

IMPACT ASSESSMENT OF REGULATION: THE CASE OF MILK FARMS IN BULGARIA

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Abstract

In 2007 Bulgaria became a member of the EU and the milk processing companies were allowed to use raw milk, which does not meet the European standards in respect to quality, and to produce only for the Bulgarian market. After an extension of one year of the transition period from 2015 till the end of 2016 the sector is subject to new requirements and procedures for control and licensing. For several years an approach for regulation has been looked for, that could transform the cow farms into ones that meet the criteria for safety production and to develop the national milk processing industry. The aim of the paper is to analyze the results from the regulations that have been applied in the country since the beginning of 2017 in the milk industry and the executed impact assessment. It studies the impact assessment significance and the presence of information asymmetry, paternalism and regulation capture in the sector.

Key words: Regulation, impact evaluation, milk industry, milk production, regulation capture

INTRODUCTION

Food, water, and air are important factors for healthy human living. The European Union (EU) raises food safety as a priority and obliges member states to implement measures to control it during the whole production cycle - from the farm to the end user. With the accession of Bulgaria to the EU, milk processing companies are given the right to process raw milk which does not comply with the EU standards and the production is destined only for the Bulgarian market. After a one-year extension of the transition period from the end of 2015 to the end of 2016, a process of implementation of new requirements and procedures for supervision and authorization has begun in the sector.

The problems of the dairy sector in Bulgaria are not from now. For years, an approach and a regulatory regime have been sought to transform the milk farms in the country into ones that meet the criteria of safety production. For that purpose financing from EU funds was provided to stimulate the modernization.

The main objective of the survey is to analyze the effect of the regulatory regime in the sector of milk production in the country since the beginning of 2017 in terms of overcoming the information problems of this market, paternalism and captivity of the regulation (regulation capture). The method used is a case study. On the base of milk production regulation and its impact assessment the weaknesses are identified as well as the prerequisites for regulation capture and derived economic benefits from its existence.

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1. REGULATION OF MILKPRODUCTION IN BULGARIA

The existence of asymmetry of information between sellers and consumers requires regulation provision by the state. The industrialization and intensification of food production has led to the need of strengthening the regulation in the sector. The requirements for each stage of production, processing and sale have increased - from permits to carry out inspections, implement systems for critical point management, self-control through laboratory tests, labeling requirements and nutrition information presentation, and other rules specific for different food products. The complicated production chains and the new technological solutions, on one hand, allow for greater and cheaper production and, on the other, create products with unclear nutritional benefit and unnecessary caloric value to humans. The state control is being strengthened in terms of food production safety, as well as in terms of food quality with a view to offering healthy products on the market and enough information for consumers.

The EU considers food safety and control as very important in order to ensure that plants and animals are healthy and that food and animal feed are safe and of high quality. The significance of the sector is increasing because it has influence upon the health of the EU citizens, as well as it brings economic benefits. The food industry is the second largest industry, which provides employment to 48 million people in the EU. The need to feed the world's population, which will exceed 8 billion people, implies intensification to tackle the problem of food shortages and the quality of nutrition.

In this regard, the EU has adopted a number of regulations that set requirements for the chain “production - processing – sale” of foods. In Bulgaria, these documents have been transposed into the national legislation, and where no regulation exists, the European norm applies directly. The Food Act (FA) is the basic law introducing requirements for the sector and measures for control. It was published in the State Newspaper (SN) issues 90 of 15 October 1999. Every year, from 2003 till 2017, several amendments were made. The most significant ones are:

- In 2006: Significant amendments aimed at creating a legal framework that is equivalent to the legal framework for ensuring food safety in the Member States of the European Union - transposition into the national legislation of provisions that are directly applicable (regulations and decisions) in the food sector.
- In 2009: The changes are aimed at solving several major problems (Preliminary Impact Assessment of the Law on Amendment and Supplement to the Food Law, 2009), such as:
 - Obsolescence of the current Food Act;
 - Weaknesses (imperfections) in the horizontal regulation of public relations in the field of food safety;
 - Lack of a unified national food safety system.

These changes are indicated as necessary after a preliminary impact assessment under the project "Towards Better Public Management: Institutionalizing the Impact Assessment Process in the State Administration". The aim is to improve the quality of public policies by doing impact assessments of regulatory documents. The project was funded by the European

Social Fund through the Operative Program "Administrative Capacity" and included development of impact assessments of regulatory documents and policies. In 2009 the process of assessing changes in legislation and policies from different aspects has been started to motivate the necessity and usefulness of the initiatives proposed. In fact, the evaluation process has been developing since the end of 2016 when a number of regulatory documents setting requirements for the impact assessment process (IA) have been developed. Assessment approaches are different. Kalfova (2016) says: "To a large extent, the adoption of one or another methodological approach depends on the reasons that motivate the impact assessment application". This, on the other hand, may give rise to differences, such as for example Mochurova (Mochurova, 2018) notices that often regional assessments for a component are generally lower than those carried out at national level.

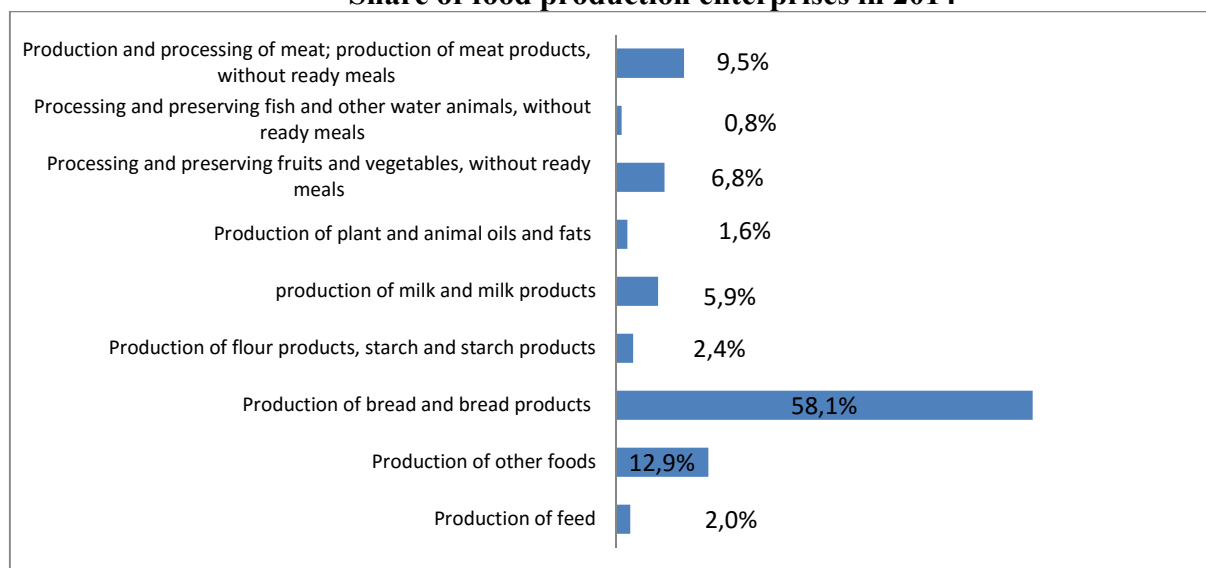
Because of the fact that the Food Act shows still inconsistencies with the changing regulation in the EU, an entirely new FA was offered in 2015. In 2016 impact assessment of the draft of the newly proposed FA was implemented but this draft has not yet been adopted and the existing law has been changed constantly. Such a situation does not create a favorable environment for the regulated as well as for the regulatory bodies. The fragmentation of the improvements creates a field for rulemaking by the different units of the governmental bodies, which are related to the processes of regulation of the food-processing industry and agriculture in the country.

In practice there are two important problems in the process of regulation establishment: firstly, lack of control over the synchronization of the documents, issued by different public authorities as legal documents, internal rules and guidelines, and secondly, lack of impact assessment of the probability of obeying the regulation to political or economic objectives of different interested parties. These two main problems create additional costs to the regulated entities: through new fees, permissions, registration taxes, etc., and as a result of the monopolisation of the market through internal rules of the institutions favourable for certain interested parties. The realization of assessments that pay attention to these points would reveal potential sources of inefficiency, artificial market access restrictions and introduction of monopolistic practices through state regulation. The milk production industry in Bulgaria has been working and faces such regulation patterns and monopolistic burden since 2017 when a new regulation came in force. It was not introduced through a new law but with a new Ordinance, which arranged the technical methods that are envisaged to control the milk farms.

2. STATE OF THE MILK SECTOR IN BULGARIA

The food production in Bulgaria is carried out by over 5,1 thousand enterprises, which turnover is over BGN 7,8 mlrd. The employment is over 81,1 thousand people in 2014 according to Eurostat (Fig. 1).

Figure 1
Share of food production enterprises in 2014



Source: Preliminary impact assessment of the Food Law, 2016. Industry Watch group Ltd.

The enterprises producing milk and dairy products occupy the fifth position according to their number, which represents 5.9% of all food producing enterprises. In 2015 there are 215 milk processing factories, which represent only 48% of their number in 2000. This sector shows a significant decrease in respect of the number of producers, but still is very important because provides employment for 6,792 persons and produces output of BGN 701.3 million. This output is highly dependent on the production of raw milk. Milk processing plants use raw milk of over half a million tones/year (Table 1).

Table 1
Declared Quantities of Processed Milk (tons)

	2013	2014	2015
Cows' milk	496 111	480 131	493 236
Sheep milk	24 218	25 180	18 866
Goat milk	7 037	7 926	8 035
Buffalo Milk and Mixture	2 534	2 830	3 052

Source: MAFF, State and Trends in the Production of Milk and Dairy Products in Bulgaria, 2017

For the period 2013-2015 there is a decrease in the processed milk of sheeps and a growth of the buffalo. This is the result of the change in the number of live animals in the country, bred for milk (Table 2) and the milk used for own consumption.

Table 2
Number of the cattle and the sheep (thousand)

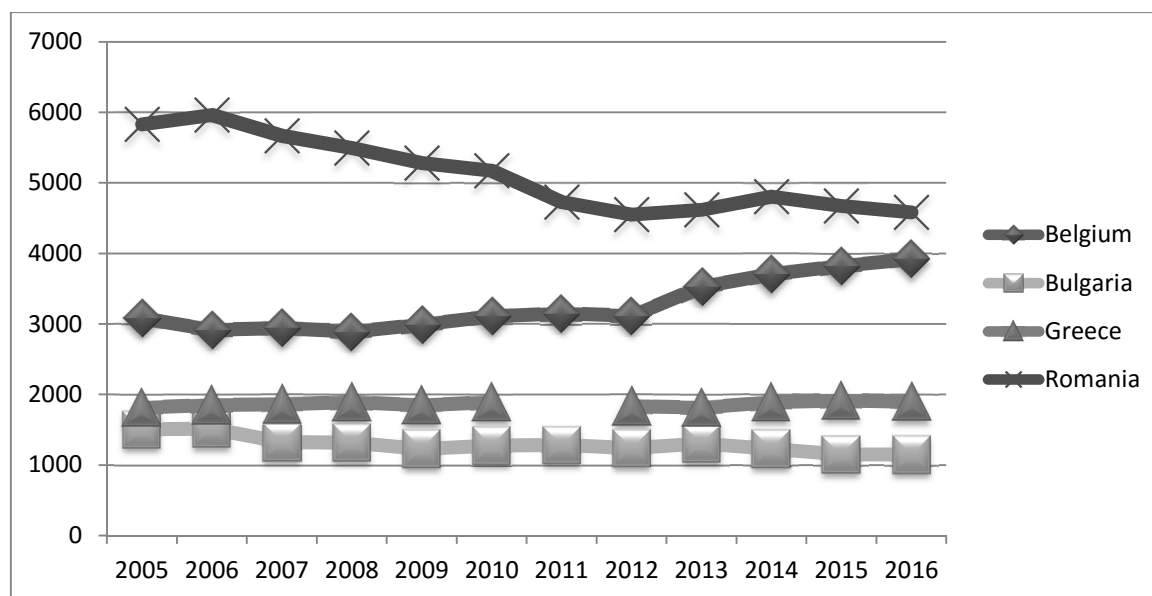
Animal	2012	2013	2014	2015	2016*
Cattle	526,0	575,0	552,0	554,0	558,0
Incl. Cows	317,0	346,0	344,0	352,0	357,0
Buffalo	5,7	10,0	9,6	10,0	13,0
Sheep	1 361,0	1 369,0	1 335,0	1 331,0	1 358,0
Goats	293,0	289,3	292,0	277,0	237,0

Source: MAFF, State and Trends in the Production of Milk and Dairy Products in Bulgaria, 2017.

* The data for 2016 are preliminary.

There is an increase in the number of buffaloes and a decrease in the number of goats, which explains the trends in the quantities of the processed milk. Comparing the results in Bulgaria in dynamics with other EU Member States, some peculiarities may be found in the production of raw milk (Figure 2).

Figure 2
Production of Raw Milk in Farms (thousand tons)



Source: data from Eurostat.

For the EU as a whole, the milk production has been increasing for the period 2005-2016. For the examined 12 years in Bulgaria the production has decreased by nearly $\frac{1}{4}$ and the country is in the 20th position in the EU. Despite the favourable national environmental and climatic conditions this type of farming does not grow. The contraction of milk production is a trend that also characterizes the period 1990-2001. According to Ruscheva (Avramov P., Todorov, P., Ruscheva, D., 2014), which studies the state of the industry since 1968, there are two sub-periods: the first – 1968 - 1986/1989, during which the production of meat, milk and eggs have been constantly increased, and the second – 1990 - 2001 during which the trend shows a strong production decrease especially strong till 1994. The data for the milk

production sector are alarming for Bulgaria, but they are not atypical when comparing them with socio-economic trends and disproportions. Decreasing and aging population due to emigration, concentration of labor resources mainly in Sofia and several larger settlements, reorientation of the economy from industry to the services sector, under-funded education and health sectors are factors that have a negative impact upon the agriculture and food processing industries leading to their production contraction.

Nineteen EU countries have higher milk yields than Bulgaria. Only 6 of them have decreased their production - Lithuania, Hungary, Portugal, Romania, Finland and Sweden, with Greece keeping its levels almost unchanged. In Bulgaria, the milk production declines, as over 50% of the raw milk is used by the milk processing factories. The rest is for personal consumption and direct sales by farms. According to this indicator, our country lags behind - it is ranked 24th among the 28 EU member states after Luxembourg, Cyprus, Malta and Croatia. A big share of the milk is not processed by factories but the farmers use or sell these quantities, which describes the underdeveloped milk market and low prices making farmers search other opportunities for their production. These data raise the question of the effectiveness of the financial incentives that farmers are given and how much these grants support the maintenance of the milk production, especially in the former socialist countries, or they are merely a mean of avoiding a sharp downturn in order to ensure a smooth exit from the milk production market. This will release a market for increased production by the developed EU member states.

The difficulties in the dairy sector in Bulgaria are serious. Researchers from the Center for Economic Research in Agriculture (Ivanov, B., Stoychev, V., 2018) highlight the following problems:

- Structural fragmentation, low productivity, lack of vertical and horizontal integration, as the most dangerous is the position of small and medium farms breeding between 20-150 milk cows and those between 100-300 sheep;
- The number of the milk herds of cows and sheep will continue to decrease, but without drastic downturns, as a result of the tied support that helps to keep the number of animals but which has little contribution to improving productivity and competitiveness of production;
- Significant differences in purchase prices of raw milk between farms with different size and location.

These considerations underlie the forecast for the development of the sector by 2022, when the milk cows are expected to be reduced by 36,000, with a slight improvement in the productivity and quantities of milk processed by the dairies. A similar trend is also expected in the number of sheep and milk produced by them. A serious problem is the impossibility of the small milk farms to meet the regulations that the EU introduces into the sector. It often leads to their reorientation from milk to meat production, which further narrows the milk production base. In addition to the requirements imposed externally, the national authorities introduce additional measures for the sector.

3. REGULATION CAPTURE

The conditions for production of cows' milk in the EU are defined in Regulation (EC) No 853/2004 laying down specific hygiene rules for on the hygiene of foodstuffs. The European Commission Decision of November 2013 provided derogation for Bulgaria to meet the hygiene requirements for raw cows' milk. From 2017 the farms must fully comply with the Regulation 853, as well as with the national requirements laid down in Ordinance No 2 of 23 February 2017 on the specific requirements for the production, collection, transport and processing of raw cows' milk, the marketing of milk and milk products and their official control. In relation to the control of cows' milk the Bulgarian Food Safety Agency (BFSA) maintains a register of farms producing raw cows' milk (BASF, 2018 a, b), as currently there are about 4 thousand farms possessing over 10 cows each and 12% of them do not meet the requirements for milk farms.

In 2017 with a view to introduce the new regulation on the milk market the Ministry of Agriculture, Food and Forestry (MAFF) formally organized public discussion, as the final effect is a document in which uncertainties exists, as well as unjustified increased regulation in the sector. In Regulation 853/2014, the criteria for raw cows' milk are in relation to three indicators:

- Plate count at 30 °C (per ml) \leq 100 000;
- Somatic cell count (per ml) \leq 400 000;
- Definition of reglamented antibiotic residues.

Ordinance 2 sets 5 indicators to be controlled by each milk producer, i.e. the indicators are increased by including one special - freezing point. This regulation aggravates milk producers, creates additional costs, while limiting the range of laboratories in which these indicators can be tested.

2 gives contradictory definitions of raw milk testing laboratories, which are obliged to test the quality of milk:

- Art. (4) The milk samples shall be submitted for testing in independent accredited laboratories, entered in the public register under Art. 11e of the Livestock Act.
- Art. 7. (1) The accredited veterinary laboratories for testing of raw milk shall be subject to control by BFSA in accordance with Art. 37 of the Law on Veterinary Activities.

The laboratories in which raw milk should be tested for the purposes of self-control of the farmers need to be accredited, as well as the next article requires that they should be also veterinarian. They must meet not only the requirements for accreditation but be approved and included in a list envisaged in the Livestock Act, and the definition "veterinarian" somehow imperceptibly implies a second approval - according to the Act on Veterinary Activities. In fact, the accreditation itself is only one of the conditions for servicing the raw milk testing market. The other requirements are an approval by MAFF under the Animal Breeding Act and by BFSA under the Act on Veterinary Activities. In addition to aggravating regulation and adding additional barriers in the form of permits, registration costs, time, but also specialized staff is required. By introducing the term "veterinarian laboratory", it is necessary to employ a veterinarian who is registered under a specific procedure. All these barriers that are established on the milk market do not protect the public interest but monopolize and

artificially restrict the right to provide laboratory services and thereby maintain artificially inflated prices.

In the whole process of normative provision the supervising authority – BFSA intervene, as its Director issues Guidelines (No. 2743-3 ЖКОФ / 09/05/2017) and clarifies the procedure of control, introducing the concept of "indivisibility" of milk samples. By introducing this concept, in practice, the barriers on the milk market are strengthened – the milk can only be tested in a laboratory that offers all five indicators within the scope of its accreditation. It turns out that it is impossible for several laboratories to test the same milk on different indicators. The Guidelines illegally rewrite a normative document and the Director of BFSA goes beyond his legally defined competences. The issue, respectively the amendment, of Ordinance 2 is within the competence of the Minister of Agriculture and Forestry and not of the Director of the BFSA.

Neither the ex-ante impact assessments of the main law - the Food Act, nor the public discussions of Ordinance 2 reflect the additional costs and difficulties that arise through the introduction of the complicated procedure for the control of raw milk. The financial burden that this new regime creates is in several directions:

- for farmers and manufactories: they need to control more indicators and pay for them;
- for samplers - a new participant in the control process is created who has to undergo training and get a tablet to carry out this activity, as well as be paid for doing the sampling;
- for the laboratories - they should be not only accredited by the National Accreditation Agency – Executive Agency “Bulgarian Accreditation Service” but included in a register of MAFF and in a register of BFSA for veterinarian laboratories. All these entries require time, recruitment of appropriate staff and payment of fees;
- for the administration - registers are kept at MAFF and at BFSA, teams of experts are established to check laboratories in addition to their farm control.

The collision in Ordinance 2 is in respect to the uncertainty whether the laboratories for raw milk testing are needed to become veterinarian. The issue is exacerbated by the fact that there is a national accreditation body. There is no practical justification for re-approving the accredited laboratories and turning them into veterinary for the purpose of testing milk. The very essence of accreditation is to approve test methods for different types of products, personnel and equipment. It remains unclear the added value of this process by turning the laboratory into veterinarian. The theoretical difference is only in the presence of a veterinarian but this is contrary to accreditation procedures where there is no requirement for a particular profession that can perform tests but only for competence. Equating a profession and competence once again distorts the market and creates a monopoly of veterinary specialists.

The confusion in the legislation can be attacked through the Commission for the Protection of Competition (CPC). In the specific case, it came out with Decision No 962 of 10.08.2017, in which it found out that:

- "It is possible that the regulatory framework, regulating the activity of accredited laboratories for testing raw cows' milk, restricts and/or distorts competition by limiting the number or circles of market participants in the form of granting exclusive rights to one of the market participants; introduces additional conditions for the exercise of the activity;

introduces additional control regimes when performing the activity; limits the ability of certain market participants to provide the service concerned;

- Establishes "controversial interpretation of the legal framework", which in itself may create "legal uncertainty among laboratories".

This decision launches a process of comprehensive assessment of the legislation in order to assess in full the deficiencies and contradictions of the implemented normative documents and established practices. On 17 May 2018, the CPC finalized the market investigation and concluded in Decision 562 that "the regulatory framework, regulating the work of accredited laboratories for testing raw milk restricts competition by creating legal uncertainty in respect to the requirements the laboratories must meet. Its proposal is Ordinance No. 2 of 23.02.2017 "to be amended in order to avoid ambiguities and contradictions in the regulations", as "changes in the legal framework related to new requirements should be done smoothly so as to allow market participants to adapt to these new requirements."

The decision confirms the existence of a wide range of contradictory practices and breaches of important principles in the creation and implementation of new rules, which results in market chaos, confusion amongst stakeholders, use of regulation to derive economic benefits. Attacking the regulations requires time and efforts (12 months), and the result is a recommendation to the institution that have issued the normative document to change it. It, in turn, is not obliged to do it. The costs of the thoughtless regulation at the end are ultimately borne by the regulated, as well as by all citizens. They will not receive the necessary guarantee of quality and safety of the milk produced, while at the same time the cost of public administration services will increase due to the duplication and lack of synchronization of the activities of the various actors involved in the process of control and management of the milk industry.

CONCLUSIONS

Led by the obligation to introduce the EU legislation requirements, as well as for paternalistic motives to overcome information asymmetry in the milk production industry, the state develops practices that are contradictory and in favour of private entities. Artificial barriers are established that create favourable conditions for business of certain laboratories without the existence of public need for such a mechanism. Introduction of new regulatory procedures generates additional costs that are unjustified. New competences are imposed upon the administration, extending the circle of the controlled persons. Parallel to that, the controlling functions of different institutions are duplicated, which creates contradictory interpretations of the ability to perform a particular activity.

A possible approach to partially address the problem areas can be the conduction of a broad impact assessment of the legislation through inclusion of different categories of stakeholders with a focus on those who will be directly affected by the regulation. The type of invited participants in the assessment describes, in fact, the public authorities' understanding of the process of regulation and guarantees the lack of monopolization of the market. A strong incentive to improve the quality of the legislative initiative and prevent attempts to manipulate the market will be:

- Inclusion of a requirement to assess the relationship of the proposed legislation in connection to other legal acts in order to avoid any contradictions;

- Compulsory assessment of the costs arising from the new regimes, especially for small and medium-sized enterprises, as well as a subsequent assessment of the results of the functioning of the normative document in a short period of time in order to correct any gaps;
- Taking responsibility by the administration in case of introduction of practices that restrict the market and create conditions to capture the regulation.

Ensuring access to the results of the public consultations and discussions on the website of MAFF will be a guarantee of the transparency of the process and will prevent attempts to disguise regimes, that are established and introduced in a hurry, as the price of this is paid by many market participants.

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