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## Peculiarities of agrarian receipts as a modern financial tool

### Abstract

Lending against the pledge of future crops is one of the main ways of using agrarian receipts. The authors propose enhanced understanding of the necessity of introducing agricultural receipts as a modern tool. The article provides detailed characteristics of possible financial tools intended to be used in agrarian business. Agricultural payments are identified as a method of progressive lending which ensures balancing and granting of rights both to the lender and the borrower. In their research, the authors of the article have developed an algorithm of lending against the pledge of future crops and assessed the applicability of foreign experience in terms of the development of suggestions on how to provide agricultural enterprises with the associated opportunities. With the use of agrarian receipts, credit facilities adapt to farmers' needs. For example, they are structured by cultivation, which makes it possible to issue the credits quicker and cheaper. Receipts can be used as collateral for obligations related to banks, suppliers and other creditors. They serve as an innovative and effective tool for stimulating lending in the agricultural sector. Lending against the pledge contributes to the improvement of investment attractiveness of the agrarian sector and ensures the use of agricultural incomes as an alternative and modern lending mechanism.

**Keywords:** Agricultural Receipts; Future Crops; Agricultural Enterprises; Bank Lending; Monitoring; Innovations

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**Особливість сучасного фінансового інструменту «аграрні розписки»**

**Анотація.** Одним із основних напрямків використання аграрних розписок є кредитування під заставу майбутнього врожаю. У статті запропоновано теоретичне розуміння необхідності запровадження сучасного інструменту – аграрної розписки. Надано детальну характеристику можливих фінансових інструментів для використання в аграрному бізнесі. Виокремлено аграрні розписки як метод прогресивного кредитування, який забезпечує збалансування та надання прав як кредитору, так і позичальнику. Побудовано алгоритм банківського кредитування під майбутній урожай. Оцінено іноземний досвід для розробки пропозицій щодо покращення кредитування сільськогосподарських підприємств під заставу майбутнього врожаю, що сприятиме інвестиційній привабливості аграрного сектору та забезпечить використання сільськогосподарських надходжень як альтернативного та сучасного механізму кредитування.

**Ключові слова:** аграрні розписки; майбутній урожай; аграрні підприємства; банківське кредитування; моніторинг; інновації.

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**Особенность современного финансового инструмента «аграрные расписки»**

**Аннотация.** Одним из основных направлений использования аграрных расписок является кредитование под залог будущего урожая. В статье предложено теоретическое понимание необходимости внедрения современного инструмента – аграрной расписки. Дана подробная характеристика финансовых инструментов, возможных для использования в аграрном бизнесе. Выделены аграрные расписки как метод прогрессивного кредитования, который обеспечивает сбалансированность и предоставление прав как кредитору, так и заемщику. Авторами статьи представлен алгоритм банковского кредитования под будущий урожай и оценен иностранный опыт для разработки предложений по улучшению кредитования сельскохозяйственных предприятий под залог будущего урожая, что будет способствовать инвестиционной привлекательности аграрного сектора и обеспечит использование сельскохозяйственных поступлений как альтернативного и современного механизма кредитования.

**Ключевые слова:** аграрные расписки; будущий урожай; аграрные предприятия; банковское кредитование; мониторинг; инновации.

**1. Introduction**

The evolution of the economic environment determines the high requirements for agricultural enterprises' activities, which necessitates investments in the expansion of agricultural production (Nolte and Ostermeier, 2017) [1].

The relevance of the search for alternative tools of financial provision for agrarian entities is increasing, and the problem can be solved only with the maximum consideration of the specifics of agro-industrial production with regard to lending.

The coverage of issues relating to the optimal use of agrarian receipts as a modern tool in lending to agro-industry, as well as the substantiation of the mechanism of their practical application, is necessary in the framework of this publication.

**2. Brief Literature Review**

Particular attention of many domestic and foreign scientists, among whom are V. Andrievsky, T. Kovalenko (2014) [3], O. Malii (2016) [4], O. Pavlenko (2015) [5], P. Stetsiuk (2015) [6], and others, is paid to research of theoretical foundations of the use of various lending methods agrarian entities, as well as to practical experience of the application of agrarian receipts. It is advisable to distinguish the American Professor I. Wright (1922), who emphasised that agricultural enterprises use of credit resources more productively and efficiently than enterprises involved in any other field of activity [7]. However, there are a number of unresolved issues that give significant impetus for the development of new mechanisms for optimal financial provision of agricultural enterprises.

**3. The purpose** of the research is to develop suggestions on how to improve the use of agrarian receipts by agrarian enterprises in terms of lending against the pledge of future crops.

**4. Results**

The agrarian sector is one of the key and most risky sectors of the economy which is characterised by force majeure and acute shortage of financial resources. Ukraine is a leading producer of sunflower, wheat, soybeans, corn and other agricultural products. According to the World Bank, the contribution of the agricultural sector to GDP is 14%, accounting for 38% of total exports. Farmers are in need of financing to improve production, in particular boosting productivity in cereal crops, and to increase the profitability of production. One of the most popular methods of financial support is bank lending which has declined substantially in recent years due to the lack of sufficient collateral. Even despite the low percentage of troubled agrarian loans, financial institutions are cautious about lending to agricultural producers.

The reasons that led to a decrease in the number of structural units of the banks in Ukraine are the rapid development of banking technologies, the introduction of remote customer service and the widespread use of electronic money [8, 338].

All these reasons shape the need for innovative financial tools that would be useful and cost-effective for both lenders and agricultural producers. A negative factor in bank lending is the fact that banks cannot issue mortgages on land that could become effective collateral. However, the development of the mortgage market in Ukraine is impossible due to the imposed moratorium on the alienation of agricultural land. The permanence of the moratorium does not allow the use of progressive agricultural technologies that a simple peasant in a small plot of land cannot implement, which leads to uneconomical and irrational land use and to decreases in land productivity.

It should be noted that agricultural receipts give creditors more powers in comparison with other tools when considering

agrarian receipts as an alternative to bank lending to agrarian enterprises. The distinction between agrarian receipts and other financial instruments is analysed in Table 1.

The new tool is the agrarian receipt, which in essence is an agreement between the borrower (agricultural producer) and the creditor (agricultural trader or bank). The receipt will help the agricultural producer to access financial and material resources on the security of future agricultural products. The advantage of an agrarian receipt is its flexibility in comparison to a bill. A bill can be executed only by means of payment of money. A loan under a bill can be issued only on condition of its avalisation (bank payment guarantee), which increases the cost of its execution. While a forward contract does not presuppose the existence of a credit history and there is no centralised state register, agrarian receipts entail the two abovementioned factors, which is regulated by legislation.

In modern conditions, tools such as agricultural receipts have become widespread in Brazil and Serbia. But what should be done if Ukraine has a common challenge similar to a problem of those countries, which is inaccessibility of bank loans for small and medium-sized agricultural

producers. Therefore, using such an instrument is viewed as relevant.

Brazil is a striking example of the effective implementation of credit schemes relating to agricultural receipts. A key success factor in Brazil's CPR is a simple foreclosure system, since a decision to charge is taken within 24-48 hours. The impossibility of applying force majeure to receipts is another important factor. Also, farmers are not obliged to insure future crops because, if production quantities are not enough to cover the debt obligation for some reason, then the mortgage operates in the next marketing year, i.e. it remains in force until the full repayment of the debt [9].

The main risks for the introduction of agrarian receipts for agricultural producers in Ukraine are crop failure or loss of harvest, a significant number of co-owners of the land plot; complications of settlement because of price fluctuations in terms of agricultural products against the pledge of future crops [2, 48-49].

The advantage of an agrarian receipt is that the conclusion of such an agreement is carried out in a short time (up to 2 weeks), unlike a bank loan agreement which is considered up to one month. A bank loan is financial, while an agrarian receipt is a commodity, which means that there is a possibility to exchange certain resources for agricultural products. An algorithm of bank lending for future crops is shown in Figure 1.

An agrarian receipt is considered issued from the date of its registration in the Register of agrarian receipts. The Register Administrator is the state-owned enterprise «Agrarian Registry». The register of agrarian receipts allows online checking information on unfulfilled agrarian receipts

Tab. 1: Comparative characteristics of financial instruments

Indicator	Bill	Forward contract	Agrarian receipt
Extrajudicial execution	+	-	+
Unconditional obligations of the borrower	+	-	+
Ability to receive goods as payments	-	+	+
Ability to manage currency and price risks	-	+	+
Commitment, security and registration in a document	-	-	+
Possibility of obtaining a bank guarantee (Aval Bank)	+	+	+
Centralised state register	-	-	+
Availability of credit history	-	-	+

Source: Compiled by the authors according to [3]

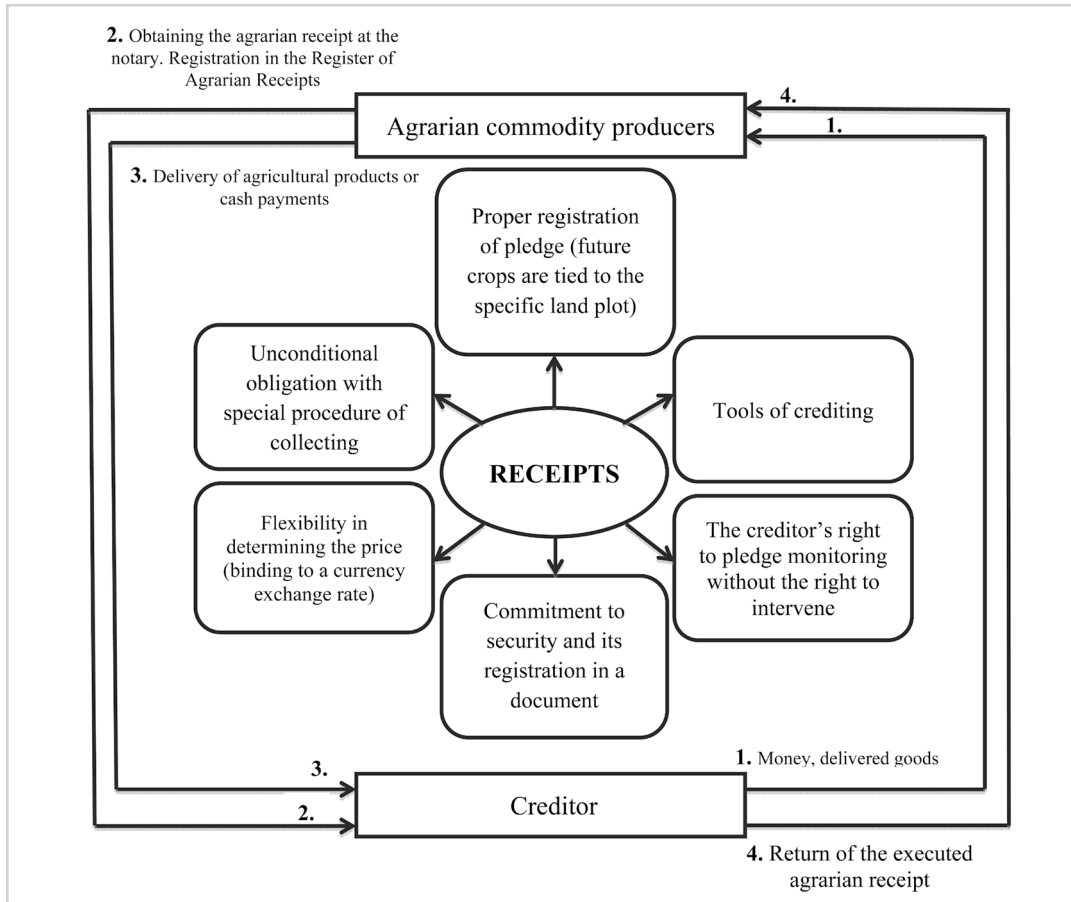


Fig. 1: Advantage of bank lending during the upcoming harvest

Source: Compiled by the authors

free of charge in open access, and also on those which were in circulation by a separate address to the notary. There are two types of agrarian receipts:

- a commodity agrarian receipt obliging to supply agricultural products, which means that the loan is returned at the expense of future crops;
- a financial agrarian receipt obliging the agricultural producer to pay the respective amount of money, taking into account the price of agricultural products, which means that the credit is repaid on returns from sale of agricultural products.

The agrarian receipt is in two copies; one of which is made in a special forms and is subject to notarization, and is transferred to the lender; the other copy is kept by the notary who carries out its verification and registration. If specified, a verified copy is transferred to the agricultural producer.

The creditor is obliged to return the receipt after it has been executed. Otherwise, penalties for non-return are charged in the form of fines of up to 10 minimum wages for a one-month delay, 100 minimum wages for a more than one-month delay, and 300 minimum wages for a delay that exceeds 6 month.

According to the Law of Ukraine «On Agrarian Receipts» [10], it is provided that in case of absence of the object of the pledge, the creditor is entitled to satisfy his claims at the expense of any other property of the debtor. But there are force majeure circumstances in which crops could fail. In such a case, the debtor is required to replace the collateral with a similar or equivalent crop or property in agreement with the creditor. Also, the creditor has an opportunity to claim the pledge not only from the debtors but also from their partners of farmers who buy the mortgaged goods. Therefore, any goods purchased from the farmer who issued an agrarian receipt are exposed to the risk of being collected by the creditor.

The main reasons for the loss of agricultural crops are determined by weather factors - 58%, crop diseases - 17%, weeds - 15% and pests - 10%. Future crops, which are the subject of pledge, are insured in advance with the amount of insurance costs for each participant being predetermined in the agrarian receipt.

A pilot project to develop the application of agrarian receipts into circulation on the example of Poltava region in Ukraine was introduced in 2014. Analysing the modern period, we can state that during 2017 agrarian receipts already

operated in 8 pilot regions of Ukraine. Agrarians issued 49 agrarian receipts worth over UAH 78.2 million in Vinnytsia region. 47 agrarian receipts (20 financial and 27 commodity products) were issued in Poltava region. 80 agrarian receipts more were issued in Cherkasy region (34 agricultural receipts), Kharkiv region (24 agrarian receipts) and in Sumy region (22 agrarian receipts). The average amount of liabilities under one agrarian receipt is about UAH 3 million. Also, 15 agrarian receipts were issued in Ternopil region and 14 agrarian receipts in Khmelnytskyi region. This project extended to Mykolaiv region - 2 agricultural receipts, and Lviv region where 1 agrarian receipt was issued in 2018. At the beginning of 2018, 207 agrarian receipts were issued (81 commodity receipts and 126 financial receipts). As a result, UAH 1.4 billion were allocated, with UAH 95 million for corn, UAH 50 million for sunflower seeds and UAH 44 million for wheat). Only this winter, agrarian receipts were issued for the future crops of raspberries, apples, plums and garlic [11-12].

In recent years, the model of government regulation in many countries, including Ukraine, has failed to fully realise its functions, which relates primarily to economic and financial aspects [13].

## 5. Conclusions

As a result of the application of agrarian receipts, agricultural producers in Ukraine will receive an effective tool which will facilitate the attraction of additional financial and logistical resources through the transparency of relations with the creditor and cheapening of the processing procedure in comparison with existing tools.

With the use of agrarian receipts, credit facilities adapt to farmers' needs. For example, they are structured by cultivation, which makes it possible to issue the credits quicker and cheaper. Receipts can be used as collateral for obligations related to banks, suppliers and other creditors. They serve as an innovative and effective tool for stimulating lending in the agricultural sector. Insurance in agriculture is essential in terms of minimising the impact of adverse weather conditions on future crops, and reducing the risk of insolvency of producers, which is an additional guarantee for creditors.

It is necessary to implement new perspective tools, like agrarian receipts, in practice and to stimulate banks performing crediting of agrarian enterprises against the pledge of future crops.

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