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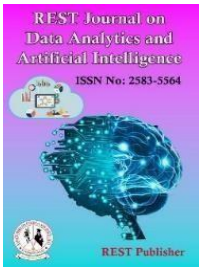

Law and Economics Evaluated by COPRAS: A Multi-Criteria Decision Approach

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Abstract: *It assesses how legal rules affect individual behavior, resource allocation, and overall social outcomes. By focusing on cost-benefit analysis, incentives, and market efficiency, this framework helps design laws that minimize social costs and maximize utility. Widely used in fields such as contract law, crime, and regulation, law and economics provides a rational basis for legal reform. This approach provides a powerful tool for improving legal policy through the combination of economic logic and empirical analysis. The importance of research in law and economics lies in its ability to bridge the gap between legal theory and economic reality. By applying economic analysis to legal systems, this approach improves understanding of how laws affect individual behavior, market dynamics, and social outcomes. It provides valuable tools for assessing the effectiveness and efficiency of legal provisions, leading to evidence-based policymaking. This interdisciplinary perspective helps in designing legal reforms that reduce social costs and improve welfare. Law and economics contribute to the creation of a more rational, efficient, and just legal framework that is aligned with economic principles.* ***Alternatives*** *taken as Traditional Law Approach (Theory-Based Law), Law and Economics Approach (Focus on Economic Efficiency), Behavioral Law and Economics (Incorporating Psychological Insights), Institutional Economics Approach (The Role of Legal Institutions), Public Choice Theory Approach (Law Influenced by Political Incentives. Evaluation parameter: Economic efficiency, Social welfare impact, Implementation complexity, Resistance to change. Based on the COPRAS method, an analysis of Law and Economics Shows that the Institutional Economics Approach a leading position. The findings show that Institutional Economics Approach, its first position with the highest ranking, while Traditional Law Approach has the lowest ranking.*

Keywords: *Economic efficiency, Legal framework, Cost-benefit analysis, Social welfare, Incentives, Property rights, Market regulation, Legal reform, Behavioral economics, Transaction costs, Public policy, Correctional law, Contract law, Institutional analysis, Rational choice theory*

1. INTRODUCTION

Law and economics is a multidisciplinary approach that combines legal analysis with economic theory to better understand, evaluate, and improve legal systems. The field, which emerged in the mid-20th century, has become one of the most influential frameworks in modern legal knowledge. It is based on the belief that legal rules and institutions can be understood and designed more effectively by analyzing their economic consequences[1]. The central idea is that laws should promote the efficient allocation of resources, minimize social costs, and maximize social welfare. This approach does not view law in isolation, but rather as a system of incentives and constraints that shape individual behavior and social outcomes[2]. At its core, law and economics relies on the concept of economic efficiency, specifically allocative efficiency, which is concerned with maximizing value within society. Legal rules are therefore evaluated in terms of how well they promote predictable and cost-effective outcomes. For example, tort law is analyzed in terms of minimizing accident costs, contract law in terms of facilitating voluntary exchanges, and property law in terms of minimizing transaction costs. This rational, outcome-based analysis provides a powerful lens for assessing whether laws achieve desirable economic objectives while maintaining fairness and justice [3]. Law and economics make significant contributions to public policy making by using cost-benefit analysis to assess the desirability of laws and regulations. This practical tool helps policymakers and legal scholars determine whether the benefits of a legal provision outweigh its costs, thereby fostering better-informed legislative and judicial decisions [4].In doing so, it shifts the focus from purely theoretical explanations to more empirical, data-driven assessments. The use of quantitative techniques improves legal predictability and transparency, supporting a more stable legal environment that fosters

economic growth. In recent years, the scope of law and economics has expanded to include behavioral economics, which challenges the assumption of perfect rationality among individuals [5]. By incorporating psychological insights, the modern approach to law and economics seeks to design legal mechanisms that account for cognitive biases and bounded rationality, thereby further connecting laws to actual human behavior [6]. This evolution reflects the dynamic and adaptive nature of the field as it responds to complex, real-world problems [7]. The application of law and economics encompasses a wide range of legal domains, including corporate law, criminal law, environmental regulation, and international trade law. Its impact is particularly evident in the judicial reasoning of economic cases and regulatory frameworks. Courts and legislators increasingly rely on economic reasoning to interpret laws and shape policy [8]. In educational and institutional settings, law and economics has become a standard part of the legal curriculum in many countries, further confirming its relevance and influence [9]. Law and economics provides a robust analytical framework that improves the effectiveness, fairness, and efficiency of legal systems. By combining economic principles with legal analysis, it facilitates deeper insights into the workings of laws and promotes reforms that are economically and socially beneficial [10]. As legal systems continue to face new challenges, from globalization to technological disruption, a law and economics approach remains a vital tool for developing rational and impactful legal solutions [11]. Law and economics is an interdisciplinary field that combines the principles of legal theory and economic analysis to examine how legal rules affect individual behavior, market dynamics, and social outcomes [12]. The central idea of this approach is that legal institutions should be evaluated in terms of their economic effectiveness and impact on social welfare [13]. Rather than viewing law solely from a moral or theoretical perspective, law and economics emphasizes the effects and consequences of legal rules, promoting a utilitarian perspective that aims to maximize overall benefits while minimizing costs to society [14]. The origins of law and economics can be traced to the work of scholars such as Ronald Coase, Richard Posner, and Gary Becker, who introduced the idea that legal rules could be analyzed using tools such as cost-benefit analysis, incentive theory, and market efficiency [15]. This marked a significant shift in legal thinking, moving away from purely descriptive approaches to more empirical and analytical methods. Legal concepts such as property rights, contracts, crimes, and liability are now often evaluated not only in terms of justice or fairness, but also in terms of their ability to allocate resources efficiently and reduce social costs [16]. At its core, the law and economics approach promotes economic rationality in legal systems. For example, it suggests that contract laws should encourage voluntary exchanges and reduce enforcement costs, while tort laws should aim to deter harmful behavior through efficient mechanisms of redress [17]. This approach also applies to areas of public law such as taxation, environmental regulation, and antitrust policy, where economic analysis can identify unintended consequences, inefficiencies, or regulatory violations. One of the most important contributions of law and economics is its emphasis on incentive structures [18]. By analyzing how people respond to legal incentives, such as fines, liabilities, or subsidies, policymakers and judges can create rules that link individual behavior to socially desirable outcomes. The result is legal reforms that are not only theoretically sound, but also practically sound, and grounded in real-world behavior. Law and economics have evolved to incorporate more nuanced understandings of human behavior, particularly through the integration of behavioral economics. Traditional models assume that individuals act rationally and in their own best interests [19]. This has led to more realistic models of how laws work in practice and has encouraged the design of legal rules to better reflect real human behavior. In academic, judicial, and policymaking contexts, law and economics have become a key tool for evaluating the effectiveness of laws and regulations [20]. It provides a clear, measurable framework for comparing alternatives and making informed decisions. In a rapidly changing world facing challenges such as climate change, globalization, and digital transformation, the ability to evaluate legal rules in terms of their economic impacts is more important than ever. Law and Economics is a powerful analytical framework that enhances our understanding of the legal system by focusing on efficiency, incentives, and empirical outcomes. It bridges the gap between law and public policy, and provides practical solutions that lead to effective governance and improved social welfare [21].

2. MATERIALS AND METHOD

In the context of evaluating legal-economic approaches, this method provides a systematic process for identifying the most appropriate model by measuring qualitative judgments and objective data in an integrated decision framework. Dataset: Five legal-economic approaches were considered - the traditional legal approach, the law and economics approach, the behavioral law and economics approach, the institutional economic approach, and the public choice theory approach. Four evaluation criteria were selected. Economic efficiency and social welfare impact. Implementation complexity and resistance to change. Weighting: Equal weights or expert-determined weights were assigned to each criterion based on their perceived importance in evaluating legal-economic models. Software Tools: Microsoft Excel or MCDM-specific software was used for calculations and graphical analysis. Decision Matrix Generation: A normalized decision matrix was generated by summing the scores of each alternative against the four criteria. Determining the relative importance (Qi): This method calculates the relative utility degree (Ui) for each alternative based on the proportional values of the beneficial and cost attributes. Ranking the alternatives: Based on the Ui and Qi values, all alternatives were ranked from best to worst.

Alternatives:
Traditional Legal Approach (Theory-Based Law): This approach emphasizes the fundamental principles of jurisprudence, focusing on legal norms, precedents, and moral reasoning. It relies heavily on established legal theories without incorporating external disciplines such as economics.

Law and Economics Approach (Focus on Economic Efficiency): This approach works on the basis of the ability of laws to maximize their effectiveness and minimize social costs by evaluating those using economic principles. It promotes cost-benefit analysis to guide legal reform and policymaking.

Behavioral Law and Economics (Incorporating Psychological Insights): Rather than assuming rational decision-making, this approach blends economics with behavioral psychology to understand how individuals actually behave. It improves legal design by accounting for cognitive biases and irrational behavior.

Institutional Economics Approach (The Role of Legal Institutions): This model, which focuses on the structure and functioning of institutions, examines how legal systems and rules develop, and how they affect economic performance and social outcomes. It emphasizes long-term stability and adaptability.

Public Choice Theory Approach (Law Influenced by Political Incentives): This approach views lawmaking as a process driven by self-interested political actors. It analyzes how incentives, lobbying, and political behavior influence legal decisions, often criticizing the inefficiencies caused by government intervention.

Evaluation Parameters:
Economic Efficiency: This parameter assesses how well a legal approach allocates resources to increase overall productivity and reduce waste. It assesses whether laws promote cost-effective outcomes and reduce transaction or enforcement costs.

Social Welfare Impact: This criterion examines the extent to which a legal model improves collective well-being, equity, and fairness in society. It reflects how laws contribute to improving quality of life, justice, and access to opportunities.

Implementation Complexity: This criterion measures the practical challenges of using a legal approach, including administrative burden, required technical expertise, and institutional capacity. High complexity can hinder smooth implementation and scalability.

Resistance to Change: This criterion assesses how rigid or adaptable a legal approach is to societal needs and reforms. High resistance indicates institutional inertia or deeply entrenched traditions that make it very difficult to update or change laws.

3. ANALYSIS AND DISCUSSION

TABLE 1. Law and Economics

	Economic efficiency	Social welfare impact	Implementation complexity	Resistance to change
Traditional Law Approach	0.55000	0.60000	0.40000	0.80000
Law and Economics Approach	0.90000	0.85000	0.65000	0.70000
Behavioral Law and Economics	0.75000	0.88000	0.70000	0.60000
Institutional Economics Approach	0.80000	0.78000	0.55000	0.50000
Public Choice Theory Approach	0.70000	0.65000	0.50000	0.65000

The given dataset provides a comparative analysis of five law-economic approaches on four parameters: economic efficiency, social welfare impact, implementation complexity, and resistance to change. The law and economics approach, despite having moderate complexity (0.65) and resistance (0.70), shows the highest performance in economic efficiency (0.90) and strong social welfare impact (0.85), creating a robust but somewhat rigid framework. Behavioral law and economics scores high in social welfare impact (0.88)

and maintains a balanced profile across all parameters, suggesting a socially sensitive but moderately complex and adaptive approach. Institutional economics shows strength in efficiency (0.80) and relatively low resistance (0.50), indicating structural adaptability, although its moderate social welfare and implementation values indicate potential policy coordination challenges. The public choice theory approach provides a balanced but moderate profile, not excelling in efficiency (0.70) or social welfare (0.65), with moderate resistance and complexity, reflecting its theoretical conservatism. In contrast, the traditional legal approach is very low in efficiency (0.55) and very high in resistance (0.80), indicating that it may hinder reform and innovation.

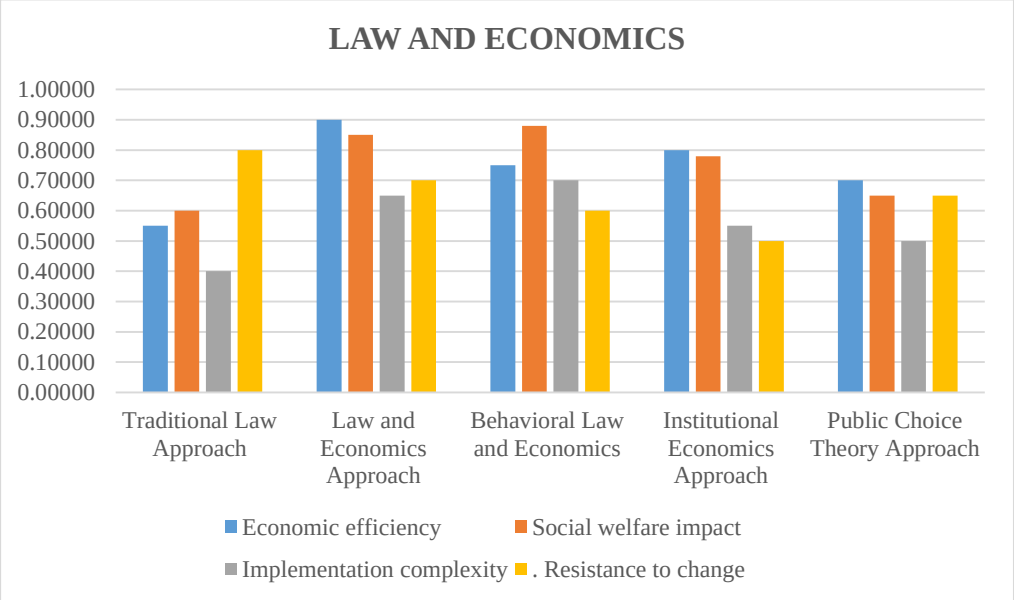

FIGURE 1. Law and Economics

The bar chart titled "Law and Economics" compares five different legal-economic approaches on four criteria: economic efficiency, social welfare impact, implementation complexity, and resistance to change. Among the approaches, the law and economics approach scores the highest on both economic efficiency (0.90) and social welfare impact (0.85), indicating strong performance in both market effects and social benefits, although it also shows moderate levels of complexity and resistance. Behavioral law and economics also performs well, particularly on social welfare impact (0.88) and maintaining balanced scores on other parameters, indicating a socially responsive but moderately complex model. The institutional economics approach shows strong economic efficiency (0.80) and relatively low resistance to change (0.50), making it a structurally flexible option. In contrast, the traditional legal approach lags behind, with very low efficiency (0.55) and high resistance to change (0.80), indicating rigidity and limited adaptability. The general choice theory approach shows moderate but balanced scores across all categories, indicating a neutral but not exceptional stance.

TABLE 2. Normalized Data

	Economic efficiency	Social welfare impact	Implementation complexity	Resistance to change
Traditional Law Approach	0.1486	0.1596	0.1429	0.2462
Law and Economics Approach	0.2432	0.2261	0.2321	0.2154
Behavioral Law and Economics	0.2027	0.2340	0.2500	0.1846
Institutional Economics Approach	0.2162	0.2074	0.1964	0.1538
Public Choice Theory Approach	0.1892	0.1729	0.1786	0.2000

The normalized data provide a comparative assessment of the five law-economic approaches on four key parameters: economic efficiency, social welfare impact, implementation complexity, and resistance to change. The law and economics approach leads in both economic efficiency (0.2432) and social welfare impact (0.2261), indicating that it provides the best balance of economic and social benefits. Behavioral law and economics performs the highest on implementation complexity (0.2500), which may indicate that sophisticated methods are required, but is likely to provide tailored interventions. It also ranks second in social welfare impact (0.2340), highlighting its effectiveness in addressing real-world behavioral patterns. The institutional economics approach scores moderately on

all parameters, showing balanced but less important performance. Its low resistance to change (0.1538) indicates its better adaptability in legal reform contexts. Public choice theory, although lacking in most areas, performs relatively well in reducing resistance to change (0.2000), indicating ease of practical application due to alignment with political behavior. The traditional legal approach lags behind in all benefit-related parameters, particularly economic efficiency (0.1486) and implementation complexity (0.1429), but shows high resistance to change (0.2462), indicating a significant slowdown in adapting or updating traditional structures.

TABLE 3.Weight

	Economic efficiency	Social welfare impact	Implementation complexity	Resistance to change
Traditional Law Approach	0.25	0.25	0.25	0.25
Law and Economics Approach	0.25	0.25	0.25	0.25
Behavioral Law and Economics	0.25	0.25	0.25	0.25
Institutional Economics Approach	0.25	0.25	0.25	0.25
Public Choice Theory Approach	0.25	0.25	0.25	0.25

The weighted normalized decision matrix provides a comparative assessment of five legal-economic approaches based on four parameters: economic efficiency, social welfare impact, implementation complexity, and resistance to change. Each value in the matrix represents the weighted performance of an approach under a particular criterion. The law and economics approach scores higher overall on economic efficiency, social welfare impact, and implementation complexity (each at 0.06), indicating its strong alignment with efficiency and policy improvement. The traditional legal approach, while stable on the first three criteria (0.04), shows relatively high resistance to change (0.06), suggesting institutional inertia and rigidity. Behavioral law and economics shows balanced strength on social efficiency and complexity (0.06), reflecting its ability to integrate psychological insights into law, but it is moderately resistant to change. The institutional economics approach maintains consistent scores on all criteria except resistance to change (0.04), indicating a structured but slightly adaptable structure. The public choice theory approach, although economically efficient and flexible (0.05), scores low on social welfare and complexity (0.04), possibly because it focuses on individual incentives rather than collective outcomes.

TABLE 4. Weighted Normalized Decision Matrix

	Economic efficiency	Social welfare impact	Implementation complexity	Resistance to change
Traditional Law Approach	0.04	0.04	0.04	0.06
Law and Economics Approach	0.06	0.06	0.06	0.05
Behavioral Law and Economics	0.05	0.06	0.06	0.05
Institutional Economics Approach	0.05	0.05	0.05	0.04
Public Choice Theory Approach	0.05	0.04	0.04	0.05

The law and economics approach leads with the highest scores (0.06) on the first three criteria, indicating its superior performance in promoting efficient legal frameworks, maximizing welfare, and ensuring effective implementation, although it shows moderate resistance to change (0.05). Behavioral law and economics follows closely, matching its social welfare and implementation scores (0.06), while lagging slightly behind on economic efficiency (0.05), reflecting its strength in human-centered legal policy but less focus on pure efficiency. The traditional legal approach, while stable at 0.04 in the first three areas, scores the highest on resistance to change (0.06), highlighting its rigidity and low adaptability. The institutional economics approach maintains balanced scores (0.05) on most dimensions and shows very low resistance to change (0.04), indicating a flexible but stable framework. The public choice theory approach exhibits moderate economic efficiency and flexibility (0.05) but scores low on welfare impact and complexity (0.04), reflecting its focus on individual motivations rather than systemic outcomes.

TABLE 5. Bi, Ci, Min (Ci)/Ci

	Bi	Ci	Min(Ci)/Ci
Traditional Law Approach	0.077	0.097	0.9004
Law and Economics Approach	0.117	0.112	0.7827
Behavioral Law and Economics	0.109	0.109	0.8059
Institutional Economics Approach	0.106	0.088	1.0000
Public Choice Theory Approach	0.091	0.095	0.9253

The given table represents a decision analysis, where Bi represents the benefit criterion score, Ci represents the cost-related (non-benefit) criterion score, and Min (Ci)/Ci represents the relative efficiency ratio obtained from minimizing the cost impact. The institutional economic approach stands out with the highest efficiency ratio of 1.0000, meaning that it has the lowest cost value among all alternatives, making it the most cost-effective and balanced option. The public choice theory approach follows with a high ratio of 0.9253, showing favorable cost efficiency and moderate benefit values. The traditional legal approach scores relatively well with a ratio of 0.9004, indicating reasonable efficiency despite low benefit values. On the other hand, the law and economic approach, despite having a high benefit score (0.117), shows a low efficiency ratio of 0.7827, indicating high associated costs that reduce its overall cost-effectiveness. Behavioral law and economics provide balanced performance with almost equal Bi and Ci values (0.109 each) and a performance ratio of 0.8059, indicating moderate performance.

TABLE 6. Qi, Ui, Rank

	Qi	Ui	Rank
Traditional Law Approach	0.179	81.6872	5
Law and Economics Approach	0.206	93.9761	2
Behavioral Law and Economics	0.200	91.4638	3
Institutional Economics Approach	0.219	100.0000	1
Public Choice Theory Approach	0.195	89.1111	4

The data given represents the final ranking of the five legal-economic approaches based on the values of Qi (integrated performance index), Ui (utility index) and their resulting ranking. The institutional economic approach ranks first with the highest Qi value of 0.219 and a perfect utility score of 100.0000, indicating its best performance across all considered criteria. This reflects a balanced and efficient framework that excels in both benefit and cost-related factors. The law and economic approach follows closely in second place with a Qi of 0.206 and a utility score of 93.9761, suggesting strong performance and impact, albeit slightly less cost-effective than institutional economics. The behavioral law and economic approach ranks third with a Qi of 0.200 and a utility index of 91.4638, indicating a well-rounded approach that integrates human behavior into legal policy but with slightly less impact. The public choice theory approach ranks fourth, with moderate performance (Qi 0.195, Ui 89.1111), reflecting its main strength in individual-centered models. The traditional legal approach ranks lowest (Qi 0.179, Ui 81.6872), highlighting its relatively weak performance by modern legal-economic performance standards.

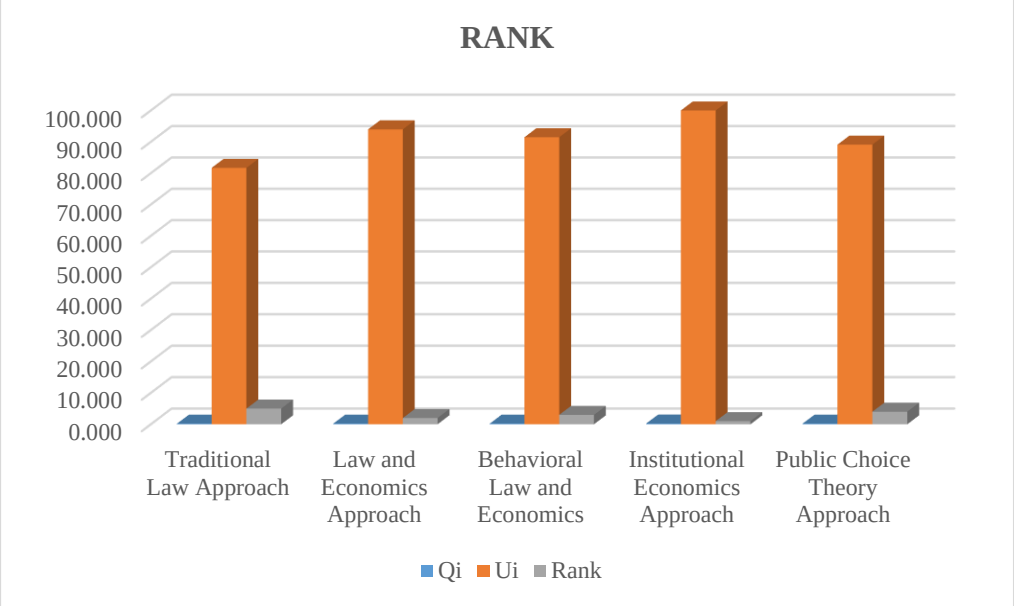

FIGURE 2. Rank

The bar chart, labeled "RANK", compares five legal-economic approaches based on three key indicators: Qi (integrated performance index in blue), Ui (utility index in orange) and rank (gray bar). Among the approaches, the institutional economic approach stands out with the highest Qi and Ui values, reaching a utility score of 100, indicating excellent performance, thus obtaining rank 1. The law and economic approach follows with high utility and Qi scores, resulting in rank 2, showing strong overall performance and effectiveness. Behavioral law and economics ranks 3rd, with performance values slightly lower than those of law and economics, reflecting balanced performance but slightly less impact. The public choice theory approach, while relatively moderate in both Qi and Ui, highlights its moderate performance, being placed at rank 4. Finally, the traditional legal approach has the lowest scores on all measures, and therefore ranks 5th, indicating limited adaptability and effectiveness in the modern legal-economic landscape. This scenario clearly illustrates that institutional economics outperforms other approaches by providing a robust and balanced framework, followed by performance-based law and economics, while traditional and theory-based models show relatively weak performance on the estimated parameters.

4. CONCLUSION

When applied to the law and economics domain, the COPRAS method facilitates a holistic assessment by weighing beneficial (e.g., economic efficiency, social welfare impact) and non-beneficial criteria (e.g., implementation complexity, resistance to change). The analysis reveals that among the various law-economic approaches, the institutional economic approach ranks highest due to its balanced performance across all parameters, which implies maximum utility and minimum cost, thus receiving the most favorable ranking. The law and economic approach ranks second, highlighting its high potential in terms of economic efficiency and social welfare. However, its slightly higher implementation complexity reduces its overall performance. The method also reveals that while behavioral law and economics performs better in some areas, it is less competitive when evaluated across all weighted criteria. The traditional legal approach, despite its fundamental value, ranks very low due to its high resistance to change and limited modern applicability. The COPRAS method demonstrates that while the law and economics approach is a powerful framework that emphasizes efficiency and utility maximization, it is not without limitations. It works admirably, but is surpassed by the institutional economic model in adaptability and implementation possibilities. Therefore, the method serves as a useful decision-making tool to guide policymakers, legal theorists, and economists in choosing the most appropriate approach to contemporary legal-economic challenges.

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