ACTA SCIENTIARUM POLONORUM Oeconomia 13 (1) 2014, 91–108

COMPETITIVENESS IN THE ECONOMIC CONCEPTS, THEORIES AND EMPIRICAL RESEARCH

Tomasz Siudek, Aldona Zawojska
Warsaw University of Life Sciences – SGGW

Abstract. The objective of this study is to analyze the competitiveness through the prism of its theoretical background, methods of empirical estimation and influence factors. This paper contributes to the theoretical research on competitiveness not only by the synthesis of old and new writings as well as the findings of the exploratory studies, but also by concept synthesis of competitiveness. Since the concept of competitiveness can be reported to individual product/service, enterprise/farm, industry, economic sector, region, nation or international economic blocks, the attempts towards creating one common definition of competitiveness seem to be doomed to fail. Thus, our study does not answer the question which of the definitions proposed in the literature best capture commonly used notions of competitiveness, but our concern is about the ambiguity of those definitions which hampers the measurement and comparison of competitiveness. In order to mirror complexity of the aspects referring to the competitiveness we suggest using composite indicators to measure competitiveness. An important limitation of the empirical research on competitiveness is imperfect comparability of results across studies using different variables (features) describing competitiveness.

Key words: competitiveness, economic concepts and theories, measures and determinants, agribusiness

INTRODUCTION

The term of "competitiveness" is one of the most commonly used concepts in economics but it is not precise enough, what means that there is no generally accepted definition of competitiveness.

The term originated from the Classical Latin word "petere" meaning to seek, attack, aim at, desire, and the Latin prefix "con-" meaning together. At present, it is often used in different contexts, meaning dissimilar things to different researchers. The phrase was coined in the 70s of the twentieth century. It was then that American economists, under the evidence of severe trade battle between American and Japanese companies, undertook

Corresponding author – Adres do korespondencji: Tomasz Siudek, Warsaw University of Life Sciences – SGGW, Faculty of Economic Sciences, Department of Economics and Organization of Enterprises, Nowoursynowska 166, 02-787 Warsaw, Poland, e-mail: tomasz_siudek@sggw.pl

the first attempts to determine the degree of competitiveness between the rival economies [Wziątek-Kubiak 2003]. In line with other research sources, the oil crisis and the associated loss of comparative advantage by some industries in the developed countries triggered attention in this economic category [Lech 2001]. Although research on competitiveness has been popular for forty years, in recent time it appears to be flourishing as many economic phenomena are assessed according to whether they are competitive or non-competitive. Despite the fact that the competitiveness is an ubiquitous term in economic research, including agribusiness research, that is analyzed at different (macro- and micro-) levels, there are still troubles with understanding its meaning as well as with its measurement. Another research problem concerns the large variations in the competitiveness determinants over space and time. According to Porter and Rivkin [2012], the wide misunderstanding of the concept of competitiveness has dangerous consequences for political discourse as well as policy and corporate choices that are all also evident today. The main motivation for this study is to attract attention to those several points.

The rest of the article proceeds as follows. Section two introduces to the research methodology. In the next section, we look at different definitions, meanings, concepts and theories of competitiveness. After that, the measures of competitiveness most commonly used in the literature are presented. Then, review of research on determinants of competitiveness is presented. Conclusions from authors' analysis are drawn in the final section of the article.

MATERIAL AND METHODS

The main aim of this research is to review the definitions, measures and determinants of competitiveness as well as competitiveness-related economic concepts and theories. Authors do not answer the question, which of the proposed definitions best fit the used notions of competitiveness. Instead, their concern is about the ambiguity of those definitions which makes difficult the task of the discussing, estimating and comparing the competitiveness. A further goal is to present the issue of competitiveness from the perspective of empirical studies worldwide. Authors look at concepts and theories of competitiveness through the lenses of major strains of the economic thought. A critical assessment of the approaches and indicators used to measure competitiveness is also provided. The category of competitiveness is applied at macro, meso and micro levels. An extensive, conceptual study of the literature on the subject is the dominant research method for this study. The material was presented in tables and figures with a view to making it more practical and convenient for readers.

DEFINITIONS, ECONOMIC CONCEPTS AND THEORIES OF COMPETITIVENESS

Despite the argument by Krugman [1996] that "economists, in general, do not use the word competitiveness", the literature survey reveals a wide range of definitions of competitiveness applied by the researchers to clarify this term. After studying the literature on the subject, authors have chosen those definitions that appear to cover the spectrum of competitiveness dimensions (Table 1).

Table 1. Definitions of competitiveness according to various authors (presented in alphabetical order)

Author [year]	Definition
Adamkiewicz-Drwiłło [2002]	The competitiveness of a company means adapting its products to the market and competition requirements, particularly in terms of product range, quality, price as well as optimal sales channels and methods of promotion
Altomonte et al. [2012]	External or international competitiveness is the ability to exchange the goods and services that are abundant in home country for the goods and services that are scarce in this country
Ajitabh, Momaya [2004]	Competitiveness of a firm is its share in the competitive market
Barker, Köhler [1998]	Country's competitiveness is the degree to which it can, under free and fair market conditions, produce goods or services meeting the test of international markets, while simultaneously maintaining and expanding the real incomes of its population over the longer term
Bobba et al. [1971]	Competitiveness is the ability of nations, regions and companies to generate wealth being the precondition for high wages
Buckley et al. [1988]	A firm's competitiveness means its ability to produce and sell products and services of superior quality and lower costs than its domestic and international competitors. Competitiveness is a firm's long-run profit performance and its ability to compensate its employees and provide superior returns to its owners
Chao-Hung, Li-Chang [2010]	A firm's competitiveness is its economic strength against its rivals in the global marketplace where products, services, people and innovations move freely despite the geographical boundaries
European Commission [2001]	Competitiveness of a nation is the ability of an economy to provide its population with high and rising standards of living and high rates of employment on a sustainable basis
Flejterski [1984]	Competitiveness is the capacity of the sector, industry or branch to design and sell its goods at prices, quality and other features that are more attractive than the parallel characteristics of the goods offered by the competitors
Krugman [1990, 1994]	If competitiveness has any meaning, it is simply just another way to express productivity. The ability of a country to improve its living standard depends almost entirely on its ability to raise its productivity. Competitiveness is meaningless word when applied to national economies
Porter [1990]	The only meaningful concept of competitiveness at the national level is national productivity. Competitiveness is an ability of an economy to provide its residents with a rising standard of living and a high employment on a sustainable basis
Porter et al. [2008]	The most intuitive definition of competitiveness is a country's share of world markets for its products. This makes competitiveness a zero-sum game, because one country's gain comes at the expense of others
Scott, Lodge [1985]	National competitiveness is a country's ability to create, produce, distribute, and/or service products in international trade while earning rising returns on its resources
Tyson D'Andrea [1992]	Competitiveness is our ability to produce goods and services that meet the test of international competition while our citizens enjoy a standard of living that is both rising and sustainable
WEF [Schwab, Sala-i-Martin 2013]	Competitiveness is the set of institutions, policies, and factors that determine the level of productivity of a country
World Economic Forum – WEF [1996]	Competitiveness is the ability of a country to achieve sustained high rates of growth in GDP per capita

Source: Authors' own research based on the literature overview.

Competitiveness has been described by various authors as a theoretical, multidimensional and relative concept associated with the market mechanism. In here-presented analysis of its definitions, the concept may refer to different levels of aggregation: supranational, national, regional, local, industrial, sectoral, as well as to individual companies (or farms). In general, these can be described as the objects of competitiveness. Definitions are, however, usually applied to the best entities that are able to face market competition successfully. But in the marketplace, there simultaneously exist highly, medium and low competitive economic agents, so it seems that the competitiveness notion should be rather defined as a set of characteristics of one object with respect to comparable objects (benchmarks) on the market. Moreover, competitiveness reveals itself as confusing term which is often used almost interchangeably with other concepts like productivity, innovation or market share.

Review of the literature, made by authors, finds several concepts and theories of competitiveness. As Table 2 indicates, they range from those considering a nation's competitiveness from the macro-perspective to those concentrating on firms (or farms), i.e. looking at competitiveness in micro-economic terms.

Table 2. Selected concepts and theories related to competitiveness

Concept/Theory	Representative	Country	Main theses
1	2	3	4
Classical concepts and theories			
Concept of invisible hand	Adam Smith	Scotland	Each party involved in international free trade can gain benefits by specializing in the production of goods in which it holds an absolute advantage. So, let every country export those goods it produces at the lowest costs and import those goods it produces at the highest costs
Comparative advantage concept	David Ricardo	England	A country can benefit from foreign trade even if it lacks any absolute advantage over its trade partners in the goods' production. It only needs to have relative advantage in any good in order to sell it abroad
Heckscher-Ohlin trade theory (natural resource abundance theory)	Eli Heckscher Bertil Ohlin	Sweden	A country will specialize in producing and exporting those commodities which require relatively intensive use of locally abundant factors of production. Relatively capital-abundant country will export capital-intensive commodities while relatively labour-abundant country will export labour-intensive commodities
Neoclassical, Austrian and institutional concepts and theories of competitiveness			
Theory of effective (workable) competition	John M. Clark	USA	Competitive advantage is driven by innovations introduced by the company. Innovations motivate firms to compete aggressively in order to obtain competitive advantage, which in turn leads to technological progress and economic growth at the macro-level
Theory of marketing behaviour	Wroe Alderson	USA	There are six potential sources of a firm's competitive advantage: market segmentation, a way of communication (i.e. promotion and advertising) and reaching out to the customers (choice of distribution channel), product development, process improvement, and product innovations

Table 2 cont.

1	2	3	4
Austrian school theory	Ludwig von Mises	Austria	Market competition is an automatic dynamic process and not a specific market structure. The tendency towards market equilibrium is the result of entrepreneurial activity. An enterprise wins or loses in competition depending on the strength of its capabilities and the degree its offers match the market needs
Evolutionary economics	Joseph A. Schumpeter	Austria	Crucial to long-term survival of firms in the marketplace is their constant adjustment to changing environment, mainly due to searching out new innovative recombination of the garnered resources
Theory of entrepreneurship and innovations	Joseph A. Schumpeter	Austria	The company's ability to innovate is a key for achieving competitive advantage over its rivals. The ability to create new solutions and the predisposition to take risks associated with testing them in the market underline the competition process and entrepreneurship. Differences both in the level of innovative capacity and entrepreneurship result in differences in the competitive position of any economic agent
Institutional economics streams	Friedrich List Max Weber James Buchanan	Germany USA	In addition to economic factors, one's competitiveness is affected by social institutions such as public authorities, trade unions, financial institutions, socio-political organizations, ownership and organizational structures and mental habits, rules and codes of conduct
Contemporary concepts and theories of competitiveness			
Krugman's concept of competitiveness	Paul R. Krugman	USA	Productivity growth is the main driver of competitiveness. International competitiveness of countries is associated with their high standard of living
Porter's theory of competitiveness	Michael E. Porter	USA	Competitiveness depends on long run productivity, which increase requires a business environment that supports continual innovation in products, processes and management. The four underlining conditions driving the global competitiveness of country's companies include: factor endowments, demand conditions, related and supporting industries (clusters), and the firm's strategy, structure and rivalry

Source: Authors' own research based on the literature overview.

The classical approach focuses mainly on competitiveness at the macro-level (international, country, regional), whereas the neoclassical approach, respectively, on the micro--level. The first attempt to explain the reasons why countries engage freely in international trade originates from Adam Smith's theory of absolute advantages developed in 1776. There are also numerous modern concepts and theories of competitiveness, which include, in particular, the views of Paul Krugman (New economic geography theory) and Michael Porter (management theory).

The macro-level approaches to competitiveness very often refer to international trade and nations' comparative advantage in production of certain commodities which are the subject of foreign trade. There is also a set of theories and concepts directly addressing the relations between competitiveness and market structure (perfect competition, oligopoly, monopoly). These are the classic approaches in which competitive struggle in the market is an indicator of the competitive position of the individual players. Additionally, there are single competitiveness theories that advocate state intervention in the market. Most of the theories of competitiveness argue that the competitiveness position of any country, region and company is decided by its productivity being, on one hand, considered as a major determinant of competitiveness, and, on other hand, equated with competitiveness.

An inspiring approach to the competitiveness is offered by Joseph Schumpeter in his theories of the entrepreneur and innovation that state that merely the capability to create innovations and owner's entrepreneurial activities determine the firm's competitive advantage. The game theory of John von Neumann and Oskar Morgenstern also contributed to the development of competitiveness theory, paying emphasis on the market competition as a game playing. Under this original approach, when looking from the perspective of all players in the market, to behave rationally means to cooperate, whereas for the single players to be rational is to refrain from the cooperation.

Summing up the development of concepts and theories of competitiveness (Table 2), it seems that the most influential and prominent are the following: the concept of the invisible hand of Adam Smith, the concept of comparative advantage of David Ricardo, the Schumpeter's theories of entrepreneur and innovation, the Porter's theory of competitiveness, and the Krugman's concept (criticism) of competitiveness. The first two explain an international trade system based on the principle of (absolute and comparative) advantages. Schumpeter's main focus is aimed at innovative activities as key determinants of competitiveness. Krugman contributed to the theory of competitiveness not only by demonstrating the relevance of productivity for nations' competitive advantages in international trade and improving population's living standards, but also by considering (denouncing) the sense of the debate on competitiveness between nations. As concerns the Porter's theory of competitiveness, particularly noteworthy is the four-factor model for the competitive advantage of nations called diamond model, which is frequently used by the researchers.

THEORETICAL APPROACHES TO COMPETITIVENESS AT AN ENTERPRISE LEVEL

The promotion of a country's productivity growth, and hence competitiveness improvement, needs to take focus on a-firm-driven nature of those processes. So, in this section some of the major theoretical approaches to competitiveness at a firm level are being introduced, namely those developed by Buckley et al. [1988], Man et al. [2002], and Ajitabh and Momaya [2004].

Buckley, Pass and Prescott [1992] conceptualize model for firm's competitiveness which comprises of three interrelated dimensions (competitiveness measures), namely competitive performance, competitive potential, and competitive process (Fig. 1). Competitive potential refers to the resources used to generate (superior) performance, while competitive performance is a performance outcome relative to that of competitors. Competitive process relates to the management (administration) of the company. The main argument offered by the authors is that no single measure of competitiveness can entirely capture all relevant dimensions of competitiveness, therefore the measures of performance, potential and process should be examined together and in relation to a firm's rivals. They propose a set of different measures, such as: profitable market share (the performance dimension), technological development, long-run price and cost effectiveness (the potential dimension), and closeness to customer, investment strategy, commercialization of technology and management attitude to internalization (the process dimension).

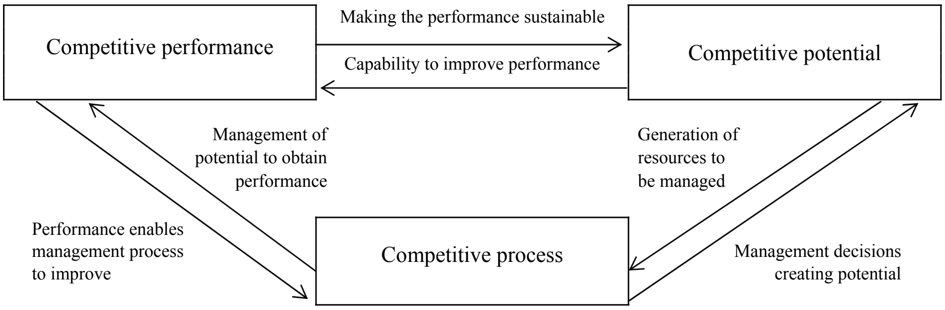

Fig. 1. Interrelationship of dimensions of firm's competitiveness
Source: Buckley et al. [1992]

Ajitabh and Momaya [2004] focus on the main competitiveness sources at a company level and classify competitiveness-related literature in the asset-processes-performance (APP) framework. Their approach includes two strategic levels: assets and performance, and processes. Authors suggest that an enterprise's competitiveness depends on the combination of tangible and intangible assets (e.g. human resources, material inputs, industry infrastructure, technology, reputation, trademarks) and processes within organization, which together provide competitive advantage and can be termed as sources of competitiveness. Competitiveness processes include those ones that help identify the importance and performance of core processes, such as strategic management processes, human resources processes, operations management processes, and technology management processes. Competitive performance is reflected in productivity, quality, costs, and financial, technological and international performance. The APP model can be helpful for firms in the identifying and pursuing useful action, if correlations between different competitiveness factors is accurately established.

Man, Lau and Chan [2002] have developed a theoretical framework for competitiveness of small-and medium-sized enterprises (SME) by drawing upon the concept of competitiveness at a firm level. They argue that SMEs are not scaled down versions of large corporations. Thereby, since the two types of firms differ in terms of their organizational structure, responses to the environment, managerial style and the ways of competing with other companies, the competitiveness analysis related to large corporations may not be applied straightforwardly to SMEs. Authors distinguish three key determinants of SME competitiveness: internal or firm-specific factors, external environment, and the entrepreneur's activity – the latter specific for SMEs. These determinants, in turn, have impact on a firm's long-run performance. Internal factors embrace financial, human and technological resources, productivity, innovation, quality, productivity, organizational structure and system, image and reputation, culture, product variety, and customer service. Entrepreneurship factors (entrepreneur attributes), like, for example, experience, knowledge, skills and goal orientation, are perceived by the authors as the most critical for the competitiveness of SMEs. In sum, the model of Man et al. considers three dimensions of a firm's competitiveness (potential, process, performance) in addition to four attributes (long-term orientation, controllability, relativity, dynamism). The process dimension includes entrepreneurial competencies while the potential dimension involves a firm's competitive scope and organizational capabilities. The model suggests that in order to achieve long-term competitiveness of SMEs, decision-makers should focus on building entrepreneurial competencies referring to managerial skills and abilities to gather resources and to exploit opportunities.

COMPETITIVENESS ESTIMATION

A challenging task in the study of competitiveness is its empirical measurement. In the light of evidence that the competitiveness concept lacks an universally accepted definition, researchers has proposed a variety of approaches to estimate competitiveness, as the literature overview shows (Table 3). Competitiveness is found to be measured at different levels of economic analysis: mega-(global), macro-(nations, regions), meso-(economic sectors and industries) and micro-(firm's) level. Research studies employ one-dimensional, two-dimensional and multidimensional measures. A good example of the latter is the global competitiveness index (GCI) which comprises of such dimensions, as: institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labour market efficiency, financial market development, technological readiness, market size, business sophistication, innovation. Competitiveness measures can be also classified into two categories: static (assessing competitiveness level at any point of time), and dynamic (assessing the changes in competitiveness over time).

Table 3. Applied measures of competitiveness at different levels of economic activity

Author/Institution	Measures of competitiveness
1	2
Macro-and mega-perspective	
Barrell et al. [2005]	Equilibrium exchange rate
Dollar, Wolff [1993]	Productivity
Esty, Porter [2002]	GDP per capita; Economic growth; Current Competitiveness Index; Environmental regulatory regime
Fagerberg [1988]	Growth in market shares for exports and imports; Relative Unit Labour Costs (RULC); Growth in 'terms of trade' for country; Technological competitiveness (private spending on R&D)
Kaldor [1978]	Growth in Relative Unit Labour Costs (RULC); Growth in market shares for exports
Lipschitz, McDonald [1991]	Real exchange rates
Markusen [1992]	Real income; Index of productive efficiency
Mulatu et al. [2004]	Net exports

Table 3 cont.

1	2
IMD [1994]	Economic Performance; Government Efficiency; Business Efficiency; Infrastructure
Schwab, Sala-i-Martin [2013]	The Global Competitiveness Index
Sharpe, Banerjee [2008]	Country's share of global Foreign Direct Investments (FDI)
Cornell University, INSEAD, WIPO [2013]	The Global Innovation Index
Meso-perspective	
Banterle, Carraresi [2007]	The net export index (NEI); The Grubel-Lloyd index
Buckley et al. [1988]	Trade balance
Carbon Trust [2004]	Profitability (operating profit)
Carraresi, Banterle [2008]	Revealed comparative advantage (RCA); Relative export advantage (RXA); Relative import advantage (RMA); Net export index (NEI), Export market shares (EMS)
Copeland, Taylor [2004]	Environmental outcomes (pollution levels), comparative advantage (in dirty-industry and clean-industry output and exports)
DeCourcy [2007]	Balance of trade
Jaffe, Palmer [1997]	Environmental and R&D expenditures; Patent applications
Lanoie et al. [2011]	Productivity of production factors
Leiter et al. [2009]	Environmental standards and Foreign Direct Investments flows
Misala, Siek [2012]	Region's comparative advantage in resource endowments and economic development
Neef [1992]	Unit labour costs
Peterson [2003]	Changes in sectoral output and share of market
Van Rooyen et al. [1999]	Balassa Revealed Comparative Advantage index for agro-food chains
Zhang et al. [2012]	Industry balance of trade; Relative Unit Export Price (RUV); Relative export growth; Mandeng's K
Micro-perspective	
Altomonte et al. [2012]	Firm-level productivity measures: Total factor productivity (TFP), Labour productivity (LP) and Unit labour costs (ULC)
Balassa [1965]	Revealed Comparative Advantage (RCA) – market share
Bruno [1965]; Gorton et al. [2001]	Domestic Resource Cost (DRC)
Buckley et al. [1992]	Multidimensional indicators
Durand, Giorno [1987]	Price ratio (price competitiveness)
Helleiner [1991]	The relative price (relative to one or more foreign competitors); Product-specific real effective exchange rate
Jorgenson, Kuroda [1992]	Price competitiveness
Krugman, Hatsopoulos [1987]	Changes in market share
Porter [1990]; Siudek et al. [2013]	Multidimensional (composite) indicators
Siggel, Cockburn [1995]	Total (full) unit costs
Swann, Taghavi [1992]	Price/product attribute
Turner, Golub [1997]	Relative Unit Labour Costs (RULC)

Source: Authors' literature review.

A further distinguishing characteristic of the competitiveness measures is their positive or normative nature. Positive indicators are based on observable evidence, thus they reflect actual performance. Normative indicators, on the contrary, involve value judgments. Closely related to this distinction is the one between ex post and ex ante measures. An ex post competitiveness is given, for example, by measures of trade (e.g. market share) and current-account balance, both based on the past information, so with limited power to assess potential competitiveness. A potential (ex ante) competitiveness demonstrates a capacity to compete and lies on indicators of technology, prices and costs. Good example is real (effective) exchange rate which can be calculated by using export prices, import prices and unit labour costs. Moreover, when assessing competitiveness, it is also important to determine if a measure represents the source or the outcome of competitiveness. For instance, low price, cost and high productivity are causes of a firm's strong competitiveness, while market share, RCA index, and trade balance represent the effects of the international competitiveness.

The heterogeneity of competitiveness variables and measures across the empirical studies may, regrettably, hinder the comparison of their findings. In view of the abundance of available measures used for assessing competitiveness, special caution is needed in choosing the right ones. It seems that in order to reflect the complexity of competitiveness, the most relevant approach is to use composite indicators capturing various components of this concept. In the case of the agricultural sector, particular attention should be taken with regards to unpaid inputs, such as, for example, input of unpaid labour given to family farm.

DETERMINANTS OF COMPETITIVENESS

As Table 4 presents, the competitiveness can be driven by many factors, understanding of which has occupied the minds of economists for more than two centuries, beginning with the seminal work by Adam Smith [1776]. A great deal of the empirical research refers to the determinants of competitiveness at the enterprise level, probably due to the conviction that firms, not individual nations, compete in international markets, as also Porter [1990] argues. According to Hollensen [2010], national circumstances create an environment in which businesses can gain international competitive advantages but it depends on the firm whether it grabs the opportunity to gain competitive advantage or not. Also McGahan [1999] suggests that external factors are more or less uniform for all competing companies and it is a firm's characteristics and action that determine its profitability.

Based on the literature review, authors identified micro- and macro-economic sources of firm's competitiveness. Microeconomic factors, having a direct impact on company competitiveness include: sophistication of firm's operations and strategy, quantity and quality of production factors, technology and innovations as well as supporting or related industries and clusters. Macroeconomic environment (monetary and fiscal policy, the rule of law and the quality of social and political institutions) sets general conditions creating opportunities for higher corporate competitiveness.

Table 4. Determinants of competitiveness found in empirical research

Determinants	Authors
1	2
Division of labour, specialization	Classical economics: Smith [1776]
Investment in physical capital	Neoclassical theories: Schumpeter [1950]; Swan [1956]
Assets (resources)	
Size of agricultural holding	Nivievskyi, von Cramon-Taubadel [2008]
Human resources	Horne et al. [1992]
Technology	Khalil [2000]; Mehra [1998]
Trust and trustworthiness	Barney, Hansen [1994]; Carney [1998]; Barney et al. [2001]
Social responsibility	Zhang [2013]
Processes	
Strategic management processes	
– competencies and quality	Sushil, Kak [1997]; Loch et al. [2008]; Hitt et al. [2012]
– corporate competitive strategy	Porter [1990]; Grupp [1997]
– flexibility and adaptability	O'Farrell, Hitchens [1988]; Reeves, Deimler [2011]
– internalization strategies	Altomonte, Ottaviano [2011]; Delgado et al. [2012]
Human resources process	
– design and deploy talents	Smith [1995]
– brain drain and brain gain	Buga, Meyer [2012]; Oishi [2013]
– workforce mobilization	Delgado et al. [2012]
Technological processes	
– innovations	Reeves, Deimler [2011]; Atkinson, Andes [2011]; Forsman et al. [2013]
– information and communication technology	Ross et al. [1996]; Atkinson, Andes [2011]; Ollo-López, Aramendía-Muneta [2012]
Operational processes	
– manufacturing	Kanter [1993]
– quality, design	Dou, Hardwick [1998]; O'Farrell, Hitchens [1988]
Marketing processes	
– marketing	Corbett, van Wassenhove [1993]; Dou, Hardwick [1998]
– advertising	Notta, Vlachvei [2010]
– managing relationships	Hammer, Champy [1993]; Porter [1998]
– persuading power	Chaharbaghi, Feurer [1994]
Firm's (farm's) performance	
Productivity	Bosma et al. [2011]; Mullen, Keogh [2013]
Firm entry and exit	Bosma et al. [2011]
Share of market	Mehra [1998]
Product differentiation and range	Buckley et al. [1988]; Dou, Hardwick [1998]; Dangelico, Pujari [2010]
Efficiency and profitability	Schwalbach [1991]; Porter [1990]
Prices and costs	Porter [1990]; Pace, Stephan [1996]; Scott, Lodge [1985]
Creation of value	Dou, Hardwick [1998]
Customer satisfaction	Porter [1990]; Suchanek et al. [2011]
Development of new products	Hammer, Champy [1993]; Man et al. [2002]; Dangelico, Pujari [2010]
Supporting and related industries and clusters	
Production sharing	Altomonte, Ottaviano [2011]
Supplier quantity and quality	Delago et al. [2012]
State of cluster development	Ketels et al. [2012]; Delago et al. [2013]
The experience of cluster manager	Ketels et al. [2012]

Table 4 cont.

1	2
Inter-organizational relationships	Chaddad, Rodriguez-Alcalá [2010]; Boonzaaier, von Leipzig [2009]
Institutions and government policies	
Nation's culture	Gulev, Dukaric [2010]
Farm subsidies	Nivievskyi, von Cramon-Taubadel [2008]; Bezlepkina et al. [2005]
Regulatory quality	Brunet [2012]
Restrictions of capital flows	Delago et al. [2012]
Government spending and taxation	Vietor, Weinzierl [2012]
Exchange rate	Schmitz et al. [2012]; Gulati et al. [2013]
Interest rates	Andrén, Oxelheim [2002]

Source: Authors' compilation based on literature review.

As concerns agriculture and agro-food sectors, the literature [Australian Government 2005, Ball et al. 2010, Herath 2013] shows that productivity enhancement and innovations are central drivers of their international competitiveness, at least if it comes to the developed economies. The study of agribusiness in Canada identified thirty facets of competitiveness including production costs, cycle time, scale, flexibility, product enhancement, new products and process technologies, marketing and organization [Westgren, van Duren 1991]. The competitiveness of Greek food and beverage manufacturing firms is shown to be determined by total and television advertising [Notta, Vlachvei 2010]. In South Africa, the competitiveness both of small-scale and resource poor farmers as well as small-scale agricultural manufacturers is improving through the clustering, integration and linkages of farmers, suppliers, processors, marketing agents, and supermarkets [Boonzaaier, von Leipzig 2009].

CONCLUSIONS

1. The last several years have witnessed a growing academic and political debate over better ways to conceptualise and measure competitiveness. The evolution of this debate has traditionally oscillated around four ideas: division of labour and specialization, market share, costs/prices, and productivity. While the classical theory of comparative advantage has long dominated thought about international trade, nowadays it is recognized as an incomplete explanation for the competitive advantage of firms under modern (agro)business environment. Advances in technology and innovations as well as environmental and resource-scarcity concerns have created both new opportunities for and constraints in gaining, maintaining and improving competitiveness against the rivals in increasingly complex, globalized economy.
2. While a firm-related factors, such as tangible and intangible assets, processes, performance and networks, effectively determine and facilitate the competitiveness, it is also affected by a range of government policies as well as formal and informal institutions. Public spending and taxes, exchange rates, interest rates, and government

regulatory activities are examples of key macroeconomic determinants of competitiveness.

3. Developing government policies to improve the business competitiveness requires an understanding the major factors that facilitate or impede firms' ability to compete. These factors can, however, differ depending on a country, region or industry. The literature suggests that for the least-developed countries one of the main obstacle for reaching competitiveness is difficulty in opening up their economies to global competitiveness forces.
4. Since the competitiveness is a complex concept determined by a multiplicity of factors, it seems that the most appropriate way to estimate the level of competitiveness is by using multidimensional or composite indicators (indexes) of competitiveness. Construction of composite indicators could, however, be associated with the dilemma of selecting appropriate variables (individual indicators) and weights representing their relative importance (priority) as well as of choosing an aggregation method.
5. Further research on the competitiveness of nations, regions, sectors, industries and individual enterprises or farms is desirable as it can help to reveal the competitive position of relevant objects and track changes of their performance over time. Such information can be useful in the formulation and implementation of future competitiveness-fostering policies by firm managers and governments at different levels.

REFERENCES

Adamkiewicz-Drwiłło H.G., 2002. Uwarunkowania konkurencyjności przedsiębiorstw. PWN, Warszawa.

Ajitabh A., Momaya K., 2004. Competitiveness of Firms: Review of Theory, Frameworks and Models. Singapore Management Review 26(1), 45–61.

Altomonte C., Aquilante T., Ottaviano G.I.P., 2012. The Triggers of Competitiveness. The EFIGE Cross-Country Report. The Bruegel Blueprint Series, Bruegel, Brussels.

Altomonte C., Ottaviano G.I.P., 2011. The Role of International Production Sharing in EU Productivity and Competitiveness. European Investment Bank Papers 16(1), 62–89.

Andrén N., Oxelheim L., 2002. Exchange-Rate and Interest-Rate Driven Competitive Advantages in the EMU. Working Paper 576, IUI, The Research Institute of Industrial Economics, Stockholm, 1–31.

Atkinson R.D., Andes S.M., 2011. The Atlantic Century II: Benchmarking EU & U.S. Innovation and Competitiveness. The Information Technology and Innovation Foundation, Washington.

Australian Government, 2005. Australian Treasury submission to the Agriculture and Food Policy Reference Group.

Balassa B., 1965. Trade Liberalization and Revealed Comparative Advantage. The Manchester School of Economic and Social Studies 33, 99–123.

Ball V.E., Butault J.-P., Juan C.S., Mora R., 2010. Productivity and International Competitiveness of Agriculture in the European Union and the United States. Agricultural Economics 41(6), 611–627.

Banterle A., Carraresi L., 2007. Competitive Performance Analysis and European Union Trade: The Case of the Prepared Swine Meat Sector. Food Economics – Acta Agriculturae Scandinavica, Section C 4(3), 159–172.

Barker T., Köhler J., 1998. Environmental Policy and Competitiveness. Environmental Policy Research Briefs 6, 1–12.

Barney J.B., Hansen M.H., 1994. Trustworthiness as a Source of Competitive Advantage. Strategic Management Journal 15, 175–190.
Barney J.B., Wright M., Ketchen D.J., 2001. The Resource-Based View of the Firm: Ten Years after 1991. Journal of Management 27(6), 625–641.
Barrell R., Choy A., Holland D., Riley R., 2005. The Sterling Effective Exchange Rate and Other Measures of UK Competitiveness. National Institute Economic Review 191(1), 54–63.
Bezlepkina I., Oude Lansink A., Oskam A., 2005. Effects of Subsidies in Russian Dairy Farming. Agricultural Economics 33(93), 277–288.
Bobba F., Langer W., Pous J.W., 1971. Bericht über die Wettbewerbsfähigkeit der Europäischen Gemeinschaft, Brussels.
Boonzaaier J.W., von Leipzig K.H., 2009. Improving the Competitiveness of Resource Poor Farmers in South Africa. 23rd Annual SAIIE Conference Proceedings, 28-30 October 2009, Roodevallei Country Lodge, Gauteng, 1–9.
Bosma N., Stam E., Schutjens V., 2011. Creative Destruction and Regional Productivity Growth: Evidence from the Dutch Manufacturing and Services Industries. Small Business Economics 36(4), 401–418.
Brunet F., 2012. Regulatory Quality and Competitiveness in Recent European Union Member States. L'Europe en Formation 364, 59–90.
Bruno M., 1965. The Optimal Selection of Export-Promoting and Import-Substituting Projects. In: Planning the External Sector: Techniques, Problems and Policies. United Nations, New York.
Buckley P.J., Pass C.L., Prescott K., 1988. Measures of International Competitiveness: A Critical Survey. Journal of Marketing Management 4(2), 175–200.
Buckley P.J., Pass C.L., Prescott K., 1992. The Meaning of Competitiveness. Servicing International Markets: Competitive Strategy of Firms. Blackwell Publishers, Cambridge.
Buga N., Meyer J.-B., 2012. Indian Human Resources Mobility: Brain Drain versus Brain Gain. CARIM-India Research Report 2012/04. Migration Policy Centre, San Domenico di Fiesole, Italy.
Carbon Trust, 2004. The European Emissions Trading Scheme: Implications for Industrial Competitiveness. The Carbon Trust, London. Available from: http://www thecarbontrust.co.uk/carbontrust/ [on-line document].
Carney M., 1998. The Competitiveness of Networked Production: The Role of Trust and Asset Specificity. Journal of Management Studies 35(4), 457–479.
Carraresi L., Banterle A., 2008. Measuring Competitiveness in the EU Market: A Comparison Between Food Industry and Agriculture. Paper presented at the 12th EAAE Congress, Gent, Belgium, 27–30 August.
Chaddad F., Rodriguez-Alcalá M.E., 2010. Inter-Organizational Relationships in Agri-food Systems: A Transaction Cost Economics Approach. In: C. Fischer, M. Hartmann (Eds). Agri-food Chain Relationships. CABI, Oxfordshire, 206–219.
Chaharbaghi K., Feurer R., 1994. Defining Competitiveness: A Holistic Approach. Management Decision 32(2), 49–58.
Chao-Hung W., Li-Chang H., 2010. The Influence of Dynamic Capability on Performance in the High Technology Industry: The Moderating Roles of Governance and Competitive Posture. African Journal of Business Management 4(5), 562–577.
Clark J.M., 1961. Competition as a Dynamic Process. Brookings Institution, Washington.
Copeland B.R., Taylor M.S., 2004. Trade, Growth, and the Environment. Journal of Economic Literature 42(1), 7–71.
Corbett C., Van Wassenhove L., 1993. Trade Offs? What Trade-Offs? Competence and Competitiveness in Manufacturing. California Management Review 35(4), 107–122.
Cornell University, INSEAD, WIPO, 2013. The Global Innovation Index 2013: The Local Dynamics of Innovation. Geneva, Ithaca.
Dangelico R.M., Pujari D., 2010. Mainstreaming Green Product Innovation: Why and How Companies Integrate Environmental Sustainability. Journal of Business Ethics 95(3), 471–486.

DeCourcy J., 2007. Research Joint Ventures and International Competitiveness: Evidence from the National Cooperative Research Act. Economics of Innovation and New Technology 16(1), 51–65.
Delgado M., Ketels C., Porter M.E., Stern S., 2012. The Determinants of National Competitiveness. NBER Working Paper 18249, 1–47.
Dollar D., Wolff N.E., 1993. Competitiveness, Convergence and International Specialization. The MIT Press, Cambridge.
Dou W., Hardwick P., 1998. The Competitiveness of EU Insurance Industries. The Service Industries Journal 18(1), 39–54.
Durand M., Giorno C., 1987. Indicators of International Competitiveness: Conceptual Aspects and Evaluation. OECD Economic Studies 9, 147–182.
Esty D.C., Porter M.E., 2002. Ranking National Environmental Regulation and Performance: A Leading Indicator of Future Competitiveness? In: M.E. Porter, J.D. Sachs, P.K. Cornelius, J.W. McArthur, K. Schwab (Eds). The Global Competitiveness Report 2001–2002. Oxford University Press, Oxford, 78–101.
European Commission, 2001. European Competitiveness Report 2001. DG for Enterprise and Industry, Brussels.
Fagerberg J., 1988. International Competitiveness. The Economic Journal 98(391), 355–374.
Flejterski S., 1984. Istota i mierzenie konkurencyjności międzynarodowej. Gospodarka Planowa 9, 390–394.
Forsman H., Temel S., Uotila M., 2013. Towards Sustainable Competitiveness: Comparison of the Successful and Unsuccessful Eco-Innovators. International Journal of Innovation Management 17(3), 1340015-1–1340015-26.
Gorton M., Daniłowska A., Jarka S., Straszewski S., Zawojska A., Majewski E., 2001. The International Competitiveness of Polish Agriculture. Post-Communist Economies 13(4), 445–457.
Grupp H., 1997. The Links between Competitiveness, Firm Innovative Activities and Public R&D Support in Germany: An Empirical Analysis. Technology Analysis and Strategic Management 9(1), 19–33.
Gulati A.B.S., Knif J., Kolari J., 2013. Exchange Rate Shocks and Firm Competitiveness in a Small, Export-Oriented Economy: The Case of Finland. Multinational Finance Journal, http://www.mfsociety.org/modules/modDashboard/uploadFiles/journals/MJ~0~p1803n5joe1h9e3uilgb1inqfbv4.pdf [on-line document].
Gulev R.E., Dukaric G., 2010. Exploring the Connectivity between Work Inclinations and Country Competitiveness Levels: A Cross-country Analysis. International Journal of Sustainable Economy 2(2), 127–143.
Hammer M., Champy J., 1993. Reengineering the Corporation: A Manifesto for Business Revolution. Harper Business, New York.
Helleiner G.K., 1991. Increasing International Competitiveness: A Conceptual Framework. In: EDI Seminar Series "Increasing the International Competitiveness of Exports from Carribean Countries". Economic Development Institute, World Bank, 17–23.
Herath D., 2013. Impediments to the Ability of Canadian Food-Processing Firms to Compete: Evidence From a Survey on Innovation. Agribusiness 00 (0), 1–21. DOi: 10.1002/agr. 21361.
Hitt M.A., Ireland R.D., Hoskisson R.E., 2012. Strategic Management: Competitiveness and Globalization, Cengage Learning.
Hollensen S., 2010. Global Marketing: A Decision-Oriented Approach. Financial Times/Prentice Hall.
Horne M., Lloyd P., Pay J., Roe P., 1992. Understanding the Competitive Process: A Guide to Effective Intervention in Small Firms Sector. European Journal of Operational Research 56(1), 54–66.
IMD, 1994. The World Competitiveness Yearbook.

Jaffe A.B., Palmer K., 1997. Environmental Regulation and Innovation: A Panel Data Study. The Review of Economics and Statistics 79(4), 610–619.
Jorgenson D.W., Kuroda M., 1992. Productivity and International Competitiveness in Japan and the United States, 1960-1985. In: B.G. Hickman (Ed.). International Productivity and Competitiveness. Oxford University Press, New York.
Kaldor N., 1978. The Effect of Devaluations on Trade in Manufactures. In: Further Essays on Applied Economics. Duckworth, London, 99–118.
Kanter R.M., 1993. Country Competitiveness. Oxford University Press, New York.
Ketels C., Lindqvist G., Sölvell O., 2012. Strengthening Clusters and Competitiveness in Europe. The Role of Cluster Organisations. The Cluster Observatory. Center for Strategy and Competitiveness, Stockholm.
Khalil T.M., 2000. Management of Technology: The Key to Competitiveness and Wealth Creation. McGraw Hill, Boston.
Krugman P., 1990. The Age of Diminished Expectations. The MIT Press, Cambridge.
Krugman P., 1994. Competitiveness: A Dangerous Obsession. Foreign Affairs 73(2), 28–44.
Krugman P., 1996. Making Sense of the Competitiveness Debate. Oxford Review of Economic Policy 12(3), 17–25.
Krugman P., Hatsopoulos G.N., 1987. The Problem of U.S. Competitiveness in Manufacturing. New England Economic Review, January/February, 18–29.
Lanoie P., Laurent-Lucchetti J., Johnstone N., Ambec S., 2011. Environmental Policy, Innovation and Performance: New Insights on the Porter Hypothesis. Journal of Economics and Management Strategy 20(3), 803–842.
Lech A., 2001. Definicje i miary międzynarodowej konkurencyjności gospodarki. Gospodarka w teorii i praktyce 2(9), 77–86.
Leiter A.M., Parolini A., Winner H., 2009. Environmental Regulation and Investment: Evidence from European Industries. Working Papers 4, Faculty of Economics and Statistics, University of Innsbruck.
Lipschitz L., McDonald D., 1991. Real Exchange Rates and Competitiveness: A Clarification of Concepts and Some Measurements for Europe. IMF Working Paper, March.
Loch C.H., Chick S.E., Huchzermeier A., 2008. Management Quality and Competitiveness: Lessons from the Industrial Excellence Award. Springer.
Man W.Y., Lau T., Chan K.F., 2002. The Competitiveness of Small and Medium Enterprises. A Conceptualization with Focus on Entrepreneurial Competencies. Journal of Business Venturing 17(1), 123–142.
Markusen J.R., 1992. Productivity, Competitiveness, Trade Performance and Real Income: The Nexus Among Four Concepts. Economic Council of Canada, Ottawa, Canada.
McGahan A.M., 1999. Competition, Strategy and Business Performance. California Management Review 41(3), 74–101.
Mehra S., 1998. Perpetual Analysis and Continuous Improvement: A Must for Organizational Competitiveness. Managerial Finance 24(1), 19–27.
Misala J., Siek E., 2012. International Competitive Ability of the Silesia Economy during the Transformation Period [Międzynarodowa zdolność konkurencyjna Śląska w okresie transformacji]. In: T. Sporek (Ed.) Międzynarodowe stosunki gospodarcze – internacjonalizacja i konkurencyjność międzynarodowa. Katowice Economic University Press, Katowice, 35–52.
Mulatu A., Florax R., Withagen C., 2004. Environmental Regulation and International Trade. Tinbergen Institute Discussion Paper 20/3.
Mullen J., Keogh M., 2013. The Future Productivity and Competitiveness Challenge for Australian Agriculture. Contributed paper prepared for presentation at the 57th AARES Annual Conference, Sydney, New South Wales, 5-8 February, 2013.
Neef A., 1992. An International Comparison of Manufacturing Productivity and Unit Labor Cost Trends. In: B.G. Hickman (Ed.). International Productivity and Competitiveness. Oxford University Press, New York, 137–157.

Nivievskyi O., von Cramon-Taubadel S., 2008. The Determinants of Dairy Farming Competitiveness in Ukraine. Paper presented at the 12th EAAE Congress, Gent, Belgium, 27-30 August.

Notta O., Vlachvei A., 2010. Competitiveness and Advertising in Greek Food and Beverage Manufacturing Firms. In: D.E. Sakas, N. Konstantopoulos (Eds). Marketing and Management Sciences: Proceedings of the International Conference on ICMMS 2008. Imperial College Press, London.

O'Farrell P.N., Hitchens D.M., 1988. The Relative Competitiveness and Performance of Small Manufacturing Firms in Scotland and the Midwest Ireland: An Analysis of Matched Pairs. Regional Studies 22(5), 399–416.

Oishi N., 2013. Migration and Competitiveness in Science and Engineering in Japan. Migration Letters 10(2), 228–244.

Ollo-López A., Aramendía-Muneta M.E., 2012. ICT Impact on Competitiveness, Innovation and Environment. Telematics and Informatics 29(2), 204–210.

Pace R.W., Stephan E.G., 1996. Paradigms of Competitiveness. Journal of Global Competitiveness 6(1), 8–13.

Peterson S., 2003. The EU Emission Trading Scheme and its Competitiveness Effects for European Business: Results from the CGE Model DART. Kiel Institute for World Economics.

Porter M.E., 1990. The Competitive Advantage of Nations. The Free Press, New York.

Porter M.E., 1998. On Competition. Harvard Business School Press, Boston.

Porter M., Ketels C., Delgado M., 2008. The Microeconomic Foundations of Prosperity: Findings from the Business Competitiveness Index. In: WEF, The Global Competitiveness Report 2007–2008 WEF, Geneva.

Porter M.E., Rivkin J.W., 2012. The Looming Challenge to U.S. Competitiveness. Harvard Business Review 90 (3), 54–61.

Reeves M., Deimler M., 2011. Adaptability: The New Competitive Advantage. Harvard Business Review 7/8 (89), 135–141.

Ross J.W., Beath C.M., Goodhue D.L., 1996. Developing Long-term Competitiveness through IT Assets. Sloan Management Review 38(1), 31–42.

Schmitz M., De Clercq M., Fidora M., Lauro B., Pinheiro C., 2012. Revisting the Effective Exchange Rates of the Euro. ECB Occasional Paper 134, European Central Bank, Frankfurt.

Schumpeter J., 1950. Capitalism, Socialism and Democracy. Harper & Row, New York.

Schwab K., Sala-i-Martin X., 2013. The Global Competitiveness Report 2013–2014. World Economic Forum, Geneva.

Schwalbach J., 1991. Profitability and Market Share: A Relationship Reflection on the Functional Relationship. Strategic Management Journal 12(4), 299–306.

Scott B.R., Lodge G.C., 1985. US Competitiveness in the World Economy. Harvard Business School Press, Boston.

Sharpe A., Banerjee M., 2008. Assessing Canada's Ability to Compete for Foreign Direct Investment. Centre for the Study of Living Standards, Ottawa, Ontario.

Siggel E., Cockburn J., 1995. International Competitiveness and its Sources: A Method of Development Policy Analysis. Discussion Paper 9517, Concordia University Department of Economics.

Siudek T., Snarski P., Chodera B., 2013. Konkurencyjność banków komercyjnych i spółdzielczych w Polsce [Competitiveness of Commercial and Cooperative Banks in Poland]. Roczniki Ekonomii Rolnictwa i Rozwoju Obszarów Wiejskich 100(2), 25–36.

Smith A., 1776 [1904]. An Inquiry into the Nature and Causes of the Wealth of Nations. Methuen & Co., Ltd., London.

Smith S., 1995. World Class Competitiveness. Managing Service Quality 5(5), 36–42.

Suchanek P., Spalek J., Sedlacek M., 2011. Competitiveness Factors in Post-transformation Period: The Case of Czech Enterprises. European Research Studies 14(1), 119–143.
Sushil, Kak A., 1997. Global Competitiveness with Core Competence: A Study of HCL. Proceedings of the International Conference of Technology, IIT Delhi.
Swan T.W., 1956. Economic Growth and Capital Accumulation. Economic Record 32(2), 334–361.
Swann P., Taghavi M., 1992. Measuring Price and Quality Competitiveness: A Study of Eighteen British Product Markets. Avebury, Aldershot.
Turner A., Golub S.S., 1997. Towards a System of Unit Labor Cost-Based Competitiveness Indicators for Advanced, Developing and Transition Countries. Staff Studies for the World Economic Outlook, IMF.
Tyson D'Andrea L., 1992. Who's Bashing Whom: Trade Conflict in High Technology Industries. Institute for International Economics, Washington, D.C.
Van Rooyen C.J., Esterhuizen D., Doyer O.T., 1999. How Competitive is Agribusiness in the South African Food Commodity Chain? Working Papers 18081, University of Pretoria, Department of Agricultural Economics, Extension and Rural Development.
Vietor R.H.K., Weinzierl M.C., 2012. Macroeconomic Policy and U.S. Competitiveness: US Competitiveness Projects. Harvard Business Review 90(3), 1–45.
WEF/IMD, 1995. The World Competitiveness Report. World Economic Forum and Institute for Management Development, Geneva and Lausanne.
Westgren M.L.R, van Duren E., 1991. Agribusiness Competitiveness Across National Boundaries. American Journal of Agricultural Economics 73(5), 1456–1464.
World Economic Forum, 1996. The Global Competitiveness Report. WEF, Geneva.
Wziątek-Kubiak A., 2003. Konkurencyjność polskiego przemysłu. Wyd. Bellona, Warszawa.
Zhang J., Ebbers H., Mulder R., 2012. Competitiveness of Chinese Industries – A Comparison with the EU. Review of European Studies 4(1), 203–219.
Zhang Y., 2013. Relation between Social Responsibility and Enterprise Long-term Competitiveness. International Journal of Emerging Technologies in Learning 8(5), 21–26.

KONCEPCJE I TEORIE EKONOMICZNE ORAZ BADANIA EMPIRYCZNE POJĘCIA KONKURENCYJNOŚCI

Streszczenie. Praca ma charakter teoretyczny. Głównym jej celem jest przegląd definicji, koncepcji i teorii ekonomicznych, mierników i czynników konkurencyjności zidentyfikowanych w badaniach empirycznych. Trudności w zdefiniowaniu pojęcia konkurencyjności wynikają z tego, że badana jest ona na poziomie makro, mezo i mikro. Ze względu na to, że pojęcie konkurencyjności jest stosowane wobec poszczególnych produktów/usług, przedsiębiorstw/gospodarstw rolnych, branży czy sektora gospodarki, regionu, kraju lub międzynarodowych bloków gospodarczych, próby stworzenia jednej wspólnej definicji konkurencyjności wydają się być skazane na niepowodzenie. W badaniach konkurencyjności powinno wykorzystywać się wielowymiarowe syntetyczne wskaźniki, ponieważ pojęcie konkurencyjności dotyczy wielu aspektów i obszarów działania. Istotnym problemem w badaniach konkurencyjności jest ograniczona porównywalność wyników ze względu na różne zmienne (cechy) wykorzystywane przez badaczy.

Słowa kluczowe: konkurencyjność, teorie i koncepcje ekonomiczne, mierniki, determinanty, agrobiznes

Accepted for print – Zaakceptowano do druku: 15.12.2013