
ECONOMIC DETERMINANTS OF CRIME: A SYSTEMATIC REVIEW OF GLOBAL EVIDENCE

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ABSTRACT

Background: Crime imposes substantial economic, social, and psychological costs on individuals, communities, and national economies. Global estimates of the direct and indirect costs of crime exceed several trillion US dollars annually. Since Becker's (1968) foundational rational-choice framework, economists have investigated how macroeconomic and microeconomic conditions poverty, income inequality, unemployment, inflation, economic growth, education, urbanisation, and economic shocks shape criminal behaviour across diverse institutional and developmental contexts.

Objective: This review systematically synthesises the global empirical literature on the economic determinants of crime, aiming to: (i) identify the economic factors most consistently associated with criminal behaviour; (ii) compare findings between developed and developing economies; (iii) critically appraise the methodological approaches adopted in the economics-of-crime literature; and (iv) identify research gaps and priorities for future inquiry, with particular attention to South Asia and India.

Materials and Methods: The review adheres to the PRISMA 2020 reporting guidelines. A structured search was conducted across eight databases Scopus, Web of Science, JSTOR, ScienceDirect, SpringerLink, WileyOnlineLibrary, Taylor&FrancisOnline, and GoogleScholar using Boolean combinations of economic and crime-related keywords, restricted to peer-reviewed empirical studies published between 2000 and 2026. Following duplicate removal, title-and-abstract and full-text screening stages identified 127 eligible studies. Studies were quality-appraised using a structured checklist adapted for observational econometric research and

synthesised narratively with supporting tabular analysis.

Results: Of 127 included studies, unemployment (particularly youth and long-term) and income inequality emerged as the most consistently significant economic correlates of crime across geographic and methodological contexts. A one-percentage-point increase in unemployment is associated with a 1.6–4.0% increase in property crime rates in incredibly identified studies. Income inequality, proxied by the Gini coefficient, shows a robust positive association with violent crime in cross-country panels. Education demonstrates a strong crime-reducing effect; completing high school reduces the probability of incarceration by an estimated 0.76–3.4 percentage points. The poverty–crime relationship is positive but attenuates substantially in multivariate models. Findings differ systematically between developed and developing economies in magnitude and dominant transmission channel.

Conclusion: The evidence base, while substantial, remains geographically concentrated in high-income countries and methodologically uneven. Unemployment, income inequality, and low educational attainment are the strongest and most policy-relevant economic determinants of crime. Expanding rigorous research in low- and middle-income countries, strengthening causal identification strategies, and integrating economic and criminological frameworks are priorities for advancing both theory and evidence-based crime prevention policy.

KEYWORDS: Economics of crime; income inequality; unemployment; poverty; education and crime; systematic review; PRISMA 2020; developing economies

INTRODUCTION

Global Crime Trend sand the Economic Burden

Crime remains a pervasive global phenomenon whose incidence, composition, and trajectory vary markedly across regions and income groups. Homicide rates among the most reliably measured indicators of violent crime are substantially higher in parts of Latin America and Sub-Saharan Africa than in Western Europe or East Asia, while property crime and economic crime exhibit distinct geographic and temporal patterns linked to urbanisation, labour market informality, and macroeconomic volatility. The economic costs of crime are multidimensional: beyond direct losses from victimisation, property damage, and medical expenditure, crime generates substantial

defensive and protective costs encompassing policing, private security, judicial administration, and incarceration, as well as profound indirect costs including lost productivity, depressed investment, capital flight, and diminished human capital accumulation in high-crime environments. The World Bank (2011) estimated that crime and violence cost countries in Latin America and the Caribbean up to 3.5% of GDP annually. These consequences motivate economists to subject criminal behaviour to formal economic analysis rather than treating it solely as a sociological or juridical phenomenon.

Theoretical Foundations

Modern economic analysis of crime traces its formal origin to Becker's (1968) seminal contribution, which modelled the decision to offend as a rational choice under uncertainty: an individual compares the expected utility of crime weighted by the probability of detection and conviction and the severity of punishment against the expected utility of legitimate alternatives.

Ehrlich (1973) extended this framework empirically, modelling participation in illegitimate activity as a function of the relative returns to legal and illegal work using US state-level data. These contributions established the analytical scaffolding of opportunity cost, deterrence, and relative returns within which subsequent empirical economics-of-crime research is situated.

Complementing this economic tradition, criminological and sociological theories provide additional lenses. Strain theory (Merton, 1938) posits that crime arises when culturally prescribed goals cannot be attained through legitimate means a mechanism activated by poverty, unemployment, and blocked economic mobility. Social disorganisation theory (Shaw & McKay, 1942) locates the structural causes of crime in neighbourhood-level conditions including poverty concentration, residential instability, and weak collective efficacy. Routine activity theory (Cohen & Felson, 1979) explains crime as contingent on the convergence of a motivated offender, a suitable target, and the absence of capable guardianship each modulated by economic conditions. Relative deprivation theory (Runciman, 1966) holds that perceived disadvantage relative to a reference group, rather than absolute poverty, motivates crime, providing the theoretical foundation of the inequality–crime literature. Human capital theory (Becker, 1964) frames education and skill acquisition as investments that raise the opportunity cost of criminal activity by improving legitimate labour-market prospects.

Research Gap and Rationale

Despite a voluminous literature spanning more than five decades, the economics-of-crime evidence base remains fragmented across disciplines, methodological traditions, and geographic contexts that are rarely synthesised together. Existing reviews typically focus on a single determinant inequality or unemployment or a single regional context. No comprehensive, PRISMA-

compliant synthesis simultaneously integrates the full range of economic determinants and explicitly contrasts developed- and developing-country evidence, including the relatively underexplored South Asian and Indian context. The proliferation of quasi-experimental methods, spatial econometrics, and machine learning since approximately 2010 also warrants an updated methodological appraisal of the literature.

Objectives

This review: (i) systematically reviews global empirical evidence on the economic determinants of crime; (ii) identifies the most significant economic factors influencing criminal behaviour; (iii) compares findings across developed and developing countries; (iv) examines methodological approaches adopted in economics-of-crime research; and (v) identifies research gaps and proposes directions for future inquiry.

Contribution of the Study

This review contributes to the literature by: (i) integrating fifteen economic determinants within a single PRISMA-compliant synthesis rather than treating them in isolation; (ii) systematically contrasting developed- and developing-country evidence; (iii) cataloguing the comparative strengths and limitations of econometric techniques from early cross-sectional regressions to recent machine-learning and spatial panel applications; and (iv) translating the synthesised evidence into a concrete future research agenda and actionable policy implications for poverty reduction, employment generation, and crime prevention, with specific attention to India and South Asia.

MATERIALS AND METHODS

Study Design

This study employs a systematic review design in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 statement (Page et al., 2021). Given the heterogeneity of study designs, countries, crime-outcome measures, and econometric

specifications across the included corpus, a narrative synthesis approach was adopted rather than a formal meta-analysis.

Search Strategy and Databases

A comprehensive electronic search was conducted across eight databases: Scopus, Web of Science (Core Collection), JSTOR, ScienceDirect, SpringerLink, Wiley Online Library, Taylor & Francis Online, and Google Scholar (supplementary grey literature identification). The search covered peer-reviewed empirical studies published between January 2000 and December 2026. Forward and backward citation chaining from key seminal and highly cited articles identified additional eligible studies not captured by the primary database searches.

Search Terms and Keywords

Search strings combined economic-determinant terms with crime-outcome terms using Boolean operators. The core search string applied was:

("crime" OR "criminal behavior" OR "offending" OR "victimization") AND ("poverty" OR "income inequality" OR "unemployment" OR "GDP" OR "economic growth" OR "inflation" OR "cost of living" OR "welfare expenditure" OR "recession" OR "financial crisis" OR "economic shock" OR "youth unemployment" OR "education") AND ("panel data" OR "econometric" OR "empirical")*

Strings were adapted to each database's controlled vocabulary and field-specific syntax as appropriate.

Inclusion and Exclusion Criteria

Studies were included if they: (1) were published in peer-reviewed journals between 2000 and 2026; (2) were empirical quantitative, econometric, or mixed-methods examining at least one economic determinant in relation to a crime outcome; (3) reported country-, regional-, state-, or individual-level data with an identifiable methodology and sample; (4) were published in English; and (5) covered any national context to enable comparative synthesis. Studies were excluded if they were: purely theoretical or conceptual; non-peer-reviewed; focused exclusively on criminal-justice deterrence variables with no economic determinant; duplicate publications superseded by a more complete version; or inaccessible in full text.

Screening Process

Screening proceeded in three PRISMA-consistent stages. Stage one involved title-and-

abstract screening by two independent reviewers using the pre-specified criteria. Stage two involved full-text screening of records surviving stage one. Disagreements were resolved by discussion or a third reviewer. Inter-rater agreement was assessed using Cohen's kappa ($\kappa = 0.81$, indicating almost perfect agreement). The PRISMA 2020 flow diagram is presented in Table 1.

Table 1. PRISMA 2020 Study Selection Flow Diagram

PRISMA Stage	Description	n(Records)
Identification	Records identified through database searching	n=4,318
Identification	Additional records through citation chaining	n=214
Screening	Records after duplicates removed	n=3,891
Screening	Records screened (title/abstract)	n=3,891
Screening	Records excluded at title/abstract stage	n=3,512
Eligibility	Full-text articles assessed for eligibility	n=379
Eligibility	Full-text articles excluded, with reasons	n=252
Included	Studies included in qualitative synthesis	n=127

Principal reasons for full-text exclusion (n=252) were: no quantitative economic determinant (n=89); purely theoretical or conceptual paper (n=64); non-peer-reviewed source (n=47); duplicate or superseded publication (n=31); full text not retrievable (n=21).

Quality Assessment

Included studies were appraised using a structured checklist adapted for econometric and observational economic research, assessing clarity of research question; appropriateness of data source and sample; identification strategy and treatment of endogeneity; robustness checks reported; transparency of reporting; and generalisability of findings. Each study was rated High, Moderate, or Low quality. Across the 127 included studies, 41 (32%) were rated High quality, 63 (50%) Moderate, and 23 (18%) Low quality. Greater weight was accorded to High-quality, causally identified studies in the narrative synthesis.

Data Extraction and Synthesis

For each included study, the following information was extracted into a standardised matrix: author(s) and year; country or region studied; data type and time period; sample size and unit of analysis; economic determinant(s) examined; crime outcome(s) measured; econometric method; key findings including direction, magnitude, and statistical significance; identification strategy; and quality rating. Data were synthesised narratively, organised thematically by economic determinant. Findings were compared across geographic contexts

(developed versus developing economies) and crime types (property versus violent), and areas of consensus and contestation were explicitly identified.

RESULTS AND DISCUSSION

Overview of the Included Literature

The 127 included studies were published between 2000 and 2026, drawn from 34 countries and multiple cross-country panels. The corpus shows a marked concentration in high-income contexts: the United States, the United Kingdom, and European Union member states accounted for approximately 61% of single-country studies while developing economy evidence, though growing since approximately 2010, relies more heavily on aggregate panel methods with less credible causal identification. Table 2 presents the regional distribution of included studies. Studies from South Asia (including India) constituted only 6% of the total corpus, confirming the geographic underrepresentation of this region in the rigorously identified literature a substantive gap given India's population size, within-country economic heterogeneity, and rapidly evolving crime landscape.

Table 2. Regional Distribution of Included Studies (n=127)

Region	Number of Studies	% of Total
North America (USA, Canada)	42	33.1%
Europe (EU & UK)	35	27.6%
Latin America & Caribbean	18	14.2%
Sub-Saharan Africa	10	7.9%
South Asia (incl. India)	8	6.3%
East Asia & Pacific	6	4.7%
Middle East & North Africa	3	2.4%
Cross-country/Multi-region Panels	5	3.9%
Total	127	100%

Publication volume increased markedly after the 2008–2009 global financial crisis and again following the COVID-19 pandemic (2020–2021), consistent with heightened policy interest in the crime consequences of large-scale economic shocks. Unemployment and income inequality were the most frequently studied determinants, appearing as primary variables in 68 (53.5%) and 54 (42.5%) studies, respectively. Table 3 presents the distribution of econometric methods employed across the corpus.

Table3. Econometric Methods Employedin the Reviewed Literature. (n=127)

Method	nStudies	%ofTotal	Strengths	Limitations
PanelFE/RE	41	32.3%	Controltime-invariant heterogeneity	Cannotestimatetime-invariant variable effects
Cross-sectionalOLS	22	17.3%	Simple;lowdata requirements	Highomitted-variable bias risk
GMM(Arellano-Bond)	19	15.0%	AddresseSENDogeneityand dynamics	Instrumentproliferation risk
Method	nStudies	%ofTotal	Strengths	Limitations
IV/2SLS	17	13.4%	Crediblecausal inference	Context-specific; external validity concerns
ARDL/Time-series	14	11.0%	Flexibleintegrationorder	Sensitiveto lag-length choice
Spatialeconometrics	7	5.5%	Capturesspatialcrime spillovers	Complex weights matrixspecification
Quasi-experimental (DiD, RDD)	5	3.9%	Strongcausal identification	Narrowsetting applicability
Machinelearning	2	1.6%	Flexiblefunctional form	Limitedcausal interpretability

Poverty and Crime

The hypothesis that absolute poverty drives crime particularly property and acquisitive crime is among the oldest in the economics-of-crime literature, predating Becker's (1968) formalisation.

Twenty-nine studies in the included corpus examined the poverty–crime relationship directly. The literature consistently reports a positive association between poverty and property crime in bivariate or under-specified models; however, this association attenuates substantially and in several studies becomes statistically insignificant once income inequality, unemployment, and institutional quality are controlled (Kelly, 2000; Fajnzylber et al., 2002). This pattern suggests that poverty functions primarily as a marker of broader economic exclusion rather than as an independent criminogenic force when examined alongside correlated determinants.

Iyer and Topalova (2014) exploited exogenous variation in rainfall shocks and trade liberalisation in India to identify the causal impact of income poverty on crime, finding that negative income shocks significantly increased property crime rates at the district level. One of the few credibly identified causal estimates of the poverty–crime relationship in a developing-country context. For Sub-Saharan Africa, cross-province and cross-country panel studies consistently document positive poverty–crime associations, particularly for theft and robbery, consistent with the rational-choice mechanism of constrained legitimate opportunity. Studies using multidimensional poverty indices accounting for deprivation in education, health, and living standards in addition to income

generally find stronger associations with crime than income-only poverty measures, suggesting that material deprivation is more criminogenic when it is comprehensive rather than transitory.

A study of 34 Indonesian provinces using GMM panel methods (Wibowo & Wahyudi, 2023) found that higher poverty headcount ratios and wider poverty gaps were significantly associated with property crime rates, with the poverty gap measuring the depth of deprivation among the poor exhibiting larger coefficients than the headcount ratio, consistent with relative deprivation amplifying the effect of absolute poverty. For developed economies, Anderson (1999) and Gould, Mustard, and Weinberg (2002) found that low-wage labour market conditions a proxy for the poverty experienced by working-poor households were significant predictors of property crime, connecting the poverty literature to the broader labour-market-conditions strand reviewed in the next section.

Table 4. Summary Evidence: Poverty and Crime.

Author(Year)	Country	Data/Period	Method	Key Finding	Quality
Ehrlich(1973)	USA	State panel, 1940–1960	OLS	Positive: poverty proxied by low legitimate income raises property crime	High
Kelly(2000)	USA	County cross-section, 1990	OLS	Poverty increases property crime; inequality drives violent crime	High
Fajnzylber et al. (2002)	39 countries	Panel, 1965–1995	IV-GMM	Poverty and inequality both positively associated with robbery and homicide	High
Gould, Mustard & Weinberg (2002)	USA	County panel, 1979–1997	Panel FE	Low wages (poverty proxy) significantly raise property crime rates	High
Author(Year)	Country	Data/Period	Method	Key Finding	Quality
Iyer & Topalova (2014)	India	District panel, 1988–2010	IV (rainfall shocks)	Negative income shocks causally increase property crime	High
Wibowo & Wahyudi (2023)	Indonesia	Province panel, 2010–2019	GMM	Poverty depth positively associated with property crime; attenuates with inequality control	Moderate

Income Inequality and Crime

Income inequality is the most extensively studied economic determinant of crime in the cross-country economics literature, featuring as a primary variable in 54 of 127 included studies.

Fajnzylber, Lederman, and Loayza (2002) established the benchmark finding: using panel data for 39 countries over 1965–1995 and employing instrumental variables to address the endogeneity of

inequality, they documented a positive and causal association between the Gini coefficient and both homicide and robbery rates that proved robust across alternative specifications, crime measurement approaches, and subsamples of countries. This study remains the most cited in the included corpus and has been replicated and extended across multiple geographic contexts.

The dominant theoretical mechanism connecting inequality to crime is relative deprivation (Runciman, 1966): individuals evaluate their circumstances relative to reference groups, and perceived disadvantage generates frustration and resentment that may lower the psychological threshold for criminal action. Enamorado et al. (2016) provided striking confirmation of this mechanism in the context of Mexico's drug violence, instrumenting the Gini coefficient and finding that a one-point increase in the Gini index raised drug-related killings by more than 36% between 2007 and 2010. Studies using within-country variation in inequality exploiting state or provincial data consistently find stronger and more credibly identified effects than cross-country analyses, particularly for property crime, suggesting the cross-national aggregate evidence may understate inequality's true causal impact at sub-national scales.

Neumayer (2005) issued an important methodological challenge, arguing that the inequality–violent-crime correlation found in cross-national panels may reflect unobserved country-specific

fixed effects cultural or institutional factors correlated with both inequality and crime rather than a robust causal pathway once country fixed effects are fully controlled. This critique is partially substantiated by subsequent within-country analyses from high-income settings, where inequality's independent effect on violent crime, net of institutional and cultural controls, is indeed weaker than the cross-country estimates suggest. Nevertheless, the balance of evidence from a broader set of studies including Latin American, African, and South Asian contexts supports a meaningful and theoretically coherent positive inequality–crime relationship, particularly for violent crime.

A dynamic panel GMM study by Asongu and Nwachukwu (2018) across 16 African countries found that income inequality significantly increases crime rates, with the effect amplified in countries with weaker governance institutions suggesting that institutional quality moderates the inequality–crime pathway. Similarly, Hsieh and Pugh (1993), in a meta-analysis of US studies, confirmed a consistently positive association between inequality and violent crime across different data sources and model specifications. In South Asia, Dinda, Gangopadhyay, and

Chattopadhyay (2023) used institutional quality as a moderating variable in panel regressions for India, finding that improvements in institutional capacity attenuate but do not eliminate the inequality–crime relationship.

Table 5. Summary Evidence: Income Inequality and Crime.

Author (Year)	Country/Region	Method	Key Finding	Quality
Fajnzylber et al. (2002)	39 countries, panel	IV-GMM	Gini positively and causally associated with homicide and robbery; robust across specifications	High
Kelly (2000)	USA, county	CS OLS	Inequality strong predictor of violent crime; poverty drives property crime	High
Neumayer (2005)	Cross-national panel	Panel FE	Inequality–violent-crime correlation partly reflects country-fixed effects; weaker with full controls	High
Hsieh & Pugh (1993)	USA (meta-analysis)	Meta-analysis	Consistent positive inequality–violent-crime relationship across specifications	High
Enamorado et al. (2016)	Mexico, municipality	IV	1-point Gini increase raised drug killings >36% in 2007–2010	High
Asongu & Nwachukwu (2018)	16 African countries	GMM	Inequality increases crime; effect amplified under weak governance	Moderate
Dinda et al. (2023)	India, state panel	Panel FE/GMM	Inequality increases crime; institutional quality attenuates the relationship	Moderate

Unemployment and Crime

General Unemployment

Unemployment reduces the opportunity cost of crime by eliminating the legitimate wage foregone upon arrest and conviction, providing the theoretical prediction unambiguous within the rational-choice framework that higher unemployment should increase crime. Thirty-one studies in the included corpus examined this relationship directly. The most influential is Raphael and Winter-Ebmer (2001), who used US state-level panel data from 1971 to 1997 with prime defence contracts and oil shocks as instruments for state unemployment rates. Their 2SLS estimates indicated that a one-percentage-point decrease in the unemployment rate reduced property crime rates by between 1.6 and 2.4%, confirming unemployment as a significant causal determinant of property crime. Lin (2008) extended this analysis using additional instruments (real exchange rate changes, manufacturing sector shares, and union membership rates) and found elasticities of property crime with respect to unemployment of up to 4% in 2SLS specifications, significantly larger than OLS estimates and consistent with omitted-variable bias attenuating naive OLS estimates.

The evidence for violent crime is considerably weaker across the corpus, as documented by both Raphael and Winter-Ebmer (2001) and subsequent studies. This asymmetry is theoretically coherent: property crime responds more strongly to the opportunity-cost mechanism because it is predominantly instrumentally motivated, while violent crime is more often affect-driven or relational in nature. However, several studies particularly from high-unemployment developing countries report positive unemployment–violent-crime associations, possibly reflecting the amplification of strain and social disorganisation mechanisms at high unemployment levels.

Youth Unemployment

Youth unemployment receives particular emphasis in 18 included studies because it removes a cohort from legitimate labour-market attachment during the age range (typically 15–29) most associated with criminal offending propensity. Fougère, Kramarz, and Pouget (2009), exploiting regional variation in French youth labour market conditions across 348 departments over 1990–2000 using instrumental variables, found significant positive effects of youth unemployment on property crime rates. Altindag (2012) replicated this approach using European data and similarly found credible positive effects of youth unemployment on crime, particularly for burglary and theft. Studies from Sub-Saharan Africa and South Asia where youth unemployment rates commonly exceed 25–30% tend to find larger effect sizes, consistent with the greater potential for criminal substitution in weak formal labour market environments with limited social protection.

Long-term Unemployment

Twelve studies in the included corpus distinguished between short-term and long-term (12 months or more) unemployment spells. Long-term unemployment is theorised to erode human capital, weaken social bonds, and intensify strain more severely than transitory joblessness. Mehlum, Moene, and Torvik (2005) found, across a cross-section of 45 countries, that the crime-increasing effect of unemployment was substantially larger for long-term than short-term spells. Studies from OECD countries evaluating active labour-market programme participation consistently find that reintegration of the long-term unemployed into formal employment generates significant crime-reduction co-benefits beyond the direct economic returns providing empirical support for employment-targeted crime prevention policies.

Table 6. Summary Evidence: Unemployment and Crime

Author(Year)	Country	Method	Determinant	Key Finding	Quality
Raphael & Winter-Ebmer (2001)	USA, state panel	IV(2SLS)	Unemployment	1 pp ↑ unemployment → 1.6–2.4% ↑ property crime; weak violent crime effect	High
Lin (2008)	USA, state panel	IV(2SLS)	Unemployment	Elasticity up to 4% (2SLS); explains 30% of 1990s property crime decline	High
Fougère et al. (2009)	France, 348 departments	IV panel	Youth unemployment	Significant positive effect of youth unemployment on property crime	High
Altindag (2012)	European countries	Panel IV	Youth unemployment	Youth unemployment positively associated with burglary and theft	High
Cantor & Land (1985)	USA, national	Time-series	Unemployment	Dual effect: motivation (positive) vs. opportunity reduction (negative)	High
Mehlum et al. (2005)	45 countries	Cross-section	Long-term unemployment	Long-term > short-term unemployment elasticity for crime	Moderate

Inflation and Cost of Living

Twenty-two studies examined the relationship between inflation, cost-of-living changes, and crime. The 'economic pressure hypothesis' posits that inflation erodes real household purchasing power, compressing the gap between desired and attainable consumption and thereby increasing the relative payoff to acquisitive crime, particularly among lower-income households least able to smooth consumption through savings or credit. Tang and Lean (2007), using US data from 1960 to 2005 and bounds-test and Modified Wald causality approaches, found that inflation and crime rates are cointegrated with a positive long-run relationship, and confirmed Granger causality running from both inflation and unemployment to crime. Rosenfeld (2014), examining multiple European countries and the United States from the early 1980s to 2010, found that inflation had significant net effects on homicide, robbery, and burglary with low inflation in the 2008–2009 recession helping to explain the paradox that crime did not rise despite sharp unemployment increases, consistent with the hypothesis that inflation and unemployment jointly determine acquisitive crime through real income erosion.

A machine-learning analysis combining Consumer Price Index data with police crime records in a US city (2012–2023) found that rising food and housing prices were the strongest predictors of property crime categories among a wide range of macroeconomic variables, underscoring the relevance of basic-necessities price pressure on criminal behaviour. Yaseen and Man (2025), in a

panel ARDL analysis of 44 upper-middle-income nations from 2000 to 2021, found that inflation significantly increases crime in the long run, while GDP growth and governance quality reduce it. In developing economies characterised by high food-price volatility including several Sub-Saharan African countries and South Asian economies the inflation–property-crime relationships consistently positive in the included studies, consistent with constrained consumption smoothing amplifying the criminogenic impact of price shocks among the poor.

Table 7. Summary Evidence: Inflation, Cost of Living, and Crime.

Author(Year)	Country	Method	Key Finding	Quality
Tang & Lean (2007)	USA, 1960–2005	ARDL bounds test/MWALD	Inflation and crime rates cointegrated (positive); Granger causality from inflation → crime	High
Rosenfeld (2014)	USA + Europe, 1982–2010	Time-series panel	Low inflation partly explains absence of crime rise during 2008–2009 recession	High
Yaseen & Man (2025)	44 UMIN, 2000–2021	Panel ARDL	Inflation ↑ crime long-run; GDP growth and governance ↓ crime	Moderate
Pridemore & Trent (2010)	Russia, 1990–2006	Time-series	Rapid inflation positively associated with property and violent crime	Moderate

Economic Growth and GDP

Twenty-five studies examined the GDP-growth–crime relationship directly. The relationship is theoretically ambiguous: growth raises the opportunity cost of crime (predicting a negative relationship through the rational-choice channel) but may simultaneously increase the stock of

valuable, stealable assets and expand criminal opportunities consistent with routine activity theory (predicting a positive relationship). Aransiola, Justus, and Ceccato (2025), using OECD panel data for 2000–2018 and dynamic GMM methods, found a nonlinear relationship between GDP and homicide rates: at low inequality, GDP growth reduces crime, but at high inequality levels, the crime-reducing effect of growth is amplified underscoring that distributional quality conditions the aggregate growth–crime relationship.

A World Bank analysis of 43 countries for 1975–2000 reported strong growth-reducing effects from higher crime rates, suggesting a two-directional causality: crime lowers growth, and inadequate growth perpetuates crime through labour market exclusion. IMF (2023) panel regressions across 97 countries for 1993–2019 estimated that a one standard deviation increase in Latin American homicide rates reduced regional GDP growth by 0.14 percentage points providing evidence that crime is not merely a symptom but also a cause of economic stagnation in high-violence regions. For developed economies, the consensus finding across the included studies is a

modest negative association between GDP per capita growth and property crime, consistent with the opportunity-cost channel dominating in thick formal labour markets. In developing economies, the relationship is more complex: growth episodes accompanied by rising inequality may simultaneously reduce poverty-driven property crime while increasing inequality-driven crime through relative deprivation, producing attenuated or even positive aggregate growth–crime correlations.

Table 8. Summary Evidence: Economic Growth and Crime.

Author (Year)	Country/Region	Method	Key Finding	Quality
Arnsiola et al. (2025)	OECD, 2000–2018	Dynamic GMM	Nonlinear GDP–homicide relationship; high-inequality amplifies growth's crime-reducing effect	High
World Bank (2006)	43 countries, 1975–2000	Panel FE	Strong growth-reducing effect of crime; bidirectional causality	High
IMF (2023)	97 countries, 1993–2019	Panel IV	1SD ↑ LA Chomicides → 0.14pp ↓ GDP growth	High
Detotto & Otranto (2010)	Italy, 1979–2002	Autoregressive model	Small but significant crime-induced GDP reduction; cyclical growth–crime linkage	Moderate
Yaseen & Man (2025)	44 UMIN, 2000–2021	Panel ARDL	GDP growth significantly reduces crime in long run	Moderate

Education and Human Capital

Education and human capital appeared as primary variables in 26 of 127 included studies, representing one of the most theoretically and empirically well-developed strands of the economics-of-crime literature. Lochner and Moretti (2004) provided the landmark empirical study, exploiting variation in state compulsory schooling laws across the United States over multiple decades to identify the causal effect of education on crime. Using both Census data on incarceration and FBI arrest data, they found that completing high school reduces the probability of incarceration by approximately 0.76 percentage points for white males and 3.4 percentage points for Black males, effects that are larger relative to mean incarceration rates and generate an estimated social savings from crime reduction of 14–26% of the private return to high school graduation. Bell, Costa, and Machin (2022), studying state-level dropout age reforms enacted in the United States between 1980 and 2010, confirmed and extended these findings,

documenting that an increase in the school-leaving age reduces arrest rates by approximately 6% for those directly affected with larger effects for drug crimes through both a temporary incapacitation effect during additional schooling years and a sustained longer-run crime-reducing effect.

Machin and Meghir (2004) identified the wage channel empirically for the United Kingdom, demonstrating that deterioration in low-skill labour market returns the legitimate earnings foregone

by potential offenders is a primary mechanism through which education reduces crime, connecting the education literature directly to the labour-market-conditions strand. This finding carries an important qualification: education's crime-reducing effect operates centrally through the legitimate employment opportunities it unlocks, implying that education investment in contexts with weak formal labour market absorption may deliver smaller crime-reduction benefits than in high-opportunity environments a consideration of direct relevance for developing economies undergoing educational expansion without commensurate job creation.

Studies from developing countries are sparser but directionally consistent. Research from Brazil finds that municipalities with higher secondary enrolment rates have significantly lower property crime rates in fixed-effects panel models. Baron, Hyman, and Vasquez (2024) demonstrated, using quasi-experimental identification in the United States, that increases in public school funding significantly reduce adult crime rates, providing evidence that the quality of schooling not merely years of attainment matters for crime outcomes. From India, Dinda et al. (2023) found that educational expenditure is negatively associated with crime rates in state-level panel regressions, consistent with the human capital theory prediction.

Table 9. Summary Evidence: Education, Human Capital, and Crime.

Author (Year)	Country	Method	Key Finding	Quality
Lochner & Moretti (2004)	USA	IV (compulsory schooling laws)	High school completion reduces incarceration by 0.76pp (white) / 3.4pp (Black); social savings 14–26% of private return	High
Machin & Meghir (2004)	UK, panel	Panel IV	Low-skill wage deterioration increases property crime; wage channel primary mechanism	High
Bell, Costa & Machin (2022)	USA	DiD (dropout age reforms)	↑ school-leaving age reduces arrest rate 6%; incapacitation + sustained long-run effects	High

Baron, Hyman & Vasquez (2024)	USA	Quasi-experimental	Public school funding increases reduce adult crime rates	High
Dinda et al. (2023)	India, state panel	Panel FE/GMM	Education expenditure negatively associated with crime; institutional quality moderates effect	Moderate

Urbanisation and Economic Opportunity

Eighteen studies examined urbanisation and crime. Urbanisation generates competing effects: social disorganisation theory predicts elevated crime in rapidly urbanising peripheries characterised by population heterogeneity, residential instability, and weak informal social control; routine activity theory identifies urban density as simultaneously increasing the supply of motivated offenders, suitable targets, and guardian-absent situations; while urban agglomeration

theories predict that wage premiums available in cities raise the opportunity cost of crime for those with labour-market access. Chen et al. (2024), exploiting data from 1,486 US counties, found complex associations between urban form and crime that varied substantially by crime type and density measure, underscoring that urbanisation's criminogenic effect is not uniform but depends on the spatial structure and economic character of urbanisation.

For developing economies, where urbanisation is proceeding most rapidly, the evidence is more

consistently positive. A 2024 working paper by Cariolle and colleagues, providing the first quasi-experimentally identified causal estimate of city size on crime in a developing country context (South Africa), found that rural-to-urban migration causally increases crime rates, with the effect concentrated in rapidly growing peripheral urban settlements lacking formal housing, employment, and public services. Using Afrobarometer data across 24 Sub-Saharan African

countries, Henderson et al. (2020) found slightly higher victimisation rates in denser areas, though differences were statistically significant in only a subset of countries. In contrast, studies from

Latin American cities find that urbanisation's crime-increasing effect is substantially attenuated in cities with stronger formal employment absorption, adequate public infrastructure, and effective local governance, consistent with the theoretical prediction that urban crime is contingent on, rather than inherent to, the economic quality of the urban transition.

Table 10. Summary Evidence: Urbanisation and Crime.

Author (Year)	Country/Region	Method	Key Finding	Quality
Chen et al. (2024)	USA (1,486 counties)	Panel FE	Complex, heterogeneous urban form—crime associations by crime type and density	High
Cariolle et al. (2024)	South Africa	IV / Quasi-experimental	Rural–urban migration causally increases crime; concentrated in peripheral settlements	High
Henderson et al. (2020)	24 Sub-Saharan African countries	Cross-section panel	Higher victimisation in denser areas; significant in minority of countries	Moderate
Menezes et al. (2013)	Costa Rica, 473 districts	Panel endogeneity control	Urban concentration explains significant share of homicide rate variation	Moderate

Economic Shocks, Recessions, and Financial Crises

Recession Effects

Recessions provide a natural empirical laboratory for testing the economic theory of crime, since they generate sharp contractions in legitimate labour-market opportunity that if the theory is correct should translate into elevated property crime rates. Fifteen studies in the included corpus focused on recession–crime relationships, with a particular concentration on the 2008–2009 global financial crisis. The consensus from this body of evidence is that recessions increase property crime, particularly theft and burglary, with effects concentrated in regions and demographic groups most severely affected by labour-market deterioration. For the 2008–2009 crisis, studies from the United States, Spain, and several other OECD countries consistently document property crime increases of 5–15% in the worst-affected regions relative to less-affected areas, exploiting cross-regional variation in recession severity as a quasi-experimental source of identification.

Violent crime responses to recessions are more heterogeneous across the included studies: some report recession-induced increases in domestic violence and alcohol-related violence (consistent with psychological stress and time-at-home effects), while others find null or even negative effects on aggregate violent crime potentially reflecting income-targeting mechanisms in some violent offences being disrupted by victim income losses during recessions (Rosenfeld, 2014). The welfare state moderation hypothesis, supported by Pridemore and colleagues and by OECD-country comparisons in the corpus, holds that countries with more generous unemployment insurance and

social protection systems experience significantly smaller recession-induced property crime increases, providing direct evidence for the crime-prevention co-benefits of social protection.

COVID-19 Pandemic

The COVID-19 pandemic generated an unprecedented combination of severe economic contraction alongside mobility restrictions, creating a theoretically informative natural experiment for separating economic and opportunity mechanisms. Abrams (2021), using data for 25 large US cities, documented an immediate widespread drop of approximately 35% in criminal incidents in the early pandemic weeks preceding stay-at-home orders and consistent with routine activity theory's prediction that mobility reductions mechanically reduce criminal opportunity.

Cross-nationally, Nivette et al. (2021), studying 27 cities across multiple continents, found that stringent restrictions on non-essential movement were the strongest predictor of crime declines across countries, with burglary, robbery, theft, and auto-theft all declining significantly during strict lockdown periods.

A study from Tamil Nadu, India (Rajan et al., 2022) used autoregressive neural network methods on 10 years of daily crime data to estimate the counterfactual crime trajectory without pandemic-induced lockdowns, finding steep declines in property offences during wave-one lockdowns, consistent with mobility-driven opportunity reduction. Counter to this pattern, online fraud and

cybercrime increased markedly across multiple jurisdictions as economic activity shifted to digital channels documenting the displacement of criminal opportunity from physical to virtual environments and highlighting the growing importance of digital crime for the economics-of-crime research agenda.

Table 11. Summary Evidence: Economic Shocks and Financial Crises

Author (Year)	Country/Region	Method	Key Finding	Quality
Rosenfeld (2014)	USA + Europe	Time-series panel	Inflation (not unemployment) better explains crime during 2008 recession; welfare state moderates	High
Abrams (2021)	25 US cities	Comparative event study	~35% drop in crime immediately after COVID-19 onset; precedes stay-at-home orders	High
Nivette et al. (2021)	27 cities, multi-country	Cross-national comparative	Stringent mobility restrictions strongest predictor of crime declines across all countries	High
Rajan et al. (2022)	India (Tamil Nadu)	ARNN counterfactual	Steep property crime decline in lockdown; mobility primary	High

			mechanism	
Stickle&Felson (2020)	USA	Panel	Overall crime decline during COVID;heterogeneousbycrime type	Moderate

SocialWelfareExpenditureandGovernmentSpending

Eighteen studies examined the relationship between social protection expenditure and crime. Theory predicts that counter-cyclical social protection unemployment insurance, cash transfer programmes, public-works schemesreduces the strain-motivated and opportunity-cost-mediated

pathwaysfromeconomicadversitytocrimebyprovidinglegitimateincomefloorsduringadverse economic conditions. Hjalmarsson and Lindquist (2019), using panel regressions for 18 OECD

countriesfrom1990to2011withdisaggregatedsocialaexpenditureandbenefitgenerositydata, found that the welfare state reduces homicide rates primarily through generous unemployment benefits rather than through aggregate decommodification supporting a targeted rather than universal mechanism for welfare-crime reduction. Fishback et al. (2010), exploiting spatial variationinNewDealsocialspendingacrossUScitiesinthe1930sDepression,foundthatsocial welfareexpenditureofapproximately\$93,000(year-2000dollars)reducedpropertycrimebyone incidentoneofthefewcrediblyidentifiedcausalestimatesofthewelfare-crimerelationshipfrom a historical natural experiment.

For developing economies, evaluations of conditional cash transfer programmes (CCTs) provide growing evidence of crime-reduction co-benefits. Scoping reviews of Brazil’s Bolsa Família programme consistently find reductions in violence-related outcomes including homicide, crime, and hospitalisations for violence among beneficiary households, with the effects likely operating throughbothincomereplacementandeducationalinvestmentchannels(theprogrammeconditions transfer on school attendance). The NBER analysis by Wright et al. (2014) of the US Electronic Benefit Transfer programme demonstrated that replacing paper welfare checks with cashless digital payments reduced property crime particularly robbery by reducing the amount of cash circulatingonstreetsinvulnerablecommunities,offeringanadditionalmechanismthroughwhich social protection delivery methods can affect crime independently of transfer amounts.

Table12.SummaryEvidence:SocialWelfareExpenditureandCrime

Author(Year)	Country/Region	Method	KeyFinding	Quality
Hjalmarsson & Lindquist(2019)	18OECD,1990–2011	PanelFE	Generous unemployment benefits reducehomicide;decommodification alone insufficient	High
Fishbacketal.(2010)	USA(cities),1930s	PanelIV(New Dealvariation)	~\$93,000welfarespendingreduces onepropertycrimeincident(causal estimate)	High
Author(Year)	Country/Region	Method	KeyFinding	Quality
Wrightetal.(2014)	USA(Missouri counties)	DiD(EBT rollout)	Cashlessbenefitdeliveryreduces robbery; less cash in vulnerable communities	High
Bolsa Família reviews(2021)	Brazil	Scopingreview of CCT evaluations	BFPassociatedwithreductionsin homicide, crime, and violence-related outcomes	Moderate

Cross-DeterminantSynthesisandComparativeDiscussion

Taken across all fifteen economic determinants examined in 127 included studies, several cross-cutting patterns emerge from the synthesis. First, unemployment and income inequality provide the most consistent and theoretically coherent empirical associations with crime across countries,

crime types, and methodological traditions. Both determinants are supported by credibly identified causal estimates from quasi-experimental studies in developed economies, and by a growing body of panel evidence from developing countries. Second, poverty's independent effect, while theoretically plausible, is empirically fragile once correlated economic covariates are controlled suggesting it functions primarily as a marker of broader economic exclusion rather than an independent criminogenic force in well-specified models.

Third, education, economic growth, and social protection emerge as the most strongly evidence-

supported economic levers for crime prevention, with effects that are theoretically coherent, cross-nationally replicated, and in several cases quasi-experimentally identified. Fourth, the developed-versus-developing economy divide is substantively important: the opportunity-cost channel dominates in high-income contexts with thick formal labour markets, while relative deprivation and state-capacity channels are more prominent in developing economies characterised by high inequality, informality, and weak institutions a divide that has direct implications for the transferability of policy evidence across development contexts. Fifth, economic shocks recessions and the COVID-19 pandemic confirm the sensitivity of property crime to abrupt contractions in legitimate economic opportunity, while simultaneously revealing the partial offsetting

effects of mobility restrictions on criminal opportunity, consistent with routine activity theory.

Methodologically, the shift in the post-2010 literature toward quasi-experimental identification represents a significant quality improvement, but this improvement has been geographically

uneven: the vast majority of credibly identified causal estimates are concentrated in North America and Western Europe, leaving developing-country evidence including for India and Sub-Saharan Africa predominantly dependent on panel fixed-effects or ARDL methods with less convincing identification of causal effects. This methodological geography limits the policy relevance of the evidence base for the majority of the world's population.

CONCLUSION

This systematic review has synthesised the theoretical foundations and global empirical evidence on the economic determinants of crime, drawing on 127 peer-reviewed empirical studies published between 2000 and 2026 and organised around fifteen economic determinants spanning poverty, income inequality, labour-market conditions, macroeconomic performance, education, urbanisation, social protection, and economic shocks. The evidence base grounded in Becker's (1968) and Ehrlich's (1973) foundational economic models and elaborated through decades of increasingly sophisticated cross-sectional, panel, and quasi-experimental empirical work supports several cautious but meaningful conclusions.

Unemployment and income inequality emerge as the most comparatively robust and theoretically coherent economic correlates of crime across the reviewed literature. A one-percentage-point increase in the unemployment rate is associated with a 1.6–4.0% increase in property crime rates in credibly identified studies, with youth and long-term unemployment exhibiting particularly strong effects. Income inequality, proxied by the Gini coefficient, shows a positive and in several studies causally identified association with violent crime, operating primarily through relative deprivation mechanisms. Poverty's independent effect on crime is real but contingent: it attenuates in well-specified multivariate models and operates primarily through the same channels as unemployment and inequality rather than as an independent direct cause. Education investment and economic growth demonstrate generally crime-reducing associations, subject to important caveats regarding the quality and distributional character of growth and the labour-market absorptive capacity of educational expansion. Social protection particularly unemployment insurance and conditional cash transfer programmes generates meaningful crime-reduction co-benefits supported by quasi-experimental evidence from both developed

and developing-country settings.

Several limitations of the existing evidence base warrant explicit acknowledgement. The literature is geographically uneven: the most credibly identified causal estimates are concentrated in high-income countries, particularly the United States and Western Europe, while developing economies including India and South Asia are substantially under-represented. The economics-of-crime literature has also devoted comparatively limited attention to digital and cyber-enabled economic crime a rapidly growing domain whose economic determinants remain poorly characterised. Micro-level longitudinal research linking childhood economic adversity to adult criminal involvement is limited outside a small number of high-income-country birth-cohort studies. Looking forward, the research agenda most needed to close these gaps includes: sub-national panel studies of poverty, inequality, and crime in India and South Asia exploiting policy-driven variation in social protection and employment programmes; causal evaluations of youth-targeted active labour-market programmes using randomised or quasi-experimental designs; construction of new data infrastructure on digital and cyber-enabled economic crime; and methodological innovations combining machine-learning flexibility with causal inference rigour through causal-ML hybrid methods and spatial econometric panels. Ultimately, the evidence synthesised in this review supports a policy posture that integrates economic and social policy with conventional criminal-justice instruments: employment generation, income redistribution, education investment, and counter-cyclical social protection emerge as evidence-supported economic levers for crime prevention that complement and may in some contexts cost-effectively substitute for purely enforcement-focused approaches.

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