

Economics as a fundamental factor in the formation of law

BACHELOR THESIS

AUTHOR:

Miromon Mirkhonov LL.B 2020/2021 year student student number B020122

SUPERVISOR:

Adam Czarnota, PhD

Rector. Professor

DECLARATION OF HONOUR:

I declare that this thesis is my own work, and that all references to, or quotations from, the work of others are fully and correctly cited.

(Signed)

RIGA, 2022

ABSTRACT

In the modern world, taking into account modern trends and processes that deeply affect social behavior, law, as an institution regulating social behavior, is also changing, but nevertheless, the institute of law is experiencing difficulties with responding to modern trends and processes, to a greater extent, due to the inability of researchers and specialists in the field of law to determine the boundaries to solve the problems of law, as well as to determine the consequences and predict the impact of the implementation of a particular law on the social behavior of individuals. Thus, this study, describing and constructing a model of social response to legal changes by using the principles of microeconomic theory, revealed that the model provided by the interdisciplinary stream "Law and Economics" is relevant for determining and responding to current trends, since the elements of microeconomic theory are able to accurately predict the implementing a particular law on social behavior, thereby arguing that when considering and implementing a particular law, it is necessary to be based on economic principles, since they are able to accurately simulate the influence of the institution of law on all aspects of the behavior of individuals in society.

Keywords: utility, noncalculable risk, transaction cost, rationality, digression, SOEs

SUMMARY

This study aims to determine the area of interaction between the legal aspect and the economic component, as well as social behavior, determining the primacy of the economic component in the implementation of legal norms. Thus, this study is divided into three chapters:

The first part aims to get acquainted with the bases and principles that guide an individual when making a decision within the "digressions" of the interdisciplinary stream "Law and Economics". Thus, in this part of the study, an individual is considered as a rational maximizer of his interest, his utility, which, when making a decision, considers the relationship between marginal benefit and marginal expenses of a particular decision. Also in this part of the study, principles are introduced that bring assumptions closer to real life experience, such as the concepts of risk, limited resources, efficiency. Thus, in this part of the study, the law is considered as a social tool necessary for the effective allocation of resources. It also introduces the concept of transaction costs arising from the allocation of resources, as well as the concept of incentive as a lever of the law to social behavior.

The second part of the study combines all the principles into a microeconomic theory, explaining the reasons for the actions of individuals and further links the principles of microeconomic theory with the legal aspect into a single model, from which it proceeds that law is a social tool necessary for the effective allocation of resources by stimulating individuals. The incentive is available by law because by means of the law it is possible to lower or increase transaction costs, stimulating individuals. And economic principles are the most important tool for assessing the impact of law on social behavior. But in addition, economic principles are able to predict the consequences on the social behavior of certain laws by building a model.

The final part of the study provides an empirical study of the evolution of property rights in China, since property rights in China have undergone a significant change. Comparing the consequences of the recognition of property rights indicated in R. Posner's theoretical model and the consequences of partial recognition of property rights in China after 1978, the study shows the accuracy of the predictive ability of the economic model in assessing the impact of law on social behavior. Thereby confirming the primacy of the economic component in the implementation of legal norms.

Table of contents

Introduction				5
1.	Re	seare	ch background	8
1	.1	Го	Foundation and main features	
1	.2	Те	rms and fundamentals of economic analyses of law	11
	1.2	2.1	Rationality and the desire to maximize utility	11
	1.2	2.2	Rationality and irrationality	12
	1.2	2.3	Risk and incentive	16
1	.3	Ca	se study. Maximizing utility and off-market relationships	17
2.	Ec	onon	nic models of law	20
2	2.1	Mi	croeconomic analysis	20
2	2.2	Mi	croeconomic analysis and legal component	22
2	2.3	Th	e economic model of law and the Posner category	24
2	2.4	Eco	onomic analysis of property rights	26
	2.4	.1	The legal aspect of property rights	26
	2.4	.2	The economic aspect of property rights	28
3.	Em	npiri	cal approach to the economic analysis of property legislation in China	30
3	3.1	Co	llectivization. Property rights in the first historical period	31
3	3.2	Th	e evolution of property rights. Post-Mao reforms	35
	Co	nclu	sion	40
Bib	oliogi	raph	y	43

INTRODUCTION

It is a generally recognized fact that law, as a structure regulating the relations of individuals within society, is constantly changing in response to social changes within society. There is no doubt that since the birth of the first civilizations, and the appearance of the first norms and rules governing relations in society, the institute of law has gone through a long and exhausting path, going through all sorts of metamorphoses before becoming the full-fledged regulator of modern public relations.

However, society itself is changing so rapidly in the modern world thus it is necessary to recognize that the XXI century has marked the emergence of new forces and processes that, with regular frequency, produce profound changes in all structures of society, both economic and legal components. Globalization, as one of the leading processes in the XXI century, has made a significant contribution to these changes, both positive and negative, since borders in the modern world have ceased to have the meaning they had in the past, and the process of penetration through these borders of the country of cultural, religious, political and financial flows from a variety of parts of the world, exposed various gaps in the legal structure of societies and countries as separate legal systems.

The institute of law is under tremendous pressure from the spirit of constant change and it becomes quite obvious that specialists dealing with legal issues in the XXI century are faced with issues of a different scale than the specialists of the past centuries, such as, for example, the virtualization of public relations, covered with fog in the legal field, the transnationalization and unification of legal institutions, which leaves a lot of questions and contradictions regarding the relevance of existing traditional legal foundations and principles.

The emergence of such extraordinary and ambiguous challenges to the legal structure in the modern world requires specialists dealing with legal issues, including judges, advocates, lawyers, and other legal scholars to have relevant competence, and not only a different approach to the study of legal foundations and law in general, but also a clear understanding and awareness of the boundaries of law, as well as an understanding of relationships rights with the principles and laws of economics, an aspect of economic-type social relations.

Nevertheless, for the most part, the traditional approach to the study of law does not give a complete picture of the interaction between law and the economic component, and this lack of an interdisciplinary approach greatly complicates the timely response of the institute of law to modern challenges of society.

A modern jurist, considering, adopting and implementing a particular law, suppose the legal introduction of a carbon tax (as a means of combating the modern problem of global climate change) should ask not only the question "How will this affect climate pollution?", but also other questions, such as "Will the introduction of a carbon tax stimulate the growth of interest societies towards renewable energy sources?". The modern complication of public relations clearly makes it clear that a modern lawyer needs to know the principles of economic theory too, the law of supply and demand, the equilibrium of prices in order to offer a comprehensive approach to regulating public behavior.

Due to the problem of the impossibility of the prevailing traditional approach to law and economics as separate disciplines, to offer future law specialists a comprehensive picture of the interaction of these two disciplines on public behavior, this study aims primarily to describe the concept of law from a different perspective, as a social tool that stimulates public behavior, and economics – as a tool that gives an assessment and model of the influence of law on public behavior, thereby contributing to the formation of law. This study, which is inherently located at the junction of various fields, such as economics, law and sociology, is designed to define the boundaries of law in the modern world, to identify and discuss the impact of the economic component as a basis for the development of the institute of law, putting forward as the main question, in search of an answer to which the entire study will be based:

"Should economics be the primary basis on which law should be based and developed?"

This study is relevant because the unconditional factor of globalization, which is a reality and a defining feature of the XXI century, covers and connects almost all corners of the globe, the most diverse cultures and unique and distinctive economies of the world, gradually, thanks to the process of interweaving and penetration of financial flows of various countries, contributes to the convergence of legal systems of various states, trying to bring them together to common norms that would be universally recognized.

The main methodology used in the study is a doctrinal qualitative method of legal research based on the consideration of the principles of the interdisciplinary movement "Law and Economics", their foundations, including a description of the use of elements of microeconomic theory in modeling, with a special focus on the model of one of the leading jurists Richard Posner. In addition, in this study, in order to test the theoretical answer to the research question, an empirical study will be conducted on the basis of the evolution of property rights, specifically private property rights, in China during collectivization and the subsequent period of Post-Mao reforms and the consequences of this evolution on the economic component. Thus, the first chapter of this study will be devoted to the terms and principles within the framework of "Law

and Economics", necessary in the subsequent economic modeling of legal impact on public behavior. The second chapter directly combines and explains the interaction of both legal and economic components into one full-fledged model based on Richard Posner's model of economic analysis of property law. The third chapter is devoted to an empirical study of the model of economic analysis of property law in the historical framework of China of the previous century, where property rights underwent significant metamorphoses.

A note to this study is that the author, due to the limited use of academic English, in order to reduce the impact of this restriction on the correct transmission of the principles described in the following chapters, used the services of a translator from Russian into English, through Yandex translator to translate his own text.

1. RESEARCH BACKGROUND

In order to comprehensively understand the primary relationship between law, economics and their influence on social behavior within the stream of the "Law and Economics", and to establish the priority of the economic component over the legal one, it is necessary to understand important terms and fundamentals of economic analysis of law and their influence within both market and non-market relations.

For this purpose, this chapter is devoted to familiarization with the theory of the stream of "Law and Economics", including: **1.1** historical implications and features of this stream; **1.2** terms and concepts necessary for a systematic explanation of the relationship between law and economics, in the context of the "Law and Economics"; **1.3** a case study where the relationship of economic analysis of law in relation to non-market relations will be demonstrated.

1.1 Foundation and main features

In the minds of most people, as well as some legal researchers, a fairly traditional idea has been fixed that the concept of economy is limited only to the analysis and study of the structure and schemes of social relations occurring within the framework of various processes, such as production, distribution, exchange and consumption¹.

In general, this is true, but nevertheless economics is a fairly extensive field that goes far beyond traditional concepts, whose principles and terms can also be used as an element necessary for the analysis and research of law, as well as related issues raised by the theory of law. Economics explores, in addition to issues strictly related to economic activity, such as, for example, the boundary of price opportunities², also issues related to the nature of relations between the implementation of legal norms and laws, and their impact on the economic and social component. The study of this nature of the relationship between law and economics is the basis for this study, since it is devoted to the study of an interdisciplinary field standing at the junction between law, economics and social behaviour.

Returning to the study of the relationship growing between law and economics, the most important point to mention is such an offshoot of interdisciplinary research as the "Law and Economics" legal movement, which originated at the Chicago School of Economics in the

¹ Paul James, Urban Sustainability in theory and practice (New York: Routledge, 2015), pp. 52

² Christensen, Laurits R., Dale W. Jorgenson, and Lawrence J. Lau. *Transcendental Logarithmic Production Frontiers*. The Review of Economics and Statistics 55, no. 1 (1973): 28–45. <u>https://doi.org/10.2307/1927992</u>. Accessed March 14, 2023

USA³. "Law and Economics", as a completely new theory that seeks to explain various issues at the intersection of law, economics and sociology, appeared and formed as a separate economic-legal branch relatively recently, in the middle of the XX century, namely, the beginning of the 1960s⁴, which is considered to be the date of its textbook appearance. Innovation is given to this stream of legal thought by the fact that despite the fact that its origins appear already in the XVIII century⁵ (in the works of Adam Smith, the connections between laws and their economic consequences are manifested), within the framework of this discipline, an attempt was made for the first time to comprehensively combine, link and explain the correlation between economic theory and its terms, such as such as price, welfare, legal norms and concepts such as ownership or possession, as well as to show the influence of the abovementioned terms on the behavior of society.

In this current, the law is considered from a social point of view, and is interpreted as a social element that is mandatory in society, due to the fact that there is a concept of "sanctions" for non-compliance with these laws and thereby "entry" into the legal vertical; as for example, a fine or imprisonment is imposed for petty theft, as sanctions for non-compliance with legal norms, the stream "Law and Economics" has provided a model that is capable of mathematical calculations, using elements of microeconomic theory, to assess the impact of a particular law on legal subjects and to some extent, predict the behavior of legal subjects. "Law and Economics" studies legal norms and how they affect the actions of individuals and firms, and measures this influence with an efficiency scale, based on which it evaluates and identifies whether this influence of legal norms is socially desirable or not⁶. To measure and evaluate the impact of a certain legal norm, "Law and Economics", referring to the economic aspect, has mathematically accurate theories (price theory and game theory) and empirically sound methods (statistics and econometrics), thanks to which the impact of the legal norm on social behavior is analyzed.⁷

Traditionally, the founders of the stream of "Law and Economics" are considered to be the author of "The Nature of the Firm", written in 1937 and "The Problem of Social Cost", written in 1960, and it is from the release date of which the legal thought of economic analysis of law

³ Robert Cooter, Thomas Ulen, Law and Economics, 6th ed. (Boston: Pearson, 2019)

⁴ The modern field begun with the publication of two landmark articles—Ronald H. Coase

The Problem of Social Cost, 3 J. L. & ECON. 1 (1960) and Guido Calabresi, "Some Thoughts on Risk

Distribution and the Law of Torts", 70 YALE L.J. 499 (1961).

⁵ Neil MacCormick, *Law and Economics: Adam Smith's Analysis', Legal Right and Social Democracy: Essays in Legal and Political Philosophy* (Oxford, 1984; online edn, Oxford Academic, 22 Mar. 2012), https://doi.org/10.1093/acprof:oso/9780198255024.003.0006, accessed April 17, 2023. pp.103-124

⁶ A. Mitchell Polinsky and Steven Shavell, *Economic Analysis of Law* Stanford Law School John M. Olin Program in Law and Economics Working Paper No. 316 (November 2005), accessed April 20, 2023, <u>http://ssrn.com/abstract=859406</u>.

⁷ Robert Cooter and Thomas Ulen, Law and Economics, 6th ed. (Boston: Pearson, 2019) pp.4

originates, the english economist Ronald Coase and the American judge Guido Calabresi, the author of "The Cost of accidents: legal and economic analysis" of 1961, which laid the foundations and fundamental principles of economic analysis of law, using the tools of microeconomic theory and applying them to the analysis of legal norms. Also among the founders is Professor Gary Becker⁸, who later received the Nobel Prize in Economics in 1992 with the wording "for extending the scope of microeconomic analysis to a number of aspects of human behavior and interaction, including non-market behavior."⁹

The innovation of the stream "Law and Economics" is that within the framework of this stream, the tool of microeconomic theory was applied to legal norms. Microeconomic theory belongs to the category that explores and reduces to regularities the causes of actions and the actions themselves produced by a single individual or a small group of people with finite resources and their shortage¹⁰, and not by the whole society as a whole. Microeconomic theory reduces actions into a pattern and explains the reasons for this or that action. It would be demonstrative to give an example of studying microeconomic theory in the form of a reason why, as an ordinary student, I preferred, instead of going to a restaurant with friends, to save up savings and buy a suit designed to perform at the defense of a bachelor's degree. More details about the structure of microeconomic analysis will be discussed in the following subsections.

Returning to the historical review, the methods of economic analysis of law preached by the theorists of this stream began to be applied rapidly to all aspects of law, including contract law, criminal law, property law, and even family law¹¹. During the following decades after the publication of the works of R.Coase and G.Calabresi, this discipline successfully developed and expanded, which is confirmed by the number of influential journals¹² publishing research and news on this topic, and went beyond purely university research, and its principles began to be applied already in practical significance. Evidence of this is that in 1984, the US Congress created a commission whose purpose was to reform the system of criminal sentencing in federal courts¹³, where conclusions stemming from studies of "Law and Economics" were largely implemented, and subsequently some prominent figures of this trend became federal judges - Associate Justice Stephen Brever from the Supreme Court, Judge Guido Calabresi of the U.S.

⁸ Francesco Parisi, *The Oxford Handbook of Law and Economics: Volume 1: Methodology and Concepts*, ed. (New York: Oxford University Press, 2017) p.8

⁹ Winners of the Nobel Prize for Economics, Encyclopædia Britannica, accessed April 20, 2023, https://www.britannica.com/topic/Winners-of-the-Nobel-Prize-for-Economics-1856936.

¹⁰ Robert Cooter, Thomas Ulen, *Law and Economics*, 6th ed. (Boston: Pearson, 2019), p.12

¹¹ Ronald H. Coase, The Problem of Social Cost 3 J. L. & ECON. 1 (1960)

Guido Calabresi, Some Thoughts on Risk Distribution and the Law of Torts, 70 YALE L.J. 499 (1961).

¹² There are more than 15 journals publishing research and news on this topic, some of them: Law and Economics Magazine, Supreme Court Economic Review published by the University of Chicago, European Law and Economics Magazine published by Springer Science+Business Media, commonly known as Springer. ¹³ Robert Coster and Thomas Llan, Law and Economics (the ad (Roston: Parson, 2010), pp. 9.

¹³ Robert Cooter and Thomas Ulen, Law and Economics, 6th ed. (Boston: Pearson, 2019), pp. 9

Court of Appeals for the Second Circuit, Judge Richard A. Posner and Judge Frank Easterbrook of the U.S. Court of Appeals for the Seventh Circuit¹⁴.

The economic analysis of law is categorized into two subspecies of analysis: positive and normative, since the causal relationship between the law, the behavior of an individual and the economic component is considered from different angles¹⁵.

Thus, a positive economic analysis of law is defined as the angle at which the relationship between the law, more precisely the sanctioning component of the law and the behavior of an individual is determined by mathematical models. This type of analysis, based on the idea that the law is subordinated to an economic factor, such as efficiency ("efficiency is a social goal reflected in law"¹⁶), interprets that the best law is the one that has contributed to the allocation of resources in the most effective way. This type of analysis can be characterized by the questions: "Does the death penalty for murder reduce the number of murders?", or "If we complicate the divorce filing system, does it help to reduce the number of divorces and does it help to preserve the institution of the family?". This type of analysis, asking a question, explores, forms, on the basis of one constant and variable, in the first case, the introduction of the death penalty and the number of murders, the relationship between them, and hence the relationship between the law and the social behavior of individuals.

The normative aspect is based on an attempt to modify the law in such a way as to get as close as possible to the goal – the efficiency of resource allocation and the maximization of social welfare. On the example given by R.Posner, the following comes out^{17} :

There was an incident where one party, accidentally (that is, the action completely unintentionally) caused harm and damage to the other party, and the injured party, having assessed the damage, demands compensation from the first party. In the system of economic analysis of law, namely in the framework of its normative aspect, the question "Is it fair for the first party to transfer an amount equivalent to the amount of damage to the injured party by a transaction?" is not important. The important question is "How can I reduce the transaction cost of an accident and prevent such cases?¹⁸"

1.2 Terms and fundamentals of economic analyses of law

1.2.1 Rationality and the desire to maximize utility

¹⁴ ibid

¹⁵ Thomas J. Miceli, *The Economic Approach to Law*, 2nd ed. (Stanford: Stanford University Press, 2008)pp.4 ¹⁶ ibid

¹⁷ Richard A. Posner, *Economic Analysis of Law*, 9th ed. (New York: Wolters Kluwer, 2014) pp.10-11

¹⁸ Robert Cooter and Thomas Ulen, Law and Economics, 6th ed. (Boston: Pearson, 2019) pp.13

Economics and law exist continuously, being the companions of mankind since the most ancient times. If only one person lived on Earth, there would be no shortage of resources, respectively, there would be no need to resolve the issue of resource allocation, respectively, there would be no reasons for the existence of legal and economic problems. But with the advent of society, as well as the degree of increase in the number of participants in public relations, there was a development and diversification of socially significant ties between members of society, as well as an increase in human needs, which inevitably led to the issue of resource allocation among members of society to meet needs. Accordingly, human society needed a tool to resolve this issue of resource allocation within the framework of resource scarcity with a constant increase in the number of participants in public relations. In the early stages of the development of society, such tools were often acts of violence or primitive social norms and traditions based on beliefs. But, with the development of human society, there was also a need for society for a completely different resolution tool, which subsequently became the formation of a system of laws that will be mandatory in execution, and in case of non-fulfillment, providing for sanctions.

Thus, from this point of view, the law is a social tool that acts as a measure to resolve the conflict of resource allocation between individuals, as well as a preventive measure that warns individuals against violations and crimes by designating the "price" that will have to be paid in an illegal case.

With the introduction of the concept of "prices", the first "digression" is introduced into the study, on which the economic analysis of law is based. A digression within the stream of "Law and Economics" lies in the fact that researchers assume that a person is an entirely rational being, clearly striving to maximize his utility, as well as rationally aware of his self-interest and aware of the consequences, that is, the price that an individual will pay when making a decision¹⁹. Human actions, in general, are subordinated to rationality and the desire to maximize their utility. And this desire to maximize its utility can be traced in all spheres of human activity, going far beyond purely market relations, but also among non-market relations, such as the processes of marriage and childbirth, theft and murder, regulated by family law and criminal law, respectively.

1.2.2 Rationality and irrationality

¹⁹ Richard A. Posner, Economic Analysis of Law, 9th ed. (New York: Wolters Kluwer, 2014) pp.16

Continuing acquaintance with the model of economic analysis of law, it is necessary to make notes. The note is that it is natural that the image of a person as a purely rational being striving to maximize his utility in all types of social relations is a "digression" necessary to provide greater transparency to the economic analysis of law, and that both rational and irrational behavior is equally present in human reasoning. Naturally, in real life, human actions are dictated not only by pure logic. People consciously go to an amusement park and ride a roller coaster, knowing that they will experience fear while riding, but nevertheless go for a ride, irrationally exposing themselves to fear. Or, people realize, when watching a horror movie, they get scared. Realizing that this is just a horror movie, and there are no real components in it that really should be scared of, people nevertheless get scared by behaving irrationally.

When discussing the "digression on rationality" of a person, there are well-documented statements in the social sciences that a person, when performing a certain action, shows limited rationality, limited willpower, which, accordingly, has nothing to do with the rationality of the object²⁰. Limited rationality is based on the idea that human cognitive abilities have natural boundaries, including boundaries in computational skills and boundaries in memory²¹.

These are natural limitations, to which, nevertheless, the human individual reacts rationally, thereby compensating for the costs of decision-making and minimizing the likelihood of making mistakes. Thus, as a reaction to memory limitations, people react by composing reminders or lists²²; as an adaptation to the limitations of computing skills with a shortage of time, the human brain has long developed a set of methods and standards that help and simplify decision-making, collectively referred to as heuristics²³. But, despite such completely rational methods used in solving everyday tasks, their outcome may differ from the predicted outcome of the action of homo economicus in similar conditions, which means that despite rational methods of abbreviations and reactions to limited abilities in decision-making, there is a possibility of making a mistake. These errors are divided into two categories: errors in reasoning and errors in decision-making.

The category of reasoning indicates a possible divergence from the models predicted in the "deviation" appearing in the economic analysis of law. These inconsistencies, first of all, consist in the use of empirical methods that simplify the methods of solution, which, despite their

²⁰ Cass R. Sunstein, Christine Jolls, and Richard H. Thaler, "A Behavioral Approach to Law and Economics," Stanford Law Review 50, no. 5 (1998): 1471-1550.

²¹ Herbert A. Simon, "A Behavioral Model of Rational Choice," The Quarterly Journal of Economics 69, no. 1 (1955): 99-118.

²² Cass R. Sunstein, Christine Jolls, and Richard H. Thaler, "A Behavioral Approach to Law and Economics," Stanford Law Review 50, no. 5 (1998): 1471-1550.

²³ James Chen, "Heuristic," Investopedia, last modified September 21, 2022, accessed March 22, 2023, <u>https://www.investopedia.com/terms/h/heuristic.asp</u>.

rationality, are prone to errors. Thus, in the work of Daniel Kahneman and Amos Tversky, examples of patterns of human thinking are presented, as well as possible errors to which these patterns are subject²⁴. One such example is the "availability" heuristic and the "modeling" heuristic. The "availability" heuristic is a frequent erroneous result, in which an individual making a decision estimates the probability of an event by how easy it is to recall similar events in his memory, in other words, how "similar scenarios are available", which leads to erroneous conclusions²⁵. A person will assess the probability of a car accident as very high if he witnessed a similar case in the past. The heuristic of "modeling" is also a frequent erroneous result in conclusions, when an individual, when assessing the probability of an event, relies on how easily such an event can be modeled in his mind or imagined²⁶. Thus, the individual makes a conclusion based on the most possible scenario played in his head. In the opposite case, the inability to simulate an event in the mind leads to a decrease in confidence in its possibility. A similar pattern is also present when evaluating information. Thus, a number of studies have demonstrated that decision-makers rely on vivid information rather than on information provided in a pale and abstract form. This is due to the fact that bright information is easier to model in the head than pale, which, in fact, leads to a bias in the evaluation of information processing. Despite the fact that these patterns are very useful and based on logical thinking, they often, in specific circumstances, lead to incorrect conclusions, which implies that an individual, under the influence of these patterns, behaves quite rationally in the context of reducing time costs, but to designate this rationality in the context of economic analysis of law is very difficult.

In addition to limitations in cognitive abilities, the individual faces limitations in willpower. This trend is that people take actions that they know contrasts with their long-term prospects²⁷. A good example is demonstrated on a smoker who knows that smoking will eventually reduce the quality of his life, but still continues to buy cigarettes²⁸. But, just as with the restriction in rationality, a reaction to the restriction of willpower is visible in human behavior. This is demonstrated by the example of the same smoker who, in order to avoid under-savings, takes actions to mitigate the consequences of smoking. Another example is this situation when an

²⁴ Amos Tversky and Daniel Kahneman, "Judgment Under Uncertainty: Heuristics and Biases," in Judgment Under Uncertainty, ed. Daniel Kahneman, Paul Slovic, and Amos Tversky (Cambridge University Press, 1982), 3-27.
²⁵ ibid

²⁶ ibid

²⁷ Deborah M. Weiss, "Paternalistic Pension Policy: Psychological Evidence and Economic Theory," University of Chicago Law Review 58 (1991): 1275-1315.

²⁸ Cass R. Sunstein, Christine Jolls, and Richard H. Thaler, "A Behavioral Approach to Law and Economics," Stanford Law Review 50, no. 5 (1998): 1471-1550

individual who has just gone on a diet deliberately hides sweets in order to avoid the consequences of his willpower limitation²⁹.

Richard Posner, in this regard, with regard to the likelihood of discrepancies with the model of economic analysis of law, noted that the main purpose of assuming such unreality lies in its objectivity rather than subjectivity. The theory of economic analysis does not have a descriptive purpose in itself, but rather strives to be abstract, and with reasonable accuracy seeks to predict a wide range of phenomena related to social relations. To the same extent as Newton's First Law of Motion is unrealistic, due to the fact that it describes the movement of bodies in a vacuum, but nevertheless remains useful, since it predicts with reasonable accuracy the behavior of bodies in the real world³⁰. Perhaps the theory of economic analysis of law is not able to fully describe the complexity of the empirical world, since it does not seek to describe it, but rather to explain it. According to R.Posner, if the economic analysis of law will be considered from the point of view of explanatory power, then this theory has achieved great success, thus the economic analysis of law with a basis in the form of the assumption that a person is a rational maximizer of his utility, is able to predict many phenomena with great success and has repeatedly proved this in its application. For example, the economic analysis of law has repeatedly predicted that the Communists' policy of price regulation is the cause of shortages, the development of the black market and queues³¹. The economic analysis model of law explained the direct link between competition with free trade and increased productivity, and that "property law encourages investment³²". In addition to the outstanding explanatory ability of R.Posner's economic model, its ability to "ensure effective intervention in the world of actions"³³ has repeatedly proved its validity on the following illustrative examples: by explaining and establishing causal relationships, the economic model has created new pricing methods, new methods of employee remuneration, methods of controlling inflation and unemployment, which once again emphasizes her solvency³⁴. Thanks to the basic digression, economic analysis is able to provide a structure for understanding the behavior of both an individual and the society surrounding the individual. The structure for understanding behavior contributes to the possibility of investigating the reasons why an individual agent and a group of agents make a certain choice based on a system of benefits and costs. This explains the ability of rational choice theory, as well as other mathematical calculus within the framework of

²⁹ Cass R. Sunstein, Christine Jolls, and Richard H. Thaler, "A Behavioral Approach to Law and Economics," Stanford Law Review 50, no. 5 (1998): 1471-1550

³⁰ Richard A. Posner, Economic Analysis of Law, 9th ed. (New York: Wolters Kluwer, 2014) pp.19-22

³¹ ibid

³² ibid

³³ ibid

³⁴ ibid

microeconomic theory, to determine the sources of irrational choice, but which are based on a rational motive.

1.2.3 Risk and incentive

Nevertheless, in order to give the "retreat" a greater approximation to real life, such a concept as an noncountable risk is introduced, which in real life is often classified as uncertainty that interferes with the rational behavior of an individual³⁵. Uncertainty is an important and widespread part of human life, which is present in the economic analysis of law as an noncountable risk. The classic example given by R. Posner is the uncertainty, traceable, and investigative in family law³⁶. Thus, the law is a preventive measure in response to the uncertainty of calculating the probability of divorce by the time of marriage and, accordingly, in order to respond to uncertainty, individuals conclude a prenuptial agreement that restrains uncertainty, and serves as a preventive measure reducing the percentage of the probability of divorce. Another important example - illustration of human actions aimed at countering uncertainty is contract law. Due to the fact that the transaction of the transfer of the right to a certain "resource", as if the right to own a certain property or service, where the resource will be time and qualifications when providing the service – the process is not spot, that is, not instantaneous, and requires a certain period of time, then over time the transaction costs of the exchange increase, and in this case contract law acts as a tool to reduce transaction costs, as well as a fixator of risks associated with uncertainty, which consists in a possible change in various circumstances and variables that change the terms of the agreement, and also in the participants' distrust of each other. Thus, the effect of contract law reacts to uncertainty by being a tool that narrows the probability to two outcomes: either the parties will fulfill their obligations and the redistribution of wealth will be effective, or the parties will not fulfill their obligations, but as a result will face sanctions related to non-fulfillment. Contract law, by increasing margin costs for the parties, in case of non-fulfillment of obligations, contributes to the parties fulfilling their obligations under the contract.

Returning to the understanding of maximizing one's utility by a person, it is also possible to interpret it as follows: a person makes a decision when the marginal benefit of this decision exceeds the marginal price. But, in the real world, taking into account the effects of restrictions and shortages, including the deficit associated with a time limit, or a shortage of financial

³⁵ John Maynard Keynes, A Treatise on Probability (London: Macmillan and Co., 1921)

³⁶ Richard A. Posner, Economic Analysis of Law, 9th ed. (New York: Wolters Kluwer, 2014) pp. 24

resources, a person is necessarily forced to make compromises related to the ratio between the marginal benefit and the marginal price of the solution. This pushes us to the next principle on which the economic analysis of law is based - the concept of incentive. If you change the ratio between the marginal benefit and the marginal price of the decision, then you can push or "give an incentive" to a person in making a decision. The same principle leads to a consequence that can be formulated in the following way: if you change the ratio between the marginal benefit and the marginal price of decisions that are everyday, then it is possible to change human behavior accordingly. From this statement, it is concluded that law is a social tool capable of changing the ratio between the price and the benefits of a decision, and thereby influencing people's behavior. The most accurate illustration demonstrating the effect of this principle in the real world, in people's daily lives, as well as being proof in favor of the statement about the role of law as a tool that changes the ratio between the price and the benefits of a solution, is the example given by Gregory Mankiw, an American macroeconomist, professor of economics at Harvard University about the impact of the carbon tax and about its influence on people's behavior³⁷. The professor, in his conversation about the possible conduct of a carbon tax and its consequences, argued that in everyday life, when a person decides to use a car to move, for example, a person attaches minimal importance to climate change, due to the existence of household worries, which a person spends more time deciding on. The introduction of a carbon tax, according to Professor G.Mankiw, will change the ratio of marginal income and the marginal cost of a person's decision, and calling for a change in his behavior, encourages a person to use more environmentally friendly means of transportation, or use the one that is, less and reduce the negative impact on the environment.

1.3 Case study. Maximizing utility and off-market relationships

Studies conducted by researchers from the University of Chicago and Stanford, led by Professor Gary Becker³⁸, regarding the phenomenon of divorce, using tools of economic analysis of law, are well-known and freely available.

The first thing the researchers started from was the "retreat", which, within the framework of marriage and exit from it, sounds like "individuals get married when the marginal benefit of marriage prevails for them over the benefit of remaining alone³⁹." And in the same way in the

³⁷ N. Gregory Mankiw, "A Pigouvian Tax on Carbon Emissions," in Harvard Environmental Law Review 29, no. 2 (2005): 313-333, <u>https://scholar.harvard.edu/files/mankiw/files/carbon_tax.pdf</u>. Accessed April 14, 2023

³⁸ Gary S. Becker, Elisabeth M. Landes, and Robert T. Michael, "An Economic Analysis of Marital Instability," Journal of Political Economy 85, no. 6 (1977): 1141-1187, <u>https://www.jstor.org/stable/1830656</u>. Accessed February 17, 2023

³⁹ ibid

opposite direction: "if an individual does not benefit from if the institution of marriage, and the marginal benefit from marriage is lower than the marginal benefit of loneliness, or free sexual life, then the individual files for divorce and leaves the system of marital relations⁴⁰".

Linking the entry and exit from the system of marital relations with the concept of well-being, then proceeding from the work of G. Becker, it follows that spouses divorce only when they assume that their well-being alone will exceed their well-being in the marriage regime, which actually fits into the first statement. Nevertheless, in order to exit their system of marital relations, mutual consent and consensus are required with regard to the distribution of resources acquired during the marriage, when exiting the marital relations of the spouses. That is, if one of the spouses, when leaving the system of marital relations, expects that his/her individual well-being after leaving the marriage will be higher than the general well-being during the marriage, and the other party on the contrary, then the first, the initiator of the divorce could "buy" the right to leave the marriage from the other, thereby "compensating" for the second party the difference between individual well-being after divorce and general well-being during marriage⁴¹.

It is with the alleged "transaction", when exiting a marriage relationship, that law and legal institutions play a significant role, due to the fact that, given that law is a social tool subordinated to the effective allocation of resources and reduction of transaction costs, in this situation, in the effective allocation of resources during the divorce process. Accordingly, two immediate questions are asked on this topic: "If you intentionally increase transaction costs during the transaction of resources during the divorce process from the first spouse to the second, is it possible to encourage the spouses to preserve the institution of marriage in their relationship and thereby reduce the number of divorces?" and vice versa, "If transaction costs are minimal, and their institution of marriage has the opportunity to get out in the most effective way, will this increase the number of divorces?"

Numerous studies have also been conducted on this subject, taking G. Becker's work "Economic Analysis of Marriage Instability" as a basis. In one of these studies, which investigated the specific topic of the influence of the concept of "divorce without fault of the guilty" on the number and frequency of divorces in the USA⁴², (for reference, "divorce without fault of the guilty" means a type of divorce in which the spouse filing for divorce is not required to provide

⁴⁰ Gary S. Becker, Elisabeth M. Landes, and Robert T. Michael, "An Economic Analysis of Marital Instability," Journal of Political Economy 85, no. 6 (1977): 1141-1187, https://www.jstor.org/stable/1830656. Accessed February 17, 2023

⁴¹ ibid

⁴² Aspasia Tsaoussi, "The Economics of Family Law," SSRN, April 2007. Accessed March 29, 2023. Available on: <u>https://dx.doi.org/10.2139/ssrn.1116386</u>

evidence of the guilt of the other spouse, for example, domestic violence, infidelity, as the reason for the divorce.⁴³)

The researchers concluded that the legal existence of a type of "divorce without fault of the guilty", which greatly simplifies the divorce process, in the sense that it reduces transaction costs in the divorce process in comparison with the traditional type of divorce, led to the fact that divorce without the fault of the guilty significantly increased the level of divorce⁴⁴. It has become easier to get divorced, because, due to legal simplifications, it has become possible to avoid large transaction costs when redistributing resources acquired in marriage to divorcing spouses. Accordingly, the level of breeding has become higher. This is the explanation of the causal relationship between law, the economic component, and social behavior. But, the tendency of law and economics and the difference between its formulations of explanations from the explanations given by other legal currents is that the current of law and economics seeks not only to identify an obvious primary cause-and-effect relationship, but also conducts a more in-depth analysis of the impact on other factors. And also, in addition, based on this data, it offers certain solutions. So, for example, in addition to determining the correlation between the number of divorces and simplification, in the form of a "divorce without the fault of the guilty", an economic analysis of the law determined that the possibility of getting out of marriage, based on the law on "divorce without the fault of the guilty", puts at risk the person least interested in divorce, since this side (mostly woman) is in the most unfavorable situation for herself which will follow after the divorce. Under the least protected person, a housewife is most often represented. Thus, the system of "divorce without the fault of the guilty", which greatly simplifies the exit from the marital relationship of the most interested party in divorce, signals to female housewives a pattern that large investments in the family, in the form of financial or non-financial, such as time, make them more vulnerable in marriage⁴⁵, thereby reducing the involvement of women (in the context of the party least interested in divorce) into marriage.

Nevertheless, researchers from the "Law and Economics" movement, represented primarily by Professor G.Becker, in addition to finding connections between various factors, also proposed the most acceptable solution for resolving such situations. In their concept, stability in marriage can be ensured by the introduction of a private marriage contract with the implementation of

⁴³ "No-fault Divorce," Legal Information Institute, Cornell Law School, accessed April 22, 2023, https://www.law.cornell.edu/wex/no-fault_divorce.

⁴⁴ Douglas W. Allen, "Marriage and Divorce: Comment," American Economic Review 82 (1992): 679-685.

⁴⁵ Aspasia Tsaoussi, "The Economics of Family Law," SSRN, April 2007. Accessed March 29, 2023. Available on: <u>https://dx.doi.org/10.2139/ssrn.1116386</u>

the principle of freedom of contract at the marriage of future spouses⁴⁶. Thus, the implementation of a private marriage contract contributes to the resolution of several "sharp corners" at once, since in this way, a private marriage contract not only reduces transaction costs during the exit from the marriage relationship system, but also transaction costs occurring during the marriage relationship, which contributes to the involvement of both parties in the development and investment in the marriage union, without fear of being in an unfavorable situation in the event of a divorce. A marriage contract would encourage investment in the family, thereby becoming the basis for the stability of marriage. One of the most important elements of this basis is that property rights will already be negotiated and distributed in the marriage and in case of withdrawal from it, as well as the concept of payments, including alimony, which will largely preserve the stability of the institution families, protecting and guaranteeing the property rights of spouses during their marriage, and in case of divorce⁴⁷. This step would reduce the number and frequency of divorces, and would reduce transaction costs when allocating resources.

When considering the example given above, it is possible to clearly determine the degree of interaction between the legal field, the law on the one hand, and the economic component on the other, when considering the social behavior of individuals. And this is the peculiarity of the movement of "Law and Economics", since in their models of economic analysis there is a holistic picture of the interaction between different disciplines.

2. ECONOMIC MODELS OF LAW

2.1 Microeconomic analysis

As already mentioned in the previous chapter, microeconomic analysis involves the analysis and prediction of the actions of individual individuals, or small groups of people in conditions of limited resources. I am a student, and I have limited financial resources, such as money, and non-financial resources, such as time, for example. Should I continue writing an important essay for the university, or should I go to a restaurant with friends? Should I buy groceries for a week, or should I keep saving until I buy a suit?

⁴⁶ Gary S. Becker and Guity Nashat Becker, The Economics of Life: From Baseball to Affirmative Action to Immigration, How Real-World Issues Affect Our Everyday Life (New York: McGraw-Hill, 1997).

⁴⁷ Aspasia Tsaoussi, "The Economics of Family Law," SSRN, April 2007. Accessed March 29, 2023. Available on: https://dx.doi.org/10.2139/ssrn.1116386

In fact, in conditions of limited resources, it is necessary to make decisions and make choices, choosing one and rejecting the other. Given that there are a huge number of students like me, microeconomic analysis offers a theory about how such decisions are made and what they are based on⁴⁸.

The definition of the fundamental principles necessary for the microeconomic analysis of law and the understanding of the thesis that law is a social tool influencing human behavior also need to be supported by four economic principles arising from the thesis, which are "intuitive prerequisites of economic analysis⁴⁹": the law of consumer demand and supply, opportunity (alternative) costs, the tendency of resources tends to their the most valuable use, and the equilibrium⁵⁰.

The law of demand implies an inversely proportional relationship between the demand for a product and its price. This means that the higher the price rises, the lower the demand for the product falls among buyers. This is due to the fact that buyers are limited in resources, and accordingly, buyers' spending on this particular product is also limited, and it turns out, subject to resource constraints, the price of a certain product increases, its demand among buyers decreases. By way of illustration, if the price of a steak increases by 10 euro, and other prices of products remain the same, then a rational consumer will react to an increase in one of the products in his consumer basket in such a way that he explores the possibility of buying those goods that he/she preferred less when the price of the steak remained the same. An increase in prices for 10 euro of steak will encourage consumer to consider exactly those products that were previously considered unattractive. It is likely that a rational consumer of steak will reduce buying steak due to the price increase and replace it with alternative options that have become more attractive, since the rationality of the consumer requires him/her to make the most effective choice. What is more remarkable is that the application of this law of demand is not limited only to market relations, but it can also be applied in non-market relations. Thus, the example of the death penalty is quite appropriate. From the criminal's point of view, an increased probability of an outcome in the form of the death penalty will increase the "price" of his action, which criminal will have to pay, which will stimulate criminal not to commit such an action, and thereby reduce the prevalence of such crimes.

In the case of consumers, they tend to make a choice that maximizes their utility (self-interest), as if happiness or satisfaction. The same can be said about producers, but in their case, maximization is more likely not to utility, but to correct profit. They strive to maximize the

⁴⁸ Robert Cooter and Thomas Ulen, Law and Economics, 6th ed. (Boston: Pearson, 2019)

⁴⁹ Richard A. Posner, Economic Analysis of Law, 9th ed. (New York: Wolters Kluwer, 2014)

⁵⁰ ibid

margin, that is, the difference between the value of the product and the selling price. But, for an illustrative example, not the maximum selling price is taken, but the lowest possible one. In R.Posner's model, this price is "the price at which the resources spent on the manufacture and sale of the product by the seller would be in demand at their next best use – an alternative price." This implies that the price should always be higher than the price at which the next seller would sell to the one who offered the highest price⁵¹. Due to the definition of cost as an alternative price, the definition is introduced that costs arise only when "someone is denied use⁵²", creating the concept of scarcity.

The next important concept is the concept of equilibrium. Equilibrium is a point of stability, and as long as the conditions of supply and demand do not change, none of the participants in the relationship will have an incentive to enter or leave the market⁵³. The concept of equilibrium is the starting point for understanding and researching the processes that hinder the most efficient allocation of resources. It is these processes that are the reasons for the existence of the concepts of excess and deficit.

And the last concept is the principle that resources strive for their most valuable use if voluntary exchange is allowed. If voluntary exchange is possible, resources are distributed in such a way that they are directed to those types of use where their value to the consumer would be the highest⁵⁴. This, in other words, is called effective use.

2.2 Microeconomic analysis and legal component.

This subsection examines and demonstrates the relationship between the terms and principles of microeconomics and the influence of the legal component within the rental housing market in a particular city (for example). In a competitive urban rental housing market, given that the actions of both the landlord and the tenant are subordinated to maximizing their utility, in these conditions, the rental rate will be charged effectively from the units of rented housing that are offered and remain in demand⁵⁵. Equilibrium in this context will mean by itself that the price level of the rental rate will be as much as possible the same with the price offered by landlords

⁵¹ Richard A. Posner, Economic Analysis of Law, 9th ed. (New York: Wolters Kluwer, 2014) pp. 27-30

⁵² ibid

⁵³ ibid

⁵⁴ ibid

⁵⁵ Robert Cooter and Thomas Ulen, Law and Economics, 6th ed. (Boston: Pearson, 2019) pp.40

and with the price agreed by tenants. The supply and demand curve intersect at the equilibrium point, and there will be no gap between supply and demand, in the form of an excess in the market or, conversely, a deficit.

However, assume that the city government has established rent price regulation by setting a ceiling for price increases that is lower than the price movement in the market. What will be the consequences of such a decision in the market, and how will it affect landlords and tenants?

Using the tools available by microeconomic analysis, comparing the supply and demand curve, it can be assumed that the result will be as follows: a shortage of supply from landlords, since it is not profitable for landlords to allocate their housing units for rent at a rental rate that is lower than the movement of market prices, and due to the lack of incentive to rent housing, there is a gap between demand and supply. It is more advantageous for landlords to designate housing units for other purposes, such as, perhaps, for their own living or sale in the form of condominiums. It is likely that with the absence of an incentive to invest in apartments, due to a fixed rental rate, the quality of housing will deteriorate, since the landlord does not see an incentive to carry out repairs or any other maintenance of the dwelling, which he will not rent out.

An example that clearly demonstrates the hypothetical concept of setting a price ceiling and its consequences in the practical component is fixed rental prices in Mumbai, India. Mumbai is rightfully considered one of the largest megacities in India, being also the financial capital of India⁵⁶. Nevertheless, the real estate market in Mumbai is one of the most illustrative examples of the impact of the legal component on the economic aspect, and how destructive the effects of the legal component can be.

The current point is that rent control has been introduced in India since the beginning of the XX century, which was originally intended to protect tenants from inflation and illegal evictions⁵⁷. After Independence, in particular in Mumbai, the city authorities introduced control over the prices of rental rates, the introduction of the law on the "Control of prices for residential buildings" from 1947. Based on this law, the price of rent had to remain at or below the standard rent, which was determined by the court or the controller or the rent at which the property in question was leased on September 1, 1940⁵⁸. In addition, the law imposed restrictions on the rate of rent growth and provided for a minimum increase in the case of repairs and

⁵⁶ Vaidehi Tandel et al., "Decline of rental housing in India: the case of Mumbai," International Journal of Housing Markets and Analysis 13, no. 1 (2020): 44-57.

⁵⁷ Satvik Dev and Pramila Datta Dey, "Rent Control Laws in India: A Critical Analysis," NIUA Working Paper 06-04 (National Institute of Urban Affairs, New Delhi, 2006).

⁵⁸ Vaidehi Tandel et al., "Decline of rental housing in India: the case of Mumbai," International Journal of Housing Markets and Analysis 13, no. 1 (2020): 44-57.

improvements carried out by landlords, where the increase was also determined by the courts⁵⁹. Another phenomenon mentioned in the law was the introduction of a mechanism that makes it difficult to evict tenants⁶⁰.

As a result of the fact that the market ceased to be competitive after the intervention of the authorities, and with the introduction of the law, the level of rent stimulating landlords was ignored, then the equilibrium between the level of the proposed rent and the level of rent based on real price movements was not reached, then there was a shortage of supply, in the sense that that landlords have no incentive to rent out their premises at all, since there is no benefit for them in this, which also negates the incentive to invest in housing, in terms of maintenance or repair. As a result, there was a "dilapidation of the existing rental fund⁶¹", which is a consequence of the regulation of prices for the rental rate, which introduced ambiguity and unclear definition of property rights.

2.3 The economic model of law and the Posner category.

The most important role in the development of economic analysis of law, and which should be given special attention, is the work of Richard Posner "Economic Analysis of Law", published in 1973, in which the author applied economic analysis to all branches of law, and whose work caused widespread controversy with its innovative approach.

And this innovation consists in several statements. The statement is that in the work of Richard Posner, the author considered economics not as a separate component of a separate subject studying the movement of the market and market participants, but as a methodology, a tool necessary and applicable in describing the process of making rational decisions in any context⁶², regardless of whether it is a market context or a non-market one.

As is already known, human is a rational being, striving to maximize his well-being, his utility, but in conditions of limited resources, put under the adoption of selective decisions. In market relations, limited resources mean income restrictions or pricing, but considering the legal field,

⁵⁹ Vaidehi Tandel et al., "Decline of rental housing in India: the case of Mumbai," International Journal of Housing Markets and Analysis 13, no. 1 (2020): 44-57.

⁶⁰ ibid

⁶¹ Vaidehi Tandel et al., "Decline of rental housing in India: the case of Mumbai," International Journal of Housing Markets and Analysis 13, no. 1 (2020): 44-57

⁶² Thomas J. Miceli, The Economic Approach to Law, 2nd ed. (Stanford: Stanford University Press, 2008)

restrictions may imply a completely different meaning, including legal sanctions⁶³. These sanctions, which begin with a monetary fine and end with imprisonment and execution, can be considered by a rational individual as the price to be paid when entering this particular legal field, and according to the laws of pricing, the individual will make a decision for himself that best suits his interests. Thus, by setting a legal "price", it is possible to guide an individual along the most socially desirable path. The main message emerging from the work of Richard Posner was the statement that the instrument measuring law and legal institutions and evaluating it should be the criterion of economic efficiency, discarding the criteria of morality or other criteria, because law as a whole should be subordinated to efficiency, that is, how effectively law directs an individual along a socially desirable path. R.Posner, like most researchers from the field of "Law and Economics", used models to measure the effectiveness of legal institutions, which are designed to simplify causal relationships to some extent in the context of a system, whether market or legal. Naturally, there are assumptions in the model, but nevertheless, the reliability of the assumptions determines how plausible the conclusions of the model are⁶⁴. In R.Posner's model, law is measured from the standpoint of efficiency, and this efficiency, according to R. Posner's assumption, can be interpreted in the same way as justice, because "in conditions of limited resources, waste should be considered as an immoral act"65. In support of this expression, other studies⁶⁶ have confirmed that the concept of justice matters to the extent that it affects the well-being of individuals⁶⁷. Another important aspect of his work is his attention to judicial decisions. R.Posner argued that the judge is also a rational agent, and that he is repelled when making a decision by his own desire for benefits, in the form of status, power.⁶⁸ When making a decision, the judge should interpret the law only on the basis of the criterion of economic efficiency and reduction of transaction costs in the allocation of resources and make a decision according to this interpretation. Since then, despite the continuation of discussions on the applicability of the economic analysis of law, this point of view has not yet lost its relevance.

This point of view that a judge should be based on the principles of efficiency when making a decision was applied in the case *Sturges v. Bridgman*⁶⁹, considered in 1879, when a judge, when considering a complaint from a doctor Sturges, engaged in medical practice at home,

 ⁶³ Thomas J. Miceli, The Economic Approach to Law, 2nd ed. (Stanford: Stanford University Press, 2008)
 ⁶⁴ ibid

⁶⁶ Kaplow, Louis and Steven Shavell. "Economic Analysis of Law." In Handbook of Public Economics, edited by Alan J. Auerbach and Martin Feldstein, Vol. 3, 1661-1784. Elsevier, 2002. ISSN 1573-4420. ISBN 9780444823144.

⁶⁷ ibid

⁶⁸ Richard A. Posner, Economic Analysis of Law, 9th ed. (New York: Wolters Kluwer, 2014)

⁶⁹ Sturges v. Bridgman, (1879) 11 Ch D 852 (CA)

against his neighbor Bridgman, in whose house a factory of sweets was located next door, the judge took side of doctor Sturges, despite the legality of the Bridgman's factory, since the amount of damage caused to Sturges due to the noise from the production of sweets was higher than the amount of benefit received by Bridgman from his factory.

In the section of the empirical study of the comparability of statutes and assumptions in the model of economic analysis of law based on the evolution of property rights in China, R. Posner's economic model and his category of property rights will be used in the analysis.

2.4 Economic analysis of property rights

As is already known, when allocating resources and wealth, individuals often face directly polar opinions regarding how to properly allocate resources. As a result of such debates and differences of opinion, the concept of property appeared. For example, researcher Harold Demsetz in his research came to the conclusion that the emergence of property rights among the Indians was facilitated by the desire to limit excessive hunting⁷⁰. The term property plays a fundamental role in the concepts of both economics and law, respectively, since on the basis of property, rights, and hence the economic component of property are determined, protected, respected and transferred. William Blackstone viewed property as giving its owner complete control over resources, and he viewed this freedom to control material things as "the guarantor of all other rights⁷¹."

For example, I bought a plot on which a large forest is located, and also gave a forest to a company engaged in the manufacture of logs for rental use, with the right to cut wood. A mule was born in this forest. Who does the mule belong to? To me, as the owner of this land plot. The mother of the mule who gave birth directly? Or to the tenant, represented by a company that manufactures logs? This example reveals one of the most important questions that the system of property rights should answer: "How are property rights acquired and established?⁷²"

2.4.1 The legal aspect of property rights

⁷⁰ Demsetz, Harold. "Toward a Theory of Property Rights." The American Economic Review 57, no. 2 (1967): 347–59. http://www.jstor.org/stable/1821637. Accessed May 1, 2023

⁷¹ Robert Cooter and Thomas Ulen, Law and Economics, 6th ed. (Boston: Pearson, 2019)

⁷² ibid

From a purely legal point of view, property is the ultimate relationship, foundation and legal basis that enshrines the rights of a certain individual to a certain tangible or intangible resource, which ultimately aims to increase the efficiency of resource allocation and use, as well as reduce transaction costs when transferring resources. Property rights are a whole bundle of rights⁷³. In the context of the totality of rights, property determines what the owner can do with his property, give it to rent, invest in it, modify it, sell it, give it, consume it, reject it and much more, and the boundaries of what the owner cannot do with his property, within the framework of legislation⁷⁴. A clear demonstration of an example: the owner of a house renting it out in Mumbai does not have the right to raise the rental rate above the price set by the city authorities. An important factor, or more precisely the characteristic of property, is that it is impersonal, that is, rights relate to property, not to the individual⁷⁵. They are attached to a resource, which means that any individual who owns property becomes vested with rights to this resource, that is, from the legal aspect of considering the concept of property: property is the ability to dispose of a resource in the way the owner sees fit; and the second important thing, property is protection from external influence or interference in this ability to dispose of a resource. But here it must be taken into account that there is an aggregation of various packages of rights, based on property. Thus, property rights are the totality of a package of possessory rights, such as modifying the landscape of property at owner's discretion or building a house, and the totality of a package of rights to transfer possessory rights⁷⁶. For example, the owner of the land may not have full ownership rights, since others may have an easement giving them the right to travel on his land, or the right to export timber, or the right to extract oil, if it is found⁷⁷.

Nevertheless, property rights are traditionally categorized into three subspecies: intellectual property, personal property and real estate. Using the example of intellectual property rights, which includes a wide range of categories, such as patent, copyright, trademarks, intellectual property rights achieve the ultimate goal by providing and protecting specific and exclusive rights to possess a certain intangible resource, stimulate individuals or organizations to further

⁷³ Richard T. Ely, "Political Economy," in Political Economy, Political Science and Sociology, edited by Richard T. Ely (New York: Macmillan, 1899), 543-544.

⁷⁴ Vaidehi Tandel et al., "Decline of rental housing in India: the case of Mumbai," International Journal of Housing Markets and Analysis 13, no. 1 (2020): 44-57

⁷⁵ Robert Cooter and Thomas Ulen, Law and Economics, 6th ed. (Boston: Pearson, 2019)

⁷⁶ Polinsky, A. Mitchell, and Steven Shavell. "Economic Analysis of Law." November 2005. Stanford Law School, John M. Olin Program in Law and Economics Working Paper No. 316. Available at SSRN: <u>http://ssrn.com/abstract=859406</u>.

⁷⁷ ibid

development and innovation, since their rights their new works and products are clearly defined and protected from outside interference.

Recognition of property rights is a fundamental aspect of any legal system. Property rights refer to the legal rights and interests that individuals have in relation to tangible and intangible resources. These rights allow individuals to control, use and transfer resources and are essential for improving economic efficiency and social well-being. There are several reasons why the recognition of property rights is important: it primarily encourages investment, because individuals and firms are more likely to invest in resources when they have reliable and enforceable property rights. This is because property rights encourage individuals to invest in resources and use them in a way that maximizes their value.

If I am a farmer, and the future income from crops will come to me, and I am protected from outside interference by law, I know that my property will not be taken away from me, then I am in the concept of a rational agent, it is profitable for me to continue developing and investing in crops. Ownership also contributes to the efficient allocation of resources: clear and enforceable property rights allow resources to be distributed among those who value them most highly. This leads to more efficient use of resources and ensures that resources are used in socially beneficial ways. Property greatly facilitates trade and exchange by presenting itself as a medium of exchange: property rights allow individuals to transfer their property rights to others in exchange for other goods and services. This facilitates trade and exchange and allows individuals to specialize in areas where they have a comparative advantage. Property protects against expropriation: Property rights provide protection against expropriation of resources by the government or others. This ensures that people can use the resources they have invested in and benefit from them.

2.4.2 The economic aspect of property rights

From an economic point of view, the existence of property rights and ownership is also considered as a means necessary and intended for the efficient allocation of resources and reduction of transaction costs. The economic point of view takes a closer look at the aspect of reducing transaction costs⁷⁸. In the context of the transfer of property rights, transaction costs relate to the time spent on negotiations, and the efforts of the parties in collecting information, when forming a contract. As in the case described above, I, as the owner of the land on which

⁷⁸ Donald Rutherford, Routledge Dictionary of Economics (New York: Routledge, 2003).

the sheep ruined the lawn and the farmer to whom the sheep belong, we spend resources and bear the costs that are spent during negotiations about the construction of a wall or fence. We can come to a reasonable consensus and agree on cooperation with each other, and our joint decision, which we have come to together, can be more effective than the one that the law and our property rights will offer us. It follows from this that a law is unnecessary and undesirable where negotiations have succeeded, and that a law is necessary and desirable where negotiations fail⁷⁹. That is, the presence of the law increases where there are no negotiations.

For an illustrative example, using the same example used above, assume that I am the owner of land adjacent to a farm where sheep are grazed. I decided that I would grow vegetables on part of my land. The boundary between my property and the neighboring farmer's property is defined, but not fenced. And as in the previous case, sheep sometimes graze on my territory, causing damage to my vegetable crops. This situation can be resolved in three obvious ways: either the farmer should reduce the number of sheep heads so that they do not wander into my territory, or I should reduce the territory of vegetable crops in this way, protecting my crops from sheep, or a wall or fence should be erected.

The first outcome: we can agree on our own and come to a consensus.

The second outcome: in the absence of negotiations, the law will intervene, which will accept one of the two sides. Or, the law states the fact that I am directly responsible for the damage, for allowing the very fact that sheep wandered into my territory without erecting a wall or fence. Or, the law states the fact that a farmer grazing sheep is responsible for the damage, which allowed his sheep to wander into someone else's neighboring territory.

Having discarded the concepts of justice, and being guided purely by efficiency, the law would be effective if it encouraged the efficiency of both my vegetable growing and the farmer's sheep growing⁸⁰.

Let's assume that I incur expenses of \$100 when sheep wander into my territory and eat part of a hypothetical crop. I can avoid these costs by fencing my territory with a fence, which will cost me \$ 50, or by fencing the territory of the farm, which will cost me \$ 75. As a rational agent seeking to maximize his benefits, for me the most effective way is to fence my territory with a fence. If we consider it from the point of view of a farmer herding sheep, then for him the most effective way to avoid compensation of \$ 100, \$ 75, by fencing his plot.

But, if we agree on our own and come to a consensus, then the participation of the law will not be in demand, and (considering that the most effective way is to erect a fence around my site,

⁷⁹ Robert Cooter and Thomas Ulen, Law and Economics, 6th ed. (Boston: Pearson, 2019) pp. 39

⁸⁰ Robert Cooter and Thomas Ulen, Law and Economics, 6th ed. (Boston: Pearson, 2019)

worth \$ 50) we will both resolve the contradiction that has arisen between us as effectively as possible.

From this example, the following conclusion is drawn that "when one activity interferes with another, the law must decide whether one party has the right to interfere or whether the other party has the right to be free from interference.⁸¹" If we start from the principle of justice, then the most favorable and fair decision will be in which the party who caused the harm compensated her⁸². Starting, on the contrary, from the principle of efficiency, namely, as R. Posner noted with the expression "the desire of resources to the one who values it the most⁸³", then the most effective solution will be the one in which the right will be the one who values it the most.

It should also be noted that in case of non-cooperation, the participation and intervention of the law directly affects the effective allocation of resources. In the case of successful cooperation and consensus, the legal distribution of rights does not matter for efficiency, regardless of legal norms⁸⁴.

3. EMPIRICAL APPROACH TO THE ECONOMIC ANALYSIS OF PROPERTY LEGISLATION IN CHINA

In addition to the theoretical part, to which the previous two chapters of this study were devoted, revealing all the terminology and principles in the application of economic analysis of law, the third part is entirely focused on its practical implementation, more precisely on the empirical aspect of the use of economic analysis of law, in particular property law in China. This part of the study examines the evolution of exclusively property rights in China in historical intervals, in the context of R. Posner's model. As an object of empirical research, property rights in China were chosen not by chance, but due to the fact that property rights in China have largely changed over the past century. To give greater clarity to the study, this historical period should be conditionally divided into two separate periods in which the value of property rights is significantly correlated with each other: this is the period of Mao Zedong's leadership (1949-1976), within which the process of collectivization was carried out; and the subsequent period

⁸¹ Robert Cooter and Thomas Ulen, Law and Economics, 6th ed. (Boston: Pearson, 2019)

⁸² ibid

⁸³ Richard A. Posner, Economic Analysis of Law, 9th ed. (New York: Wolters Kluwer, 2014) pp.29

⁸⁴ Robert Cooter and Thomas Ulen, Law and Economics, 6th ed. (Boston: Pearson, 2019) pp.42

of economic reforms initiated by Deng Xiaoping, and whose reforms were continued in the future by his successors, aimed at strengthening property rights. It is this correlation of attitudes to property rights in two specific periods, their difference from each other, that will allow conducting an empirical study in a transparent manner by applying economic analysis of property rights in China, from the Mao Zedong period to the present, with an emphasis on R.Posner's economic model and the modification of property rights in the course of this evolution.

Empirical research in relation to the economic analysis of property rights in China implies, by means of a microeconomic model, the analysis and identification of the relationship between laws, in particular laws regulating property relations, and economic activity, in particular on variables such as the size of investments and the scale of innovation. Returning to R. Posner's model, the basis of which is the idea that the law is a social tool necessary to maximize social well-being, giving an incentive to an individual to perform an action, a designation of property rights is central to the effective allocation of resources, since a designation of property rights encourages individuals to invest in their property and use it in the most effective way, since a designation of property rights gives individuals confidence that, that their property is protected and they can use it in the future.

Has the designation and division of property rights in China led to an increase in investment and stimulated it to increase the market? Is the application of the R. Posner model in relation to property rights in China correct, or does China have its own specifics that do not allow the R.Posner model to be fully applied? This chapter is intended to answer these questions and emphasize the connection between the division of property rights (law) and the economic aspect.

3.1 Collectivization. Property rights in the first historical period.

For a broad understanding of the evolution of property rights in China and its consequences, it is necessary to make a historical reference about the first historical interval.

By the time the People's Republic of China (PRC) was established after a bloody civil war in 1949, China was a completely agrarian country, 90% of whose population (approximately 540 million people) lived in rural areas⁸⁵. And the primary task for the new leadership of the country

⁸⁵ National Bureau of Statistics. China Statistical Yearbook 1981. Beijing: China Statistics Press, 1982, p. 89.

was the modernization of the economy, which in the context of communist ideology consisted in accelerated collectivization and urbanization of the population⁸⁶.

Collectivization implies the process of integrating numerous villages into one territorial unit, as well as the integration of agriculture and industry of various individual units into one common commune⁸⁷. Thus, through land reform in 1950⁸⁸, private property in general was abolished, and introduced into the structure of the commune, regulated by the state, which was called "danwei"⁸⁹, a comprehensive urban unit that distributed living conditions, work and social security among the urban population⁹⁰. This means that the state actually took away all property rights, both to land and to factories, and other production structures from a certain part of the population, as a result of which they were left without houses, without property; appropriated this property to itself, within the framework of collective use, and redistributed among the communes, in fact, leaving the property itself, since the system of organization and management of communes, was a direct continuation of the Communist Party⁹¹.

All the people of a certain commune who lived on the territory of this commune had no property rights, were from the point of view of the state, working units, and were obliged to contribute to this commune, like small details in the mechanism of the clock, in this case, the commune, since labor was promoted as the highest virtue⁹².

The most characteristic and descriptive of this process that took place in society is the speech delivered by Mao Zedong, who at that time was the ideological inspirer and leader of the collectivization process:

"We must gradually integrate industry, agriculture, trade, education and the armed forces into the people's commune, which is the basic unit of our society."⁹³

⁸⁶ Cyan Jingru Cheng, "Collectivisation, paradox and resistance: the architecture of people's commune in China," The Journal of Architecture 27, no. 7-8 (2022): 913, <u>https://doi.org/10.1080/13602365.2022.2158207</u>. Accessed 2 March 2023

⁸⁷ ibid

⁸⁸ "Agrarian Reform Law (1950)." In Encyclopædia Britannica. Accessed May 9, 2023. https://www.britannica.com/topic/Agrarian-Reform-Law-1950-China.

⁸⁹ Lü, Xiaobo, and Elizabeth J. Perry, eds. Danwei: The Changing Chinese Workplace in Historical and Comparative Perspective. Armonk, NY: M. E. Sharpe, 1997.

Bray, David. Social Space and Governance in Urban China: The Danwei System from Origins to Reform. Stanford, CA: Stanford University Press, 2005.

Rowe, Peter G., Ann Forsyth, and Ye Kan Har. China's Urban Communities: Concepts, Contexts, and Well-Being. Berlin: Birkhäuser, 2016.

⁹⁰ Cyan Jingru Cheng, "Collectivisation, paradox and resistance: the architecture of people's commune in China," The Journal of Architecture 27, no. 7-8 (2022): 913, <u>https://doi.org/10.1080/13602365.2022.2158207</u>. Accessed 2 March 2023

⁹¹ ibid

⁹² ibid

⁹³ Cyan Jingru Cheng, "Collectivisation, paradox and resistance: the architecture of people's commune in China," The Journal of Architecture 27, no. 7-8 (2022): 913, https://doi.org/10.1080/13602365.2022.2158207. Accessed 2 March 2023

Thus, over the next 8 years of agrarian land reform, by 1958, 85% of the total population of China became part of rural communes⁹⁴. To demonstrate the scale, the largest city in Qingpu County, for example, the city of Zhujiajiao, has been transformed into the Hongqi People's commune, which has more than 120 villages united into 10 concentrated settlements⁹⁵.

The distinctive features of the commune are that (1) the communes were essentially large-scale, bringing together towns and nearby villages; (2) in them all the property was public, there was no private property; (3) the leadership of the commune was directly linked to the party and public sector⁹⁶.

Accordingly, all borders between the city and the village were erased, private property was completely destroyed, all property was integrated into the commune system, that is, it became a common resource, which subsequently negatively affected both the village and the city. Agriculture became paralyzed by the burden of having to support urban industrialization, as urban development prevailed over rural development⁹⁷.

Considering the current situation with collectivization in the context of R. Posner's model, it should be noted that an important reason for the failure of collectivization is that due to the lack of private property, the country's legal system, under the strongest influence of ideology and slogans, ceased to be a social tool for the effective allocation of resources, became paralyzed and lost efficiency, predictability, which is negatively affected on the fundamental lever of effective resource allocation - stimulating people. If in R.Posner's model, by reducing or increasing transaction costs, the law has the opportunity to stimulate individuals who are rational maximizers of their utility, then in the system of "building socialism" and forced collectivization, transaction costs themselves were absent, due to the lack of the very possibility of resource transactions, since there was no transaction unit – a property, in particular in this case, private. If all the land and all the property is state owned and is in collective use, then there will be no transactions, which means that the possibility of stimulating individuals will also not be possible. In R. Posner's model, property plays the most important role, because thanks to a strong and effective legal system, where property is clearly defined, property is the main engine of stimulating innovation and investment, and in the case of China in the period 1949-1976, the absence of property, exactly as the subsequent lack of incentive to development, innovation, entrepreneurship in individuals in this era explains such ambiguous results. As a

⁹⁴ Cyan Jingru Cheng, "Collectivisation, paradox and resistance: the architecture of people's commune in China," The Journal of Architecture 27, no. 7-8 (2022): 913, https://doi.org/10.1080/13602365.2022.2158207. Accessed 2 March 2023

⁹⁵ ibid

⁹⁶ Kuan, H. K. "People's Commune in Chinese Mainland in 1958 and Its Conceptional Origin." East Asia Studies 33, no. 2 (2002): 1-10.

⁹⁷ ibid

demonstration of the lack of incentive for an individual, the following example is given: there is a farmer in a commune and there is land in collective use, which he cultivates and sows grain there. Since the above-mentioned farmer gives the entire grain harvest to the commune without receiving any benefit, and even if there is one, he shares it with all members of the commune, then the farmer has no incentive to invest in these crops, improve harvesting technologies, since the farmer will not receive any benefit from this. Richard Posner traced this clear causal relationship between law, the economic component and social behavior in his model.

As a result of the policy of collectivization within the framework of the "Great Leap Forward"⁹⁸, the economy of the People's Republic of China was paralyzed, which contributed to terrible consequences. The "Big Leap Forward" was a mistake made by the leadership of the PRC on the way to building "socialism"⁹⁹.

Due to the lack of incentive to cultivate the land and grow grain, due to the fact that it was sold only to the state at a low price, below the market, production capacity decreased, the volume of grain harvest decreased, a shortage appeared, which led to the Great Famine, because of which, according to various estimates, more than 40 million people died¹⁰⁰. Because of the famine, as a result of the failure of the party's policy, in order to avoid discontent among the population, the Communist Party of China (CPC) initiated the Cultural Revolution (1966-1976). The Cultural Revolution led to a cultural and social vacuum, to mass massacres and repressions, to a de facto civil war within the country. After the beginning of the Cultural Revolution in 1966, the management system was destroyed, labor discipline was absent, the system of planning and statistics collapsed, and the rampant Red Guard and armed conflicts of the working class paralyzed production, agriculture and traffic¹⁰¹. As a result, the total loss of national income over the decade (1966-1976) amounted to approximately 500 billion yuan.¹⁰² In addition, due to the internal antagonism that plagued the country, the Cultural Revolution reduced the potential stock of human resources by 14.3%¹⁰³. The consequences were felt for a long time:

⁹⁸ Jung, Hsiung-Shen, and Jui-Lung Chen. "Causes, Consequences and Impact of the Great Leap Forward in China." Asian Culture and History 11, no. 2 (2019): 58-67. Available on: doi:10.5539/ach.v11n2p58. Accessed March 4,2023

⁹⁹ Lee, H. P. "A Brief Analysis of the Causes of the Formation of the United Front of Our Party during the Liberation War." Monthly of CPC History in Fujian 4 (2009): 22-24.

¹⁰⁰ Pei, Y. R. "40 Million People Starving to Death, From Great Leap Forward to Famine." 21st Century Bimonthly 4 (2008): 45-50.

¹⁰¹ Jung, Hsiung-Shen, and Jui-Lung Chen. "Causes, Consequences and Impact of the Great Leap Forward in China." Asian Culture and History 11, no. 2 (2019): 58-67. Available on: doi:10.5539/ach.v11n2p58. Accessed March 4, 2023

¹⁰² Chu, H. M. "Current Crisis of the CPC Regime." In Chu et al. (Ed.), Mainland China Studies, 227-234. Taipei: Wunan Publishing Press, 1985.

¹⁰³ Tsai, F., & Du, Y. "Destructive Effects of Cultural Revolution on Physical and Human Capital." China Economic Quarterly 2, no. 4 (2003): 795-806.

after the end of the "Great Leap Forward", it took five years to put the national economy in order before it was restored to the level of 1957¹⁰⁴.

3.2 The evolution of property rights. Post-Mao reforms

After the death of Mao Zedong, most of the leaders of the Communist Party of China (CPC) were united and convinced that the only way to preserve the power and unity of the country is to improve living standards for the majority of the population¹⁰⁵. After a short political struggle, Deng Xiaoping, one of the few party leaders who criticized the deployment of accrelerated collectivization and the survivors of the Cultural Revolution, became the head of the party. Deng Xiaoping proclaimed a departure from the Stalinist rigid model of socialism towards "socialism with Chinese characteristics"¹⁰⁶, and initiated the beginning of reforms, which also included such processes as the relative liberalization of market relations, reducing the influence of the state on the economic sector, the possibility and admission of transactions of private property and its very appearance, as well as involvement in international trade¹⁰⁷. An additional incentive for China was the fact that in the late 1970s - early 1980s, among post-confessional and ethnic brethren in East Asia, such as Taiwan, Singapore, Hong Kong and South Korea, there was a fairly rapid economic growth¹⁰⁸. The transition from the hard Maoist line to the soft line of "socialism with Chinese characteristics" marked the beginning of reforms, which ultimately led to the fact that from now on individuals and collectives were freed from the dictates of the state and had the opportunity to follow their interests and make appropriate decisions. The reforms led to the liberalization of the political, economic, social and legal aspects of Chinese life, the decentralization of the market towards market relations¹⁰⁹, which made China what it is now.

The reforms that followed Mao Zedong's death, known as the post-Mao reforms, were divided into two stages, the delegation of authority and the creation of so-called " system of contractual responsibility of households ", which will be written about later.

¹⁰⁴ Jung, Hsiung-Shen, and Jui-Lung Chen. "Causes, Consequences and Impact of the Great Leap Forward in China." Asian Culture and History 11, no. 2 (2019): 58-67. Available on: doi:10.5539/ach.v11n2p58. Accessed March 4, 2023

¹⁰⁵ Goldman, Merle, and Roderick MacFarquhar (eds.). The Paradox of China's Post-Mao Reforms. Cambridge, MA: Harvard University Press, 1999.

¹⁰⁶ He, Z. (2022). On the theoretical features of the political economy of socialism with Chinese characteristics and the new issues. World Review of Political Economy, 13(3), 361-373.

¹⁰⁷ Goldman, Merle, and Roderick MacFarquhar (eds.). The Paradox of China's Post-Mao Reforms. Cambridge, MA: Harvard University Press, 1999.

¹⁰⁸ ibid

¹⁰⁹ ibid

The main feature of the reforms was that it included, in addition to all the above measures, the gradual introduction of the concept of private property, although with a specific formulation, not contrasting with the socialist ideology.

Thus, the reforms did not affect the basic principles, and fixed that the only absolute owner of property in China is the state. All land belongs either to the state or to agricultural institutions¹¹⁰. The state has the opportunity to requisition land to the state fund in the "public interest"¹¹¹. The term "public interests" is very ambiguous, and it turns out that the biggest threat to private property rights is the possibility of seizure by the state, despite the fact that the state in this case undertakes to pay compensation¹¹².

But nevertheless, thanks to the reforms, the state allowed the land to be given for private use. Thus, to some extent, the State has recognized that a private party may have the right to use state-owned land in such a way as to create a valuable market commodity¹¹³. The private party has the right to use the land, guided by its own interests. Thus, the state grants the property right to a private party to use and dispose of land, giving it an incomplete package of rights emanating from property rights. Thus, for commercial and industrial purposes, the state provides land for private use for a period of 40 to 50 years; for residential purposes up to 70 years, with the right to extend¹¹⁴.

Nevertheless, such a specific "recognition" of property rights was also enshrined in the country's Constitution in the late 1970s, and importantly, the state allowed the transaction of property rights¹¹⁵, which immediately increased the flow of investment, and accelerated the pace of innovation, which contributed to the development of the country's economy, in accordance with the principles of the R. Posner model. Despite the fact that the chinese model is specific in relation to the recognition of property rights, which significantly distinguishes it from R. Posner's model, with clearly defined property rights, due to the explanatory and predictive ability of R. Posner's model, R. Posner's model predicted with sufficient accuracy the probability of subsequent events that will occur in China. The hypothetical model coincided with the real model, despite some deviations. The recognition of property rights, in this case, although specific, stimulated individuals and small groups of individuals to improve assets, the

¹¹⁰ Long, Q. (2009). Reinterpreting Chinese Property Law. Southern California Interdisciplinary Law Journal, 19, 55-92.

¹¹¹ ibid

¹¹² ibid

¹¹³ ibid

¹¹⁴ Randolph, P. A., & Lou, J. (2000). Chinese Real Estate Law. Kluwer Law International, 85-93

¹¹⁵ 1. China. Constitution of the People's Republic of China 1982 (amended in 1988), art. 10, promulgated by the Standing Committee of the National People's Congress . Available on: https://english.www.gov.cn/archive/lawsregulations/201911/20/content_WS5ed8856ec6d0b3f0e9499913.html. Accessed March 29, 2023

rights to manage and use which were transferred by the state, in accordance with article 10 of the Constitution of PRC, invest in them, in order to use it most effectively for increasing utility.

China has become one of the fastest growing economies in the world. To demonstrate this phenomenon: from 1979 to 2017, that is, since the beginning of economic reforms and partial recognition of property rights, the level of real Gross Domestic Product (GDP) in China increased annually by an average of 10% per year, which demonstrates a unique constant growth rate, unprecedented before¹¹⁶.

Thanks to the partial recognition of private property rights, Deng Xiaoping laid the foundations for achieving his goal: according to the World Bank, about 800 million people got out of poverty¹¹⁷. The reasons for this phenomenon, based on observations, researchers agree and name two significant factors: a sharp increase in household productivity and an increase in capital investments and inovations¹¹⁸. From the point of view of observations in the context of R. Posner's model, despite the specificity of the chinese model, these factors are a direct social consequence of the specific recognition of private property and the possibility of transactions, the creation of a legal framework for transactions of private property rights, since with the advent of private property securing individual benefits from a certain resource, an individual has an incentive to invest in his resource, as well as using it as effectively as possible for yourself, which follows from the provisions of Richard Posner's model.

The first stage in which the delegation of authority was carried out is that the government initiated reforms concerning state-owned enterprises (SOEs), including industrial ones in the field of coal mining, heavy metals mining and other areas. It is a well-known fact that under the old party system, analogous to the Maoist system until 1976, the state completely owned industrial enterprises, and completely took over management through the level layer of the commune leadership.

As a result of the reform of the system, the party delegated its authority to manage enterprises to private management, as if "hiring them" in management, but giving them full autonomy. Employees and directors of state-owned enterprises ("SOEs") are given the opportunity to receive personal economic remuneration for themselves, within the framework of the so-called right of the excractor in the private property system¹¹⁹. This means that the state, in addition to

 ¹¹⁶ Congressional Research Service. China's Economic Rise: History, Trends, Challenges, and Implications for the United States. 2009. Available on: https://sgp.fas.org/crs/row/RL33534.pdf. Accessed February 14, 2023
 ¹¹⁷ World Bank. China Overview 2017. Available on: http://www.worldbank.org/en/country/china/overview. Accessed May 5, 2023

 ¹¹⁸ Congressional Research Service. China's Economic Rise: History, Trends, Challenges, and Implications for the United States. 2009. Available on: https://sgp.fas.org/crs/row/RL33534.pdf. Accessed February 14, 2023
 ¹¹⁹ Hu, Xiaobo. Problems in China's Transitional Economy: Property Rights and Transitional Models. World Scientific & Singapore University Press, 1998.

delegating powers, as well as granting autonomy, has secured by a legal institution the possibility for employees and directors to keep part of the profit for themselves within the right of the excractor in the structure of private property. From now on, individuals, in this case, employees of the enterprise, themselves disposed of this asset, and thanks to the stimulation from the state, in the form of the right of the excractor, they disposed in the most effective way, due to the understanding that the legal institution fixed the procedure for obtaining benefits from the enterprise. The culmination of this reform was the adoption in 1988 of the "Law on Industrial Enterprises Belonging to the Whole People"¹²⁰.

Thus, drawing analogies with R. Posner's model, an individual, as a maximizer of his utility, will allocate and use resources in a way that best suits his interests. In the framework of stateowned enterprises (SOEs), similarly, employees of the enterprise will use the resource given by the state in the most efficient way, since this corresponds to the desire for economic benefit. The concept of market ownership was introduced to replace the system of state ownership¹²¹, which immediately bore fruit. State-owned enterprises were reanimated, turning from unprofitable to profitable. According to the SASAC Review 2009', the total assets of stateowned enterprises of the type (SOEs) by the beginning of 2003 reached a massive 19,710.3 billion yuan, and for the period up to 2009, reached the mark of 53,537.2 billion yuan.¹²² The total revenue of state-owned enterprises (SOEs) increased from 10,734 billion yuan to 24,200.8 billion yuan over the same period, recording an annual growth of 14.5%; and the total profit increased from 495.1 billion yuan to 1570.3 billion yuan, which is 21.2% more year-on-year¹²³. As a result of this improvement in indicators, tax deductions of state-owned enterprises increased from 810.5 billion yuan in 2003 to 2,279.6 billion yuan in 2009, with an average annual growth of 18.8 percent¹²⁴. These phenomenal indicators are a consequence of the ability to dispose of property in accordance with the right of the exctractor, which is essentially a partial recognition of private property.

The second stage of the reform carried out by Deng Xiaoping is that the state grants the property right to use agricultural land, which is also in collective ownership, by introducing a "system of contractual responsibility of households¹²⁵".

¹²⁰ China. Law on Industrial Enterprises Belonging to the Whole People 1979, promulgated by the Standing Committee of the National People's Congress. Available on: http://www.npc.gov.cn/zgrdw/englishnpc/Law/2007-12/12/content 1383921.htm. Accessed April 12, 2023

¹²¹ Long, O. (2009). Reinterpreting Chinese Property Law. Southern California Interdisciplinary Law Journal, 19, 55-92.

¹²²State-owned Assets Supervision and Administration Commission of the State Council SASAC Review 2009. Available on: http://www.sasac.gov.cn/n1180/n13307665/n13307681/n13307749/13333552.html. Accessed May

^{1,2023}

¹²³ ibid 124 ibid

¹²⁵ Long, Q. (2009). Reinterpreting Chinese Property Law. Southern California Interdisciplinary Law Journal, 19, 55-92.

The "system of contractual responsibility of households" implies a system where the state provides land for collective use to the commune, and the collective of the commune, in turn, distributes and provides land to households for a certain period, in accordance with certain conditions, which also include the number of employees, allowing, after meeting certain quotas¹²⁶, to preserve and dispose of surplus in accordance with their own interests. Thus, each individual in the collective has the right to dispose of property that is protected by the legal system from external interference, to the extent that it corresponds to their interests, and with the advent of the form of ownership, there is an incentive to invest and innovate in this form of ownership, since there is a benefit factor. The more efficient the use of land, the more likely it is to maximize the benefits.

Thus, the main purpose of establishing a "system of contractual responsibility of households" is to restore the individual household and replace the production and command system as a unit of production and accounting in rural areas¹²⁷.

It was first applied in Anhui Province long before the post-Mao reforms in 1978, secretly, and led to great positive results¹²⁸. So, during the year of the implementation of this system, Shaxiang Commune of Anhui Province reported an increase in grain production by 12.5%, while production teams in Huxian County, which used the household responsibility system, increased grain production by 35.7%¹²⁹.

On the scale of the whole of China, after the widespread introduction of the system, it is estimated that the cost of China's agricultural output increased by 42.23% in constant prices from 1978 to 1984, of which half of the growth is due to the replacement of the collective farming system with the household responsibility system¹³⁰. In 1949, per capita grain production in China was only 209 kg, and in 1973 it barely exceeded 300 kg. In 1984, the share of grain per capita was approaching 400 kg¹³¹. Such a rapid increase became possible, largely thanks to the "system of contractual responsibility of households."

Despite the uniqueness of the chinese model, due to the influence of a number of factors, such as socialist ideology, cultural and religious confucian aspects, as well as the factor of partial recognition of property rights in China, the factor of maintaining a strong presence of the state in SOEs, the factor of a high probability that the state can requisition property back for public

¹²⁶ Huang, F. X. (2004). The Path to Clarity: Development of Property Rights in China. Columbia Journal of Asian Law, 17, 191-216.

¹²⁷ Lin, J. Y. (1992). The Household Responsibility System Reform in China: A Peasant's Institutional Choice. The American Economic Review, 82(1), 140-145.

¹²⁸ ibid

¹²⁹ ibid

 ¹³⁰ Lin, Y. (1992). System, technology and agricultural development in China. Shanghai Sanlian Bookstore Press.
 ¹³¹ Cangshu, L. (2020). How Household Contract Responsibility System Promotes Poverty Alleviation? Retrieved from https://www.cnki.net/kcms/doi/10.16183/j.cnki.jfe.2020.10.004.html

reasons, thereby controlling market participants relations (it is appropriate to recall the story of entrepreneur Jack Ma, who in 2020 criticized Chinese financial regulators, after which, the entrepreneur did not go public for a long time, and the Alibaba subsidiary Ant company canceled a stock market offering worth 26 billion pounds, which could have become the largest in the world if it had not been canceled at the last minute by the chinese authorities, who referred to "serious problems" with the regulation of the firm¹³²) economic analysis of the law played an important role, due to its explanatory and predictive power, in the construction of a legal system corresponding to a focus on market relations. Due to the evaluative ability of the economic analysis of law, due to the use of microeconomic analysis tools, the economic analysis of rights monitored the effectiveness of certain laws in promoting economic growth.

CONCLUSION

The author described within the framework of the interdisciplinary movement "Law and Economics", the bases on which an individual is guided when making a decision: the desire for maximizing own utility and the desire to mitigate the impact of an noncalculable risk in the form of uncertainty, and also described the framework in which an individual must make decisions, that is, limited resources. In order to avoid various attacks towards the unreality of such bases in everyday life, the author provided arguments, and also conducted a case study, where author determined that the digressions listed above in the first chapter are ultimately not only relevant to use for studying the behavior of individuals in everyday life, but also relevant to all aspects of an individual's life, such as within the framework of market relations, as well as non-market ones. Further, the author, collecting all the bases and principles of microeconomic theory, according to the definition of an individual's social behavior, as a maximizer of own utility, combined an economic model with a legal model into one model, introducing the concept of transaction costs, from which it became clear that law must be considered as a social tool necessary for society, that is, individuals for effective resource allocation, which ultimately leads to an increase in self-benefit (utility) for the individual maximizer. Since resources are finite and limited, individuals respond to incentives that are regulated by law, thereby increasing or decreasing transaction costs through the institution of law, law has a lever to influence public behavior, since the behavior of society is evaluated and explained by economic principles. Thus, the concept of incentive is a point of contact between legal discipline and economic principles. Starting from this statement, along the way, giving an

¹³² Nicholas Yong "China orders tech giants to end anti-competitive practices." BBC (2021, December 16). Accessed Februaty 13, 2023. Available on: https://www.bbc.com/news/world-asia-china-65084344.

example of the situation with the real estate market in Mumbai, India, where the real estate market is paralyzed, since there is no equilibrium of prices that would suit both landlords and tenants, due to stimulation from the legal institution, landlords lack an incentive to develop their property and invest in it, since it he will not rent out his real estate at a favorable price for him. Using this example, the author, using models of economic analysis of law, determined the boundaries of law and the nature of interaction between the legal regulator and the economic component. Further, the author focused on the model of the Richard Posner, since its construction gave a clear answer to the research question. R. Posner argued that the only tool for assessing the law is efficiency, how effectively the law distributes resources among individuals, reducing transaction costs, so deeply will the effect of this right on the social behavior of individuals. And the means of assessing the depth of the right to social behavior is the principles of microeconomic theory. But, in addition to evaluating ability, the principles of microeconomic theory have predictive ability, which is an important part of the answer to the research question. This emphasizes the analysis of the economic and legal aspects of property law in the framework of the economic analysis of the law of Richard Posner's model. The theoretical conclusions that were demonstrated at the end of the second chapter of the study, about the impact of the recognition of property rights on the volume of investment and innovation, were similar to the real consequences of the recognition of property rights in China after collectivization, within the framework of reforms. In the theoretical part of the study of property rights, the R.Posner model revealed the relationship between law and the economic component, since the model revealed that a clear designation of property rights encourages individuals to invest in their property and use it in the most effective way, since a clear designation of property rights gives individuals confidence that their property is protected and they they can use it in the future. In the empirical part of the study of property rights in China, this conclusion was generally justified. The partial recognition of property rights in China, within the framework of socialist ideology, the admission to the use of property stimulated the residents of collectives in China to develop and invest in assets, since this corresponds to the goal of obtaining benefits for the individual maximizer of their benefits. The figures provided in the empirical part of the study fully justify the influence of law on the social behavior of individuals.

These conclusions of the study make it possible to answer the research question by claiming that the economic component, as a fairly accurate tool for evaluating the effectiveness of the right to social behavior, as well as a tool for modeling and predicting the consequences of the right to social behavior, should be the primary basis on which the law should be based and developed, since the principles of microeconomic theory have the ability to fairly correctly predict the impact of law on people's social behavior.

BIBLIOGRAPHY

Primary sources

Legislation

China. Constitution of the People's Republic of China 1982 (amended in 1988), art.
 promulgated by the Standing Committee of the National People's Congress .
 Available on:

https://english.www.gov.cn/archive/lawsregulations/201911/20/content_WS5ed8856e c6d0b3f0e9499913.html. Accessed March 29, 2023

- China. Law on Industrial Enterprises Belonging to the Whole People 1979, promulgated by the Standing Committee of the National People's Congress. Available on: <u>http://www.npc.gov.cn/zgrdw/englishnpc/Law/2007-12/12/content_1383921.htm</u>. Accessed April 12, 2023
- 3. China. The System of Contractual Responsibility of Households 1978, promulgated by the Central Committee of the Communist Party of China and the State Council.
- India. Control of Prices for Residential Buildings Act 1947 (1 May 2021), published in Gazette of Maharashtra, Extraordinary, Part IV, Section 4. Available on: <u>https://www.indiacode.nic.in/bitstream/123456789/4655/1/rentshotelact.pdf</u>. Accessed March 12, 2023

Case-law

1. Sturges v. Bridgman, 11 Ch D 852 CA (1879).

Secondary sources

Books and chapters

- Becker, Gary S., and Guity Nashat Becker. The Economics of Life: From Baseball to Affirmative Action to Immigration, How Real-World Issues Affect Our Everyday Life. New York: McGraw-Hill, 1997.
- 2. Bray, David. Social Space and Governance in Urban China: The Danwei System from Origins to Reform. Stanford, CA: Stanford University Press, 2005.
- 3. Cooter, Robert, and Thomas Ulen. Law and Economics. 6th ed. Boston: Pearson, 2019
- Ely, Richard T. *Political Economy*. In Political Economy, Political Science and Sociology, edited by Richard T. Ely, New York: Macmillan, 1899.
- Goldman, Merle, and Roderick MacFarquhar. *The Paradox of China's Post-Mao Reforms*. Cambridge, MA: Harvard University Press, 1999.
- 6. Hu, Xiaobo. Problems in China's Transitional Economy: Property Rights and Transitional Models. Singapore: World Scientific & Singapore University Press, 1998.
- 7. James, Paul. Urban Sustainability in Theory and Practice. New York: Routledge, 2015.
- Kaplow, Louis and Steven Shavell. *Economic Analysis of Law*. In Handbook of Public Economics, edited by Alan J. Auerbach and Martin Feldstein, Vol. 3, 1661-1784. Elsevier, 2002. ISSN 1573-4420. ISBN 9780444823144. Accessed February 25, 2023
- 9. Keynes, John Maynard. A Treatise on Probability. London: Macmillan and Co., 1921.
- MacCormick, Neil. Law and Economics: Adam Smith's Analysis. In Legal Right and Social Democracy: Essays in Legal and Political Philosophy. Oxford: Oxford Academic, 1984. Accessed April 17, 2023. Available on: https://doi.org/10.1093/acprof:oso/9780198255024.003.0006
- 11. Miceli, Thomas J. *The Economic Approach to Law*. 2nd ed. Stanford: Stanford University Press, 2008.
- 12. Oi, Jean Chun, and Andrew George Walder. *Property Rights and Economic Reform in China*. Stanford: Stanford University Press, 1999.
- 13. Parisi, Francesco. *The Oxford Handbook of Law and Economics: Volume 1: Methodology and Concepts.* New York: Oxford University Press, 2017.
- Posner, Richard A. *Economic Analysis of Law*. 9th ed. New York: Wolters Kluwer, 2014.
- 15. Posner, Richard A. *The Problematics of Moral and Legal Theory*. Cambridge: Belknap Press of Harvard University Press, 1999.
- 16. Sun, Yan. *The Chinese Reassessment of Socialism, 1976-1992.* Princeton: Princeton University Press, 1995.

- Tversky, Amos, and Daniel Kahneman. Judgment Under Uncertainty: Heuristics and Biases. In Judgment Under Uncertainty, edited by Daniel Kahneman, Paul Slovic, and Amos Tversky, 3-27. Cambridge: Cambridge University Press, 1982.
- 18. Zamir, Eyal, and Doron Teichman, *The Oxford Handbook of Behavioral Economics and the Law*. Oxford University Press, 2014.

Articles

- Allen, Douglas W. "Marriage and Divorce: Comment." *American Economic Review* 82 (1992) pp.679-685.
- Anderson, C. David. The Yale Law Journal 82, no. 6 (1973): 1355–62. https://doi.org/10.2307/795568. Accessed January 11, 2023
- 3. Cangshu, L. "How Household Contract Responsibility System Promotes Poverty Alleviation?" *Journal of Financial Research*, *10*, (2020) pp. 33-46.
- 4. Cass R., Christine Jolls, and Richard H. Thaler. "A Behavioral Approach to Law and Economics." *Stanford Law Review* 50, no. 5 (1998). pp. 1471-1550.
- Chen, James. "Heuristic." Investopedia. Last modified September 21, 2022. Accessed March 22, 2023. Available on: https://www.investopedia.com/terms/h/heuristic.asp.
- Cheng, Cyan Jingru. "Collectivisation, paradox and resistance: the architecture of people's commune in China." *The Journal of Architecture* 27, no. 7-8 (2022) pp. 913-926. Available on: <u>https://doi.org/10.1080/13602365.2022.2158207</u>. Accessed 2 March 2023
- Christensen, Laurits R., Dale W. Jorgenson, and Lawrence J. Lau. "Transcendental Logarithmic Production Frontiers." The Review of Economics and Statistics 55, no. 1 (1973): 28–45. <u>https://doi.org/10.2307/1927992</u>. Accessed March 14, 2023
- Chu, H. M. "Current Crisis of the CPC Regime." In Chu et al. (Ed.), *Mainland China Studies*, 227-234. Taipei: Wunan Publishing Press, 1985.
- Coase, Ronald. H. "The Problem of Social Cost". The Journal of Law and Economics, 3(1), (1960) 1-44. <u>https://doi.org/10.1086/466560</u> Accessed April 22, 2023
- Cohen, Paul A. "The Post-Mao Reforms in Historical Perspective." *The Journal of Asian Studies* 47, no. 3 (1988) pp. 519-41. 1988 by the Association for Asian Studies, Inc.
- Demsetz, Harold. "Toward a Theory of Property Rights." The American Economic Review 57, no. 2 (1967). pp. 347–59. <u>http://www.jstor.org/stable/1821637</u>. Accessed May 1, 2023

- Dev, Satvik, and Pramila Datta Dey. "Rent Control Laws in India: A Critical Analysis." NIUA Working Paper 06-04. National Institute of Urban Affairs, New Delhi, 2006.
- Dirlik, Arif. "Postsocialism? Reflections on 'socialism with Chinese characteristics'." Bulletin of Concerned Asian Scholars 21, no. 1 (1989): pp. 33-44. Available on: 10.1080/14672715.1989.10413190. Accessed April 22, 2023
- Harcourt, G. C. "The Rate of Profits in Equilibrium Growth Models: A Review Article." Journal of Political Economy 81, no. 5 (1973). pp. 1261–77. Available on: <u>http://www.jstor.org/stable/1830656</u>. Accessed February 17, 2023.
- He, Z. "On the theoretical features of the political economy of socialism with Chinese characteristics and the new issues." *World Review of Political Economy*, 13(3), (2022) pp. 361-373.
- 16. Huang, Frank Xianfeng. "The Path to Clarity: Development of Property Rights in China." *Columbia Journal of Asian Law 17* (2004): pp. 191-216.
- 17. Jung, Hsiung-Shen, and Jui-Lung Chen. "Causes, Consequences and Impact of the Great Leap Forward in China." *Asian Culture and History* 11, no. 2 (2019) pp.58-67. Available on: doi:10.5539/ach.v11n2p58. Accessed 4 March, 2023
- Kim, E. Han, Adair Morse, and Luigi Zingales. "What Has Mattered to Economics Since 1970." *Journal of Economic Perspectives 20*, no. 4 (2006): pp. 189-202.
- 19. Klein, Daniel B. and John Robinson. "Property: A Bundle of Rights? Prologue to the Property Symposium." *Journal of Economic Perspectives 1*, no. 1 (1987): pp. 139-144.
- Kuan, H. K. "People's Commune in Chinese Mainland in 1958 and Its Conceptional Origin." *East Asia Studies* 33, no. 2 (2002). pp.1-10.
- 21. Lee, H. P. "A Brief Analysis of the Causes of the Formation of the United Front of Our Party during the Liberation War." *Monthly of CPC History in Fujian* 4 (2009): 22-24.
- 22. Li, Xin and Kjeld Erik Brødsgaard. "SOE Reform in China: Past, Present and Future." *The Copenhagen Journal of Asian Studies*, vol. 31, no. 2, 2013.
- 23. Lin, J. Y. "The Household Responsibility System Reform in China: A Peasant's Institutional Choice." *The American Economic Review*, 82(1), (1992) pp.140-145.
- 24. Lin, Justin Yifu. "The Household Responsibility System Reform in China: A Peasant's Institutional Choice." *American Journal of Agricultural Economics, vol.* 69, no. 2, 1987, pp. 410-415.
- 25. Long, Q. (2009). "Reinterpreting Chinese Property Law." Southern California Interdisciplinary Law Journal, 19, pp. 55-92.
- 26. Lü, Xiaobo, and Elizabeth J. Perry, "Danwei: The Changing Chinese Workplace in Historical and Comparative Perspective". New York: M. E. Sharpe, 1997.

- 27. Mankiw, N. Gregory. "A Pigouvian Tax on Carbon Emissions." Harvard Environmental Law Review 29, no. 2 (2005). pp. 313-333. Accessed April 14, 2023. Available on: <u>https://scholar.harvard.edu/files/mankiw/files/carbon_tax.pdf</u>.
- Nicholas Yong "China orders tech giants to end anti-competitive practices." BBC (2021, December 16). Accessed Februaty 13, 2023. Available on: https://www.bbc.com/news/world-asia-china-65084344.
- 29. Pei, Y. R. "40 Million People Starving to Death, From Great Leap Forward to Famine."21st Century Bimonthly 4 (2008) pp. 45-50.
- Polinsky, A. Mitchell, and Steven Shavell. "Economic Analysis of Law." Stanford Law School John M. Olin Program in Law and Economics Working Paper No. 316 (November 2005). Accessed April 20, 2023. Available on: <u>http://ssrn.com/abstract=859406</u>.
- 31. Randolph, P. A., & Lou, J. (2000). "Chinese Real Estate Law". Kluwer Law International, pp. 85-93
- 32. Rowe, Peter G., Ann Forsyth, and Ye Kan Har. "China's Urban Communities: Concepts, Contexts, and Well-Being". Berlin: Birkhäuser, 2016.
- Simon, Herbert A. "A Behavioral Model of Rational Choice." *The Quarterly Journal of Economics* 69, no. 1 (1955). pp. 99-118.
- 34. Tandel, Vaidehi, "Decline of rental housing in India: the case of Mumbai." International Journal of Housing Markets and Analysis 13, no. 1 (2020). pp. 44-57.
- 35. Tsai, F., & Du, Y. "Destructive Effects of Cultural Revolution on Physical and Human Capital." *China Economic Quarterly* 2, no. 4 (2003) pp.795-806.
- 36. Tsaoussi, Aspasia. "The Economics of Family Law." SSRN (2007), Available on: <u>https://dx.doi.org/10.2139/ssrn.1116386</u> Accessed March 29, 2023
- 37. Weiss, Deborah M. "Paternalistic Pension Policy: Psychological Evidence and Economic Theory." *University of Chicago Law Review* 58 (1991). pp.1275-1315.

Websites

- "No-fault Divorce." Legal Information Institute, Cornell Law School, Accessed April 22, 2023, <u>https://www.law.cornell.edu/wex/no-fault_divorce</u>
- "Winners of the Nobel Prize for Economics." Encyclopædia Britannica. Accessed April 20, 2023. <u>https://www.britannica.com/topic/Winners-of-the-Nobel-Prize-for-Economics-1856936</u>.

Official documents and reports

- Congressional Research Service. China's Economic Rise: History, Trends, Challenges, and Implications for the United States. 2009. Available on: https://sgp.fas.org/crs/row/RL33534.pdf. Accessed February 14, 2023
- National bureau of Statistics. *China Statistical Yearbook 1981*. Beijing China Statistics Press, 1982.
- State-owned Assets Supervision and Administration Commission of the State Council SASAC Review 2009. Available on: <u>http://www.sasac.gov.cn/n1180/n13307665/n13307681/n13307749/13333552.html</u>. Accessed May 1, 2023
- 4. World Bank. *China Overview* 2017. Available on: <u>http://www.worldbank.org/en/country/china/overview</u>. Accessed May 5, 2023