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## **Classification of contracts used in agriculture based on literature review**

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**Abstract:** This literature review aims to present a comprehensive overview of contracts used in agriculture, focusing on their development, usage, and impacts in Bulgaria and other countries, and based on it make a classification of the contracts. The research is grounded in the broader field of agricultural economics, rural development and instructional economics, emphasizing the shift in use in contracts in agriculture in Bulgaria after the accession of the country in the EU. It delves into various types of contracts used in agriculture. The classification that is created is illustrating a detailed framework that organizes these agreements based on their focus and functionality.

**Keywords:** Agrarian Contracts; Agricultural Economics; Contracts in agriculture; Bulgarian Agriculture; Contractual Governance

### **INTRODUCTION**

Research on contracts in agriculture in Bulgaria is situated within the broader field of agricultural economics, rural development and institutional economics. This area of study is significant for several reasons. Firstly as Bulgaria has a rich agricultural history that underwent another transformation after entering the EU. We aim to research the state agricultural contract in the context of EU and practices in both EU and the country. This shift led to substantial changes in land ownership and farming practices, making the study of agrarian contracts and contracts used in agriculture crucial for understanding these transitions. Agrarian contracts, including land leasing and sale-purchase contracts, with their national specifications, play a vital role in shaping the rural economy. Research in this area helps in understanding how these contracts affect agricultural productivity, income distribution among rural populations, and overall economic development in rural areas. Insights from this research can inform government policies related to agriculture,

land use, and rural development. Understanding the effectiveness and challenges of different types of agrarian contracts can lead to more informed and sustainable policy decisions, benefiting farmers and rural communities. Finding the scope and reach of available research in Bulgaria as well as practices in EU and other countries can be a basis for a further analysis of the state and change of agrarian contracts. Bulgaria's experience with agrarian contracts can provide valuable lessons for other countries with similar historical backgrounds or agricultural systems. A need of classification of the used agrarian contracts has risen in recent years. Comparative studies are used to enhance understanding of different agricultural models and their implications on a global scale. Contracts used in agriculture can influence farming practices, which in turn affect environmental sustainability. Research in this field can contribute to developing contract models that encourage sustainable farming practices, aiding in environmental conservation and addressing climate change challenges.

## METHODOLOGY

For this study we are looking both into contracts that are used in agriculture and agrarian contracts. An agrarian contract refers to agreements related to the use, management, and ownership of agricultural land and resources. These contracts can vary widely depending on the legal,

social, and economic contexts of a given country or region but generally involve agreements between landowners and those who farm the land. In contrast, the contracts that are used in agriculture can be related to work force, any kind of service, cooperation etc.

The scope of this review is on three levels: World, Europe, and Bulgaria. This decision is in

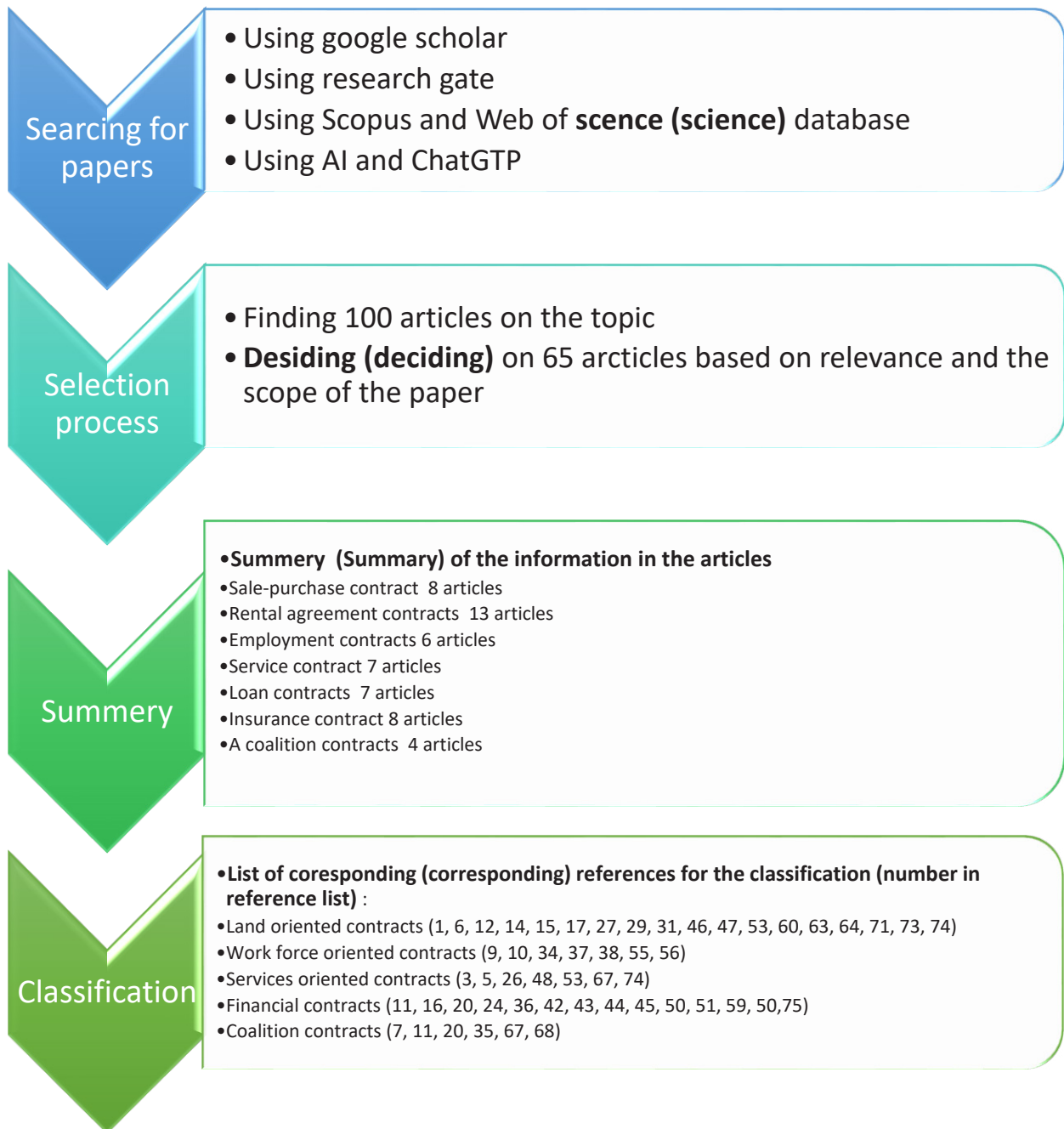


Fig. 1. Schema of literature review process  
Source: Created by the author.

line with the understanding that due to globalization and Bulgaria's accession to the EU, the country has adopted all of the EU regulations.

The classification is based on the findings in the literature. Keywords used for this literature review: contracts used in agriculture, agrarian contracts, agrarian contracts in EU, agrarian contracts in Bulgaria.

For the literature review, that is the base of the classification of the contracts, 100 articles are read and reviewed on the topic of agrarian contracts and contracts that are specifically used in agriculture. Because of relevance to the topic and specifics, 65 are used to describe and classify the different agrarian contracts we are researching.

For the purpose of this study, we are going to review the literature relevant to development and use of agrarian contracts and contracts that are used in the agriculture of EU and Bulgaria. To understand the standing and changes in agrarian contracts in Bulgaria the adaptation of acquits communitarian from Bulgaria, is an important step that is the reason why we are going to have a general view of development of agrarian contracts in EU and then review their state and development in Bulgaria. By doing this we will classify the contracts in different groups. In Fig. 1 we have pointed the references used for the classification that are part of the literature review and summary of the articles.

## **RESULTS AND DISCUSSION**

Agrarian contracts in the European Union (EU) encompass various agreements facilitating agricultural production and land usage. The institutional design of contracts relevant for farmers varies across EU member states and regions, indicating a complex landscape where contract choice might be influenced by farmers' preferences regarding the institutional design of contracts (Polman and Slangen, 2008). The EU agrarian policy, being one of the most extensive policies of the EU, provides a legal framework that underpins agrarian contracts. This framework is analyzed from a law and development perspective, which might

reveal insights into the evolution of agrarian contracts within the EU (Malatinec, 2015). Agrarian contracts are conceptualized as "composite" institutional arrangements encompassing contractual, conventional, and regulatory dimensions. This conceptualization may reflect the evolving nature of agrarian contracts within the multifaceted legal and regulatory environment of the EU (Colin, 2002). The union has seen the emergence of innovative agri-environmental contracts, with result-based and collective contracts being perceived as promising innovations. These contracts ideally blend action- and result-based elements, and their implementation is recommended to be gradual and adapted to local contexts (Klement et al., 2023). The PECL (Principles of European Contract Law), drafted by leading contract law academics in Europe, strives to elucidate basic rules of contract law and more generally the law of obligations common across most EU member states' legal systems. This set of model rules may provide a foundation for understanding the legal underpinnings of agrarian contracts within the EU (Ole, 2000). Discussion on the evolution of agrarian contracts within the EU, considering different regulatory frameworks and legal systems across member states (Hill, 2023). Exploration of the economic impact of agrarian contracts on the agricultural sector, including aspects like price stability, income security for farmers, and market competitiveness was discussed by Swinnen, J. F. M., and Knops, L. (2013). Cardwell (2004) made an examination of the legal frameworks governing agrarian contracts in the EU and the challenges posed by diverse legal systems across member states. Discussion on the future of agrarian contracts in the EU, considering ongoing policy debates, technological advancements, and global market dynamics.

For FAO contract farming involves agreements between buyers and farm producers, where the buyer often specifies the quality and price, and the farmer agrees to deliver at a future date. More commonly, the contract outlines conditions for production, quality, and delivery (FAO, 2008).

Agrarian and Agri-business Contracts encompass a broader range of agreements within the

agricultural sector. They are classified based on various factors including technological, institutional, behavioral, dimensional, and transaction costs, which influence the choice of contractual arrangements in agriculture and agri-business (Journal of Economic and Social Thought). For the purpose of this study, we will make the classification of contracts based on orientation of their use. We want to answer the question of what types of contracts are used and what needs are met.

We are not only looking into agrarian contracts, but contracts that are often used in agriculture that facilitated the work that is done in agricultural holdings. The EU's agrarian contract landscape is diverse, tailored to meet the specific needs of its agricultural sector. These contracts play a critical role in ensuring food security, promoting sustainable farming practices, and supporting the livelihoods of farmers. Research on contracts used in agriculture in Bulgaria sheds light on the contractual structures in the transitional phase of Bulgarian agriculture. These studies propose a comprehensive framework which integrates various disciplinary insights from New Institutional and Transaction Costs Economics, encompassing fields like Economics, Organization, Law, Sociology, Behavioral and Political Sciences. This interdisciplinary approach aids in elucidating the principal governance mechanisms pertaining to agrarian contracts (Bachev, 2010). Gorgiev (2020) states that rent contract can be utilized for agricultural, urban, and other types of land. Moreover, a notable concern in Bulgarian agriculture is the coordination of contracts within the land market. An institutional analysis of transactions in agricultural land contracts reveals that contract coordination in the land market presents a significant challenge, which implicates the broader institutional environment of Bulgarian agriculture (Georgiev, 2011).

### **Classification of agrarian contracts**

A study on the contractual structure in Bulgarian agriculture explores various modes of governing supplies including land, labor, ser-

vices, inputs, finance, insurance, and marketing of output across different types of farms. This study reflects the organizational modernization of Bulgarian agriculture, implying a transition in contractual practices over time. Using the review made for the existing contractual forms in Bulgaria, we constructed a classification for the contracts used specifically in agriculture.

The classification for contracts that is used is based on understanding what the contract object orientation is. The literature review provides a foundational framework for understanding the various types of contracts in agriculture, highlighting their significance in economic theory and practical application within the broader agricultural economy. The classification is structured in a hierarchical manner, categorizing contracts into several primary types:

- Land oriented contracts – These deal specifically with the use and management of land, including sale-purchase contracts, rental agreements, and joint ownership agreements.
- Workforce oriented contracts – These are focused on employment and partnership arrangements.
- Service oriented contracts – Covering contracts that relate to services such as marketing, consulting, and production.
- Financial contracts – Including loan contracts, insurance contracts, and investment contracts.
- Coalition contracts – These involve cooperative efforts between parties, such as resource sharing agreements, group certification schemes, and joint ventures.

Each primary category is further broken down into specific types of contracts that are commonly used within these categories, illustrating a detailed framework that organizes these agreements based on their focus and functionality. This type of classification is useful for understanding the various legal and business relationships in agriculture. The main reasons for the classification are understanding the types of contracts and their functions can help policymakers and regulators craft more targeted and effective agricultural policies that enhance productivity, ensure stability,

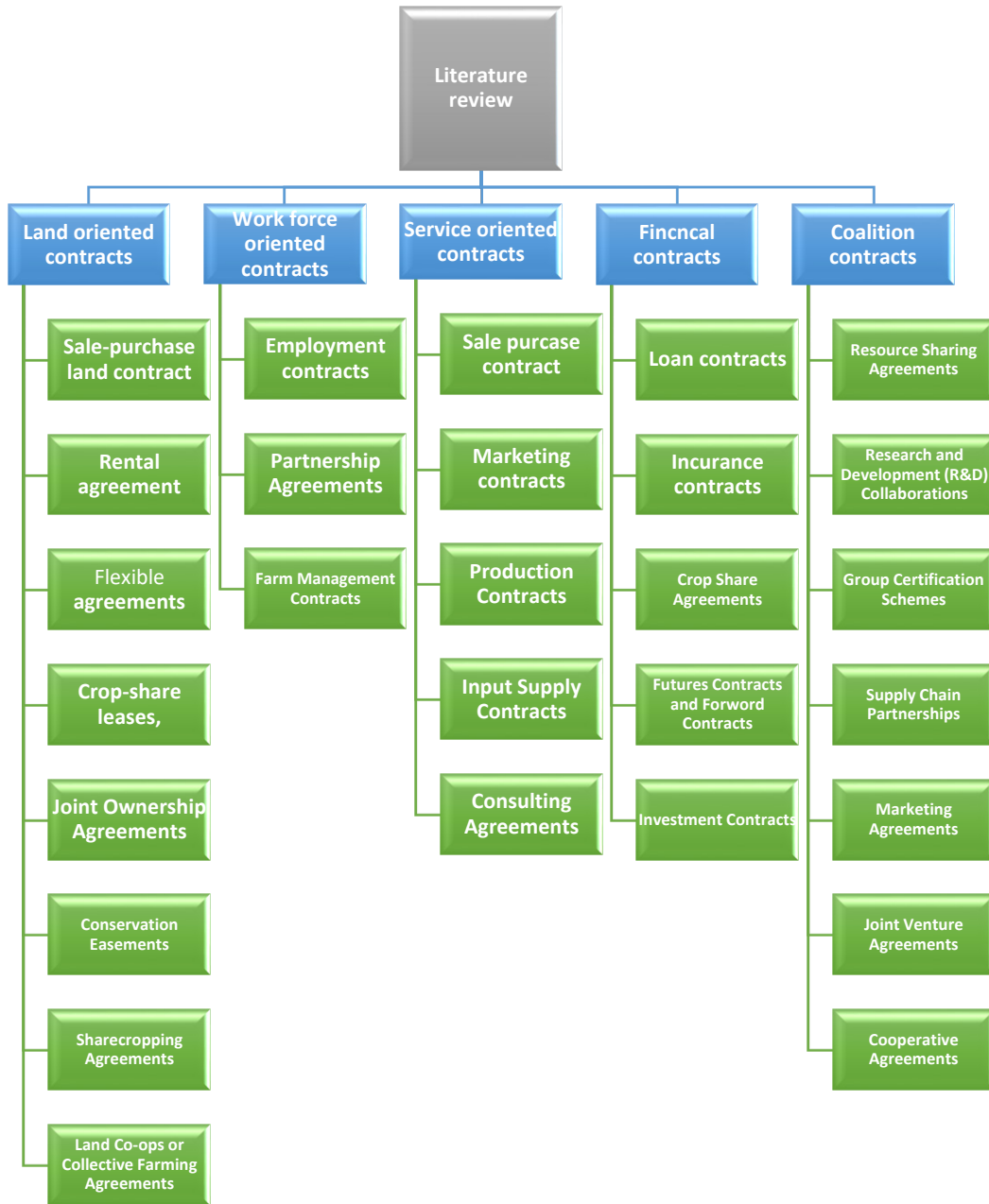


Fig. 2. Classification of contracts based on literature review

Source: Created by the author.

and promote sustainable practices. Contracts play a critical role in the economic development of rural areas by determining how resources are allocated and managed. They influence agricultural productivity, income distribution among rural populations, and overall economic stability. The study highlights the importance of contracts in

promoting sustainable farming practices and environmental conservation, crucial for long-term agricultural sustainability. The classification of agrarian contracts as described in the literature review is pivotal for enhancing the operational efficiency, legal clarity, and economic viability of the agricultural sector. It aids various stakehold-



ers in making informed decisions, supports policy formulation, and contributes to the sustainable development of agriculture, particularly in contexts like Bulgaria's integration into the EU agricultural framework.

### **Types of contracts used in agriculture**

The specific types of contracts discussed in the literature review were chosen due to their broad applicability, impact on the agricultural sector, and relevance to the EU context, particularly in Bulgaria. Each type of contract outlined – ranging from land-oriented to coalition contracts – directly impacts critical aspects of agricultural operations. They cover the full spectrum of activities, from land use and management, labor relations, service provision, financial interactions, to collaborative efforts. These contracts represent the backbone of agricultural business structures and their effective management. For a country like Bulgaria, which has transitioned from a centrally planned to a market-based economy, understanding and reforming agricultural contracts is crucial. Such contracts are integral to restructuring the agricultural sector to enhance productivity, ensure sustainability, and integrate more fully with the EU's agricultural framework. The EU has stringent policies governing agriculture, aimed at promoting sustainable development, fair trade practices, and economic growth. The contracts discussed are likely those most affected by EU regulations or most beneficial for compliance with EU standards. For instance, coalition contracts can help align Bulgarian agriculture with EU cooperative efforts and collective farming initiatives. Contracts such as insurance, loan agreements, and futures contracts are fundamental in managing the risks inherent in agriculture. These contracts help stabilize income, protect against price volatility, and ensure financial security, which are significant concerns for Bulgarian farmers adapting to market-oriented farming and facing the challenges of climate change. Employment and partnership agreements are critical for the socio-economic development of rural areas. These contracts help define labor relations and profit-sharing mechanisms, which are pivotal in

ensuring fair treatment and equitable growth for workers and partners within the agricultural sector. Contracts that include terms for sustainable practices and environmental conservation are increasingly important under EU directives. Researching these contracts helps promote and implement practices that are environmentally sustainable and compliant with EU standards aimed at reducing agriculture's ecological footprint. The choice of these contract types likely reflects a strategic approach to address the multiple, interconnected challenges faced by agriculture in Bulgaria. Each contract type has been chosen to illuminate how legal frameworks and business practices can evolve to support an integrated, sustainable, and economically viable agricultural sector in Bulgaria and within the larger EU market. These contracts collectively help to create a robust understanding of the agricultural contractual landscape, aiding stakeholders in navigating and optimizing their operations in line with both national and EU-wide objectives.

### **Sale-purchase contract**

The sale-purchase contract in agriculture is pivotal in orchestrating a permanent transfer of rights over a particular resource or object against the payment of a specified price. The buying farmer often faces the risk emanating from the pre-contractual opportunism of the seller, primarily due to the information asymmetry concerning the quality of the acquired object. Sellers, on the other hand, may not be inclined to disclose any existing shortcomings. To mitigate such risks, parties might negotiate preliminary testing, a trial period before final purchase, or guarantees provided by the seller. However, there is also a risk of post-contractual opportunism that exists, especially when purchasing long-term assets like equipment, bundled with after-sale technical services. Once the trade is concluded and payment transferred, the promised future servicing might not be fulfilled satisfactorily or may be plagued with delays. The risk significantly abates when farmers opt for trusted sellers/buyers or choose market agents with a well-established reputation. These dynamics highlight the essence of having

effective contractual governance to stipulate the rights and obligations of exchange partners, coordinate profit sharing, and control partner opportunism (Zhao et al., 2022). Furthermore, a framework for agrarian contracts, as well as risk management in the agri-food chain, are critical in understanding and navigating the contractual landscape in agriculture (Bachev, 2020). Also pre-emptive mechanisms can be devised to prevent post-contractual opportunism, thus protecting the interests of the parties involved (Boukendour, 2007). Agricultural contract sales models can be selected to maximize supply chain profits. The contractual arrangements between wholesalers and producers can have significant impacts on the efficiency and profitability of the agricultural supply chain (Farimani et al., 2020). The process of concluding a contract for the purchase and sale of agricultural land is a crucial step in establishing the legal and operational framework for agricultural transactions. It is important that the contractual terms are clear and agreed upon by all parties involved to ensure smooth transactions (Moroz, 2022). There are various legal options and considerations when it comes to agricultural product sale and purchase. In some regions, the behavior of sale and purchase agreement transactions without formal written agreements is studied to understand the legal and ethical settlements in case of defaults in the agreement (Fathurrahman et al., 2021). Agricultural sales agreements have various considerations including the type of agreement (online, pre-filled forms, custom agreements), and some purchases might be made according to “adhesion contracts” which are standard form contracts prepared by one party, to be signed by the party in a weaker position, usually a consumer, who adheres to the contract with little choice about the terms.

Sale-purchase contracts in Bulgarian agriculture may encompass agreements surrounding the buying and selling of agricultural products, land, or other assets within the agricultural sector.

The Bulgarian legal system recognizes two types of contracts concerning agricultural land, which may extend to other aspects of agricultural transactions. These contracts could be managed

by farmers and are used for different purposes, hinting at a structured legal framework governing agricultural transactions including sale-purchase agreements (Georgiev, 2019).

### **Rental agreement contracts in agriculture**

Agricultural lease contracts are agreements where farmers temporarily use resources like land, equipment, or livestock in return for rental payments. These contracts carry risks primarily due to pre-contractual deceit about the asset's condition and the imposition of fixed rents. Fixed rent arrangements expose lessees to significant financial variability, as they absorb all gains or losses from changes in asset productivity. To mitigate these risks, lease agreements can vary, such as shared rent or market rent schemes, which distribute risks more evenly between lessee and lessor. Additional risks include the lessee's potential mismanagement or neglect of the asset and the possibility of delayed or defaulted payments. The specific terms and types of leases, such as flexible agreements, crop-share leases, and cash leases, should be carefully considered and chosen to align with the operational and legal environment in the respective agricultural sector and region. A typical agricultural lease encompasses several components including the term length, rent clauses, termination process, and limitations on subleasing and assignment among others. Moreover, they require adherence to federal and state conservation provisions, and may specify types of crops to plant, control of noxious weeds, and insurance requirements (National Agricultural Law Center, 2022).

Flexible rent agreements have emerged as a viable mechanism to distribute the risks and rewards associated with crop production. These agreements often stipulate a base cash rent price paid in advance, with a potential bonus at harvest based on the gross value of the crop (LaPorte et al., 2020). Although not specifically mentioned for the EU, flexible rent agreements are a mechanism to distribute risks and rewards associated with crop production, stipulating a base cash rent price paid in advance with a potential bonus at harvest based on the gross value of the crop

(Lease Agreement Considerations for Farmer and Landowner, n.d.). In cash rent lease agreements common in some regions, the landowner is exempt from operational and marketing decisions, enjoying a fixed annual income, while the tenant assumes the risks and benefits from the crop's yield and has the freedom to make decisions regarding crop and livestock management. This type of agreement ensures that the owner has consistent earnings, whereas the tenant has the flexibility and bears the risk associated with agricultural production. Tools exist to estimate returns to both landowners and tenants under varying rental agreements, including cash rent, flexible rent, crop share, or custom farming agreements. Such tools depict the share of risk for tenants and landowners based on the type of lease arrangement, aiding in informed decision-making (Leibold, 2021).

Bago and Shearer specify that different rental agreements allow for varying distributions of risk between landowners and tenants. For instance, a cash rent lease places most of the risk on the tenant, whereas a crop-share lease spreads the risk between both parties. Individuals' risk preferences significantly impact their contractual choices. For instance, risk-averse workers tend to prefer fixed-wage contracts, while high-ability workers lean towards piece-rate contracts. This demonstrates how risk preferences can effectively predict contract choices and how individuals might opt for contracts that mitigate their exposure to undesirable risk (Bago and Shearer, 2022).

The distribution of risk between landowners and tenants varies significantly with different rental agreements. In a cash rent lease arrangement, the tenant usually pays a fixed dollar amount in rent, either on a per-acre or whole-farm basis. This type of lease arrangement places most of the price and production risk on the tenant, as the landlord receives a set payment amount annually regardless of the farming outcomes. The landlord is not as involved in crop production, giving the tenant more autonomy but also more risk exposure (Rincker Law, 2012).

On the other hand, a crop-share lease is an agreement where the landowner and tenant split

the expenses of farming as well as the production. This type of lease arrangement spreads the price and production risk between both the tenant and the landowner. In crop-share leases, both parties experience the risk associated with the highs and lows of price and production. The landowner often shares in both input costs and farm income from multiple sources, thereby having elevated exposure compared to cash rent leases (Understanding Crop Share Leases, 2020).

These differences highlight how cash rent and crop-share leases allocate the financial and production risks between landowners and tenants. In summary, while cash rent leases put most of the risk on the tenant, crop-share leases distribute the risk more evenly between the tenant and the landowner. Risks due to natural disasters, for instance, are a consideration in agricultural land leases. Provisions within the lease agreement can address the evaluation of damages and remediation of land issues stemming from natural disasters (Accounting for Risk: Agricultural Land Leases and Natural Disaster, 2019).

A farm lease agreement is a legally binding contract between a landowner and a farmer, outlining the conditions for leasing farmland. This agreement establishes both parties' rights, responsibilities, and obligations regarding using the land for agriculture. It is suggested that well-designed contracts can help in mitigating the risks associated with both pre- and post-contractual opportunism. These contracts can establish clear terms and conditions, responsibilities, and penalties for non-compliance, which in turn can help in reducing the instances of adverse selection and moral hazard. Pre-contractual opportunism often occurs when there is asymmetric information before the formation of a contract. In such scenarios, one party may have better information about certain critical factors than the other party. This lack of information can lead to adverse selection, where, for example, a tenant might hide their intention to misuse or ineffectively use the leased asset before the contract is signed (Zhang et al., 2023, Furubotn and Richter, 2005). Post-contractual opportunism arises due to the actions of parties after the contract has been formed. Furubotn



and Richter, (2005) also note that moral hazard is a form of post-contractual opportunism where a party may engage in detrimental practices like poor maintenance or improper crop rotation, as they may have lesser incentive to take care due to the protection or the terms provided by the contract.

The discourse surrounding the risks in agricultural lease contracts and the implications of different rent arrangements is well-articulated within contract theory, emphasizing the importance of well-structured contracts to mitigate such risks (Allen, D. W. and Lueck, D., 1999; Bago and Shearer, 2022a). The decision among fixed rent, shared rent, and market rent can substantially affect how risk is allocated between the tenant and the owner, which in turn can influence the overall efficiency and productivity of the agricultural endeavor. In Bulgaria a study by Nivelin Noev titled “Contracts and Rental Behavior in the Bulgarian Land Market: An Empirical Analysis” delves into the development of the land rental market in Bulgaria. It investigates how various factors affect contracting and land renting decisions among landowners and farmers. The study reveals that contract conditions and property rights significantly impact land rental activities and other important household socioeconomic factors. The same researcher found that land leases with shorter and less formal contracts tend to have lower rental income in Bulgaria. This finding also applies to rural areas in China, suggesting that the formality and length of rental contracts can affect the rental income derived from land leasing arrangements (Noev, 2008).

### **An employment contracts**

An employment contract is a crucial document establishing the relationship between an employer and an employee. Within the farming sector, such contracts allow for the delineation of duties, responsibilities, and compensation. This type of “service” contract is characterized by the employer’s rights to direct, control, and terminate the employment relationship, thus creating a subordination relationship. The flexibility inherent in this contract type enables adaptation to the

labor needs of a farm, which can change based on seasons, weather, and other factors. Without a detailed employment contract, there could be continuous negotiations or adjustments required as conditions and needs change for either party involved. Farmers face certain risks in this contractual relationship mainly from pre- and post-contractual opportunism. In pre-contractual opportunism, a worker might misrepresent their abilities or intentions to secure the job. To mitigate such risks, farmers can seek recommendations, verify educational qualifications or certifications, and conduct interviews or tests to assess the applicant’s capabilities. Post-contractual opportunism occurs when a worker doesn’t exert the required efforts after being employed, which can be exacerbated in agricultural settings where constant supervision may be challenging, and productivity doesn’t always correlate with labor input due to external factors like weather. For instance, a highly skilled worker might leave at a critical time for a better-paying job elsewhere. To curb these forms of opportunism, farmers may employ strategies such as permanent employment contracts, appointment of supervisory personnel, output-based compensation, bonuses, and other incentives like paid holidays or provision of housing.

Various sources stress the importance and the specifics of crafting well-structured employment contracts in agriculture. An employment contract should ideally cover the place of work, salary or hourly rate (including overtime rates where applicable), working hours, notice period, and entitlements to holidays and sick pay. Additionally, it’s advisable to have a detailed job description attached to the contract to prevent future disagreements regarding the duties and responsibilities of the employee (Horne, 2022). The contract can also cover other issues like the use of personal protective equipment, expectations regarding holidays during harvest time, and the procedure for reporting sickness absences. It’s crucial to ensure that the terms offered in the contract meet or exceed the minimum legal entitlements, such as the national minimum wage, minimum holiday entitlement, and statutory minimum notice

periods. These provisions help in safeguarding the rights and obligations of both the employer and the employee, providing a clear framework within which the employment relationship operates (Horne, 2022a).

Moreover, having well-drafted contracts can also mitigate risks associated with opportunism from either party. Pre- and post-contractual opportunism are recognized issues in contractual relations, where one party may act deceitfully to pursue self-interest at the expense of the other. Within agricultural employment contracts, pre-contractual opportunism could occur if a prospective employee misrepresents their skills or intentions. Post-contractual opportunism could manifest if an employee shirks responsibilities or exerts less effort once employed (Bachev, 2010a; Jäckering, 2021; Mahoney, 2016; Lyons and Mehta, 1997).

Employment contracts in Bulgarian agriculture are fundamental for organizing labor and defining the terms of employment between agricultural employers and employees. While specific research journal articles focusing solely on agricultural employment contracts in Bulgaria are limited, several studies encompass the broader contractual framework within which employment contracts operate. Ivanov, B., and Sokolova, E. (2017) explored the role of agriculture for income and employment in Bulgarian rural areas, reflecting on the importance of employment contracts in sustaining rural livelihoods and economic development in agriculture. A study titled "Contractual Structure in Bulgarian Agriculture" discusses how employment contracts are applied, stipulating negotiated terms on labor usage within transitional agriculture in Bulgaria (Bachev, 2010b).

### **Service contract**

In the agriculture sector, contracts come in different forms to cater to various needs, and Service Contracts are one of them. They are agreements where farmers obtain specific services in exchange for payment. These services can be material-based like land cultivation, transportation, or task-based like equipment maintenance or vet-

erinary services. Unlike Employment Contracts, Service Contracts position both parties equally without a subordinate relationship, often allowing for output-based payment that can mitigate service provider opportunism. However, sometimes time-based or fixed payment is the only viable option. Long-term contracts can enhance service quality as service providers become familiar with the farm, and choosing reputable suppliers minimizes opportunistic risks.

Service Contracts in agriculture are vital for acquiring specific services like cultivation, transportation, maintenance, and veterinary care through payments, often based on output to reduce the provider's opportunistic behavior. These contracts, unlike employment agreements, create a partnership between the farmer and the service provider without a hierarchical structure, limiting the farmer's directive power. Long-term contracts enhance service quality by familiarizing providers with the farm's operations, incentivizing them to maintain high standards and renew contracts. Clear payment terms and selecting reputable providers are essential to mitigate risks, including non-payment and other operational hazards like adverse weather or crop failure. These contracts are crucial for ensuring continuous service provision and maintaining farm efficiency with minimal capital, as they often include technical support and guaranteed market access for produced commodities.

Establishing long-term contracts can enhance the quality of services provided, as the service provider becomes more familiar with the particular farm's operations, thereby fostering a desire to maintain or renew the contract. Selecting a reputable supplier is crucial in minimizing risks associated with opportunistic behavior. Murtazaev et al. (2021) discusses the role, importance, and ways of improving agricultural service provision, analyzing contract value, value covering, and reasons for payment problems in the agricultural development sector. Contract farming is gaining traction in both developed and developing nations, providing essential guarantees for vulnerable farmers' continued operations and the steady supply of agricultural products. Over 60%

of large farms in the United States have utilized contracts, covering approximately 40% of the annual value of agricultural products, indicating the significant role of contract farming in modern agriculture (Liao et al., 2023). Mugwagwa et al. (2020) proposes a new typology of contract farming arrangements based on transaction cost theory, underscoring the importance of understanding contract provisions and the motivations behind them to effectively manage transaction attributes within the agribusiness sector. Agricultural contracts service contracts, in general, have two common types: Production Contracts and Marketing Contracts. In Production Contracts, producers are paid for growing crops or raising livestock, but they do not own the commodities. This arrangement transfers the risk of production and pricing to the buyers, providing a stable income and a guaranteed market price for the producers. On the other hand, Marketing Contracts allow producers to retain ownership of the commodities, detailing the quantity, price, product specification, and delivery time and location. These contracts often offer price premiums for commodities exceeding quality standards. Marketing Contracts are the type of contract retains the commodity's ownership with the producers, detailing the required quantity, price, product specification, and delivery time and location. Occasionally, price premiums are given when commodities exceed the quality standards. Various forms of contracts, like marketing contracts, can also help manage risks associated with price setting and delivery (Agricultural Economic Report No. (AER-747) 3 pp., 2023).

Service contracts in agriculture within Bulgaria involve agreements made for the provision or receipt of certain services against payment. Though specific research journal articles discussing service contracts in agriculture in Bulgaria are limited, certain aspects related to service delivery in agriculture are discussed in the broader context of public service delivery and agrarian contracts. A study by Marquardt, D., Dirimanova, V., and Csongor, A. (2009) reviewed public service delivery in agriculture for Bulgaria and Romania. The study discusses the results of surveys

among farmers regarding the delivery of public services in agriculture, although it does not delve into service contracts per se. Another piece of research sheds light on the organization, financing, and productivity of agricultural research in Bulgaria post the country's EU accession, indicating the important role of institutional frameworks in agricultural service provision (Bachev, 2020a). A study by Dirimanova, (2008) on the economic effects of land fragmentation, property rights, land market, and contracts in Bulgaria also touches on contractual aspects within the agricultural domain, which might encompass service contracts Georgiev (2019a). Joint ownership agreements in agriculture are essential for managing shared resources like property or equipment effectively, delineating the rights, responsibilities, and dispute resolution mechanisms among co-owners. These agreements typically cover expense sharing, usage rules, financial obligations, debt security, and procedures for asset disposition, including sales of shares or whole properties. In joint machinery ownership, costs and usage are allocated based on each party's usage, with flexible terms to accommodate variable agricultural conditions. These contracts are vital for ensuring equitable cost distribution, handling ownership changes, and resolving conflicts, often requiring legal guidance to address tax, inheritance, and financial division implications comprehensively.

### **Loan contracts**

Loan contracts in agriculture arrange a temporary transfer of property rights on a certain amount of money or products, with the debtor obligated to return the equivalent quantity, usually with interest. Loan contracts in agriculture serve as arrangements for temporarily transferring property rights over a specified amount of money or products, with or without an interest charge. Unlike lease contracts, the debtor is not obliged to return the identical money/products borrowed but is required to return an equivalent quantity, usually along with some interest. In modern settings, money loans from commercial banks, private individuals, or firms are commonplace. Monitoring the use of loan funds is challenging

due to the high “mobility” of money, prompting strict selection of loan applicants through credit history examination, property ownership verification, and guarantor requirements. Significant collateral, guarantees, or co-financing are often required to mitigate debtor opportunism, increasing the contract’s cost to farmers. Alternately, more efficient loan forms are being explored, often bundled with the sale of long-term assets (leasing), short-term assets (installments or delayed payments), or interlinked credit against the marketing of farm outputs/services. These contracts are common for acquiring funds from commercial banks, private individuals, or firms. Due to money’s high “mobility”, controlling its utilization is challenging, prompting strict applicant selection and substantial collateral, guarantee, or co-financing requirements. This increases the cost for farmers, who are increasingly exploring alternative financing forms like leasing, installment sales, or interlinked credit against farm output/services marketing.

Koçturk et al. (2013) found that reliability and accessibility of the banks influenced farmers’ bank selections. Farmers who preferred private sector banks for agricultural loan uses perceived higher levels of reliability and accessibility than did farmers who preferred public banks. Farmers perceived higher levels of reliability, service quality, positive loan conditions and lower loan costs for domestic capital banks than they did for foreign capital banks. An investigation using primary survey data from small farmers in Tennessee explored how credit constraints significantly impact financial performances. The study examined problems related to credit and loans of small farms, factors influencing credit constraint, and the impact of credit constraint on financial performance. The government’s role in intervening in the agricultural capital market was also discussed, emphasizing the creation of specialized agricultural credit institutions like the FCS and the FSA to provide multiple loan programs to rural farmers (Khanal and Omobitan, 2020). Low agricultural productivity driven by the low use of modern agricultural inputs or technologies, indicating a need for improved access to credit and

financial services (Balana and Oyeyemi, 2022). Analysis of the adequacy between credit supply and the expectations of rice farmers to define policies for improved agricultural-oriented financial services (Dossou et al., 2020). The article on Innovative Mechanism of Rural Finance discusses the indispensability of agricultural loans for supporting agricultural development and promoting rural revitalization strategy, emphasizing the credit risks financial institutions face when reviewing and issuing agricultural loans (N. Zhao and Yao, 2022).

Agricultural loan contracts in Bulgaria are arranged to temporarily transfer property rights over a specified amount of money or products. These contracts, often facilitated through commercial banks, private individuals, or firms, play a critical role in transitional agriculture in Bulgaria. They’re part of a broader contractual structure encompassing sale-purchase, lease, employment, service, insurance, and coalition contracts, each with distinct features and governing mechanisms (Bachev, 2010c). Certain research underscores a comprehensive methodology towards grasping the nuances of agrarian contracts in Bulgaria, blending interdisciplinary frameworks such as New Institutional and Transaction Costs Economics. This methodology aids in deciphering the principal governance mechanisms and the elements impacting contractual decisions, including technological, institutional, behavioral, dimensional, and transaction costs factors. Furthermore, the relationship between agricultural credit and the gross value added of the agrarian sector in Bulgaria has been explored, indicating a connection between bank lending and agricultural development (Kirechev, 2019).

### **Insurance contract**

Insurance contracts in agriculture help transfer certain risks over a specified time period in exchange for a payment. These contracts come into play when specific incidents, covered under the contract, occur, whereupon the insurer pays out an insurance premium based on the agreed terms. Insurance can cover a range of risks including damage to property, crops, livestock, or



individuals caused by natural calamities, health issues, or social factors like theft or vandalism. However, opportunistic behavior can manifest either pre-contractually, with the insured not disclosing accurate information regarding potential risks, or during the contract execution, where the insured may neglect to minimize damages or even induce damages to claim the insurance premium. This behavior significantly raises insurance prices, deterring farmers from utilizing insurance contracts. Additionally, farmers may only realize the opportunistic behavior of insurers post-harm occurrence, discovering that not all terms of the contract were well-explained or suited to their needs initially. Moreover, certain risks like market demand fluctuations or price variations for farm products remain uninsurable, posing additional challenges.

Research shows various aspects of agricultural insurance:

Kramer et al. (2022) find that agricultural insurance has garnered interest, particularly index-based insurance, which aims to overcome challenges faced by traditional indemnity-based insurance programs like multi-peril crop insurance. The agricultural insurance sector is expanding, becoming a significant component of producer-oriented governmental support programs, promoting various research outcomes (Tsiboe and Turner, 2023).

A study highlighted the role of premium subsidies in enhancing producer participation in crop insurance programs, though critiques argue it as a means of income redistribution from taxpayers to producers (Mavroutsikos et al., 2021). Agricultural producers in developing nations face numerous risks, traditionally addressed through government-subsidized insurance products. Recent contractual innovations link insurance payouts to weather conditions instead of farmer indemnities, sparking substantial research (Cole and Xiong, 2017). Lefebvre et al. (2014) find that the agricultural insurance sector in Bulgaria is presented in the broader context of the transition to a market-oriented economy and integration of Bulgarian agriculture into the EU Common Agricultural Policy. The authors find that farm-

ers with diversified activities, using irrigation or having contracts with retailers or processors, are more likely to adopt insurance, after controlling for farms and farmers' structural characteristics (Lefebvre et al., 2014a). Many risk-reduction mechanisms are not applied, and there is a considerable disparity in risk-reduction mechanisms used between different agricultural specializations and according to the economic size (Harizanova-Bartos and Stoyanova, 2023). Lefebvre et al. (2014b) find that the main characteristics distinguishing farmers who purchase agricultural insurance from non-users are farm size and farm location. The existence of strong regional effect suggests the importance of adapting the insurance products to the different regional contexts in Bulgaria.

### **A coalition contracts**

A Coalition Contract regulates the rights and responsibilities within a group of two or more entities, managing their collective resources and actions, including ownership, control, and profit distribution. These contracts cater to various organizational forms such as partnerships, cooperatives, and corporations, each tailored to specific objectives. However, risks like post-contractual opportunism arise when members do not meet their obligations or exploit the coalition for personal gain. Mitigation strategies include incorporating trusted members and implementing motivation mechanisms for active participation. The process of forming these coalitions involves significant costs related to setup and modernization, which can deter investment despite the potential benefits, including participation as "free-riders" in successful coalitions. A study mentions a sequence where a coalition and a buyer agree on delivery terms and prices, showing a form of coalition contract in agriculture, although the context may not exactly match the provided definition of a coalition contract (Shi and Cao, 2020).

Contract farming, which creates a coalition of farmers and buyers, is a common practice to encourage vertical coordination in agriculture. However, its effectiveness in spurring rural transformation is debated (Arouna et al., 2021).



Agricultural Marketing Cooperatives also form a type of coalition, where contract design, including quality provision and payment mechanisms, are crucial for coordination among members (Qian and Olsen, 2022).

A new form of agricultural collectivism through cooperatives, where farmers enter long-term contract policies, reflects a coalition for resource management and risk mitigation (Hannachi et al., 2020). In Bulgaria the lack of direct information on coalition contracts could imply that they might be encompassed within other contractual frameworks or are not commonly referred to as “coalition contracts” in Bulgarian agricultural contexts.

The literature review provides valuable insights into the various types of agrarian contracts, their challenges, and the mechanisms to address these challenges. This knowledge is crucial for stakeholders in the agricultural sector, including farmers, landowners, financial institutions, and policymakers, to ensure sustainable and efficient agricultural practices in Bulgaria and the broader EU context. The study highlights the risks of opportunism, both pre- and post-contractual, and the importance of effective contractual governance to manage these risks for sale-purchase contracts. This understanding aids in developing strategies to mitigate opportunism and ensure fair and efficient transactions. The review explores the nuances of agricultural lease contracts and help form categorization/classification of this contracts. We also explore the meaning and significance of the contracts.

## CONCLUSIONS

The classification provides a structured way to comprehend the diverse and complex types of contracts used in agriculture. This helps stakeholders – including farmers, landowners, policymakers, and academics – understand the specific roles and functions of different contracts, facilitating better management and utilization of resources. Detailed classification assists policymakers and regulators in crafting targeted agri-

cultural policies. By understanding the specific types of contracts prevalent in the agricultural sector and their implications, governments can develop more effective regulations that support sustainable practices, enhance productivity, and ensure equitable economic benefits. A clear classification system helps in identifying the most efficient contractual arrangements for various agricultural activities. This can lead to better economic outcomes by optimizing resource allocation, minimizing transaction costs, and enhancing the overall efficiency of agricultural operations. The classification allows for comparative research across different regions and countries. By categorizing contracts systematically, researchers can more easily compare how different legal, economic, and social environments impact agricultural contracting, leading to broader insights and potential improvements in contract design and enforcement. Understanding different types of contracts helps in promoting and implementing innovative agricultural practices. For example, contracts that emphasize sustainable practices or those that involve cooperative efforts (like group certification schemes or supply chain partnerships) can be identified and promoted to enhance sustainability in agriculture. Agricultural activities are inherently risky, involving price volatility, changing weather conditions, and fluctuating market demands. A clear understanding of the types of contracts available allows stakeholders to better manage these risks through appropriate contractual arrangements, such as futures contracts for price stability or insurance contracts for risk transfer.

Classification helps clarify the legal obligations and rights of all parties involved in agricultural contracts. This clarity is crucial for dispute resolution and for preventing conflicts. By defining the characteristics and stipulations of different contracts, the potential for legal misunderstandings and disputes is reduced. In the financial domain, understanding the variety of contracts can assist banks and financial institutions in designing credit products and services that are better tailored to the needs of the agricultural sector. This alignment can improve access to finance for

farmers and agricultural businesses, supporting growth and innovation.

Given the significant presence of smallholder and family farms in Bulgaria, research focusing on how these entities navigate and negotiate agrarian contracts could provide valuable insights. This could include studying the barriers they face and the strategies they employ. Research on contracts used in agriculture in Bulgaria shows that there is a lack of comprehensive and extensive study that include all of contracts and there pros and cons as well as the impact of their use on agriculture. The review explores the nuances of agricultural contracts and help form categorization/classification of this contracts. We also explore the meaning and significance of the contracts.

We as authors recommend conducting comparative research to understand the differences and similarities in agrarian contracts across within Bulgaria and other EU countries. This would provide insights into how regional variations affect contract structures and their outcomes.

There's a need for longitudinal studies to assess the long-term impacts of different types of agrarian contracts on agricultural productivity, sustainability, and rural development. This would help in understanding the evolving nature of these impacts over time.

Further research is needed to develop more effective agricultural insurance products and risk management strategies. These recommendations aim to fill the identified gaps and contribute to a more nuanced understanding of agrarian contracts, ultimately aiding in the development of more effective and sustainable agricultural practices in Bulgaria. The research into agrarian contracts is significant for Bulgaria in its EU context as it aids in regulatory compliance, supports economic and sustainable development, enhances the competitiveness of Bulgarian agriculture, and contributes to the overall stability and growth of the sector. As Bulgaria continues to integrate with the EU, such research becomes increasingly crucial for leveraging opportunities and addressing challenges in the agricultural domain.

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