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MICHAŁ PIETRZAK
Warsaw University of Life Sciences
Warszawa

THE PROBLEM OF THE GEOGRAPHIC SCOPE OF THE MARKETS/SECTORS IN THE ERA OF GLOBALISATION AND REGIONALISATION

Abstract

The article has two goals. The first one was to discuss the problem of the boundaries of geographical sectors/ markets in the conditions of globalisation and regionalisation, with particular emphasis on agri-food economy. The discussion was based on a review of a variety of sources – the analysis covered the literature in the field of economics and economic geography, strategic management, marketing and logistics. The article addressed the issues of market and sector concepts and the importance of their geographic dimension. In this context, the role of distance and area for farming was presented. The processes of globalisation and the development of regional integration groupings were discussed, indicating their importance for the agri-food sector.

The second objective was to present the concept of determining the geographical boundaries of sectors/markets. The existing methods of assessing the globalisation potential of the sector were discussed. Afterwards, while compiling the elements of these approaches and extending the range of included degrees of possible spatial ranges, an own approach was put forward.

There is a need to further research this area, in particular to attempt to determine the geographical range of sectors, including agri-food products. The concept proposed in the article can be used in this regard. To that end, it would be desirable to further operationalise it and test it in practical terms in the evaluation of the geographical ranges of markets.

Keywords: transnational corporations, geographic scope of the markets/sectors, globalization, regionalisation, Porter, Yip, Lassare

Introduction

Market is the basic notion of micro-economy [53]. A typical textbook definition would define market as a collection of sellers and buyers concluding voluntary trade transactions with one another [42]. The same authors offer a separate definition of a sector – a group of entrepreneurs manufacturing and distributing one or several similar products. This reasoning is in practical terms identical to the way Porter [44] defines a sector. From this perspective one could identify the notion of a sector/industry with the supply side of the market, i.e. sellers in the definition of the market presented above (in other words a sector is included in the notion of market). Another view, quite frequently presented in literature on management and marketing, identifies a market with the demand side and a sector with the supply side [28, 31, 49]. Some authors, however, see the need to combine the logic of supply and demand in defining the notion of a market [2, 50]. One of the "founding fathers" of the economics of industry (the essence of which is to study how markets function [53]) – Bain, defined industry as "a group of sellers offering a collection of products being close substitutes for one another to a shared group of buyers" [5]. Practically, this definition matches the textbook definition of a market quoted earlier. In literature on economics of industry the terms market and industry are often treated as synonyms[1].

The author is a supporter of a multidimensional approach to defining a market/industry, which notions he will use interchangeably. In this approach, the first dimension is supply (sellers offering products with a high rate of substitution), the second dimension is demand (buyers with specific needs). The third dimension that has to be taken into account to complete the definition of an industry is the geographical area [2, 19, 20, 36, 50].

Proper definition of industries in each of the dimensions mentioned is not an easy task. In the era of progressing processes of regionalisation and globalisation, definition of current geographical boundaries of markets becomes a particularly significant challenge. Geographical reach of markets defined in the past – as a consequence of transformations in transport, telecommunications, liberalisation of flow of goods – may in many cases be inadequate for the present economic situation. The processes of internationalisation also affect agriculture and food economy [10, 15, 40, 51]. Therefore, the question becomes more and more legitimate: is the way we define the geographical dimension of agri-food markets adequate? A substantial part of economic research and analyses is based on domestic mass statistics on industries. Thus, these studies assume, in general *implicite* that the national market is the adequate reference market.

Intensification of globalisation and regionalisation processes forces a reflection, whether in the case of certain products (e.g. skimmed milk powder, cere-

[1] For examples, Sherer, when discussing the problem of defining market boundaries alternatively uses terms "industry definition" and "definition of a market" [48], while Carlton and Perloff clearly say that they use the notions of market and industry interchangeably.

als, etc.), this perception of markets is not too narrow. On the other hand, short storage life and the ratio between the value and volume of many agricultural and food products (e.g. raw milk, some fruit and vegetables, bread, etc.) cause their markets to have rather narrowly defined geographical boundaries. Inadequate definition of boundaries of a market/sector, including in the geographical dimension, shall have an impact on the quality of diagnoses and analyses of the same, distorting the conclusions and in extreme cases they could lose any analytical relevance [see 5, 48].

The objectives of this paper include: (1) to discuss the problem of geographic boundaries of markets/industries in conditions of globalisation and regionalisation, with a particular focus of agri-food economy, and (2) to propose a concept for definition of these boundaries. The study is of an overview nature – it is based on critical analysis of sources in the area of economics and economic geography, strategic management and logistics.

The role of distance and area

The problems of distance and area touch the issues of key importance for management and, as a consequence, for the theory of economics. Distance, through costs of transport, has an impact on market prices and location of production, the role of area expresses itself in the need to define geographical boundaries of markets[2] [7].

While the 18th century economists, including Adam Smith, were aware of the problems of distance and area, it is a certain paradox that issues of such significance were practically left out of the mainstream of economics in the 19th and first half of the 20th century. The mainstream had, in fact, been developing without taking into account the spatial dimensions of the economy. The spatial economics, including the theory of location, had been developing in almost complete isolation from the mainstream of the economic theory for as long as until the 1950s.

It should be pointed out that the domain, where – on the margins of the mainstream – the spatial economics flourished in the 18th century – was the economics of agriculture. While the economics originated from the philosophical thought in the 18th century, the economics of agriculture – derived from the concepts of physiocrats and cameralists – shaped its identity as a sub-discipline of economics throughout the 19th century, beginning form Thaer and his student von Thünen [18, 35].

Von Thünen's publication "Der isolierte Staat" of 1826 is considered to be the beginning of the location theory. The author introduces a number of rigorous assumptions pertaining to an abstract geographic model of "an isolated state", which aimed to separate the costs of transport from among other factors influencing the location of agricultural production, while thanks to assumptions

[2] For an interesting analysis of these issues in relation to the milk market see [25].

made the costs of transport are a linear function of distance[3]. On this basis, von Thünen formulates a scheme of agricultural production in the form of concentric circles around the central city of "an isolated state". Products with short storage lives or with large weight/volume in relation to their value shall be produced close to the central city [7].

The location theory, particularly for industrial plants, was further developed by, i.e.: Launhardt (1885), Weber and Pick (1909), Palander (1935) and Lösch (1939). When publishing "Location and Space Economy" in 1956, Isard aimed to fill in a more than a century old gap between the classical location theory and mainstream economics, which he defined as "a wonderland deprived of spatial dimensions" [cited from: 7]. Isard treated "transport effort" on equal terms with other inputs. He understood "transport effort" as moving a unit of weight by a unit of distance. Efforts understood in this way have their price – a transport tariff depending on weight and distance. However, putting "transport effort" on equal terms with other inputs, Isard blurs qualitative differences between production decisions and location decisions [7]. Godlewska-Majkowska in turn emphasises this distinction, pointing to passive and active processes of location, depending on the sequence of taking these two categories of decisions [23]. For example, in agricultural production in case of family farms, location in terms of a process would typically be of passive nature – the location of a farm is given, and decisions pertain to production. In case of larger enterprises the location of active nature is more frequent, i.e. with specific decisions on production, the decision on location follows, and it consists in selecting from among various potential production locations on the basis of their attractiveness [23]. Decisions taken in international corporations on location of subsidiaries could serve as a typical example.

In this context, Blaug views Isard's concept as "throwing the baby out with the bathwater". As a result, the spatial issues continued to be neglected by mainstream economists, while the classical location theory was sort of absorbed by regional economics. The latter has not developed a consistent economic theory of spatial issues, instead offering tools and techniques of operational nature [7]. Lubbe expresses a similar view, writing that: "Until recently the analysis at the regional level was the domain of geographers. Mainstream economists did not treat it seriously" [34]. He sees the return of interest in the location theory in modern mainstream economics as a result of progress of globalisation and regionalisation processes. In doing so he points to the role of works of Paul Krugma[4] in renewed interest in geographical factors in economic development [34].

[3] In practice, there is a degressivity of costs of transport in relation to the size of cargo and distance – distance degressivity of tariffs is particularly clear in rail, air and specifically sea transport [6, 12].

[4] 2008 Nobel Prize winner for the analysis of trade structure and explanation of location of economic activity [27]. He emphasises the importance of distinction of international intra- and inter-sectoral trade, while claiming that only inter-sectoral trade could be explained with the assistance of the comparative costs theory. In intrasectoral trade the pursuit of the benefit of scale of production and sales is of key importance [40].

Globalisation of economy

Globalisation as a notion appeared for the first time in Webster's dictionary in 1961. A year later, media theoretician McLuhan introduced the popular term "global village" into public use [39]. Twenty years later, futurologist Naisbitt deemed the transition from local to global economy one of the ten mega-trends changing the future [23]. In this very period, in the 1980s globalisation enters everyday language as a term for deep transformations in global economy following liberalisation of economic ties, limitation of state interventionism, internationalisation of capital, IT revolution and increased importance of transnational corporations. At that time, globalisation was often identified with proliferation of consumerism, the American style, with terms such as Americanisation, Californisation or McDonaldisation of life. However, it soon turned out to be an excessive simplification [39]. Beginning form the 1990s, globalisation started to be perceived as the most fundamental process of changes taking place in the modern world, changing the trajectory of its future development, the process of an exceptional nature in the history of mankind [38, 57].

Globalisation raises a lot of controversy [38]. No commonly approved definition of globalisation has been elaborated so far in the course of these discussions, moreover, there is no consent as regards the scope of this process, which some authors identify with the area of economy, while others see globalisation in a much broader context.

McGrew's definition is an example of a broader perspective: he defines globalisation as a multiplicity of interactions and mutual connections, going beyond national borders and societies, creating modern global system [cited from: 46]. According to the World Bank, globalisation is the increasing interdependence of countries resulting from the progressing integration of trade, finance, people and ideas [21]. In Polish literature, the broader, multidimensional scope of globalisation – stretching beyond economical aspects – is emphasised by, e.g.: Czyżewski and Poczta-Wajda, Kołodko, Lubbe, Szymański, Zorska [15, 30, 34, 52, 57].

However, as Zorska notes, the biggest progress of globalisation processes has been made in the area of economy [57]. The result is the observed penetration of economical phenomena across state borders [1]. In this dimension, globalisation could be perceived as a more advanced stage of internationalisation of economic activity, which takes place at the levels of enterprises, markets, sectors of economy and economy as a whole [30, 38, 57]. Czyżewski and Poczta-Wajda define globalisation as the process of a market operating beyond borders and as a process of elimination of methods and ways of protection of domestic operators against external competition [15].

Some authors go as far as to identify globalisation with the economic dimension. According to Levy's definition, globalisation pertains to progressing integration between national economies through international trade and foreign direct investment [cited from: 37]. Similar is the view of globalisation in WTO's study Globalization and Trade [22]. Michalak notes that globalisation means increasing systemic interdependence of national economies, which are penetrated and transformed by international economic activity [cited from: 57].

In summary of the review of numerous definitions, Zorska formulates the following compilation definition of globalisation of economic activity: "long-term process of integration of an increasing number of national economies above their borders, taking place across the world thanks to broadening and intensification of mutual connections (investment, manufacturing, trade, cooperation), as a result of which a global economic system is created with high interdependence and substantial repercussions of activities undertaken/taking place even in remote countries" [57].

As mentioned earlier, globalisation is subject to many controversies, related not only to the issues of defining this notion. Niedziółka lists numerous axes of dispute around globalisation [38]. The discussion of problems outlined by her goes beyond the scope of this paper – the author shall only briefly reflect on the issue of assessment of the balance of disadvantages and advantages of globalisation. As Kulawik emphasises, economic globalisation may bring a lot of advantages, manifested by the opportunity to improve welfare, primarily as a result of accelerated economic growth and decreased volatility of consumption. Attention should also be drawn to indirect benefits of globalisation, such as: better quality of politics, increased macroeconomic discipline and taking care about institutional development. However, globalisation also has its destructive side, which is increased susceptibility to crises [32]. Szymański draws attention to the risk connected with autonomisation of economic globalisation, progressing without parallel political globalisation (the absence of global coordination entity) [52]. Kulawik emphasises that European economic integration may turn out to be a protective mechanism, buffering the EU Member States to a certain extent against negative impact of crises, to which globalisation exposes us [32]. It is also Szymański that points out that the EU is an experiment of a kind, facilitating testing of how – in the absence of a global coordination entity – to act on behalf of a larger community and taking into account long-term collective interest [52].

Regionalisation of economy

The observations on the EU referred to above, take us to the discussion of the process, which is considered to be both complementary and competitive to globalisation, which is the process of regionalisation. Both processes are outcomes of substantial internationalisation of the economy, and as such they shape modern international economic relations [58]. A region is a delimited, relatively homogeneous area, differing from adjacent areas by specific features. A region may be delimited on the basis of criteria, which are not only geographical, but also economic, political and cultural [29, 34]. Traditionally, a region would typically be understood as an integral part of a given country. However, presently the term is used in a broader dimension – as an area in a borderland (e.g. the so-called Euroregions in the EU) or a space encompassing several states in a given geographical area, e.g. a continent [29, 56]. The notion of regionalisation is sometimes used interchangeably with terms such as: regionalism[5], economic integration and regional trade agreements, regional integration groups or semi-globalisation [3, 13, 29, 58].

In this perspective regionalisation is understood as an interim stage of global integration [56] or in a more complex manner – as a process, which is partly complementary and partly competitive to globalisation [29, 58]. Czarny states that 345 agreements on trade preferences compliant with WTO principles have been concluded until 2012 [13]. From among 153 WTO member countries, only Mongolia is not a member of any integration group, while some countries participate in as many as 20 groups. About 90% of groups are free trade zones and agreement with a partial range, a 10% are more advanced forms of economic integration (tariff unions) [59].

Liberalisation of trade both under GATT/WTO and regional trade agreements bore fruit in the form of impressive dynamics of global trade turnover in the past thirty years; from the level of USD 1,838 billion in 1983 to USD 17,930 billion in 2012, while 3 largest regional trade agreements hold 1/3 share in the global trade (NAFTA – 13%, EU-27 – 12%, ASEAN – 7%) [26].

Agriculture and food industry in the conditions of globalisation and regionalisation

As Sapa notes, processes of globalisation and regional economic integration are important factors influencing development processes in agriculture [47]. However, for as long as until the Uruguay Round of GATT, trade in agricultural products had been excluded from negotiations under GATT [47]. This round was the first internationally relevant attempt at limiting protectionism in the agri-food sector, which – as a result of difficulties with reaching agreement in this area - caused the Uruguay Round, started in 1986, to finish several years than planned. The Agreement on Agriculture signed in Marrakesh in 1994 launched the process of liberalisation of global trade in agricultural products – becoming an impulse to tighten the connections between agricultural business and its international environment [15].

Subsequent international agricultural negotiations under the auspices of the WTO took place in 2001 in the framework of the so-called Doha Round. The topics of discussions had been set by the previous round – these were the issues of: market access, export subsidies, internal support. However, the negotiations

[5] For broader consideration on distinction between notions of regionalism and regionalisation see [29, 58].

turned out to be very difficult and no agreement on agriculture was reached as a result. Agricultural issues may be perceived as the key to the success of the entire trade negotiations, as their positive solution is the condition for progress of discussions on trade in remaining products and services and on intellectual property [15]. Recently, on 7 December 2013, an agreement was concluded under the WTO conference organised in Bali, which may turn out to be the beginning of a breakthrough in the protracting Doha Round, but it is still a long way before completion of the round. The agreement fails to deal with a majority of the most important issues, including fundamental action on trade in agricultural services and products, or further reductions in tariffs and contingents [41].

Irrespective of the present stagnation in liberalisation of trade at the WTO level, liberalisation in the area of agriculture is progressing at the level of regional integration groups. From the point of view of Polish agricultural business, the membership in the EU strengthens the competitive mechanism. Polish producers, processors and exporters of agricultural and food products have increased opportunities to sell, but at the same time they have to face competition from the EU operators [40]. While Poland continues to have a negative overall trade balance, in the trade in agri-food products exports surpass imports. At the same time, since the time of Poland's accession to the EU, a dynamic increase of both exports (2.8 times) and imports (2.6 times) has been observed. In 2003, exports represented 8.4% of all Polish exports, while imports 5.9%, In 2009, these proportions were 11.4% and 8.5%, respectively [40].

The issue of globalisation processes was tackled many times by Chechelski, who – since 2005 – has carried out a pioneering research on the role of transnational corporations (TNC) in Polish food industry, on the basis of which he draws conclusions on the state of play of globalisation in this link of agri-food business – identifying sectors with a varied level of globalisation [11]. According to last year's publication of this author, the present classification of sectors of food industry is as follows [9]:

- Sectors with a very high degree of globalisation (the share of TNCs: 62-99% of revenues) – sugar, confectionery, beer, oil, tobacco;
- Sectors with a high degree of globalisation (the share of TNCs: 38-51% of revenues) – spirits, food concentrates, feeds, non-alcoholic beverages;
- Sectors with a low degree of globalisation (the share of TNCs: 4-21% of revenues) – fisheries, milling, meat, dairy, fruit and vegetable.

Recognising the substantial contribution of Chechelski's research into the development of knowledge on the role of TNCs in Polish food industry, the author of this paper wishes to draw attention to imprecise application of notions and measures of globalisation in the cited research – which results in a risk of inadequate assessment of the degree of globalisation. Chechelski uses notions of TNC and a global enterprise as synonyms, using the terms interchangeably. He understands TNC as a company with a turnover above one billion dollars, holding a several percent share in the global market, operating on at least two continents, while the products manufactured by such companies are not niche products [10, 11]. The author believes that TNC could be termed a "global" enterprise, but this does not determine, whether it employs a multi-local strategy (separate and to a large extent independent competing in many local markets) or a global one. Only enterprises employing integrated global strategy should be defined as global, and their presence that should be treated as a symptom of globalisation of a sector. Presence of multi-local companies is not such a symptom [44, 56]. The author is obviously aware of problems with practical distinction between these two types of strategies, without data which are difficult to access. But this should make one even more prudent when using a broad notion of TNC in assessing globalisation.

Nevertheless, Chechelski adopts the share of TNCs as a determinant of the level of globalisation of sectors [9, 10, 11]. However, as Porter rightly points out, the fundamental measure of globalisation is the scale of exports of the sector, while the share of international companies could be a supporting, complimentary measure. This is because international companies not necessarily use truly global strategies, and on many occasions it is a multi-local strategy, consisting in establishing independent branches [44].

Treating the share of TNCs as a sole determinant of globalisation may thus lead to misguided conclusions. Tobacco industry, which Chechelski includes in sectors with a very high level of globalisation, is a very good example in this area [9, 10, 11]. But, as Wierzejski and Gornowicz note, the internationalisation ratio (the quotient of the value of exports and sold production) for this sector amounted to 13.1% in 2007, and was even lower in previous years [55]. Though it is showing an upward trend, it is still low enough, to hardly view this sector as truly highly globalised. Despite the domination by international corporations, the sales of cigarettes continue to be primarily domestic. Closing this thread of discussion, it is worth quoting Porter: "Some sectors, despite having a lot of multi-national enterprises, do not have the fundamental features of a global sector (...) numerous multi-nationals manufacturing packed food run their operations in many countries. Their subsidiaries (...) have autonomy and achieve competitive balance on the scale of individual national markets" [44].

A sector/market as a key unit of economic analysis

Globalisation of economic activity is a process taking place at levels of enterprises, markets/sectors, countries and entire global economy [10, 57]. At the same time, as Chechelski rightly points out, literature is dominated by studies on globalisation at a macroeconomic level, analyses at the microeconomic level are rare, while mesoeconomic studies (at the level of a sector) are exceptions [10].

Porter states, however, that the essence of competitive advantage of nations/countries can only be fully understood and explained at the level of specific sectors. Assuming that the fundamental economic objective of a nation should be to ensure a high and increasing standard of life of its members – he concludes that the only relevant concept of competitiveness at the national level is productivity of resources at the disposal of such nation, which depends on both the quality and attributes of goods produced by that nation (which defines their prices), and on effectiveness of use of resources [43].

Starting from this way of understanding competitiveness, Porter underlines that the analysis at the level of the entire national economy is unable to provide us with a precise answer to the question on determinant of productivity and its growth. In order to get the answer, one should focus on individual sectors, or even their segments. Its enterprises, rather than entire nations and their economies, that compete on international markets. Arena, where companies win or lose their competitive advantages, is a sector. It is also a fundamental analytical unit for understanding competitiveness [43]. According to Porter "a global sector is a sector, where strategic situation of competitors on primary regional and national markets depends to a large extent on their general global situation" [44].

Porter emphasises the importance of adequate definition of the boundaries of a sector – broad definitions of sectors often used in studies, such as for example machinery sector, do not facilitate in-depth understanding of competitiveness, as in fact they embrace an entire set of strategically separate markets with differing competition environments [43]. Representatives of the sector economics – Scherer, and Bain in particular, offer an in-depth discussion of the problem of proper definition of boundaries of a sector. Both authors tackle the issue of geographic boundaries of a sector, which in reality can be much narrower or much broader that the area of a given country assumed implicite in mass statistics [4, 48]. In his classical studies on the impact of market concentration on profitability, Bain approached proper definition of market boundaries with particular reverence. It is evidenced by the fact that from the list of 149 sectors for which he had relevant data, he eliminated 66 (44%) due to doubts on proper definition of a market, including the aspects of geographical scope [4].

The adequate level of analysis is of key importance for it being a source of exhaustive and operationalised advice on building and strengthening competitiveness – both for decision makers responsible for public policies and persons designing company strategies [43].

Defining geographic boundaries of a sector/market

So, how to define proper geographic boundaries of a sector? In particular, how do we know that a market has become global in the course of its evolution? According to Porter, a sector becomes global because there are specific advantages of competing in different national markets in a coordinated manner. On the other hand, there may be barriers to achieving these advantages. The more economic and other advantages surpass the barriers, the bigger is the global potential of a sector [44].

Porter points to four fundamental sources of advantages of competing at a global level: (1) presence of comparative advantage in certain countries in relation to others; (2) economies of scales and results of experience, using of which call for the production volume exceeding the demand in national markets; (3) advantages resulting from diversification of products, i.e. an opportunity to achieve uniqueness (e.g. reputation, credibility) as a result of competing on a global scale; (4) advantages resulting from presence of universal assets, i.e., assets which could be used multiple times without incurring additional cost after initial expenditure – e.g. technological innovations, knowledge of a market [44].

On the other hand, barriers in global competition could include: barriers of economic nature, i.e. increasing the direct cost of competing (cost of logistics, cost of servicing diversified needs and complex segments, cost of access to distribution channels, necessity to provide local sales services, local repairs, sensitivity to delays, absence of demand on a global scale), barriers increasing complexity of managerial tasks (geographical diversification of marketing tasks, intensified local services, rapid and frequent technological changes) and institutional barriers (tariff and non-tariff trade barriers, policy preferences, etc.) [44].

Twelve years after the original publication of Porter's book quoted above, his former doctoral student – George Yip – published a book on global strategy, where he proposed his own model of assessing globalisation potential of a sector. In the view of Gierszewska and Romanowska, although Yip's concept "is based on Porter's definition and classification, it is much more orderly, better operationalised and thus its usefulness for research is greater" [20].

According to Yip's model, there are four determinants of globalisation potential of a given sector, which determine the potential and the needs to apply a global strategy: related to market, costs, governments and their policies and behaviours of competitors on a global scale. Assessment of globalisation potential of a sector according to this concept is carried out across more than 20 factors of globalisation, grouped in the categories listed above [56]. In Yip's model, regionalisation is treated as "interim stage" between operating on a local scale and a strategy integrated globally, as the factor "driving" globalisation also applies to regionalisation. Globalisation factors may not be strong enough to create global potential of a sector, but may be strong enough to generate regional potential [56]. Companies taking advantage of opportunities presented by regional organisations, such as NAFTA, EU, ASEAN, etc. – coordinating and integrating their activities at the regional level – in fact apply a quasi-global strategy in the region, i.e. "a regional strategy". The notion of semi-globalisation used by Arregl et al. [3] seems to be a good term in this case.

Gierszewska and Romanowska proposed a simplified mechanism for point evaluation of globalisation potential of a sector, based directly on Yip's model. However, as the authors themselves point out, it is of primarily educational nature, and propose to treat Yip's model as the destination tool [20].

Lassere developed his own concept, although it is close to Yip's mechanism. It specifies two categories of factors: those forcing globalisation and those hindering it, or in other words – forcing a local approach. In the group of factors forcing globalisation Lassere includes: political factors – the essence of which is the reduction of barriers in international trade; technological factors – which increase economies of scale and reduce cost of coordination; social factors – thanks to which clients favour standardisation and global brands; competitive factors – which are conducive to integration and coordination. The group of factors preventing globalisation includes: cultural factors – the essence of which is reduction of advantages resulting from standardisation; commercial factors – which are related to the need for a diversified, locally personalised approach to sales and marketing; technological factors – which cause reduction of advantages resulting from economies of scale, centralised coordination and standardisation, as well as legal factors – which limit free movement of persons, goods, capital and information [33].

The author has used Yip's model for assessment of globalisation potential of a variety of sectors (including agri-food) since 2005 – for various purposes and at different levels of analytic insight – starting from simple exercises during classes and trainings for managers (including for managers of agri-food companies)[6] to extensive expert analysis for large corporations[7]. These experiences point to analytical usefulness of Yip's model. However, practical application of the method also showed certain shortcomings. Table 1 presents synthetic comparison of discussed concepts of assessment of globalisation potential of sectors.

According to the author, it would be worthwhile to propose a method that would be a form of compilations of the concepts so far, attempting to combine their advantages and avoid disadvantages, at the same time broadening the examined spectre of possible geographic scopes of markets. In particular, it would be advisable to retain the clarity of Yip's model. Therefore, the author proposes to retain fundamental grouping of globalisation factors according to Yip with exclusion of "competitive factors" and to introduce minor modifications and supplementations. In the group of "competitive factors" Yip takes into account the role of turnover in international trade of a sector, international interdependence of countries, presence of international and global competitors and the degree of transferability of competitive advantage[8] [56]. In the view of the

[6] Which has borne fruit in the form of a chapter in an e-learning textbook for international study network MBA for agricultural business – AGRIMBA [17].

[7] The author drafted or co-drafted such analyses prepared for the sector of compound fertilisers (NPK) and several other chemical markets: titanium dioxide, acrylic acid, acrylic acid esters and polymer super absorbents.

[8] The factor of transferability of competitive advantage [56] is – according to the offer – wrongly proposed, because as a matter of fact it is examined in detail in other areas of Yip's model in such factors, as for example transferability of marketing or high cost of product development and rapidly changing technologies.

author, this approach represents "mixing up" symptoms of global competition with factors driving globalisation of a sector. In this respect, the author shares Porter's view that a large share of exports in sector's turnover and foreign direct investment prevail in sectors, where competition is of global nature, while serious export flows are a credible symptom of global competition [44]. From this perspective, global competition and its syndromes are an outcome of broadening of geographic boundaries of a sector rather than a reason for it – hence the proposal to treat these still important aspects separately, while the essence of the assessment of globalisation potential of a sector is to focus on the reasons. The author proposes to define the categories of factors taken into account in assessment of the geographic scope of a sector as demand related ("market" by Yip), supply related ("cost" by Yip), and political and legal ("government" by Yip).

Table 1

Comparison of advantages and disadvantages of Porter's, Yip's and Lassare's concepts

Method[a]	The biggest advantages	The biggest disadvantages
Porter's concept (1980)	• Perception of dynamics of globalisation of a sector as a resultant of advantages of application of a global strategy and barriers to their achievement • Perception of symptoms of global competitions separately from advantages and barriers to globalisation of a sector	• Classification and discussion of factors not always clear • Low level of operationalisation
Yip's model (1992)	The best operationalised concept Apart from "mixing up" symptoms of global competitions separately from advantages and barriers to globalisation of a sector	• No demarcation between factors driving and limiting globalisation of a sector • "Mixing up" symptoms of global competition with factors driving globalisation of a sector
Lassere's model (2003)	• Perception of the dynamics of globalisation of a sector as a resultant of factors forcing globalisation and forcing local approach to a sector	• Classification of groups of factors not always clear • Low level of operationalisation

[a] Dates of original publication provided in parenthesis.

Source: own elaboration.

It is vital for the methodology to take into account the duality of directions of impact of factors (supporting and preventing globalisation). Such approach is a great value of Porter's approach and it is also present in Lassere. Thanks to this dual component approach – as rightly proposed by Gierszewska and Romanowska – assessment of globalisation potential of a sector may be treated as a form of analysis of a force field [20]. Analysis of a force field is a tool originating from the work of a social psychologist Kurt Lewin (1950s) Presently, it is used in analysis and management of changes [20, 54]. The essence of analysis of a force field is taking onto account forces supporting and preventing a change. The system of these forces achieves a balance and "freezes" the examined problem at a specific point. The status quo may be thawed as a result of increase/decrease of supporting/preventing forces [54]. Thus, one can say that a change to present balance of these forces results in progress or regress of the change in question.

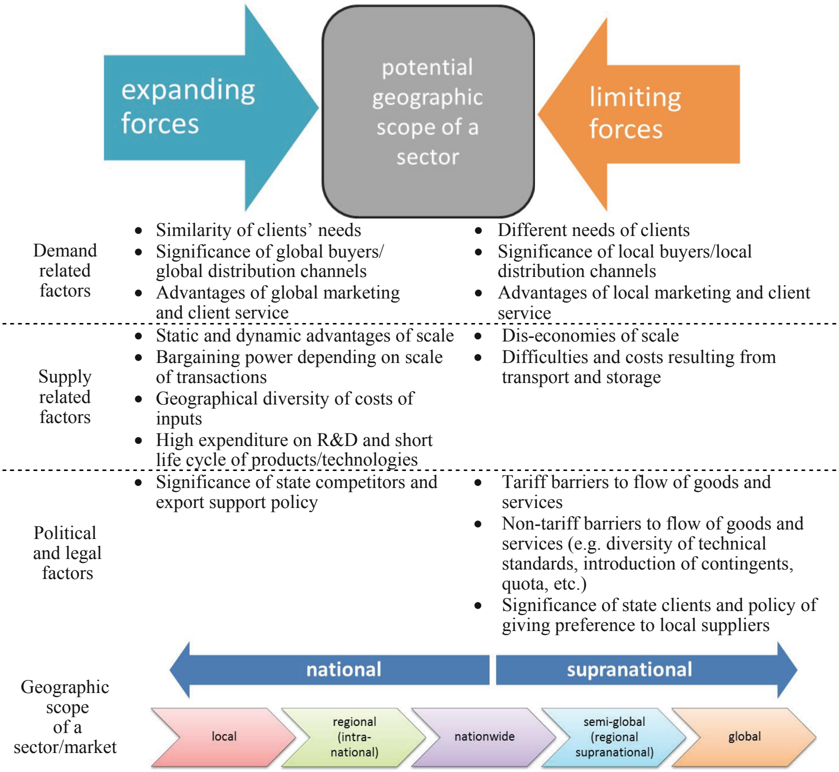

Fig. 1. Proposal of a methodology to define geographic scope of a sector/market.
Source: own elaboration using: [20, 33, 44, 56].

Typically, in the analysis of a force field the change investigated is a desired change, while the analysis of forces supporting and preventing change serves anticipation of possibilities to overcome difficulties preventing change and definition of priorities and selecting courses of action towards the change [20, 54]. However, when adapting, according to the recommendation from Gierszewska and Romanowska, the methodology for analysis of a force field to the diagnosis of the geographical scope of a sector, one should bear in mind that globalisation, or more broadly – expanding geographical boundaries of markets does not necessarily mean "a desired change"[9]. Thus, rejecting valuation of processes of expanding boundaries of a sector, we can use the analysis of a force field in order to achieve the result in the form of a matrix system of factors grouped in three general categories according to directions of impact (Fig. 1).

In the approaches of Porter, Yip and Lassere discussed above, the essence of the problem is defined as deciding on a local (understood as domestic/national) or global nature of a sector. Yip's model also includes a possibility for a regional (supranational) potential of a sector as an interim stage. The author believes that the problem should be placed in a broader context of geographical boundaries of a sector – irrespective of the scale of its scope. It is worth pointing out that the literature indicates an analogy between globalisation and regionalisation processes with expansion of market boundaries from the local to nationwide level as a result of the so-called second industrial revolution [13, 44, 52]. In case of some products, and in particular perishable agricultural and food products, the nationwide perspective is still too broad delimitation of geographical market boundaries.

Alfred Marshall, in his "Principles of Economy" first published in 1890 emphasised presence of "broad" markets (i.e. global: market for stocks and noble metals) and "narrow" ones (i.e. local: markets for perishable and volume goods) from the geographical perspective. He believed that most markets were located between these extremes [36]. In 1969, Mennes, Tinbergen[10] and Waardenburg proposed definition of four types of sectors, depending on spatial ranges resulting from mobility of goods offered by given sectors: local, regional[11], national and international [cited from: 16]. Porter, in his considerations on competitiveness of clusters takes into account six component division of possible geographical scopes – including in relation to sectors: cities, metropolitan areas, states/provinces, countries, groups of neighbouring countries, global reach [45]. With reference to the above overview, the author suggests to use the following levels in the proposed methodology of assessment of geographical scope of a market: local, regional (intra-national)[12], national, semi-global (regional in the supranational meaning), global (Fig 1).

[9] It could be desired from the point of view of a company wishing to apply global or semi-global strategy and conversely from the point of view of a local player, who may see it as a threat. An impartial analyst will see this phenomenon as an objective economic process.

[10] First Nobel Prize winner in economics in 1969 [27].

[11] Understood traditionally, i.e. as sub-national level.

[12] The author understands local scope as municipal and district level, while the regional level (intra-national) is the level of provinces and macroregions [23].

Summary

The issue of distance and area, though to a large extent discussed outside of the mainstream of economics, is a crucial problem in the area of economic activity – shaping market prices and location of production and having an impact on the geographic scope of markets. However, the market, despite being the fundamental category in microeconomics, is often not directly defined in its geographical dimension or it is by default defined the way mass statistics show it – most of the time as the national sector, without discussion on the rationale behind this approach or consideration of potential mistakes made as a result of potential inadequacy of such definition. Intensification of globalisation and regionalisation processes forces a reflection: in case of which products, including agri-food products, this approach to definition of spatial boundaries of a sector can be retained, and where it shall not withstand the criticism?

The literature has seen attempts to define factors determining globalisation potential of a sector – the article discusses the concepts of Porter, Yip and Lassere in this area. The foundations of author's own concept of a compilation nature have also been proposed. The author's idea was to combine advantages and avoid shortcomings of methodologies discussed and to expand the spectre of assessment with possible sub-national geographic scopes of markets. The processes of expansion of geographic boundaries do not affect all sectors equally and even in the era of globalisation and development of regional integration agreements, there are markets with a scope narrower than national.

In the authors view, there is a need for further research, particularly in the area of agricultural and food sectors. Appropriate level of analysis of a given market is crucial for its quality and, as a consequence, for its usefulness both for political decision makers and entrepreneurs and managers designing strategies of enterprises. Therefore it is necessary to undertake attempts at defining geographical scopes of sectors, and in particular at verification of adequateness of the national level of analysis to the real economic and spatial conditions. The concept proposed by the author could be used in this area. To this end, it would be useful to further operationalise it and to practically test it in the assessment of geographical scopes of sectors.

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