

Journal of Economics and Sustainable Development

ISSN 2222-1700 (Paper)

ISSN 2222-2855 (Online)

Vol.9 No.18

2018

Journal of Economics and Sustainable Development

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Journal of Economics and Sustainable Development

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The IC Impact factor value of this journal is 7.15

The publication charge of this journal: 160 USD (online publication only) or 165 USD (online publication + 2 hard copies)

Posted: 2011-06-03

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Agricultural Financing in the European Union: The Cap Framework

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Abstract

Agriculture is a very critical economic activity in the European Union (EU). The regional bloc estimates that 22 million of its citizens are dependent on primary agricultural activities for their livelihoods. The organization of agricultural activities in the EU ranges from small family- owned and run farms to larger and commercialized farms which produce on a sizeable scale. Apart from that, agriculture also supports 44 million jobs in value addition activities such as food processing, food retail, and other food- related activities. Further, the EU relies on food exports for upwards of €130 billion in export revenues each year, further underlining the importance of the sector (European Commission, 2015). The numbers here illustrate just how key agriculture is for the economy in the European Union. They may not even capture the true picture which would require one to include other linkages and spillover effects to other industries. Just like any other economic activity, agriculture requires financing.

Keywords: The CAP Framework, European Union, Agriculture, Financing, Economic development LEADER programme

Introduction

Many farmers may find it difficult to acquire bank financing like their counterparts engaged in other productive activities. The EU states have an agreement in place whereby agricultural financing is undertaken on a regional basis as opposed to it being undertaken by individual countries. The Common Agricultural Policy (CAP) is the framework that guides how the EU finances and supports agriculture and the rural economies of its members. While the policy is developed and implemented at the regional level, it is carried out in such a way that it takes care of the specific needs of each individual country. Ultimately, the goal of the policy is to ensure sustainable development of the EU agricultural sector and to ensure that the bloc can feed itself as well as leave some produce for export.

1. The CAP framework

The Common Agricultural Policy (CAP) is the guiding policy instrument that provides for the way in which agriculture is financed in the EU. The success that the EU has had in agriculture means that it is the one sector for which the bloc has achieved the most integration. Crucially, financing for the sector is carried out on a regional level in a bid to ensure that there is the creation of a level playing field for all the farmers in the EU and that they can achieve maximum support that is necessary to enable them carry out their activities. It is significant to note that the CAP era has seen Europe emerge as a major food producer globally with massive competitive advantages in food production.

The origin of CAP goes back to the 1957 signing and ratification of the Treaty of Rome which lay the ground for the formulation of a European- wide policy on agriculture. At its inception, the main aim of the CAP was to increase agricultural productivity in Europe. It is worth remembering that agriculture then played a more significant role in the economies of European countries at the time as compared to today. Apart from the desire for increased productivity, the people behind the policy also hoped to ensure a fair standard of living for farmers in Europe who were often found to enjoy lower standards compared to people engaged in other economic activities. Further, the formulators also hoped to raise the incomes of farmers while at the same time shielding them from excessive and unfair competition from farmers in other parts of the world. Therefore, the overarching aim of the CAP was to put in place an environment in which farmers in Europe could thrive and fulfill their potential in an organized and competitive manner.

2. Measuring the performance of CAP

According to a report by the European Commission, 38% of the union's budget is spent on agricultural activities and rural development (European Commission, 2015). The Common Monitoring and Evaluation Framework are

used to measure the performance of CAP as a whole and move away from ad hoc metrics. The framework introduces new measures for budget management, conformity, and transparency. Investment in farms through the rural development program indicates that the production potential and productivity has improved in agriculture. In 2007-2013, €8.7 billion was spent on the modernization of 380,000 farms in the EU increasing the level of private investment by €25 billion. Between 2014 and 2020, 365,000 will receive €22.6 billion for farm modernization from the rural development program. The investments by the EU in rural development have played a major role in improving the performance of agriculture. For example, there was a 45% increase in food exports value in 2009-2014 compared to 4% increase in the economy in general (European Commission, 2015).

CAP has focused more on market orientation of the EU economy with the aim of making the agricultural sector more competitive. The EU is a net exporter of food and drinks with diversity in these areas indicating its strong focus and the range of products grown or produced. The financing provided for agricultural activities in the EU is also geared towards ensuring sustainability of the sector. An interesting element of the EU is that over half of its territory is under farming activities. As a result, it is essential and has to be considered because of the need to protect the environment and reduce the potential adverse effects. The EU environmental policy focuses on the need to produce more with less by ensuring that the potential adverse effects on the environment are mitigated. In light of these needs, the EU invested €23 billion on environmentally sensitive agriculture. The venture covered 46.9 million ha, which is about a quarter of the total land area in the EU under agriculture. The area under agri-environmental commitments in the EU has been on the rise since 2007 with a spike being experienced in such commitments from 2011 (European Commission, 2015).

The rural development program has a projected spending of €25 billion per year to be spent on greening and other agricultural-environmental measures. Some of the key targets for the environmental protection programs in agricultural financing include putting 19% of EU farmland under biodiversity management contract. At the same time, the CAP targets that 15% of EU farmland area will be put under better waste management contracts as well as soil management (European Commission, 2015). These innovation projects are beneficial to the local economy because they aid in protecting the environment and ensuring the productivity of agricultural operations. This is because they provide a way of ensuring that the natural virility of the soil and the ecology is maintained. Some of these objectives are achieved through the European Innovation Partnership that will involve 2000 projects in the 2014-2020 period.

3. The constraints faced by farmers in accessing credit

Obtaining finance can prove to be quite a challenge for the small players in any industry. The case is the same for small-scale farmers and especially the young ones who find it exceptionally tough to obtain financing from local commercial banks. The financial institutions shun them as they are perceived to be high risk and not worth the investment. It is a double tragedy of sorts for these people as they also often lack the necessary collateral that they would have put up to help them secure bank financing. Undoubtedly, agriculture is seen as carrying a higher level of risk as compared to other sectors of the economy but that may partly be the case because the financial players do not take their time to understand the sector at a more in-depth level.

A major issue of agriculture and the challenges it faces in accessing credit is that it involves long production cycles that result in operational as well as economic risks. The fluctuation of production from agricultural activities also presents a challenge for agricultural operations. The fluctuations in productivity and the potential for losses make it difficult to insure the operations and assets of agricultural enterprises. This reduces the potential for the agricultural operations to be considered as collateral for securing financing for businesses. Since the agricultural entities face difficulties in using the resources at their disposal for financing, they are unable to verify the worth of their operations and this reduces their attractiveness to financiers.

4. Why it would be important to provide financing to agriculture

Ultimately, someone might argue for justification for financing the agricultural sector. On paper, the contribution of agriculture to the European GDP might be seen as negligible as it stands as a mere 3%. However, it is the source of income for about a fifth of the European population which is mainly rural-based. These people are mainly involved in primary farming activities and food production. A further 22 million people work in agro processing industries and other activities that are related to agricultural production such as distribution and export. Overall, agricultural and related activities employ 7% of the European workers while creating new value worth an estimated €420 billion. As a major food exporter, the EU relies on agriculture for approximately the €130 billion each year (European Commission, 2015).

The figures above go to show the importance of the agriculture in the EU. The fact that primary agricultural production only accounts for only 3% should not be taken to mean that the sector is insignificant or less important to the EU. It is crucial to note that farming is crucial to the sustainability of rural economies and any shocks to the sector have a direct impact on the livelihoods of a significant portion of the population that is concentrated in the rural areas and which counts on crop growing and animal husbandry for their incomes. An

often overlooked fact is that farmers are responsible for feeding the people in Europe, most of who live in urban areas. Provision of food for the population is an important undertaking that the authorities attach a lot of significance to but they perhaps fail to attach as much importance to the entire supply chain (Brzozowska, Bubel, Kalinichenko, & Larysa Nekrasenko, 2017).

Therefore, it would be rather foolish to merely consider agriculture for its contribution to the economy. For starters, the ability of a society to feed itself is a critical determinant of its strength. Food security is part of the overall security of a country, without which civil strife would set in. As such, support for agriculture ought to go beyond the mere consideration of how the nominal return which investment in the sector will yield to the strategic importance of the sector as well as the value that the industry creates.

5. Globalization of finance in the EU

One of the most important aspects in relation to the financing of agriculture around the world is globalization. Globalization of finance is characterized by a diversity of links across different countries and financial centers. The focus of finance globalization is the opening up of trade and external flows of capital including the deregulation of financial markets. Progress in information technology has also played a major role in the liberalization and globalization of finance due to the reduced cost of communication and popularization of trade. These factors are cited in Sievers (2013) as critical to the globalization of finance. They include openness of trade, financial development of the country, monetary integration in Europe and restrictions on capital level. Most studies indicate that openness to trade should be accompanied by liberalization in the financial markets. However, others have cited the relevance of restricting commodity trade as a way of maintaining the optimum level of home bias in financial transactions.

Financial openness is essential in enhancing risk diversification because it addresses challenges associated with information asymmetry and the development of financial instruments. Domestic savings and financial integration is beneficial to countries in terms of enabling foreigners and local investors to invest more and gain higher profitability from their capital (Brzozowska, Bubel, Kalinichenko, & Larysa Nekrasenko, 2017). The nexus between macroeconomics and agriculture has been evaluated in different studies assessing the domestic and international macroeconomic determinants of the net income in agriculture. The main aspects include the selling prices of the agricultural produce, the prices paid for the production means that are bought by the farmers, real exchange rates, revenues from exports, and the real gross product of agriculture. Increase in money supply over a short period may contribute to the appreciation of the long term exchange rate of the economy. The change in exchange rate is significant and results in volatility in the output of the different sectors. This problem may be addressed by the use of a floating exchange rate, which allows for reduction in the costs associated with the appreciation of the exchange rates. However, these costs cannot be fully eliminated as is the case in the Eurozone with the introduction of floating exchange rates and liberalization of the monetary policies in different countries.

A major issue that needs consideration in the EU is the difference in economic growth and development of the financial markets across countries. For example, in 2016 the average lending rate in France was 3.43% and 3.94% in Germany while in the Ukraine it was 11% to 16% in foreign currency and 16% to 24% in the local currency. This means the process of lending to agricultural enterprises in developing markets such as Ukraine and Poland is relatively weak. The share of credit extended to agriculture in relation to the total loans extended in Ukraine was only 6.2% in 2014 (Lupenko & Feschenko, 2016). Requirements for creditability and the collateral that they need for the loans have become stricter in recent years. Similarly, the price of the bank loans has increased considerably in some countries such as Ukraine hence making it more difficult for the farmers to access affordable financing. Liquidity problems facing countries such as Ukraine reduce the credit support that farmers get and increase the requirements that are placed by the different financial institutions in providing credit and financing operations of agribusiness enterprises. The risks associated with climatic conditions are exacerbated in developing nations where the effects of economic crisis are more likely to be felt. These factors make agriculture more vulnerable to changes in interest rates and market prices of the commodities that are provided.

6. Public financial incentives

The EU and member states are the biggest providers of development assistance globally. They provide over 50% of the development assistance to countries around the world. This is mostly channeled through the European Development Fund, which is separate from the general EU budget. With the advancement in financing obligations for agricultural entities there have been worries about the large private-public partnerships that may crowd out investments by smaller businesses and farmers. These also raise concerns regarding the occurrence of governance issues that may adversely affect the outcomes of agricultural entities globally.

One of the approaches adopted by the EU governments and entities in the global agricultural; scene is the use of production contracts. These are agricultural activities that are carried out under prior agreements between

the buyers and producers. The farmer agrees to produce and sell commodities to the buyer according to their specifications. The buyer and seller also agree on the price at which the products will be accepted. These agreements act as an incentive for the farmers and have been cited as a tool for promoting coordination of trade and production in agriculture (IFAD, UNIDROIT, & FAO, 2015). The production networks also provide an alternative for ensuring that there are adequate supplies for the agriculture sector. They fill the void in the supply networks for agricultural inputs where the producers are able to access production resources that are necessary for them and would be difficult to get without the assistance of the organizations. The buyers are motivated to provide inputs such as agrochemicals, equipment, and seeds for the farmers. In this way, the farmers have access to high quality agricultural inputs that they use to improve the quality of their production.

7. Risk management

One of the key issues in the financing of agriculture is the mitigation of risks that face the industry and reduce the potential earnings for farmers. It is a key element of the Common Agriculture Policy (CAP) in which the initiators considered that negative or catastrophic events may result in abandonment by the farmers. The EU recommends the use of different tools for support. The EU recommends the use of different tools for supporting farmers to ensure that they do not suffer heavily when catastrophes occur. Besides the risks that are faced by other business entities such as market risk, credit risk, and operational failures, agriculture also faces risks associated with the environmental conditions (Janowicz-Lomott & Lyskawa, 2014). Agriculture has long production cycles hence there is slow circulation of capital that is engaged in the production process resulting in economic and productivity risks.

Article 3 of the Treaty of Rome highlights the concept of risk management in the Common Agricultural Policy. Within the framework of CAP, the element of risk management was incorporated in the European Parliament in 2006. It was a resolution on crisis and risk management for the European Community and involved the need for conscious risk management by producers in agricultural enterprises. According to the regulation EC1857/2006, the EU sought to provide public aid for small and medium sized farmers due to losses resulting from adverse weather destroying over 30% of their average annual production. In such cases, the member state may provide financial aid covering up to 90% of the losses incurred by farmers or provide subsidies for insurance premiums up to 80% covering natural disasters. The element of agricultural insurance using the mutual fund concept has grown significantly in the recent past. Countries such as Italy use the mutual fund concept with producer groups. The fund allows the government to cover production losses that are below the 30% threshold because of the adverse effects it has on the stability of the enterprise (Petronelli & Nizza, 2012). In Poland, the concept is adapted to ensure that the needs of the farmers are addressed. This involves 28% of total crop being covered by insurance that was created specifically to respond to the needs facing the farmers. The mutual fund concept ensures that the agricultural activities are more insurable and the different risks can be addressed (Janowicz-Lomott & Lyskawa, 2014).

8. Benefits of agricultural financing under CAP

The Common Agricultural Policy was geared towards increasing the effectiveness of agricultural activities in contribution to economic development. One of the key aspects of agriculture in the EU is that it accounts for 1.7% of total value added in the EU but provides over 500 million consumers with food and 22 million people that are employed in primary agricultural activities. CAP through the rural development programs has invested heavily in providing infrastructure such as broadband connectivity for rural areas. This is meant to ensure that over 27 million people can access the internet more effectively. A major element of this is that the €1.6 billion invested in rolling out the broadband internet supports SMEs establishing in rural areas. Most of the businesses supported by broadband internet in rural areas are connected to agriculture (European Commission, 2015).

CAP has a wide reach in rural areas and contributes positively to their growth because it influences the attractiveness of the rural area to investors. CAPs focus on a wide range of issues including the environment play a critical role in making it more targeted and improving the effect it has on the quality of life for the citizens. By funding agricultural activities, the program ensures improvement in agricultural productivity and focus on value addition for the stakeholders in making agricultural enterprises more profitable and stable. For EU 28 members, direct payments between 2015 and 2020 amount to €252.2 billion. For rural development, the projected level of union support in 2014-2020 is €95,338 billion with 238.9 billion in technical assistance (European Commission, 2015a).

The funding of agricultural projects also plays a major role in the development of agriculture enterprises hence enhancing the levels of employment. Agriculture provides employment to over 40 million people in value addition on top of the ones working in primary agricultural activities. Funding the agricultural activities in the region has a significant role in ensuring that people especially in the rural areas are effectively employed in entrepreneurial activities. It is the largest sector in the EU providing 47 million jobs to the economy and CAP has played a major role in improving the conditions, productivity and income levels for farmers (European

Commission, 2015). The average entrepreneurial income for agriculture compared to non-agricultural activities is 40%. According to the European Commission, the conditions are improving for farmers with income disparity being on a declining trend. The financing of agricultural ventures especially from public programs provides a good way of ensuring that they provide value to the farmers and the community at large.

Conclusions

In conclusion, this essay was geared towards evaluating the issue of agricultural financing. The analysis shows that the main approach used to provide financing for agricultural activities is the Common Agricultural Policy applied in the EU regional market. It has evaluated different issues associated with the EU regulations and policies on agricultural financing and support. The agriculture sector is critical to the success of the EU economy because it supports over 22 million jobs in primary activities and over 40 million in value addition. The sector also supports the social wellbeing of the community through the provision of healthy food and ensuring that people have access to the right nutrition. CAP is the guiding policy for EU countries and highlights how the sector is financed in the region. The policy is successful because it aids in directing 38% of the union's budget to ensure that it supports agriculture. Investing in agriculture through CAP has also played a key role in improving the state of agriculture financing and the value of food exports from the region.

The issue of financing for agriculture in the EU through CAP involves a wide range of issues including agri-environmental commitments, knowledge transfers, and rural development. The fund through the rural development programs has been critical in ensuring that people have the right resources to support agricultural enterprises in rural areas. The CAP framework allows farmers to have access to public funds in areas where private financing is scarce. Due to issues that are specific to the agriculture sector, it is difficult to get financing because of the risks associated with it and the fluctuations in productivity levels. These issues also make it difficult for the sector to get the necessary access to insurance or other risk mitigation strategies. The issue of risk management for agriculture in the EU has been addressed through the mutual fund concept where the government provides financing and subsidized premiums for the farmers to access agricultural insurance.

Financing of agriculture and other sectors has been globalized with significant focus on the variations in the level of economic growth. Differences in economic growth contribute to the variations in access and cost of financing across countries. Other issues such as requirements for creditability also play a role in making financing more difficult especially in the less developed countries such as Poland and Ukraine. The CAP framework has been beneficial in increasing the level of investment in agriculture by providing a wide range of issues that promote the overall quality of life for people in the EU as a whole.

References

- Brzozowska, A., Bubel, D., Kalinichenko, A., & Larysa Nekrasenko. (2017). Transformation of the agricultural financial system in the age of globalisation. *Agric. Econ. – Czech*, 63(12), 548–558.
- European Commission. (2015). *EU agriculture spending: Focused on results*. Paris: Author.
- European Commission. (2015a). *Multiannual Financial Framework 2014-2020 and the financing of the CAP*. Paris: European Council.
- IFAD, UNIDROIT, & FAO. (2015). *UNIDROIT/FAO/IFAD legal guide on contract Farming*. Rome: Authors.
- Janowicz-Lomott, M., & Lyskawa, K. (2014). The new instruments of risk management in agriculture in the European Union. *Procedia Economics and Finance*, 9(1), 321– 330.
- Lupenko Y. & Feschenko V. (2012). Futures mechanisms of the agricultural sector. *The Financial Market of Ukraine*, 9, 20–23.
- Petronelli, A. & Nizza, M. (2012). Perspectives on risk management as climate change adaptation measure in Italian agriculture (pp. 317-326). *Building Resilience for Adaptation to Climate Change in the Agriculture Sector*, Proceedings of a Joint FAO/OECD Workshop. Rome: Food and Agriculture Organization.