Socio-economic determinants of crime in U.S. states

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1 Research question

Our project studies the socio-economic and demographic determinants of crime in the United States at the state level. More precisely, we ask whether economic opportunities and social inequalities are correlated with different types of crime (violent and property crime) across states and over time.

Crime in the United States exhibits substantial variation across states and over time, and understanding the socio-economic factors that contribute to these differences remains a central question in both economics and public policy. Our project aims to investigate how economic conditions, demographic structure, inequality, public spending, and police behaviour correlate with violent and property crime at the state–year level. The objective is not to establish strict

causal relationships—an ambitious task given the observational nature of the data—but rather to document robust associations and explore whether crime levels systematically co-evolve with structural socio-economic indicators.

A first motivation for this research question is the long-standing hypothesis that economic opportunity and crime are linked. Periods of slow economic growth and labour market stress may increase incentives for certain types of offences, particularly property crime. To examine this mechanism, we combine the crime data from the CORGIS/FBI series with annual state GDP from the Bureau of Economic Analysis. GDP provides a measure of overall economic activity and allows us to test whether states experiencing strong or weak economic performance also display different crime patterns.

Income inequality is another potential determinant of criminal activity. The World Inequality Database (WID) provides rich information on income shares and fiscal aggregates at the top and bottom of the distribution. High inequality may generate both economic stress and social fragmentation, potentially amplifying incentives for crime or reducing the perceived legitimacy of institutions. By merging the WID data with the crime series, we can evaluate whether states with higher income concentration or lower fiscal income shares among the majority of the population exhibit systematically different violent or property crime rates.

Migration flows constitute a third dimension of interest. Public debate often assumes—sometimes incorrectly—that immigration influences crime rates. The DHS immigration data enable us to incorporate yearly state-level measures of lawful permanent residents, nonimmigrants, asylees, and refugees. Our goal is not to test politically charged claims, but to empirically examine whether changes in migration patterns are associated with changes in state crime trends once we control for other socio-economic conditions.

In addition, we incorporate information on public expenditure and food assistance (from the Census and USDA Food Environment Atlas), which may proxy for the strength of social safety nets and local investment in welfare-related programmes. States with stronger social services may provide better support for vulnerable populations, potentially mitigating some of the socio-economic pressures that contribute to crime. Including these variables allows us to explore such channels empirically.

Finally, we integrate data on police shootings from the Washington Post database. While this dataset does not measure police activity directly, fatal shootings can serve as a proxy for law-enforcement intensity or tension between police and residents. Investigating whether states with higher levels of fatal shootings also differ in crime trends contributes to a broader understanding of institutional and behavioural dimensions of crime.

How do economic conditions, income inequality, immigration flows, public spending, and police activity correlate with violent and property crime across U.S. states?

1.1 Brief dataset description

We build our panel from seven sources:

- crime rates (FBI/CORGIS, 1960–2019) distinguishing violent and property offences;
- income inequality (WID, 1960–2018) providing top income shares by state;
- GDP (BEA Regional Accounts, 1997–2023);
- immigration flows (DHS, 2013–2023) covering legal residents, refugees and asylees;
- police shootings (Washington Post, 2015–2024);
- public spending (Census Bureau, 2017–2023) on education, welfare, health, corrections and police;
- and food assistance participation (USDA Food Atlas, 2015).

Full descriptions are provided in the data cleaning document (Phase 2).

2 Data analysis

Our empirical analysis is divided into two parts, reflecting the heterogeneous temporal coverage of our sources. The crime, inequality (WID), and GDP series provide consistent state-year observations spanning nearly six decades (1960–2018), allowing us to examine long-run associations and temporal dynamics. In contrast, immigration flows (2013–2018), police shootings (2015–2018), public spending (2017–2018) and food access (2012-2023) are only available for recent years.

Rather than discarding these valuable contemporary indicators, we adopt a two-stage approach: we first exploit the full historical depth of our panel to study structural relationships between economic conditions and crime, then narrow the window to 2015–2018 to incorporate additional explanatory factors in a richer, shorter-term analysis.

2.1 Part 1. Long-run analysis (1960–2018)

2.1.1 Descriptive analysis

2.1.2 Regression analysis

2.1.3 Tests

2.2 Part 2. Short-run analysis (2015–2018) - Contemporary correlates of crime

2.2.1 Descriptive analysis

2.2.2 Regression analysis

2.2.3 Tests

3 Conclusion