The aim of the project is an attempt to estimate changes in the potential competitive capacity of the Polish agri-food sector on regional markets and the global market under the implementation of the Transatlantic Trade and Investment Partnership agreement (TTIP). Due to the fact that the Polish agri-food sector is an integral part of the EU food economy **the analyses will fall within the scope of comparative economics**. The subjects of the analyses will be Poland and the other EU countries, on the one hand, and the US, on the other hand – as parties in the agreement. In fact, the study will include a diagnosis of the international competitive position (*ex-post* **approach**) and the potential competitive capacity (*ex-ante* **approach**) of the agri-food sectors in Poland, other EU countries and the US.

The following **specific objectives** will lead to the achievement of the main goal of the project:

- empirical verification of the economic integration theory, including the establishment of the preferential trade zone for the agrifood sectors in Poland, the other EU member-states and the US under the implementation of the TTIP,

- identification of the competitive potential of the agri-food sectors in Poland, the other EU member-states and the US,

- discussion on the macroeconomic factors affecting the trends and structure of agricultural trade in Poland, the other EU memberstates and the US,

- determination of the significance of tariff and non-tariff instruments of protection of agricultural markets in the EU countries and the US,

- showing the role of the policy of support of the agricultural sectors in the EU and US as a factor affecting their competitiveness on international markets,

- determination of the volume, geographical and assortment structure of foreign trade in agri-food products from Poland, the other EU member-states and the US,

- diagnosing the ex-post competitive advantages of the agri-food sectors in Poland, the other EU member-states and the US in bilateral and global trade,

- projection of the effects of the TTIP implementation on the agri-food sectors in Poland, the other EU member-states and the US, including potential changes in welfare, production, consumption, prices and foreign trade, using the Global Trade Analysis Project (GTAP) general equilibrium model, specially adapted to the research.

The considerations of the proposed research subject refer to the economic integration and trade regionalism theories, as well as selected international trade and international competitiveness theories. The research will attempt to verify these theories with the implementation of the TTIP. The main point of the research will be analyses, which should give answers to the following questions:

- Will the establishment of the free trade zone cause the creation and diversion effects in the agri-food trade in Poland, the other EU member-states and the US and how strong will these effects be?

- What are the sources of comparative advantages gained by the countries under study on international markets and can they guarantee long-lasting comparative advantages to these countries if the free trade zone is established?

- What will the potential competitive capacity of the agri-food sectors in these countries be in the bilateral system and on international markets when they change their foreign economic policies?

The projection of the effects of the TTIP implementation on the agri-food sector will be a significant element of the project. It will be based on the GTAP general equilibrium model, specially adapted to the research. The role of the planned ex-ante research is even more important for the theory of economics, because in the future it may be used as the basis for ex-post analyses, which will be made after the implementation of the TTIP, when the real effects of the agreement are known.

The project will have **not only a cognitive but also methodological character** due to the application of an advanced simulation model. The research will make a contribution to economic sciences and it will enable us to bridge the information gap in the methodology and practice of research on the sector under the conditions of general equilibrium.

The EU and US play an important role in the world economy and international economic policy. In 2014 the EU countries and the US together generated more than 45% of the global GDP and they made nearly 40% of the world export. In absolute terms it meant that the EU countries generated the GDP of 17.4 trillion dollars and they generated the income of 6.2 trillion dollars from export. In the same year in the US the GDP amounted to 16.3 trillion dollars, whereas the export value amounted to nearly 1.3 trillion dollars. However, it is necessary to note the fact that in consequence of the global economic crisis, which started in autumn 2008, the economic position of these countries became weaker. In 1995 the economics in the EU and US together generated nearly 60% of the global GDP and their share in the global export exceeded 25%. The economic activity of these countries became weaker mainly due to the slump in international trade and simultaneous dynamic growth of some less developed countries, including BRIC countries, especially China.

In view of the observed change in the balance of economic power, especially due to the increasing importance of countries from Asia and the Pacific region, the EU and US could remain in the dominant position in the world economy if they deepened their mutual economic relations by signing the Transatlantic Trade and Investment Partnership (TTIP). On the one hand, by establishment of the interregional free trade zone the EU and US may increase their impact on the international economic environment and strengthen their position against BRIC countries. On the other hand, it is necessary to remember that the EU and US significantly differ in their economic potentials and the signing of the agreement liberalising bilateral trade exchange may cause a radical change in the competing conditions both on regional markets and on the global market. The change of the competitive situation may particularly concern producers and exporters of agri-food products.

The EU is the world's greatest exporter of agri-food products. The export worth of 573.2 billion dollars resulted in a nearly 40% share of this group of products in the world export in 2013. However, in view of the fact that nearly 75% of the value of agri-food export in the EU is done within the Single European Market (424.2 billion dollars in 2013) and considering only the value of export to third countries, the shares of the countries under analysis in the world food export become equalised (EU – 10.1%, US – 9.7% in 2013). The abolishment of trade barriers would give both parties of the agreement an opportunity to increase their market shares. In view of this fact the situation of the agri-food sectors in the new EU member-states, including Poland, is a matter of special concern. In comparison with the EU-15 the new EU member-states are characterised by lower competitive potential of the agricultural sector, which is measured with the volume and efficiency of use of the resources of factors of production and relations between factors of production. In view of this experience, it is worth considering whether the establishment of the

interregional free trade zone between the EU and US will lead to trade creation and strengthen comparative advantages in the Polish agri-food sector, or, on the contrary, equal conditions of competition might result in a loss of some of the markets both in the EU and outside the EU as American exporters have efficiency advantages because of their scale of production.

The attempt to estimate the potential competitive capacity of the Polish agri-food sector on international markets comprises the competitiveness of the production potential, results of competitive actions measured with the volume of production and income gained by agribusiness entities and competitiveness in international trade. It uses both the ex-post and ex-ante approaches, including analogies and comparisons with the other EU countries and the US. It is the first attempt offering such a complex approach to investigation of the effect of the Transatlantic Trade and Investment Partnership agreement on the food economy and the agri-food markets in the partner states after the abolishment of barriers in bilateral trade. The analysis of the potential competitiveness in the future under simulated conditions will enable the formulation of recommendations for the economic policy so as to eliminate the possible negative consequences of trade liberalisation between the EU and US and to prevent the possible loss of some markets, which would weaken the competitive position of the Polish and EU agri-food sectors. The recommendations can also be used for the assessment of the EU Common Agricultural and Commercial Policies and thus, they might give premises for possible correction of these policies by their creators. They may also be a point of reference for representatives from Poland and the other EU member-states as well as the entire EU in international institutions, such as the WTO or OECD. In this context not only the cognitive aim but also the utilitarian aim of the research becomes important . The application of an advanced ex-ante simulation model is a new element in the research on the agri-food sector in Poland. Simultaneously, it continues the applicants' earlier investigations, gives a chance to improve this research tool and extend the possibilities of application of the model. It will enable us to bridge the considerable information gap in the methodology and practice of research on the potential consequences of changes in the trade policy in the agri-food sector.