SOME THOUGHTS ON THE GENESIS OF THE EFFICIENCY CONCEPT AND THE CAUSES OF ITS CONTEMPORARY STATUS IN LEGAL DISCOURSE

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In the present paper we have hypothesized an explanation for the fact that the evaluation of the social impact of law is modeled predominantly by the economic efficiency concept. Considering the early stages of the concept's development, we try to make it more intelligible to the European lawyers.

Keywords: efficiency; marginal utility theory; Darwinism; preferences; social consequences of law.

When thinking about the conceptualization of the social context of law, including a rational evaluation of its impact, one cannot ignore two major issues, which reflect the current attitudes in the legal community towards the problem.

The first relates to the doubts widespread among orthodox legal scholars concerning the aptitude of the conceptual apparatus of legal discourse to accomplish such a task.⁵⁷ This is the problem of internal constraints within legal discourse, which at least hinder the accomplishment of the task. This highlights the principal obstacles that legal science faces in its attempts to predict the consequences of the implementation of legal structures. These limits prevent legal science from elucidating the methods that are able to assess and to predict what impact a law may have on human behavior. Since we use only the internal technical instruments

⁵⁷ The fact is that mainstream legal theory acknowledges the importance of analyzing the social consequences of the law. In fact, even in Europe contemporary methodologies tend to be more and more pragmatic and goal oriented. For an excellent review of the evolution of German legal theory see J Schröder, *Recht als Wissenschaft* (2nd edn, CH Beck 2012). The problem, however, remains: continental legal discourse cannot generate a synthetic model, combining 'formal' and 'social' dimensions. As a result, current versions of legal method are treated as incoherent and malleable. See J Rückert and R Seinecke (eds), *Methodik des Zivilrechts – von Savigny bis Teubner* (2nd edn, Nomos 2012).

of a legal system (eg a legal text and its interpretation), we fail to explain how the legal system interacts with its own social environment.⁵⁸

The second major issue questions the status of the efficiency concept of the neoclassical economic theory as the basis of the evaluation of the social impact of the law. Curiously enough, the problem remains relatively untouched both by the protagonists of the application of economic methods in legal science and also by its critics. The question is why the economically oriented model succeeded. The opposite side of the question is why alternative models (presumably generated by social sciences) of a comparative degree of sophistication are absent.

The problem is very complex and multifaceted. My aim here is to make some suggestions concerning the genesis of the efficiency concept which can to a certain extent elucidate the its current significance. Without any doubt, there are numerous other factors which contributed to the status of the efficiency concept.

An additional purpose of the research is to provide European legal scholarship with a better understanding of the efficiency concept itself, as well as the intricacies of the interdisciplinary discourse of regulative impact evaluation.

The next steps are to analyze the genesis, development and current status of one of the interdisciplinary methodologies that claims to give a positive answer to the question of...

It is worth making some preliminary observations. First, as this article is intended to explain, the current status of the described theory of the efficiency of legal structures is shaped by the characteristics of the genesis and development of the relevant interdisciplinary discourse. This is a rationale why it is focused on the origins of the theory in question. Secondly, the described interdisciplinary discourse emerged and had its greatest development in the USA. European science adopted a more advanced form of this discourse later.⁵⁹ The analysis of the reasons for the rise of this discourse in the USA and its subsequent transplantation to Europe is beyond the scope of this article.⁶⁰ This article covers certain aspects of the genesis of the law and economics as a interdisciplinary discourse within the framework of the American legal tradition. The key elements of the law and economics as a interdisciplinary discourse were elaborated during its rise in the USA. Later the modified versions of these elements were adopted by European legal science. However even now in Europe

⁵⁸ N Luhmann, Ausdifferenzierung des Rechts: Beiträge zur Rechtssoziologie und Rechtstheorie (Suhrkamp 1999).

⁵⁹ N Garoupta and TS Ulen, 'The Market of Legal Innovation: Law and Economics in Europe and the US' (2007–2008) 59 Ala L Rev 1555.

⁶⁰ The application of economic methodology to the analysis of legal structures has been justified and has had its greatest influence in the USA, where this interdisciplinary discourse has become 'the most successful legal innovation of the recent decades' (A Kronman, 'The Second Driker Forum for Excellence in the Law' (1995) 42 Wayne L Rev 115). During the last two decades in continental Europe this method has become more influential due to its intense reception by European legal science. Therefore, it is seems fair to say that in modern legal discourse a legal and economic framework dominates as the basic model of the assessment of the efficiency of legal structures.

there is no interdisciplinary discourse that can play the role of a coherent and solid correlative to the law and economics. Therefore the American intellectual tradition should be the starting point for this research due to the essential characteristics of this discourse and not due to any personal or linguistic idiosyncrasies.

Instrumentalism is deemed to be one of the basic conditions to meaningful forecasting and assessment of the social consequences of a legal system.⁶¹ However instrumentalism itself is not enough for a valid and successful engineering of the legal structures and for an assessment of their efficiency even if instrumentalism is assumed to be the dominant theoretical framework. The key challenge is identifying the criteria for assessing the legal system's effect on its social environment. The legal realists have faced this 'criteria problem', although they have operated a rather advanced instrumental concept of law.⁶²

The legal realists have searched for a criteria of efficiency of legal structures by using remarkably different methods: from a detailed analysis of commercial practice⁶³ (in order to design the legal structures aiming to regulate this practice) to the use of psychological techniques⁶⁴ (in order to predict the behavior of a lawmaker or a law enforcement officer).

The diversity of these methods makes the reconstruction of the common theoretical underpinnings of these methods a challenging task. However this paper suggests that some common theoretical concepts can be identified.

All post-classical concepts of law have rejected the classic perception of private law (and law generally) as mere infrastructure for the regulation of market operations through a set of formal and neutral rules. The legal realists and their less successful European supporters have practiced a more 'active life position'. They believe that the legal system is able to modify existing social practices; to eliminate negative social consequences and to engineer desirable social consequences.⁶⁵ However the legal realist movement and the European sociology of law movement have failed to design a comprehensive and coherent sociological theory that is able to reconstruct how a legal system interacts with its own social environment.

Hovenkamp has claimed that the reason for such paradoxical failure is the epistemological limits of legal realism theories. These limits are driven by the Darwinism and the theory of marginal utility that have formed the theoretical underpinnings of legal realism.⁶⁶

⁶¹ R Summers, Instrumentalism and American Legal Theory (Cornell University Press 1982).

⁶² JH Schlegel, American Legal Realism and Empirical Social Science (University of North Carolina Press 1995).

⁶³ W Twining, Karl Llewellyn and the Realist Movement (2nd edn, CUP 2012).

⁶⁴ J Frank, Law and Modern Mind (Transaction Publishers 2009).

⁶⁵ B Fried, *The Progressive Assault on Laissez Faire* (HUP 1998).

⁶⁶ See H Hovenkamp, 'Positivism in Law & Economics' (1990) 78 Cal L Rev (1990) 815; -- 'Knowledge about Welfare: Legal Realism and the Separation of Law & Economics' (2000) 84 Minnesota L Rev 805; -- 'First Great Law & Economics Movement' (1990) 42 Stanford L Rev 993.

Darwinism is based on the theory of evolution by means of natural selection which assumes that more offspring are produced than can possibly survive due to the scarcity of available resources. Natural selection is driven by competition between organisms for available resources. Because of the competition, those organisms that are more adaptive to an environment have more chances to survive than the less adaptive ones and, therefore, they have more chances to pass their advantageous traits to the next generation. Darwinism as an intellectual concept has been extremely influential and its influence have gone beyond the biological sciences. Being a seminal and revolutionary theoretical concept Darwinism has influenced various spheres of intellectual life and has been interpreted and applied in many ways and in many variations.

One of these variations is so-called 'reformed Darwinism'. The reformed Darwinists argue that human beings are the only organisms who are aware of the effect of natural selection on themselves. Therefore, a human being can use its knowledge of natural selection in order to stimulate self-development and the development of its biological type. They claim that, whereas regular evolution requires millions of years of development, the adaptability of human beings to their environment might be increased within several decades, once the rules of natural selection are applied by a capable 'engineer'. This claim has been used to justify the various intellectual concepts, e.g. eugenics and social reformism.

Social reformism suggests that the increase in adaptability is achieved by active interference in the social relationships in order to stimulate members of society to acquire the social skills that help them to better fit in to their social environment. For example, a good education helps social adaptation. Therefore, education is not considered a purely personal matter for a member of society. Education should be a public policy matter, as the more people receive a proper education, the more competitive they are. It leads to the conclusion that there are certain basic social needs that have to be satisfied irrespective of what the market requires.

One could advance an argument that the basic level of adaptability of human beings to their biological and social environment is universal to all people, as they all have one thing in common – their ancestors have succeeded in surviving and passing on their advantageous traits. This argument also suggests that the basic traits, needs and interests of human beings are common, as these traits, needs and interests are generated by the common environment. The similarity of basic human traits and fundamental needs makes the engineering of human behavior achievable by various social mechanisms (including, law) at least theoretically. Moreover, once the relevant data (biological, psychological etc) are available, it becomes theoretically possible to forecast, design and model the consequences of such social engineering on the basis of the general assumption of 'the similarity of human nature' that is claimed by the theory of evolution.⁶⁷

⁶⁷ H Hovenkamp, 'Evolutionary Models in Jurisprudence' (1985) 64 Texas L Rev 645.

'Reformed Darwinism' has formed the philosophical underpinnings of a 'social control' theory which assumes the active role of the law in governing societies. Darwinism has helped scholars to recognise the theoretical possibility of changing mainstream social practices for the benefit of 'social welfare'. However 'reformed Darwinism' is not a verifiable theory that could be easily applied to legal structures. It has not suggested any criteria that allow a choice between different and equally available variations of a legal structure. Nor has it suggested any criteria for the assessment of the consequences of varying legal structures. Although 'reformed Darwinism' has justified the theoretical possibility of 'replacing' market structures with legal structures, it has not generated any methodology to answer the questions of how to design the legal structures and how to asses the consequences of their implementation.

Marginal utility theory is a second intellectual concept that together with 'reformed Darwinism' has opened a way to the construction of a coherent theory that claims to asses and to forecast the social consequences of a legal system.⁶⁹ The concept of marginal utility led to the replacement of classical economic theory by a neoclassical one. This concept assumes that a person has a limited amount of resources available for her or his consumption and has to find an optimal way to satisfy her or his needs with the available resources. The satisfaction of a certain need requires a certain amount of available resources. The resources are used for the satisfaction of one need until that person considers that the use of these resources for the satisfaction of an alternative need has more utility. A law of diminishing marginal utility is a focal element of this theory. This law suggests that the utility arising from the consumption of a second and any subsequent unit will be less than a utility arising from the consumption of any earlier unit. Based on this law it may be possible to propose a rational and optimal structure of satisfying someone's needs once we know the needs and resources of that person. The validity of the law of diminishing marginal utility, as it is applied in mainstream microeconomic theory, is based on the following two principal assumptions: (1) only the marginal utility arising from the different cost of one good or service is comparable (homogenous assumption), and (2) only the needs of one person are taken into account.⁶⁹

The combination of the theory of evolution and the theory of marginal utility generates interesting results. The similarity of human needs is dictated by the common environment. The similarity allows the theoretical possibility to model the effect that a law has on an 'average' person. This theoretical possibility is subject to the following conditions. First, as suggested by the concept of marginal utility,

⁶⁸ RS Howey, *The Rise of the Marginal Utility School*, 1870–1889 (University of Kansas Press 1960); RD Collison Black, AW Coats, & CDW Goodwin (eds), *The Marginal Revolution: Interpretation and Evaluation* (Duke University Press 1973).

⁶⁹ H Hovenkamp, 'Marginal Utility and Coase Theorem' (1990) 76 Cornell L Rev 783.

such an 'average' person should be a 'rational utility-maximiser' i.e. she or he should be focused on optimisation of her or his needs and available resources available to her or him. Secondly, the basic needs of such a person should be determined by evolution. The first condition allows us to predict the general pattern of behaviour of a person who is trying to satisfy his basic needs under the conditions of scarcity of resources. The second condition allows us to determine what needs are basic.

The combination of the theory of evolution with the theory of marginal utility helps to justify three principal theoretical claims. First, the response of 'rational utilitymaximisers' to a legal structure is predictable, as the legal structures are similar to other exogenous restrictions of human behaviour (eg the scarcity of resources) and, therefore, the marginal utility theory can be applied to them. From the perspective of economics, any prohibition or restriction imposed by a law can be interpreted as the price of a certain behaviour of a person (being calculated as the costs of violation of that legal restriction multiplied by a probability of these costs being borne by that person). Secondly, the first claim is universal and does not require any profound empirical justifications, as the basic needs of human beings are universal and stable. Thirdly, there is a rational and intersubjective framework that can be used for justifying a procedural system of resolving disputes between the members of a society.

The third claim is based on the conjunction of the law of diminishing marginal utility and the proposition of the theory of evolution that the basic needs of all *homo sapiens* are similar. If from one person's perspective the value of a second dollar is always less than the value of a first dollar, then because of the theory of evolution this rule should be valid for all persons. Accordingly, one can apply a rational procedure of 'interests-weighting' to the interests of various persons and various social groups.

Logically, the above interpretation of the law of diminishing marginal utility suggests that incomes are distributed equally. However within the described theoretical framework the claim of equal distribution has not been supported, because it implies an active redistribution policy that will diminish the total wealth inevitably.

The theoretical conjunction of the law of diminishing marginal utility and the theory of evolution seems able to justify the various legal structures that are different from the classical concepts of law. For example, this conjunction argues for the justification of private law structures that are perceived generally as violations of autonomous values imbedded into private law (minimum wages, the protection of a 'weaker' party under the certain contracts, mandatory standards of rental housing etc).²⁰ In the public law sphere this theory has been largely applied to tax law, in particular, for the justification of progressive income tax. However the use of this

⁷⁰ Although it should be noted that to a certain extent this justification is arguable not only because it assumes an intrapersonal comparison of utility, but because it is based on the very debatable assumption that all employers, landlords etc are 'rich' and all employees, tenants etc are 'poor' eo ipso.

theory is not limited to the above examples. Generally this theory seems to be the first theoretical synthetic concept that allows the engineering and assessment of the social consequences of legal structures.⁷¹

The above theoretical conjunction has played a focal role in the formation of the theory of the assessment of the social consequences of the law and the related theory of the engineering of legal structures (i.e. engineering the legal structures on the basis of a certain pattern of interaction between the law and its social environment). As a result from their early days these theories relied on neoclassical macroeconomics.

However from the beginning this theoretical conjunction was unbalanced, as it consisted of two contradictory elements – the theory of evolution and the theory of marginal utility. The contradictory nature of these elements was revealed in the course of the development of the theory of marginal utility. As described above, the validity of the law of diminishing marginal utility is based on the assumption that only the needs of one person are subject to comparison. Accordingly, a comparison of the needs of two or more persons *vis-à-vis* any common scale violates the law of diminishing marginal utility. Robbins has made this point.⁷² To put Robbins's idea simply, there is no scientific foundation to the argument that the utility arising from the consumption of a next dollar by one person is less than utility arising from the consumption of a next dollar by another person because the first person is richer. Scholars are unable to compare independently and objectively the utility arising from each person's consumption *vis-à-vis* any scale common to these persons.

Once the validity of Robbins's claim was recognised by the proponents of the theory of marginal utility, this theory ceased to be an appropriate instrument for the assessment of the social consequences of legal rules. As discussed above, such assessment is based on the idea of similar utility preferences for different persons, but the existence of any common scale of utility preferences was rejected by Robbins. The theory of evolution suggests that all the basic needs of homo sapiens are similar. However this claim is too general and is not testable empirically. As a result, the theory of evolution cannot be treated as a valid justification of the view that all people have the similar utility preferences and assign a similar value to money, goods and services. This contradiction has undermined the conjunction of the theory of marginal utility with the theory of evolution. Going further these theoretical concepts has been developing independently.

One important reservation is required. Each of the described non-classical legal structures might be justified differently in different legal systems because of the social, legal and historical background of each legal system. Further, the justification of these structures might not be based on the above economic arguments, as the legal theory and macroeconomics remain autonomous and isolated scientific domains in Europe. However the economic concepts described above offer a rational explanation of these structures and this is one of the advantages of these concepts compared with the classic legal theory.

⁷² L Robbins, An Essay on the Nature and Significance of Economic Science (Macmillan 1932).

Now the theory of marginal utility is playing a key role in the mainstream approach to the assessment of the efficiency of legal systems. There is no serious alternative to this theory among the various methods that are designed to assess the social consequences of legal rules.⁷³ This theory has deeply influenced the whole discourse and has become a focal element of almost all theoretical discussions on this topic.

One of the most influential claims about this theoretical framework is the idea that the interpersonal comparisons of utility are unscientific, because there is no objective instrument to compare what value two different persons assign to certain goods and to assess whose preferences are stronger with respect to those goods. Inevitably such a comparison implies an analysis of the internal psychological preferences of each person, but the domain of psychological preferences is a sphere where an external observer can hardly make an objective judgement. Accordingly, economic science can not aim to analyse the internal preferences. It is capable of analysing the externalised preferences (ie transactions) only, as the analysis of transactions is the sole objective instrument of revealing the preferences of homo economicus.

At first glance this 'externalised preferences only' argument seems to be a purely technical consequence of methodological standards that require empirical data. However this technical element has played a significant role in the whole theoretical discourse on the interaction between law and society.

Since the scientific analysis of factors which determine the genesis of individual human preferences is impossible, we have to assume the autonomous nature and the sovereignty of the preferences of homo economicus. This assumption violates the principal claim of the theory of evolution – the claim that fundamental human preferences are universal and driven by the common environment and natural selection (this claim is being used by some schools of sociology and psychology). At first glance, the idea of autonomy and sovereignty of human preferences appears to be driven by the ideology of liberalism and the *laissez faire* concept. However the concept of autonomous preferences has a more fundamental origin. It is an inevitable consequence of science being unable to analyze non-externalised psychological preferences.

Because of the theoretical justification of the autonomy of preferences and the waiver of interpersonal comparisons of utility, economic science has to limit the scope of its research to the analysis of market transactions as the principal instruments of the externalisation of individual preferences. Based on this premise one could advance the argument that a redistribution of economic resources via non-market instruments (taxes and other legal structures) has to be excluded from the scope of economic research and, therefore, the redistribution issues have to be dealt with and resolved at a political level.

⁷³ R Cooter and P Rappoport, 'Were the Ordinalists Wrong about Welfare Economics?' (1984) 22 J Econ Lit 507.

It is true that in modern developed countries almost all the redistribution processes operate via a legal system which plays the role of a 'redistribution system' that is an alternative to the market.⁷⁴ However once we acknowledge that the alternative redistribution system belongs to the political domain, we have to recognize that the redistribution processes associated with that alternative system are generally random, as they are driven by a random cooperation between the political parties, the acts of lobby groups and the development of the political institutions in a society in question.

The acknowledgment of the political nature of the redistributive processes has played a significant role in the development of the concepts of the efficiency of legal structures. Those efficiency theories, which were formed under the influence of the theory of evolution, were focused on a rational reconstruction of redistributive processes. Going further the efficiency theories become more skeptical on whether the use of law for the redistribution processes is efficient and whether the rational evaluation of the efficiency of these redistribution processes is achievable.

Three principal methodological way outs have been elaborated in response to this skepticism. The first is to design the legal structures and, accordingly, the redistribution processes with the goal of mimicking the results of market distribution (the Coase theorem, Chicago school⁷⁵). The second solution is to analyze the redistribution behavior of the actors of political and legal systems as if it were a behavior focused on the rational maximization of utility and to study the results of such analysis (Arrow's Theorem⁷⁶, 'public choice'⁷⁷, Virginia school⁷⁸). The theories representing the third methodological way out can be generalised as theories that are based on non-economic disciplines and that claim the objective nature of the intensity of human preferences and assumes that a scientific intrapersonal comparison of utility is achievable ('critical legal studies' school, modern positivist theories)⁷⁹.

The first and the second way outs are based on the methodology of neoclassical economics, while the third has quite different theoretical underpinnings. The sound theoretical concept of the evaluation of legal efficiency has been developed only

⁷⁴ It is also true that in modern developed countries the market operates via law, but generally the law does not determine the logic of the market exchanges. Its role is limited to technical support of the market. By contrast, in the alternative redistribution procedures the law plays a more significant role.

⁷⁵ R Posner, *Economic Analysis of Law* (6th edn, Wolters Kluwer 2003).

⁷⁶ H Hovenkamp, 'Arrow's Theorem: Ordinalism and Republican Government' (1989–90) 75 Iowa L Rev 949.

⁷⁷ D Müller, Public Choice III (CUP 2003).

⁷⁸ D Farber and P Frickey, *Law and Public Choice: A Critical Introduction* (University of Chicago Press 1991).

⁷⁹ H Hovenkamp, 'Legislation, Well-Being, and Public Choice' (1990) 57 U Chi L Rev 63; M Kelman, A Guide to Critical Legal Studies (HUP 1987). Strictly speaking, Crits are extremely critical of the efficiency theory, treating it as pure ideology. It seems as if they were skeptical of the possibility of the neutral legal discourse. That means that the legal discourse is to be transformed into political. See D Kennedy and F Michelman, 'Are Property and Contract Efficient?' (1980) 8 Hofstra L Rev 711.

by the proponents of neoclassical economics, whereas their opponents have failed to provide an alternative and sound concept and remain focused on criticism of the economic concept.

The effect of the neoclassical microeconomic theory depends on the simplicity of its claim to model the effect of legal rules on people. The focal assumption of this theory is that all actors are the 'rational utility-maximisers' (ie they aim to satisfy the maximum amount of their needs) in the most optimal manner by finding the best balance between their goals and their scarce resources. Since we deem legal rules to be a part of such restrictions, it becomes theoretically feasible to model the effect of legal rules on actors. In market transactions price is the most common limitation. The negative consequences of the violation of the law might be interpreted as implied prices. A rational utility-maximiser will violate a legal rule or alternatively refrain from its violation if he compares a utility arising from the violation with all potential negative consequences of such violation and takes into account the probability of these consequences being applied to him. This is the classic scheme of margin theory where a market player (being a rational utility-maximiser) makes a decision to buy an optimal amount of a product on the basis of comparison made between the utility of this product, its price and any applicable budgetary restrictions.

This fairly simple theoretical scheme offers some appealing insights into the mechanism of the impact of the law on human behavior. Under the scheme a legal rule is interpreted as an incentive for human behavior. This is a principal advantage of this theory compared to the competitive and popular (among the lawyers and left economists) view that assumes an automatic implementation of legal rules. Since we accept the validity of the economic approach, we have to treat a law as one of the incentives (or restrictions) that has some influence on a rational utility-maximiser together with other incentives (and restrictions). The efficacy and efficiency of this incentive depends on numerous factors and these factors can be rationally reconstructed within the described theoretical framework. Accordingly, the goal of a lawmaker is to find an optimal 'price' (being the penalty for breaking the law multiplied by the probability of its enforcement) which can induce a person to opt for compliant behavior. Further, the treatment of a law as an incentive makes the described theoretical framework focused on regulation of future relationships rather than the resolution of conflicts ex post.

The central element of the described theory is the assumption that all actors are rational utility-maximisers. This element makes the whole theoretical framework intelligible, as the waiver of this element eliminates the ability to predict the potential reactions of actors to external incentives. This assumption has been criticized intensively because of the frequent irrational reactions to incentives. The frequency of this phenomena makes excessive to describe the arguments of critics.⁸⁰ Given this

⁸⁰ For example, G Kirchgässner, *Homo oeconomicus* (2nd edn, Mohr Siebeck 2000).

criticism, it is more valuable to consider the validity of arguments supporting the rationality and utility maximization assumption. Firstly, the argument of evolution - a number of rational utility-maximisers among the human population should increase evolutionally, because rationality, efficiency and ability to opt for an optimal behavior are principal traits that make people competitive and allow them 'survive' in the market.⁸¹ Also, the Chicago school of law and economics has been applying this methodology to non-market behavior and so far it has offered interesting insights to some forms of non-market behavior (family, social deviance, theory of 'human capital').⁸² Accordingly, it is fair to say that the theory of rational choice and the maximization of utility has some explanatory power and the limits of this power are yet to be discovered. The second argument supporting the rationality and utility maximization assumption is that generally law and economics have stronger predictive power than the alternative theories, although some of the assumptions of law and economics might contradict real life to a certain extent.⁸³ Finally, so far there is no strong alternative to the legal and economic framework despite it being the object of severe criticism.

Currently at least two alternative theoretical approaches to the evaluation of the law's consequences have been suggested. The first is to develop a non-economic interdisciplinary paradigm, like the evolutionism of the XIX – early XX century. Within this non-economic framework the key goal is to rehabilitate the concept of intrapersonal comparisons of utilities, because without such a concept the meaningful non-economic paradigm is hardly feasible.⁸⁴ The second approach is to analyze human behavior which does not fully comply with the rationality assumption – a behavior based on a bounded rationality caused either by a lack of mental capacity or the lack of necessary information.⁸⁵ However so far none of approaches has offered a sound model of the evaluation of the consequences of legal structures.

⁸⁴ For example, C Sunstein, Free Markets & Social Justice (OUP 1997); H Hovenkamp, 'The Limits Preference Based Legal Policy' (1994) 89 Nw Univ L Rev 4.

⁸¹ For example, PH Rubin, 'Why is the Common Law Efficient?' (1977) 6 J Legal Stud 51.

⁸² For example, GS Becker, The Economic Approach to Human Behavior (University of Chicago Press 1978); G Becker and R Posner, Uncommon Sense: Economic Insights, from Marriage to Terrorism (University of Chicago Press 2007).

⁸³ M Friedman, 'The Methodology of the Positive Economics' in M Friedman (ed) *Essays in Positive Economics* (University of Chicago Press 1953).

⁸⁵ For example, C Sunstein (ed), Behavioral Law & Economics (CUP 2000); F Parisi & V Smith (eds), The Law & Economics of Irrational Behavior (SUP 2005); V Smith, Rationality in Economics: Constructivist and Ecological Forms (CUP 2008).

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