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ASSESSMENT OF FACTORS FOR FORMING THE FINANCIAL POTENTIAL OF AGRICULTURAL PRODUCTION OF THE NATIONAL ECONOMY

Banar Oksana, Starynets Oleksandr, Kozlovtseva Valentyna, Bondar Iuliia. *“Assessment of factors for forming the financial potential of agricultural production of the national economy”.* The article deals with the evaluation of agricultural production and the national economy's financial facilities development, with emphasis on its financial assurance key figures. The peculiarities of agricultural production financial facility development and the improvement of regional agricultural enterprises' financial assurance have been defined. The peculiarities of financial resource use in modern conditions have been analyzed. The control of the financial resources helped determine the forecast value of agricultural production financial facilities. The aim of the article is to define the factors of agricultural production financial facilities, which are taken as the basis of macroeconomic analysis, and explain the characteristics of the region's agricultural enterprise development in Ukraine's agroclimatic zones.

Agricultural production may have an efficient development due to the commensurability and equation of the real and potential volume of financial resources, which assure financial facilities and play an important role in the stability of agricultural activity. At the same time, the dynamism of the market environment almost always causes a change in agricultural production conditions. Distribution and redistribution of income and financial resources between agricultural market entities influences the volume of agricultural enterprises' financial resources and determines the conditions of their access to cheap financial loans. On the one hand, the vectorial retargeting of the financial system towards a favorable financial environment assurance contributes to the reasonableness of problem solving of agricultural production financial facilities in this manner. On the other hand, it is caused by the improvement of agricultural enterprises' business functions and financial components, which are adjusted to external environmental realities. Discharged funds from the state budget financial flow and the banking sector will allow for the formation of financial facilities and potential sources for the development of agricultural enterprises, subject to the improvement of the legal framework in the following direction and the state control scheme of agricultural production finance and credit assurance.

The complexity of the category "financial facilities" shows that it should be reviewed as the ability to transform financial resources into the real factor of agricultural production development. Financial facilities can be used to estimate the rate of profitability in the critical range, save money, and possibly establish a degree of separation between the activity spheres of agricultural enterprises.

Considering the importance of bank crediting and state financial support as factors in the development of regional financial facilities, it is reasonable to consider their overall influence on earning capacity, which corresponds to the critical level of agricultural production financial facilities. Commensurability: The establishment of all elements and components of financial facilities and the use of their possibilities will assure the equating of nationwide, sectoral, and private interests for economic development and the activation of long-term investment activity.

Keywords: financial resources, financial facilities, agricultural production, the evaluation of factors, national economy.

Банар Оксана, Старинець Олександр, Козловцева Валентина, Бондар Юлія. «Оцінка факторів формування фінансового потенціалу аграрного виробництва національної економіки». В статті розглянуто оцінку формування фінансового потенціалу аграрного виробництва національної економіки з окресленням показників його фінансового забезпечення. Визначено особливості формування фінансового потенціалу аграрного виробництва і удосконалення фінансового забезпечення аграрних підприємств регіону, що дає змогу проаналізувати можливості використання фінансових ресурсів в сучасних умовах. Моніторинг фінансових ресурсів допоміг визначити прогнозну величину фінансового потенціалу аграрного виробництва.

Аграрне виробництво може мати ефективний розвиток завдяки співмірності та рівності реальних і потенційних обсягів фінансових ресурсів, які забезпечують фінансову спроможність і відіграють важливу роль у стабільній діяльності аграрної сфери. Водночас динамізм ринкового середовища майже в кожному випадку викликає зміну умов сільськогосподарського виробництва. Розподіл і перерозподіл доходів і фінансових ресурсів між суб'єктами аграрного ринку впливає на обсяг фінансових ресурсів сільськогосподарських підприємств, визначає умови їх доступу до дешевих фінансових кредитів. Доцільність вирішення проблем фінансування сільськогосподарського виробництва саме таким шляхом зумовлена, з одного боку, векторною переорієнтацією фінансової системи на забезпечення сприятливого фінансового середовища. З іншого боку, це зумовлено вдосконаленням фінансової складової діяльності аграрної сфери, яка адаптована до реальності зовнішнього середовища.

Складність категорії «фінансові засоби» свідчить про те, що її слід розглядати як здатність трансформувати фінансові ресурси в реальний фактор розвитку сільськогосподарського виробництва. Фінансові засоби можуть бути використані як оцінка показника критичного діапазону прибутковості, економії витрат, встановлення можливого ступеня розподілу фінансових ресурсів між сферами діяльності аграрної сфери національної економіки.

Враховуючи важливість банківського кредитування та державної фінансової підтримки як чинників розвитку фінансової бази регіону, доцільно розглядати їх загальний вплив на прибутковість, що відповідає критичному рівню фінансової бази аграрного виробництва. Встановлення співмірності всіх елементів і складових фінансових об'єктів, використання їх можливостей забезпечить збалансованість загальнодержавних, галузевих і приватних інтересів економічного розвитку та активізацію довгострокової інвестиційної діяльності.

Ключові слова: фінансові ресурси, фінансовий потенціал, аграрне виробництво, оцінка чинників, національна економіка..

Банар Оксана, Старинец Александр, Козловцева Валентина, Бондарь Юлия. «Оценка факторов, формирующих финансовый потенциал аграрного производства народного хозяйства». В статье рассмотрена оценка формирования финансового потенциала аграрного производства национальной экономики с определением показателей его финансового обеспечения. Определены особенности формирования финансового потенциала аграрного производства и усовершенствования финансового обеспечения аграрных предприятий региона, что позволяет проанализировать возможности использования финансовых ресурсов в современных условиях. Мониторинг финансовых ресурсов помог определить прогнозную величину финансового потенциала аграрного производства.

Аграрное производство может иметь эффективное развитие благодаря соразмерности и равенству реальных и потенциальных объемов финансовых ресурсов, обеспечивающих финансовую состоятельность и играющих важную роль в стабильной деятельности аграрной сферы. В то же время, динамизм рыночной среды почти в каждом случае вызывает изменение условий сельскохозяйственного производства. Распределение и перераспределение доходов и финансовых ресурсов между субъектами аграрного рынка влияет на объем финансовых ресурсов сельскохозяйственных предприятий, определяет условия их доступа к дешевым финансовым кредитам. Целесообразность решения проблем финансирования сельскохозяйственного производства именно таким путем обусловлена, с одной стороны, векторной переориентацией финансовой системы в обеспечение благоприятной финансовой среды. Кроме того, это обусловлено усовершенствованием финансовой деятельности аграрной сферы, адаптированной к реальности внешней среды.

Сложность категории "финансовые средства" свидетельствует о том, что ее следует рассматривать как способность трансформировать финансовые ресурсы в реальный фактор развития сельскохозяйственного производства. Финансовые средства могут быть использованы в качестве оценки показателя критического диапазона доходности, экономии затрат, установления возможной степени распределения финансовых ресурсов между сферами деятельности аграрной сферы национальной экономики.

Учитывая важность банковского кредитования и государственной финансовой поддержки как факторов развития финансовой базы региона, целесообразно рассматривать их общее влияние на прибыльность, что соответствует критичному уровню финансовой базы аграрного производства. Установление соразмерности всех элементов и составляющих финансовых объектов, использование их возможностей обеспечит сбалансированность общегосударственных,

отраслевых и частных интересов экономического развития и активизацию долгосрочной инвестиционной деятельности.

Ключевые слова: финансовые ресурсы, финансовый потенциал, аграрное производство, оценка факторов, национальная экономика

Introduction. Agricultural production may have an efficient development due to the commensurability and equation of real and potential volume of financial resources, which assure financial facilities and play the important role in stable activity of agricultural sphere. At the same time, the dynamism of market environment almost in every case causes the change of agricultural production conditions. Distribution and redistribution of income and financial resources between agricultural market entities influences the volume of agricultural enterprises financial resources, determines the conditions of their access to cheap financial loans.

Reasonability of problems solving of agricultural production financial facilities in this particular way is caused, on the one hand, by vectorial retargeting of financial system towards favourable financial environment assurance. On the other hand, it is caused by the improvement of agricultural enterprises business function financial component, which is adjusted to external environment reality.

Recent research and publications analysis. The problem of financial facilities development hasn't been paid enough attention for a long period of time by the national researchers. Nowadays different aspects of this problem are a major focus of interest of the famous agrarian researchers, including A.A. Ajupov, A.A. Kurilova, Y. A. Anisimova [1], V.G. Boronos [2], O.Y. Hudz et al. [3], M.Y. Demianenko [4], I.V. Karpochuk [5], I.I. Chunyańska [6], Y. Anisimova [7], Yu. Bondar et al. [8], O. Hutsaliuk et al. [9-11], O. Prokopyshyn et al. [12], I. Koshkalda et al. [13] etc. The main attention in their investigations is paid to the problems of development, distribution and use of financial resources at the level of the state, agricultural production sphere and agricultural enterprises. At the same time there are a lot of problems, which have been investigated very slightly or still

have polemical character. There is no one and only point of view according to methodical principles of the specification of time and resource measures of agricultural production financial assurance with the emphasis on the sphere particular characteristics.

The aim of the article is to define the factors of agricultural production financial facilities, which are taken as a basis of macroeconomic analysis and the explanation of forecasting characteristics of the region agricultural enterprises development in Ukraine's agroclimatic zones.

Key research findings. Financial resources, which are the complex of the cash resources funds, are in the possession of different economic entities (the state, sphere, enterprise) and specify only one of the components of financial facilities – their really consumed part. Therefore financial resources can't generally register a variety of financial facilities peculiarities, such as the possibility to realize secret reserves, the ability to increase the volume of financial resources, the probability of the additional investment resources derivation etc.

In particular the inability of the concept "financial resources" to describe all the economics possibilities according to the production of different financial flows caused the appearance of the concept "financial facilities". The most meaningful and at the same time laconic definition of financial facilities was given by I.I. Chunyańska as "the state's ability to raise funds and use them efficiently with the aim to provide economic development" [6]. While investigating the concept "financial facilities" at the state level V.G. Boronos defines it as the complex of specifications, "which are able to provide integral assessment on the first place - of the financial condition at the macrolevel and microlevel; factors of financial condition change on the second place; and finally the

challenges of the stable economic growth or financial economic activity success at the microlevel" [2]. We share the scientist's opinion according to the fact that state financial facilities are the process of financial resources efficient use providing "the removal of the possibility of financial means abuse and financial flows redirection to the use spheres which are not supported by the law" [7]. We agree that financial facilities are also the complex of diagnostic, support and check-out measures, which have financial character, provide the efficiency of financial activity of economic entities and minimize the exposure of internal and external environment to financial resources [1]. However, in our opinion, state financial facilities are the complex of real and suspected financial resources and income, which may be used for any measures solution, that also includes measures, received by means of the redistribution from one use sphere to another. It may happen without the transition of critical limits, that is without the threat to destroy spheres, from which financial resources have been withdrawn.

It has a clear explanation, as financial resources stock out causes the underfunding of the needs in material production sphere; the use of funds inappropriately; great amount of debts and problems with their operation; low level of bank system plough-back; the raise of percentage rates for short credit use; the decrease of the volume of long-term bank crediting; the increase of the inflation and the currency zig; withdrawal of financial assets abroad; the deformations in accounting and possible financing fraud.

With the aim to unite key characteristics of this complicated economic category and solve the problems of this investigation, we offer to determine financial facilities of agricultural production as general function and estimated factor of industrial sphere according to the development, distribution and use of financial resources for region agricultural enterprises efficient functioning and development.

The complex of financial facilities components of agricultural production sphere should be reflected in the system of financial analysis rates, which are worth reviewing in terms of direct and relative. However, for agricultural enterprises financial activity not the rates, but their threshold amounts – boundary values (or indicators) really matter. Their nonobservance leads to financial flexibility breakdown, prevents normal development of different reproduction elements, causes and develops negative, destructive tendencies in agricultural production.

The definition of financial facilities with the use of relative efficiency rates (rates of business activity) are based on the integrated index of agricultural production financial facilities, which is calculated as geometric average of efficiency rates – the factors of financial facilities sphere development. In such a case, taking into account the significance of financial resources and their sources as factors of financial facilities development, we suppose it rational to review not financial resources and their sources business activity rate use, but to consider complex influence of the component rates: the circulation of manufactured goods, debit debts, cash resources, their equivalents and following financial investments, long-term and short term bank loans, state financial support [3].

Direct rates of agricultural production financial facilities determination are the indicators of earning capacity market based valuation due to the existing region agricultural enterprises budgeting and market variables (such as prices, demand and supply, competitiveness etc.), which may be potentially and practically obtained on the base of conditions, determined by financial resources market.

Every region, which takes part on equal basis in the process of agricultural production earning capacity creation has benefits for the appropriate primary income (it is primary in the sense, in which it is formed by the market). Actually, the region gets such earning

capacity in the process of primary distribution of created and realized gross domestic (or regional) product. General income of agricultural production (income or gross value added, that is income without financial loss) is formed and distributed among regions not only in practice, but also implicitly, on the basis of rated limiting conditions of financial facilities (financial resources and the price for funding sources).

Total income, which falls within every region, implicitly corresponds to the limiting level of agricultural production financial facilities. In a wide sense, the complex of agricultural production primary income is a general agricultural production potential income, apart from income, which legally belongs to the state in the form of direct or indirect taxes.

In such a way, agricultural production complex earning capacity consists of the gross value added (including depreciation), because the latter acquires the form of operating earnings in the short-term period. Agriculture production and region agricultural enterprises financial facilities may develop in manner of accuracy degree growth according to:

- gross produce (private financial resources);
- gross value added (gross produce);
- added value (pure income, without depreciation);
- total profit;
- income, which remains at the person's disposal after tax payment and other obligatory budgetary payments.

In any case financial facilities are based in the conceptual sense on the theory of financial resources management and financial flows development. The change of their characteristics influences financial results of activity and paying capacity of region enterprises and agricultural production altogether.

Macroeconomical analysis of agricultural production should serve as economic justification of financial facilities characteristics, taking into account the

acceptance of region agricultural enterprises efficient functioning criteria due to assurance of equal and sustainable movement of financial flows. Pure income, as the factor of financial facilities development, is a direct rate of region agricultural enterprises financial obligations absorbing.

During 2015-2021 pure income of agricultural enterprises of the Forest-steppe zone increased in 4.4 times. In the structure of financial assurance the amount of private financial resources overbalances the amount of borrowed assets more than in 2.0 times. In the structure of borrowed financial assets relative share of short-term loans increased in 2.6 times. What concerns long-term loans, relative share increased more than in 2 times [14]. The dimension of state financial support comprises in average 7.4 %, among them at the expense of household allowance 49.2 % (for plant production - 0.6 %, for animal production - 48.6 %); at the expense of the special taxation scheme - 50.8 % (in plant production field - 3.5 %, in animal production field - 47.3 %) [15].

In the Polissya zone and the Western region the portion of short-term loans in the structure of borrowed assets financing distribution comprises 8.7 %, the portion of long-term loans comprises 50.3 % (Register of the licensed participants of fund market, 2015-2021). The dimension of region agricultural production state financial support comprises only 3.3 %. In its structure the household allowance for plant production is formed only within 0.2 %, for animal production - 5.6 %; financing of the sphere at the expense of tax allowance in plant production comprises 71.9 %, in animal production it comprises 22.3% [16].

During the period of investigation the Polissya and the Western regions increased the volume of private financial resources in 2.8 times, the volume of pure income - in 4.4 times. In such a case the amount of long-term loans for sphere development increased in 1.9 times, the amount of short-term loans increased in 3.0 times [14].

Agricultural production of the Steppe zone is provided with its own financial resources in 61.4 %, pure income makes 42.5 %. The sphere's region financing at the expense of borrowed assets fundraising with a short-term period of validity is formed within 12.4 %, with a long-term period – 80.4 % [14]. The distribution of state government allowance according to the field direction is formed percentagewise to the volume of plant and animal production as 70:30. At the expense of assets accumulation of value-added percentage the support of agricultural producers increased within the special taxation scheme to 1950.7 million hryvnias, that is in 3.8 times, during 2015-2021 [15].

With the help of the special Programme «MatCad» we have conducted the calculation

of the influence of financial sources activity on agricultural production pure income with its further distribution among Ukraine's agroclimatic zones, especially the Steppe zone (with and without account of the Autonomous Republic of Crimea). It was done taking into account the fact that the bank crediting and state financial support, the amount of which is several times bigger than the direct levels of other rates, used in financial facilities parameters development.

Variable-based scheme of agricultural production pure income forecasting according to Ukraine's agroclimatic zones on the basis of curvilinear relation is shown in the chart 1, forecasting characteristics of the financial facilities for 2021 are given in Table 1..

Table 1 – Forecasting of agricultural production pure income according to Ukraine's agroclimatic zones

Agroclimatic zone	Polynomial of pure income forecasting	Determination coefficient (R ²)
The Forest steppe	$Y = -2 \cdot 10^{-17}x^5 - 3 \cdot 10^{-12}x^4 + 2 \cdot 10^7x^3 + 0,0053x^2 - 72,76x + 391390$ $Y = 0,00002x^2 - 0,5438x + 58689,24$	0.9921 0.4256
The Polissya and the Western region	$Y = 1 \cdot 10^{-11}x^4 - 4 \cdot 10^{-7}x^3 + 0,0046x^2 - 19,01x + 36481$ $Y = 0,00008x^2 - 0,8278x + 16798,43$	0.8766 0.4537
The Steppe with account of the Autonomous Republic of Crimea	$Y = 6 \cdot 10^{-13}x^4 - 6 \cdot 10^{-8}x^3 + 0,0022x^2 - 30,85x + 184232$ $Y = 1,523x + 30812,49$ $Y = 0,00005x^2 - 0,7436x + 51164,98$	0,9763 0.7960 0.8668
The Steppe (without the Autonomous Republic of Crimea)	$Y = 4 \cdot 10^{-13}x^4 - 5 \cdot 10^{-8}x^3 + 0,0018x^2 - 27,17x + 176533$ $Y = 1,506x + 35677,82$ $Y = 0,00005x^2 - 0,7186x + 56484,88$	0.9798 0.7870 0.8612

The source: author's calculations.

It has been determined that there is a close connection between the level of financial assurance and pure income according to all agroclimatic zones. In such a way, for the regions of the Forest steppe zone the polynomial of the second order is acceptable ($R^2 = 0.4256$). In this context

forecasting characteristics of pure income for one region will range from 3104.4 million hryvnias, which is 11 % of the compound rate of this zone – 27940 million hryvnias.

The tightness of the rates parametric interrelation in the Polissya zone and the Western region ($R^2 = 0.4537$) defines the

polynomial of pure income forecasting per one region 1601,4 million hryvnias on the average or 14,3 % from its general amount (11210 million hryvnias). In the Steppe zone the polynomial of the rate forecasting shows significant density ($R^2 = 0.8612$). It means that agricultural enterprises activity profitableness of 9 regions directly depends on bank crediting and state financing.

Upon condition of all the Steppe zone regions integration to the forecasting of pure income volume, its level will correspond to 54.5 % of Ukraine's agricultural production compound income. In this context one region will receive on the average 5220 million hryvnias of pure income. At the same time, within the absence of the Autonomous Republic of Crimea, agricultural production will receive less private financial resources in the amount of 205 million hryvnias. The level of one region profitableness will correspond

to 12 % of its overall dimension according to the agroclimatic zone agricultural production (40120 million hryvnias).

It has been defined, that taking into account financial facilities of the Autonomous Republic of Crimea, overall rate of the Steppe zone agricultural production must correspond to 13970.6 million hryvnias on the average, the amount of bank crediting will comprise not less than 72146.37 million hryvnias (including short-term loans – 9379 million hryvnias and long-term loans – 52770.37 million hryvnias), state financial support will comprise 4643.53 million hryvnias (especially to support the sphere of plant production at the expense of government allowances within 46.44 million hryvnias, to support the sphere of animal production – 116.08 million hryvnias). Boundary parameters of financial facilities per one region will correspond to 9612.87 million hryvnias on the average (Figure 1).

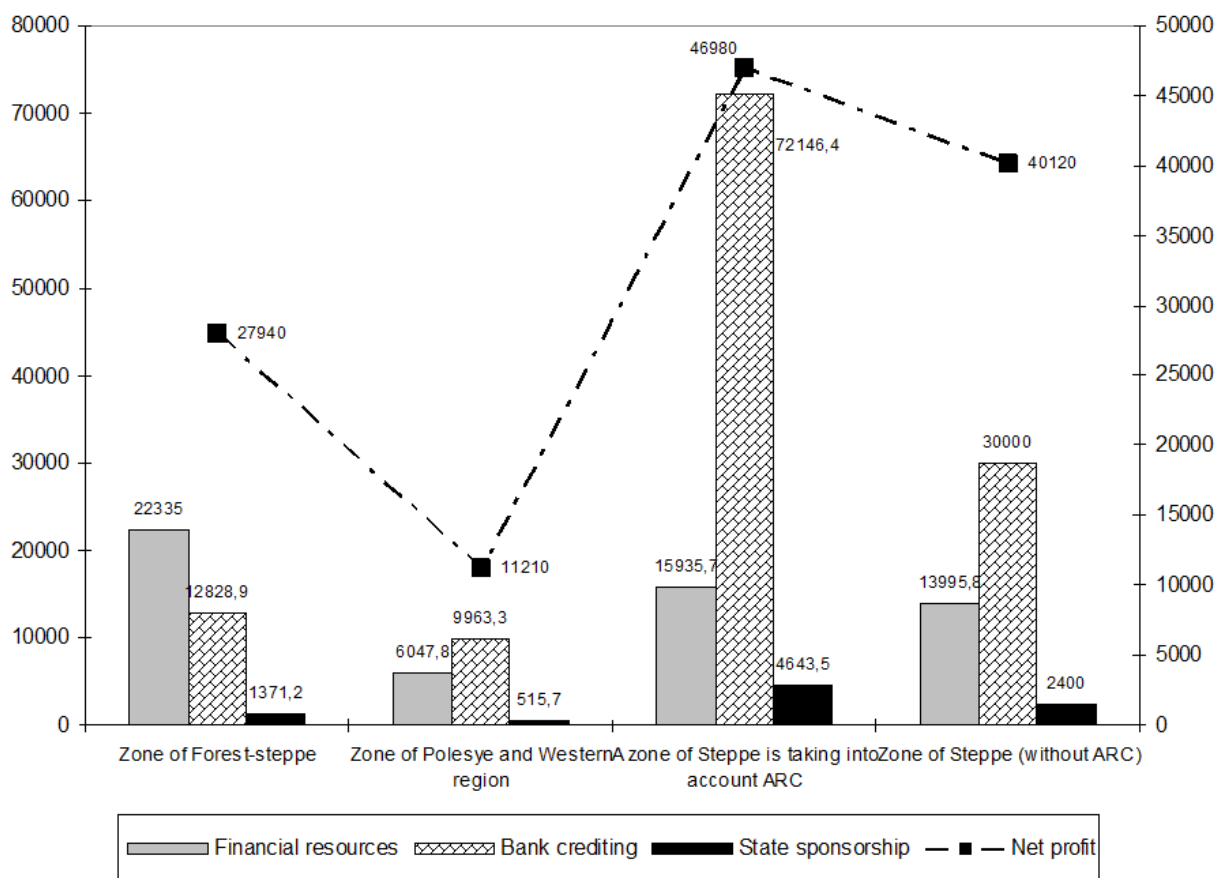


Figure 1 – Prognosis parameters of financial potential of agro-climatic zones of agrarian production of Ukraine in 2021, million UAH.

The source: author's calculations.

Agricultural production financial capacity, under condition of the Autonomous Republic of Crimea expulsion from the Steppe zone, will decrease to 38 % and will comprise 86515.8 million hryvnias. Undersupply of overall dimension of private financial resources will comprise 8800 million hryvnias. Besides, the volume of state financial support will decrease to 48.3 %, especially the amount of funds according to the special taxation scheme of the plant and animal production sphere will comprise 13 % from the level of 2020.

Discharged funds from the state budget financial flow and banking sector will make it possible to form financial facilities potential sources for agricultural enterprises development under condition of improvement of legal framework in the following direction and state control scheme of agricultural production finance and credit assurance.

Conclusions. Complexity of the category "financial facilities" shows that it should be

reviewed as the ability to transform financial resources into the real factor of agricultural production development. Financial facilities may be used as estimating rate of profitability critical range, cost saving, financial resources distribution possible degree establishment between agricultural enterprises activity spheres.

Taking into account the importance of bank crediting and state financial support as the factors of region financial facilities development, it is reasonable to consider their overall influence on earning capacity, which corresponds to agricultural production financial facilities critical level.

Commensurability establishment of all elements and components of financial facilities, the use of their possibilities will assure the equation of nationwide, sectorial and private interests for economic development and the activation of long-term investment activity.

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