Vol. 16 No. 2 ISSN: 0976-3570

The Ineffectiveness of the US Sentencing Guidelines in Deterring Economic Crimes

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Abstract

This study critically examines the structural effectiveness of the 2021 United States Sentencing Guidelines (USSG) in deterring high-value property crimes. Employing a normative legal research design combined with Economic Analysis of Law (EAL), the study analyzes sentencing provisions under USSG §2B1.1, §5A, and §5E1.2(c)(3). A derived analytical indicator — the Upper-Limit Loss per Maximum Imprisonment (ULL/MIP) ratio — is introduced to assess the implicit economic value attributed to custodial sanctions relative to the scale of financial harm. The ULL/MIP values are benchmarked against the federal minimum wage to evaluate whether imprisonment imposes a genuine economic cost exceeding the benefit derived from crime. The analysis identifies three structural deficiencies. First, the fine schedule lacks proportional correspondence with escalating loss categories, rendering monetary penalties economically negligible in large-scale offenses. Second, the constant two-point offense-level increment produces an asymmetric sentencing trajectory in which imprisonment terms increase arithmetically while financial losses expand exponentially. From loss category (C) onward, the ULL/MIP ratio exceeds the minimum-wage benchmark, indicating a structural deterrence failure. Third, the sentencing ceiling at USD 550,000,000 prevents proportional escalation beyond that threshold, creating a zone of sentencing indifference for ultra-large economic crimes. The study concludes that the current USSG framework does not consistently satisfy the deterrence condition that punishment must outweigh criminal gain. Reform toward non-linear escalation and economically calibrated fine structures is necessary to restore proportional coherence and deterrent credibility.

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Keywords: *US Sentencing Guidelines; Economic Analysis of Law; Sentencing Proportionality; Deterrence Failure; Property Crime; Loss-Based Sentencing; Criminal Justice Reform*

I. Introduction

The United States has an independent agency known as the US Sentencing Commission (USSC). Its purpose is to establish, update, and promulgate a penal code for Federal Courts in America. The USSC aims to ensure that punishments are proportional to the actions committed by the convict. It was founded based on Jack Kress's research on Sue Titus Reid's "Just Deserts" theory. This theory suggests that the sanctions imposed on criminals should correspond to the level of damage caused by the crime. The USSC has developed the US Sentencing Guidelines (USSG)[3].

The USSG includes provisions for criminal acts, descriptions of terms or conditions that define specific criminal acts, options for selecting criminal sanctions or sentences, and, crucially, guidelines for judges to apply a specific range of offense weight. This is done through the term "offense level," which helps determine the severity of the criminal sanction. The offense level is the method through which the USSC constrains judges to assess the seriousness of each crime within a specific range, thus predefining the length of imprisonment using the provided codes. Additionally, it is utilized to evaluate and establish boundaries within a range of minimum and maximum values for another type of criminal sanction: fines or fine sentences. The USSG comprises 43 offense levels of crime, each with its own range of criminal sanctions.

The offender to be punished for their guilt should receive punishment in proportion to the harm they have caused[4]. Therefore, the punishment imposed on the perpetrator, who will be deprived of their rights, must be adjusted with the level of guilt they have incurred. This norm holds that there is a line between just law and unjust punishment. This approach relates to the just deserts' theory, which also introduces another concept, namely "commensurate deserts". This theory, as formulated by Jeremy Bentham, states that "the severity of punishment

[3] Tyrone Kirchengast, *Proportionality in Sentencing and the Restorative Justice Paradigm: 'Just Deserts' for Victims and Defendants Alike?*, SSRN ELECTRON. J. (2009).
[4] *Id.*

must be commensurate with the seriousness of the guilt"[5]. The determination of the degree of guilt in just deserts theory involves assessing the severity of the offense along with an analysis of the societal interests protected by the criminal laws[6].

In line with this view, Beccaria also emphasized that punishment should closely match the nature of the offense. This ensures that there is a fear of punishment, which deters individuals from pursuing the benefits of committing crimes[7]. Similar descriptions regarding the weight of punishment being equal to the damages caused by the crime are also expressed by many others, from Aristotle, David Fogel in Conrad[8] to Nigel[9], and possibly many more.

The prior research shows nonequivalence between imprisonment and fines in USSG, meaning the economic value of the imprisonment sentence and its fines, acting as the imprisonment alternative, is proven unequal[10]. This indicates a lack of formula to determine specific fines and their specific imprisonment alternative to the fines, and vice versa. It shows a possibility that decision-making in USSG provisioning lacks: a. The theoretical rationale for determining a specific imprisonment and its specific fine alternative to the imprisonment should be equal to the specific imprisonment's economic value, nor; b. determining a provisioned specific imprisonment for specific damages, especially monetary or economic damages, to the victim and the society. This raises doubts about whether sentencing in USSG can ensure that the economic value of the

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[5] JEREMY BENTHAM, AN INTRODUCTION TO THE PRINCIPLES OF MORALS AND LEGISLATION (2017).

[6] Gazalba Saleh & Teng Junaidi Gunawan, *Designing a Just, Definite, Deterrent, Restorative, and Responsive Criminal Justice System through Sentencing Economic Value*, 24 (2021), https://www.abacademies.org/articles/designing-a-just-definite-deterrent-restorative-and-responsive-criminal-justice-system-through-sentencing-economic-value-10428.html.

[7] MICHEL FOUCAULT, DISCIPLINE & PUNISH: THE BIRTH OF THE PRISON (1995), https://books.google.com/books/about/Discipline_and_Punish.html?hl=id&id=AVzuf-r22eoC.

[8] Rutkowski (1976)

[9] Walker (1969)

[10] Teng Junaidi Gunawan & Muhammad Sholehuddin, *Nonequivalence Between Imprisonment and Fines in United States Sentencing Guidelines*, 11 J. LAW SUSTAIN. DEV. e512 (2023), https://ojs.journalsdg.org/jlss/article/view/512.

imprisonment sentence can be equivalent to the damages the crime caused, especially in economic crimes such as street crimes or basic economic offenses.

The identification of non-fulfilling the maxim “crime does not pay” within the USSG provision indicates that United States Criminal Law has failed to deliver justice, let alone deter crime. Given that the amount of punishment or imprisonment tends to be unfair because the value of criminal sanctions can be smaller than the benefits obtained from the crime, leading to an imbalanced risk-benefit analytics ratio. The general public believes that criminal sentencing in the United States has not been able to provide a fair and just sentencing and has therefore failed to provide a rational formulation regarding the appropriate severity and the proportionality of criminal sentences. This also makes it more difficult for the USSG to use a fair and efficient sentencing system to fight crime. [11]

Gary S. Becker has also spoken out about the problem of criminal law not being able to ensure crime does not benefit perpetrators[12], which is ultimately a push for the United States towards a system of determinate sentencing that sees "public concern over crime increase dramatically, and society demands stricter laws to deal with the problem of crime." Determinate Sentence produces the rule "three-strikes-and-you're-out", which punishes criminals who commit offenses three times with very severe punishments.

In the criminal justice system of the United States, the Double Track System or dual-track sentencing theory has been implicitly applied. These theories imply that any criminal sanction or penal sentencing has an alternative model treatment mode with a format of maximum imprisonment or a maximum fine sentence or fines. The Double Track System calls for an equal emphasis on criminal sanction for deterrence on one end and rehabilitation of convicts on the other end[13]. Unfortunately, this theory is often violated both in its formulation and implementation. It can be observed that there is no equivalent between the threat of imprisonment and the threat of criminal fines in the US Sentencing Guidelines.

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[11] *Id.*

[12] GARY BECKER, CRIME AND PUNISHMENT: AN ECONOMIC APPROACH (1974).

[13] M. Sholehuddin, *Sistem Sanksi Dalam Hukum Pidana, Ide Dasar Double Track System Dan Implementasinya*, RAJA GRAFINDO PERSADA 71 (2007), https://jdih.kemenkeu.go.id/dok/c48e3167-643e-4f6a-442c-08db6e8b31bb.

The US Sentencing Guidelines (USSG) inconsistently correlate prison imprisonment with fines is the main focus of the problem statement. This inconsistency challenges the principles of the double-track sentencing system theory, which advocates for a balanced approach between imprisonment and fines. In addition, this research aims to address this issue by applying the concepts of the Just Deserts theory, emphasizing that punishment should be commensurate with the seriousness of the offense. This theory aligns with the goal of ensuring that criminal sanctions are proportional to the actions committed by the convict, as proposed by the USSC based on the 'Just Deserts' theory. In order to evaluate the economic viability of criminal penalties and fines, the research additionally examines the Economic Analysis of Law (EAL), that aims to establish equality between criminal penalties and fines by including economic value indicators such as Decent Living Needs (DLN). This emphasizes the financial consequences of sentencing discrepancies.

Based on the description above, this study will discuss further the non-achievement of unfavorable crimes in the US Sentencing Guidelines. It should be under lined that this study does not include the implementation of combined criminal liability and civil liability or unlawful acts. This separation aims to avoid ambiguities related to criminal and civil liability in the United States. This research also emphasizes aspects of criminal justice or criminal law only, not in conjunction with other types of law and its sanction.

II. Materials and Methods

A. Research Design and Legal Approach

This study adopts a normative legal research design, which is the predominant methodological approach in doctrinal legal scholarship. Normative legal research is concerned with examining, interpreting, and critically evaluating existing legal rules and provisions by applying legal reasoning derived from authoritative primary and secondary legal sources[14]. The primary objective of this design is to uncover legal truths grounded in the internal logic and normative structure of positive law, rather than through empirical data collection from human subjects or social surveys. Within this framework, two complementary analytical

[14] Maria Grasia Sari Soetopo, *LEGAL CERTAINTY IN THE IMPLEMENTATION OF ECONOMIC ANALYSIS OF LAW FOR POLICY MAKING PROCESS*, 22 PENA JUSTISIA MEDIA KOMUN. DAN KAJI. HUK. (2023).

approaches are employed: the statutory approach and the conceptual legal approach.

The statutory approach entails a systematic examination of the binding legal provisions contained in the 2021 United States Sentencing Guidelines Manual, with particular reference to the offense-level schedule under USSG §2B1.1 (Larceny, Embezzlement, and Other Forms of Theft), the Sentencing Table under USSG §5A, and the Fine Table under USSG §5E1.2(c)(3). These provisions constitute the primary legal materials of this study. The conceptual legal approach supplements the statutory analysis by situating the provisions within established theoretical frameworks — specifically, the Just Deserts theory, the utilitarian deterrence theory, and the Double Track System — to assess whether the normative objectives of the USSG are realized in its structural design[15].

B. Materials: Primary and Secondary Legal Sources

The primary legal material utilised in this study is the 2021 United States Sentencing Guidelines Manual, officially published by the United States Sentencing Commission[16]. This document constitutes an authoritative federal regulatory instrument that governs sentencing practices in all United States federal district courts. Three specific provisions within this manual are subjected to systematic analysis. First, USSG §2B1.1 provides the offense-level schedule for property crimes, specifying the base offense level and the incremental offense-level adjustments corresponding to 16 graduated categories of monetary loss, ranging from losses not exceeding USD 6,500 to losses exceeding USD 550,000,000. Second, USSG §5A provides the Sentencing Table, which translates an offender's total offense level and criminal history category into a prescribed minimum-to-maximum imprisonment range expressed in months. Third, USSG §5E1.2(c)(3) provides the Fine Table applicable to individual defendants, specifying the minimum and maximum monetary fine corresponding to each offense level.

Secondary legal materials consist of peer-reviewed academic literature, legal treatises, and foundational works in criminal law theory and economic analysis

[15] Keith N. Hylton, *Law and Economics versus Economic Analysis of Law*, 48 EUR. J. LAW ECON. 77 (2019), http://link.springer.com/10.1007/s10657-018-9580-0.
[16] Public Affairs One Columbus Circle, *2021 Guidelines Manual Annotated*, U.S. TAXPAYER EXPENSE (2021).

of law. Key secondary sources include Becker's (1974)[17] seminal economic model of crime and punishment, Bentham's (2017) classical utilitarian framework of penal proportionality, Kirchengast's (2009)[18] analysis of the just deserts paradigm in sentencing, and Sholehuddin's (2007) exposition of the Double Track System in modern criminal sanction theory. In addition, prior empirical-normative studies, which documented the nonequivalence of imprisonment and fine sentences within the USSG, serve as the foundational prior research upon which the present study builds[19]. Economic data on the prevailing federal minimum wage in the United States, as published by the U.S. Department of Labor, are incorporated as a reference variable for calculating the economic value of lawful employment per unit time, consistent with the EAL methodology advocated by Soetopo and Hylton[20].

C. Analytical Method: Economic Analysis of Law

The principal analytical tool employed in this study is the Economic Analysis of Law (EAL), a methodology that applies economic concepts and reasoning to evaluate the formation, structure, and social impact of legal rules[21]. EAL proceeds from the assumption that legal actors — including potential offenders, sentencing authorities, and legislators — respond to legal incentives in a broadly rational manner, weighing expected costs and benefits when making decisions. Applied to criminal sentencing, EAL requires that the economic value of punishment be sufficient to neutralise the economic incentive to commit crime, thereby operationalising the deterrence objective embedded in the USSG.

The analytical procedure consists of three sequential steps. In the first step, the provisions of USSG §2B1.1, §5A, and §5E1.2(c)(3) are restructured into a unified comparative table. For each of the 16 loss categories (A through P), four values are extracted and consolidated: (1) the upper-limit monetary loss threshold defining each category; (2) the corresponding current offense level, derived by applying the base offense level and the prescribed incremental additions; (3) the maximum term of imprisonment in months, obtained from the Sentencing Table

[17] BECKER, *supra* note 10.
[18] Kirchengast, *supra* note 1.
[19] Gunawan and Sholehuddin, *supra* note 8; Saleh and Gunawan, *supra* note 4.
[20] Soetopo, *supra* note 12; Hylton, *supra* note 13.
[21] Hylton, *supra* note 13; Soetopo, *supra* note 12.

at the highest applicable criminal history category; and (4) the maximum fine prescribed for the applicable offense level under the Fine Table.

In the second step, a derived indicator is computed for each loss category: the Upper-Limit Loss per Maximum Imprisonment ratio (ULL/MIP), calculated by dividing the upper-limit loss value by the maximum imprisonment term in months. This ratio functions as a proxy for the per-month economic value imputed to the custodial sanction associated with each loss category, reflecting the implicit economic significance of one month of imprisonment in relation to the scale of financial harm addressed by that category. In the third step, the ULL/MIP ratios are systematically compared against the prevailing federal minimum wage in the United States (USD 7.25 per hour, equivalent to approximately USD 1,160 per month), which serves as a benchmark for the economic value of lawful employment under the least advantageous conditions. This three-step procedure enables a rigorous assessment of whether the USSG's sentencing structure satisfies the economic condition necessary for criminal deterrence — namely, that the cost of punishment must exceed the benefit of crime from the perspective of a rational economic actor[22].

D. Scope and Limitations

The scope of this study is deliberately confined to the criminal law dimension of the USSG, excluding civil liability, restitution orders, and ancillary sanctions that may arise under separate legal regimes. The analysis focuses exclusively on individual defendants, as specified under USSG §5E1.2(c)(3), and does not address the organizational fine structure applicable to corporate offenders under USSG Chapter Eight. Furthermore, the study is restricted to the property crime provision under USSG §2B1.1 as a representative case study; although parallel structural deficiencies have been identified in other economic crime provisions — including USSG §2B2.1 (Burglary and Trespass) and §2B3.1 (Robbery, Extortion, and Blackmail) — a full cross-provision analysis lies beyond the scope of the present article and is recommended for future research. These delimitations are adopted to maintain analytical focus and avoid conflation of distinct legal liability frameworks, consistent with the normative legal research approach employed throughout the study.

[22] BECKER, *supra* note 10; BENTHAM, *supra* note 3.

III. Results and Discussion

A. Structural Analysis of the USSG Sentencing Framework for Property Crimes

The United States Sentencing Guidelines (USSG) employ an offense-level system comprising 43 graduated levels and six criminal history categories, designed to constrain judicial discretion and promote sentencing uniformity across federal courts[23]. Each offense level corresponds to a prescribed minimum-to-maximum imprisonment range, with the threshold between adjacent levels set at no fewer than six months or at least 25 percent above the minimum sanction. Despite this elaborate architecture, empirical examination of the Guidelines reveals critical structural deficiencies, particularly in their treatment of economic crimes involving substantial monetary losses.

The present study focused on property offenses under United States Sentencing Guidelines Section 2B1.1, which governs Larceny, Embezzlement, and related theft offenses. This criminal code provision applies a base offense level of 6 (or 7 for recidivists convicted of offenses carrying a statutory maximum of 20 years or more), with 16 graduated loss categories labeled (A) through (P) that incrementally increase the offense level by two points per category. The loss thresholds range from losses not exceeding USD 6,500 at category (A) to losses exceeding USD 550,000,000 at category (P). Table 1 presents a synthesized analysis combining the offense-level provisions under USSG §2B1.1, the maximum imprisonment terms from the Sentencing Table at USSG §5A, the maximum fines from the Fine Table under USSG §5E1.2(c)(3), and the calculated ratio of the upper-limit loss value to the maximum imprisonment term for each category.

Three analytically significant observations emerge from Table 1. First, the fine ceilings provisioned across all loss categories are markedly disproportionate to the magnitudes of the corresponding monetary losses. For instance, at category (G), where losses exceed USD 250,000, the maximum fine is set at only USD 100,000 — a figure substantially below the actual damage threshold. At the most extreme category (P), applicable to losses exceeding USD 550,000,000, the maximum fine is merely USD 400,000. This disparity signifies that the fine schedule bears no mathematically coherent relationship to the scale of harm

[23] Circle, *supra* note 14.

inflicted on victims. Prior research by Gunawan and Sholehuddin confirmed that there is no systematic equivalence between imprisonment and fine sentences within the USSG, a finding that this study corroborates and extends through a loss-to-imprisonment ratio analysis[24].

Second, the ratio of the upper-limit loss value to the maximum imprisonment term — expressed in USD per month — escalates dramatically across categories. Beginning at USD 361 per month at category (A), the ratio reaches USD 1,681,957 per month at category (O), indicating that the per-month economic value imputed to imprisonment far exceeds what an individual would earn through lawful employment under comparable conditions. Given that the prevailing federal minimum wage in the United States was USD 7.25 per hour as of 2024, equating to approximately USD 1,160 per month, the imprisonment term corresponding to large-loss categories (C through P) is economically more advantageous to the perpetrator than working for the equivalent period at minimum wage. This finding is consistent with Becker's (1974) foundational economic analysis, which posited that the expected cost of punishment must exceed the expected gain from crime for deterrence to be effective[25].

Third, the loss categorization ceases at USD 550,000,000, imposing a de facto ceiling on the sentencing escalation schedule. Once losses exceed this threshold, no additional offense-level increments are prescribed beyond the 30 points added at category (P), effectively capping the severity of punishment for crimes involving losses well in excess of half a billion dollars. This structural truncation signals that the USSG fails to maintain commensurate sentencing proportionality at the highest levels of financial harm, contrary to the principle of just deserts as articulated by Kirchengast (2009) and grounded in the Sentencing Reform Act of 1984.

Table 1. Combination of Loss Categories (USSG §2B1.1), Maximum Imprisonment (USSG §5A), Maximum Fines (USSG §5E1.2(c)(3)), and Upper-Limit Loss Divided by Maximum Imprisonment

[24] Gunawan and Sholehuddin, *supra* note 8.
[25] BECKER, *supra* note 10.

Loss (Apply the Greatest)			Increase in Level	Upper Limit Loss	Current Offense Level	Max Prison (Months)	Fines Maximum	Upper Limit Loss/ Max Prison
(A)	Equal or less	$6.500	0	$6.500	6	18	$9.500	$361
(B)	More than	$6.500	2	$15.000	8	24	$20.000	$625
(C)	More than	$15.000	4	$40.000	10	30	$40.000	$1.333
(D)	More than	$40.000	6	$95.000	12	37	$55.000	$2.568
(E)	More than	$95.000	8	$150.000	14	46	$75.000	$3.261
(F)	More than	$150.000	10	$250.000	16	57	$95.000	$4.386
(G)	More than	$250.000	12	$550.000	18	71	$100.000	$7.746
(H)	More than	$550.000	14	$1.500.000	20	87	$150.000	$17.241
(I)	More than	$1.500.000	16	$3.500.000	22	105	$150.000	$33.333
(J)	More than	$3.500.000	18	$9.500.000	24	125	$200.000	$76.000
(K)	More than	$9.500.000	20	$25.500.000	26	150	$250.000	$170.000
(L)	More than	$25.500.000	22	$65.000.000	28	175	$250.000	$371.429
(M)	More than	$65.000.000	24	$150.000.000	30	210	$300.000	$714.286
(N)	More than	$150.000.000	26	$250.000.000	32	262	$350.000	$954.198
(O)	More than	$250.000.000	28	$550.000.000	34	327	$350.000	$1.681.957

(P)	More than	$550.000.000	30	### ### ### ###	36	405	$400.000	$26.049.383

Source: *Adapted from the 2021 USSG Manual (Circle, 2021); calculations by authors.*

Table 1 consolidates sentencing data from three provisions of the 2021 USSG Manual into a unified analytical framework. Each row corresponds to one of the sixteen loss categories under USSG §2B1.1(b)(1), ranging from losses of USD 6,500 or less (category A) to losses exceeding USD 550,000,000 (category P). The table presents, for each category, the offense-level increment, the resulting total offense level, the maximum term of imprisonment under Criminal History Category VI (USSG §5A), the maximum fine for individual defendants (USSG §5E1.2(c)(3)), and the Upper-Limit Loss per Maximum Imprisonment (ULL/MIP) ratio. The ULL/MIP ratio is calculated by dividing the upper loss threshold by the maximum custodial term in months, translating the economic magnitude of harm into a comparable monthly value. This allows direct comparison with lawful monthly earnings and provides a measurable basis for assessing deterrence adequacy.

A cross-category comparison reveals a widening disparity between financial harm and sentencing weight. While loss thresholds expand exponentially—from USD 6,500 to over USD 550,000,000—the offense-level increments increase at a constant two-point rate. Although imprisonment terms rise in absolute months, they do not keep pace with the scale of losses. As a result, the ULL/MIP ratio increases dramatically and exceeds the federal minimum-wage benchmark (approximately USD 1,160 per month) beginning at category (C). This indicates that, in most higher loss categories, the economic value implicitly assigned to imprisonment per month surpasses lawful minimum-wage earnings, raising structural concerns regarding deterrence effectiveness.

The fine schedule demonstrates a similar imbalance. Across all sixteen categories, the maximum fine increases only modestly—from USD 9,500 to USD 400,000—despite the exponential growth in loss ceilings. At higher categories, fines represent only a negligible fraction of the potential harm. For example, at category (N), where losses may reach USD 250,000,000, the maximum fine of USD 350,000 amounts to less than 0.2 percent of the upper loss threshold. This structural disconnect between fines and financial harm suggests

that monetary penalties lack proportional alignment with the magnitude of victim losses.

The ceiling at category (P) further intensifies the proportionality concern. Once losses exceed USD 550,000,000, no additional offense-level increments apply. Consequently, substantially larger harms receive identical maximum sanctions. This creates a structural plateau in sentencing escalation, limiting proportional differentiation at the highest levels of economic crime.

Taken together, Table 1 highlights three interrelated weaknesses: the lack of proportional linkage between fines and losses, the asymmetric growth between loss magnitude and imprisonment terms, and the structural ceiling that halts escalation beyond category (P). These features collectively indicate that the current USSG framework does not consistently maintain proportional coherence between financial harm and penal severity.

B. Inadequacy of Fine Provisions Relative to Economic Losses

The Double Track System, adopted by most contemporary criminal justice systems, posits that custodial and non-custodial sanctions (principally fines) must be formulated as genuine functional equivalents, each capable of serving both punitive and rehabilitative purposes[26]. Under this framework, the economic weight of a fine sanction should, at minimum, mirror the economic weight of its corresponding imprisonment alternative. The absence of this equivalence within the USSG has been documented in prior comparative analyses[27], and the present study confirms that the structural imbalance is particularly acute in property crimes involving high-value losses.

As demonstrated in Table 1, the maximum fines prescribed across categories consistently fall short of the economic losses suffered by victims. The ratio of the maximum fine to the upper-limit loss diminishes progressively from category (A) onward. At category (N), where losses may reach USD 250,000,000, the ceiling fine of USD 350,000 represents less than 0.2 percent of the maximum cognizable loss. This pattern reveals that the fine schedule was not calibrated according to any principled economic formula; rather, it appears to have been

[26] Sholehuddin, *supra* note 11; H.C. Fragoso, *The "Dual-Track" System of Sanctions in Continental Criminal Law*, 12 INT. J. OFFENDER THER. 37 (1968).
[27] Gunawan and Sholehuddin, *supra* note 8; Saleh and Gunawan, *supra* note 4.

determined independently of the loss-increment structure embedded in §2B1.1. The consequence is that for perpetrators of large-scale property crimes, the maximum prescribed fine offers minimal financial deterrence, as it represents a negligible fraction of the illicit benefit derived from the offense.

This conclusion is further reinforced when the fine values are benchmarked against the principle of commensurate deserts articulated by Bentham (2017)[28], which holds that the severity of punishment must be commensurate with the seriousness of the culpable conduct. A punishment system that permits a perpetrator who caused USD 250,000,000 in losses to discharge their criminal fine obligation for USD 350,000 patently fails this standard. It also contradicts the foundational aspiration of the USSG — as articulated in the Sentencing Reform Act of 1984 — to provide fair and effective punishment capable of deterring future criminal conduct[29].

C. Economic Value of Imprisonment Versus Lawful Employment: Identifying the Deterrence Failure

A central analytical contribution of this study is the formulation of the Upper-Limit Loss per Maximum Imprisonment ratio as a proxy for the economic value imputed to each month of incarceration within the USSG framework. This ratio allows a direct comparison between (a) the per-month economic significance attributed to custodial punishment in relation to the losses associated with each offense category, and (b) the per-month earnings available to an individual engaged in lawful employment under the least favorable economic conditions in the United States — that is, at the federal minimum wage.

The federal minimum wage of USD 7.25 per hour, unchanged since 2009, translates to approximately USD 1,160 per month based on a standard 40-hour working week (U.S. Department of Labor, 2024). When the Upper-Limit Loss per Maximum Imprisonment values in Table 1 are compared against this benchmark, it becomes evident that from category (C) onward — corresponding to losses exceeding USD 15,000 — the per-month loss-to-imprisonment ratio exceeds the minimum wage threshold. By category (G), the ratio reaches USD

[28] BENTHAM, *supra* note 3.
[29] Hylton, *supra* note 13.

7,746 per month, approximately 6.7 times the monthly minimum wage. The ratio continues to escalate through category (O), reaching USD 1,681,957 per month.

The economic implications of these figures are significant. When the economic value attributed to imprisonment per unit of time exceeds what a person can earn through lawful minimum-wage employment in the same period, imprisonment effectively functions as a more efficient means of "settling" the economic debt of crime than honest labor. This undermines the foundational deterrence mechanism described by Becker (1974) and reinforces the view that the USSG fails to satisfy the "crime does not pay" maxim with respect to large-scale property offenses. Such structural inadequacy contributes to what Saleh and Gunawan characterized as an imbalanced risk-benefit ratio in the architecture of criminal sanctions[30].

Moreover, the analysis reveals an absence of a coherent formula for calibrating the relationship between offense-level increments and the economic magnitude of victim losses. As losses increase across categories (A) through (P), the incremental addition to the offense level remains constant at two points per step, regardless of the exponential growth in the loss amounts. This mechanistic uniformity fails to account for the qualitatively different deterrent requirements associated with, for instance, a USD 95,000 loss versus a USD 250,000,000 loss. The USSG's uniform two-point increment structure thus produces an asymmetric sentencing trajectory in which the punitive response to financial harm grows at a substantially slower rate than the harm itself, a deficiency consistent with findings in comparative sentencing scholarship[31].

D. Theoretical Assessment: Deterrence, Just Deserts, and Economic Rationality

The empirical findings presented above are assessed against three overlapping theoretical frameworks: the just deserts theory, the utilitarian deterrence theory, and the Economic Analysis of Law (EAL). Together, these frameworks provide a multi-dimensional basis for evaluating whether the USSG achieves its stated objectives of proportionality and deterrence in the context of economic crimes.

[30] Saleh and Gunawan, *supra* note 4.
[31] M. M Boone, *Imposed versus Undergone Punishment in the Netherlands*, 6 ELECTRON. J. COMP. LAW (2002); Rutkowski, *supra* note 6.

The just deserts principle, as reconstructed by scholars from Aristotle through Walker (1969) and Kirchengast (2009)[32], holds that the severity of criminal punishment must correspond to the moral gravity of the offense and the magnitude of harm caused. Applied to property crimes, this principle demands that sentencing weight — whether expressed in months of imprisonment or in monetary fines — must maintain a meaningful relationship to the scale of victimization. The present study demonstrates that the USSG systematically violates this principle at higher loss categories, where punishment severity stagnates relative to the growth in financial harm. Rutkowski (1976), drawing on Fogel's justice model, similarly argued that treating all offenses alike without adequate calibration to the specific harm caused represents a failure of equitable punishment[33].

From a utilitarian deterrence perspective, as elaborated by Bentham (2017) and subsequently formalized by Becker (1974)[34], a rational potential offender weighs the expected benefit of crime against the expected cost of punishment, discounted by the probability of detection and conviction. For deterrence to operate effectively, the expected cost of punishment must exceed the expected benefit of the criminal act. The USSG's failure to ensure that neither fine sentences nor imprisonment terms consistently outweigh the economic gains from large-scale theft constitutes a structural failure of deterrence design. This concern is particularly acute for property crimes characterized by high monetary gains, where the asymmetry between criminal proceeds and sanctioned penalties is most pronounced.

The Economic Analysis of Law framework, as applied by Hylton and Soetopo, offers a complementary lens by examining the efficiency and rationality of legal rules as economic instruments. Applied to sentencing, EAL requires that imprisonment and fine schedules be designed with reference to empirically grounded economic variables — such as prevailing wage rates and regional living standards — so that the economic value of punishment can be meaningfully compared to the economic value of the crime's benefit. The present analysis employs the federal minimum wage as a reference variable for the economic value of liberty (and, by extension, the economic value of

[32] WALKER, *supra* note 7; Kirchengast, *supra* note 1.
[33] Rutkowski, *supra* note 6.
[34] BENTHAM, *supra* note 3; BECKER, *supra* note 10.

imprisonment), consistent with John Rawls' difference principle, which directs that socioeconomic arrangements must be evaluated from the perspective of the least advantaged members of society[35]. This reference point provides a principled, objectively verifiable benchmark against which the proportionality of sanctions can be assessed, and it demonstrates that the USSG's current structure fails this benchmark for the majority of property crime loss categories.

Furthermore, this study concurs with Gibson that an effective and legitimate sentencing system must integrate punitive proportionality with rehabilitative goals, ensuring that the conditions of imprisonment preserve human dignity while simultaneously communicating a clear and credible deterrent signal to potential offenders[36]. The current USSG structure, by failing to align fine and imprisonment schedules with the economic realities of large-scale property crime, risks compromising both objectives simultaneously.

E. Implications for Sentencing Reform

The findings of this study carry direct implications for the reform of the USSG, particularly with respect to the economic crimes covered under §2B1.1. Three specific reform directions are identified. First, the fine schedule under USSG §5E1.2(c)(3) requires substantial revision to establish a mathematically principled relationship between fine ceilings and the loss categories prescribed in §2B1.1. At minimum, maximum fines should represent a meaningful percentage of the applicable loss ceiling, ensuring that the fine alternative to imprisonment retains genuine economic deterrent value across all loss categories.

Second, the loss-increment structure in §2B1.1 should be reconsidered in light of the empirical evidence that constant two-point offense-level increments produce a progressively diminishing punitive response to exponentially larger losses. A graduated, non-linear increment schedule — calibrated to ensure that the per-month economic value of imprisonment does not systematically exceed the economic value of lawful minimum-wage employment — would more effectively operationalize the deterrence goals of the Sentencing Reform Act. This approach is consistent with recommendations by Gunawan and Sholehuddin

[35] JOHN. RAWLS, A THEORY OF JUSTICE (1999).
[36] STEPHEN C. GIBSON & CRISTINA B. GIBSON, DESIGNING FOR DIGNITY: REIMAGINING PRISON REFORM (2022).

for the application of economic analysis to the formulation of criminal sanction schedules[37].

Third, the de facto loss ceiling at USD 550,000,000 in category (P) of §2B1.1 should be eliminated or restructured to allow for continuous, proportional escalation of punishment beyond this threshold. The current ceiling effectively grants impunity for the marginal harm caused by losses in excess of USD 550,000,000, a result wholly inconsistent with the principle of commensurate deserts[38]. The introduction of additional loss categories above the current maximum, with corresponding increases in both offense level and fine ceilings, would better align the USSG with its own foundational goals.

These reform proposals are grounded in a normative-empirical methodology that integrates legal analysis with economic reasoning, consistent with the EAL approach advocated[39]. Future research should extend this analysis to additional criminal code provisions within the USSG — including Burglary and Trespass (§2B2.1), Robbery, Extortion, and Blackmail (§2B3.1), and other basic economic offense provisions — to assess whether the structural inadequacies identified herein are systemic across the USSG or specific to theft-related offenses.

IV. Conclusion

This study demonstrates that the sentencing architecture of the 2021 United States Sentencing Guidelines (USSG), particularly under §2B1.1, does not structurally satisfy the economic conditions required for effective deterrence in high-value property crimes. Through a normative legal methodology integrated with Economic Analysis of Law, this research introduced the Upper-Limit Loss per Maximum Imprisonment (ULL/MIP) ratio as a derived analytical instrument to measure the implicit economic value assigned to custodial sanctions relative to financial harm. The findings reveal three systemic deficiencies: first, the fine schedule under §5E1.2(c)(3) lacks proportional alignment with escalating victim losses, resulting in monetary penalties that represent only a negligible fraction of large-scale economic harm; second, the constant two-point offense-level increment produces an asymmetrical sentencing structure in which imprisonment terms increase arithmetically while financial losses expand exponentially,

[37] Gunawan and Sholehuddin, *supra* note 8.
[38] BENTHAM, *supra* note 3; Kirchengast, *supra* note 1.
[39] Soetopo, *supra* note 12.

causing the ULL/MIP ratio to exceed the federal minimum wage benchmark from category (C) onward; and third, the loss ceiling at USD 550,000,000 creates a structural discontinuity that prevents proportional escalation for ultra-large economic crimes. Collectively, these features indicate that the USSG fails to operationalize the foundational principle that punishment must outweigh the benefit of crime.

From the perspectives of just deserts theory, utilitarian deterrence, and economic rationality, the current sentencing design undermines the maxim that "crime does not pay." When the economic value implicitly attributed to imprisonment per unit of time surpasses what can be earned through lawful employment under minimum-wage conditions, incarceration ceases to function as a credible deterrent instrument in high-loss categories. The absence of a mathematically principled relationship between loss magnitude, offense-level increments, imprisonment terms, and fine ceilings signals a structural misalignment between normative sentencing objectives and economic reality. Reform is therefore warranted. A recalibrated sentencing model incorporating non-linear escalation of offense levels, elimination of the upper loss ceiling, and economically grounded fine formulas would better align the USSG with the proportionality and deterrence objectives embedded in the Sentencing Reform Act. Future scholarship should extend this structural analysis across additional economic crime provisions to determine whether the deficiencies identified herein represent systemic characteristics of the Guidelines framework.