (see Table).

Table

Calculation of the share part at two-stage differentiation

Number of members	Turnover, thousands of Lt		Total turnover, thousands of Lt	Coefficient of the share	Shares, thousands of Lt		Change, %
	Of the member	Of the group			Of the member	Of the group	
8	10	80	80	0.1792	1.79	14.34	-10.4
12	20	240	320	0.1792	3.58	43.01	-10.4
2	40	80	400	0.1808	7.17	14.34	-10.6
1	50	50	450	0.1808	8.96	8.96	-10,6
4	75	300	750	0.7792	13.44	53.76	-10.6
2	105	210	960	0.2200	23.10	46.20	+10.0
1	170	170	1130	0.2200	37.40	37.40	+10.0
1	190	190	1320	0.2200	41.80	41.80	+10.0
1	210	210	1530	0.2200	46.20	46.20	+10.0
32		1530				306.00	

The average coefficient of the share is:

$$k_{pv} = 306 / 1530 = 0,2.$$

When the part of the share attributed to the biggest members is increased by 10 per cent ($c = 10$ per cent.), then

$$\Delta k_{pd} = 0,2 \cdot 0,1 = 0,02.$$

The table suggests that all the members should be stimulated, when their turnover is 105, 170 or more thousands of Lt.

Lets say we have chosen the marginal turnover to be $A_r = 100$ thousands of Lt, then

$$A_{rd} = 80+240+80+50+300 = 750 \text{ thousands of Lt}; A_s = 210+170+190+210 = 780 \text{ thousands of Lt};$$

$$\Delta k_{pm} = (780 / 750) \cdot 0,02 = 0,01208;$$

$$k_{pmax} = k_{pv} + \Delta k_{pd} = 0,2 + 0,02 = 0,22;$$

$$k_{pmin} = k_{pv} - \Delta k_{pm} = 0,2 - 0,01208 = 0,1792.$$

Therefore the stimulated members received 171.6 thousands of Lt of the profit and the rest ones 134.4 thousands of Lt.

Conclusions

1. At present the methods enabling to define the peculiar traditional methods to determine the share value of the cooperative members: the share value of all the members is equal, all the members have the same number of votes, etc. It is obvious that such equality is peculiar to the classical cooperatives world wide because they were established at the same time. Such cooperatives have good material basis, most of them are united into the powerful cooperative units. They are strong economically and can compete in the modern market. The main precondition for the development of the agri-

cultural cooperative movement is the arrangement of the conditions for the cooperative activity and the elimination of the factors suppressing the cooperative movement. But not all the aspects of the cooperative theory can be applied to agriculture during the transitive period into the market economy – some of them must be created anew.

2. It is concluded that the members of the similar or equal power and social position should be united when founding the agricultural cooperatives. But in Lithuania the farms of the farmers and other subjects vary according to their size, specialization and economic level. They differ from some to several times, thus the management principles of equality in the present cooperatives do not promote the economic interest of the powerful farmers to join into the cooperatives of the small and less powerful farmers.
3. The value of the part of the share of the cooperative members should be differentiated in accordance with their turnover in the cooperative and the economically powerful cooperative members should be given less value of the relative advances.
4. Theoretical assumptions are given and the proposed method for the definition of the distribution of the differentiated share value for the cooperative members enables to achieve: the smaller in the ratio between the share to be accumulated and the whole cooperative turnover, the bigger possibility is to get the share paid in kind; the more speedy is the increase of the profit, the more simple way to get the loan.

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Kooperatyvų ekonominiai valdymo aspektai

Santrauka

Rytų ir Vidurio Europos šalyse vyksta sudėtingi ekonomikos transformavimosi procesai. Jie ypač sudėtingai ir nevienareikšmiškai vyksta žemės ūkio sektoriuje. Daugumoje šių šalių buvę valstybiniai žemės ūkiai iširę, vis dar vyksta žemės gražinimo buvusiems savininkams procesas, įsikūrė didesni ar mažesni individualūs ūkiai, žemės ūkio bendrovės, iš esmės reorganizavosi įvairios žemės ūkio gamybą aptarnaujančios organizacijos. Tokiomis sąlygomis, ypatingą reikšmę įgauna ūkininkų, bendrovių, aptarnavimo organizacijų tarpusavio bendradarbiavimas, glaudesnis organizavimas, bendros strategijos rengimas ir realizavimas. Šio bendradarbiavimo formų įvairovėje ypač svarbi vieta tenka žemės ūkio kooperatyvams. Kooperatinio judėjimo žemės ūkio sektoriuje kai kurie aspektai pasaulio ekonomikos mokslo išnagrinėti gana išsamiai. Deja, daugumos tokių tyrimų išvadų beveik negalima pritaikyti specifinėms transformacijos procesų paliečioms ekonomikos sąlygoms. Todėl šie tyrimai yra aktualūs. Vienas šio periodo pokomunistinių šalių žemės ūkio ypatumas, lemiantis ir stabdantis kooperatyvų veiklą, – ūkių dydžių įvairovė. Lietuvoje greta stambiųjų ūkininkų ir bendrovių, turinčių po kelis šimtus ar net tūkstančius hektarų žemės, dideles gyvulių bandas, didelius šiltnamių plotus ir gaminančių daug produkcijos, yra tūkstančiai iki 2-3 ha smulkiųjų ūkių, gaminančių didelę produkcijos dalį. Tai stabdo kooperatyvų steigimąsi ir plėtrą, nes smulkieji ūkininkai, neturėdami pakankamai kapitalo investicijoms, negali steigti kooperatyvų. Stambieji ūkininkai ir kiti žemės ūkio subjektai, būdami ekonomiškai ir techniškai pajėgesni, nesuinteresuoti kooperuotis su smulkiaisiais produkcijos gamintojais, nes pagal Lietuvos (kaip ir kitų šalių) kooperatyvų įstatymą balsuojant narys gali turėti tik vieną balsą, nepaisant pajaus dydžio. Be to, pagrindinė kooperatyvo pelno dalis skirstoma proporcingai apyvartai, o dividendams mokėti pagal įstatymą gali būti skiriama iki 10 procentų grynojo pelno (maksimalus dividendų dydis nustatomas kooperatyvo įstatuose).

Kooperatyvams būdingi tradiciniai narių pajaus dydžio (nario pajaus dydis yra lygus nario įneštų pajinių įnašų vertei) nustatymo metodai (lygų visų narių pajaus dydį, visiems nariams vienodą balsų skaičių ir pan.) sėkmingai naudojami klasikiniuose pasaulio kooperatyvuose. Jie susikūrė tuo pačiu metu kaip ir kitų rūšių įmonės, turi gerą materialinę bazę, dauguma jų susijungę į stiprius kooperatinius darinius, yra ekonomiškai stiprūs ir gali konkuruoti šiuolaikinėje rinkoje. Tačiau ne visi kooperatyvų klasikinės teorijos aspektai gali būti taikomi žemės ūkiui pereinamuoju į rinkos ekonomiką laikotarpiu, kai kuriuos teorijos klausimus reikia kurti iš naujo. Tyrimais nustatyta, kad pagrindinė žemės ūkio kooperatinio judėjimo plėtos prielaida – tinkamų sąlygų kooperatyvų veiklai sudarymas ir kooperatinį judėjimą stabdančių veiksnių pašalinimas. Viena svarbiausių sėkmingos kooperatyvų steigimosi ir plėtos sąlygų – ekonominiai valdymo aspektai: pradinio kapitalo formavimas (pajaus dydis), pelno skirstymo taisyklės, balsavimo teisė ir pan.

Šio darbo tikslas – pasiūlyti metodus diferencijuoti kooperatyvų narių pajaus dydį priklausomai nuo jų apyvartos.

Kooperatyvų būklė tirta sociologiniu, monografiniu, anketinės ir ekspertų apklausos metodais; pajaus dydžio diferencijavimo būdų klasifikavimas ir pajaus proporcingumo koeficientų grafikai parengti vadovaujantis matematinės logikos mokslu. Tyrimo metu skirtingos krypties veikiantiems šalyje kooperatyvams buvo išplatintos 34 anketos, kurių analizė leido padaryti patikimas išvadas.

Steigiant kooperatyvą vienas svarbiausių klausimų yra kapitalo poreikio nustatymas ir būdas jį sukaupti. Iš karto sukaupti viso reikiamo kapitalo nariai paprastai nepajėgia. Jų pradiniai įnašai dažniausiai sudaro nedidelę kooperatyvo kapitalo poreikio dalį. Esant mažam ūkių ekonominiam pajėgumui, didesnis pradinio piniginių įnašų reikalavimas dažnai tampa kooperatyvo įkūrimo stabdžiu. Didžiąją dalį kooperatyvui reikiamo kapitalo tenka skolintis iš kredito institucijų (bankų) ir iš narių (jiems priklausanti pelno). Atlikti tyrimai parodė, kad kooperatyvo nariai pajų gali sukaupti įvairiai:

- pirmasis būdas – visi nariai jiems priskaičiuotą pajų įneša pinigais ar kitomis kooperatyvui naudingomis vertybėmis. Dabartinėmis sąlygomis šis būdas sunkiai įgyvendinamas, nes retas narys tam turi pakankamą lėšų;
- antrasis būdas – narių pajai palaipsniui kaupiami iš kooperatyvo pelno. Visas reikiamas lėšas kooperatyvas skolinasi iš kredito institucijų ir iš narių;

- trečiasis būdas yra pirmųjų dviejų junginys. Sutartą dalį kapitalo, pvz., 30 proc. nariai sumoka pinigais ar natūrine išraiška, likusią pajaus dalį (šiuo atveju 70 proc.) kaupia iš pelno. Visiems nariams nustatoma privaloma pradinė pajaus įmoka. Kuo didesnė įmoka, tuo lengviau kooperatyvui pradėti veiklą, tuo mažesnės reikia paskolos.
- Kai kooperatyvo kapitalas kaupiamas iš pelno, labai svarbu tinkamai (racionaliai) pasirinkti kiekvienam nariui tenkančio pelno dalies ir jo pajaus apskaičiavimo būdą. Dažniausiai taikomi šie būdai:
- visiems nariams skiriama vienoda pelno dalis ir nustatomas vienodas pajus. Šis būdas tinka tik tiems kooperatyvams, kuriuos steigia apytiksliai vienodo ekonominio pajėgumo nariai, o kiekvieno jų apyvarta su kooperatyvu mažai skiriasi;
- nariams tenkanti pelno dalis ir pajus proporcingi ūkio dydžiui arba gamybiniam pajėgumui. Tačiau šie rodikliai ne visuomet proporcingi narių apyvartai (skiriasi gyvulių produktyvumas, nevienodas produkcijos pasilieka savo reikmėms ir pan.). Pagal ūkio dydį ar jo gamybinį pajėgumą galima nustatyti tik stojamojo mokesčio dydį, kurio reikia padengti kooperatyvo steigimo išlaidoms (dokumentų parengimas, registravimas ir kt.);
- narių pelno dalis ir pajaus dydis proporcingi planuojamai apyvartai su kooperatyvu. Šis apskaičiavimo metodas geriausiai atitinka kooperatyvų principus, nes apyvarta yra kiekvieno nario indėlio į kooperatyvo pelną matas.

Kooperatyvo pelno ir pajaus išdalijimas nariams pagal jų apyvartas su kooperatyvu sudaro galimybę skatinti atskirus narius ar jų grupes didinti apyvartą su kooperatyvu, padaryti jį patrauklesnį finansiskai pajėgesniems nariams. Tačiau dažnai kooperatyvai negali įsisteigti vien todėl, kad į juos nenoriai stoja ekonomiškai pajėgiausi ūkininkai, kurių apyvarta su kooperatyvu daug didesnė nei vidutinio nario. Esant dideliui indėlio į kooperatyvo veiklą skirtumui, tokiems nariams rekomenduotinos tam tikros paskatos. Paskatos dydis turi priklausyti nuo teikiamos naudos kooperatyvui. Skatinti galima ne tik turinčius didelę apyvartą su kooperatyvu narius arba grupes, bet ir įnešančius didelį įnašą kooperatyvo veiklos pradžiai.

Daugelio kooperatyvų veiklos nesėkmių analizė parodė, kad jų būtina diferencijuoti. Straipsnyje pateikti kooperatyvų narių grupinis, individualusis, mišrusis ir ruožinis pajaus dydžio priklausomai nuo jų apyvartos diferencijavimo teoriniai metodai ir pateiktas pasiūlytų metodų taikymo mechanizmas. Diferencijuojant pajų, sudaromas narių grupės: mažiausiai grupių yra dvi – skatinamųjų ir apkraunamųjų narių. Sudarant grupes, svarbiausias kriterijus yra kiekvienos grupės apyvartų sumos. Pajaus koeficientai taip pat parenkami pagal grupės narių apyvartų sumas, o pajus apskaičiuojamas pagal individualiąją narių apyvartą. Kiekvienos grupės pirmasis ir paskutinis nariai yra ribiniai grupės nariai, o jų apyvartos – ribines grupės apyvartos. Apkraunamųjų ir skatinamųjų apyvartų sumos neturi per daug skirtis. Kuo mažesnė skatinamųjų narių apyvarta, tuo lengviau jų nuolaidą išdalinti kitiems nariams, nes bet kuriuo atveju reikia sukaupti tiek pat pajaus.

Apskritai pajaus diferencijavimo tikslingumas labai priklauso nuo narių ekonominio pajėgumo skirtumo. Kuo daugiau skiriasi narių apyvarta, tuo didesnė tikimybė, kad diferencijavimas bus naudingas. Pajaus dydis diferencijuojamas keičiant pajaus proporcingumo koeficientą k_p . Naudojant grupinę diferenciaciją, apskaičiuojami trys koeficientai: didžiausias, vidutinis ir mažiausias. Pasirinkus individualiąją diferenciaciją, pajaus proporcingumo koeficientas kiekvienam nariui apskaičiuojamas individualiai pagal jo apyvartą. Šiuo atveju pirmiausiai randami vidutinis (k_{pv}), maksimalusis (k_{pmax}) ir minimalusis (k_{pmin}) koeficientai. Vidutinis koeficientas nėra maksimalaus ir minimalaus koeficientų vidurkis. Jis parodo bendrąjį pajaus poreikį ir ribą, skiriančią apkraunamuosius ir skatinamuosius narius. Nariai, kurių pajaus proporcingumo apyvartai koeficientas yra mažesnis už k_{pv} , yra skatinamieji, jų pajus mažinamas, o nariai, kurių šis koeficientas yra didesnis už k_{pv} , yra apkraunamieji, jų pajus didinamas. Bendroji pajų suma išlieka nepakitusi.

Kooperatyvo narių pajaus dydžio apskaičiavimą palengvina sudaryta originali kompiuterinė programa Microsoft Exsel aplinkoje. Ši programa pravarti ne tik reguliariam kooperatyvo narių pajaus dydžiui apskaičiuoti pakartotinai, bet ir narių pajaus įmokėjimo terminams nustatyti, nes šie dydžiai nuolat kinta (kooperatyve atsiranda naujų narių, keičiasi atskirų narių apyvarta ir pan.). Pateikta darbe pajaus diferencijavimo teorija pritaikyta nustatyti pajaus dydžiai Šiaurės Lietuvos vaisių ir uogų kooperatyvo nariams, kurį steigia 5 smulkūs kooperatyvai ir 27 ūkininkai (šis kooperatyvas galėtų būti pripažintas gamintojų organizacija ir pretenduoti į ES paramą).

Atlikti tyrimai leido padaryti tokias išvadas:

- pagrindinė žemės ūkio kooperatinio judėjimo plėtros prielaida – sudaryti tinkamas sąlygas kooperatyvų veiklai ir pašalinti kooperatinį judėjimą stabdančius veiksniai. Tačiau ne visi kooperatyvų teorijos aspektai gali būti taikomi žemės ūkiui pereinamuoju į rinkos ekonomiką laikotarpiu, kai kurie jų turi būti kuriami iš naujo;
- į steigiamus žemės ūkio kooperatyvus, geriau telkti panašios turtinės padėties (su apytiksliai vienoda apyvarta) narius. Tačiau Lietuvoje ūkininkų ir kitų žemės ūkio subjektų ūkiai pagal dydį, specializaciją ir ekonominį lygį skiriasi kelis ir net kelias dešimtis kartų, todėl laikymasis dabartinių kooperatyvų lygiateisių valdymo principų mažina stambiųjų ūkininkų ekonominį suinteresuotumą jungtis su smulkiaisiais;
- siūloma diferencijuoti kooperatyvų narių pajaus dydį priklausomai nuo jų apyvartos kooperatyve, o ekonomiškai pajėgesniems kooperatyvų nariams rekomenduotina mažinti santykinį įnašą dydį.

Apibūdintos teorinės prielaidos ir sudaryta kooperatyvo pelno skirstymo bei diferencijuoto narių pajaus dydžio nustatymo metodika leidžia pasiekti: mažesnę santykį tarp reikiamo sukaupti pajaus ir visos kooperatyvo apyvartos; didesnę tikimybę gauti įnašą natūra; spartesnę pelno didėjimą; lengvesnę paskolos gavimą.

Raktažodžiai: kooperatyvas, pajus, diferencijavimas, skirstymas, narių apyvarta.

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