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THE USE OF ECONOMIC ANALYSIS, FROM EU PROJECTS TO ECONOMIC ANALYSIS OF LAW *ARKADIUSZ KLUSEK**

Abstract

The main aim of the article is to confirm or disprove the hypothesis about the applicability of the methodology of analysis, which is used in the evaluation of EU projects, for economic analysis of law.

According to the hypothesis, it is possible to use a methodology that considers a wide range of data. In addition to financial values, it considers human and social values. The methodology used in this way could help in assessing the impact of the regulations introduced. It's would be an important tip for the legislator.

The method of comparative law was used in the research.

Key words

Economic Analysis of Law, Law and economics, European funds, Economic Analysis, Project appraisal

JEL Classification: K00, K29

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1. Introduction

Law can be defined in many ways. For example, it can be described as a specific set of norms. However, what law is depends on the function which the norms fulfil. Law is a certain tool for the legislator (lawmaker), the tool which enables the achievement of important economic and social objectives. In some situations, public administration, while applying law, strives for exerting the proper influence on recipients of that law in order to achieve the objectives. The recipients, on the other hand, behave in the way which is expected. Law, which is an element of social relations, influences financial relations as well. These attitudes could be measured with financial values. Effective law, which realizes the objectives assumed, is very frequently connected with financial results. Since law contributes even to direct changes in financial categories, we should apply economic tools for examining these norms. It is basically required by legislative rationality and care for the spending of public funds. However, the theory of Economic Analysis of Law gives us direct solutions here, enabling assessment of effectiveness of given objectives of the employer and public administration applying the legislative norms. Economic analysis applied in the assessment of European projects can be a successful tool while applying it for Economic Analysis of Law. The above-mentioned analysis, introduced to the Polish system of law by the European Community regulations examines, by the use of precisely described methodology, the effectiveness of public funds spending, and as a consequence the effectiveness of social objectives reached. This methodology could be applied for examining the effectiveness of other public funds spending and as such would constitute an important element in the development of Economic Analysis of Law in Poland. The author attempts to prove the above thesis in this article.

The article presents basic assumptions of the Economic Analysis of Law (EAL) and brings closer the practical aspects of EAL while applying the regulations concerning redistribution of public funds as grants. The article comes in two parts. The first part, theoretical, brings closer the basic rules of Economic Analysis of Law. In this part the theory including the rules represented by Austrian school of economics has been discussed. The school develops and modifies the fundamental base of methodological assumptions. Next a consideration on the possibility of applying the Economic Analysis of Law in financial law has been presented. The second part includes some practical experience connected with applying the economic analysis during assessment of the applications for European Union grants. The author's opinion has been presented according to which the rules

and methodology of economic analysis applied for European Union projects show how to estimate the benefits from the validity of given legislative regulations concerning the public funds spending. For this reason, the model of the analysis could also be applied for the Economic Analysis of Law at least in the cases of regulations concerning the spending of public funds on specific goals. An evolution of changes in the regulations concerning the differences between the former Perspective of the European Union Budget, that is in the years 2007-2013, and the present Perspective for the years 2014-2020 has also been presented. Conclusions and recommendations *de lege lata* and *de lege ferenda* based on the above-mentioned experience have been formulated.

2. Fundamental Theoretical Assumptions of Economic Analysis of Law

Law and economics have been connected practically for as long as both concepts exist, even as phenomena of legal and financial nature. Thinking about law in economic terms has been developing for thousands of years together with the developing and formulating economic theories and with the development of the theory of law. Yet, thinking about law and the effects of its application in terms of Economic Analysis of Law, understood as the analysis of its economic results with the use of economic models, is a relatively new phenomenon in the history of law theory.

The application of law has practically always had economic results. They can be both direct, when the application of law results in an adequate allocation of financial property, and indirect. Indirect results come from the application of specific mathematical rules or, for example, game theory for estimating the social results which are not reflected directly in financial values.

Economic Analysis of Law is then a kind of examining of the results of validity and application of law. If economic analysis of law was perceived as a duty supported by state-run sanction, we would interpret it as a scientific theory for forecasting the results of applying legal sanctions concerning specific attitude (Cooter, 2000: 2.). Forecasting the results of law application is also an analysis of economic results. This examining can lead to conducting such analysis whose results would be figures allowing the estimation of the values for the recipient of the legal norm in case of both applying and not applying of the given norm. In the case of imperative (mandatory) rules we can talk about the results of complying with disposition of a given norm by the recipient or about the lack of complying. However, in case of semi-imperative norms it can be the examination

of the results of the application, for example two different, potentially applicable solutions. The number of potential cases would be as unlimited as the rule of freedom of contract. Economic Analysis of Law can be applied both to public and private law. However, in each case, no matter if the given norm is private or public; the results of its application will be examined.

It can be claimed that all regulations have a common feature: their validity should influence the recipients in a way to evoke some specific benefits, for example social ones. This is or should be a feature connecting all regulations. Applying law is also connected with costs. The fact whether costs are rational will depend on the fact if benefits exceed the costs. That is why it is necessary to measure them. We can consider the benefits from the perspective of public or private interest. Obviously, it is impossible to recognize something as beneficial for absolutely everybody. However, measuring the benefits with economic values, we conduct Economic Analysis of Law from the perspective of the benefits of one of the parties of the legal relationship. For example, it can be the benefit for the party of the agreement, state budget or the recipient of the legal norm of criminal law. Such economic justification of the existence of legal regulations is or should be a common feature of all legal regulations. This economic justification will be a common base for all aspects of law. R. A. Posner names it a disclosure in the light of economy of a 'deep structure' interpreted as a certain significant base for the existence of law itself, ensuring integrity of law (Posner, 1998: 6.). That is the reason why it is a theory giving basis for justification of the existence of law from the economic perspective. It seems that it was R. A. Posner who gave the foundations for the contemporary theory of Economic Analysis of Law, publishing in 1972 'Economic Analysis and Law'. R. Posner together with G. Calabresi, H. Manne and R. Coase, was recognized by the American Law and Economics Association (<http://www.amlecon.org>), as one of the founders of Law and Economics¹. It should be noticed that Posner was criticized for his theory, for example by Dworkin who states that a judge, justifying the ruling in difficult cases, appeals more to instinctive sense of values than to economic analysis based on the rule of effective sharing of resources (Dworkin, 1998: 56.). However, in reality judge does not have any analysis results,

¹ R. Posner's theory is not the only one. Many authors and other schools of economic analysis of law (for example New Haven, Virginia) refer to the issue of both economic justification and justice, while considering social factors and values. Different schools examine the economic efficiency of the law in various ways, considering both the social interest and individual values that are important from the point of view of an individual. Presentation of R. Posner's theory results from his recognition as a co-founder and thus one of the important representatives of the entire Law and Economics movement.

only such elements as own knowledge, experience or the system of values. This criticism shows the actual state in which the judge, having no results of economic analysis has to rely on own system of values originating from own knowledge and experience. However, it is possible to speculate that if the judge had the results of the conducted economic analysis he could take them into account in his considerations. In this way Dworkin states the facts and does not set the objectives. However, including the theory of law, the Economic Analysis of Law and then its popularization would yield measurable benefits in law application and would also deliver significant information useful during legislation process.

According to Posner, the Economic Analysis of Law which exists nowadays not only in the United States of America but also in Europe, has both aspects that is positive (descriptive) and normative. It is trying to explain and forecast the behaviour of objects and persons whose behaviour is regulated by law. It is also trying to correct law defining the rules in which existing or suggested rules were not intended or brought unwanted consequences, either due to their low economic effectiveness or a defined share of profit or welfare or other values (Posner, 1998: 2.).

It arises from the ontological nature of law that at least 4 following economic objectives should be realized:

1. securing the basic economic rights of the subjects of law,
2. defining of the effective system of sharing resources,
3. enabling the resolving of economic conflicts which may develop between legal subjects,
4. pursuing the development of individual and social welfare (material and non-material), which involves fulfilling the requirement of economic effectiveness (Stelmach, 2007: 12).

Economic effectiveness may concern all legal norms. However, this situation brings significantly bigger difficulties with its calculation in case of non-material benefits. There is no doubt that in case of regulations concerning legal-financial relations between legal subjects or expressed directly in financial values the calculating of economic effectiveness should not, in general, become a major problem. It can be actually claimed that, in some ways, there is a problem of entirely technical-computational nature. The fact, that legal and financial relation, often refer to financial problems, as a rule brings the assessment of the nature

of these relationships to the assessment of their economic effectiveness. Referring to the public funds we can state that they should be spent in a way to bring social-economic benefits, so their spending should be most effective from the economic point of view.

Economic effectiveness is treated as a fundamental distinctive feature allowing the assessment if a given opinion can be included in the trend of Economic Analysis of Law. In this way an assumption is put up about the fact that effectiveness should be the only objective of law (Stelmach, 2007: 17). As a consequence, there is no doubt that public fund spending should also be most effective economically.

The critics of the economic effectiveness of law as the major objective indicate that economic analysis does not take human life into account as the supreme value (Tokarczyk, 2007: 177). We could ask a question: does law devoid of economic analysis of effectiveness, treat human life as supreme value? In the general sense of a value definitely yes but not always when specific solutions are concerned. For example, National Health Fund² seems to be guided by the rule of budget balance rather than the rule of supreme value of human life over other values while establishing numbers and quotes of reimbursable drugs and medical services. If we tried to evaluate human life with an economic analysis method, the value would be very high indeed which would make it in fact superior in relation to other, less 'valuable' values. Such result would confirm the sense of economic analysis as the calculated value of human life would most probably be higher than the value of other benefits. In such circumstances the result of the analysis would confirm the superiority of the human life value. Obviously, it would be difficult to obtain such an economic model allowing the calculations. However, some attempts have already been undertaken to create such a model and calculate the value. Within the ExternE programme for European Union UE 25 countries a model has been created. It considers, apart from monetary aspects, also moral and ethical ones³. Moreover, the critical view on Economic Analysis of Law also refers to the fact that we do not have to prove with the theory of Economic Analysis of Law the needs

² National Health Fund (NFZ) is a state institution that finances health care benefits from contributions paid by people insured in the NFZ (the insured individuals pay contributions to the NFZ, and in return for that they are entitled to free healthcare).

³ ExternE is the well-known acronym for "External Costs of Energy" and a synonym for a series of projects starting from early 90s till 2005. The so called "ExternE-Methodology" is an approach of calculating environmental external costs as it was developed during the "ExternE project-series". All the results of the "ExternE project-series" have been made available on the ExternE project webpage, which can be found here (version from 2006): [access: 16.08.2018] http://www.externe.info/externe_2006

e.g. to introduce economically effective law, on account of the fact that such law leads to the increase of social welfare or should improve the preceding situation, as these are obvious (Tokarczyk, 2007: 177). Unfortunately, in spite of the fact that we can acknowledge these points as obvious in their nature, we can at the same time try to ask why they haven't been implemented. It is not the matter that the lack of economic analysis is the reason of not realizing such straightforward points but that economic analysis would be a perfect evaluation tool which would enable defining if a given solution fulfils the criteria of these points.

However, referring to values like human life or legal order, peace and other similar values of universal, human nature, as long as we do not have the possibility to use the model with which we could calculate these values, we definitely have to regard them as superior *a priori*. This, however, does not rule out a theory that it is possible to create a model which, considering an adequately large number of variables would be capable of calculating it. ExternE model, which has been mentioned before, could be an example. In this model the cost of premature death has been calculated and it was defined in 2004 as an equivalent of one million euro. However, due to the lack of existing calculations of larger number of such goods and values and a high degree of complexity and difficulty in performing a reliable calculation and also the predictability of the fact that the calculation results would exceed the values of other goods, we can discard performing such calculations for the needs of this article. In these circumstances we can make a certain assumption of the superiority of, by now, incalculable values over the values of different nature, secondary, subordinate in relation to those values.

It is also not the case that the theory of Economic Analysis of Law, due to the fact that it relates all the benefits to financial values, is a certain 'philosophy for the rich', which is also a certain critical argument. It is because its essence is rather the justification of the existence of a defined normalization on account of the fact that the lack of normalization is less advantageous for the recipients of law than its existence. In brief, with the economic tools the economic analysis of law proves that the recipients of a legal norm benefit more in case the norm exists than in a situation that there is no legal norm. This, however, does not determine in any way that the recipients of law are supposed to be the rich or the poor. It should refer equally to everybody. The fact of estimating the benefits through numerical values should not influence such criticism. There are no limitations to the values of such benefits. Also, a minor benefit can be justification for applying a specific legal norm. The most important thing is that in case of implementing a legal norm

the total of benefits exceeds the total of costs involved in the implementation. Of course, there are still difficulties connected with estimating the values not related directly to financial values such as e.g. the sense of security. Nevertheless, in case of legal-financial relationships referring to such values, there is no doubt that economic effectiveness should characterise these relationships.

The problem of estimating the value of life is also taken by other authors. They appreciate that human life is the supreme value. The problem is its valuation. In some cases, the value of life is compared to the state of imprisonment (Polinsky, 2007: 409) (because being imprisoned, we cannot use life). This view is better used in criminal matters (criminal law) and the problem of compliance and enforcement. Other authors look at the problem from the side of the valuation by the interested person. Friedman assumes that everything can be compared (comparability) and that we still have to make choices because we cannot have everything (non-satiation) (Friedman, 1990: Chapter 2). So, if we act and take risks, we value our lives and health in exchange for other goods that we want to achieve.

As Economic Analysis of Law has not worked out a consistent research programme (Stelmach, 2007: 17) yet, various concepts assuming different methodological assumptions exist. Apart from Chicago movement, also called neoclassical, whose dominating representative is Posner, and it is worth to notice other attitudes to this theory. The outstanding theory here is the Austrian school of economics approach. The basic differences between the above mentioned two schools are presented in the table:

Table 1. Basic differences between Austrian and Neoclassical schools of Economic Analysis of Law.

Subject of comparison	Austrian paradigm	Neoclassical paradigm
1. Way of perception of economy (basic rule)	Theory of human activity seen as a dynamic process (phraseology)	Theory of decision: national and based on maximisation in the word of limitations
2. Methodological starting point	Subjectivism	Stereotype of methodological individualism
3. Protagonist of social processes	Creative entrepreneur	Homo oeconomicus

Subject of comparison	Austrian paradigm	Neoclassical paradigm
4. The possibility of an error <i>a priori</i>	There exists clear or ordinary error of the entrepreneur and regret ex post	There are no errors which can be regretted later as all decisions made can be explained in the categories of cost-benefit analysis
5. The nature of information	Knowledge and information are subjective, scattered and transform constantly (entrepreneur creativity). Definite distinction between scientific knowledge (objective) and practical knowledge (subjective)	Existence of complete, objective and permanent information about the goals and means is assumed. No difference between practical (entrepreneurial) and scientific knowledge.
6. The concept of competition	The process of competition between entrepreneurs	The situation or model of perfect competition
7. The concept of cost	Subjective (depends on the ability of discovering new, alternative goals by the entrepreneur)	Objective and permanent (can be acknowledged by third parties and measured)
8. Defining law	Law is a set of rules resulting from human activities and evolution. Law based on private property is effective and ethical.	Main positive law and the rules of common law, multitude of interpretations. Law must be effective in the spirit of neoclassical economy

Source: Chrupczalski, 2008: 18.

As the above table shows the attitude of the Austrian schools of economics is based more on real aspects of general activities. It is proved by appreciation of imperfections and subjectivity of decisions made. At the same time the attitude to law is expressed in praxeological perspective, as resulting from human activity. It is essential for the theory of Economic Analysis of Law not to treat the subject of law as homo oeconomicus but as subject who decides which, from the present point of view, seems to be the most effective solution. This does not of course eliminate

situations in which an error can be committed for various reasons. Error can result from faulty analysis e.g. incomplete information, inappropriate information, inappropriate cost and economic profit evaluation of a given activity. The Austrian school of economics attitude is more realistic and relates to events which take place in reality and does not describe an ideal situation, difficult to reflect in reality, which characterises the neoclassical (Chicago) school better. Such attitude, aiming at the calculation of the value of economic benefits from applying legal rules, especially financial, should characterise the analysis of financial law.

3. Applying Economic Analysis of Law in Financial Law

Posner mentions many different areas for which Economic Analysis of Law can be applied: labour law, intellectual property law, family law, environmental protection law, administrative law, legal (court) proceedings and others. He quotes a statement that linking law to economic movement is currently one of the fast-developing theories in the United States of America (Posner, 1998: 2). As financial law is also law, it could be natural to apply Economic Analysis of Law in financial law as well. It should be noticed here that financial law which deals, among other, with state finances, is quite specific. Nowadays the role of the state is not limited to the role of a 'night watchman'. The state, within the framework of financial economy, tries to stimulate specific branches of economy, invest actively and influence the development of the economy. This refers to states, institutions as well as to international organisations. Employers perform legal regulations enabling e.g. obtaining funding for investment in certain areas. In a way they expect, in exchange for that, that existing normalisation, through their application in a broad range, will evoke a specific effect in macro-scale. In such a situation it seems that the economic result is a direct goal of implementation of specific regulations and economic analysis should be the basic tool for examining its effectiveness.

What is interesting, the work of A. Director, an economist at the Faculty of Law University of Chicago Law School, had a major influence on shaping the Economic Analysis of Law. He was researching the American antitrust law. The result was proving harmfulness of the state regulations, in spite of the intentions leading to expanding the monopoly and affecting the consumers' rights directly. This specific case referring to financial law was a significant element of the development of Economic Analysis of Law concept. It also showed that there are situations in which public administration institutions, pursuing specific outcomes, introduce norms which do not ensure the realisation of these outcomes. It proved

in this case that the above-mentioned antitrust law did not fulfil the criteria of effectiveness and so it was irrational as it did not achieve the goals it aimed at. Economic Analysis of Law ensures in this situation conveying appropriate knowledge to the lawmaker on the basis of which the goals can be achieved. Therefore, at the beginning of the development of this theory, it was the analysis of the regulations of financial law which became almost a cornerstone while formulating the theory of Economic Analysis of Law. This by all means proves the need of applying appropriate EAL tools in financial law.

Application of financial law often consists in taking specific, frequently individual decisions. EAL is based, among others, on utilitarian approach to law. It should be noticed that, in case of financial law, this utilitarian approach will refer to certain usefulness in favour of public good. The attitude of the recipients of law and the consequences of this attitude it would bring for the public good would be the subject of research. The amount of tax could be an example. It is commonly known that raising taxes will not generate more revenue. In brief, it is not true that the higher the taxation, the higher the revenue it will generate. According to Laffer curve, extreme tax rates will generate smaller revenue. The goal of Economic Analysis of Law would be examining the attitudes of taxpayers in order to identify the maximisation of taxation revenues. This enables a wide application of EAL in economic aspects of financial law.

There definitely are numerous situations in which law generates legal consequences. Social aspects are not the subject of detailed considerations of this article. Nevertheless, it seems that social repercussions analysis is desired at least where undoubtedly legal norms refer to economic relationships and influence them. Financial law is an area of law. For that reason, economists deal with this problem. According to R. Coase, it is necessary to manage legal rules as they have impact on economy. He also claims that economists can use specific tools which define their discipline in terms of given subject, in this case law (Harnay, 2009: 7). Due to that, in the areas where the impact is undeniable, we can apply economic analysis for examining the very impact of law.

A question could be asked: why can't we leave the work with economic models for economists? Why would we analyse economic results of legal regulations if we could leave law for lawyers and economic issues for economists. Indeed, these concepts can't be separated, especially in case of regulations whose content refers directly to economic issues. Obviously Economic Analysis of Law concerns a wider range of application as it is a fact that each legal regulation influences

the recipients and because of this they make decisions resulting in economic consequences. Economists have suitable analytical tools which they can use to examine law and economic results of its application. Hence lawyers need them. At the same time economists need law and lawyers who provide real matters, some sort of subjectivity, giving a sense of reality for their examination. There exists a humorous though relevant statement that economists, who consider themselves to be theoretical tools without a real subject, do it in a manner in which they would study blood circulation without having a body (Harnay, 2009: 7). The essence of the relation of law and economics is also expressed very well by a claim that the rules of just proceedings which a lawyer studies serve some economic order a lawyer has no idea about. On the other hand, this order is examined by an economist who in turn is equally unaware of the nature of the rules of proceeding, on which the examined order is based (Chrupczalski, 2008: 17). The above statements do not concern exclusively financial law but all aspects of law. They confirm even more the validity of application of the described methods in financial law which concerns legal relationships in the aspect of property.

What should Economic Analysis of Law designed for legal regulations of financial law contain? It should contain estimated values of benefits from the perspective of public good. Estimation should be performed with the use of economic models. As a result of such analysis we would obtain numerical values expressed in money which would be comparable to the results of applying other regulations of financial law.

4. Practical application of Economic Analysis of Law in Perspective of the European Union Budget 2007–2013

In the EU budget perspective for the years 2007-2013 realised in Poland, economic analysis was applied widely and generally. The application of economic analysis was the result of expanding statutory interpretations applied by the European Commission for large projects. The Commission expected that Member State or managing institution will present cost and benefit analysis, comprising risk assessment and predictable impact on given sector and social-economic situation of Member State or region (Act 1083/2006, Art. 40).

The basic provisions of Polish law concerning economic analysis are included in the 'Guidelines for issues related to the preparation of investment projects, including projects generating income and hybrid projects for the years 2014-2020'(Statement of April 21, 2015, item 395). The horizontal guidelines presented above were issued by the Minister of Infrastructure and Development

on the basis of Article 5 of the Implementation Act (Act of 11 July 2014, item 1146). Horizontal guidelines issued under the law by the Minister responsible or program guidelines issued as local legal acts by the legislative bodies of local authorities are an important source of law in the system of legal instruments regulating financial support through European funds together with state budget funds. They are part of the implementation system of each operational program (Act of 11 July 2014, Art. 6, ust. 2). Guidelines constitute a legal instrument specifying uniform conditions and procedures for implementing Structural and Cohesion Funds and are aimed at institutions participating in the implementation of operational programs. They are applied by these institutions on the basis of an appropriate arrangement, territorial contract or agreement as well as by beneficiaries under the project co-financing agreement or the project co-financing decision (Act of 11 July 2014, Art. 2, pkt 32). The guidelines are therefore issued on the basis of the applicable regulations and in the proper manner, they are mandatory for all the addressees (entities intending to implement the subsidized projects) and abstract (universal) in character. Failure to comply with the guidelines results in the imposition of specific sanctions, most frequently the non-granting of subsidies (refusal to sign an agreement or refusal to grant co-financing). Horizontal guidelines for issues related to the preparation of investment projects impose, in Section 8.1, the obligation to perform economic analysis, referring to the so-called Regulation 1303/2013 (Act 1303/2013, Article 101 (e)). In this way, due to EU regulations, economic analysis appeared on a larger scale in Poland as it had been practically unused in relation to public investment before. The above analysis appearing in the documentation submitted for projects in the form of economic analysis was prepared by the applicant separately for each project, e.g. for a particular investment of a unit of local authorities, i.e. the repair of a given road. The obligation to use economic analysis is based on generally applicable provisions of law, but the analysis process itself refers, obviously, to a specific project. Still, the managing authority of the operational program could extend the applicability of the above obligation to draw up economic analysis on projects other than large ones. This obligation was imposed by the relevant provisions in the guidelines governing the preparation of feasibility studies.

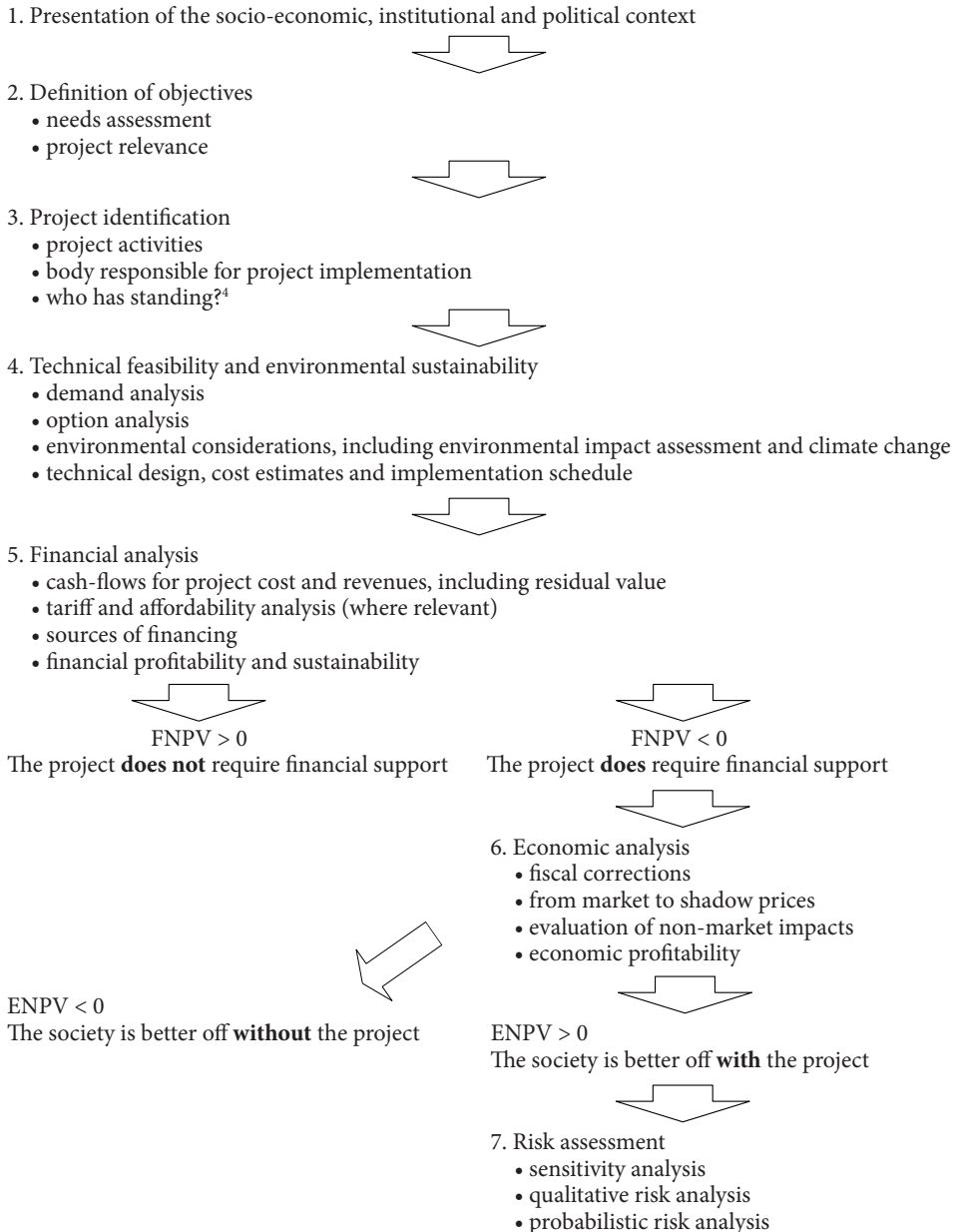
A good example here are the guidelines attached to the guide of the beneficiary adopted by the Board of Pomorskie Voivodeship. They constitute the local legal act issued on the basis of the implementation law and applicable in the financial perspective in question for the Pomorskie Voivodeship (Guidelines for the years 2007-2013). The guidelines impose the obligation to draw economic analyses on individually defined priorities in the operational program or on projects

of a fixed size, e.g. those worth over 2 million PLN. Owing to this, the Board of Pomorskie Voivodeship, who is the public funds administrator, determined individually which types of projects were viewed by them as requiring a precise approach to the assessment of a project impact. Thus, the local authorities received information on the effects of channelling a stream of public funds to a particular project or project type. Moreover, they also obtained comparative data.

Clear and comprehensible indicators for many projects could be contrasted making it possible to compare the expected results of not only projects but also groups of projects with reference to certain priorities or operational program activities. It should be noted that the need to apply economic analysis provided de facto important information used for several purposes. Firstly, they helped to identify projects that might produce better results and those which might prove to be less effective. Indicators obtained from the analysis appeared to be excellent data for comparison. Secondly, as a result of conducting the analyses of a number of projects it was possible to assess the effects of a given priority or program activity with much greater accuracy, which, in turn, allowed for the comparison of the whole programs with one another. It was possible to determine which priority including a given group of activities produced a greater number of measurable effects. A subsidiary argument for the use of economic analysis is that applicants were obliged to conduct a profound analysis of the effects of publicly funded investments. As a result, such projects were, in general, much better prepared in comparison to projects containing no economic analysis. On the other hand, the analysis itself did not generate technical difficulties as its performance was consistent with the principles of conducting financial analysis which, in turn, was obligatory for the projects simultaneously analysed for economic results. Thus, there are no serious arguments against using economic analysis in case of distributing public funds during the implementation of EU programs.

Economic analysis certainly brings some difficulty. However, it is not a matter of a particular complexity. Basically, the purpose of economic analysis is to determine the impact of specific public funding on the assessment of social wellbeing. This translates into the evaluation of regulations (specific priorities and actions in EU programs) in terms of social benefits. The calculation of the benefits in question follows a defined pattern. The European Commission provides methodologies for conducting cost-benefit and economic analyses. The methodology is described in detail in the Guide to Cost-Benefit Analysis. Figure 1. below presents the scheme for the whole project evaluation, a part of which is economic analysis.

Figure 1. The steps of the appraisal



ENPV – Financial Net Present Value (cumulative net present value of financial benefits)
 ENPV – Expected Net Present Value (cumulative net present value of economic benefits (social))

Source: Guide to Cost-Benefit, 2015: p.28

⁴ eligibility criteria

Simply put, it can be stated that economic analysis is reduced to the calculation of the economic indicator NPV⁵ (ENPV). NPV is an indicator quite commonly known and used in economic sciences. To calculate it the value of all costs should be determined, in this case the investment expenditures and here it means the value of public funds spent. It is slightly more difficult to estimate the economic benefits. In that case fiscal adjustments should be made; market prices should be converted into hidden ones and non-market effects should be assessed along with adjustments for external effects. Fiscal adjustments and the conversion of market prices to hidden ones are purely technical operations. They involve the adjustment of price value to take account of taxes (fiscal adjustments) and the application of a price conversion factor to take account of alternative social costs of inputs and outputs (the conversion of market prices into hidden ones). On the other hand, the assessment of non-market effects together with the correction for external effects is made by identifying first all possible benefits resulting from the investment, such as: shorter travel time, increased life expectancy or better quality of life, prevention of mortality, injury or accidents, landscape improvement, noise abatement, increased resistance to current and future climate change, etc. It is then necessary to quantify the effects in numerical terms which are converted into monetary amounts. For example, a newly built motorway will result in a transit time shorter by a specified unit of time and in a smaller number of accidents calculated in relation to the present state. On the other hand, using values such as revenues for a specified working time or costs of medical treatment makes it possible to calculate the monetary value for the benefits received. This is done on the basis of statistical data and data available in the documents containing the calculation of the value of quantified benefits (van Essen, 2014, 71-101).

After calculating the value of benefits, it is necessary to bring the value of future benefits to their present value. This is the definition of a current value, i.e. the value of cash flow as of today. It is necessary because investment benefits will be obtained over many years in future, i.e. during a so-called investment life cycle. Obviously, the exemplary 100 PLN is of higher value for us today than, for instance, in five years' time. To estimate the value of 100 PLN in five years' the amount in question should be remunerated, i.e. the interest, which is the product of the interest rate and the base value, should be added to it annually. In contrast, to bring down the future value of 100 PLN to its current value we have to discount it, that is to annually deduct from it the interest being the product of the interest rate

5 NPV – net present value.

and the base value. Write-offs are made in annual periods, i.e. for each year separately. It should be added that the interest rate is set in the Guide to Cost-Benefit Analysis. The formula for calculating the indicator takes the following form:

$$\text{ENPV} = \sum_{t=1}^n \frac{\text{ENCF}_t}{(1+r)^n} = \sum_{t=1}^n \frac{P_t}{(1+r)^n} - \sum_{t=1}^n \frac{N_t}{(1+r)^n}$$

where:

ENPV – Expected Net Present Value,

ENCF – Net cash flows in period *t* for economic benefits,

P_t – Income from economic benefits in a given year, e.g. due to fewer accidents,

N_t – outlays in a given year, e.g. the cost of building a new highway incurred in a given year,

r – discount rate,

t – next succeeding period – most often the year of exploitation of investment effects,

n – life cycle of project outputs in years.

As a result, the ENPV indicator presented in monetary terms, e.g. in PLN, is received. The value of the indicator may be positive or negative allowing for the interpretation described below. A positive value means that the benefit value is greater than the costs and so the project is worth implementing. A negative value of the indicator means that the costs outweigh the benefits and therefore the project implementation does not make any sense. The application of this methodology to interpret regulatory provisions for, e.g. certain EU programs, would allow to determine whether the benefits of introducing these regulations as well as the benefits of public spending are greater than the costs incurred.

The methodology described above applies to a specific situation in which non-financial effects are evaluated for a project where public funds are involved. It can thus be said that the study is conducted to determine the effects of public spending in a particular case where such funds are involved. The outcome shows whether the disbursement of public funds has generated appropriate benefits. It is of utmost importance that the effects measured on the benefit side are not financial but social. On the cost side there is an expenditure of specific financial resources. On the benefit side, however, there appear benefits such as better health care, better or new roads, efficient public transport, etc. These effects are not directly measurable in money but the methodology described above allows to slightly transform them in such a way that they can be presented in monetary

amounts and so compared with costs and with other cases of public spending. The application of this methodology to a wider range of public expenditure regulations would allow to examine virtually any program in which public funds are involved and where effects are benefits of a social character. This may be a program of co-financing the renovations of tenement house elevations, supporting the creation of new jobs by entrepreneurs or social programs such as the 500 plus. Due to this methodology it would be possible to investigate the actual effectiveness of implemented legal regulations of a similar nature. The Public Finance Act refers in many places to the principle of 'achieving the best possible results from outlays' but it does not define the method for examining the results in question. Economic analysis provides a solution to the problem of the methodology of studying social effects in case of public spending.

5. Trends in applying EAL – budget perspective 2014–2020

In the current budgetary perspective for the years 2014–2020 the existing regulations of the European Commission are the same. The obligation to perform an economic analysis of projects is imposed on so-called large-scale projects (Act No 1303/2013, Art. 101 (e)). Projects with eligible costs exceeding € 50 million are regarded as large-scale ones (Act No 1303/2013, Art. 100). Hence, the regulations set by the European Commission have not changed in relation to the previous budget perspective. However, the guidelines for feasibility studies, which are annexed to the rules for the implementation of a regional operational program, set out the obligation to conduct an economic analysis for large projects solely (Resolution 1279/195/16). The guidelines, therefore, depart from the principle that individual criteria determining for which projects the economic analysis should be performed are set by the voivodeship self-government.

Obviously, such an analysis evaluates the effects of applying the financial perspective provisions only to one specified investment. Nevertheless, based on the results of many analyses it is possible to examine the global effects. On the other hand, the lack of such regulations for projects smaller than EUR 50 million practically deprives the voivodeship self-government of valuable data which could be used to determine and compare the effectiveness of applying a particular set of regulations in case of awarding grants within the framework of specific priorities in a regional operational program. This is also due to the fact that there are very few large-scale projects in regional programs. An additional consequence of the lack of obligation to prepare an economic analysis is that applicants do

not have to specify costs and benefits precisely. They only provide a cost-benefit analysis which often does not include figures as it is not mandatory.

As a result, the analyses created are very general and with only a small amount of mostly descriptive data. Such studies are virtually of no value in assessing the effectiveness of grant programs. Obviously, the question of simplifying application documentation might be raised here. Unfortunately, the simplification is made at the cost of very valuable data. In view of the above, the changes in regulations concerning the distribution of European funds should be regarded as a negative. Simultaneously, both the opportunity to disseminate knowledge about economic analysis and the opportunity to deploy such analysis more widely in other fields of law are wasted.

6. Conclusions – Perspectives on the application of EAL

In the 1920s there was a debate between economists from Austria and former socialist countries on the possibility of effective management in the context of a centrally planned economic system. The debate focused on the issue of economic calculation raised by Ludwig von Mises. The problem was whether, and if so, then how it might be possible to calculate what amount of goods concerned should be produced to make its supply and demand equal in the conditions of socialism (i.e. centrally planned economy). Hayek claimed that such a calculation was impossible because a central planner was unable to gather the necessary knowledge about consumer needs (von Mises, 2000: 27-28).

In a sense, a similar problem applies to law-making as well. It is the legislative authorities who recognize arbitrary provisions as appropriate. They are theoretically guided by the needs of society, but since they do not have specific data their activity may be called intuitive. Economic effects are neither examined nor measured. Only general macroeconomic data remain available, but it is difficult to determine what exactly and to what extent have influenced their change. This certainly cannot be referred to specific legal solutions. Therefore, the economic effectiveness of legislative decisions is unknown. EAL does not answer all questions and problems, yet it provides additional knowledge helping to find answers. Due to economic analysis it is possible to better justify the implementation of new regulations and prove that intuitively introduced provisions bring the intended results. In the absence of these effects, in contrast, it would be possible to change the regulations accordingly. For this very reason, we should strive for the EAL to become the most common practice in deciding on the establishment of a given

law. Without this the legislator becomes a central planner making decisions intuitively and not knowing whether their actions generate or will generate the intended effects.

It seems that the methodology of economic analysis is an ideal tool to study EAL. It can be used to examine not only the legal provisions for EU funds but also a wider range of public funds. An important advantage of the methodology in question is the possibility to study social effects which cannot be measured directly and immediately in monetary values, but which require public spending. The methodology was implemented together with EU funds and it may become helpful in the research on the effectiveness of national public spending. Thus, it would be advisable to widely disseminate and apply economic analysis.

Conclusion de lege lata

Within the framework of existing legislation concerning European funding we should strive to conduct as accurate economic analysis as possible for the widest range of cases. The analysis should be expressed in measurable and comparable indicators also for smaller projects and the project size limit should be determined by the spread method or in cooperation with institutions administering public funds. It would be appropriate to apply economic analysis conducted according to a precisely defined methodology also to other provisions, especially those involving the spending of public funds acting as a kind of intervention intended to achieve certain goals. The lack of detailed economic analysis makes it impossible to evaluate the scale of public funding impact on the magnitude of the effects achieved.

Conclusions de lege ferenda

Wherever public funds are spent there should be an obligation to analyse the economic effects of introducing specific regulations. They should address both the recipients of the measures in question as well as their economic surrounding which will be influenced. Economic analysis can be applied not only to some specific projects but also to any publicly funded aid programs or, for example, targeted subsidies. This would make it possible to measure the efficiency and effectiveness of the legal provisions regulating the disbursement of public funds by means of comparable values.

References

- Chrupczalski, S.: *Ekonomiczna analiza prawa własności w ujęciu szkoły austriackiej* (Economic analysis of property law in terms of the Austrian school), Kraków: 2008.
- Cooter, R., Ulen, T.: *Introduction to Law and Economics*, Berkeley: Addison Wesley Longman, Inc., 2000.
- Dworkin, R.: *Biorąc prawa poważnie* (Taking Rights Seriously), Warszawa: Wydawnictwo Naukowe PWN, 1998.
- von Mises, L.: The equations of mathematical economics and the problem of economic calculation in a socialist state, *The Quarterly Journal of Austrian Economics* vol. 3, no. 1 (2000) [access: 16.08.2018]: <https://mises.org/library/equations-mathematical-economics-and-problem-economic-calculation-socialist-state-0>
- Posner, R.A.: *Values and consequences: An Introduction To Economic Analysis Of Law*, John M. Olin Law & Economics Working Paper no. 53 (2d Series) (1998).
- Tokarczyk, R.: *Jednostronność ekonomicznej analizy prawa* (Unilateral economic analysis of law), *Ruch Prawniczy, Ekonomiczny i Socjologiczny* (Legal, Economic and Sociological Movement) no. 4 (2007).
- van Essen, H., et al: *External Cost of Transport in Europe*, Delft: CE Delft, 2011.
- Friedman, D.: „Price Theory: An Intermediate Text”, Santa Clara University School of Law, Chapter 2, [access: 16.08.2018]: http://www.daviddfriedman.com/Law_and_Econ_97/Law_and_Econ_97.html (1990).
- Harnay, S. et al: Posner, economics and the law: from law and economics to an economic analysis of law, *Journal of the History of Economic Thought* no. 31 (2009).
- Korzhenevych, N. et al: *Update of the Handbook on External Costs of Transport*, Report for the European Commission, London: European Commission, 2014.
- Polinsky, A.M., et al: *The Theory of Public Enforcement of Law*, in: Polinsky, A.M., et al: *Handbook of Law and Economics Volume 1*, North Holland: Elsevier B.V., 2007. [access: 16.08.2018]: <http://www.law.harvard.edu/faculty/shavell/pdf/07-Polinsky-Shavell-Public%20Enforcement%20of%20Law-Hdbk%20LE.pdf>
- Stelmach, J., et al: *Dziesięć wykładów o ekonomii prawa* (Ten lectures on the law economy), Warszawa: Oficyna Wydawnictwo, 2007.
<http://www.amlecon.org>, [access: 04.08.2018]

List of legal acts

- Act of 11 July 2014 on the rules for the implementation of programs in the field of cohesion policy financed in the financial perspective 2014-2020 (“Ustawa z dnia 11 lipca 2014 o zasadach realizacji programów w zakresie polityki spójności finansowanych w perspektywie finansowej 2014–2020”), as amended.
- COUNCIL REGULATION (EC) No 1083/2006 of 11 July 2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1260/1999, as amended.

Guide to Cost-Benefit Analysis of Investment Projects, European Commission, Luxembourg: Publications Office of the European Union, 2015, [access: 16.08.2018]: http://ec.europa.eu/regional_policy/index_en.cfm, as amended.

REGULATION (EU) No 1303/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006, as amended.

Statement of the Minister of Infrastructure and Development of April 21, 2015, Monitor Polski (the Official Journal of the Republic of Poland) of 11 May 2015, item 395, as amended.

The rules for the implementation of the Regional Operational Program of the Pomorskie Voivodeship for the years 2014-2020, constituting Annex No. 2 to Resolution No. 1279/195/16 of the Board of the Pomeranian Voivodeship of 9 December 2016, as amended.

Wytyczne do studiów wykonalności dla projektów w ramach regionalnego programu operacyjnego dla województwa pomorskiego na lata 2007-2013 (Guidelines for feasibility studies for projects under the regional operational program for the Pomeranian Voivodeship for the years 2007-2013), as amended.