
INFLUENCE OF THE ENVIRONMENTAL LEGISLATION ON THE VALUE OF THE ENTERPRISES TECHNICAL EQUIPMENT IN POULTRY BREEDING

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ABSTRACT

The aim of the study was to define the technical and economical contexts and influences of introduced legislation on integrated prevention of concerned equipment for poultry farming. To assess the influence of environmental legislation on the value of technical equipment of a company, the acquisition price value at the time of acquisition of equipment was identified. The individual acquisition prices of equipment were calculated according to the methodology of valuation of machinery and equipment for the general price in 2007, and the same procedure was applied to calculate the general price in 2008 (Paseka, Mareček, 2012). According to the methodology for the valuation of machinery and equipment, the influence of changes in the relevant legislative regulations on technical and economical parameters of twelve equipment for poultry breeding was analyzed. Six equipment was under the concerned equipment and the other six equipment did not come under the criteria of Act No. 76/2002 Coll. on integrated prevention. It has been shown that the general price of the older equipment for poultry farming has decreased as of the determining date of October 30th, 2007 approximately by more than 80% of its original value. In case of newer equipment approximately by 50% of its value. Comparing equipment being not concerned by the law after the determining date with equipment concerned by the law on integrated prevention, it can be said that their general price was rising according to the inflation and the coefficient of sale ability.

Key words: environmental legislation, integrated prevention, poultry breeding

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INTRODUCTION

The development of environmental law after the Czech Republic's accession among the European Union's countries has been faster and deeply projected into changes of national legislation of the Czech Republic. Currently the subsystem environmental law is one of the most dynamically developing sectors of international law. The frequency of changes in national environmental laws of the Czech Republic and its individual legislative regulations is then even higher. These changes can directly or indirectly influence the development of other legal sectors and consequently the behaviour of legal entities (Mareček, 2008). The enactment of Directive 96/61 EC Integrated Pollution Prevention and Control (IPPC) entered into force in 1999, and according to it the new equipment was assessed and eight-year postponement was applied for the existing equipment (Council Directive, 1996). Implementation of the Directive in the Czech national law in the process of negotiation of EU environmental legislation is the Act No. 76/2002 Coll. on integrated pollution prevention and control, on the integrated pollution register and on amending of certain laws (effective since January 1st, 2003) (Information Portal of Ministry of Industry and Trade of the Czech Republic). Adoption of this law caused a change in the business environment in the Czech Republic (Mareček, 2008). Concerned equipment (potentially major polluters of the environment) must have had a valid so-called integrated permit on the date of October 30th, 2007 (Act No. 76/2002 Coll.). Integrated permit was being issued on the basis of the positive outcome of the administrative procedure initiated within the meaning of the implementing Decree No. 554/2002 Coll. defining a model application for issuing an integrated permit and the scope and manner of its completing (Decree No. 554/2002). Integrated permit may be issued for equipment that satisfies the criteria of the Best Available Techniques (BAT) (Mareček, 2008).

The need for monitoring and publishing the work is resulting from direct consequences of laws affecting the general price of machinery and equipment and also the subsequent effects. Among subsequent effects belong mainly advantage of unconcerned machinery and equipment at the expense of the concerned ones determined only by a human decision, the size of insurance, where it happens that the owner of such equipment pays an insurance for a property which value will be half of the original value on the determining date, and thus it could result into a possibility of criminal acting within the meaning of insurance fraud for the purpose of obtaining of a sum of money for the recovery of the operation.

MATERIAL AND METHODS

The source material for elaborating of this work was twelve poultry plants in total, six of which came under the Act on integrated prevention and the other six didn't come under this law. Based on local investigation of these operations, provided materials of administrative bodies, insurance companies and liquidation reports, a database has been created, out of which it can be seen up to 80% reduction of a general price in 2008 compared to 2007 in four older plants as a result of the law on integrated prevention. In case of the two operations that met certain requirements stipulated by this Act it can be seen "only" about 50% reduction of the general price. In case of the other six plants, which the Integrated Prevention Act did not "effect directly", there occurred increasing of the price with inflation. The extent to which this law influenced these machinery and equipment in terms of indirect influence (i.e. no reduction of coefficient of sale ability, which indicates the level of interest in the machinery and equipment or the interest in the entire operation) cannot be deduced, but it can be assumed that on condition that the competition decreases, the price of the remaining operations increases. The method used for the valuation of machinery and equipment was based on the methodical tool - Measurement of machines and equipment according to Dr. Ing. Radek Knoflíček.

RESULT AND DISCUSSION

In 2007 there was a hypothesis that the Act on integrated prevention would devalue the equipment from year 2007 to year 2008 by 70%. Based on the following graphs it can be said that this hypothesis was essentially correct. Everything depends on the age of these machines and equipment. In some cases there was "only" 50% reduction of the general price and in older equipment the level reached 80%.

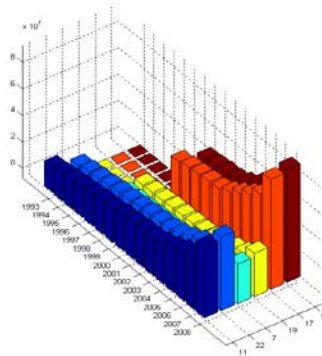


Fig.. 1 Poultry with IPPC - the initial price of machinery and equipment (axes description: x – year of purchase of a given equipment and its ageing, y – type of equipment, z – value of equipment in millions of Czech crowns)

Graph no. 1 shows the evolution of the purchasing price in six poultry factory farms, which reflects only its increase with inflation in a given year. This results in initial price of machinery and equipment for subsequent arithmetic operations in those years. Arithmetic operations are counted only for the groundbreaking years of 2007 and 2008 to obtain the necessary results. This graph shows the course development of inflation and it is depicted for the better visualization of development of initial prices, which will not have any impact on the further assessment. In the following graphs there are depicted only the years 2007 and 2008, which represent the pivotal representation of reality characteristic for these years.

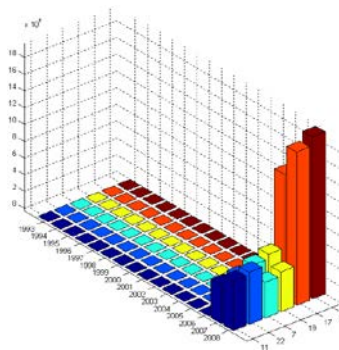


Fig.. 2 Poultry with IPPC - time price of machinery and equipment (axes description: x – groundbreaking years without the influence of the IPPC law, y – type of equipment, z – value of equipment in millions of Czech crowns)

Graph no. 2 represents the time prices of machinery and equipment in 2007 and 2008, which show real technical value. Time price is a real technical value of machinery and equipment stated in Czech crowns. Time price in this graph still represents the normal development of the price in the market. Factory farming number 7 and number 19 have time prices lower in 2008 than in 2007, because 2008 is a groundbreaking year for them from the perspective of achieved age, thus technical value, which is based on the methodology used.

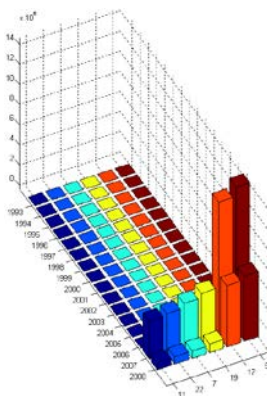


Fig. 3 Poultry with IPPC - the general price of machinery and equipment (axes description: x – representing groundbreaking years with/without the influence of the IPPC law, y – type of equipment, z – value of equipment in millions of Czech crowns)

Graph no. 3 shows the real impact of the Act on integrated prevention on the machinery and equipment in poultry factory farms. In four equipment the general price decreased in 2008 by about 80% compared to 2007, which means that there came to devaluation that had fatal consequences in terms of sale in parts under favorable circumstances (those parts fit into plants unconcerned by the law, or into completely different plants) where it was possible to achieve an increase of funds received, but only in the amount of up to hundreds of thousands, or by selling it as a whole to the scrapyard. In two equipment which were manufactured between 1999 and 2000 did not occur so radical decline (more equipment met the requirements of the IPPC law) by about 50%, but it had the same or similar results.

The results obtained at the factory farming of poultry in comparison with the results of investigation in equipment for factory farming of pigs are about 5% worse. In case of the factory farming of pigs, where the influence of the IPPC law was also solved, it came out that there was about 75% decrease in general price from 2007 to 2008. Identified differences are given by the different requirements of the IPPC law, therefore different plants, old age. Future solutions in case of other laws represent the greater involvement of state authorities for negotiation of a longer period for implementation of this Act and the time for replacement of the obsolete equipment. At the present time it is also related with the idea of sustainability of jobs and with imposing requirements on plants. The more we burden the owners of operating plants by unnecessary investments into functional equipment, the more we lose competitiveness compared with countries such as Eastern countries where the environmental protection is not being solved or is within the bounds which comply with them.

CONCLUSIONS

The aim of this work was to show the impact of environmental laws on the price of machinery and equipment that may cause and causes their price devaluation in the range from about 50 to 80% in the general price in equipment over 40,000 animals including poultry farms. Machinery and equipment becomes commodity not easy to sell especially in the lower price level than before the adoption of this law. Of course it depends on the age of particular equipment. Further it shows that by adoption of laws that divide the same business sector, in this case poultry farming – up to / over 40,000 pieces, by a mere human decision can result in a disadvantage or advantage in the given sector and thus to influencing the competition. There were created conditions that interfere with normal development of the competitive environment, because there were not only defined the conditions to be achieved, but there was also set the limit on the number of pieces. Then the possibility of creation of another influence, in this case on the insurance environment, that means criminal activity as a result of utilization of current insurance to cover losses incurred by the given law and that with the possibility of insurance frauds in the form of unexpected events such as accident, fire, etc.

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