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## **FINANCIALIZATION AND SPECULATION IN AGRICULTURE – POSITIVE AND NEGATIVE ASPECTS OF THE FINANCIALIZATION OF THE ECONOMY**

Key words: financialization, speculation, agriculture

**ABSTRACT.** The aim of this study was to present the phenomenon of financialization, with consideration for its dual nature: the negatively-perceived side, which is said to have contributed to the financial crisis of 2007-2008, and the positive, which influences the production of real value, especially in the agricultural land market. It was found that the value of agricultural land is increasing, along with the average annual prices of agricultural products paid for by economic entities purchasing directly from producers. The financialization of the economy after 2007 is not only associated with increases in value brought about by investments in new financial instruments, but with the process of investors transferring agricultural raw materials to commodity and agricultural land markets. The study found that both institutional investors and farmers invest in agricultural land, with a view to benefiting from the advantages of future increases in their value. There are, however, limitations on the potential purchase of agricultural land by institutional investors, which, as a result, create a price barrier on the purchase of land by actual farmers.

### **INTRODUCTION**

The problem of financialization of the economy has been an area of scientific research since the 1980s, when significant changes in the scale of real and financial debt were observed after the market stagnation of the 1960s. Over the 20 years, from 1965 to 1985, unpaid debt increased over seven and a half times as part of non-financial activity, and nearly 20 times as part of financial activity. In addition, there was an increase in speculative activity following the explosion of debt and level of daily operations of financial companies (clearly separated from the real sphere) [Magdoff, Sweeze 1987] – compare, for example John Foster [2007] and Riccardo Bellofiore and Joseph Halevi [2010]. More than 50 years have passed since the beginning of the process of financialization, and with globalization, the development of the world's financial markets and the growing number of fast-developing countries, the spread of financialization has greatly increased. More and more entrepreneurs from various corners of the world are looking for financial benefits from financial operations, while the real sphere is perceived as benefitting on a smaller scale and only in the long run.

The process of financialization is perceived as one of the main causes of the economic crisis of 2007-2008, and therefore the study of financialization is both important and necessary. However, there is no consensus in the assessment of this phenomenon. Some researchers perceive it as negative, while others consider it a dual process by nature, both positive and negative. As such, the aim of the article is to examine and evaluate the process of financialization, with particular emphasis on its impact on the agricultural sector.

Financialization is not an easy process to research and interpret. On the one hand, it is perceived as obtaining financial benefits from financial operations. On the other, as a search for additional value transferred to commodity markets, especially raw materials and agricultural products (purchased directly from farmers), and land (agricultural land in particular). The literature shows that Fred Magdoff and Paul M. Sweezy were the first to describe the phenomenon of financialization [Magdoff, Sweezy 1987]. Financial markets began to have a significant impact on the real economy from the moment money was separated from bullion in the early 1970s, and interest rates were released in the US at the end of the same decade [Dąbrowski et al. 2018]. The source of the financialization process in the second half of the 20th century was described comprehensively by Agata Adamska, Gabriel Główska and Grzegorz Sobiecki who pointed, amongst other things, to the international debt crisis of the 1970s and '80s [Adamska et al. 2018]. Concurrently, these authors positively verified an interesting research hypothesis, which states that "The consequence of the diversification of progress in financialization pace is the state of heterogeneity of its advancement on local capital markets" [Adamska et al. 2018]. The extent of the research is important, as it coincides with this author's approach that financialization can bring both positive and negative effects. Which of these occur in a local or global economy depends on the level of their development, the scale of operations on their financial markets, the level of trust in the financial system – particularly the banking system – as well as the awareness of households and their inclination to either save or borrow money. Since the financial problems of developed economies have so far been the basis of excessive indebtedness, this factor, along with speculation, should be considered one of the keys in the financialization process.

Jennifer Clapp and S. Ryan Isakson noted that, in recent decades, food and agriculture have become increasingly more attractive to investors as targets of financial accumulation [Clapp, Isakson 2018]. Another important observation, from the Polish market, is that corporate debt due from debt securities has been growing dynamically since 2002. In addition, companies have been financing their development not only by issuing debt securities, but also by taking loans, which has caused the value of debt to show a clearly upward trend [Adamska 2017].

According to studies by Camille Aït-Youcef, there has been a growing correlation between the stock market and agricultural markets since 2004, reflected, amongst other things, in the increased inflow of institutional investors to commodity markets [Aït-Youcef 2018]. Conversely, Ward Anseeuw, Jean-Marc Roda, Antoine Ducastel, and Norfaryanti Kamaruddin pointed to a clearly progressive process of financialization in the example of African agriculture. They demonstrated an asymmetric relationship between corporations (often western), and small and medium-sized farms, traders and even farmers from tropical countries. This asymmetry between small and large entities is readily apparent in tropical

countries, where it is mainly due to the greater bargaining power of Western corporations. Furthermore, hedging against financial risk using financial tools such as futures and derivative contracts is very flexible and convenient. It is a theoretically cheaper method than conventional insurance, and even capable of generating profits. However, it is not available to all entities as financialization requires a certain scale of economy [Anseeuw et al. 2017]. Similar observations were made by Antoine Ducastel and Ward Anseeuw, who analyzed cereal cooperatives and considered the issues of specialized financial institutions managing agricultural entities. Their research looked at the criteria of savings systems in accordance with specific objectives in risk, return and maturity [Ducastel, Anseeuw 2018]. Similarly, in a 2014 study of rural land in America, the results presented by Andrew Gunnoe showed that millions of hectares of land were owned and controlled by various financial institutions. He also pointed out that we were then witnessing unprecedented integration between financial capital and land ownership, marking a return to the previous era of rentier control. The financialization of agricultural land is a continuous process, and institutional land ownership is growing all around the world. As a result, millions of acres of productive rural areas are owned and controlled by the financial sector, which benefits from doing so [Gunnoe 2014] (see also Justyna Franc-Dabrowska [2017]).

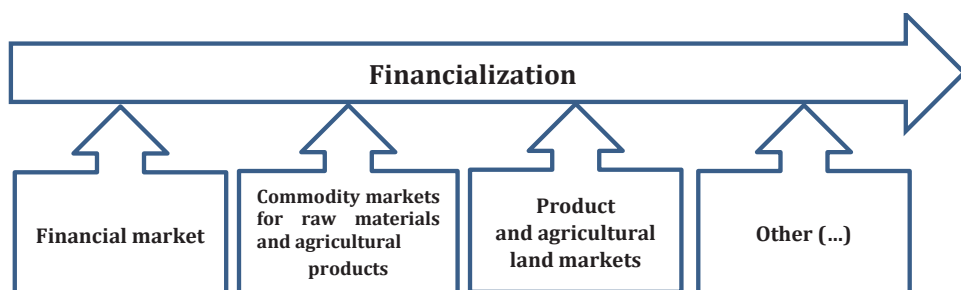


Figure 1. Financialization in agriculture

Source: own concept

As Ryan Isakson rightly points out, agriculture is inherently risky. Farmers are faced with climatic phenomena, pests, pathogens and other natural threats. But not all farmers are equally sensitive to these problems [Isakson 2015]. In addition, fast and often irreversible changes brought about by globalization, the emergence of new financial instruments, and above all, the increased speed of operations afforded by new technologies, have all resulted in agriculture becoming an attractive area for advancement of the financialization process. Thus, it can be concluded that the current phenomenon of financialization covers a much larger area of operations than just financial markets. A schematic diagram of financialization is presented below.

## MATERIAL AND METHODS

Since one of the manifestations of financialization is the transfer of free funds from the financial market to, for example, investments in agricultural land, this study includes agricultural land prices in the period 2013-2018. Another area of importance in the study of financialization is price volatility, which in relation to agriculture is expressed as average purchase prices. These are averaged from the annual prices paid by economic entities purchasing agricultural products directly from producers. In the present study, this data is drawn from 2003-2018. The final stage of the analysis was to examine and assess the changes in the level of average annual purchase prices paid by economic entities purchasing agricultural products directly from producers (in PLN/100 kg). This data was characterized by the longest time series – 1999-2017. All data were obtained from local databanks. The design of the study is presented in Figure 2.

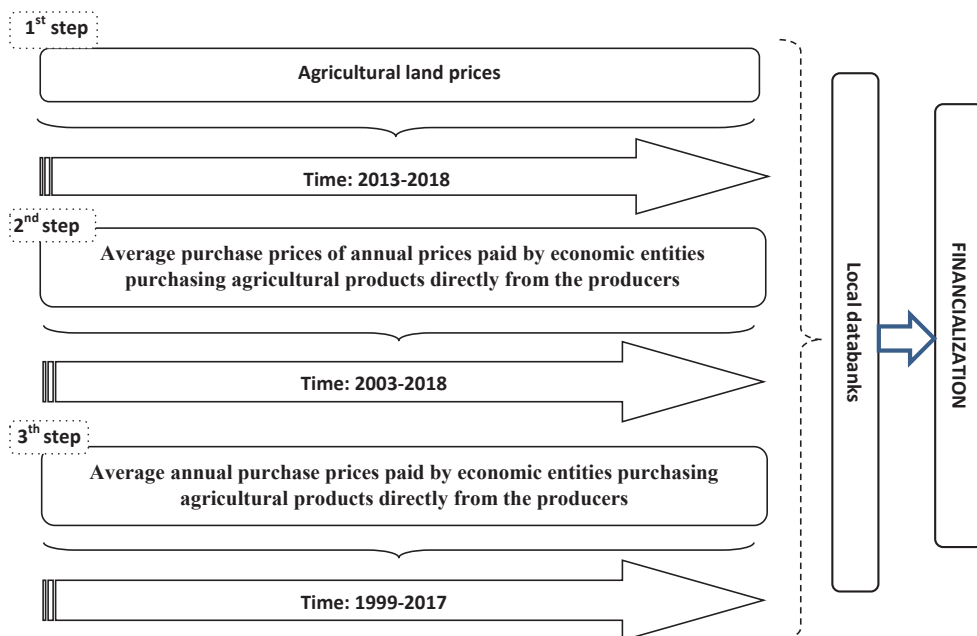


Figure 2. Study design

Source: own idea

## STUDY RESULTS

Figure 2 shows the prices of agricultural land in Poland, per hectare, in 2013-2018. The increase in agricultural land prices from PLN 44,200/ha to PLN 72,100/ha is clearly visible, and 1.63 times higher. This increase was mainly due to changes in arable land prices, from above PLN 25,300/ha to PLN 44,400/ha. This price increase should be considered significant, especially as it covers a relatively short period of time. Although the value

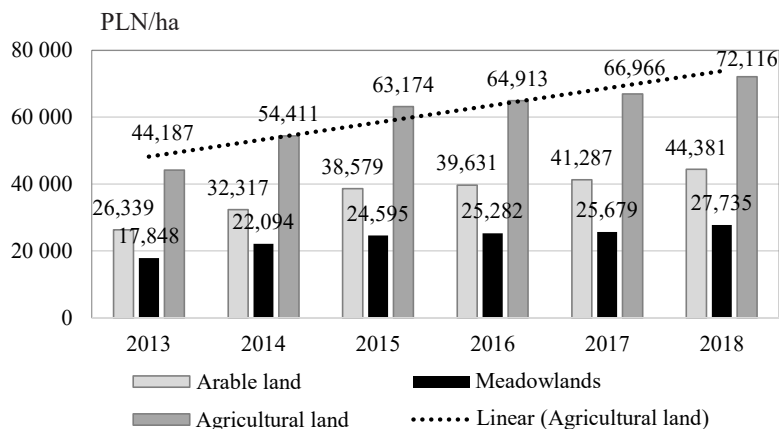


Figure 3. Prices of agricultural land in Poland, 2013-2018

Source: own study based on LDB [<https://bdl.stat.gov.pl>]

of meadowland was lower, this type of agricultural land also systematically increased in value, by about PLN 10,000, over the five-year period. One of the reasons for this is the process of financialization of the economy, in which land becomes an increasingly sought-after investment by entities with free capital. Such entities can either be large institutions or simply farmers holding on to land as a capital investment, without actually cultivating it. This phenomenon is already known of in the literature, and it seems that it is now also present in Polish agriculture.

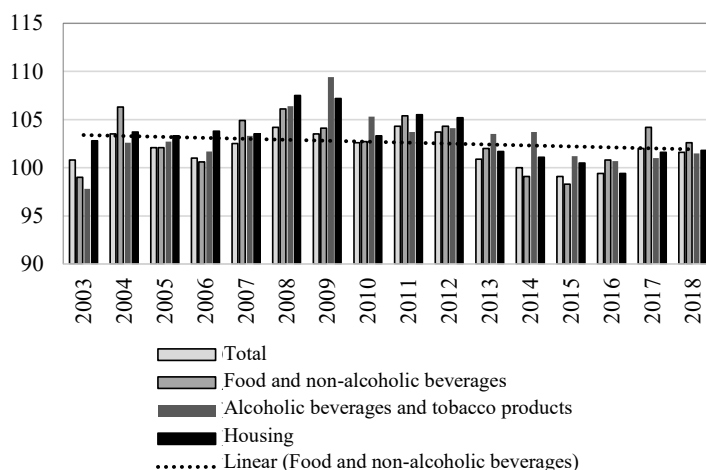


Figure 4. Average purchase prices from annual prices paid by economic entities purchasing agricultural products directly from producers

Source: own study based on LDB [<https://bdl.stat.gov.pl>]

Another interesting area of research is the purchase prices of agricultural products. Figure 4 presents the annual indexes for selected product groups in the agri-food sector, as an investment reference point for housing prices. The speculative bubble is clearly visible with regard to housing prices, the value of which increased over the average in 2008-2009 before systematically decreasing after that period, falling below 100% in 2016. In this case, the designated trend line takes a decreasing direction. A similar direction of changes was observed for the indexes of total agricultural products, although the index values in this case were lower in relation to the indexes of housing price changes. High variability was observed in the food and non-alcoholic beverage indices, and also quite a high variability was noted in alcoholic beverages and tobacco products. In this latter case, price indices grew markedly and culminated in 2007-2008, before then shedding their value as the economic crisis spread around the world. It was only from 2015 that there was a clear improvement and increase in their level.

Figure 5 shows the average annual purchase prices paid by economic entities purchasing agricultural products directly from producers in PLN/100 kg. The highest price increase was observed for oilseed rape and agrimony for industrial use. The trend line for this group of agricultural products had a clear upward direction. Among the remaining agricultural products, the highest values were characterized by wheat prices, the changes in which can be described as sinusoidal, with maximum values in 2007 and 2012. The situation was similar with respect to rye and potato prices, although their average prices were lower. Sugar beet prices were the least favourable from the point of view of agricultural producers, which remained relatively stable throughout the entire nineteen-year research period.

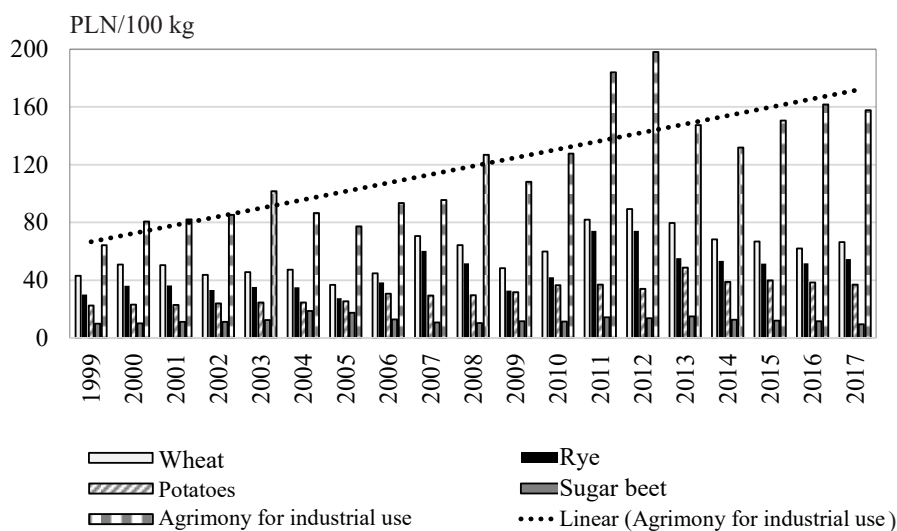


Figure 5. Average annual purchase prices paid by economic entities purchasing agricultural products directly from producers

Source: own study, based on [<https://bdl.stat.gov.pl/>]

Bearing in mind the changes that have taken place in agriculture since the end of the 1990s, it can be concluded that at least some are the result of the ongoing process of financialization of the economy. The increasing prices of agricultural land are a particularly clear example of this process. Even if we assume that farmers are not selling their land to investors, some of them are certainly becoming land investors themselves. And, thanks to the increase in land prices in the long run, they have put capital into a resource that will bring value over time. Undoubtedly, average purchase prices from annual prices paid by economic entities purchasing agricultural products directly from producers, including food and non-alcoholic beverages – which were characterized by a clear declining trend (during the fifteen-year period) – are less optimistic. This only shows, more clearly, the value of agricultural entrepreneurs investing in agricultural land. It can also be justified in production terms, taking into account average annual purchase prices paid by economic entities purchasing directly from producers, as well as the price increases on some of the products (which were especially high for oilseed rape and agrimony for industrial use). These investments can also justify the purchase of land for actual production purposes, not only as long-term investments.

## CONCLUSIONS

The financialization of agriculture is not a new phenomenon. Undoubtedly, after the great economic crisis of 2007-2008, which significantly damaged confidence in financial institutions and investments in the financial market (while also decreasing confidence in banks), the natural process is to seek new, less risky uses for investors' free funds. According to analysis of the literature, one such use is to invest in (and speculate on) agricultural commodity markets. Agriculture is one of the areas of capital investment examined in the present study. On the one hand, institutional investors are purchasing agricultural land to invest their capital for long-term gains. On the other hand, farmers have also become investors, purchasing new plots of arable land not only for production purposes, but also for investment purposes. Sometimes a farmer's long-term land investment can become a production investment, if the land is used for agricultural purposes rather than leaving it fallow. This solution seems interesting in a time when new financial instruments are playing a significant role in the search for additional value, and is usually highly risky. Some investors fail to accept such high risk, or want to diversify their investment portfolio, so they allocate at least part of their funds to the purchase of agricultural land. This can be disturbing in situations where institutional investors buy out land, limiting local farmers' production capacities, or the purchased land causes such high price increases that farmers cannot afford to grow their property. Although this leads to wealthy investors becoming even wealthier in the process of financialization, in my opinion farmers also have these opportunities, by holding on to their existing land.



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## FINANSJALIZACJA A SPEKULACJE W ROLNICTWIE – POZYTYWNE I NEGATYWNE STRONY UFINANSOWIENIA GOSPODARKI

Słowa kluczowe: finansjalizacja, spekulacja, rolnictwo

### ABSTRAKT

Celem badań było przedstawienie zjawiska finansjalizacji, z uwzględnieniem dwóch jej obliczy postrzegania: negatywnego, któremu przypisuje się wystąpienie kryzysu finansowego zapoczątkowanego w 2007 roku oraz pozytywnemu, które wpływa na wytwarzanie realnej wartości, szczególnie w zakresie ziemi rolnej. Stwierdzono, że zwiększyła się wartość ziemi rolnej, jak również wzrosły przeciętne roczne ceny skupu za produkty rolne wypłacane przez podmioty gospodarcze skupujące je bezpośrednio od producentów rolnych. Ufinansowanie gospodarki po 2007 roku oznacza nie tylko i wyłącznie wzrost wartości poprzez inwestycje w nowe instrumenty finansowe. Jest to również proces przechodzenia inwestorów na rynki towarowe surowców rolnych, a także na rynek ziemi rolnej. Stwierdzono, że zarówno inwestorzy instytucjonalni, jak i rolnicy inwestują w ziemię rolną, a tym samym mogą w przyszłości być beneficjentami korzyści wynikających ze wzrostu jej wartości. Istnieją jednak ograniczenia związane z potencjalnym wykupem ziemi rolnej przez inwestorów instytucjonalnych i tym samym stworzeniem bariery cenowej zakupu ziemi dla rolników. Posiadanie jednak przez nich już określonego areału daje szansę uzyskania korzyści ze wzrostu jego wartości w długim okresie.

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