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THE EVOLUTION OF THE ECONOMIC ANALYSIS AND ITS INFLUENCE ON THE THEORY OF ECONOMIC REGULATION

Abstract

The economic analysis of law transformed legal scholarship by applying price theory and rational choice assumptions to the analysis of legal rules and institutions. This methodological innovation fundamentally reshaped the theory of economic regulation, moving it from normative public interest models toward positive explanations of regulatory outcomes. The primary aim of instituting economic regulation is to safeguard the efficient functioning of the market, prevent deceptive practices and negative spill over effects, while ensuring level playing field and consumer rights. However, economic regulation and market operations are not without flaws, often resulting in a mix of positive outcomes and unintended burdens, including implementation costs and potentially detrimental repercussions. This paper endeavours to revisit the foundational concepts of the theory of economic regulation, which originated from the economic analysis of legal frameworks. The theory emerged from the necessity to conduct empirical evaluations of the costs and benefits associated with specific legislative measures. Furthermore, it operates within the broader economic and social contexts that are not only dynamic but also exhibit cyclical patterns. The purpose of this paper is twofold, firstly, to analyse the pivotal thinkers who have significantly influenced the formation of this scholarly theory and to scrutinize their contributions

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to the advancement of economic regulation theory; and secondly, to extract insights and offer guidance that are applicable to contemporary economic regulatory practices.

Key words: economic analysis of law, theory of economic regulation, market regulation

I. INTRODUCTION

Since 1950s the relationship between law and economics has undergone a profound transformation. Before the mid-twentieth century, economics and legal scholarship operated largely as separate domains. Evolution of economic analysis of law as a distinct field of inquiry dissolved this boundary, applying the tools of microeconomic analysis to virtually every aspect of the legal system—from property and contracts to torts, criminal law, and civil procedure¹. Before this development, the dominant framework for understanding regulation was the "public interest" theory: regulation is created to correct market failures. The economic analysis of law challenged this narrative on positive and normative grounds; positively - whether regulation actually achieved its stated goals, and normatively - whether government intervention could improve upon market outcomes given the incentives facing regulators and regulated interests?² The government usually intervenes in economy (like a proverbial *deus ex machina*) by using economic regulation to prevent or alleviate market failures and negative externalities, reduce asymmetric information's or to protect consumers. There are many types of regulation and traditionally economists classify different types of regulation to the categories of "economic, social, or process regulation"³. Economic regulation imposes entry, exit and price controls on specific industries.

¹ Grembi, V. (2012). The Imperialistic Aim of Economics: At the Origin of the Economic Analysis of Law. SSRN Working Paper.

² Kroszner, R. S. (2015). Unintended Consequences: Origins of an Enduring Idea. Chicago Booth Review. Retrieved on 22.5.2026. from: <https://www.chicagobooth.edu/review/unintended-consequences-origins-of-an-enduring-idea>

³ Hahn, R. W. (2000). Reviving Regulatory Reform, Washington D.C. AEI-Brookings Joint Center for Regulatory Studies, p. 7.

Social regulation imposes a number of environmental, public health and safety regulations on industries in order to correct market failures and imperfections. And finally process regulation regulates the behaviour of public and private sectors and often imposes paperwork and administrative costs on both of these sectors.⁴ Adam Smith famously wrote "It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest"⁵. Somehow, to everyone's great surprise the economists have observed that selfish interests of the economic actors (e.g., butchers, brewers, bakers and like) usually lead to market structures that are imperfect (monopoly, oligopoly, monopolistic competition) and not to the perfect competition. The imperfect market structures usually result in the unequal distribution of goods, services and income. The economic theory of regulation examines the rationale, mechanisms, and outcomes of regulatory policies implemented by governments in order to remedy market failures. Economic theory of regulation was influenced the Economic Analysis of Law, which uses microeconomic tools to analyse laws and their impact (effects) on society⁶. Economists usually divide market failures into three categories: "externalities, asymmetrical information, and monopoly"⁷. Usually, government intervenes in the economy to promote either efficiency or equity; economic efficiency can be defined as an optimal allocation of resources to maximize social welfare, effective regulation should correct market failures and enhance efficiency without imposing excessive costs on firms and consumers, equity on the other hand address distributional impacts of regulation on different groups within society.⁸ Effective regulation should promote fairness and avoid putting disproportionate burdens on vulnerable populations, which is no easy object to achieve.

⁴ Ibid.

⁵ Smith, A. (1977) *An Inquiry into the Nature and Causes of the Wealth of Nations*, Chicago, University of Chicago Press, p. 30.

⁶ Cooter, R. D., Ulen, T. (2012). *Law & Economics* sixth edition, Boston, Addison-Wesley.

⁷ Cooter, R. D., Gilbert, M. D. (2022), *Public Law and Economics*, Oxford, Oxford University Press, p. 31.

⁸ Mankiw, G. (2015). *Principles of Economics* seventh edition, Stamford, Cengage Learning;

II. ECONOMIC ANALYSIS OF LAW AND THEORY OF ECONOMIC REGULATION

One of the basic principles of economics is that people respond to incentives. By using regulation governments hope to encourage certain behaviours which they see as beneficial to society and to discourage behaviours which they see as harmful to society. Initially, economic regulation was viewed as an effective and cost-free method of correcting market failures to safeguard public interest. There are two types of mechanisms or instruments at governments disposal which can be used to address the problem of market failures⁹- price incentives and direct control of certain behaviour by introducing and imposing adequate regulation through legislation. Economists usually point out that “government can impose tax on various kinds of activities in order to decrease their attractiveness”¹⁰. Government can levy specific taxes on products which society views as harmful e.g., tax on cigarettes or alcohol. The second type of government intervention in the economic activity is the usage of laws, which would directly regulate economic behaviour. Antitrust laws are the best example of this approach. Ever since 1890s the governments have been using competition laws as means to promote competition and to reign in monopolies. Curbing the excessive market power of powerful economic players (firms) is the main rationale for state to intervene in the non-competitive market structures. The market structure which favours open competition usually results in efficient business practices.¹¹ Regulating competition and preventing monopolies from emerging is one of the topics which Legal science and Economics “share” and in which both scientific disciplines take interest.¹²

⁹ Viscusi, W. K., Harrington, J. J. Jr., Vernon, J. M. (2005) *Economics of Regulation and Antitrust*, Cambridge, The MIT Press.

¹⁰ *Ibid.*, p. 3.

¹¹ For more details see: Olson, M., Kahkonen, S. (eds) (2000) *A Not-so-dismal Science: A Broader View of Economics and Societies*, Oxford, Oxford University Press.

¹² Seitz, C. (2014). *Economic Principles in Antitrust Law in the Aftermath of the More Economic Approach* General Aspects, Current Issues and Recent

Traditional economic regulation was envisioned as protective measures against harm that could happen in certain aspects of economic activity and with consumers in mind. Before the advent of regulatory agencies, the consumer was protected by the old Roman law adage: *caveat emptoris*. Later the institute of warranty was developed with regards to durable commodities. The rules of origin were also introduced in order to safeguard the consumers. During the 1950s and early 1960s the economy became more complex with the development of aviation and telecommunication industries. These new industries were then regulated in order to safeguard the consumers and ensure that proper standards were in put in place under which they would operate. The regulatory trend turned in the early 1980s with the advent of deregulation during which some public monopolies in aviation, energy, and telecommunications were privatized, while other business sectors were liberalized (e.g., finances).¹³ Some scholars noticed that “freer markets were accompanied by more rules”¹⁴, since they need to be regulated due to economic and non-economic reasons.

The source of law and economics as a separate discipline can be traced back to the legal realism of the 1920s and 1930s. Legal realists challenged formalist conceptions of law as a self-contained system of logical rules, arguing instead that judicial decisions reflected social and economic considerations. Figures such as Karl Llewellyn and Felix Cohen emphasized that law served functional purposes and could not be understood apart from its real-world consequences.¹⁵ Parallel developments occurred in institutional economics, where economists such as John R. Commons and Robert Hale recognized that legal rules—property rights, contract enforcement, liability standards—shaped economic outcomes in fundamental ways. Hale, in particular, argued that the legal system's definition of property rights amounted to a distribution of bargaining

Developments. In: Mathis, K. (ed). (2014). *Law and Economics in Europe*, Dordrecht, Springer.

¹³ Gilardi, F. (2008). *Delegation in the Regulatory State Independent Regulatory Agencies in Western Europe*, Cheltenham, Edward Elgar.

¹⁴ *Ibid.*, p. 1.

¹⁵ Priest, G. (1993). The Origins of Utility Regulation and the Theories of Regulation Debate, *Journal of Law and Economics*, 36(1), p. 289–323.

power.¹⁶ Nevertheless, legal realism offered critique without constructive alternative, while institutional economics produced rich description without rigorous analytical models.

Actual development of the Economic analysis of Law in the 1960s enabled the development of Theory of Economic regulation. Economic analysis of law uses microeconomic tools in order to analyse and identify the effects of legal rules on the social outcome (s) and to determine if these outcomes are socially desirable or not.¹⁷ The sources of the scientific discipline of Economic Analysis of Law can be traced back to Beccaria and Bentham in 18th and early 19th century and their writings on crime.¹⁸ According to Shavell the key moment in the development of the Economic Analysis of Law happened in the 1960s when Coase wrote a paper on externalities; Becker wrote a paper on economic analysis of crime; Calabresi wrote on liability rules and accidents and Posner wrote a textbook *on Economic analysis of law* and founded Journal of Legal Studies.¹⁹ The scientific journals also played a pivotal role in the development Economic Analysis of Law. The pride of place among these journals belonged to the Journal of Law and Economics and the Bell Journal of Economics and Management Science, which were key publications in the advancement of economic analysis of law. Meanwhile, the Brookings Institution promoted analyses and public discussions on the interplay between the public and private sectors, as well as the impact of economic regulation and antitrust policies on the economy.²⁰ The 1960s were a time of buzzing regulatory activity. In 1946 USA Congress passed the Administrative Procedure Act which basically set the rules on how federal agencies and federal government could regulate. Ever since the time of Great Depression (early 1930s

¹⁶ Novak WJ. A Revisionist History of Regulatory Capture. In: Carpenter D, Moss DA, eds. Preventing Regulatory Capture: Special Interest Influence and How to Limit It. Cambridge University Press; 2013.

¹⁷ See more in: Cooter, R. D., Ulen, T. (2012). Law & Economics sixth edition, Boston, Addison-Wesley; Shavell, S. (2004). Foundations of Economic Analysis of Law, London, The Belknap Press of Harvard University Press.

¹⁸ Shavell, S. (2004). Foundations of Economic Analysis of Law, London, The Belknap Press of Harvard University Press.

¹⁹ Ibid. p. 4.

²⁰ Priest, G. (1993). The Origins of Utility Regulation and the Theories of Regulation Debate, Journal of Law and Economics, 36(1), p. 289–323.

onwards) the amount of regulation in USA was increasing. All of this lead many economists of the era to question the efficiency of the government's regulatory actions.

In their pioneering analysis of electricity regulation, Stigler and Friedland²¹ argue that regulation, intended to limit monopolistic harm and price discrimination, does not significantly impact electricity prices or industry dynamics and is therefore economically ineffective and unjustified. Their comparative analysis of prices and shareholder earnings in regulated versus unregulated contexts showed negligible differences, indicating regulation's minimal economic effect. They attribute this ineffectiveness to two main reasons: utility services do not maintain long-term monopolies due to potential competition from other energy sources or systems, and regulatory agencies struggle with information asymmetry, preventing accurate oversight of utility companies. They conclude that the electricity industry does not exhibit the conditions necessary for efficient regulation, such as high monopoly rates of return and prices significantly above long-term marginal costs.

Stigler's theory of economic regulation²² aims to identify which parties benefit and which bear the costs of regulation, as well as the overall effects of regulation. He uses the law of supply and demand to describe how regulation is demanded by industries seeking rights and benefits, and supplied through a political process where a small group (industry) secures privileges. According to Stigler, on one side, the state influences the economy via policies like state aid, entry control, and price setting, selectively aiding or harming industries. Politicians prioritize their own interests (re-election) over public interest, with regulation often serving industry interests. On the other side, industries prefer controlling competition entry over subsidies, which diminish over time due to increasing demand. The basic question that Stigler (and others) asked about regulation was if regulation made a difference in the behaviour of an (specific) industry?²³ Although Stigler's articles often posed more questions than

²¹ Stigler, G. J., Friedland, C. (1962). What can Regulators Regulate? Case of Electricity, 5 *Journal of Law and Economics*, 5, p. 1–16.

²² Stigler, G. J. (1971). The Theory of Economic Regulation, *The Bell Journal of Economics and Management Science*, 2(1), p. 3–21.

²³ Stigler, G. J., & Friedland, C. (1962). What Can Regulators Regulate? The Case of Electricity. *The Journal of Law & Economics*, 5, 1–16.

answers, his major contribution lay in developing a methodology that became widely adopted by economists, leading to a broader examination of regulation's impacts. For example, writings on the impact of regulation on wages²⁴ and the literature on the impact of regulation on oil price growth²⁵.

In his seminal paper Coase²⁶ used the same line of reasoning in his examination of the challenges related to radio communication and the regulation of this domain. Like Demsetz, he sees the state's role as promoting an efficient legal system, regulating property rights, and resolving disputes, rather than performing the functions of the Federal Communications Commission. He criticized the public interest theory for its lack of clear meaning and argues that regulatory agencies are too slow and inadequate to handle concession grants effectively. He advocates for introducing ownership rights and using a price mechanism to determine concession beneficiaries. Coase believes that the real issue is not excessive competition but the absence of proprietary rights over frequencies, which he views as a scarce resource similar to land, labour, or capital. According to Coase, these resources do not need government intervention but should rely on market pricing mechanisms. He suggests that ownership rights for frequencies should be established first, and interested bidders should compete based on price for the limited number of frequencies. Coase also pointed out that externalities were not separate policy issue and, emphasized out that many externalities could have private solutions as long as transaction costs were low. Coase also argued that problems, which make private solutions difficult will also make public solutions to the problem of externalities difficult and costly. Coase's analysis

²⁴ See for example: Hendricks, W. (1977). Regulation and Labor Earnings, *Bell Journal of Economics and Management Science*, 8, p. 483–496; Ehrenberg, R. G. (1979). *The Regulatory Process and Labor Earnings*, Academic Press, New York; Rose, N. L. (1987). Labor Rent Sharing and Regulation: Evidence from the Trucking Industry, *Journal of Political Economy*, 95, p. 1146–1178.

²⁵ Kalt, J. P. (1981). *The Economics and Politics of Oil Price Deregulation: Federal Policy in the Post Embargo Era*, MIT Press, Cambridge; Peltzman, S. (1993). George Stigler's Contribution to the Economic Analysis of Regulation, *The Journal of Political Economy*, 101(5), p. 818–832.

²⁶ Coase, R. H. (1959). The Federal Communications Commission, *Journal of Law and Economics*, 2, p. 1–40.

had three enduring contributions;²⁷ it placed transaction costs at the center of legal analysis, it established the comparative institutional approach: rather than comparing markets to an ideal of perfect competition, Coase insisted on comparing real markets to real legal institutions, and finally it provided an efficiency criterion for evaluating legal rules that did not require perfect competition assumptions.

Guido Calabresi, working independently of Coase, put forward economic reasoning applicable to the field of tort law. In his 1961 paper *Some Thoughts on Risk Distribution and the Law of Torts*²⁸ and 1970 monograph *The Costs of Accidents*²⁹, he proposed that the primary function of accident law is to minimize the full scope of social costs stemming from accidents. He established a three-category cost framework: primary costs (accident avoidance), secondary costs (loss distribution), and tertiary costs (administrative expenses). He argued that the common law's rules of negligence and strict liability could be understood as attempts to minimize the sum of these costs.³⁰

Gary Becker extended economic reasoning beyond traditional contexts to domains previously considered noneconomic: crime and punishment, marriage and divorce, racial discrimination, and addiction. In his 1968 article "Crime and Punishment: An Economic Approach,"³¹ Becker argued that criminals respond to incentives just as consumers and firms do. The optimal level of law enforcement trades off the marginal deterrence benefit of increased sanctions against their marginal enforcement costs.

²⁷ Grembi, V. (2012). *The Imperialistic Aim of Economics: At the Origin of the Economic Analysis of Law*. SSRN Working Paper.

²⁸ Calabresi, G. (1961). *Some Thoughts on Risk Distribution and the Law of Torts*. *The Yale Law Journal*, 70(4), 499–553.

²⁹ Calabresi, G. (1970). *The Cost of Accidents: A Legal and Economic Analysis*. Yale University Press.

³⁰ Wright, J. D. (2006). *Posner on the Overlapping Generations of Law and Economics. Truth on the Market*. Retrieved on 22.5.2026. from: <https://truthonthemarket.com/2006/07/31/posner-on-the-overlapping-generations-of-law-and-economics/?msg=fail&shared=email>

³¹ Becker, G. S. (1968). *Crime and Punishment: An Economic Approach*. *Journal of Political Economy*, 76(2), 169–217.

Becker's work exemplified what Veronica Grembi calls "economic imperialism"—the application of price theory to all forms of social activity.³²

Posner³³ defines economic regulation as taxes, state subsidies, and controls on tariffs and market entry. He criticizes the public interest theory for wrongly assuming that: markets need constant external intervention, regulation is cost-free, government is efficient, and regulation only affects monopolies. Posner argues it's hard to link public perception to law-making and that regulatory agencies often fail to set fair prices due to a lack of information. He also notes that the theory of economic regulation, which sees regulation as driven by interest groups, overlooks other influencing groups and that research in this area is inconsistent. He concludes that while neither theory fully explains economic regulation, the theory of economic regulation still has potential for further development, which was supported by numerous researchers in the field³⁴. Posner considers that common law and its doctrines in property, contracts, torts, and criminal law tend toward efficiency and can be understood as implicitly embodying wealth-maximization norms. Several mechanisms have been proposed to explain this tendency. One is evolutionary: inefficient rules generate litigation that selects them out of the legal system; efficient rules persist. Another is behavioral: judges, even without explicit economic training, may intuit efficient outcomes because inefficient rules create observable anomalies in case resolution.³⁵ The benefits of the regulation should be higher than the cost which it imposes on the

³² Grembi, V. (2012). The Imperialistic Aim of Economics: At the Origin of the Economic Analysis of Law. SSRN Working Paper.

³³ Posner, R. A. (1974). Theories of Economic Regulation, *The Bell Journal of Economics and Management Science*, 5(2), p. 335–358.

³⁴ Priest, G. (1993). The Origins of Utility Regulation and the Theories of Regulation Debate, *Journal of Law and Economics*, 36(1), p. 289–323; McCraw, T. K. (1975). Regulation in America: A Review Article, *Business History Review*, 49(2), p. 159–183; McCraw, T. K. (1984) *Prophets of Regulation*, Harvard University Press, Cambridge, Massachusetts, p. 300-311; Jordan, W. A. (1972) *Producer Protection, Prior Market Structure and the Effects of Government Regulation*, *Journal of Law and Economics*, 15(1), p. 151–176; Jarrell, G. A. (1978) *The Demand for State Regulation of the Electric Utility Industry*, 21(2) *Journal of Law and Economics*, p. 269–295.

³⁵ Klick J, Parisi F. *Functional Law and Economics*. In: White MD, ed. *Theoretical Foundations of Law and Economics*. Cambridge University Press; 2008, p. 41-54.

society. Critics noted that efficiency is not the only—or even primary—value of legal systems, which also embody distributional and corrective justice concerns. Moreover, the efficiency hypothesis applied primarily to common law, leaving statutory and regulatory law to be explained by other mechanisms.³⁶

Jordan³⁷ examined how regulation affects different industries. His findings show that regulation has a minimal impact on utilities but significantly affects transportation industries, leading to higher prices in air, rail, and road transport. Price discrimination benefited oligopolies and competitive firms but had little effect on natural monopolies. Overall, the study suggests that regulation often favours industries over consumers.

Although he did not use the instruments of economic analysis of law to analyse regulation, Hayek³⁸ was probably one of greatest critics of economic regulation. Hayek tried to explain that the political control of economic life through central planning and regulation would lead to the loss of personal and economic freedom for citizens of Western democracies. The war (World War II) has made Western democracies more similar to Nazi Germany and Fascist Italy in their regulation of economic activity. Therefore, Hayek proposed deregulation of economic activity as means of preserving individual freedom.

Olson did not research regulation *per se*, but rather built a theory of how interest groups organize and how they influence politics in their favour, especially by lobbying for favourable (regulatory) outcome. In his pioneering work “The Logic of collective action”³⁹ Olson tried to explain that it was easier for smaller groups to organize and to achieve their goals (lobbying in certain industries, etc), than for the larger ones, due to the free rider problem. He further expended this

³⁶ Wright, J. D. (2006). Posner on the Overlapping Generations of Law and Economics. Truth on the Market. Retrieved on 22.5.2026. from: <https://truthonthemarket.com/2006/07/31/posner-on-the-overlapping-generations-of-law-and-economics/?msg=fail&shared=email>.

³⁷ Jordan, W. A. (1972) Producer Protection, Prior Market Structure and the Effects of Government Regulation, *Journal of Law and Economics*, 15(1), p. 151–176.

³⁸ Hayek, F. (1944). *The Road to Serfdom*, London, Routledge.

³⁹ Olson, M. (1971) *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge, Massachusetts: Harvard University Press.

analysis with his book “Rise and decline of nations”⁴⁰ where he argued that groups such as steel producers, labour unions, etc have the incentive to form lobby groups which would influence public policy (regulation) in their favour.

III. MONOPOLY

One of the earliest examples of regulatory intervention by the state was addressing market irregularities caused by the rise of monopolies. The word monopoly comes from the Greek word *μόνος* - 'single' and *πωλεῖν*, - 'to sell'. The basic characteristic of the monopoly market is the absence of competition from the other economic actors. Monopoly is viewed as a threat both to competitive market and to consumers.

Schumpeter observed that the premodern economists did not develop the theory of monopoly, since the unit of business economy was firm of medium size, which was privately owned or was operating as a business partnership.⁴¹ Furthermore, Schumpeter emphasized the importance of industrial organization as a source of monopoly since large scale industrial organisations favour the emergence of monopolies. Monopolies arose when joint stock companies came into being in the 17th century England and Holland, since privately owned firms or partnerships were not economically strong enough to create monopolies, because they could not reap benefits of the economics of scale. Even during Schumpeter's life, the importance, he placed on large firms as agents and bringers of monopoly was challenged by other economists primarily by Ludwig von Mises.⁴²

One of the key aspects of monopoly is the fact that a firm or individual has the control over a particular product or service and the others can access it only on the monopolist's terms⁴³. Monopolies can arise due to the barriers (manmade and/or natural) to free market

⁴⁰ Olson, M. (1982) *The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities*. New Haven: Yale University Press.

⁴¹ Schumpeter, J. A. (1954). *History of Economic Analysis*. New York: Oxford University Press.

⁴² Gordon, R. L. (1994). *Regulation and Economic Analysis - A Critique over Two Centuries*, Dordrecht, Springer-Science+Business Media, B.V., p. 15.

⁴³ Friedman, M. (2002). *Capitalism and Freedom*, Chicago, Chicago University Press.

entry. Adam Smith noticed that the monopolist undersupplies the market and therefore can sell their products or services above the natural price; Smith points out that monopolies are beneficial for the firms or merchants, which enjoy them (either through grant by the monarch or parliament), but are not so advantageous to the inhabitants and merchants of the country which grants favoured status since they will limit competition.⁴⁴ First monopolies based on legal regulation arose as monarchs or governments awarded the exclusive rights to trade with foreign lands or to exploit natural resources to certain individuals or companies. The most famous examples of this practice were English and Dutch East Indian Companies, which had the exclusive right to trade with the Indian subcontinent and adjoining lands. This trade monopoly was the foundation of their wealth and influence. Klobuchar⁴⁵ pointed out that obtaining monopoly in England and later in British Empire either from king or the parliament involved shady practices such as corruption, lobbying and bribes by the beneficiaries of monopolistic position. The other form of royal patronage that could result in creation of monopoly was the grant of mining rights to certain families, or individuals. This is how Fugger's managed to secure the copper monopoly in Central Europe, when Maximilian I granted them mining rights in Tyrol in 1494, when he was no longer able to repay his debts to the family.⁴⁶

Monopolies are viewed as an inefficient way to organise markets since they eliminate competition, or to put it differently monopoly market suffers no competition, which has been viewed as one of the key ingredients of economic development and of Western success.⁴⁷ Unlike in competitive market (s) under monopoly there are no alternatives to monopolistic product. Monopoly, unlike monosomy, favours the seller, as it allows him/her to "capture much of the extra value that would otherwise accrue to consumer"⁴⁸. Some economists, among them Posner, argued that monopolies could cause recession,

⁴⁴ Smith, A. (1977) *An Inquiry into the Nature and Causes of the Wealth of Nations*, Chicago, University of Chicago Press.

⁴⁵ Klobuchar, A. (2022). *Antitrust*, New York, Alfred A. Knopf.

⁴⁶ Steinmetz, G. (2015). *The Richest Man Who Ever Lived: The Life and Times of Jacob Fugger*, New York, Simon & Schuster.

⁴⁷ Ferguson, N. (2018). *Civilization: The West and the Rest*, London, Penguin.

⁴⁸ Posner, R. A. (1999). *Natural Monopoly and Its Regulation*, Washington, Cato Institute.

since they created insufficient demand in the private sector, with a transfer of income from consumers to investors (monopolists) making things even worse. This is a typical case against the monopolistic practices, which were seen as one of the causes of Great Depression by many economists, politicians as well as general public of that era.⁴⁹ Monopoly profits, which are caused by cartelization or monopoly usually led to reduction in output - the deadweight cost of the monopoly. When a monopolist charges a price above marginal cost of production, potential consumers could decide that they value the good at more than its marginal cost but less than the monopolist's price. Some will choose not to buy the good. Because the value these consumers place on the good is greater than the cost of providing it to them, this result is inefficient, since the fewer production factors will be employed to produce less output than it would be socially optimal.

Governments usually have couple of aces in their sleeve which they can use to solve the problem of monopolies. These are: 1) Increasing Competition with Antitrust Laws; 2) Regulation (especially in the case of natural monopolies) 3) Public ownership, or 4) Do nothing.⁵⁰ First three of these instruments require adequate and efficient government bodies which could perform them. The view on monopolies is correlated to dominant political and economic ideologies of certain period.⁵¹ As we have already written during the course of human history and especially before the 19th century creating monopolies was a way by which ruler could reward or show favour to faithful subjects, regardless of the economic cost to the society. The Great Depression also had a big influence on how the economists and citizens viewed monopoly since it was thought that big business hurts the economy and consumers.⁵² Up until the 1970s the dominant legal and economic approach to the problem of monopolies was the old Harvard School approach which was based on the "theory of Cournot oligopoly, exaggerated notions about barriers and impediments to

⁴⁹ Ebell, M., Ritschl, A. (2007). Real Origins of the Great Depression: Monopolistic Competition, Union Power, and the American Business Cycle in the 1920s, Berlin, SFB 649 Discussion Paper 2007-006.

⁵⁰ Mankiw, G. (2015). Principles of Economics seventh edition, Stamford, Cengage Learning.

⁵¹ Geisst, C.R. (2000). Monopolies in America, Oxford, Oxford University Press.

⁵² Gordon, R. L. (1994). regulation and economic analysis - A Critique over Two Centuries, Dordrecht, Springer-Science+Business Media, B.V.

entry, and a belief that certain types of anticompetitive conduct were more-or-less inevitable given a particular market structure”⁵³. Posner⁵⁴ with his book *Antitrust law* was one of the founders of the Chicago School’s approach to the problems of antitrust and monopolies, which is more economically based and cares less about noneconomic values, which are hard to identify and quantify. Chicago’s approach puts more faith that the markets will deal with the problems of monopolies on their own.⁵⁵ Nowadays due to the Chicago school victory over Harvard we have antitrust system on the both sides of Atlantic that is more economically than legally based and which may have to do something with the market power of the underregulated technical sector namely Google, Apple, Meta. This situation has led to more calls for regulation of this business sector, which come from both sides of Atlantic (USA as well as from EU).

1. Natural monopoly

Natural monopoly is a special case of monopoly. One of the first economists to write about the natural monopoly was John Stuart Mill⁵⁶. He observed that certain public utilities in London could not be supplied competitively. Natural monopoly arises “when a single firm can supply a good or service to an entire market at a lower cost than could two or more firms”⁵⁷. Posner defines the natural monopoly in a similar way “If the entire demand within a relevant market can be satisfied at lowest cost by one firm rather than by two or more, the market is a natural monopoly, whatever the actual number of firms in it”⁵⁸. The main characteristic of natural monopoly is that consumers actually benefit from the existence of monopoly since the service(s) or product (s) it offers should come at a lower

⁵³ Hovenkamp, H. (2007). *The Harvard and Chicago Schools and the Dominant Firm*, University of Pennsylvania All Faculty Scholarship 1771, p. 1.

⁵⁴ Posner, R.A. (1976). *Antitrust Law: An Economic Perspective*, Chicago, University of Chicago Press.

⁵⁵ Hovenkamp, H. (2007). *The Harvard and Chicago Schools and the Dominant Firm*, University of Pennsylvania All Faculty Scholarship 1771.

⁵⁶ Mill, J. S. (1926). *Principles of Political Economy*. Longman, London.

⁵⁷ Mankiw, G. (2015). *Principles of Economics* seventh edition, Stamford, Cengage Learning, p. 302.

⁵⁸ Posner, R. A. (1999). *Natural Monopoly and Its Regulation*, Washington, Cato Institute, p. 1.

price due to the lower costs of production. Key element in cutting the production costs are the benefits of the economics of scale. Since there is only one supplier of certain product or service his business behaviour is bound to invite government regulation.

Demsetz⁵⁹ builds on the work of Stigler and Friedland, arguing that the mere existence of a natural monopoly does not justify regulation. He criticizes the natural monopoly theory for failing to logically connect economies of scale in production with monopoly pricing, asserting that competition will not inherently lead to higher unit production costs. Instead, Demsetz believes prices should be determined by the market through a tender system, where the concession is awarded to the provider offering the best service at the best price. The government's role, he suggests, should be limited to selecting the best bidder. This approach, according to Demsetz, would prevent price increases due to inefficient cost accumulation from duplicative utility infrastructure. He sees the primary challenge to be the setting up of an appropriate price for the scarce resource, or the concession for a communal service.

Jarrell⁶⁰ argues that private sector influence on government regulation is evident in local communal service regulation. He suggests that in competitive areas, local authorities can secure lower prices through competitive bidding, but utility companies lobby for state regulatory agencies to increase their profits. His study found that before state regulation, prices were 46% lower, profits 38% lower, and productivity 23% higher. After regulation, prices and profits rose while productivity fell, indicating that utility companies pushed for regulation to benefit themselves.

IV. REGULATORY AGENCIES

With the economic development and the appearance of telecommunications, air transport industry, environment damages, and when financial services became more sophisticated, the need for more

⁵⁹ Demsetz, H. (1968). Why Regulate Utilities? *Journal of Law and Economics*, 11(1), p. 56-57..

⁶⁰ Jarrell, G. A. (1978) The Demand for State Regulation of the Electric Utility Industry, 21(2) *Journal of Law and Economics*, p. 269–295.

complex regulation and competent regulators arose. Alongside the evolution of economic regulation, regulatory agencies were established, progressively taking on the responsibility of overseeing specific market segments. The rationale for the establishment of agencies was that state needed professionals who would permanently oversee market segments, and who by overseeing specific market segment would be able to implement better regulatory measures.

Usually, the regulatory agencies are statutory bodies of executive government. Regulatory agencies deal with administrative law and regulatory law, and they sometimes may be called upon to provide secondary legislation within their area of expertise. All this leads to the fact that the agencies exercise vast discretion in administering regulatory controls. These discretions are usually based on broad and ambiguous statutory guidelines.⁶¹ Regulatory agencies play a crucial role in implementing and enforcing government policies which are designed in order to correct market failures, promote competition, and protect public welfare the regulatory agencies have existed for a long time, but the age of regulatory agencies in Europe and to some extent in USA started in the late 1980s.⁶² Today the number of regulating agencies and economic activity, which they regulate is probably at the highest level in the human history.

Concurrently, academic circles began conducting quantitative and qualitative economic analyses of the impacts of individual legal actions and critically assessing the performance of regulatory agencies from 1960s onwards. New paradigms emerged, aiming to explain the relationship between the regulator and the regulated entities. Some tried to emphasise that the relationship between regulator and regulating agency could be explained by the standard principal agent problem. The others argued against this approach since regulatory agencies are formally independent from elected policy and thus the principal agent model cannot be used here.⁶³ Formal statutory independence doesn't mean that there is no control over the regulating agencies exercised by the state. The orthodox view was that regulatory

⁶¹ Quirk, P. J. (1981). *Industry Influence in Federal Regulatory Agencies*, Princeton, Princeton University Press.

⁶² Gilardi, F. (2008). *Delegation in the Regulatory State Independent Regulatory Agencies in Western Europe*, Cheltenham, Edward Elgar.

⁶³ Ibid.

programs and regulatory agencies came into being primarily “as a result of broadly-based social movements, which succeeded in overcoming the opposition of industry, and enacted programs intended to benefit “the public””. If the programs do not benefit the public, but favour industry then the programs and agencies must have been captured by the industry and their primary purpose must have been subverted to serve the private interest (s).⁶⁴

Smith⁶⁵, McCraw⁶⁶ and McDonald⁶⁷ argue that fixed pricing by regulatory agencies benefits industries more than self-imposed excessive pricing, as it avoids public resistance under the guise of public good and consumer protection. Peltzman⁶⁸ highlighted Stigler's ground-breaking contributions to the theory of economic regulation and the economic analysis of law. Before 1962, normative and public-interest oriented discussions were centred on natural monopolies, marginal costs, and public interest. That framework suffered from two weaknesses; it could not explain persistent evidence that regulation often failed to achieve its stated goals, and it provided no positive theory of how regulation would actually function given the incentives facing regulators and regulated entities. Regulators might be captured—the term itself suggesting that the public interest rationale was a facade for private benefit.⁶⁹ Stigler was the first to attempt measuring the effects of regulation and the performance of regulatory agencies, significantly shaping future research in this field, e.g., the economic analysis of the effects of the Securities Act of 1933.⁷⁰

⁶⁴ Quirk, P. J. (1981). *Industry Influence in Federal Regulatory Agencies*, Princeton, Princeton University Press, p. 9.

⁶⁵ Smith, J. A. (1914). Effect of State Regulation of Public Utilities upon Municipal Home Rule, *The Annals of the American Academy of Political and Social Science*, 53, p. 85–93.

⁶⁶ McCraw, T. K. (1975). Regulation in America: A Review Article, *Business History Review*, 49(2), p. 159–183.

⁶⁷ McDonald, F. (1958). Samuel Insull and the Movement for State Utility Regulatory Commissions, *The Business History Review*, 32(3), p. 241–254.

⁶⁸ Peltzman, S. (1993). George Stigler's Contribution to the Economic Analysis of Regulation, *The Journal of Political Economy*, 101(5), p. 818–832.

⁶⁹ Novak WJ. A Revisionist History of Regulatory Capture. In: Carpenter D, Moss DA, eds. *Preventing Regulatory Capture: Special Interest Influence and How to Limit It*. Cambridge University Press; 2013.

⁷⁰ Stigler, G. (1964). Public Regulation of the Securities Markets, *The Journal of Business*, 37(2), p. 117–142.

Stigler also promoted the capture theory which emphasises the fact that regulatory agencies are often "captured" by the industries they are supposed to regulate. Stigler makes the case that regulation is acquired by the industry and is designed and operated primarily for its benefit.⁷¹ Capture theory points out that regulatory agencies may be influenced, controlled or "hijacked" by industry through practices such as lobbying, or political contributions by implying that "rather than serving the public interest, regulatory agencies may enact policies that benefit the regulated firms at the expense of consumers and overall market efficiency"⁷². According to this theory regulators could favour established industrial players especially in the field of finance. Stigler's theory made testable predictions. Regulation would tend to benefit producers at the expense of consumers: entry restrictions, price floors, and subsidies for politically influential industries. Regulatory agencies established to protect consumers would, over time, serve the industries they nominally regulated—a process documented in the history of the ICC and the FCC.⁷³ The capture theory was important milestone in evolution of this new approach, but still imperfect. It could not explain regulations that harmed concentrated interests or benefited diffuse ones. It treated regulators as passive recipients of interest group pressure rather than strategic actors with their own objectives and it did not explain variation in regulatory outcomes across industries and/or over time. Sam Peltzman's 1976 "Toward a

More General Theory of Regulation"⁷⁴ addressed these limitations by modeling the regulator as an active political entrepreneur who balances competing interests to maximize political support. Unlike Stigler's deterministic model, in which producers always win, Peltzman showed that the optimal regulatory outcome trades off producer profits against consumer prices. Peltzman expands on Stigler's model, suggesting that regulatory agencies do not solely

⁷¹ Stigler, G. J. (1971). The Theory of Economic Regulation, *The Bell Journal of Economics and Management Science*, 2(1), p. 3–21.

⁷² Saltelli, A. Dankel, D. J., Di Fiore M., Holland, N., Pigeon, S. (2021). Science, the endless frontier of regulatory capture, *Futures* 135 (2022), p. 1.

⁷³ Novak WJ. A Revisionist History of Regulatory Capture. In: Carpenter D, Moss DA, eds. Preventing Regulatory Capture: Special Interest Influence and How to Limit It. Cambridge University Press; 2013.

⁷⁴ Peltzman, S. (1976). Towards a More General Theory of Regulation, *Journal of Law and Economics*, 19(2), p. 211–240.

benefit one entity. Consumers, being diverse and dispersed in their interests, differ from focused corporations. Effective goal achievement, not just defining interests, is crucial in influencing government policies. Becker⁷⁵ proposes that political equilibrium depends on groups exerting pressure strategically. They invest to create optimal pressure aligned with their goals, considering others' objectives to avoid duplication of efforts and foster collaboration. In his work Becker explored interaction between interest groups and government in shaping regulation. Becker emphasizes that the best regulatory policies are those that can be implemented and enforced with minimal bureaucracy and cost to the taxpayers and economic activity.⁷⁶ In his research Peltzman⁷⁷ tried to pursue complex understanding of the political economy of regulation, with the emphasis on the role of interest groups and the probability that regulatory policies will reflect the balance of power among these groups. He claims that regulatory agencies consider their costs and benefits to maximize their own gains in the regulatory process.

Peltzman also emphasized the importance of unintended consequences—a theme he developed in empirical studies of automobile safety regulation and pharmaceutical regulation. His 1975 study of auto safety regulation⁷⁸ found that mandatory seatbelts, while reducing driver fatalities, also induced riskier driving (the "Peltzman effect") and increased pedestrian and cyclist deaths. The net effect on total fatalities was ambiguous. These empirical findings reinforced a central message: regulation inevitably involves trade-offs. The relevant question is not whether regulation has benefits, but whether benefits exceed costs and whether alternative institutional arrangements would produce superior outcomes.

Stigler's capture theory was challenged on empirical and conceptual grounds, William Novak and Daniel Carpenter argue that

⁷⁵ Becker, G. S. (1983). A Theory of Competition among Pressure Groups for Political Influence, *The Quarterly Journal of Economics*, 98(3), p. 371–400.

⁷⁶ Ibid.

⁷⁷ See Peltzman, S. (1976). Towards a More General Theory of Regulation, *Journal of Law and Economics*, 19(2), p. 211–240; Peltzman, S. (1993). George Stigler's Contribution to the Economic Analysis of Regulation, *The Journal of Political Economy*, 101(5), p. 818–832.

⁷⁸ Peltzman, S. (1975). The Effects of Automobile Safety Regulation. *Journal of Political Economy*, 83, 677 - 725.

the capture narrative relies on an impoverished history of American regulation that overlooks the genuine public-interest achievements of Progressive and New Deal reforms, suggesting that the concept of "capture" is not something completely new; politologists were aware of the dangers of private influence in public institutions even before Stigler's work.⁷⁹ From that perspective, the capture theory provided justification for deregulation and privatization policies that advanced particular political agendas. The "regulatory state" that emerged from the 1970s debates was not simply a response to empirical evidence about regulatory failure but also a product of organized efforts to roll back New Deal institutions. Also, economic analysis of law and regulation relies heavily on rational actor assumption: people maximize utility, firms maximize profits, politicians maximize votes or political support. These assumptions generate precise predictions but may oversimplify real decision-making. Behavioral law and economics, developed by scholars such as Cass Sunstein and Christine Jolls, incorporates insights from cognitive psychology. It shows that bounded rationality, framing effects, and systematic biases (optimism bias, loss aversion, present bias) affect regulated parties and regulators themselves. These insights further complicate positive predictions and normative prescriptions.⁸⁰

V. CONCLUSION

The pendulum of regulation has been known to periodically swing from little regulation to overregulation, with that rare and brief moments in between the two extremes when the appropriate amount of regulation was achieved. As the old saying goes the road to hell is paved with good intentions. The same can be said of government's under-regulation or overregulation of the economy. From Coase's transaction cost insights through Stigler's capture thesis to Peltzman's general theory of regulation, law and economics provided a positive, predictive framework for understanding regulatory outcomes.

⁷⁹ Novak WJ. A Revisionist History of Regulatory Capture. In: Carpenter D, Moss D.A, eds. Preventing Regulatory Capture: Special Interest Influence and How to Limit It. Cambridge University Press; 2013.

⁸⁰ Klick J, Parisi F. Functional Law and Economics. In: White MD, ed. Theoretical Foundations of Law and Economics. Cambridge University Press; 2008, p. 41-54.

Regulatory theory has shifted from normative public-interest narratives to positive accounts of interest group competition, political entrepreneurship, and unintended consequences. Cost-benefit analysis has become institutionalized in regulatory governance. During the 1960s and 1970s when Theory of economic regulation emerged, regulation of economy was the norm due the strong economic development and heritage of both Great Depression and World War II. At that exact moment in time Economic Analysis of Law seems to have awoken from 150 years of slumber and made tools to analyse governments regulation available. The economists started to question the omnipotence of government interventions in market economy and they wanted to examine whether it was beneficial for the economy and society. The majority of economists of that time were not against government regulation *per se*, but they certainly thought that some economic sectors were overregulated and that this regulation did not result in more efficient market outcomes, but the opposite.

Furthermore, they emphasised the importance of regulatory capture which means that firms and business interest groups could shape regulation in a way that would benefit them and not the economy as a whole. Most of the economists we mentioned in this paper were critical of government's efforts to regulate the economic activity. Becker pointed out that government(s) is not able to automatically solve problems, which are created by selfish behaviour in private sector, since public sector and voters behave with as much selfishness as the private sector. Some of them, e.g., Stigler and Becker, went even further and joined organisations and societies like the Mont Pelerin Society, which were in the frontline of neoliberal revolution, with University of Chicago (intellectually) leading the way. The deregulation of 1980s and 1990s had its roots in the theory of economic regulation, which called for more faith in self-regulation of market activity by markets themselves and which called for deregulation of economy. Even with the triumph of deregulation during the 1980s the regulatory agencies were not abolished, although their filed of regulation and supervision was narrowed. The privatization of certain public services asked for more regulation of their now private services in order to safeguard the consumers. The seeds of the 2007 financial crisis were sown during the 1980s deregulatory triumph. Yet limitations remain. Behavioral economics challenges rational actor assumptions. Historical revisionism

questions the novelty and empirical adequacy of capture theory. From the 2010s onward and especially during the coronavirus epidemic the pendulum of regulation swung to more regulation by the governments. Re-regulation seems to be the watchword of the present times and calls for more regulation come both from the EU and from the USA (Democratic party), especially regarding the tech industry (Google, Meta, Apple, etc). The enduring contribution of law and economics to regulatory theory may be in its insistence on rigorous, institutionally-grounded, comparative analysis. Regulation should not be assumed to work simply because it aims at noble outcomes. Markets should not be assumed to work simply because they generate efficient outcomes under ideal conditions. The task of institutional analysis is to compare real alternatives, identify trade-offs, and subject claims about both market failure and government failure to empirical testing, so we can improve the present state of regulation.