# Acta Sci. Pol. Oeconomia 14(1) 2015, 55-67

# ASSESSMENT OF DYNAMIC GROWTH OF FOOD PRODUCTION IN BULGARIA

Diana Kopeva<sup>1</sup>, Nikolay Sterev<sup>2</sup>, Dimitar Blagoev<sup>1</sup>, Paskal Zhelev<sup>2</sup>
<sup>1</sup>Business Faculty, <sup>2</sup>International Economics and Politics Faculty
University of National and World Economy

**Abstract.** Perspectives for competitive growth are put in the core of the re-industrialization policy of the European Union for the next program period, and respectively are key issue for the Bulgarian industrial policy. Re-industrialization of the Bulgarian economy is possible in terms of support for competitive industries at present, but also to support industries that are at the bottom of competitiveness. The methodology for selection of appropriate "priority" sub-sectors and production specializations, is based on the following two principles:

- 1. A combination of economic criteria (at national and company level) and social criteria;
- 2. Measures targeted both: certain sub-sectors and production specializations that either have a competitive advantage, or are at the bottom of the rankings for competitive advantage. On the basis of analysis six production specializations in food industry were identified for which specific policy measures have to be developed along the chain raw materials/inputs production-marketing/export.

Key words: re-industrialisation, food production, dynamic growth, Bulgaria

### INTRODUCTION

The European economy is still recovering slowly from the 2008's crisis and especially the poorest regions in the European Union. The European economic policy has been updated and adjusted according to the new requirements in the beginning of the new planning period (2014–2020) and respectively the role of the EU-industry has been strengthened. Thus, the EU development passes through making a strong and profoundly reshaped European industry<sup>1</sup>.

According to this rebirth of the industrial policy the EC adopted an action plan, titled For a European Industrial Renaissance, on 22 January 2014. Following the leading EU member states, the Bulgarian government has started a process of preparing a national action plan for the industrial Renaissance, that has not been completed yet.

Corresponding author: Diana Kopeva, Business Faculty, UNWE, e-mail: diana\_kopeva@yahoo.com <sup>1</sup>See: EC, http://ec.europa.eu/enterprise/initiatives/mission-growth/index en.htm#h2-2.

<sup>©</sup> Copyright by Warsaw University of Life Sciences Press, Warsaw 2015

Food industry is one of the key industrial sub-sectors in Bulgarian economy. Determining the production specializations with potential for growth and revealed competitive advantages, as well as such with potential to become competitive is important.

The paper is going to assess the growth perspectives of Bulgarian food production. Thus, the paper is organized as follows: Introduction: provides an overview of the impact of re-industrialization perspectives on food production; 1. State of art: explains the basic issues of growth at production specialization level; 2. Methodology: shows the stages of assessment as well as the indicators of dynamic growth; 3. Data analysis: includes a brief presentation of the assessment of dynamic growth of Bulgarian food production; Conclusion: summarizes the research results.

In the background of the new industrial policy there are several prerequisites that formed the necessity to adjust the implemented policies and measures in the industry. First, the share of industry in GDP has fallen down sustainably since the mid-1980s and now it has reached a trough. According to the industrial chain, a further decrease of the industry level based on capital re-shapes could threaten some of the core elements of the chain (for example the ROI in trade or construction is some times bigger than that in the mining industry, which sharply indicates that capital shifts from industry to services). Second, when the industry produces goods targeted to satisfy basic (physical) needs (i.e. thirst-beverages/water; hunger-food, security etc.) the industry is able to overcome the negative effects and influences of the financial and economic crises with minor losses. Nevertheless, the industry has just survived, it could not fight back with non-productive sectors (i.e. services). Third, the industrial sustainability could not be kept steady without a relevant EU policy. Industrial production should obey the requirements of society for: environmental protection (the industry still pollutes the environment many times more than the nature could perceive), energy costs (many of the industrial processes are still not energy efficient using a lot of the energy inputs, principally the fossil ones), modernization of the industry lags behind the new technological development (the investment in research and innovation of industry is too low).

According to these prerequisites the basis of EU industrial Renaissance is focused on the following three priorities<sup>2</sup>: information networks, energy networks and green transport. The final result of implementing such policy priorities could be pointed out as follows: advanced manufacturing that is a knowledge-based one; bio-based products produced from clean raw materials; clean vehicles and vessels for greener transport; systems based on sustainable construction and raw materials; newer production standards based on smart grids and digital infrastructures.

The food production has an influence on the economic as well as on the social sphere. Basic reasons for this are summarized as follows:

- information networks and advanced manufacturing need a new type of workers that possess newer skills and knowledge;
- environmental protection and bio-based products: the arable land decreased but food needs to be increased. So, producers have to produce products out of the natural raw food materials;

<sup>&</sup>lt;sup>2</sup>See EC, For a European Renaissance, COM (2014) 14/2, http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52014DC0014&from=EN.

clean vehicles and vessels for greener transport: as a result of society's development
in Bulgaria the villagers' infrastructure has been decreasing for years. So, there is inability to use such green transport.

Nevertheless, the food production is directly connected with human existence, so the point of the common industrial policy is to help the food production to change and grow much faster.

Industrial Renaissance as an expression of contemporary industrial policy represents the government's impact on economic processes. As there was a debate between post-Keynesians and neo-liberals for the role of the Government in the economic processes, the contemporary economic theory supposes different approaches to industrial policy [Rodrik 2008]. Basically, there are two different approaches [Marleba et al. 2001] to analyze inter-connections between industrial policy (resp. its effects) and dynamic growth.

First, the economists define that industrial policy expresses somehow interventions on the markets that could change the markets from the inside. Traditionally, industrial policy is referred to usage of taxes and subsidies from the Governments to persuade producers to act in ways in which they would be disinclined to do so. As an example, subsidies could persuade producers to keep open facilities and jobs which in other circumstances would not be viable [Sharp 2003].

Second, the neo-liberals define that industrial policy creates economic conditions and its measures effect on antitrust regulations. So, the industrial policy takes a central role in managing economic externalities as the degree to which the policy's actions effect on other market players' initial decisions. So, contemporary industry protection helps entities (and the economy as a whole) grow. In particular, encouraging investment, especially investment in R&D, education and training expresses the new growth theories [Sharp 2003]. Thus, the modern industrial policy "attempts to alter the sectorial structure of production towards sectors that are expected to offer better prospects for economic growth" [Pack and Saggi 2003]. Finally, the existence of "entrepreneurial governance" as an economic phenomenon changed the industry from the inside and governing the endogenous factors effects on structural dynamic are the same which are the major challenge for industrial growth [Krafft 2006].

As we perceive the second approach, we believe that the new industrial policy (resp. policy of industrial Renaissance) has to develop the markets as it regulates industrial structures in a way to protect start-ups and new entrants on the markets. In addition, Rodrik [2008], Lin and Chang [2009], and others define that the need of industrial policy in developing countries is because they are "ridden with market failures, which cannot be ignored simply".

But, how could we measure the effects of the industrial policy? To answer the question above, we need to define the dynamic growth expression as a specific result of the overall business activities in the economy. For the first time Forrester [1961] defines that industrial dynamic is result of the increasing ability to enforce the industry evolution for long-term periods [Forrester 1988]. Therefore, the industrial dynamics analyses the forces and directions of changes in industry architecture and may lead to evolution of markets [Mattig 2009].

Moreover, the industrial dynamics describes market driven factors that can change economic structures over time [Dietrich 2006; Krafft 2006]. According to this approach Dosi et al. [2004] give the requirements for defining industrial growth:

- relatively stable Pareto-type size distribution of firms (measured by numbers of employee or turnover);
- broad statistical aggregates that allows finding a relatively homogeneous groups of firms

The contemporary measure of industrial growth is given by Carlsson and Eliasson [2001] and Madani [2001] who define the economic growth as result from the interaction of all market actors and it's based on double differentiation of the general production function (Y):

$$Y = A. f(K, L, M) \tag{1}$$

where: A – index of HICK's natural technological progress.

Further endorsement of this approach we can find in the EU Industrial performance scorecard<sup>3</sup>. The EC measured the industrial policy's impact through basic growth factors as follows:

- changes of manufacturing productivity;
- quality of the workforce;
- share of exports in GDP;
- innovation index;
- energy intensity in industry;
- improvements in the business environment and efforts directed towards better regulation:
- electricity prices (excluding VAT) for small and medium-sized enterprises;
- business satisfaction with infrastructure (rail, road, port and airport);
- bank lending and access to finance for SMEs;
- business investment in equipment.

#### **METHODOLOGY**

The methodology for selecting the appropriate "priority" industries and product specializations within the policy reindustrialisation is based on the following two principles:

- A combination of economic criteria (at national and company level) and social criteria;
- The measures are aimed both at certain sub-sectors and industries that either have a competitive advantage, or the bottom of the rankings for competitive advantage.

In this connection, following consequent steps in the selection of appropriate sub-sectors and product specializations are undertaken (Fig. 1).

<sup>&</sup>lt;sup>3</sup>EC, Member States' Competitiveness: Performance and Implementation of EU Industrial Policy, SWD (2013) 346.

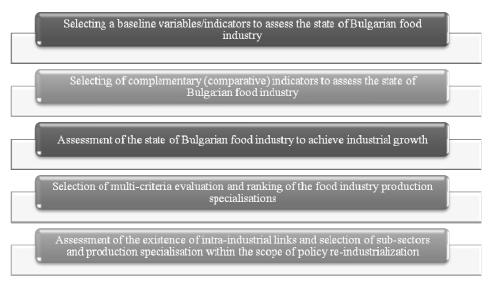


Fig. 1. Steps in the selection of appropriate subsectors and product specializations Source: Own elaboration.

The sequence of steps of the methodological scheme required to submit additional arguments on each of them (Fig. 1).

- 1. Selecting baseline variables (indicators) for assessment of the status of Bulgarian industry: a basic requirement of this stage is the following principles to be fulfilled:
- reality: the assessment should be done using the existing features, which can actually be measured;
- importance and relevance: the assessment must be based on significant characteristics of the economy;
- comparative ability and versatility: the assessment should be based on evidences that
  can be set for each sub-sector and production, as well as on indicators that do not depend on the type of production, size of the sub-sector or stage of their development.

Appropriate indicators to assess the state of the Bulgarian industry can be reduced to two groups of indicators: economic and social.

Economic indicators: they relate the contribution of individual sectors or production for the country's economy. They express the economic value of the food specialization. The economic indicators explain the economic impacts of the industrial policy, respectively better position means and stronger effect of the industrial policy. Basically, these indicators are connected to the growth perspectives and they are: gross value added (GVA) by production factors (business investment in equipment; changes of labour productivity); innovation index; business performance.

Social indicators: relate to the sharing of social responsibilities between business and the state. International practice suggests businesses to share social commitments to the state, not only the economic effects of production. They express the social responsibility of the food producers and the share of social engagements between governments and business entities. In many cases the industrial policy covers only the social effects

nevertheless they are acceptable for the business. Three social indicators are used: share of social security costs in labour costs; share part-time employees to full-day employees; wage adjusted labour productivity (apparent labour productivity by average personnel costs).

- 2. Selecting of complementary (comparative) indicators to assess the state of Bulgarian food industry: express the relative importance of the sub-sector / industry for the country. They express the role of the food specialization in food production. These indicators just complete the economic and social indicators. They could be calculated as share to food production, manufacturing or industry as a whole. Complementary indicators are relative and can be both in terms of processing and in terms of the whole industry: share of GVA; share of production value; share of employment; investment rate (investment/value added at factors cost).
- **3.** Assessment of the state of the Bulgarian food industry to achieve industrial growth: above indicators express the current situation. For this purpose we use generally accepted in world literature-based indicators of the production function and its first derivative: impact of material consumption growth; influence the labour intensity of growth; impact of capital intensity growth; impact of innovation;

This assessment should take account of the fact that there is a close functional relationship between different factors (e.g. higher cost of labour is mostly due to a low use of new technologies or low degree of scientific support of the business). In this respect, it is better to examine the degree of substitutability between factors of production, which is related to the study of the effect of increasing or reducing the use of one or another factor.

- **4. Selection of multi-criteria evaluation and ranking of the food industry production specialisations**: The multi-criteria evaluation targets to determine the importance (weight) of the above three sets of criteria. Undoubtedly, it cannot give preference to one of them. This requires that seek suitable compromise that expresses the current economic policy pursued by the government, i.e. long-lasting policy (resp. present or long term); the scope of the policy (resp. individual economic agents or sub-sector as a whole); type of competitive advantage (resp. the contribution to the growth of the industry). In multi-criteria evaluation and analyse their potential for export (including in the EU), by assessing the indicator share of net exports of sub-sector or industry, and their export specialization. The purpose of the analysis is to promote and develop these specialisations that are related not only to the local market, but also have the potential of foreign markets, including thesis and in the EU.
- 5. Assessment of the existence of intra-industrial links and selection of sub-sectors and production specialisations within the scope of policy re-industrialization: at this stage to identify these sub-sectors and production specialisations that can lead to additional multiplier effect due to participation in one or other industrial chain.

The assessment of growth of Bulgarian food production and its connection with the Bulgarian industrial policy requires identifying these indicators with enough contribution to the industrial growth. Thus, we use a modification of the Solow-Swan production function (formula 2) and its first derivative (formula 3):

$$Y = f(x) = A_1.R.L.K.e^M$$
 (2)

where: Y – production value;

R – costs for material resources;

L – labour costs, including social payments;

K – investment costs for machinery and equipment;

M – innovation costs.

$$\log Y = a_1 \cdot \log(R) + a_2 \cdot \log(L) + a_3 \cdot \log(K) + a_4 M \tag{3}$$

where:  $a_1$  – impact of material intensity on industrial growth;

 $a_2$  – impact of labour intensity on industrial growth;

 $a_3$  – impact of capital intensity on industrial growth;

 $a_4$  – impact of R&D intensity on industrial growth.

#### **DATA ANALYSIS**

#### **Database**

To be more useful, the analysis is based on Eurostat data and covers the following indicators<sup>4</sup>:

- value added at factor cost (V12150) VA fc;
- apparent labour productivity / gross value added per person employed (V91110) *ALabProd*;
- total intra-mural R&D expenditure (V22110) R&D;
- gross operating surplus/turnover (gross operating rate) (V92110) GOS;
- gross investment in machinery and equipment (V15110) / gross investment in tangible goods (V15150) *Inv m*;
- wage adjusted labour productivity / apparent labour productivity by average personnel costs (V91120) WLabProd;
- wages and salaries (V13320) / personnel costs (V13310) WageSoc;
- number of employees in full time equivalent units (V16140) / number of employees (V16130) – Empl Soc.

# Data analysis

Dataset covers values of the indices, given above, for Bulgarian food production at four-digit level (C10xx) for 1995–2012. The analysis is based on their value (in EUR and %).

To understand their growth change, we use their natural logarithm value. Figure 2 shows that economic indicators have changed more significantly during the observed period. According to the figures we could divide the observed eight indicators in four groups:

<sup>&</sup>lt;sup>4</sup>EC, Eurostat, http://epp.eurostat.ec.europa.eu/statistics\_explained/index.php/Glossary:\*\*\*.

• significant growth: even though their base in 1995 is too low, three of the indices have changed rapidly for a 17-year period: apparent labour productivity; intra-mural R&D expenditure; and gross operating surplus;

- slow growth: added value at factor costs; wage adjusted labour productivity; and share of social security costs in labour costs;
- flat rate: share of part-time employees from full-day employees;
- slow decrease: share of investments in machines and equipment.

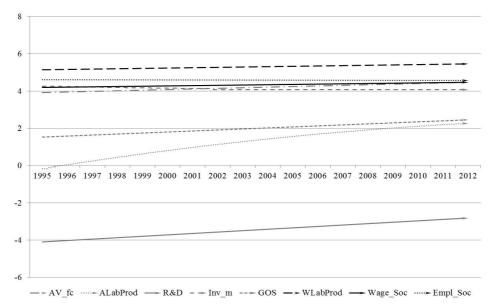


Fig. 2. Natural logarithmic values of the observed indices Source: Eurostat and own calculations.

In conclusion: the food production in 2012 works at its optimal level as the social and employment indices do not change significantly.

The growth of the food production basically is result of innovation growth and is connected to higher labour productivity and profit.

The most negative is that the food production disinvesting as the change of investments in new machines and equipment slopes down.

This state is not equal for the whole range of food specializations (Fig. 3). The comparison between important and not-important specializations measured by value of indices we found that the higher change is done by the highest value specializations. Thus, the highest added value is generated by the largest specializations. This situation is valid for apparent labour productivity as well as for intra-mural R&D costs and gross surplus. But the biggest specializations are less social-friendly ones as the highest decrease of the full-time employment is accounted by them.

The effects of investments in machinery as well as of social securities are equally dispersed among different food specializations.

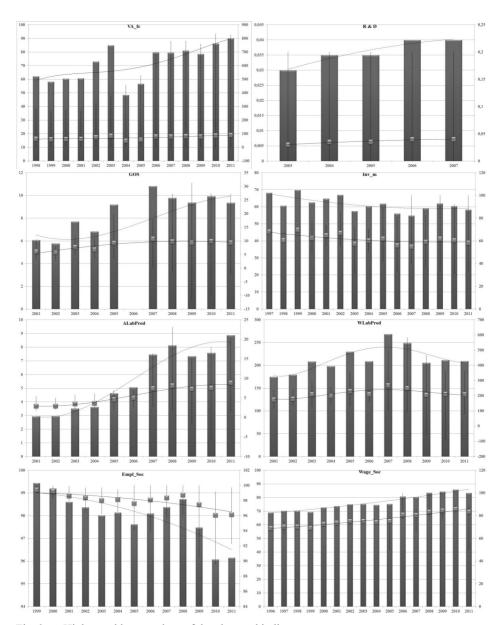


Fig. 3. Higher and lower values of the observed indices Source: Eurostat and own calculations.

Based on the growth factors the classification of the food specializations is given in Table 1.

Table 1. Classification of food specializations by their economic and social attractiveness

FOOD Specialization	NACE Rev.1	NACE Rev.2
Manufacture of grain mill products, starches and starch products	DA156	C106
Manufacture of vegetable and animal oils and fats	DA154	C104
Production, processing, preserving of meat and meat products	DA151	C101
Production of meat and poultry meat products	DA1513	C1013
Processing and preserving of fruit and vegetables	DA153	C103
Manufacture of ice cream	DA1552	C1052
Manufacture of cocoa; chocolate and sugar confectionery	DA1584	C1082
Manufacture of oils and fats		C1041
Processing and preserving of fruit and vegetables n.e.c.	DA1533	C1039
Production and preserving of poultry meat	DA1512	C1012
Manufacture of sugar	DA1583	C1081
Manufacture of dairy products	DA155	C105
Manufacture of other food products		C108
Manufacture of other food products n.e.c.	DA1589	C1089
Operation of dairies and cheese making	DA1551	C1051
Manufacture of prepared feeds for farm animals	DA1571	C1091
Manufacture of prepared animal feeds	DA157	C109
Manufacture of homogenized food preparations and dietetic food	DA1588	C1086
Production and preserving of meat	DA1511	C1011

Source: Eurostat and own calculations.

According to the figures, the biggest economic and social attractiveness for growth and development is possessed by food productions, such as: grain products, processing oil, production of meat products and processing fruit and vegetables. They have compromised the economic strength and social responsibility that give them enough impulse to grow.

The assessment of real growth potential defines three groups of food specialization that have different potential to development measured by formulas 2 and 3:

- Lagging food specialization: they are falling behind the others as in material effectiveness as well as in apparent labour productivity and investment rate in machines and equipment. Examples of these groups are traditional specializations for Bulgarian agriculture and food production as follows: Production and preserving of meat and poultry meat; Processing and preserving of fruit and vegetables; Manufacture of vegetable and animal oils and fats; Manufacture of dairy products; and others;
- Reinforcing food specializations: they present better on the market, but their labour effectiveness is not good enough even though their material goods' effectiveness is the best one. The examples of this group are part of traditional specializations for the Bulgarian agriculture and food production but they show a technological and product development as follows: Manufacture of bakery and farinaceous products, incl. Manufacture of bread; Manufacture of fresh pastry goods and cakes; Manufacture of other food products n.e.c. and others;

• Developing food specializations: they are one of the smallest mostly newer food specializations that possess enough potential to growth. Their apparent labour productivity, goods effectiveness and investment rates overflow the average rates for the food production in Bulgaria. The examples of this group are not traditional specializations for the Bulgarian agriculture and food production as follows: manufacture of fruit and vegetable juice; processing and preserving of fish and fish products; manufacture of macaroni, noodles, couscous and similar farinaceous products; manufacture of margarine and similar edible fats; manufacture of prepared feeds for farm animals; manufacture of prepared meals and dishes; and others.

In comparison the differentiation between these three types of food specializations are given in Table 2.

Table 2. Differentiations in growth potential between different food specializations

Independent Variable	Ave	rage		ng food lization	Reinforc speciali	_		oing food izations
Log R	0.125	0.977	0.563	0.881	-0.020	1.010	0.257	0.933
Log L	2.514	0.974	3.396	0.686	4.004	0.535	2.347	1.093
Log K	3.279	0.822	4.304	0.388	5.037	0.318	3.168	0.691

Dependent Variable: Log P.

Source: Eurostat and own calculations.

According to their contribution to industrial growth to food production by usage of formulas (2) and (3) and their growth attractiveness (see Table 1) is given the next classification of the best six developing food specializations (Table 3).

Table 3. Classification of attractive food specializations with growth potential

Specialization	NACE Rev.1	NACE Rev2
Manufacture of other food products n.e.c.	DA1589	C1089
Manufacture of sugar	DA1583	C1081
Manufacture of prepared animal feeds	DA157	C109
Manufacture of prepared feeds for farm animals	DA1571	C1091
Manufacture of ice cream	DA1552	C1052
Manufacture of homogenized food preparations and dietetic food	DA1588	C1086

These six attractive food specializations with growth potential should be placed in the core of the contemporary industrial policy for Bulgarian industry Renaissance.

Source: Eurostat and own calculations.

#### **CONCLUSIONS**

Growth and development of enterprises in food production depends on the establishment of favourable conditions that will strengthen their comparative advantages, as well as existing and/or potential competitiveness, and will smooth the influence of the existing negative factors. One of the possible ways is the elaboration of the National Long-term Programme for Reindustrialization of Food Industry (NLPRFI).

- Key elements of the NLPRFI should be targeted to:
- Global R&D directly serving Food industry and acting as a basic prerequisite for innovation leading to the efficiency of industrial production;
- Modern and relevant scientific qualification requirements (competencies), and all categories of staff in companies in the food industry;
- Create external environment (political stability and security to all components of the business environment) to stimulate the investment activity and focus the investment on new technology solutions in the food industry;
- Change the ratio between our traditional industries with high input of resources and low added value products on one hand, and new medium and high technology sectors where the country has comparative advantage on the other;
- Increasing the share of industry in GDP and GVA at the expense of the share of services in enriched interconnection and interaction between "industry-services";
- Industry operating and developing in line with the environmental requirements and
  environmental protection; businesses that have successfully implemented and social
  protection functions and responsibilities to society and the country, along with the
  achievement of business goals.

The main objective of the program is to provide reindustrialisation prerequisites and conditions for the consistent implementation of structural change aimed at technological and product modernization of the Bulgarian food industry, leading to industrial growth and increasing contribution of the industry to GDP and economic growth of the Bulgarian economy.

## REFERENCES

- Aiginger, K. (2007). Industrial Policy: A Dying Breed or A Re-emerging Phoenix. Journal of Industry, Competition and Trade, 7, 297–323.
- Carlsson, B., Eliasson, G. (2001). Industrial dynamics and endogenous growth. Nelson and Winter Conference of the Danish Research Unit for Industrial Dynamics (DRUID), June. www. druid.dk/conferences/nw/.
- Dietrich, M. (2006). The Economics of the Firm. Routledge, London.
- Dosi, G., Freeman, C., Fabiani, S. (1994). The process of economic development: introducing some stylized facts and theories on technologies, firms and institutions. Industrial and Corporate Change, 3(1), 1–47.
- EC, Member States' Competitiveness: Performance and Implementation of EU Industrial Policy, SWD (2013) 346.
- Forrester, J.W. (1961). Industrial Dynamics. Portland, Oregon: Productivity Press.
- Forrester, J.W. (1988). Designing Social and Managerial Systems, System Dynamics Group, Sloan School. Cambridge, MA. Massachusetts Institute of Technology.
- Hicks, J.R. (1961). Measurement of Capital in Relation to the Measurement of Other Economic Aggregates. [In:] F.A. Lutz, D.C. Haque (Eds). The Theory of Capital. Macmillan, London. 18–31.
- Kopeva, D., Sterev, N., Blagoev, D. (2011). Industrial growth investment behavior and innovation in Bulgaria. Journal of Regional and Business Studies, 683–697.
- Kopeva, D., Sterev N., Blagoev D. (2012). Industrial dynamics in Bulgaria the connection between past and future: the case of food and beverage industry. Review of Applied Socio-Economic Research, 3(1), 113–121.

- Kopeva, D., Sterev, N., Blagoev, D. (2013). Industrial dynamics of food and beverage industry (Bulgarian example). Review of Applied Socio-Economic Research, 5(1), 121–129.
- Krafft, J. (2006). June 2006, http://www.ofce.sciences-po.fr/pdf/revue/hs-06-06/rhs-06-06-intro2. pdf.
- Lin, J., Chang, H. (2009). Should Industrial Policy in Developing Countries Conform to Comparative Advantage or Defy it? Development Policy Review, 27(5), 483–502.
- Madani, D. (2001). Regional integration and industrial growth among developing countries. The World Bank, Washington.
- Marleba, F., Nelson R., Orsenigo L., Winter, S. (2001). Competition and industrial policies in a 'history friendly' model of the evolution of the computer industry. International Journal of Industrial Organization "Competition Policy in Dynamic Markets". Elsevier Science.
- Mattig, A. (2009). Industrial dynamic and the evolution of markets in the mutual Fund industry. Garbler, Wiesbaden.
- Pack, H., Saggi, K. (2003). The case for industrial policy: a critical survey. Working paper.
- Rodrik, D. (2008). Industrial policy: don't ask why, ask how. Middle East Development Journal, Demo Issue, 1–29.
- Sharp, M. (2003). Industrial Policy and European Integration: lessons from experience in Western Europe over the last 25 years. University College London. Working paper, 30.
- Sterey, N., Blagoev, D., Gatovski, I. (2014). Dynamics Of Food Production Before And After The Economic Crisis. Economic Alternatives Journal, 1, 19–32.
- Sterev, N., Kopeva, D., Blagoev, D. (2011). Industrial Dynamics at national level as a factor of sustainable industrial growth in EU. 3rd European Conference on Corporate R&D (CON-CORD-2011): The dynamics of Europe's industrial structure and the growth of innovative firms. Seville, Spain.
- Zhelev, P. (2014). Industrial policy of Bulgaria in years of transition and the first decade of EU membership. Publ. complex UNWE.

# OCENA DYNAMIKI WZROSTU PRODUKCJI ŻYWNOŚCI W BUŁGARII

Streszczenie. Perspektywy konkurencyjnego wzrostu są w centrum uwagi polityki reindustrializacji w Unii Europejskiej w perspektywie finansowej 2014 roku i odpowiednio jest to kluczowe zagadnienie również w polityce przemysłowej Bułgarii. Reindustrializacja gospodarki Bułgarii jest możliwa w zakresie wsparcia już obecnie konkurencyjnych gałęzi, jak również tych, które będą kluczowe dla konkurencyjności gospodarki. Metodologia wyboru właściwych priorytetowych sektorów i produktów jest oparta na następujących zasadach: połączenia kryteriów ekonomicznych (na poziomie krajowym i na poziomie przedsiębiorstwa) i społecznych, ukierunkowania działań na wybrane podsektory i specjalizacje produkcyjne (produktowe), które cechują się przewagą konkurencyjną lub są podstawą przewag konkurencyjnych.

Słowa kluczowe: reindustiralizacja, produkcja żywności, dynamika wzrostu, Bułgaria

Accepted for print: 30.01.2015