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**EU Support to Crop Production and Its Perception by
Czech Farmers**

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Diploma Thesis

**EU Support to Crop Production and Its Perception by
Czech Farmers**

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Czech Farmers**

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EU support to crop production and its perception by Czech farmers

Objectives of thesis

The purpose of this diploma thesis is to acquaint the reader with the state of agriculture in the Czech Republic as a member state of the European Union and the Common Agricultural Policy, particularly with current subsidy programs at the national and European level, which are allocated to crop production. Main goal is to find out the perception of this system of subsidies by Czech farmers and how they subjectively evaluate the impact on their farming.

Methodology

The theoretical part is formulated based on a study of professional literature and a comparison of opinions of individual authors who deal with the issue of agricultural subsidies and the common agricultural policy of the European Union, as well as data from the Ministry of Agriculture of the Czech Republic, European Commission, European and Czech Statistical Office et cetera. Within the theoretical part, the state of Czech agriculture will be characterized, terms such as the common agricultural policy of the EU will be further defined and the current subsidy instruments at the European and national level is introduced.

In the practical part of the diploma thesis, based on theoretical knowledge and data from preliminary research, a quantitative analysis among private farmers in the Czech Republic is performed, which takes the form of a questionnaire survey. The questionnaire was distributed using the email addresses of members of selected associations of farmers. The obtained results of the questionnaire are processed mainly by descriptive statistics.

The empirical research and knowledge achieved should provide answers to the research questions formulated at the beginning.

The proposed extent of the thesis

60-80 pages

Keywords

European Union, subsidies, Common Agricultural Policy, crop production, agriculture

Recommended information sources

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Declaration

I declare that this thesis titled "EU Support to Crop Production and Its Perception by Czech Farmers" represents my own work and I have used only sources mentioned at the end of this thesis. As the author of the dissertation, I declare that this thesis does not breach any copyrights of a third person.

In Prague on May 30, 2021

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EU Support to Crop Production and Its Perception by Czech Farmers

Abstract

This diploma thesis deals with the topic of agricultural subsidies. Especially the relationship between small Czech private farms operating in the crop production and the European subsidy system of agriculture, which results from the common agricultural policy of the European Union applied in the 2014-2020 programming period and national sources of subsidies.

The main goal of this thesis is to determine how selected groups of farmers perceive and evaluate the fairness of redistribution of specific types of subsidies at a local and global level. Furthermore, the economic significance of subsidies for their enterprises, degree of digitization and lastly the clarity of applying for support in the online platform LPIS, position of young people, and agriculture in Euro-American society.

The literature review of the diploma thesis has been done through a literature review. Before moving forward to the practical part of the thesis, preliminary research was conducted to comprehensively understand the topic. All findings were then used in a personal interview with semi-structured questions with three selected farmers. Based on the obtained data, information from the literature review and preliminary research a practical part is subsequently processed in quantitative research or a questionnaire survey, which was electronically sent to members of two significant agricultural voluntary associations that bring together private farmers. A total of 109 respondents submitted their answers to the questionnaire.

To sum up, the results are analysed and processed by descriptive statistics into answers to the research questions defined at the beginning. Furthermore, a suggestion is made for a possible future solution to subsidizing crop production in the European Union.

Keywords: European Union, subsidies, Common Agricultural Policy, crop production, agriculture

Le soutien de l'UE à la production végétale et sa perception par les agriculteurs tchèques

Résumé

Ce mémoire de fin d'études traite de la question des subventions agricoles et, plus précisément, de la relation entre les petites exploitations privées tchèques opérant dans la production végétale et le système européen de subventions de l'agriculture. Ce dernier résulte de la politique agricole commune de l'Union Européenne, entrée en vigueur dans la période de programmation 2014-2020, et des sources nationales de subventions.

L'objectif principal est de déterminer comment des groupes sélectionnés d'agriculteurs perçoivent et évaluent l'équité de la redistribution de certains types de subventions au niveau local et global. En outre, l'importance économique des subventions pour leurs entreprises, le degré de numérisation et de clarté lors de la demande de soutien dans la plateforme en ligne LPIS, la position des jeunes et de l'agriculture dans la société euro-américaine.

La partie théorique de ce travail a été réalisée par le biais d'une revue littéraire. Avant la partie pratique une recherche préliminaire a été menée pour comprendre en profondeur la problématique, grâce à des entretiens personnels composés de questions semi-structurées et administrés à trois agriculteurs. Sur la base des données et des informations obtenues lors de la partie théorique et de la recherche préliminaire, la partie pratique est ensuite développée dans le cadre d'une recherche quantitative ou d'une enquête par questionnaire, qui a été envoyée par voie électronique aux membres de deux importantes associations volontaires agricoles regroupant des agriculteurs privés. Au total, 109 personnes ont répondu au questionnaire.

Pour conclure, les résultats sont analysés et traités par des statistiques descriptives pour répondre à notre problématique initiale. Enfin, une suggestion est faite, comme solution future possible afin de subventionner la production végétale dans l'Union européenne.

Mots clés: Union européenne, subventions, politique agricole commune, production végétale, agriculture

Podpora Evropské Unie do rostlinné výroby a její vnímání českými farmáři

Abstrakt

Diplomová práce se zabývá problematikou subvencování zemědělství, zejména pak vztahem mezi malými českými soukromými farmami působícími v rostlinné výrobě a evropským dotačním systémem zemědělství, který vyplývá ze společné zemědělské politiky Evropské unie uplatňované v programovém období 2014–2020 a národních zdrojů dotací.

Hlavním cílem je zjistit, jak vybrané skupiny zemědělců vnímají a hodnotí spravedlivost přerozdělování konkrétních druhů dotací na lokální a globální úrovni. Dále pak ekonomickou významnost dotací pro jejich podniky, stupeň digitalizace a přehlednosti při žádání o podporu v online platformě LPIS, pozici mladých lidí a zemědělství v euroamerické společnosti.

Teoretická část diplomové práce má podobu literární rešerše. Před samotnou praktickou částí pak byl pro komplexní pochopení dané problematiky proveden předvýzkum formou osobního interview s polostrukturovanými otázkami s třemi vybranými farmáři. Na základě získaných dat a informací z teoretické části a předvýzkumu je následně zpracována praktická část v podobě kvantitativního výzkumu, respektive dotazníkového šetření, které bylo elektronicky rozesláno členům dvou velkých zemědělských dobrovolným spolků, které sdružují soukromé zemědělce. Celkem se podařilo do dotazníku zaznamenat odpovědi 109 respondentů.

Závěrem práce jsou výsledky deskriptivní statistikou analyzovány a zpracovány do odpovědí na úvodem definované výzkumné otázky. Dále je vytvořen návrh možného budoucího řešení problematiky subvencování rostlinné výroby v Evropské unii.

Klíčová slova: Evropská Unie, dotace, Společná zemědělská politika, rostlinná výroba, zemědělství

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List of Abbreviations

CAP.....	Common Agricultural Policy of the European Union
CZ.....	the Czech Republic
CZK.....	Czech Crown currency
EAFRD.....	European Agricultural Fund for Rural Development
EAGF.....	European Agricultural Guarantee Fund
EAGGF.....	European Agricultural Guidance and Guarantee Fund
EU.....	the European Union
EUR.....	Euro currency
GDP.....	Gross Domestic Product
GIS.....	Geographic Information System
GVA.....	Gross Value Added
ha.....	hectare (of soil)
LPIS.....	Land Parcel Identification System
MF.....	Ministry of Finance
n.....	number (of respondents)
PGRLF.....	Support and Guarantee Forestry and Peasant Fund
SZIF.....	State Agricultural Intervention Fund
SAPS.....	Single Area Payment Scheme
ZPF.....	Agricultural Land Fund

1 Introduction

Agriculture has played a crucial role since the beginning of the ages of civilization. Among many other functions, it provided a regular supply of food for generations of our ancestors. At present, however, the importance of agriculture in Euro-American society is declining, as young people in developed countries mostly want to work in other sectors of the economy, such as services. Even so, agriculture remains essential for our lives. It affects, for example, rural employment, the appearance of the landscape, the number of chemicals in nature, the amount of water in the soil, the diversity of fauna and flora and much more. I value agriculture and have a relationship with it. I also see it as a concept that is often part of passionate political debates.

The Czech Republic is one of the European Union member states, and, like other member states, it is covered by the common agricultural policy. Together with other subsidies at the national level creates a system that significantly affects the form and agriculture and strategy of individual farms and farmers.

Despite this, many laypeople continue to grow stronger and claim that the European subsidy system is unfair and unsustainable in the long run.

I decided to partially listen to these voices and with this work to understand more agriculture, especially to find out how the issue of the current agricultural support system is viewed and perceived by the smallest, i.e. private Czech farmers. They have a privileged and vital place in the history of Czech agriculture.

Based on results, there should ideally be a public debate. It should show what kind of issues to improve or keep the same so that European agriculture is fairer and more efficient among individual farmers and the Member States of the European Union.

2 Objectives and Methodology

2.1 Objectives

The purpose of this diploma thesis is to acquaint the reader with the state of agriculture in the Czech Republic as a member state of the European Union and the Common Agricultural Policy, particularly with current subsidy programs at the national and European level, which are allocated to crop production. The main goal is to find out the perception of this system of subsidies by Czech farmers and how they subjectively evaluate the impact on their farming.

2.2 Methodology

The literature review is formulated based on a study of professional literature and a comparison of opinions of individual authors who deal with agricultural subsidies and the common agricultural policy of the European Union. As well as data from the Ministry of Agriculture of the Czech Republic, European Commission, European and Czech Statistical Office, et cetera. Within the theoretical part, the state of Czech agriculture is characterized. The common agricultural policy of the EU is further defined, and the current subsidy instruments at the European and national level are introduced.

In the practical part of the diploma thesis, based on theoretical knowledge and data from preliminary research, a quantitative analysis among private farmers in the Czech Republic is performed, which takes a questionnaire survey. The questionnaire was distributed using the email addresses of members of selected associations of farmers. A total of 109 respondents took part in the questionnaire survey. The obtained results of the questionnaire are processed mainly by descriptive statistics.

The empirical research and knowledge achieved should provide answers to the research questions formulated at the beginning: What European and national subsidy programs are used the most for agricultural crop production in the Czech Republic? How do the subsidies draw economically affect crop production and lives, according to Czech farmers? How do Czech farmers perceive the current subsidy system as a whole? How do Czech farmers perceive the position of agriculture in today's society.

3 Literature Review

Within the literature review of the diploma thesis, the basic concepts concerning the beginnings of European integration, the Common Agricultural Policy, the subsidy system of agriculture and last but not least, data on the history and position of Czech agriculture in the national economy are stated.

3.1 A brief description of the efforts of European unification and the establishment of the European Union

This chapter is devoted to the initial efforts for European integration, which gradually led to the creation of the European Union through a long process.

3.1.1 The beginnings of European integration

According to Fiala, the idea of integrating or unifying Europe dates back to ancient Greece. These foundations were followed by ancient Rome, which throughout its history carried out the military and political unification of the surrounding empires. In the Middle Ages, the integration tendencies of the Holy Roman Empire were evident, which were based on the universalist ideal of Christianity. During this period, however, it was more a matter of formulating visions based on the spiritual and cultural proximity of European nations, without their authors trying to formulate concrete political and institutional steps for possible integration. Other motives for unification were, on the one hand, religion, but also efforts to defend more effectively and to reduce the risk of war between European states based on political cooperation. However, there are much fewer theoretical models of unification, which consider so-called institutionalized cooperation as one of the basic preconditions for their functioning (Fiala and Pitrová, 2009; Kubicek, 2017).

The "Common Europe" model was therefore intended to help cover socio-cultural differences and eliminate political fragmentation and cultural heterogeneity of the countries concerned. One of the first greatest medieval pioneers of European unification was the Frenchman Francois Dubois (1255-1312). At the turn of the 13th and 14th centuries, this lawyer and political reformer introduced the very modern ideas of a federal Europe, where states were not to fight among themselves and, conversely, to defend

themselves against Arab invasion. According to Dubois, the union of European states was to be led by a so-called congress of monarchs and a court of conciliation. The then monarch, Philip IV. However, the handsome one was not inclined to Dubois's idea. At this time it is possible to also find the Czech trace and it is the king George of Poděbrady (1420-1471). This monarch sought to create a "Union of European States" with a joint legislature and court. Unfortunately, it was not understood by other rulers in the surrounding states (Fiala and Pitrová, 2009).

Tomšík and Kubicek add that another milestone that supported European unification was the industrial revolution in the 19th century. to the industrial revolution, because with the development of industry, transport, and communications there is a need for international cooperation and technical unification. Therefore, then modern organizations such as the Postal Union (1874) and the Telegraph Union (1875) were established. After World War I, international cooperation was seen as a means of combating the economic crisis and unemployment, although there were still strong views advocating preference and the protection of national interests. For example, in 1931, Great Britain introduced preferential imports from the Commonwealth (Kubicek, 2017; Tomšík, 2009).

Fiala, Pitrová, and Tomšík agree that one of the most important projects of European unification was the so-called Pan-European movement from the interwar period because it was the first project to build a united Europe. The author of the pan-European movement was the Austrian Count Coudenhove-Kalergi. He formulated the original idea in the work *Panevropa* (1923). Pan-Europe was to be a full partner of the USA, Russia, China, and the Commonwealth. Great Britain was not to be a member of Panevropy due to its position of power and unwillingness to unite. Pan-Europe was to be created based on an integration process consisting of four phases. At the highest stages of pan-European integration, a customs union, a single economic space, and a pan-European constitution were to be established, establishing pan-European institutions and relations between them. However, the specific pan-European model never received the necessary support, as it was considered utopian and was also negatively affected by the economic crisis of the 1930s. However, this was the first real attempt to create a united European state. (Fiala and Pitrová, 2009; Tomšík, 2009).

3.1.2 A description of the development and creation of the European Union as a basis for common policies

The most dominant moment when the European nations realized the importance of integration was World War II, or more specifically the opportunity after the end of World War II. After the horrors of the Great War, European states realized that only stronger European integration and common trade would prevent further conflict. In general, therefore, the new motives for integration were as follows:

- Renewal and cooperation of democratic states against expanding radical ideologies (communism),
- Enabling the common market as a means of increasing economic prosperity,
- Securing peace on the European continent,
- Allowing a free movement, because the free movement was banned during the war, and citizens of European states longed for freedom (Baldwin and Wyplosz, 2012; Kubicek, 2017).

The negotiations culminated between 9th December and 10th December, when the so-called Maastricht Treaty was signed by foreign ministers in the Netherlands. Within the framework of this treaty, *the term European Union* appears for the first and official time. However, the establishment of the European Union dates to 1st November 1993, because ratification of the Maastricht Treaty was challenging. To sum up, briefly, The European Union was established based on a community of states that started mutual economic cooperation as early as 1951, respectively: Belgium, France, Italy, Luxembourg, Germany, and the Netherlands. (Bomberg *et al.*, 2012).

Table 1 shows the current Member States of the European Union and the dates of their accession to the European Union. Great Britain joined the European Union on 1st January 1973 but left it on 31st January 2021. Great Britain thus continued its historical tradition, when its national tendencies often manifested themselves. Croatia was the last to join the European Union on 1st July 2013. The Czech Republic joined the European Union on 1st May 2004, together with Estonia, Cyprus, Lithuania, Latvia, Hungary, Malta, Poland, Slovakia, and Slovenia. At the time, it was the largest enlargement of the European

Union to date. Croatia was the last to join the European Union on 1st July 2013 (European Union, 2020; Tomšík, 2009).

Table 2 - Current Member States of the European Union

Belgium (1 st January 1958)	France (1 st January 1958)	Italy (1 st January 1958)	Luxembourg (1 st January 1958)
Netherlands (1 st January 1958)	Denmark (1 st January 1973)	Ireland (1 st January 1973)	Greece (1 st January 1981)
Portugal (1 st January 1986)	Spain (1 st January 1986)	Finland (1 st January 1995)	Austria (1 st January 1995)
Sweden (1 st January 1995)	Czech Republic (1 st May 2004)	Estonia (1 st May 2004)	Cyprus (1 st May 2004)
Lithuania (1 st May 2004)	Latvia (1 st May 2004)	Hungary (1 st May 2004)	Malta (1 st May 2004)
Poland (1 st May 2004)	Slovakia (1 st May 2004)	Slovenia (1 st May 2004)	Bulgaria (1 st January 2007)
Rumania (1 st January 2007)	Croatia (1 st July 2013)		

Source: European Union, 2020.

Other countries that will expand the European Union soon include the so-called candidate countries. These states are at the stage of integrating the legal orders of the Union into their legal systems. These include Albania, Montenegro, Northern Macedonia, Serbia, and Turkey. Potential countries that could theoretically apply for membership in the European Union but are still working to meet the requirements for membership in the European Union are Bosnia and Herzegovina, Kosovo (European Union, 2020).

3.1.3 Current benefits and obligations of membership of the European Union

In their book, Fiala and Pitrová state that the Maastricht Treaty, based on which the European Union was founded, defined three pillars, the so-called Maastricht Temple, which illustrates and classifies the various areas of Community policy. The key is the

degree of supranational and intergovernmental. The EU Treaty covered all the pillars. In this treaty, the European Union also began to consider itself a subject of international relations that is interested in developing its foreign policy identity (Fiala and Pitrová, 2009;Kubicek,2017).

There was pressure from the Member States to create a new basic legal document (the original plan was the European Constitution, but this idea was rejected by France and the Netherlands in 2005) to replace the current system of several treaties, resulting in the so-called Lisbon Treaty. 13.December 2007 27 representatives of the Member States. The Lisbon Treaty abolished the Maastricht Temple and introduced one pillar. This has made the European Union more efficient, more democratic, and more transparent.

The above documents set out the benefits and obligations and determine common politics of membership of the European Union, in particular:

- Free movement of people,
- Free movement of services, goods, and capital,
- Law Enforcement,
- Redistribution of financial resources within the EU,
- Common monetary policy (Fiala and Pitrová, 2009).

As can be seen, the Common Agricultural Policy (CAP) is currently one of the European Union's policies that regulate the internal market between member countries and, among many other functions, plays an important role in the overall European integration process. The whole chapter is to be understood comprehensively, which is why I have included this chapter at the beginning. I will discuss the CAP and the redistribution of European subsidies in more detail in the following chapter.

3.2 Common Agricultural Policy of the European Union (CAP)

This part of the literature search deals with the Common Agricultural Policy of the European Union. It represents its origin, reason, and pillars on which it stands.

3.2.1 Origin of the CAP

The history of the common agricultural policy (CAP) returns to the period after the end of World War II again. As we mentioned before countries in Europe were economically and psychically exhausted by the negative impact of the Great war. The European Communities (founded in 1958) were therefore affected by the lack of agricultural products, which were imported primarily from the United States. In Article 32.1 of the Amsterdam Treaty agricultural products have been defined as products of the soil, of stock farming and fisheries, and products of first-stage processing directly related to the foregoing. The main goals that were pursued by the artisans of the common agricultural market were to ensure a self-sufficient production of agricultural goods, while also providing constant well-being for farmers. Thus, the bases of the CAP were established after the European Economic Community was formed. It was in 1957 based on the Treaty of Rome and other related documents. The original objectives of the Treaty of Rome reflect the current objectives of the CAP in Article 33:

- To increase agricultural productivity by promoting technical progress and by ensuring the rational development of agricultural production,
- ensuring an adequate standard of living for the countryside,
- to stabilize markets,
- to provide certainty of supplies,
- to ensure supplies to consumers at a reasonable price (Dragoi and Jean-Vacile, 2019; El-Agraa, 2004).

Neumann writes the same that from the beginning the process of agricultural integration was challenging, mainly due to a large number of agricultural participants in the European market with significantly different economic levels and a differentiated agricultural sector. During the years 1962-65, the CAP's major principles were developed and implemented by the Commission of the European Communities. Rules were laid down for the creation of nine jointly organized markets agricultural products (especially cereals, pigmeat, milk, milk products) and prepared and started convergence of their prices. Furthermore, the European Agricultural Fund has created the Guidance and Guarantee Fund (EAGGF), which had provided agricultural subsidies since 1964. Thus, a system of

financial solidarity was created. In 1966-70, the complete free circulation of agricultural products within the EEC and established a customs union vis-à-vis third countries. The common prices of products already worked, the EAGGF already paid domestic and export subsidies. Structural and social policies have been put in place in the field of agriculture (Neumann, 2004).

3.2.2 Evolution of instruments of the CAP

The instruments of the common agricultural policy serve to achieve the objectives of the common agricultural policy. Briefly, these objectives can be divided into three main groups, respectively: economic objectives (to secure food supplies through viable agricultural production, to improve competitiveness and distribution of added value in the food chain), environmental objectives (sustainably using natural resources and combating climate change), territorial objectives (to ensure the economic and social dynamism of rural region). The instruments and objectives of CAP have been reformed several times (Masot, 2020).

Originally, in the 1970s, the instruments of the CAP were based on the principle of intervention buying agricultural products when market prices fell below the agreed level. At the same time, the import of agricultural products was taxed and export was subsidized. In economics, this is referred to as protectionist measures. In the 1980s, these measures created overproduction in the European Union, which put a heavy burden on the EU budget. Moreover, foreign producers protested against the measures. This led to the first reforms of the instruments of the common agricultural policy (Bydžovská, 2018; El-Agraa, 2004).

Among the most important reforms of the instruments of CAP is the MacSharry reform from the year 1992. It was intended to reduce overproduction and reduce costs, i.e. the budgetary burden on the Community. The principle consisted of decoupling subsidies from the amount of production. The Community reduced protectionist measures and instead of that introduce direct payments, which were located for example on the size of the land cultivated or the number of livestock. In some cases, payments were also made for land that was intentionally set aside (reform of voluntary set aside program from 1988). Farmers with above a certain size of grain production (90 tonnes) had to set aside a certain

percentage of the area under grain production to qualify for the direct payments. Thanks to direct payments grain intervention prices were reduced by 30% (Bydžovská, 2018; El-Agraa, 2004).

One of the major milestones of CAP reforms was the reform of **AGENDA 2000** in 1999, following the Member States' decision at the Berlin Summit. AGENDA 2000 had three sections focusing on common policy reform, a pre-accession strategy and a study on extending the impact on EU policies. In the CAP, the reform was intended to improve the competitiveness of EU agriculture on the domestic and foreign markets, ensuring stable farm incomes (countries could redistribute national support) and integrate environmental objectives into the CAP. The reform was intended for the period 2000-2006 (Keane and O'Connor, 2016).

In 2003, a review of the AGENDA 2000 reform of the Common Agricultural Policy was launched. Moreover, the CAP Reform (Mid-Term Review) was created. The key to this reform was to separate direct payments from livestock production, milk production, and arable crops. However, the option has been left for the Member States that do not want total decoupled payments. At the same time, this reform has introduced requirements for welfare farming and respect for environmentally friendly production conditions. It has partially abolished or reduced quotas, for example, on milk products. The CAP was further divided into only two pillars, and the volume of rural development funding was increased. At the same time, a financial ceiling limited the volume of funding for the CAP (direct payments) (Keane and O'Connor, 2016).

Another particularly important reform was introduced in 2003. It is named after its Franz Fischler founder. Fischler's reform introduced a single farm payment. *Thus, instead of several payments, farmers receive only one. The amount of payments is determined either based on payments received in the past (historical model) or based on area payments cultivated in the first year of introduction of the system (regional model) or a hybrid model combining both principles.* Payment of direct payments is also conditional on compliance with a set of legislative conditions (**cross-compliance**); in the event of non-compliance, sanctions are imposed on farmers. (Bydžovská, 2018; El-Agraa, 2004).

Tangerman agrees and adds that direct payments, decoupled from production and subject to cross-compliance. It is a set of 19 legislative standards (for example for conditions regarding the environment, animal welfare, and worker safety, etc.) that farmers

must meet to benefit from direct payments. In the event of non-compliance with these standards, farmers may not receive direct payments or may be subject to retroactive penalties. Direct payments are also more advantageous because it is possible to estimate in advance the EU's annual budget according to the number of farms and acreage (Tangerman, 2012).

The changes, which most recently brought about a more significant change in the CAP, last in 2008 during the so-called **CAP health check**. As part of this inspection, certain partial adjustments were made in the area of decoupling direct aids from payments and the modulation system, the phasing out of dairy quotas and new rural development targets (Keane and O'Connor, 2016).

To sum up briefly, according to MacMahon is CAP in the current programming period 2014-2020 managed by four main legal instruments:

- Regulation on Direct Payments,
- Rural Development,
- Finance,
- Common organization of the Markets (MacMahon, 2019).

More specifically, the CAP affects agriculture and the market for agricultural commodities most often, as has been said of direct payments, market intervention, quota systems (countries have much to produce, such as dairy products), export and import licenses and export subsidies (Kubicek, 2017).

3.2.3 **Two pillars of today's CAP in the period 2014-2020**

Baldwin and Wyplosz state that the current form of the Common Agricultural Policy, which follows from the 2014-2020 programming period, currently has two pillars. The first is direct payments to farmers and the single common market organization, and the second is indirect rural development policy. This reform aims to achieve greater fairness in the redistribution of support among farmers. Member States are also given a greater degree of decision-making in targeted funding, as the Member States more know about local agricultural conditions and constraints. Member States may transfer up to 15% of the

annual envelope between the two pillars. Bydžovská adds that in the 2014-2020 programming period, up to 38% of the general EU budget was allocated to the CAP budget, representing approximately 408.31 billion euros. Masot puts it in the same way, adding that this money was paid until 1st January 2007 from one European fund - the European Agricultural Guidance and Guarantee Fund (EAGGF). However, this was further replaced by the European Agricultural Guarantee Fund (EAGF) and the European Agricultural Fund for Rural Development (EAFRD) (Baldwin and Wyplosz, 2015; Bydžovská, 2018; Masot, 2020).

- **First pillar**

Direct payments and market intervention. Under the first pillar, direct payments are made to farmers from 70% of the first pillar budget to ensure a certain steady income for farmers, regardless of the amount of production. The novelty is that the remaining 30% of the first pillar budget is earmarked for so-called greening, i.e. direct payments to ensure sustainable farming practices. For the period 2014-2017 CAP, this pillar receives 76.6% of the CAP budget, i.e. approximately 312.74 billion euros. Conversely, in the context of market intervention, the CAP can affect the market through price caps or production quotas. The best-known quotas introduced by the CAP were for milk and beet sugar. They were cancelled in 2015 and 2017 (Baldwin and Wyplosz, 2015; Bydžovská, 2018).

- **Second pillar**

Rural development. Under the second pillar, rural development and protection against climate change should, in particular, take place through the support of related projects. They are divided into entitlement and project payments. Entitlement payments have the nature of direct payments. Project payments have the nature of indirect payments, i.e. funds are drawn in financing specific projects or measures. The budget for the second pillar was 23.4% of the CAP budget, approximately 95.58 billion euros. However, Member States may use the modulation principle, i.e. they may transfer part of the money from the first pillar to the second pillar at their discretion (Baldwin and Wyplosz, 2015; Bydžovská, 2018).

It is not yet clear what reform the Common Agricultural Policy will bring for the 2021-2027 programming period, but on 30th May 2008, the plenary adopted a communication (later a legislative framework) entitled "The future of food and agriculture" (COM (2017) 0713). This legislative framework will enter into force in 2021-2027 and will have a major impact on the Common Agricultural Policy. Although the European Union's expenditure on agriculture will be maintained at 28.5% of the EU's budget, there will be cuts in real terms due to the Brexit (Leaving the UK from the EU) and funding needs arising from the EU's new priorities (migration, external borders, digital economy, transport). As a result, there will be a 28 % reduction in funding in the second pillar and 11 % in the first pillar compared to the previous budget from 2014-2020. The CAP in the period 2021-2027 should focus on 9 main objectives according to the strategic plan of the European Commission: to ensure a fair income to farmers, to increase competitiveness, to rebalance the power in the food chain, climate change action, environmental care, to preserve landscapes and biodiversity, to support generational renewal, vibrant rural areas, to protect food and health quality. (European Union, 2020; El-Agraa, 2004; Masot, 2020).

3.2.4 The importance of the CAP

It might seem that agriculture is not important in Europe. However, the opposite is true. The CAP forms a serious item of the European Union budget each year. In the year 2020, the CAP has received 58.124 billions of euros, a percentage it is 34.5 % of the budget of the EU. At the beginning of the '80s, it was 66 % of the budget of the EU, in the period 2014-2020 it reaches only 37.8 %. Despite the annual downward trend, it is still a considerable sum. According to an article by the European Parliament, the crisis or mad cow disease between 1996 and 1997 and the growing number of EU Member States have contributed decline (European parliament, 2020).

One of the reasons it is essential to focus on the CAP is its challenges facing the CAP of the EU include, in particular, the declining trend in agricultural employment, the high average age of farmers (which accounted for five to six farmers over 65 in the European Union in 2013 per farmer under the age of 35), low wages in agriculture (in the EU-28 the wage in agriculture is around 40% of the average wage), low growth in the efficiency of European agriculture, costs associated with legislation, low levels of training

and education in agriculture and other challenges in the natural, socio-economic and economic context. (European Union, 2019).

3.3 Agriculture and crop production in the Czech republic

This subchapter deals with Czech agriculture, its history, and especially its functioning in the European subsidy system and its position in the national economy.

3.3.1 The modern history of Czech agriculture

According to Toman and Bašek modern Czech (formerly Czechoslovak) agriculture can be divided into a total of four main stages. However, the most important date for the current state of agriculture remains 17th November 1989. The totalitarian system (communism), which ruled Czechoslovakia for 40 years, was replaced by a democratic system led by President Václav Havel. This has brought about several fundamental changes, such as the decentralization of power and freedom for the people. In the agricultural sector, agricultural land was privatized, when ownership passed from the state to the private sphere, and agriculture in general opened up to the Western market. However, this process has also brought with it many challenges that Czech agriculture still faces (Bašek, 2010; Toman *et al.*, 2012).

Another important stage was the date of 1st May 2004, when the Czech Republic (already a separated state) joined the European Union and Czech agriculture began to be influenced by the single market and the Common Agricultural Policy (Bašek, 2010; Toman *et al.*, 2012).

- **The first land reform (1918 – 1935)**

Until 1918, the Czech (Czechoslovak) lands were part of the Austro-Hungarian Empire. After the end of the First World War, however, Czechoslovakia became independent and restored its political and economic independence. This created the first Czechoslovak Republic. There was a democratic system and Tomáš Garrigue Masaryk was elected the first president. Therefore, in addition to several state issues, it was necessary to resolve land ownership issues.

All agricultural land, including arable land, was owned by a few aristocratic families and churches. The small farmers who farmed the land were usually forced to pay a large part of the crop to the owner. Often this part was striking for farmers. Another problem was the fact that in Czechoslovakia Czechs (Czechoslovaks) and Germans lived in coexistence for centuries, and much of the land belonged to German nobles. Due to the Czech revivalist struggle as part of independence, there was political pressure to acquire German land in favor of the Czechs (Czechoslovaks). Due to these circumstances, the main laws of the first land reform were created, respectively: Act No. 32/1918 Coll., Occupation Act No. 215/1919 Coll. (on the seizure of large land property), Replacement Act No. 329/1920 Coll. (on the takeover and compensation for a confiscated land property) and the Allocation Act No. 81/1920 Coll. (on the allocation of seized land and adjustment of legal relations to it). In general, it can be argued that a series of these laws caused the land and forest property of the nobility to be seized and could not be sold, transferred, or indebted without the consent of the Ministry of Agriculture. Subsequently, these lands were seized by aristocratic estates by the Czechoslovak state and further redistributed. The laws allowed the occupied lands to be replaced to some extent financially by the original owners. The seized land was allocated according to the laws to the seized land to individuals, agricultural associations, and others by the State Land Office, which was established based on Act No. 330/1919 Coll. (on the Land Office) (Damohorský *et al.*, 2015; Beranová and Kubačák, 2010).

The result of the first land reform was a fundamental adjustment of land relations in the new Czechoslovak Republic. It had a positive effect, removing the outdated aristocratic ownership system and enabling peasants to acquire land or expand its acreage. Peasants gained a relationship with the land, which increased the efficiency of agricultural production. The negative impact was not entirely fair financial compensation to the original landowners - nobles and landowners.

Damohorský further states that the first land reform was implemented on 40% of all agricultural land, or 1.8 million hectares out of a total of 4 million hectares (Damohorský, *et al.*, 2015; Toman *et al.*, 2012).

- **The second land reform and its three stages**

In his work, Toman states that the period of the second land reform can be divided into three stages. The first stage began after the end of World War II in 1945, the second in

1948, and the third after the 25th February 1948. This date is known as Victorious February, or coup d'état and the rule of the Communist Party (Toman *et al.*, 2012).

The first stage dates back to 1945, when after the end of World War II, the so-called Third Czechoslovak Republic was established, which was formally established on 4th April 1945 and which was still democratic, but was influenced by Moscow and the Soviet Union as one of the victorious powers, which liberated almost the entire Czechoslovak area. In the post-war Third Czechoslovak Republic, there was great hatred between the Czech population and the German population. The Czechoslovak government, led by President Eduard Beneš, therefore issued confiscation and settlement decrees in the period from April to October 1945 (Decree No. 12/1945 Coll. On confiscation and accelerated division of agricultural property of Germans, Hungarians, traitors, and enemies of the Czech and Slovak nations, and Decree No. 28/1945 Coll., on the settlement of agricultural land of Germans, Hungarians, and other enemies of the state by Czech, Slovak, and other Slavic farmers), the so-called Beneš decrees. The result of Beneš's decrees was a considerable redistribution of ownership of agricultural and economic land, real estate and a drastic change in the ethnic composition of the population, which significantly changed the development and character of the landscape, especially in the border areas of Czechoslovakia (Sudetenland), where before the war the vast majority was made up of the German population.

In the second stage of the second land reform, the Czechoslovak state tried to follow the first land reform. In principle, it was a revision and reform based on Act No. 142/1947 Coll. as a result, sought to allocate the seized land according to the legislation of the beginning of the interwar republic. However, the land was also allocated to interested parties by the principle of Beneš's decrees.

The last, third stage of the second occurred on 25th February 1948, after the communist coup in Czechoslovakia, the so-called Victorious February. The Communist Party, led by Communist President Klement Gottwald, came to power. Czechoslovak agriculture marked the victory of the Communists for another 40 years. According to Act No. 46/1948 Coll., The Communists began to set the maximum amount (50 hectares) of land ownership per person. The condition, however, was that the owner had to work on the land. The acreage, which exceeded the limit or did not meet the conditions of ownership,

was bought by the state (however, the owners were not paid) and fell into state ownership or handed over to interested parties who were interested in managing it.

Due to socialist ideology and the leadership of the Soviet Union, ownership and land conditions in Czechoslovakia began to change even more. One of the most typical acts of that time was the establishment of so-called unified agricultural cooperatives based on Act No. 69/1949 Coll. These agricultural cooperatives were to be established throughout the state, and local farmers had to enter and deposit their land. As a result, the de facto lost ownership. Agricultural production was centrally planned in five-year plans. The main goal was to maximize revenue at all costs and meet plans, which often failed and In his book, Damohorský states that ownership of agricultural land was severed by these practices, which brought many negative aspects. Farmers in state agricultural cooperatives were unrelated to the cultivated land and the huge acreage of agricultural land of state cooperatives was harmful to the environment. (Bašek, 2010; Damohorský *et al.*, 2015).

- **State of land ownership in the Czech Republic after the "Velvet Revolution"**

The period of communism, party ideology, and the rule of the proletariat lasted in Czechoslovakia from 1948 to 1989, ie more than 40 years. In the 1980s, the entire Soviet Union began to collapse due to citizens' dissatisfaction with economic and political developments in individual states. In Czechoslovakia (until 1989 under the name the Czechoslovak Socialist Republic), the regime change took place between 17th and 29th December. The name "Velvet Revolution" originated from the fact that the change of political regime took place in a bloodless way. Václav Havel, who was a dissident and one of the main faces of the Velvet Revolution, was elected the first post-revolutionary Czechoslovak president. Czechoslovakia (with the new exact name of the Czech and Slovak Federal Republic) thus became a pluralist democracy with a market economy and a Western orientation. However, this required many drastic democratizing changes, especially in the economic and property fields. This period is, therefore, best known for restitution laws (Act No. 403/1990 Coll.), Land laws (Act No. 229/1991 Coll.) And privatizations of state-owned enterprises into private ownership. Based on these laws, the property (most often agricultural land, real estate, and forest property) was returned to the original owners or their descendants by the Land Fund of the Czech Republic, which was seized during communism. If the property could not be realistically returned, replacement

property was offered, in the case of financial compensation. Subsequent laws also made it possible to reconstitute property seized by the so-called Beneš decrees. Several restitution proceedings have been ongoing to date (Damohorský *et al.*, 2015; Toman *et al.*, 2012).

In addition, due to the mood in society and political disagreements, on January 1, 1993, Czechoslovakia (The Czech and Slovak Federal Republic) disintegrated into the Czech Republic and Slovakia. The division was again a bloodless and unarmed dough and is therefore nicknamed the "Velvet Divorce". However, the two independent states today have good relations with each other and are trying to integrate into the Western system (for example, accession to the European Union or the North Atlantic Alliance) (Berounský, 2013).

It should be noted that the whole process of democratization and economic transformation did not go smoothly and was often interwoven with controversial events. According to Richter, for example, the coupon privatization of the then president Václav Klaus (Richter, 2005).

3.3.2 The current position of agriculture in the Czech Republic and the national economy

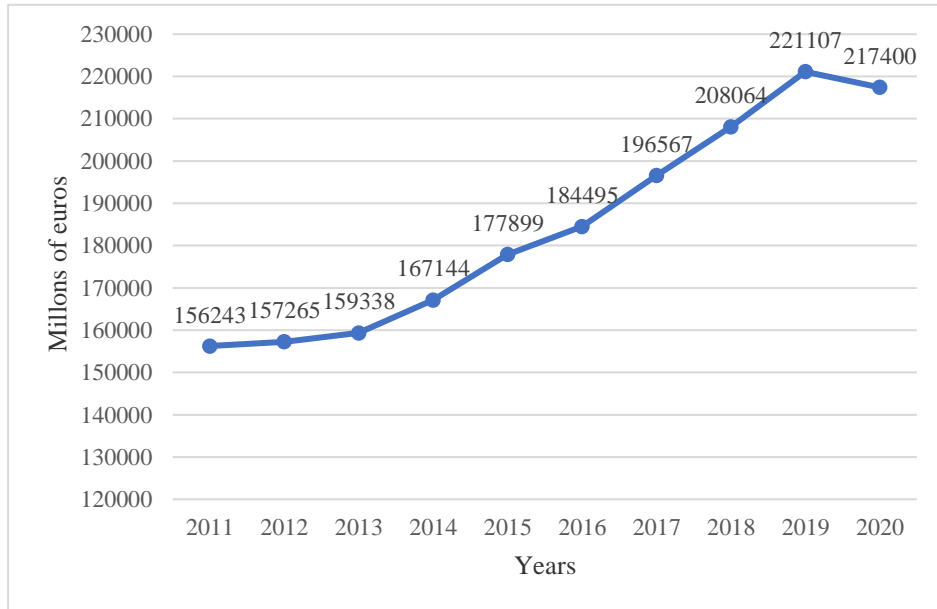
The Czech Republic is a landlocked country located in the middle of Europe. It has an area of 78,871 square kilometres. The population as of 1st January 2019 is 10,649,800 inhabitants. The average density is 135 square kilometres, and the average age of the population is 42.3 years. The Czech Republic is organizationally divided into 14 self-governing regions. (Czech Statistical Office, 2019).

- **Basic economic data of the Czech Republic**

One indicator of economic performance is Gross Domestic Product (GDP). It is used to determine the performance of a country's economy. GDP is the sum of the total value of goods and services newly created in a given period in a given territory. Chart 1 shows the gross domestic product (GDP) in millions of euros. For a better international demonstration, Czech crowns are approximately converted at the rate of 26 Czech crowns for one Euro. In 2021, the exchange rate fluctuated most often around this value. The graph ends in 2019, i.e. before the coronavirus epidemic, so it is possible that in the coming years

GDP will reach lower values and the trend will have a downward trend. (Czech Statistical Office, 2021).

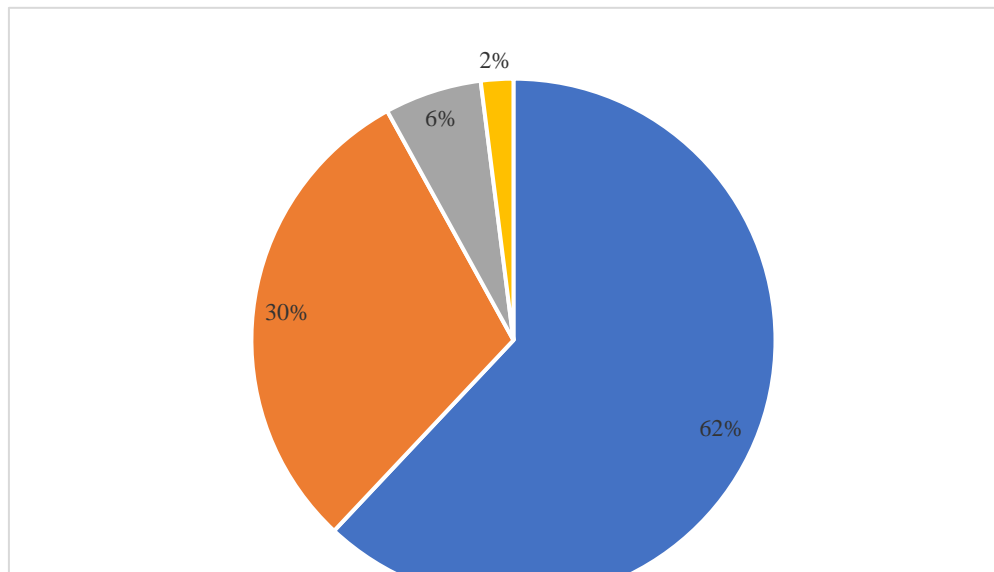
Chart 1 - Development of the GDP of the Czech Republic in millions of euros



Source: Czech Statistical Office, 2021

Gross Value Added is obtained by the difference between total output, valued at basic prices, and intermediate consumption, valued at purchasers' prices. It is calculated for sectors or institutional sectors / sub-sectors. The sum of all values of gross value added and net taxes gives the gross domestic product. Gross value added in the long run copies the curve of gross domestic product. Based on Deloitte's analysis, the sectoral structure of the national economy of the Czech Republic is shown in chart 2. It is clear from this that the services sector is the most important for gross value added. On the contrary, the agricultural sector plays a minority role. (Czech Statistical Office, 2021; Deloitte., 2020).

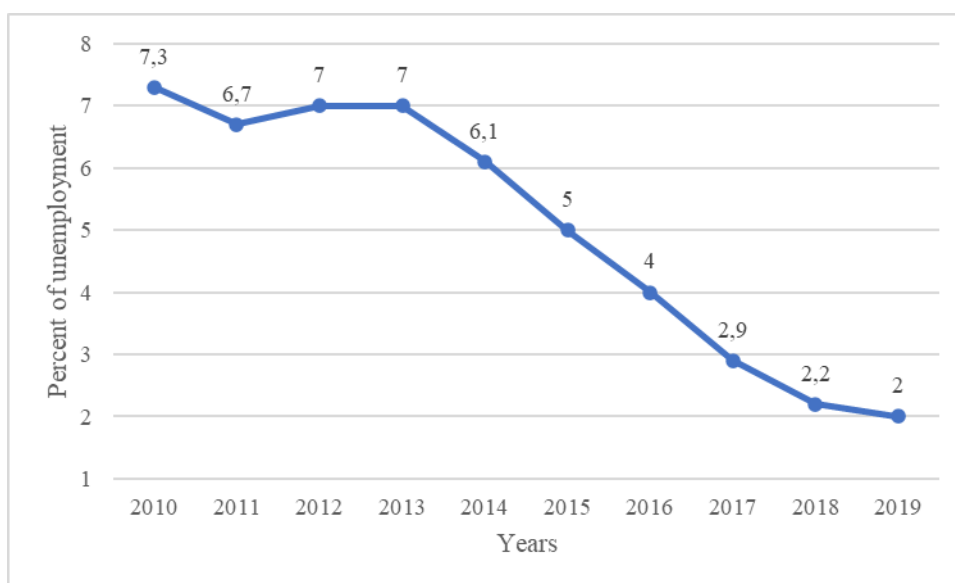
Chart 2 - Approximate composition of Gross Value Added in the Czech Republic by sector in 2019



Source: Deloitte, 2020

Another indicator that describes the state of the economy is the general rate of inflation. It means the share of the number of unemployed in the total labour force (as a percentage). A downward trend can be seen in chart 3 of this indicator. In the Czech Republic, it reached 2% before the coronavirus crisis in 2019. Compared to the other Member States, this result was one of the lowest in Europe (Czech Statistical Office, 2019).

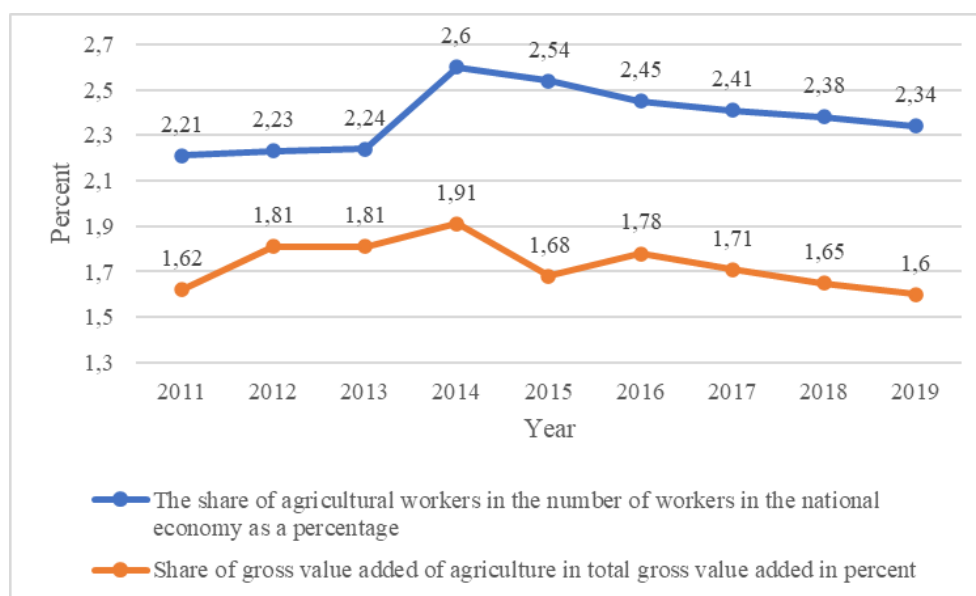
Chart 3 - Development of the general unemployment rate in the Czech Republic



Source: Czech Statistical Office, 2021

The share of agricultural workers in the national economy has a long-term slightly declining trend and together also the share of agriculture in the total gross value added of the Czech Republic. Chart 4 shows The highest figures in recent years were in both indicators in 2014. It worked in agriculture 2.6% of all workers in the national economy worked and agriculture generated gross value added of 1.91%. (Ministry of Agriculture of the Czech Republic 2020).

Chart 4 - Shares of agricultural workers and gross value added in the Czech economy



Source: Ministry of Agriculture of the Czech Republic, 2020

Since about 2017, the number of agricultural workers in the Czech Republic has been slightly higher than the number of unemployed in the total number of workers. Despite a slightly declining trend, the number of workers in agriculture is around 100,000 workers. Within the age structure of agricultural workers, the majority is the age group 45-59 years (41.4%), in second place is the age group 30-40 years (31.2%), in the third is the group older than 60 years (14.5%). The smallest group consists of the youngest group under 30 (12.9%). The average wage in agriculture in 2019 was around CZK 27.200 (at the exchange rate of 1 EUR = 26 CZK, it is 1,046 euros). On the contrary, the average wage of the whole Czech Republic reached CZK 34.125 (at the exchange rate of 1 EUR = 26 CZK, it is EUR 1,312). Wages in agriculture are, therefore, on average one third lower (Czech Statistical Office, 2019; Ministry of Agriculture of the Czech Republic, 2020).

3.3.3 The situation in agriculture in the Czech agriculture

In 2019, the whole of the Czech Republic was approximately 7,887,000 hectares, of which approximately 53.3% in total, i.e. 4,202,100 hectares, forms the agricultural land fund. This fund includes agricultural land (arable land, hop gardens, vineyards, gardens, orchards, permanent grassland) and land that has been and is to continue to be farmed but is not temporarily cultivated. The agricultural land fund also includes ponds with fish or

waterfowl breeding and non-agricultural land needed to ensure agricultural production, such as field roads, land with equipment important for field irrigation, irrigation water reservoirs, drainage ditches, dams used to protect against wetting or flooding, technical anti-erosion measures. Forestlands make up approximately 33.9% of the total area of the Czech Republic, i.e. 2,675,700 hectares. Ploughing means what percentage of arable land belongs to the total agricultural land. In 2019 it was 70%, i.e. 2,940,900 hectares of arable land (Ministry of Agriculture of the Czech Republic, 2019; 2020).

In 2016, the average agricultural entity of a natural person managed 45 hectares of agricultural land, of which 22 hectares were owned, and 23 hectares were leased. They also managed an average of 43 hectares of arable land. An average of 3 people worked on these acreages, including the farmer. On average, six people worked on 100 hectares of cultivated land. Following this, the average agricultural entity of a legal entity managed 805 hectares of agricultural land in the same year, of which 144 hectares were owned, and 661 were leased. These entities managed an average of 763 hectares of arable land. The average legal entity employed 38 people, of which 23 were employees. On average, five people worked on 100 hectares of cultivated land. The average agricultural entity in the Czech Republic has 132 hectares, of which 35 hectares are it is own, and 97 hectares are leased. The cultivated arable land of this average agricultural entity was 145 hectares, and an average of 7 people worked in it, of which five regularly. On average, five people worked on 100 hectares of cultivated land. (Czech Statistical Office, 2016).

According to older data from the Czech Statistical Office, table 2 shows size groups and agricultural holdings (also a percentage of the total number) according to individual size groups. At the same time, the area of agricultural land in hectares, which they managed in 2014, is shown for the relevant groups. The most significant number (56.5%) are farms with an area of 1 to 5 hectares, but the most cultivated land belongs to agricultural holdings with an area of more than 2000 hectares (32.5%). These enterprises included plant and animal production (Czech Statistical Office, 2004).

Table 2 - Size of agricultural enterprises by acreage of agricultural land

Hectares	Number of farms		Area of cultivated land (ha)	
	Num.	%	Num.	%
0	2206	4,1	0,0	0
>0<5	30520	56,5	44969,0	1,2
5<10	5972	11	41469,5	1,1
10<50	9564	17,8	206644,1	5,7
50<100	1888	3,5	131952,8	3,6
100<500	2076	3,8	464843,0	12,8
500<1000	728	1,3	533258,0	14,7
1000<2000	725	1,3	1024422,8	28,4
2000 and more	392	0,7	1171359,7	32,5
Total	54071	100	3618919,5	100

Source: Czech Statistical Office, 2004

Another indicator of agriculture in the Czech Republic is agricultural land cultivated according to the legal forms of business. It is shown in table 3. Most of the smallest small farms are owned by natural persons engaged in business. In contrast, most of the largest farms are owned by juridical persons (such as a limited liability company, a joint-stock company, et cetera). Juridical persons manage approximately twice as much agricultural land as natural persons (Czech Statistical Office, 2004).

Table 3 - The legal form of business and cultivated agricultural land according to size groups of agricultural enterprises

Hectares	The legal form of business							
	Natural person				Juridical person			
	Share		Cultivated land (ha)		Share		Cultivated land (ha)	
	Num.	%	Num.	%	Num.	%	Num.	%
0	1977	3,9	0	0	229,0	8,2	0	0
>0<5	30356	59,2	44634,89	4,4	164,0	5,9	334,13	0
5<10	5921	11,5	41120,62	4,1	51,0	1,8	348,91	0
10<50	9355	18,2	201226,2	19,9	209,0	7,5	5418,54	0,2
50<100	1772	3,5	123497,2	12,2	116,0	4,2	8455,65	0,3
100<500	1609	3,1	325579,9	32,3	467,0	16,8	139263	5,3
500<1000	201	0,4	136680,1	13,5	527,0	18,9	396577,9	15,2
1000<2000	87	0,2	113608,1	11,3	638,0	22,9	910814,7	34,9
2000 and more	9	0	22731,23	2,3	382,0	13,8	1148628	44,1
Total	51287	100	1009078	100	2783,0	100	2609841	100

Source: Czech Statistical Office, 2004

The data show and Beranová with Kubačák write that the Czech Republic has the most significant number of smaller (family) farms with a smaller area. However, companies manage the most significant percentage of land over 1000 hectares, but the number of these farms is the smallest. Thus, there are apparent differences in the size of farms, which are also given by the historical development of the Czech Republic. Therefore, the size of the average farm is relatively large (Beranová and Kubačák, 2010; Ministry of Agriculture of the Czech Republic, 2020).

3.3.4 Czech agriculture within the agriculture of the European Union

In the European Union, around 11 million farms manage about 171 million hectares of agricultural land, which is approximately 40% of the European Union's area. In 2004, the average European farm (EU-28) had an area of 16.1 hectares of agricultural land. The median mean, in this statistic, was 5 hectares of agricultural land per farm, as 66% of all European Union agricultural land is managed by small farms that are smaller than 5 hectares. Only 7% of all farms are more extensive than 50 hectares, but they cultivate more than two-thirds of the European Union's agricultural land. Most farms are located in

Romania or 33% of all European farms. However, these farms are also the smallest, and their average size is 3.6 hectares per farm.

On the contrary, the largest farms are located in the Czech Republic, where one farm manages approximately 133 hectares of agricultural land. Significant differences in farm sizes are referred to as dualism. Dualism is typical of Bulgaria, Hungary, Slovakia, and the Czech Republic, where smaller natural person farms farm next to large agricultural holdings. It is mainly due to the historical development of these states (Beranová and Kubačák, 2010; Eurostat, 2004, 2016).

3.4 The most used subsidy programs used at the European and national level in the Czech republic

The Czech Republic is one of the Member States of the European Union and, like the other Member States, the common agricultural policy applies. Farmers and agricultural enterprises thus have the opportunity to draw subsidy programs at the European and national levels. At both levels, payments are made directly or indirectly. The subsidy system should maintain competitiveness and fairness in the European single market. (Kubicek, 2017).

3.4.1 European level

The European Union's subsidy programs can be divided according to how payments are paid to farmers, or direct and indirect. The system of direct payments is currently regulated by the European Union Regulation No. 1307/2013. On the contrary, the system of indirect payments (rural development program) is governed by the European Union Regulation No. 1305/2013. (Damohorský *et al.*, 2015)

- **European indirect payments**

The authors agree that European indirect payments take the form of project payments from the European Agricultural Fund for Rural Development. The basic objectives of these payments, which are to contribute to rural development at the European level, are to promote agricultural competition at the European level, ensure the sustainable

management of natural resources and climate action, and achieve balanced territorial development of rural economies and communities, including job creation and retention.

Member States propose so-called support programs to implement the objectives. Everything must go further through the approval process at the Union level.

The eligibility of all expenditures related to the financing of project payments is closely monitored, controlled, and verified by the Member States themselves, as well as by the European Network for Rural Development and the European Innovation Partnership Network. (Damohorský, *et al.*, 2015; Kubicek, 2017)

Rural Development Program

A major European fund that allocates a significant amount of money to agriculture in the Member States of the European Union is called the European Agricultural Fund for Rural Development (EAFRD). It draws financial resources from the European Structural and Investment Funds (Ministry of Agriculture of the Czech Republic, 2020; European Commission, 2020).

The EAFRD primarily aims to modernize rural farming practices, ensure competitiveness and jobs, and maintain an ecological (sustainable) approach to agriculture in terms of positive climate action. This fund is intended for small municipalities with a population of 500 to 2000 inhabitants. This means that large cities, including capital cities, are so often set aside and cannot apply for support from this fund (Ministry of Agriculture of the Czech Republic, 2020; European Commission, 2020).

In the period 2014-2020, the European Union will redistribute more than 100 billion euros among individual member states. However, Member States shall extend the amount allocated to national financial resources. One of the Member States that is massively expanding its EAFRD is, for example, Austria (Ministry of Agriculture of the Czech Republic, 2020; European Commission, 2020).

The grant applicant must meet a wide range of legislative conditions, such as project information, financial and business plan. Completed documents are subsequently evaluated by the competent authority based on scoring criteria. The applicant who gets the most points in the criteria and asks for the least money is usually supported (Ministry of Agriculture of the Czech Republic, 2020; European Commission, 2020).

In the Czech Republic, the EAFRD again redistributes the State Agricultural Intervention Fund (SAIF) and for the period 2014 to 2020, the European Union has set

aside 2.3 billion euros for the Czech Republic. As mentioned above, individual states can extend this amount from national sources. The Czech Republic did so and expanded this fund by another 1.2 billion euros. In total, it was possible in the Czech Republic to draw approximately 3.5 billion euros, or 96 billion Czech crowns, from rural development programs (Ministry of Agriculture of the Czech Republic, 2020; European Commission, 2020).

Table 4 - Overview of direct and indirect measures from the rural development program 2014 - 2020

Name of the measure	Payment	Brief description
M01 - Knowledge transfer and information events	Indirect (Project)	Measures to support agricultural education
M02 - Advisory, management, and support services for agriculture	Indirect (Project)	Measures to promote competitiveness
M04 - Investments in tangible assets	Indirect (Project)	Measures to support the competitiveness of small and medium-sized enterprises
M06 - Development of agricultural enterprises and entrepreneurial activities	Indirect (Project)	Measures to support young and beginning farmers
M08 - Investments in the development of forest areas and improving the viability of forests	Indirect (Project)	Measures to promote and protect the environment and the efficient use of resources
M10 - Agri-environmental-climate measures	Direct (Entitled)	Measures to promote and protect the environment
M11 - Organic farming	Direct (Entitled)	Measures to promote environmentally sound management.
M12 - Payments under the Natura 2000 network and the Water Framework Directive	Direct (Entitled)	Measures for farmers with specific handicaps (eg

		protected landscape area).
M13 - Payments for areas with natural or other special constraints	Direct (Entitled)	Measures for farmers farming in less-favored areas (eg. mountain areas)
M14 - Animal Welfare	Direct (Entitled)	Measures to improve the welfare of livestock. Only in animal production.
M15 - Forest-environmental and climate services and forest protection	Direct (Entitled)	Forest and climate protection measures
M16 - Cooperation	Indirect (Project)	Measures to support SMEs through development, education, and innovation.
M19 - Support for local development based on the LEADER initiative (community-led local development)	Indirect (Project)	Measures for rural development through local inhabitants (so-called action groups).
M20 - Technical assistance	Indirect (Project)	Measures to reduce the administrative burden for beneficiaries

Source: State Agricultural Intervention Fund, 2020

Table 4 shows the Rural Development Program is divided into entitlement payments, which are drawn more as direct payments (described in more detail below), and purely indirect project payments (Damohorský *et al.*, 2015).

- **European direct payments**

The importance of direct payments lies in the fact that they are designed to provide farmers with a stable financial income that is independent of how many products (agricultural commodities) they produce (European Commission, 2020).

These payments can only be made by a beneficiary who is an active farmer, ie agriculture must be its main business activity and who respects the principle of cross-

compliance. These are literally according to the *Dahomorsky standards concerning public health, animal and plant health, the environment, and animal welfare set out in other EU or domestic legislation* (Damohorský *et al.*, 2015).

The amount of direct payments is also covered for larger agricultural holdings. If the basic payment is more than EUR 150,000, the Member State must reduce this amount by 5%. Direct payments have two support schemes. The mandatory regime and voluntary regime. Under the voluntary scheme, the Member States of the European Union can decide for themselves which enterprises and agricultural production to support (for example, the coupled production aid measure).

Member States also have the possibility to transfer up to 15 % of the budget between direct and indirect (rural development program) at their discretion. (Damohorský, *et al.*, 2015)

The Single Area Payments Scheme and the Basic Payment Scheme

One of the most important items of direct payments to farmers from the European Union budget in the Czech Republic is the Single Area Payments Scheme (SAPS). This item accounts for circa 55 % of all direct payments from the European Union budget.

This system is used mainly in the post-Soviet Member States of the European Union (Czech Republic, Bulgaria, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovakia) and Cyprus. One of the reasons is that farms in these countries have a much larger average area or some other specific requirements than the western Member States of the European Union. *In the SAPS, there are no payment entitlements, the support paid is solely based on the eligible hectares declared by farmers and the level is the same for all hectares in the country.* This system should be transitional (European Commission, 2020)..

The equivalent of the SAPS in the remaining Member States of the European Union is the basic payment scheme (BPS). This system is more complex and allocates payments to farmers based on the activation of special payments entitlements and declaring eligible hectares (European Commission, 2020).

In the Czech Republic, applications for SAPS subsidies are submitted once a year, always until 15 May of the relevant calendar year. The applicant must meet several conditions, for example, a minimum area of 1 hectare registered in the Czech Land Use Register (LPIS) and proper management of agricultural land, compliance with good

agricultural and environmental conditions so-called cross-compliance conditions (State Agricultural Intervention Fund, 2020).

Greening

This additional direct European payment is part of the SAPS. This is a payment (SAPS surcharge) for farmers who follow climate- and environment-friendly practices, or more environmentally friendly practices, respectively. This subsidy has three main pillars that a farmer must comply with to receive the subsidy. Firstly, the farmer must ensure the diversity of the crops grown. Diversity helps to diversify nature, which is a beneficial phenomenon and maintains nutrients in the soil. Secondly, the farmer must ensure a sufficient ratio of permanent grassland to agricultural land. Thirdly, the farmer must set aside an area of ecological interest. According to the EU directive, this area is called the Ecological Focus Area (EFA). Examples of EFA are fallow land, boundaries, tree lines, ditches, buffer strips along waters, strips of land lying at the edge of a forest, wooded areas, and the like. Thanks to EFA, nature can regenerate or better retain water in the landscape. In the period 2015 - 2020, the EFA area is set at 5% of the total cultivated land. To illustrate, a farmer farms 100 hectares of land, then 5 hectares should be EFA (Fajmon, 2006; Procházka, 2019).

The Young Farmers Payment

Another payment (surcharge), which is part of SAPS. The purpose of the payment is to help young farmers in their early years of business and thus help to establish a strong generation of young farmers. It can be requested by natural or legal persons. The main condition is that the applicant or the founder of the legal entity is up to 40 years old and the maximum size of cultivated agricultural land is 90 hectares. In 2020, 3985 applicants applied for a subsidy under the Single Payment in the Czech Republic (European Commission, 2016; Fialová, 2021).

Voluntary Coupled Support

This support is paid from the budget of the European Union, but the Member States can adjust how and where they use this support. The support comes from the 1st pillar of the Common Agricultural Policy for the period 2015 to 2020. The aim is to accurately support

sectors or regions, where specific types of farming or specific agricultural sectors particularly important for economic, social or environmental reasons undergo certain difficulties. In the Czech Republic in crop production, the support is paid only for a certain agricultural sector: support for the production of potatoes intended for the manufacture of starch, ware potatoes, hops, fruit species with a very high workload, fruit species with a high workload, vegetable species with a very high workload, vegetable species with a high workload and sugar beet (European Commission 2020; Ministry of Agriculture of the Czech Republic 2020).

3.4.2 National level

The Member States of the European Union, including the Czech Republic, often support agriculture with other support and subsidy programs aimed at maintaining its potential, competitiveness, and the development of rural areas. These programs are paid from the state budget.

In the Czech Republic, the State Agricultural Intervention Fund, which falls under the Ministry of Agriculture, is also in charge of distributing national support programs to farmers. National subsidy programs are based on Act No. 252/1997 Coll.

In order to be able to provide national subsidies within the Common Agricultural Policy of the European Union at all, it is necessary to deal with legislation. That is why it is enshrined in Articles 107 to 109 of the Treaty on the Functioning of the EU. *The main purpose of this legislation is to ensure that State aid does not contribute to distortions of competition between the common market. These articles oblige the Member States to notify the European Commission in advance of any plans to grant or alter State aid.* (State Agricultural Intervention Fund, 2020)

- **National direct payments**

These payments usually take a similar form to European direct payments. They are also applied for in the Public Land Register (Fajmon, 2006; Procházka, 2019).

Transitional National Aids

This payment is fully paid from the budget of the Czech Republic and is intended as a complement to the European Single Area Payment Scheme (SAPS). It is currently

provided on agricultural land, cow breeding without marketable milk production, sheep or goat breeding. In the Czech Republic, this payment is usually significantly lower than SAPS. (Ministry of Agriculture of the Czech Republic, 2020)

- **National indirect payments**

In the literature, it is also possible to search for the term additional financial support. It is a set of other tools by which the state tries to support agriculture. In the crop production of Czech agriculture, it is possible to meet the following sources of support most often (Fajmon, 2006; Procházka, 2019).

The Green Diesel

Entities doing business in the Czech Republic in agricultural primary production may, following the law, apply Section 57 of Act No. 353/2003 Coll. refund of excise duty on mineral oils. Applicants shall prove the right to a tax refund by proof of purchase of fuels and records of their actual consumption or records in the Land Public Information System (LPIS). Applicants apply for a refund of part of the excise duty in the given calendar year, otherwise, the right expires. In 2020, taxes accounted for approximately 59% of the price of diesel. These taxes consist of value-added tax and the already mentioned excise duty, which is higher. The excise tax was fixed at CZK 9.95 / liter and EUR 0.37 / liter, respectively, which is approximately 31% of the sales price of diesel at petrol stations. Farmers could apply for a refund of part of this amount under the green diesel aid. The amount of support is also determined according to whether or not farmers use diesel with a bio-component blend (Customs Administration of the Czech Republic, 2020).

Support and Guarantee Farm and Forestry Fund (PGRLF)

This fund has the legal form of a joint-stock company, where it owns 100% of the shares of the Czech Republic, it is an instrument of the Czech Ministry of Agriculture, which is to provide national support programs with low costs. The company was registered in the Commercial Register based on a government resolution on 16 September 1993. At present, this joint-stock company operates independently of the Ministry of Agriculture and is represented by the Minister of Agriculture of the Czech Republic. The fund provides support in the form of interest subsidies on commercial loans, financial support for insurance, the provision of guarantees, loans, and credits, or the provision of funds to

reduce the principal of loans. At present, this fund offers thirteen programs for primary agricultural producers, processors of agricultural production, and entrepreneurs in the field of wood processing and forestry. Since its establishment on 31 December 2020, the fund has helped farmers draw loans totaling 207 billion Czech crowns (7.6 billion euros) and is thus one of the most important subsidies in state aid. The applicant applies for this support via the web portal of the support and guarantee of the agricultural and forestry fund.

The Farmer program is given for illustration. It is one of the 13 mentioned programs and serves to create preconditions for the development of agricultural primary producers, or investments in the purchase of equipment for agricultural primary production, such as grain cleaners, cultivators, cultivators, and so on. Under the Farmer program, the state subsidizes part of the interest on the loan (gross aid intensity is a maximum of 50 % for eligible investments) and guarantees the amount of interest on the loan. It was set at 2.5% p.a. in 2020 (Support and Guarantee Farm and Forestry Fund, 2021).

4 Research Methodology

This chapter describes the methods of creating and applying a questionnaire survey, its subsequent distribution, and analysis. The selection of the target group of respondents is described.

4.1 The process of creating and maintaining a questionnaire survey

Before the questionnaire survey could be created, it was necessary to be sufficiently acquainted with the issue of agricultural subsidies. Theoretical background was obtained by studying the literature, but it was necessary to provide resources from practice sources. Therefore, preliminary research was carried out first.

4.1.1 Preliminary research

Before quantitative were collected, the preliminary research took the form of qualitative analysis of the semi-structured interview. The meeting was held with three young farmers farming and took place partly in person, partly on an online platform (Skype). Their answers were recorded and then analyzed and based on and divided into groups according to similar expressions. The most frequently recurring terms were identified and further integrated into the main questionnaire survey within the questions. Questions of the preliminary research are in the appendix of this work.

4.1.2 Compilation of the questionnaire

An intuitive, user-friendly Google forms platform was chosen to create the questionnaire survey. The following types of questions were used in the questionnaire, depending on the answers required:

- Open questions
- Closed questions
- Checkbox questions
- Likert scales

- Semantic differential
- Net Promoter Score (Survio, 2021)

A total of 54 questions were created, which were divided into five sections according to sub-objectives.

Table 5 - Structuring the main questionnaire survey

Section	Partial objective	Questions	Time
Information on respondents	Obtaining basic data so that the following parts of the questionnaire survey can be classified and analyzed in more detail	14	5
Information on drawn subsidies and financial resources	Finding out which subsidy and support or financial programs the respondent uses in crop production and how he perceives their fairness and competitiveness in the Czech Republic	17	10
Information on the effect of subsidies on the economic result of the company	Finding out how respondents perceive the influence of subsidy, support, or financial programs on the economic result of their business	9	5
Information on the global perception of European subsidies by farmers	Finding out how respondents perceive the European redistribution of subsidies from a global perspective in terms of competitiveness and fairness in comparison with other countries of the European Union	7	5
Information on the attractiveness	Finding out how respondents perceive the attractiveness and opportunities for young people in agriculture and how respondents perceive the	7	5

s and availability of agricultural education for young people	relationship of society to agriculture		
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Source: Author, 2021

Table 5 lists the individual sections and briefly describes their sub-objectives to be achieved. The table also shows the number of questions in each section and the estimated time. The questions of the questionnaire were also adjusted and reduced to this form based on regular consultations with the supervisor from Lyon and Prague.

4.1.3 Pilot testing

After the creation of the main questionnaire survey, its pilot testing was launched, which lasted one week. During which the beta version of the questionnaire was sent by e-mail to selected testers who tested the functionality, comprehensibility, and intuitiveness of the main questionnaire. Based on the feedback from a total of 9 testers who completed the questionnaire, several significant adjustments were made to it. Some questions have been shortened or reworded. During the pilot testing, it was further found that it takes approximately 25-30 minutes to complete the questionnaire, which corresponded to the original time estimate in table 5. Then the questionnaire was ready for final distribution.

4.1.4 Starting the questionnaire

Data collection began on 7th April 2021 and lasted approximately three weeks. The CAWI method, or Computer Assisted Web Interviewing, was used to collect data. This is a method of recruiting respondents. Questionnaires are usually distributed through web links that make the questionnaires available. (Mediaguru, 2021). In the case of this diploma thesis, the link was targeted and sent to two relatively narrow groups of private farmers farming in crop production - more in the chapter Selection of respondents. A total of 109

respondents completed the questionnaire. Unfortunately, it was not possible to determine the bound rate of how many respondents left the questionnaire before sending the questionnaire. Theoretically, it could be relatively high because the questionnaire was quite long, which could discourage respondents.

4.2 Choice of respondents

In connection with the introductory research question on how farmers perceive subsidies, the reference to the questionnaire survey was purposefully sent to two closed groups, where data were collected. One of these groups was the registered Society of Young Agrarians of the Czech Republic (Společnost mladých agrárníků ČR, z.s.), the other group was the Association of Private Agriculture of the Czech Republic (Asociace soukromého zemědělství České republiky). In both cases, a contact person from each group was contacted and sent a link to the email domains of the members of the two research groups. Last but not least, the link was sent manually to several individual farmers.

The Society of Young Agrarians of the Czech Republic is a voluntary non-political association, which was founded in 1999 and which brings together and supports mainly young farmers, rural development, and modern agriculture in the Czech Republic and abroad. It also provides information and advisory activities for farmers in the form of various professional seminars and training courses alike. It also seeks to promote their interests to state or non-state actors. In total, this association has about 200 active members. Figure 1 shows the logo of the Society of Young Agrarians of the Czech Republic.

Figure 1 - Logo of the Society of Young Agrarians of the Czech Republic



Source: Society of Young Agrarians of the Czech Republic, 2021

The logo of the Association of Private Agriculture of the Czech Republic can be seen in figure 2. It is a voluntary organization of private farmers in the Czech Republic. The number of members of the Association of Private Agriculture of the Czech Republic is 6,500, currently associated in 41 regional and 7 member organizations throughout the Czech Republic. The members of the association manage about 40 percent of agricultural land in the Czech Republic and contribute about a quarter to the total creation of agricultural GDP. The activities of this association take place at the international, national level and the aim is to support private agriculture as such and promote its interests. It organizes, among other things, many different events and also publishes a wide range of printed supporting information materials.

Figure 2 - Logo of the Association of Private Agriculture of the Czech Republic



Source: Association of Private Agriculture of the Czech Republic, 2021

Thus, the data were collected together in a group of about 7,000 private farmers. However, the real number of respondents concerned by the questionnaire will be even lower, as the questionnaire was focused purely on crop production. From this number, it is therefore very difficult to filter the exact number of persons concerned by the questionnaire, because it also includes farmers who carry out livestock production or a combination of crop and livestock production.

In any case, a total of 109 answers of respondents were collected, which, given the total length of the questionnaire and the number of farmers farming in crop production in the Czech Republic, can be considered a sufficient sample for the elaboration of the master thesis.

5 Practical Part

The practical part of this work is based on the evaluation of quantitative analysis or questionnaire survey created in the online platform Google Forms. Farmers engaged in crop production in the Czech Republic took part in the questionnaire survey.

Descriptive statistics such as mode, median, mean, variance, standard and mean deviation, and so on are used for evaluation. For better visual display, pie, bar, and other graphs created in the Google Forms platform itself or Microsoft Excel software are used. The result of the evaluation and subsequent discussion should be the answer to the originally formulated research questions:

- R.Q.1: What European and national subsidy programs are used the most for agricultural crop production in the Czech Republic?
- R.Q.2: How do the subsidies draw economically affect the crop production and lives according to Czech farmers?
- R.Q. 3: How do Czech farmers perceive the current subsidy system as a whole?
- R.Q.4: How do Czech farmers perceive the position of agriculture in today's society?

It should also be noted that only some of the answers to the questionnaires that appear to be relevant to the topic were used. The others served only to consolidate knowledge of the main issues.

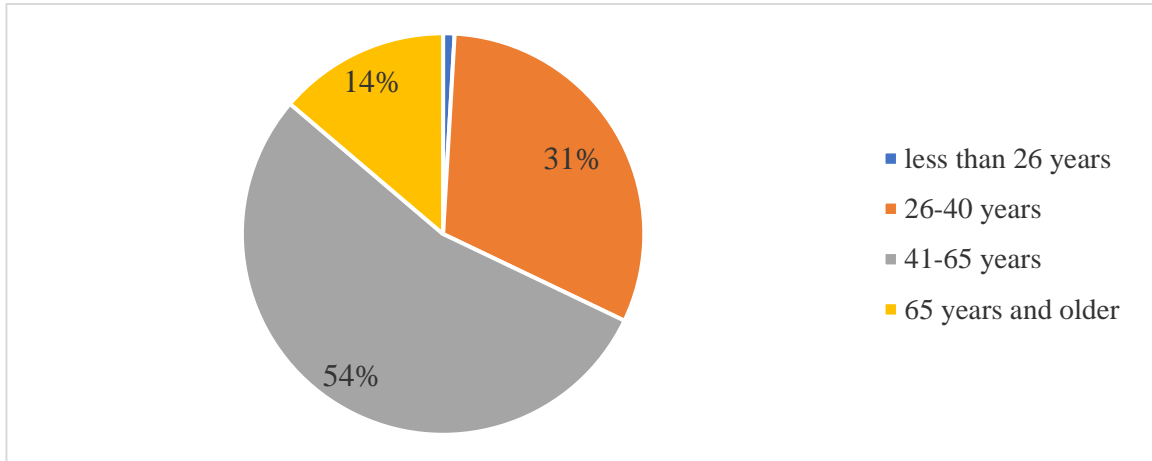
5.1 Respondents and their farms

The data for the processing of this chapter were obtained by the first section of the questionnaire survey, in which the respondents filled in information about their farm and their management.

5.1.1 Personal data of farmers

The most frequent age interval out of 109 respondents was the group of 41-65 years with a frequency of 59 out of 54.1%. The second most common age group with 31.2% is 26-40 years. The least represented group was under 26 years of age.

Chart 5 - Age representation of respondents in percent (n = 109)



Source: Author, 2021

Pie chart 5 shows the percentage of age groups. Up to 40 years of age, according to the legislation of the European Union and the State Agricultural Intervention Fund, applicants can apply for support for Young Farmer (State Agricultural Intervention Fund, 2021). Only 33% of all respondents completed the questionnaire for farmers under the age of 40.

More than half (57.4%) of farmers started farming in such a way that they were brought to agriculture by their ancestors or after they took over this craft, followed by the possibility (23.1%) that the respondent had some previous experience with agriculture (school, employment, courses) and subsequently started farming. The rest of the farmers (17.6%) started farming without previous experience, they built their business from scratch.

The majority of 78 out of 109 respondents stated that they have been in business for 11-40 years, while the largest group of 36 respondents has been in business for 26-40 years. Only 12 of them stated that they start or farm within 5 years.

5.1.2 Farm locations, size, and production

The Czech Republic has a total of 14 territorial self-governing units - regions. One of the regions is the capital city of Prague (Czech Statistical Office, 2019). A total of 108 respondents filled in the questionnaire regarding the location of farms in the questionnaire. Most farmers came from the Vysočina region, a total of 19. It was followed by 16 farmers in the Central Bohemian Region and the South Bohemian Region. At least 1 farmer came from each region, ie the answers were obtained to a greater or lesser extent from the entire territory of the Czech Republic, which can be seen in figure 3.

Figure 2 - Number of farms that participated in the questionnaire survey, by region of the Czech Republic



Source: Author, 2021.

The frequency of responses according to individual regions approximately correlates based on comparison with statistical data with the regions with the most cultivated land in table 6. In 2014, according to the Czech Statistical Office, the largest area of agricultural land (arable land, meadows, possibly pastures, orchards, and vineyards) was managed by 16% of the Central Bohemian Region with Prague, followed by the South Bohemian Region with 12%, the South Moravian Region and the Vysočina Region with 10%. The Liberec and Karlovy Vary regions have the least percentage of cultivated

agricultural land - both with 3%. This is typical here because these regions are characterized by a mountain landscape unsuitable for crop production. The least questionable answers from these regions also come from the questionnaire survey. One of each (Czech Statistical Office, 2014).

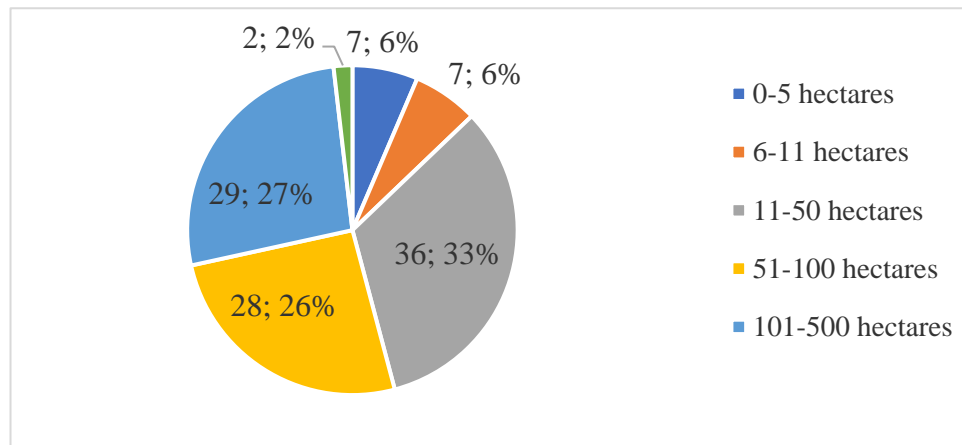
Table 6 - Comparison of the share of regions in managed agricultural land of the Czech Republic and the answers obtained from the questionnaire survey

Region	Percentage of cultivated agricultural land of the Czech Republic	Number of answers obtained
South Bohemian	12	16
Vysočina	10	19
South Moravian	10	6
Plzeň	9	13
Pardubice	7	7
Hradec Králové	7	6
Olomouc	7	7
Moravia-Silesia	6	7
Ústí	6	5
Zlín	4	4
Liberec	3	1
Karlovy Vary	3	1
Total	100	109

Source: Czech Statistical Office, 2014; Author, 2021

As for the size of the farms that participated in the questionnaire survey, none was larger than 1000 hectares appeared in chart 5. The most common answer was that farmers farm 11-50 hectares with 33%, the second 101-500 hectares with 26.6%, and the third 51-100 hectares with 25.7%. The most frequently interviewed farmers farm on an area from 0 to 100 hectares as part of crop production. 71.5%, or 78 respondents, answered on this scale.

Chart 6 - Farm size ranges along with frequency and percentages (n = 109)



Source: Author, 2021

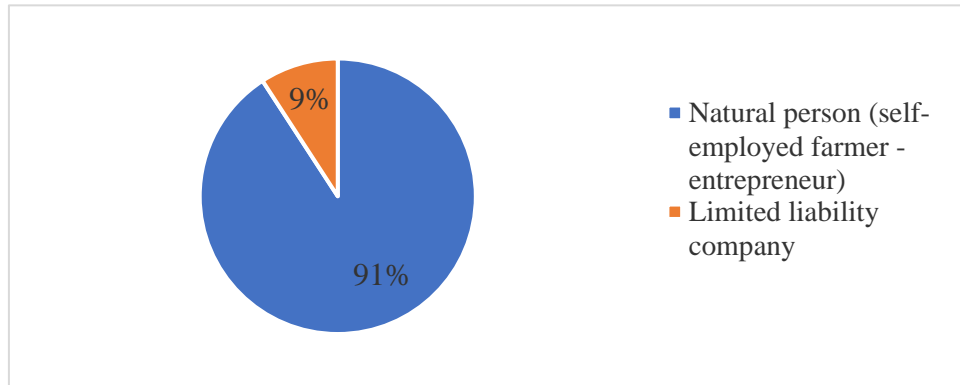
Impressive parameters are also in the issue of land ownership. More than half of farmers (57.8%) own land up to a maximum of 50% of the area and rent the remaining land and pay the rent or real. The most frequent response was up to 40% owned and up to 60% rented and up to 20% owned and 80% rented. Each variant with 21.1% response. In contrast, 31.2% of farmers said they owned up to 80 or 100% of the land they farmed. Farmers rent land more slightly than own it. Although the difference is not so marked.

On average, over 96% of these farms annually grow up to 10 types of useful crops in crop production, of which 78% only to 5 useful crops. According to farmers' answers, these are clearly in descending order cereals (grown by 85 farmers out of 108), fodder (73 farmers), oilseeds (49 farmers), legumes (40 farmers), and root crops (32 farmers). Among the relatively unusual crops, for example, lavender and cumin (1 farmer) appeared in the responses.

5.1.3 Legal form agricultural business and labour force

In this part, the results turned out quite clearly. Even according to the target groups to which the questionnaire was divided, the result could be expected. A total of 91% of farmers run their business as individuals, the remaining 9% have their farms as a limited liability company can be seen in chart figure 7.

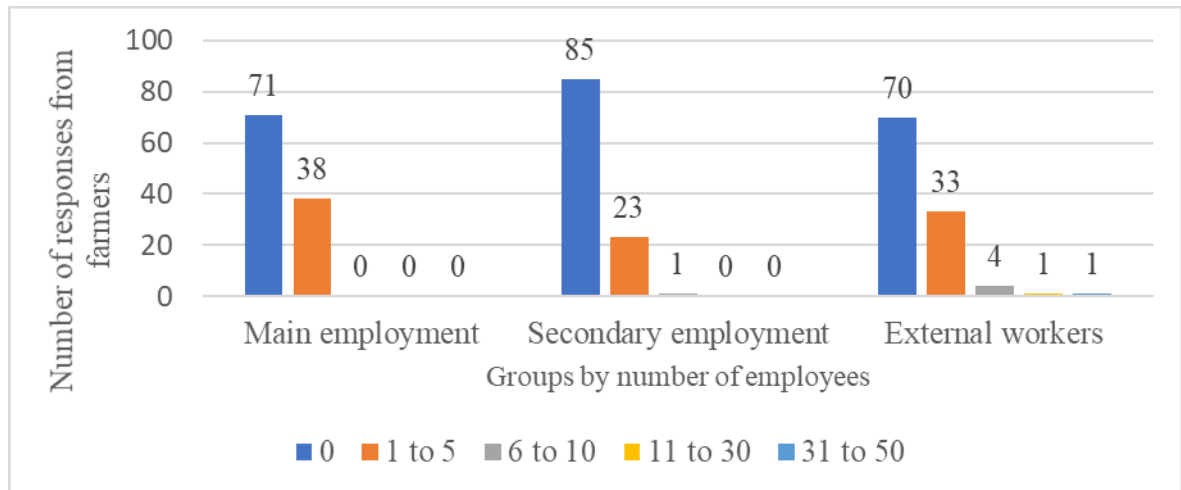
Chart 7 – Legal form of business of farmers (n = 109)



Source: Author, 2021

The results of the survey are also shown in chart 8 that for most farmers (86.2%) there is a significant share of work of family members. On the other hand, they do not employ any full-time employees (65.1%), part-time employees (78%) or external workers who perform work under a performance agreement or a performance agreement (64.2%) This type of employment is typical, for example, for seasonal work, summer jobs and so on.

Chart 8 - Employment conditions according to the number of groups of employees and the answers of farmers (n = 109)



Source: Author, 2021

The rest of the farmers employ 1 to 5 employees, respectively 34.9% in the case of the main employment relationship and 21.1% in the secondary employment relationship, and 30.3% as external workers. Only one farmer probably employs 6 to 10 part-time

employees. Most employees are allegedly employed by farmers as external workers. One respondent even employs 31 to 50 external workers.

5.2 Drawn subsidies by farmers

In this part, the aim was to find out which subsidies do farmers receive at national and European levels and how they perceive their level of adequacy.

5.2.1 Received subsidy programs and payments from the European Union

When asked what direct and indirect payments from the Rural Development Program were expressed all 109 farmers. Two farmers stated that they did not draw any European subsidy. Of the direct payments, 107 farmers use the single area payment. In addition, another 93 people identified landscaping, followed by voluntary support linked to production (31 respondents) and Young Farmer (18 respondents). Significantly fewer farmers already benefit from indirect payments from the Rural Development Program. Most M10 Agri-environmental-climate measures (54 respondents), M13 Payments for areas with natural or other special constraints (50 respondents), M11 Organic farming (26 respondents).

There are significant differences in the price ranges indicated by farmers for receiving from this aid per hectare of arable land. Two respondents stated that they do not receive any European subsidies. 31.2% of farmers receive from 1 to 5,000 CZK (from 0.1 to 192 EUR) per hectare. From 5,001 to 7,000 CZK (from 192.1 to 269 EUR) then 35.8% of farmers. Thus, the majority of 67% of farmers receive from CZK 1 to CZK 7000 (from 0.1 to 269 EUR) per hectare. However, 15.6% of farms receive from 10,001 to 25,000 CZK (from 385.1 to 962 EUR) per hectare of cultivated land on European payments.

Regarding the coverage of total costs per hectare by these payments, farmers most (34.9%) state that European subsidy programs and salaries cover their total costs by up to 40%. Another 31.1% state that up to 20% of total costs and 13.2% of farmers state up to 50% of total costs. It can therefore be stated that for the majority of 79.2% of farmers, European support and subsidy programs cover up to approximately 50% of their costs. However, it is interesting that the degree of adequacy of these subsidies was marked by

most farmers as 5 (1 is the least and 10 the most). From level 5, it evaluates approximately descending in the same way on both sides.

According to the answers, farmers think strongly disagree (39.4%) and rather disagree (27.5%) with the fact that in the Czech Republic a fair assessment of entitlement (fulfillment of criteria and requirements) to obtain European indirect payments (project payments from the Development Program rural areas) between farms, regardless of their size, position and the like.

5.2.2 Received subsidy programs and payments from the national budget

In the area of national direct subsidies, 32.1% of farmers do not draw them. By contrast, 69.7% of farmers benefit from transitional national support. Their amount reaches the most for 27.8% of the value from 1 to 100 CZK (from 0.1 to 3.85 EUR) per hectare. For 25% of farmers from 101 to 200 CZK (from 3.86 to 7.7 EUR) per hectare and 201 to 300 CZK (from 7.71 to 11.5 EUR) per hectare, 7.4% of farmers led. For the majority of 60.2% of farmers, the value of national direct subsidies ranges from CZK 1 to 300 per hectare. Which are significantly lower numbers than in the case of European subsidies. The assessment of the degree of sufficiency corresponds to this. On a scale from 1 to 10 (where 1 point means the least and 10 points the most), 37.3% of farmers stated 1 point, 18.6% gave 2 points, 14.7% gave 3 points.

Of the national indirect payments, 84.4% of farmers use Green Diesel and 69% of farmers use the Support and Guarantee Fund for Agriculture and Forestry. No other indirect payments were identified. Regarding fairness in assessing and meeting the criteria for obtaining indirect national subsidies, regardless of their size and position, most (35.8%) respondents tend to agree that it is fair. Furthermore, for most farmers, consisting of 75.2%, commercial sources of financing, such as loans from banking institutions, leasing, and the like, play an important role in the running of their economy.

5.2.3 Application for national and European subsidies

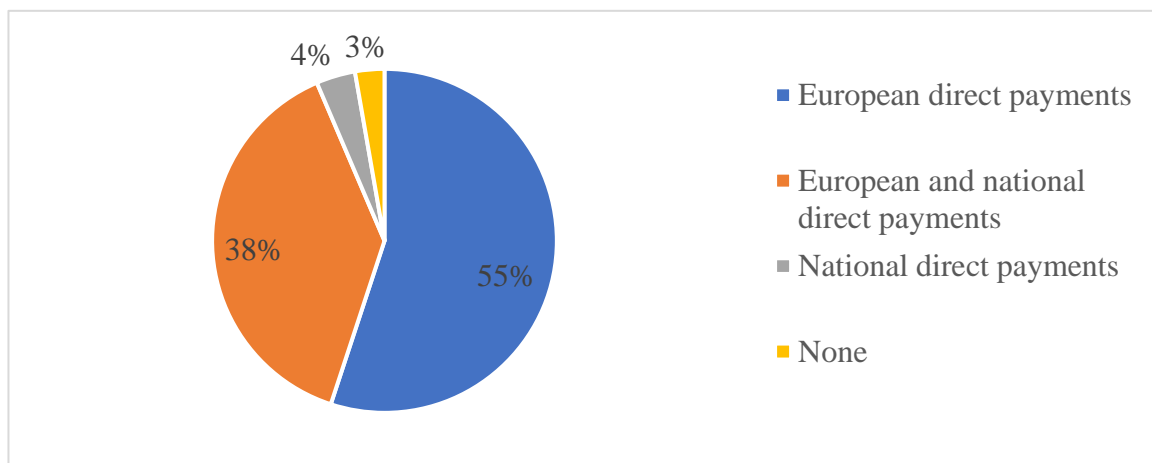
As explained in the theoretical part of this work, farmers apply for national and European dating programs in the public land register (Land Parcel Identification System). The questionnaire survey also concerned how respondents perceive the level of digitization

of public land, or how much it is possible to communicate and work with authorities electronically. Another issue was the evaluation of the bureaucratic complexity of applying for grant programs.

The grading again took place on a scale from one to ten, where ten means the best rating. The degree of digitization of the public land register was assessed relatively positively by farmers, with most responses remaining in the better half. The number of points 8 and 9 received the most responses (each option 21.1%, a total of 42.2% of respondents).

On the contrary, the legislative and bureaucratic complexity of applications for subsidies was marked relatively low by farmers, ie poorly. Most responses ended in the worse half of the scale and most responses were given by the number of points 3 (17.4% of farmers), 65.9% of farmers voted until the number of points 5.

Chart 9 - Comparison of the importance of European and national direct payments for farmers' farming (n = 109)



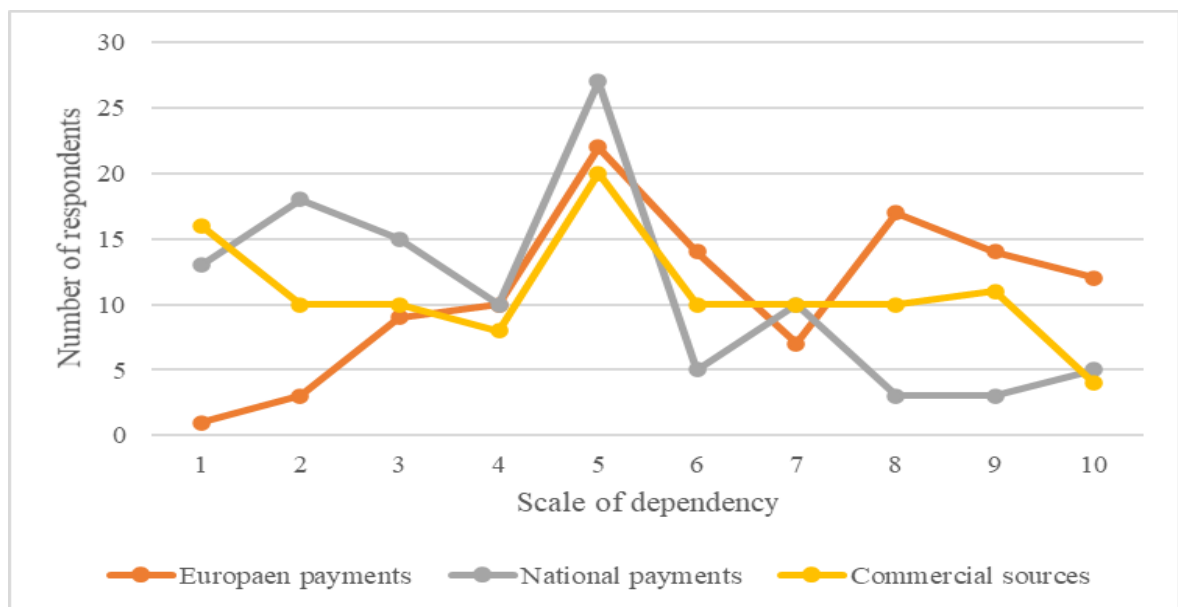
Source: Author, 2021

Graph 9 shows the importance of direct national or European payments to farmers. It is clear from the graph that European direct payments are particularly important for the management of 55% of farmers, and for 38.5% of farmers national and European direct payments are important for their management (without them it would not be possible to operate). The rest of the farmers said that they did not receive direct payments or that national direct payments were more important to them, but that they were a minority.

5.3 Subsidies and its impact on the economic result of farms

This section aimed to find out how farmers assess the strength of the link between European subsidy payments, national subsidy payments, or other commercial sources of financing (such as bank loans) and the economic performance of their farms on a scale of 1 to 10, with 1 being very weak. or no bond and 10 very strong or absolute bonds. In the chart 10 we can see the number of responses of farmers to individual points and their connection according to the individual financial source. For European payments, it is possible to observe an upward trend in the link. It peaks at point 5 and then decreases slightly, yet remains high. This means that farmers value the strength of the link between European payments and their outcome rather strongly. National payments have the opposite trend. It also reaches a maximum in point 5, but the trend of the link has a sharper decline from point 1, which means that for farmers national payments are more unrelated to the result of their management. Within other commercial sources of funding, the line of the trend is almost horizontal, with a slight increase again around point 5, which may mean a significant difference in the strength of the link between farmers.

Chart 10 - Economic results depending on various financial sources (n = 109)



Source: Author, 2021

The questions concerning economic ties were deliberately followed by supplementary questions with Likert scales with an even number of options and a neutral

answer as to whether farmers would be able to achieve economic viability of their economy under current market conditions without some kind of financial support or resources. Without European payments, 41.3% of farmers would certainly not be able to reach profitability. Option rather no than 34.9% of respondents. Altogether, 76.2% of respondents answered in the negative. The option rather yes was indicated by 20.2% of respondents and definitely yes by 3.7% of respondents.

On the other hand, the answer to the same question concerning national payments was answered by 43.1% and certainly by 11% of farmers. The option was rather not indicated by 29.4% of respondents and certainly not only by 12.8%. 3.7% of respondents to the question indicated a neutral possibility to this question. The larger half, consisting of 54.1% of respondents, therefore stated a positive possibility that it would be able to achieve profitability without national payments.

Without commercial sources of financing (such as bank loans), 24.8% of farmers would certainly not be able to reach profitability, and rather 28.4% of farmers would rather not be able to achieve profitability. The possibility was rather proved by 29.4% of farmers and the possibility was definitely yes by 15.6% of farmers, 1.8% of farmers indicated the neutral option "I don't know". The larger half, consisting of 53.2% of respondents, therefore expressed a negative opinion that they would be able to achieve economic profitability without commercial sources of financing.

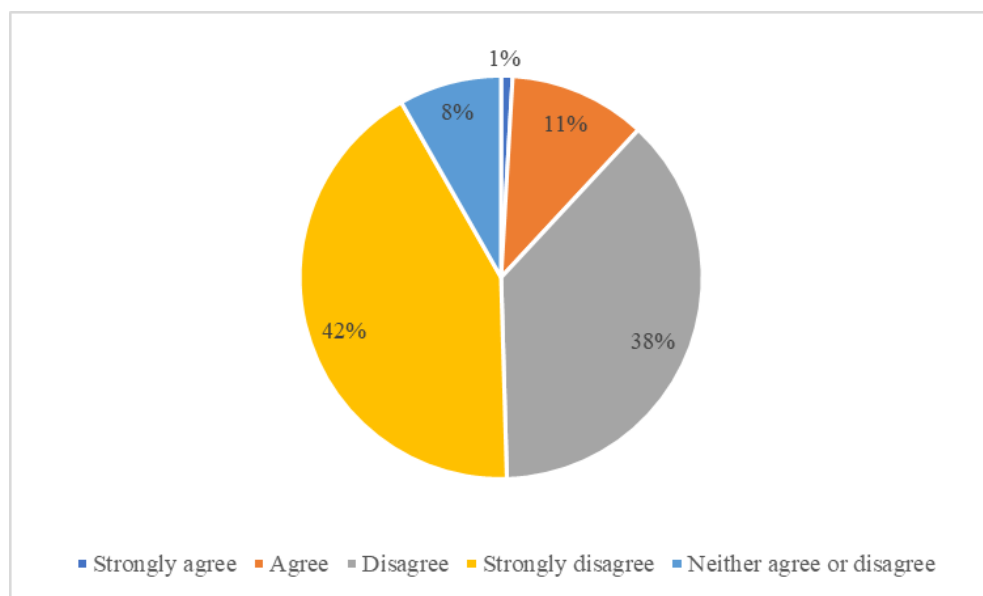
5.4 Perception of European subsidy payments from a global perspective

This subchapter aimed to determine how the interviewed Czech farmers perceive the fairness of the subsidy system within the single market and individual member states of the European Union and what subsidy programs should be created to be more favorable for them. All 109 respondents commented on all questions except the final open optional question, where only 39 answers were recorded.

Chart 11 shows the percentage distribution of respondents' views on whether the conditions of the single market and the Common Agricultural Policy between the Member States of the European Union are currently set relatively. The graph clearly shows the prevailing opinion. 42% of respondents chose the option 'strongly disagree', and 38% of respondents chose the option 'strongly disagree'. Therefore, more than 80% of respondents

think that the conditions of the single market and the Common Agricultural Policy among the Member States of the European Union are not fair. The 'strongly agree' option is only 1%, and the 'agree' option is 11% and, 8% of respondents choose a neutral answer.

Chart 11 - Scales of agreement with the fairness of the conditions of the single market and the Common Agricultural Policy between the Member States of the European Union



Source: Author, 2021

This topic was followed by another question, which should specify the issue more. Respondents were thus given a semantic differential to express their views on individual types of support and, using Likert scales, to indicate how fair their specific subsidy programs would be. According to the obtained data, the subsidy programs are arranged in descending order:

- European direct payments (negative reactions: 53.21%; positive reactions: 34.86%, neutral: 11.93%),
- National direct payments (negative reactions: 61.47%; positive reactions: 25.69%, neutral: 12.84%),
- National indirect payments (negative reactions: 60.55% ;positive reactions: 22.94%, neutral: 16.51%),
- European indirect payments (negative reactions: 65.14%; positive reactions: 17.43%, neutral: 17.43%).

The answers of the interviewed farmers suggest that the fairest redistributions within the European Union are direct European subsidies and then direct national subsidies. On the contrary, the respondents are least fairly evaluating the redistribution of national indirect subsidies and European indirect subsidies. At the same time, the most unfair option is the highest percentage of the neutral option "I do not know." So it is possible that farmers may not be so sure of the answers. Perhaps farmers call indirect subsidies the most unfair, maybe the information found in the literature in creating the theoretical part. For national indirect (and direct) subsidies, there can be significant differences between the Member States of the European Union because the money flowing from national budgets is often less traceable and controllable. Moreover, in many cases, states indirectly subsidize their agriculture and the budgets of ministries other than the Ministry of Agriculture. As far as European indirect subsidies or project payments from Rural Development are concerned, there is probably a complicated assessment of entitlement to subsidies and fulfillment of conditions. Part of this questionnaire section was also a multiple-choice question. Farmers had to identify the positives and negatives or challenges of the Common Agricultural Policy and the European Union's single market. The maximum number of options that could be marked was three or wrote their point. In the table 7, it is possible to see the most numerous possibilities of positives and challenges that have been recorded. The difference is also the designation of the option 'none.' It was 15.6% for positives and only 4.6% for calls with a similar number of records. It could be also indicated by a higher percentage of records of answers, which are in the table behind individual positives or challenges. It may indicate that farmers seem to see more challenges for the European Union.

Table 7 - The biggest global positives and challenges of the Common Agricultural Policy of the EU and the European Union according to farmers (n = 109)

Positives	Challenges
Support for investment in more modern technology and more advanced production technology (42,2%)	Excessive administrative burden (59,6%)
Pressure on environmentally friendly production and environmental protection (30,3%)	Competitiveness is distorted by national subsidies from the individual Member States of the EU, which are not properly regulated (45,9%)
International cooperation - easier export of goods to EU member states, et cetera (30,3%)	Unfair redistribution of subsidies among the Member States of the European Union in general (39,4%)
Greater opportunities to implement and develop your own business (23,9%)	Large differences in farms (for example in size - given the historical development) among the Member States of the European Union (38,5%)
Pressure for a higher quality of production and final products (22,9%)	Disproportionate subsidies to agriculture by the European Union, which distorts the entire system of the European Union's single agricultural market (21,1%)

Source: Author, 2021

Part of this questionnaire section was also an open question, in which farmers could describe in writing what subsidy programs should be created to make the European agricultural system work and at the same time fair. This optional question was filled in by 39 out of 109 respondents, which is 42.5%. Subsequently, a qualitative analysis of the responses was performed, which resulted in two most recurring suggestions:

- Do not create any subsidies, or significantly reduce them (7x; 18%)
- Area capping of subsidies (11x; 28%)

In connection with the abolition or significant reduction of subsidies, farmers most often mention hand in hand the increase in commodity prices and tax cuts. According to some opinions, it would lead to filtering out farmers, who are just parasitizing on the subsidy system. It would be shown who farms appropriately and efficiently. A reduction in the tax burden would lead to an increase in purchasing power, covering the rise in agricultural commodity prices. It would also reduce the extensive bureaucratic apparatus associated with the redistribution of subsidies and forces that artificially move the purchase price of agricultural commodities.

According to the most frequent answers, the comprehensive capping of direct subsidies should take place up to a maximum of 100 hectares of cultivated land. The reason is that large farms (which are many times more extensive in the Czech Republic) receive the same contributions per hectare as smaller enterprises. It can be unfair, according to many, because the farmers surveyed state that large farms have lower costs and economies of scale and therefore have significantly higher profits.

5.5 Farmers, their position in today's society, and young people in agriculture

The selection of answers revealed from farmers how they perceive the position of young people in agriculture or how they feel the situation in agriculture in today's Euro-American society.

5.5.1 Farming and young people

Respondents were asked whether work in agriculture or crop production is currently attractive enough for young people. A total of 29.4% strongly disagree, and 51.4% disagree that crop production would attract young people. Thus, a total of 80.8% of farmers express a negative attitude. Only 1.8% strongly agree with this idea, and 16.5% of respondents agree. At the same time, 37.6% strongly disagree, and 37.6% disagree with the opinion that there would currently be sufficient funding opportunities, for example, for the purchase of equipment, real estate, land for young people who would be interested in starting crop production. The majority, therefore, expressed a negative opinion.

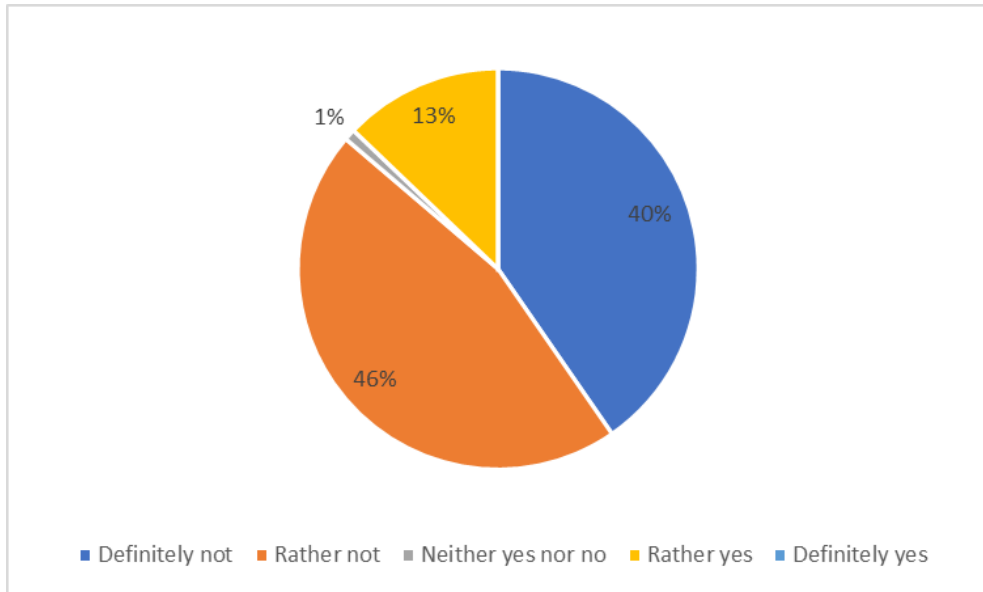
Furthermore, a total of 75.3% of farmers believe that young farmers are disadvantaged in the market, for example, a weaker bargaining position with suppliers and customers, lack of experience, inaccessible acquisition of their land, and et cetera.

On the contrary, most respondents were optimistic that there are currently enough training and qualification opportunities for young people who want to start farming. 14.7% of respondents strongly agreed, and 44% agreed. Altogether, 58.7% of respondents are in favour of this issue.

5.5.2 Farmers and today's society

The farmers surveyed also commented on the relationship between agriculture and society. It is displayed in chart 12. According to the questionnaire results, 78% think that the current lay society perceives farmers and agriculture, precisely 57.8% of farmers think negatively and 20.2% strongly negatively. An interesting fact is that no farmer marked the option strongly positively. The rest of the 19.3% indicated the option positively, and 2.8% of farmers neither negatively nor positively. Farmers commented even more negatively on whether the lay public currently values the work of Czech farmers. A total of 86.3% of farmers think not. From 45.9%, rather not, and 40.4%, the option definitely not. Moreover, again, there was no option of a strong positive.

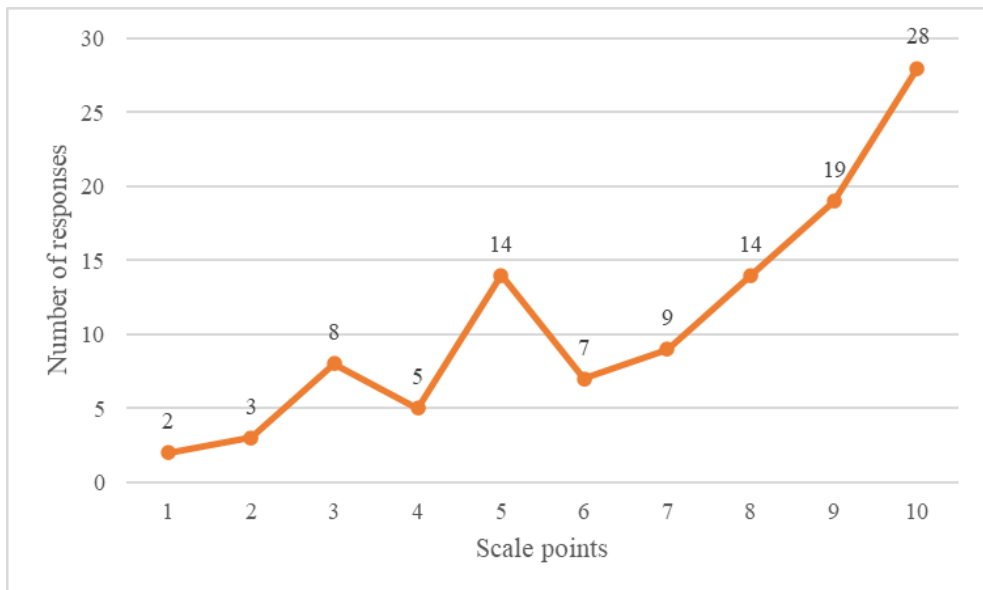
Chart 12 - Farmers' answers if they think that today's lay society values the work of Czech farmers (n = 109)



Source: Author, 2021

Finally, farmers were subjectively assigned on a scale of one to ten the number of scale points (where one means insignificant and ten very significant). The importance of agriculture in today's Euro-American society can be seen in the chart 13.

Chart 13 - Importance of agriculture according to the number of responses from farmers (n = 109)



Source: Author, 2021

As might be expected, there are more responses to the right of the focus of value. Scale point nine received the most 28 responses from 109 farmers. The following most common answer was the number of points nine, eight, and six. The average scale point is 7.25. A total of 14 farmers answered a moderate scale point five. Farmers are therefore more convinced that agriculture is still essential today.

5.6 SWOT Analysis

To better evaluate the most important findings, a SWOT analysis was created based on the questionnaire survey results, which identifies the strengths and weaknesses of the selected company within the strategic analysis. In this case, the SWOT analysis is created from the perspective of Czech farms operating in the current subsidy system of agriculture. The SWOT analysis is captured in the figure 4 in two views. One is an internal view of the strengths and weaknesses of the farm, and the other is an external view.

Figure 4 - SWOT analysis from the point of view of a Czech private farm in the context of the current subsidy system (n = 39)

	Positive	Negative
INTERNAL	STRENGTHS	WEAKNESSES
	1 Strong relationship to farming and agricultural land	1 Pressure on larger area of farms
	2 Long experience in farming	2 A significant percentage of leased land
	3 Share of labour from family members, farmers mutual assistance	3 Dependence on the purchase prices of agricultural commodities
	4 Coverage of costs per hectare of cultivated land	4 Dependence of farming on the subsidy system
	5 Investments in more modern technology, greener farming	5 The disparity between drawn national and European subsidies
	6 Degree of digitization of the subsidy application process (LPIS)	6 High bureaucratic complexity of the subsidy application process
	7 Willingness to cooperation to achieve better purchase prices	7 Unfairness in redistribution of indirect support at the national level
EXTERNAL	OPPORTUNITIES	THREATS
	1 Possibilities of education in agriculture	1 Varying amounts of national support in Member States of the EU
	2 International cooperation, such as export of agricultural products	2 Different entitlements to receive European indirect support
	3 Increasing competitiveness in the European agricultural market	3 Significant differences in farm acreage across the EU
	4 More job opportunities in the European countryside	4 The disparity in the production costs in the EU
	5 Standardization of production processes and technologies	5 Low interest in agriculture from politicians and society
	6 Agricultural development and ecology in the EU	6 Long-term financial unsustainability of the European subsidy system
	7 The repuration of farmers of European direct payments	7 The insufficient new young workforce

Source: Author, 2021

An internal view means strengths and weaknesses arising from the farm itself or at the national level, while an external view means essentials from the European level.

Strengths are the most frequent favourable stimuli from the questionnaire survey in the context of the European subsidy system and farming in the Czech Republic, on which private farmers rely or can rely. On the other hand, Weaknesses mean the exact opposite, or instead, they are negative stimuli. Opportunities mean positive influences in the European subsidy system that Czech farms use or can use. On the contrary, Threats are negative obstacles that farmers face or may face in the future.

6 Results and Evaluation

Within this chapter, the achieved results are further processed, and the research questions formulated at the beginning of the research are answered.

6.1 General Overview

In the above practical part were evaluated mainly descriptive statistics of the questionnaire survey among private farmers on how they perceive the impact of the European subsidy system on crop production, which is set by the programming period 2014-2020 of the Common Agricultural Policy of the European Union from four levels. The questionnaire was attended by 109 farmers and most of them answered all the questions. In the following subchapter, the SWOT analysis summarizes the essential points of the survey from the perspective of private farmers.

Below, by evaluating all the results achieved so far from the preliminary research, the practical part, and the SWOT analysis, all four research questions are answered, which were formulated at the beginning of this diploma thesis.

6.2 Evaluation of Research Questions

6.2.1 Research Question 1

- What European and national subsidy programs are used the most for agricultural crop production in the Czech Republic?

Private farmers operating in crop production in the Czech Republic draw national direct and indirect payments and European direct and indirect payments.

European direct payments play the most critical role for the vast majority of them, namely the Single Area Payment Scheme (SAPS) and Greening. Of the eligible payments of the Rural Development Program, which take direct payments, the most important is the M10 - Agri-environmental - climate measure. However, only half (54 out of 109 farmers) deny it. For most farmers (84 out of 106 farmers), on average (together with the remaining payments), these payments, which take the form of direct payments, cover up to 50% of the cost per hectare of arable land. Farmers evaluate these payments relatively sufficiently.

The equivalent of European direct payments in the Czech Republic are national direct payments paid from the state budget, most of which (76 out of 109 farmers) receive transitional national support, but at the same time agree that this support is very insufficient. In terms of one hectare of arable land, these payments are approximately 50 times lower than European direct payments and entitlement payments from the Rural Development Program.

In terms of indirect payments, only about a third of respondents draw European project payments from the Rural Program, the most important of which is measure M04 - intangible investment assets (35 out of 109 farmers). Many more farmers draw on national indirect payments, namely Green Oil (92 out of 109 farmers) and the Support and Guarantee Fund for Agriculture and Forestry (76 out of 109 farmers).

In conclusion, it can be assessed that actual payments drawn by Czech private farmers, as they state, are European direct payments. They also show a strong dependence on these payments in connection with the financial result of their farms. Indirect payments are national indirect payments, which draw significantly more farmers than European indirect payments, which are project payments from the Rural Development Program. One reason may be more complex administration when applying and higher unfairness in assessing the criteria for indirect European indirect payments as reported by farmers. The figures show that national indirect payments are more accessible and probably more critical for responded farmers.

6.2.2 Research Question 2

- How do the subsidies draw economically affect the crop production and lives according to Czech farmers?

Farmers perceive the link between direct and indirect European dating and farm economic performance as relatively strong. Most (83 out of 109 farmers) would not be able to achieve profitability without them.

On the contrary, the strength of the link between direct and indirect national subsidies and the financial results of farms is assessed rather weakly to zero. On the other hand, the larger half of the respondents (59 out of 109 farmers) would instead achieve profitability without this subvention support.

From this, it is possible to summarize that the farms of Czech private farmers are economically tied to the European subsidy system, and its deviations can significantly affect farmers.

Additional note: It has also been found that various commercial sources of financing, such as loans from banking institutions, leasing of machinery and equipment and the like, are economically important for farmers' cash flows. Farmers more or less firmly state that without them, they would not be able to achieve profitability. However, these sources do not fall into the European subsidy system and are mentioned only marginally.

6.2.3 Research Question 3

- How do Czech farmers perceive the current subsidy system as a whole of European agriculture?

From the global perspective of Czech private farmers, European agriculture is perceived as most respondents perceiving the redistribution of European subsidies more or less unfairly (87 out of 109 farmers). It is also apparent from the sub-question that the main reason for this assertion appears to be the redistribution of European indirect and national direct and indirect aids in the context of the single market and the Common Agricultural Policy, presumably because in each Member State of the European Union.

Another interesting fact is that more farmers did not know the answer to the positives of the European subsidy system of agriculture than to the negatives (17 to five farmers). It may again indicate a negative attitude on the part of farmers. Among the benefits of this system, the most significant response came from investments in more modern technology and more advanced production technologies, the pressure to be environmentally friendly and to protect the environment, and international cooperation. On the contrary, the biggest challenges for the system are excessive administrative burdens, excessive subsidization by different national subsidies from the individual Member States distorts competitiveness and the unfair redistribution of European subsidies between the Member States.

Therefore, respondents have a rather negative attitude towards the European agricultural subsidy system, given by the 2014-2020 programming period of Common Agricultural Policy. Instead, it is financially unsustainable in the long run. Nevertheless, they are aware of some of its positive benefits.

6.2.4 Research Question 4

- How do Czech farmers perceive the position of agriculture in today's society?

According to the vast majority of farmers, today's secular society does not value enough work of farmers and views agriculture and farmers more or less negatively.

They also evaluate the position of young people in agriculture negatively. Firstly, according to them, work in crop production is not attractive to young people. Even for them, there are not enough financing options that the current system allows to purchase the real estate, technology, and other input capital. Moreover, those young people who already work in agriculture are significantly disadvantaged in the agricultural market by the lack of experience and position with suppliers and customers. The only positive aspect may be that more than half of farmers claim that there are enough training opportunities for young people in agriculture.

To sum up briefly, farmers perceive the position of young people in agriculture and lay society to agriculture in a significantly negative way. On the other hand, farmers perceive agriculture as significant in today's European-American society (61 out of 109 farmers gave the highest marks 8-10), which can mean a solid relationship to their work and land, determined by the history and form of their farming.

6.3 Suggestions and recommendation

The detailed analysis of the questionnaire results identified possible suggestions from private farmers, which are taken up and formulated into several proposals and recommendations, such as a theoretical policy discussion at the national and European level on changes and future shape of European Union common agricultural policy programming periods. Among them are more or less realistic recommendations, for example:

- a. **Ceiling the amount of European direct payments.** One way to support small and medium-sized private farms would theoretically be to cap the level of direct payments per hectare (SAPS) or to set a degressive form for these payments. This

means that the number of direct payments would be higher only up to a certain limited area of the farm. Above this amount, the amount of the payment would decrease, which could lead to greater competitiveness between small to medium-sized private farms and large agricultural holdings.

- b. **Significantly reduce all subsidies and at the same time reduce the tax burden on the purchasing power of buyers.** Based on the evaluation of research questions, it turned out that the European subsidy system would not be undesirable to revise and evaluate its actual impact on Czech and European agriculture. Because especially direct subsidies, according to farmers' answers, significantly affect the development of supply and demand for agricultural products. Therefore, one solution would be to reduce or abolish part of the subsidy payments, but at the same time reduce the tax burden on the population, which could level the market for agricultural commodities. At the same time, entities that abuse the subsidy system would be cut off. However, more detailed data are lacking for a more detailed evaluation of such a radical suggestion.
- c. **Reduce the bureaucratic burden of applying for aid and increase the degree of fairness in the redistribution of, in particular, indirect European payments between private farmers and large enterprises.** On the one hand, private farmers evaluate the degree of digitization of the online LPIS platform positively when applying for subsidies; on the other hand, they express a negative opinion, for example, on the legislative complexity when applying for subsidies and meeting individual criteria. In particular, the results show that larger farms have an advantage when applying. Therefore, it would be desirable to try to increase the degree of fairness or to introduce more support and information media for farmers.
- d. **Reduce differences in the amount of individual national aids among the Member States of the European Union.** Furthermore, the degree of fairness in the redistribution of national indirect and direct payments in the individual Member States is negatively assessed by Czech private farmers. Based on this, a study of expert articles found that national support varies between countries, which may give some farmers from different countries a competitive advantage. Therefore, it is recommended that national aid in the Member States be revised or, where

appropriate, adjusted so that competitiveness at the European level is genuinely fair.

However, suggestions and recommendations to extend this research are also suggested below to make the final results more representative by an extensive sample of agricultural subjects. The perception of European Union support could be similarly analyzed by Czech farmers and European farmers, or comparison could be perceived between two or more Member States:

- e. **Extend similar research to the responses of large agricultural enterprise management.** For a more accurate description of Czech agriculture in crop production, it would be desirable to obtain a perception of the European subsidy system of owners, shareholders, or managers of large agricultural enterprises. It is possible that their view would be different. Similar research could be applied between them.
- f. **Extend to include entities that affect the purchase prices of agricultural commodities.** In the research, farmers mention the pressure on prices by customers who have considerable strength in the agricultural commodity market—for example, multinational chains or large agricultural holdings.
- g. **Extend research to animal production or a combination of plant and animal production.** Research can also be extended to the perception of subsidies by farmers engaged in animal production or a combination of crop and livestock production. The situation may also be different in organic farming. Therefore, it is recommended to address this issue as well.
- h. **To carry out similar research in another Member State of the European Union compare the results.** It would be engaging to move a similar questionnaire survey to the European level and find out opinions in other member states, most probably among the member states of the Western States and the states of the former Soviet Union. Interpretation of the results could apply to European agriculture as a whole.
- i. **Research the perception of farmers by the lay population.** Farmers' answers show that they think that the lay population perceives farmers' work and agriculture negatively. On the contrary, it would be beneficial to research the perception of

contemporary agriculture by a sample of the lay population. The results could reveal some misunderstandings on both sides.

6.4 Limitation of the Research

The limitations of the research are partly based on suggestions and recommendations. Despite efforts to make research as representative as possible, there are several limitations. One of the largest is that the research was conducted among farmers, who primarily farm family members on private small to medium-sized farms with an area of about 100 hectares of arable land. However, in the Czech Republic, large agricultural enterprises manage thousands of hectares of agricultural land (for example, the media-famous agricultural holding Agrofert) as well. Therefore, it is very likely that the owners, shareholders, or managers of these farms would have a different view or be troubled by issues related to European subsidy schemes. In general, the questionnaire survey results showed that respondents often mention in their answers a certain degree of inequality between small to medium-sized farms and extensive agricultural holdings, for example, in matters of redistribution of indirect subsidies. Therefore, it is not possible to summarize the results of this diploma thesis on the whole of Czech agriculture.

The diploma thesis also deals with the state of agriculture, mainly only in crop production. The situation and perception of the subsidy system by private farmers and the management of cooperatives engaged in animal production or combining animal and plant production may also be different.

Another limitation is the Czech Republic itself, as it is a relatively small area in the European Union. Indeed, suppose the fundamental importance of European and national subsidies is to be assessed. Similarly, similar research should be carried out in the other Member States of the European Union, and the results then compared. At the same time, the programming period of the Common Agricultural Policy of the European Union is adjusted seven years before its adoption and amendment. This work relates to the programming period 2014-2020. If the future seven-year period brings significant changes, this work will no longer be current.

Last but not least, the current Covid-19 pandemic is also a significant limitation of the research. Initially, the diploma thesis was to include qualitative research with private farmers and the management of large agricultural enterprises in interviews with semi-

structured issues. Due to the significant complications associated with the pandemic, there was not enough time to conduct qualitative research. This qualitative survey could examine this issue in more detail and make the results more representative.

7 Conclusion

The aim of the thesis was to acquaint the reader with the state of Czech agriculture, respectively crop production in connection with membership in the European Union and the resulting European subsidy system of agriculture which affects agricultural production mainly by the Common Agricultural Policy in the programming period 2014-2020 and subsidy systems Member States of the European Union. The main goal of this final essay was to find out the most realistic perception of this system by farmers who actively use the European subsidy system.

Based on preliminary research and literature review, four main research questions were formulated. Those have covered farmer's perceptions of the European subsidy system from different perspectives. Once the questions were formulated a questionnaire survey was compiled, consisting of 54 questions and sub-questions, which were to serve to achieve the set of goals and sub-goals. The questionnaire survey was then electronically sent to two voluntary associations, which brought together private small to medium-sized farmer's farms. A total of 109 responses were obtained. Furthermore, the answers were analysed mainly by descriptive statistics and lastly, they were evaluated. A SWOT analysis was also created for better visual display and presentation of the results.

One of the most significant successes achieved by the research is that the responses received by respondents doing business in crop production covered all 14 self-governing regions of the Czech Republic. In addition, it also corresponded to the number of responses in the regions according to the acreage of cultivated land in those regions, which gave us added value. The author also managed to record all the most common subsidies that farmers actively use.

It was also found that the European subsidy system is economically significant for private Czech farms in the range from small to medium-sized farms. The biggest importance had European direct payments, on the other hand, the smallest importance had national direct payments. Farmers themselves perceive some of the positives of the European subsidy system, but, but they can definitely put a finger on the negatives and a certain degree of injustice, especially in the redistribution of national and European subsidies between private small to medium-sized farms and large agricultural holdings, as well as between EU member states. There is a crucial level of national payments by the individual Member States of the European Union, which is not centrally regulated.

Commercial sources of financing, such as loans from banking institutions, also play an essential role in financing farms.

However, in the context of subsidizing agriculture, despite all obstacles, private farmers still perceive agriculture as very important in today's European-American society. Despite believing that lay society generally does not consider agriculture important, it does not value farmers' work. Moreover, that agriculture is not attractive to young people. It can indicate their strong motivation for the work they do.

In conclusion, the author of the thesis dares to mention that he hopes that the research results will be extended in the future by similar research. Alternatively, it will enrich at least a small amount of academic, political, or other discussions that will raise awareness of agricultural subsidies or lead to a fairer or more effective European agriculture. Because good fertile soil has always been the most valuable thing, humanity has ever had.

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9 Appendix

9.1 Questionnaire Survey

Perception of subsidies by Czech farmers in crop production

This questionnaire is used for purpose of the diploma thesis of a student of the Czech University of Life Sciences Prague in international cooperation with the French Catholic University of Lyon. The survey is divided into four sections. The questionnaire is anonymous and will take approximately 10 minutes. Your participation in the survey will contribute to the discussion on the issue of current subsidies in agriculture in the Czech Republic. Thank you in advance for your time.

A. Basic information about respondents

1. How old are you?

- Less than 26 years
- 26 – 40 years
- 41 – 65 years
- More than 65 years

2. How many years you have been running your farm?

- 0 - 5 years
- 6 - 10 years
- 11 - 15 years
- 16 - 25 years
- 26 - 40 years
- 41 years and more

3. How did you start farming?

- My ancestors brought me to the farm (and I took over this craft after them)
- I started on my own, without previous experience. I run the business from the beginning.
- I had previous experience (knowledge) with working in agriculture and then I started farming
- Other: _____

4. In which region of the Czech Republic is your farm located?

- Prague
- Central Bohemian Region
- South Bohemian Region

- Pilsen Region
- Karlovy Vary Region
- Ústí Region
- Liberec Region
- Hradec Králové Region
- Pardubice Region
- Vysočina Region
- South-Moravian Region
- Olomouc Region
- Zlín Region
- Moravian-Silesian Region

5. What is the legal form of your farm in crop management?

- Self-employed farmer - entrepreneur
- Joint-stock Company
- Company with limited liability
- Agricultural cooperative
- Association
- Other: _____

6. Does your family (family members) play a significant role in your farming?

- Yes
- No

7. On average, how many full-time employees you have within your farming (without your family members)?

- 0
- 1 – 5
- 6 – 10
- 11 – 30
- 31 – 50
- 51 – 250
- 251 and more

8. On average, how many part-time workers you have within your farming (without your family members)?

- 0
- 1 – 5
- 6 – 10
- 11 – 30
- 31 – 50

- 51 – 250
- 251 and more

9. On average, how many external workers you have within your farming (without your family members)?

- 0
- 1 – 5
- 6 – 10
- 11 – 30
- 31 – 50
- 51 – 250
- 251 and more

10. Do you use the so-called unpaid work (mutual help between farmers, etc.) significantly in your farming?

- Yes, and it important in my farming
- Rather yes, but it is not so important in my farming
- Rather not (only occasionally)
- No, I do not
- I do not know
- Other: _____

11. How many hectares of land do you cultivate in crop production?

- 0 – 5 ha
- 6 – 10 ha
- 11 – 50 ha
- 51 – 100 ha
- 101 – 500 ha
- 501 – 1000 ha
- 1001 – 2 000 ha
- More than 2 000 ha

12. Would you be able to determine approximately the ratio of how much arable land you own and how much your rent?

- 0 % owned, 100 % rented
- up to 20 % owned, up to 80 % rented
- up to 40 % owned, up to 60% rented
- up to 50 % owned, up to 50 % rented
- up to 60 % owned, up to 40 % rented

up to 80 % owned, up to 20 % rented

100% owned, 0% rented

13. How many crops do you grow on average per year?

0 – 5

6 – 10

11 – 20

21 and more

14. What are the crops you grow?

Cereals

Legumes

Root crops

Fodder

Oil crops

Vegetables and nuts

Energy crops

Sugar crops

Textile crops

Fruit

Other: _____

B. Information about drawn subsidies and financial resources

15. Which of the EUROPEAN subsidies (direct payments + entitlement payments from the Rural Development Program) do you use for your farming?

None

Single Area Payment (SAPS)

Greening

Young farmer

Voluntary coupled support

M08 - Investments in the development of forest areas and improving the viability of forests

M10 - Agri-environmental-climate measures (AEKO)

M11 - Organic farming

M12 - Payments under the Natura 2000 network and the Water Framework Directive

M13 - Payments for areas with natural or other special constraints (ANC)

M14 - Animal Welfare (DŽPZ)

M15 - Forest-environmental and climate services and forest protection

Other: _____

16. Approximately how many CZK do you get in total on average per hectare of cultivated land from the above-mentioned EUROPEAN direct payments and entitlement payments from the RDP in crop production?

- 0 CZK / hectare
- 1 - 5000 CZK / hectare
- 5001 - 7000 CZK / hectare
- 7001 - 10000 CZK / hectare
- 10001 - 15000 CZK / hectare
- 15001 - 25000 CZK / hectare
- 25001 - 30000 CZK / hectare
- 31001 CZK and more / hectare

17. How many percent of the above-mentioned EUROPEAN direct payments and entitlement payments from the RDP cover your total costs per hectare of land you cultivate in crop production?

- Up to 20%
- Up to 40%
- Up to 60%
- Up to 50%
- Up to 80%
- Up to 100%
- I do not draw subsidies

18. In general, how do you rate the degree of adequacy of the above-mentioned EUROPEAN direct and entitlement payments from the RDP for your farming?

1 (Completely insufficient)	2	3	4	5	6	7	8	9	10 (Excellent)
-----------------------------------	---	---	---	---	---	---	---	---	-------------------

19. Which of the NATIONAL subsidies (direct payments) do you draw for your crop production?

- I do not draw any national subsidies
- Transitional national aid (PVP)
- Other: _____

20. Approximately how many CZK do you get in total on average per hectare of cultivated land from the above-mentioned NATIONAL direct payments in crop production?

- 0 CZK / hectare
- 1 - 100 CZK / hectare
- 101 – 200 CZK / hectare
- 2001 - 300 CZK / hectare
- 301 - 500 CZK / hectare
- 501 - 1000 CZK / hectare
- 1001 and 1500 CZK / hectare
- 1501 CZK and more / hectare

21. In general, how do you rate the degree of adequacy of the above-mentioned NATIONAL direct for your farming?

1 (Completely insufficient)	2	3	4	5	6	7	8	9	10 (Excellent)
--------------------------------	---	---	---	---	---	---	---	---	-------------------

22. Which existing direct subsidy payments are currently significantly more important for your farming?

- National direct payments
- European direct payments
- Both are very important to me, our business would not be possible to run in the current system without them
- Direct subsidy payments are not important / I do not draw them

23. Which of the EUROPEAN indirect payments (project payments from the Rural Development Program) do you use for your farming?

- None
- M01 - Knowledge transfer and information events
- M02 - Advisory, management, and support services for agriculture
- M04 - Investments intangible assets
- M06 - Development of agricultural enterprises and entrepreneurial activities
- M08 - Investments in the development of forest areas and improving the viability of forests
- M16 - Cooperation
- M19 - Support for local development based on the LEADER initiative (community-led local development)
- M20 - Technical assistance
- Other: _____

24. Do you consider EUROPEAN indirect payments (project payments from the Rural Development Program) to be important for your crop production farming?

- Definitely Significant
- Rather significant

- Rather insignificant
- Definitely insignificant
- I do not know / I do not draw it

25. In your opinion, is the assessment of the claim (fulfillment of criteria and requirements) to obtain EUROPEAN indirect payments (project payments from the Rural Development Program) among agricultural enterprises REGARDLESS of their size, position, etc., set fairly in the Czech Republic?

- I strongly agree
- I rather agree
- I rather disagree
- I strongly disagree
- I do not know

26. Which of the NATIONAL indirect payments do you use for your management? *

- None
- Green diesel
- Support and Guarantee Fund for Agriculture and Forestry (PGRLF)
- Other: _____

27. In your opinion, is the assessment of the claim (fulfillment of criteria and requirements) to obtain NATIONAL indirect payments (project payments from the Rural Development Program) among agricultural enterprises REGARDLESS of their size, position, etc., set fairly in the Czech Republic?

- I strongly agree
- I rather agree
- I rather disagree
- I strongly disagree
- I do not know

28. Do you use a significant share of commercial financing sources (eg loans from banking institutions, leasing, etc.) to run your business?

- Yes
- No

29. Are there other subsidies or support programs at the national and European level that you use and are economically important for your crop production? Please indicate which and their significance.

30. How do you rate the level of digitization when applying for grant and support programs in the LPIS?

1 (Very low, everything has to be solved on paper)	2	3	4	5	6	7	8	9	10 (Very high, everything can be solved online)
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31. How do you rate the level of difficulty in applying for grant and support programs in the LPIS?

1 Very difficult / difficult to navigate and fill	2	3	4	5	6	7	8	9	10 (Very easy, fast)
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C. Information about the impact of subsidies on the economic result of the company

32. How would you rate the strength of the dependence of your economic results on the above-mentioned EUROPEAN sources of subsidies and support (direct + indirect + RDP)?

1 Very weak (none)	2	3	4	5	6	7	8	9	10 Very strong (absolute)
-----------------------	---	---	---	---	---	---	---	---	---------------------------------

33. How would you rate the strength of the dependence of your economic results on the above-mentioned NATIONAL sources of subsidies and support (direct + indirect + RDP)?

1 Very weak (none)	2	3	4	5	6	7	8	9	10 Very strong (absolute)
-----------------------	---	---	---	---	---	---	---	---	---------------------------------

34. How would you rate the strength of your economic performance depending on COMMERCIAL sources of financing (eg loans from banking institutions, leasing, etc.)?

1 Very weak (none)	2	3	4	5	6	7	8	9	10 Very strong (absolute)
-----------------------	---	---	---	---	---	---	---	---	---------------------------------

35. Would you be able to achieve profitability of your business under current market conditions without EUROPEAN sources of subsidies (direct + indirect)?

Definitely yes

- Rather yes
- Rather not
- Definitely not
- I do not know

36. Would you be able to achieve profitability of your business under current market conditions without NATIONAL sources of subsidies (direct + indirect)?

- Definitely yes
- Rather yes
- Rather not
- Definitely not
- I do not know

37. Would you be able to achieve profitability of your business under current market conditions without COMMERCIAL sources of subsidies (direct + indirect)?

- Definitely yes
- Rather yes
- Rather not
- Definitely not
- I do not know

38. Regarding the above, do you cooperate with other farmers, for example, on common purchases of materials in order to achieve better negotiating positions with suppliers and thus reduce purchase prices?

- Definitely yes
- Rather yes
- Rather not
- Definitely not
- I do not know

39. Are you / would you be willing to cooperate like this?

- Yes
- No

40. Would the result of your farming change significantly if you owned all the land you managed? In this case, would you be able to manage the current market conditions without some subsidy programs?

- Definitely yes
- Rather yes
- Rather not

Definitely not

I do not know

D. Information about the global perception of European subsidies by farmers

41. In your opinion, are the conditions of the single market and the common agricultural policy currently being set fairly between the Member States of the European Union?

I strongly agree

I rather agree

I rather disagree

I strongly disagree

I do not know

42. How do you specifically rank the level of fairness of these aids within the single market and the current common agricultural policy between the Member States of the European Union?

Rank	Fair	Rather fair	Rather unfair	Unfair	I do not know
Payments					
European direct payments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
European indirect payments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National direct payments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National indirect payments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

43. Select, what are the most important POSITIVES of the single market and the common agricultural policy of the European Union, or specify another option, in your opinion.

Pressure for a better quality of production and final products

International cooperation (eg easier export of products to the other EU Member States)

Better economic results

Pressure on environmentally friendly production and environmental protection

Availability of educational programs

Increasing competitiveness

Support for investment in modern technology and more advanced production technologies

Greater opportunities for implementation and development of your own business

None

Other: _____

44. Select what are the most important CHALLENGES for the single market and the common agricultural policy of the European Union, in your opinion.

- Competitiveness is distorted by national subsidies from the EU Member States, which are not properly regulated
- Disproportionate subsidies to agriculture by the European Union, which distorts the entire system of the EU's single agricultural market
- Unfair redistribution of European subsidies between the EU Member States
- Significantly different production costs in crop production between the EU Member States
- Large differences in farms (for example in size - also due to historical developments) across the EU Member States
- Cultural and geopolitical diversity of EU Member States
- Excessive administrative burden
- None
- Other:

45. How do you subjectively rate the long-term financial sustainability of the current system of European subsidies and support programs within the single market and the common agricultural policy of the European Union?

1	2	3	4	5	6	7	8	9	10
Completely unsustainable									Completely sustainable

46. Do you think that the forthcoming plan of the Common Agricultural Policy for the period 2021-2027 will be generally more favorable and fair for farmers than the current one?

- Definitely yes
- Rather yes
- Rather not
- Definitely not
- I do not know

47. Please indicate which grant schemes would you propose to suggest to make the European agricultural system work and at the same time fair?

E. Information on the attractiveness and availability of agricultural education for young people

48. Do you think that working in agriculture (crop production) is currently attractive for young people?

- Definitely yes
- Rather yes
- Rather not
- Definitely not
- I do not know

49. In your opinion, are there currently enough educational opportunities for young people who are starting or want to start farming?

- Definitely yes
- Rather yes
- Rather not
- Definitely not
- I do not know

50. In your opinion, are there currently enough possibilities of financing (for the purchase of equipment, real estate, land) for young people who want to start farming in crop production?

- Definitely yes
- Rather yes
- Rather not
- Definitely not
- I do not know

51. Do you think that young people in crop production are currently disadvantaged (eg lack of experience, weaker bargaining positions with suppliers and customers, more inaccessible acquisition of their land and equipment, etc.)?

- Definitely yes
- Rather yes
- Rather not
- Definitely not
- I do not know

52. How do you think the current lay society perceives farmers and agriculture in general?

- Definitely positive
- Rather positive
- Rather negative
- Definitely negative

I do not know

53. Do you think that the current lay society currently values the work of Czech farmers enough?

Definitely yes

Rather yes

Rather not

Definitely not

I do not know

54. How would you rate the real importance of agriculture in general in today's Euro-American society?

1	2	3	4	5	6	7	8	9	10
Completely unimportant									Very important

9.2 Preliminary Research – Interview (questions)

- 1) Could you first describe your relationship and your agricultural situation?
- 2) How many hectares and how many species of plants do you care about?
- 3) Do you have employees or do you only work within a family?
- 4) What are the subsidy programs at the European and national levels? Which do you draw and which ones could you draw?
- 5) Which sources of subsidies, if we can say so, are more important to you? National or European? Could it work without European subsidies?
- 6) Are there internet sources where it is possible to find information about subsidies? And in connection with this - how would you assess the level of digitization when applying for European (or national) subsidies?
- 7) Do you think the level of subsidies is sufficient? Or do you think agriculture is distorted by subsidies too much? Please describe.
- 8) How do European (or national) subsidies affect your financial result in your accounting? Can you share it?
- 9) How do subsidies affect your business? Is it possible to make a living without subsidies? And is the income, or profit from doing business in agriculture, above average than the average salary in the Czech Republic?
- 10) Do you think it is possible to get rich while working in agriculture?

- 11) Looking at the European Union in general, do you think that the redistribution of European subsidies among farmers in the EU Member States is fair? And why?
- 12) Do you think that agriculture with the current subsidy system is sustainable in the long run? If not, what should change to make it work in the long run?
- 13) The European subsidy program should change in 2021. How do you think the change will affect the original European grant program?
- 14) What do you think could be improved in the European subsidy program for farmers? What are the weaknesses and strengths?
- 15) Is there anything you would like to say at the end?