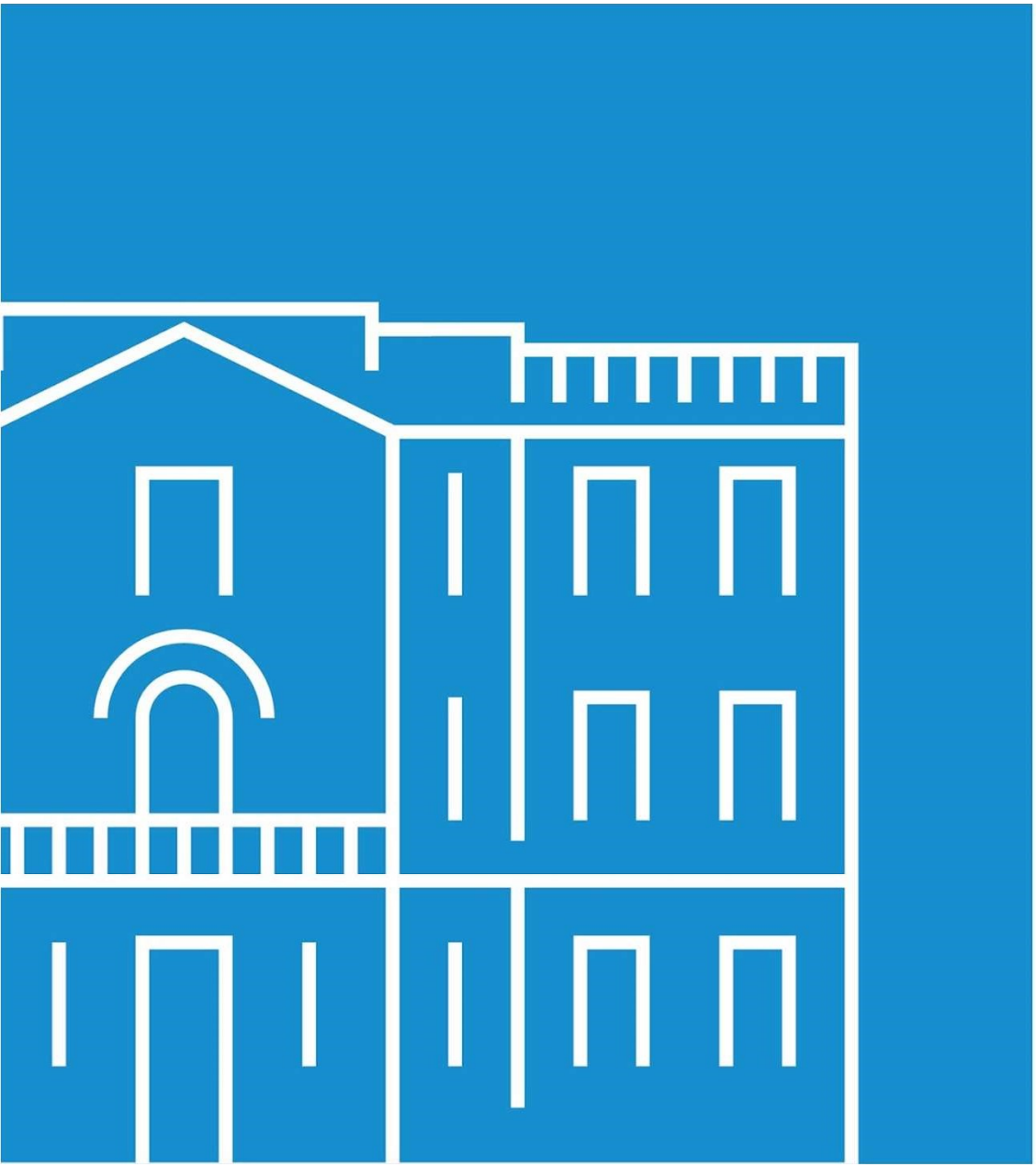


Research
Education
Outreach
CCA

Fondazione Compagnia di San Paolo
Università degli Studi di Torino

Opening Ceremony of the Academic Year 2024-25

Torino, 11 November 2024

The Economics of Crime

Giovanni Mastrobuoni
Intesa Sanpaolo Chair in Economics

THE ECONOMICS OF CRIME

*Study of **i) economic factors influencing criminal behavior** and*
***ii) the impact of crime on economic outcomes**.*

Historical Perspective: Gary Becker's (1968) "Crime and Punishment" model, which analyzed crime as a rational choice based on cost-benefit analysis.

Key Questions in the Economics of Crime:

- What are the economic incentives and disincentives associated with criminal behavior?
- How do factors like unemployment, education, and inequality influence criminal behavior?
- What are the effects of criminal justice policies on crime?

THE SHIFT TOWARD EMPIRICAL WORK AND CAUSAL IDENTIFICATION

Motivation: Establishing causal relationships is challenging in social sciences, especially in economics and criminology, due to confounding factors.

Challenges: reverse causality, omitted variables, and selection bias that make simple correlations unreliable.

Need for Credible Identification: importance of causality for informing policy, predicting individual behavior, and making effective interventions.

Examples from part of my past, present, and future research:
next…

CORRELATION ≠ CAUSATION:
Police-Crime

Research question: How much should we in invest in police (**P**) patrolling? Does an increase in police presence reduce crime (**C**), and by how much?

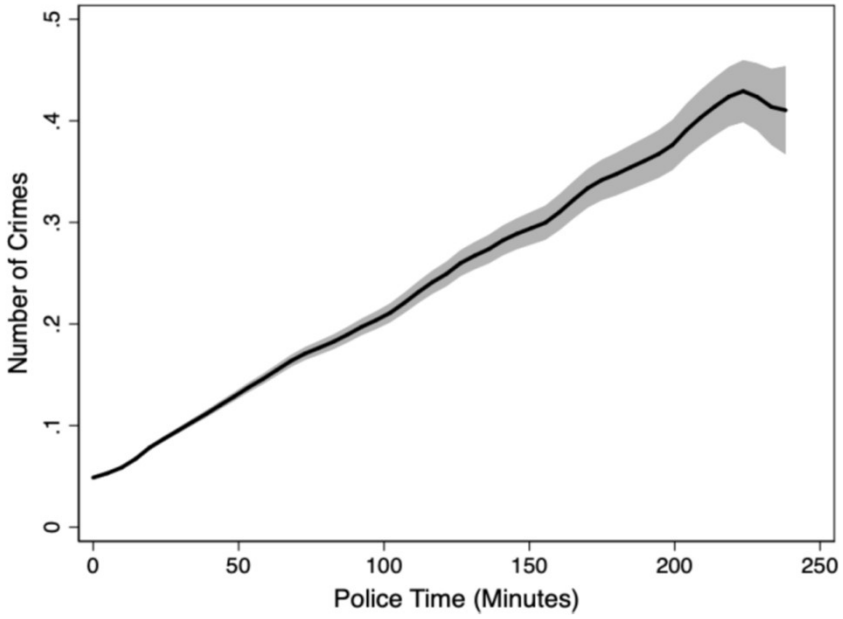
Data: Essex (UK)

Correlation: based on big data

Reverse causality: P→C→P

Focus

Issue



CORRELATION ≠ CAUSATION: Unemployment-Crime

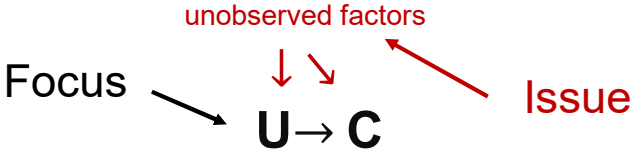
Research question: Does unemployment (**U**) trigger criminal behavior (**C**)?

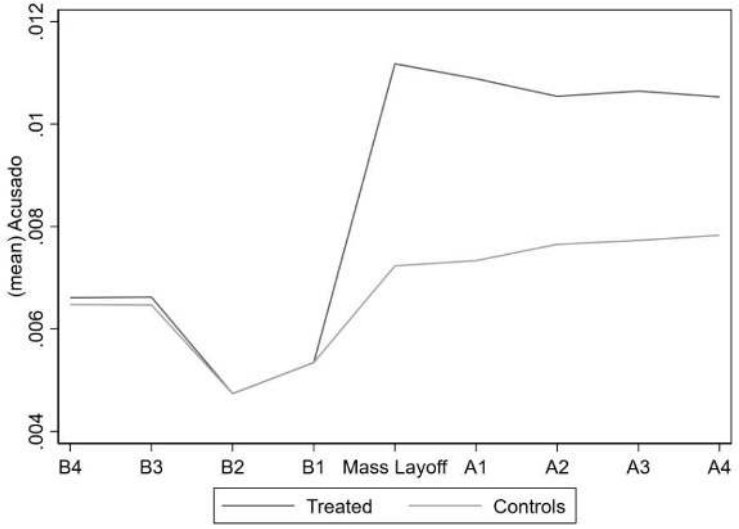
Recent literature: Use mass layoffs (>30%) to reduce selection

Data: Employer-employee & crime in Chile

Correlation: With job loss C↑

Selection and reverse causality:





CORRELATION ≠ CAUSATION:
Prisons and Crime

Research question: Do prison conditions (open prison) influence criminal behavior?

Data: Italian prison admin.

Correlation: Large difference in recidivism between Bollate inmates and inmates in other prisons

Selection: The prison administration selects inmates who end up in Bollate.

Bollate (est. 2001)

San Vittore (est. 1879)

CORRELATION ≠ CAUSATION:
Immigrants' Legal Status-Crime

Research question: Does immigrants' legal status reduce criminal behavior?

Data: Italian Prison Admin

Correlation: about 30% of inmates are immigrants and most are undocumented

Selection: but immigrants who acquire legal status may have better labor market prospects, irrespective of their legal status. More educated, more forward-looking, …

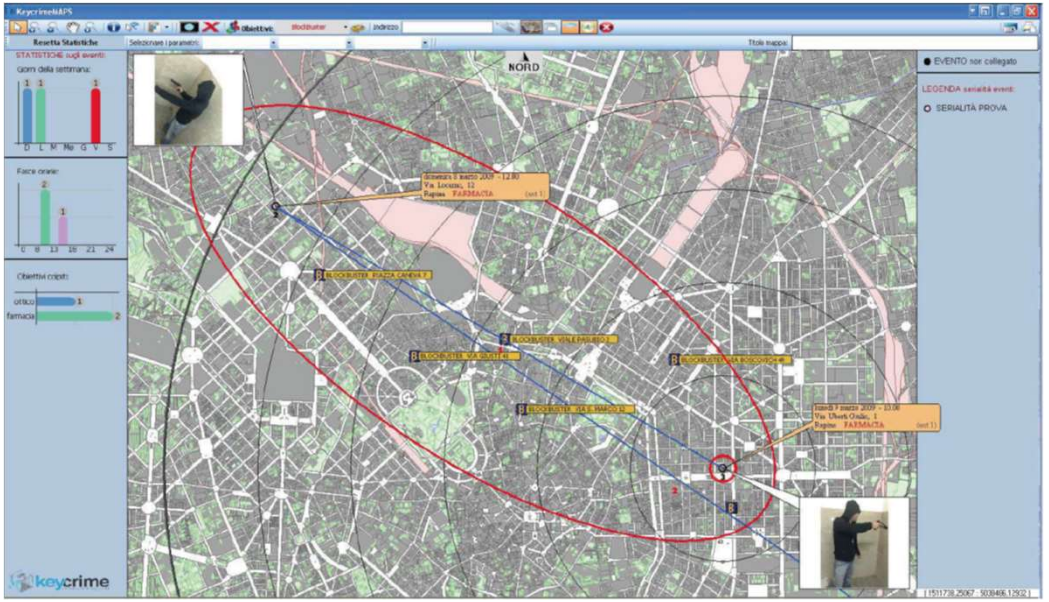
CORRELATION ≠ CAUSATION:
Predictive Policing & Police Productivity

Research question: Does predictive policing increase clearance rates?

Data: Milan police department

Correlation: Large improvements in clearance rates

Selection: the software may just pick crimes that are easier to predict and thus, easier to clear (leaving the others unsolved)



CORRELATION ≠ CAUSATION:
Banking Regulation & Money Laundering

Research question: Does anti-money laundering regulation work?
i.e. transaction value thresholds, reporting activity, etc.

Probable endogenous response: criminals respond to incentives by i) transacting below the limits, ii) increasing the number of transactions to add noise to such transactions, etc.

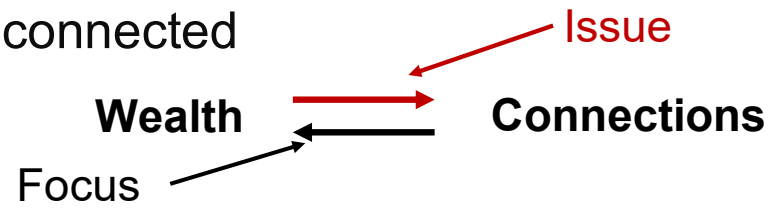
Correlation: reductions in observed risky transactions following a change in regulation may be due to an endogenous criminal response to circumvent the regulation (displacement): could be mistaken for deterrence

CORRELATION ≠ CAUSATION:
Mobsters' Network Centrality and Success

Research question: Are mobsters with more Mafia connections more successful?

Correlation: positive correlation between network centrality and wealth

Reverse causality: More wealthy mobsters could use the money to become more powerful, more connected



He was the longtime leader of the Lucchese family from 1967–1985. He was indicted under the RICO Act and sentenced to 100 years in prison. On August 23, 2000, he died at a medical center for federal prisoners.

NAME	: Anthony CORALLO
ALIASES	: Tony Ducks, Tony Corralo, Antonio Freno, Antonio Covello.
DESCRIPTION	: Born 2-12-13, New York City, 5'6½", 170 lbs., blue eyes, brown hair.
LOCALITIES FREQUENTED	: Resides 144-67 North Drive, Queens, N. Y. Frequents New York area race tracks, Little Napoli Restaurant and Tasse Restaurant, both in New York City.
FAMILY BACKGROUND	: Married to Ann Ryan, step-daughter: Madeline, son: Jerry, brothers: Joseph & Salvatore, sisters: Carmela, Mary Zogare, Frances Governali, father: Giuseppe, mother, Lucia, (both dead).
CRIMINAL ASSOCIATES	: Eddie Coco, Johnny Dio, Andimo Pappadio, John Ormento, Vincent Rao, Carmine Tramunti, Anthony Castaldi, [redacted], Joe Bendenelli, all of New York City.
CRIMINAL HISTORY	: FBI #269969, NYCPD-B #75882. Arrests since 1929 include grand larceny, robbery, violation New York State Narcotic Laws.
BUSINESS	: Is vice-president of Local 239, Queens, N. Y. International Brotherhood of Teamsters, and connected with other Teamster locals.
MODUS OPERANDI	: Finances large narcotic transactions. Closely associated with most major Mafia narcotic traffickers in New York City. Involved in labor racketeering.

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Without permission of Commissioner of Narcotics

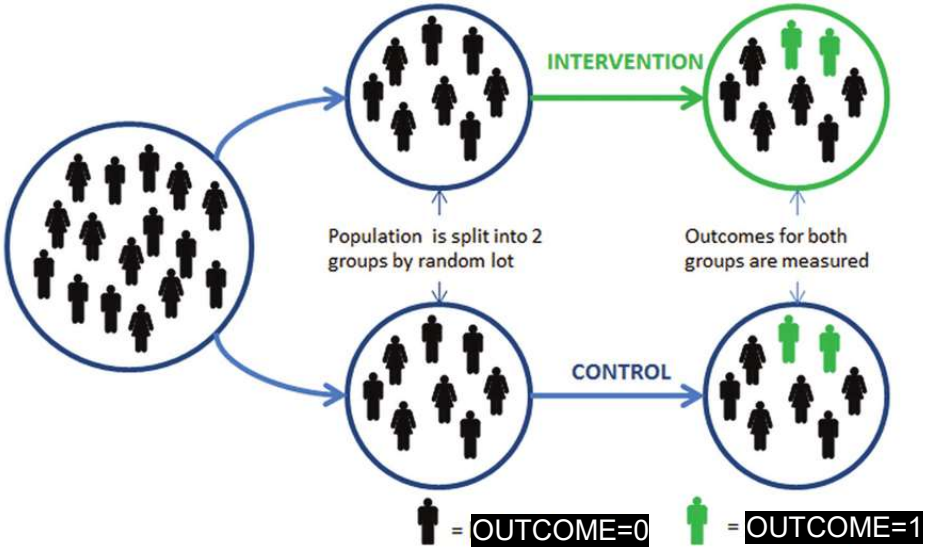
ADVANCEMENTS IN METHODOLOGY

Natural Experiments: Economists have leveraged events or policies that mimic random assignment, like changes in policing practices or legal thresholds.

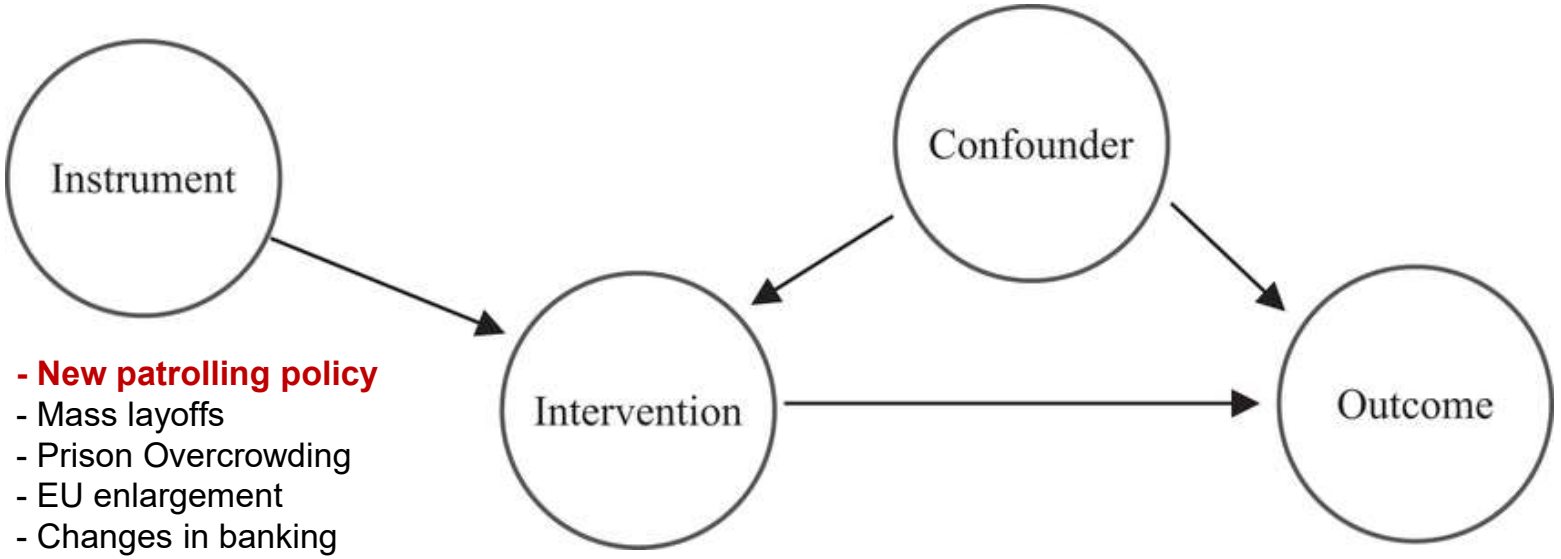
INTERVENTIONS:

- Legal status
- Open prison
- More p. patrols
- Predictive software
- Different regulation
- More connections

…



ADVANCEMENTS IN METHODOLOGY

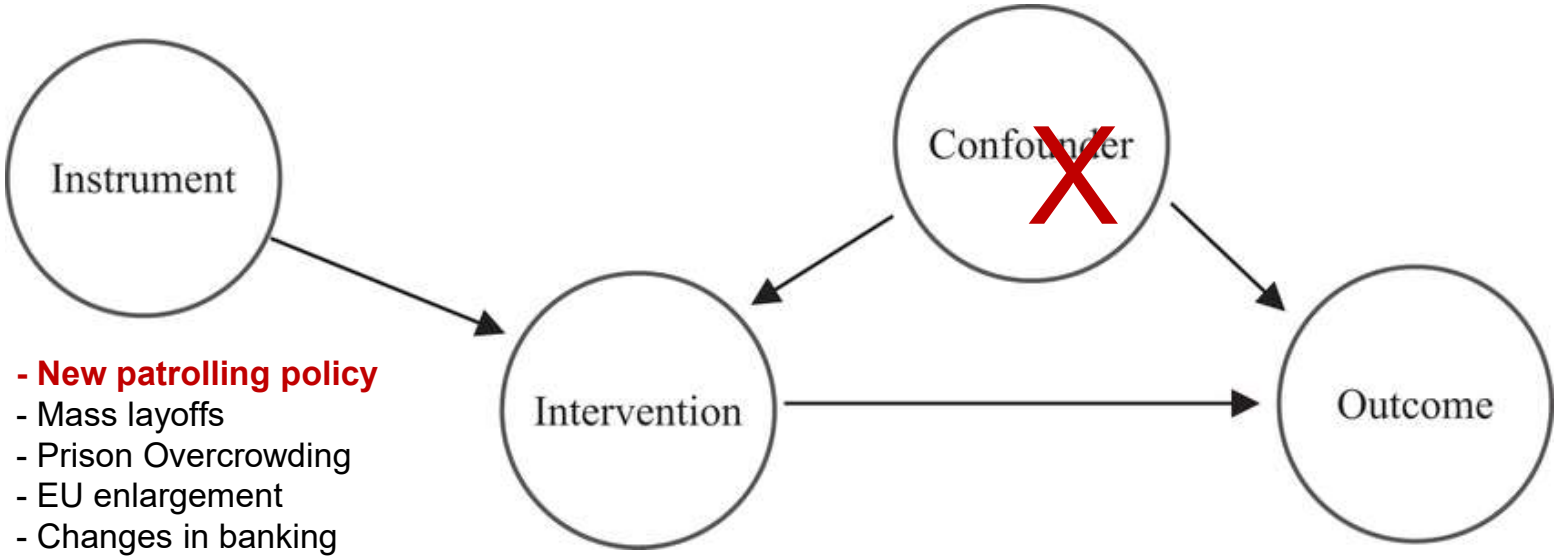


- New patrolling policy
- Mass layoffs
- Prison Overcrowding
- EU enlargement
- Changes in banking regulations
- Innate connections
.
.

- Police presence
- Unemployment
- Open prison treatment
- Immigrants' legal status
- Regulation
- Connections
.

- Crimes
- Arrest
- Recidivism
- Recidivism
- Money-laundering
- Wealth
.

ADVANCEMENTS IN METHODOLOGY



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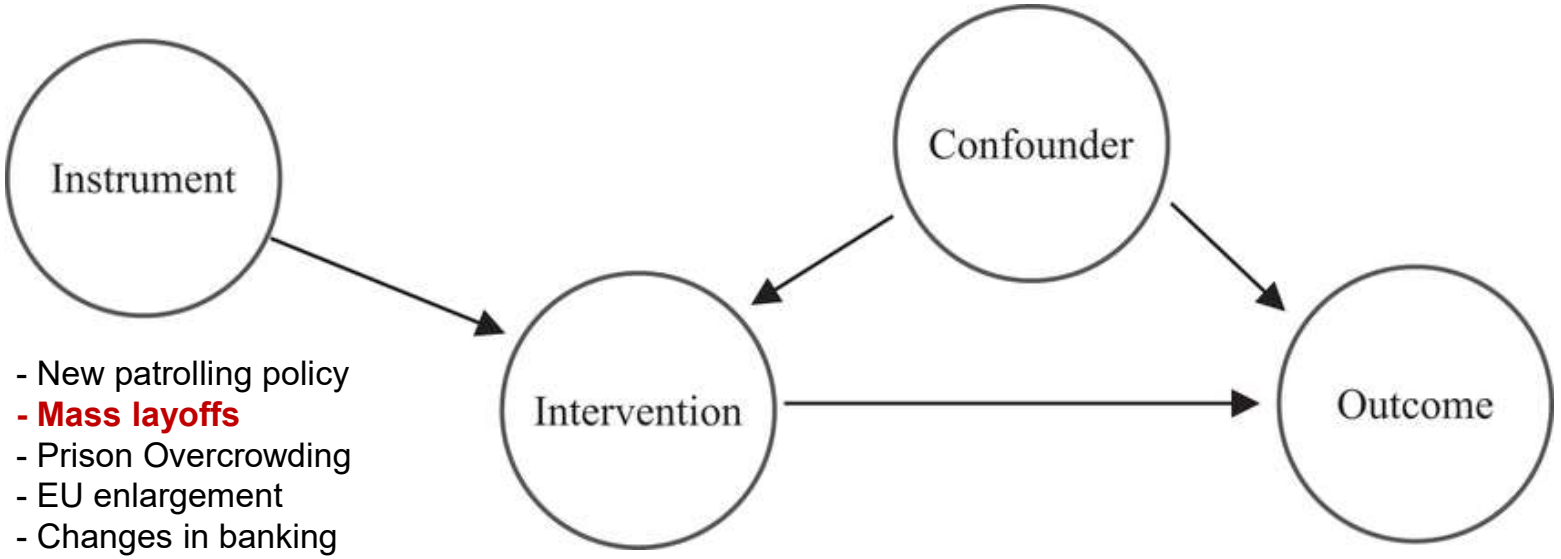

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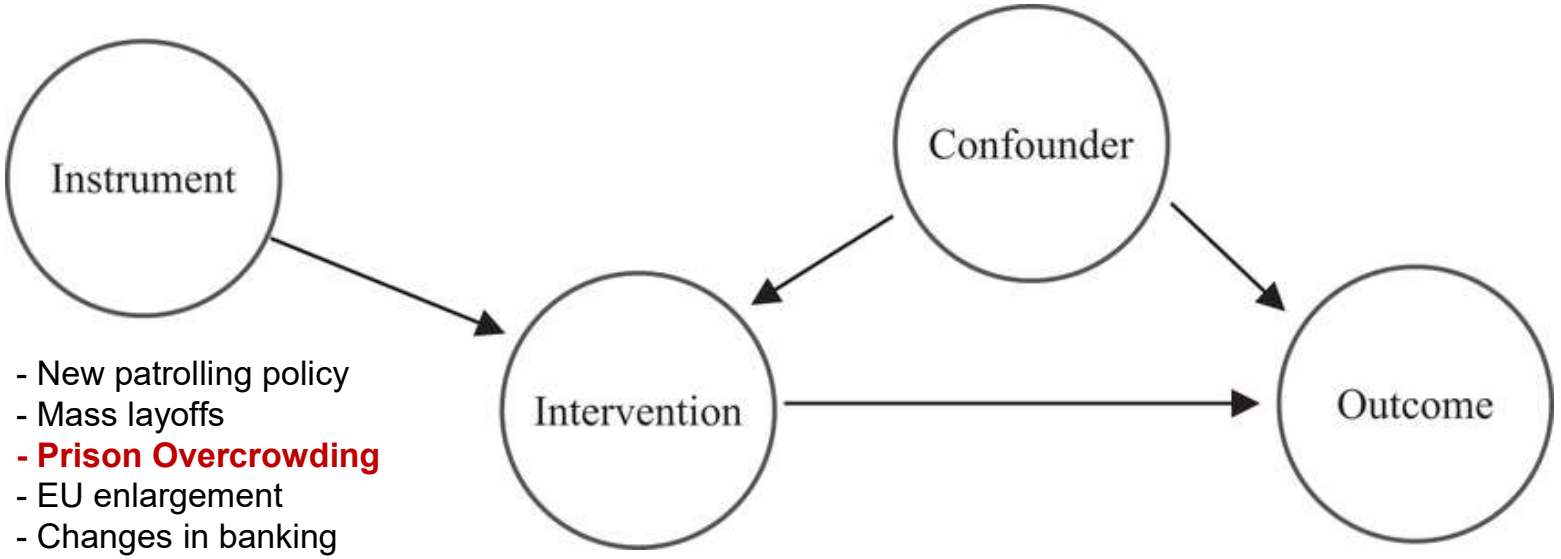

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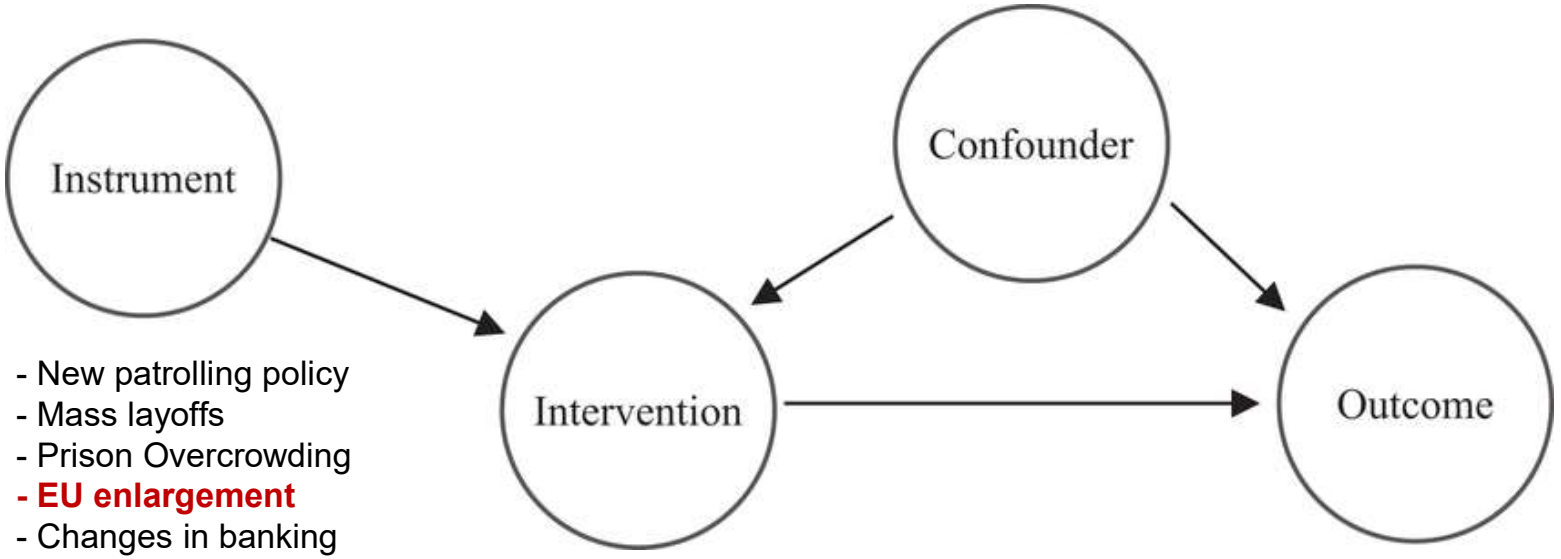

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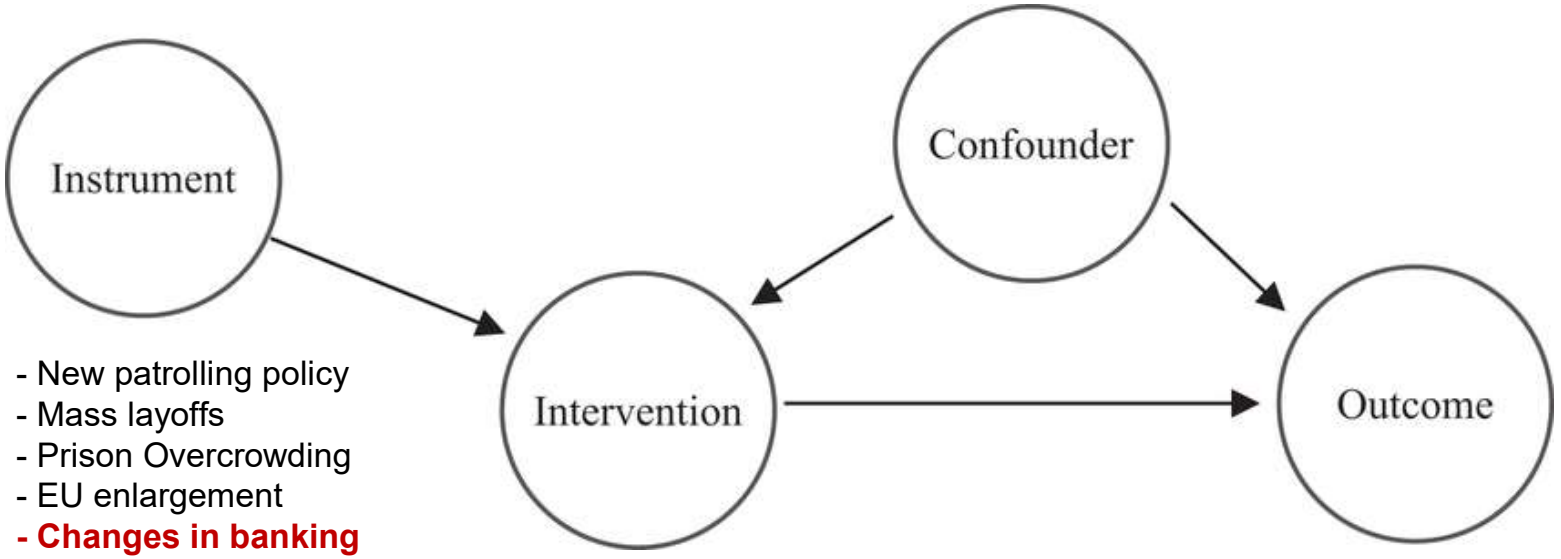

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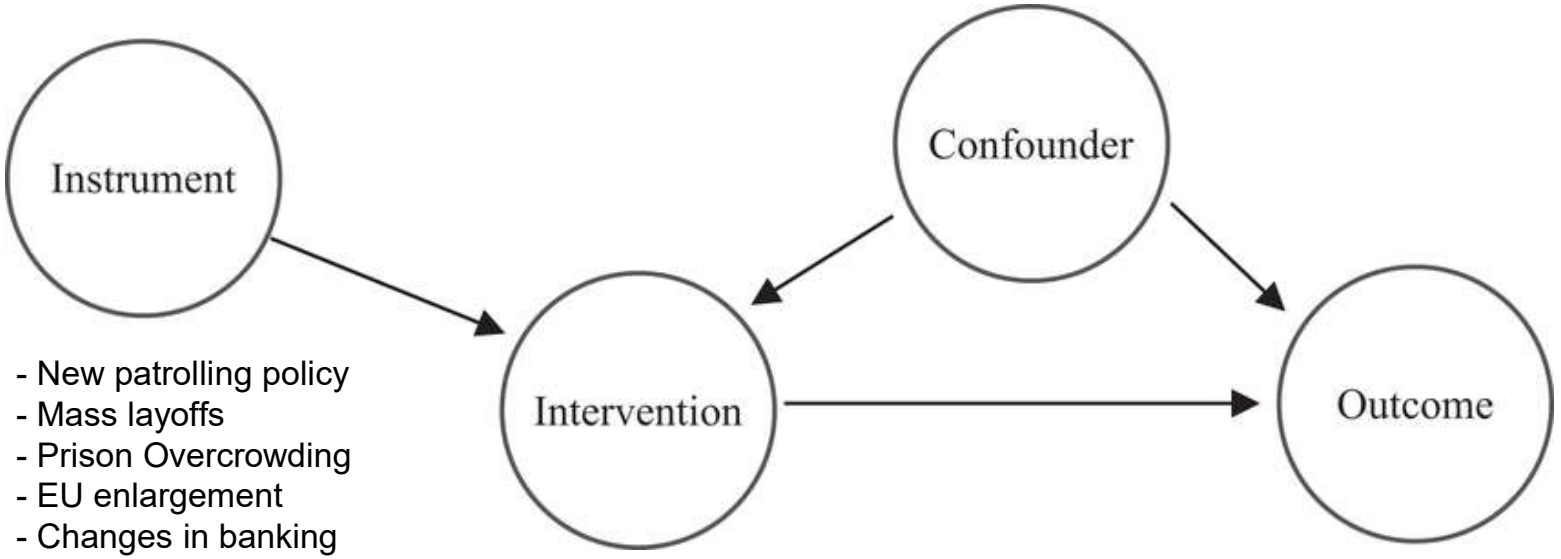

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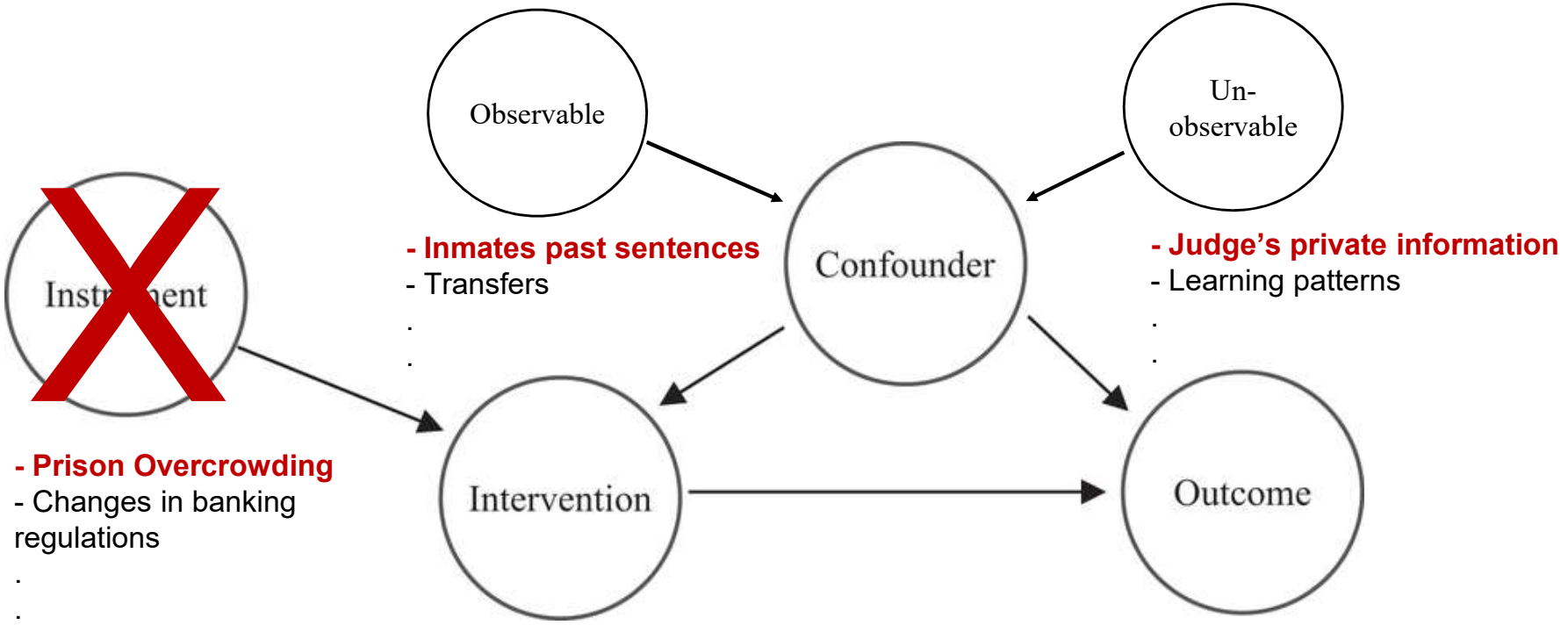

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- Transfers
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- Judge's private information
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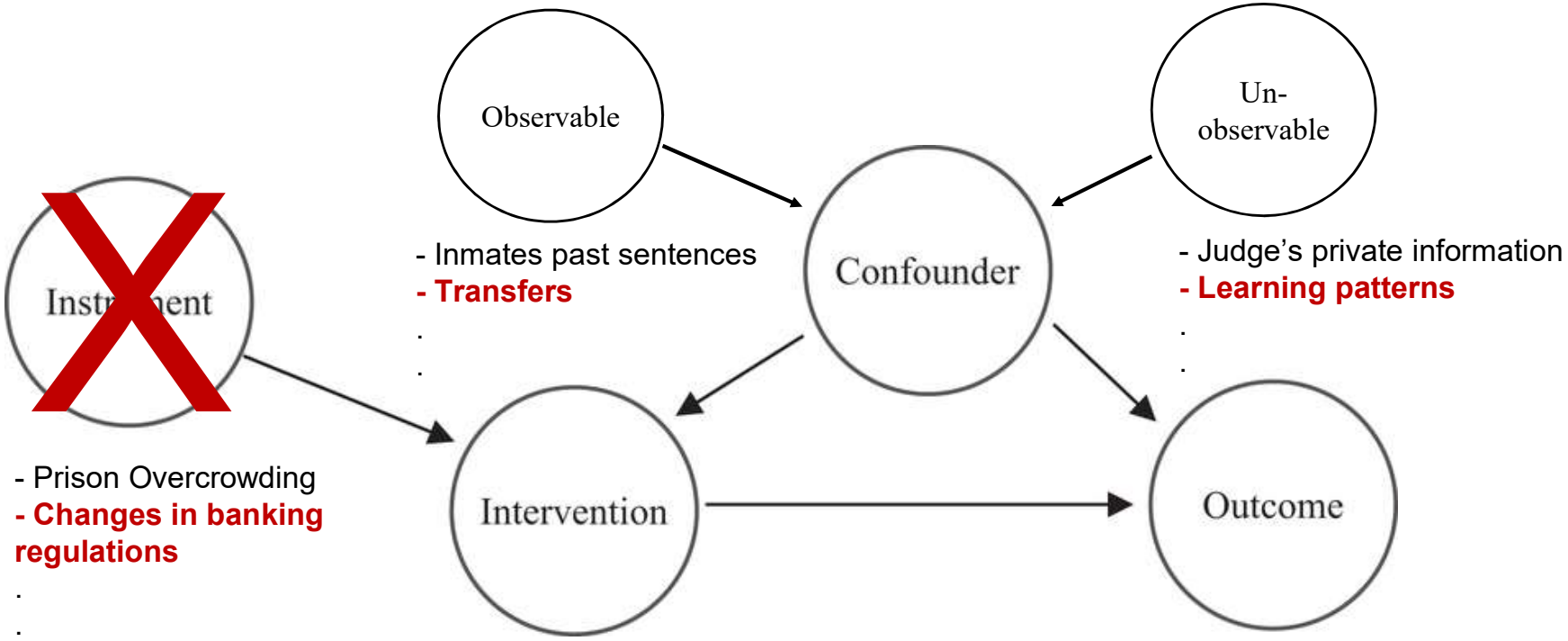

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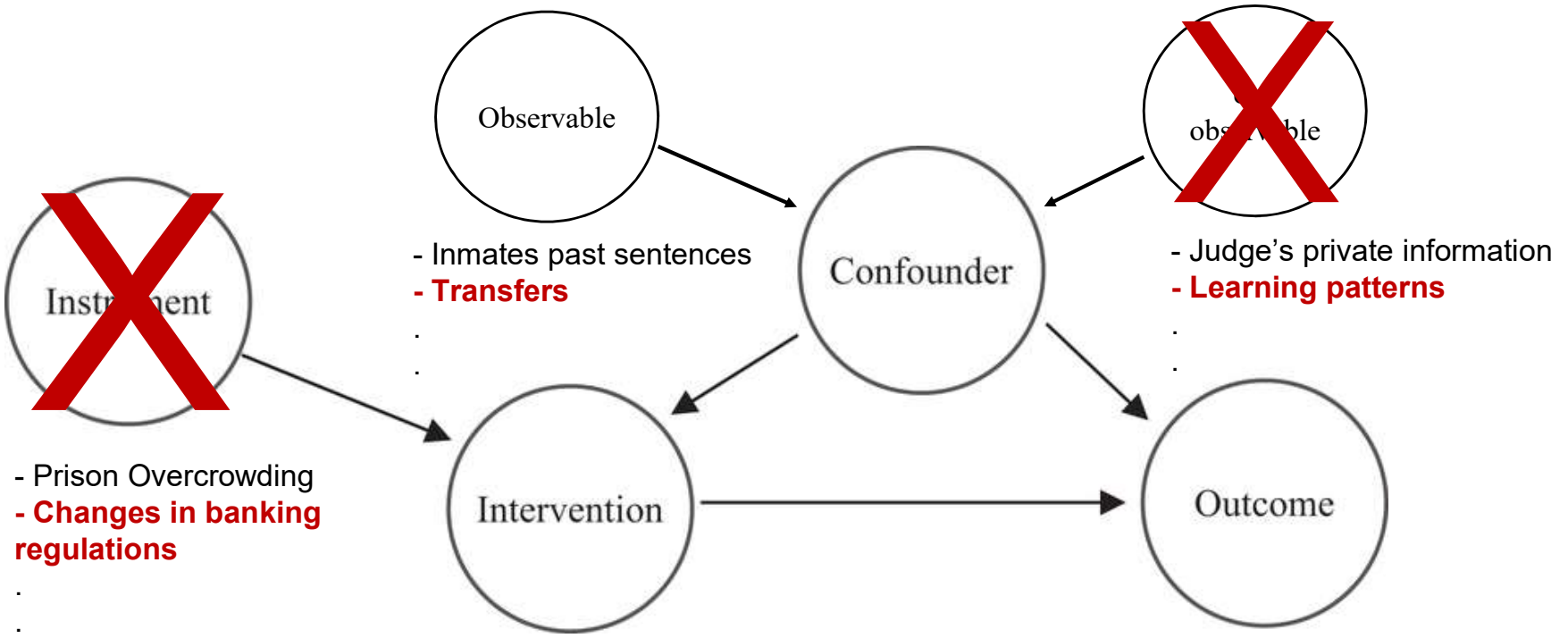

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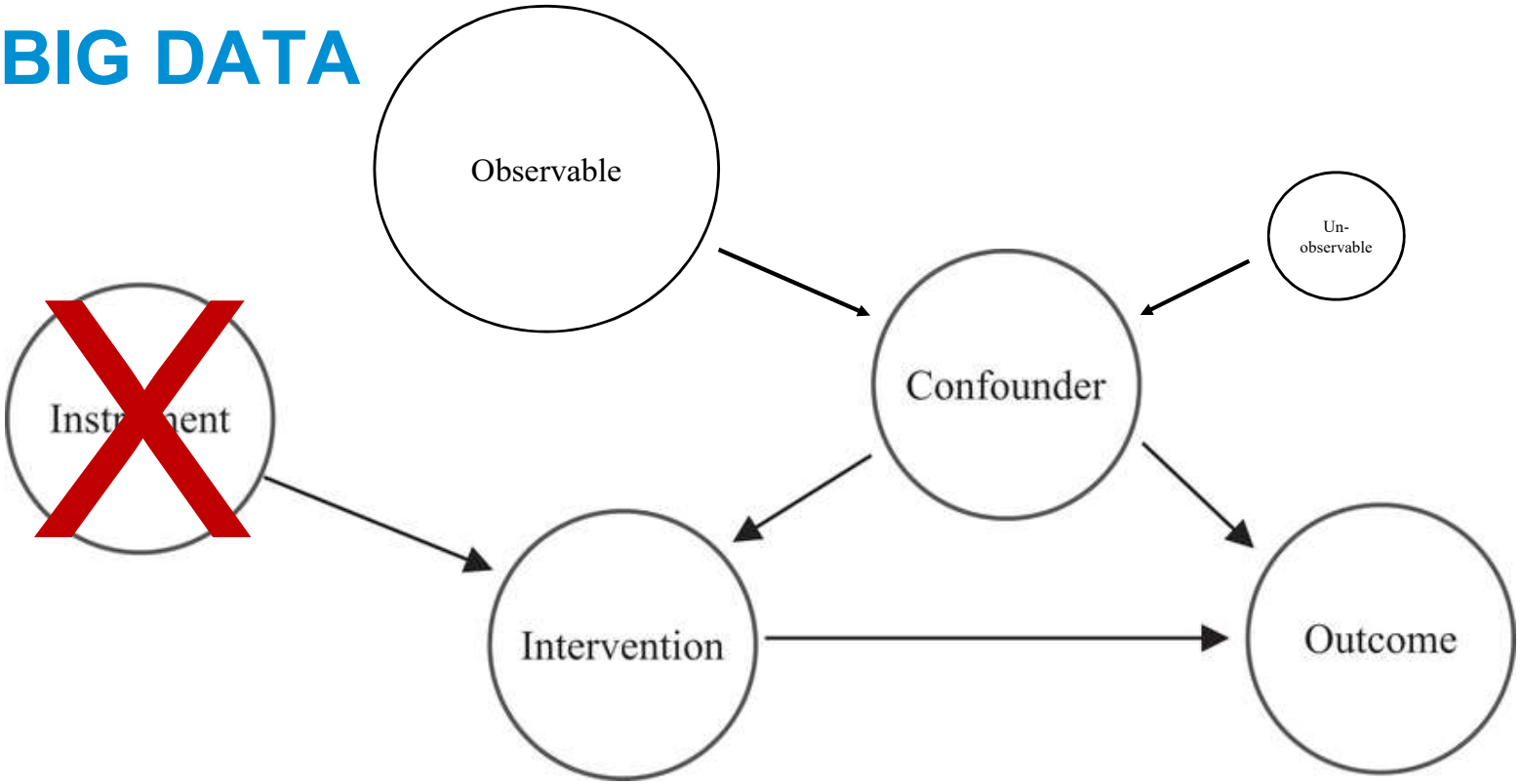
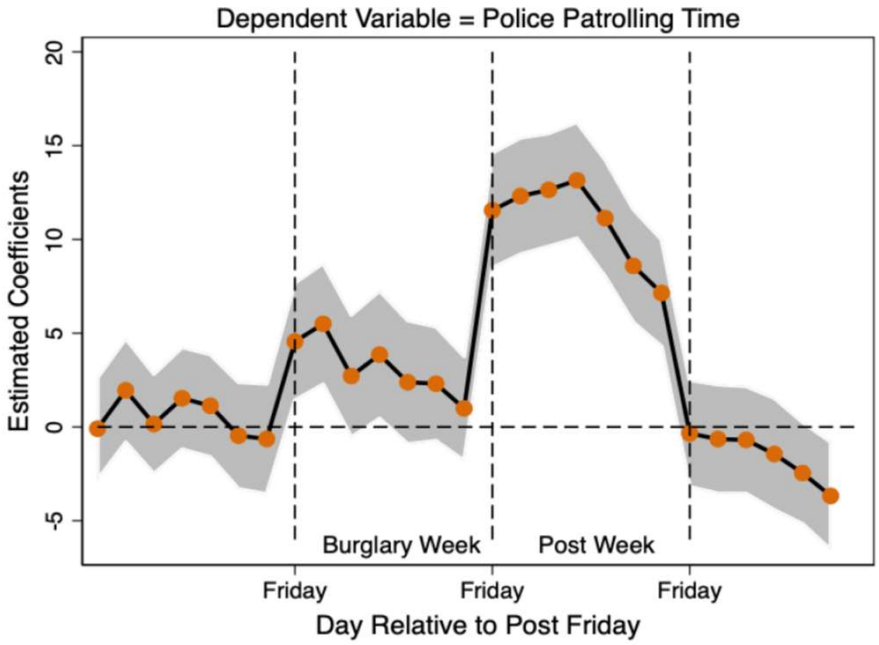
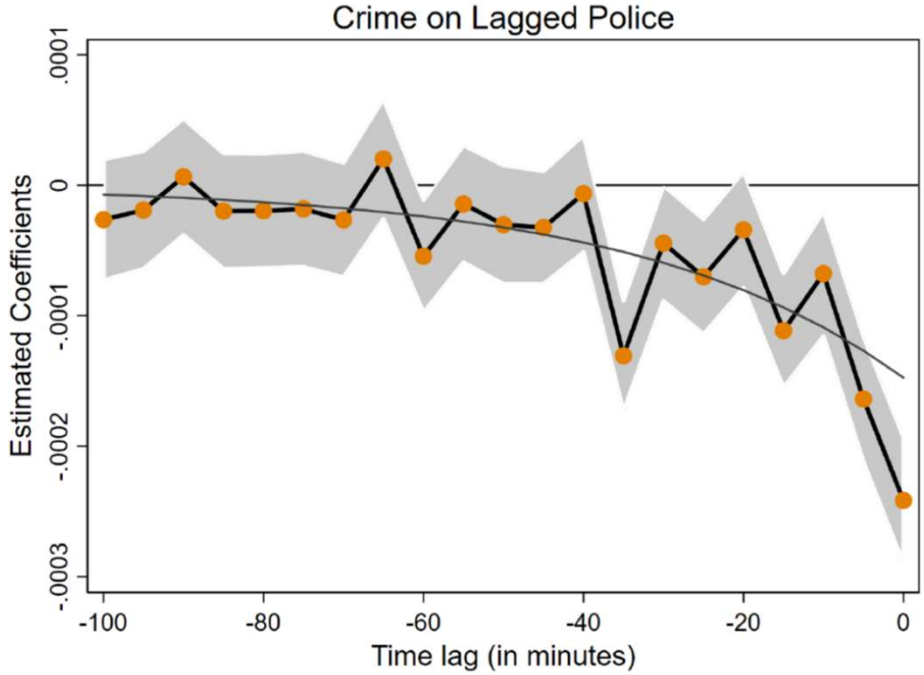
BIG DATA


Observable
Un-
observable
Confounder
Intervention
Outcome

RESULTS POLICE-CRIME

- Mobile police patrols reduce crime, but only for about 45 minutes

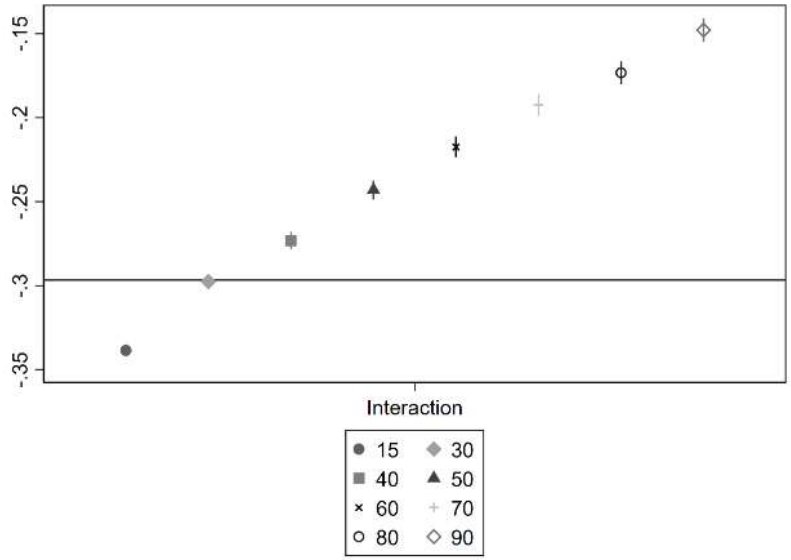




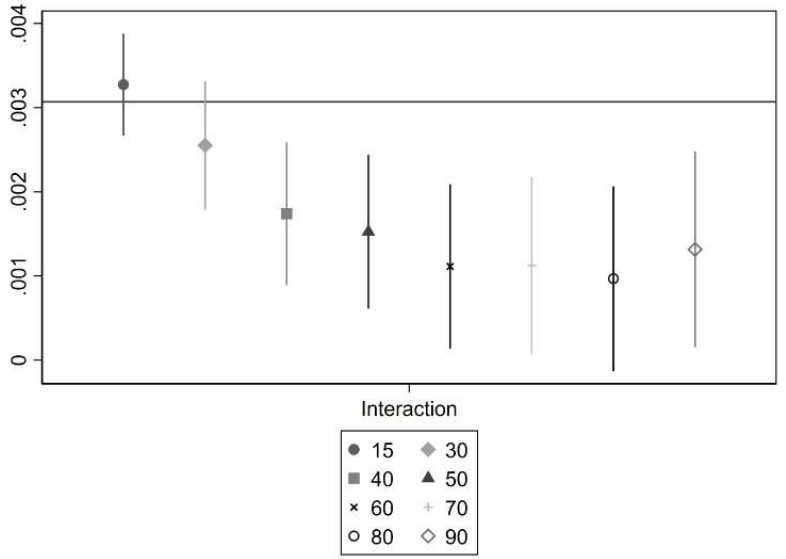
RESULTS MASS-LAYOFF AND CRIME

- Mass-layoffs lead to employment losses and arrests, but the effects are larger the smaller the fractions of laid off workers

Changes in Employment by the Fraction of the Mass Layoff

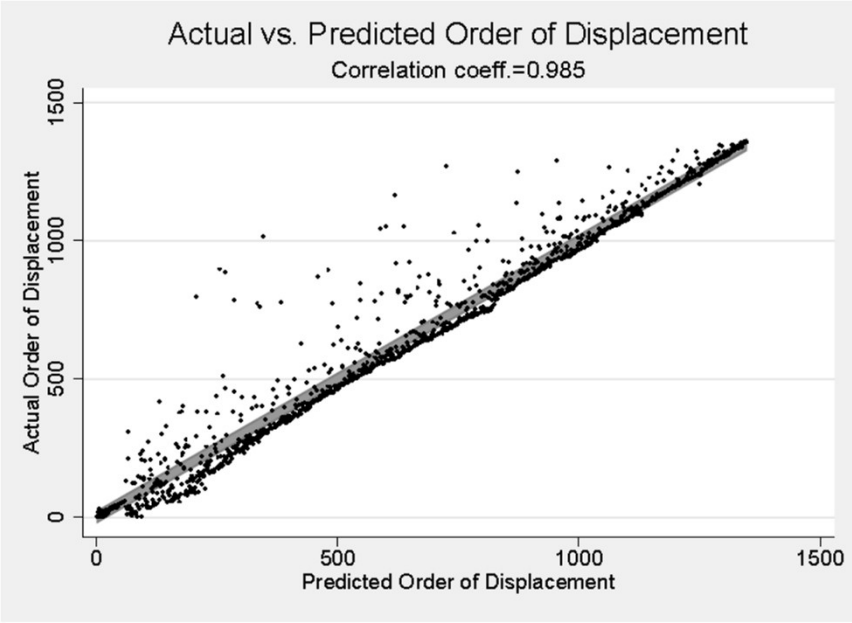


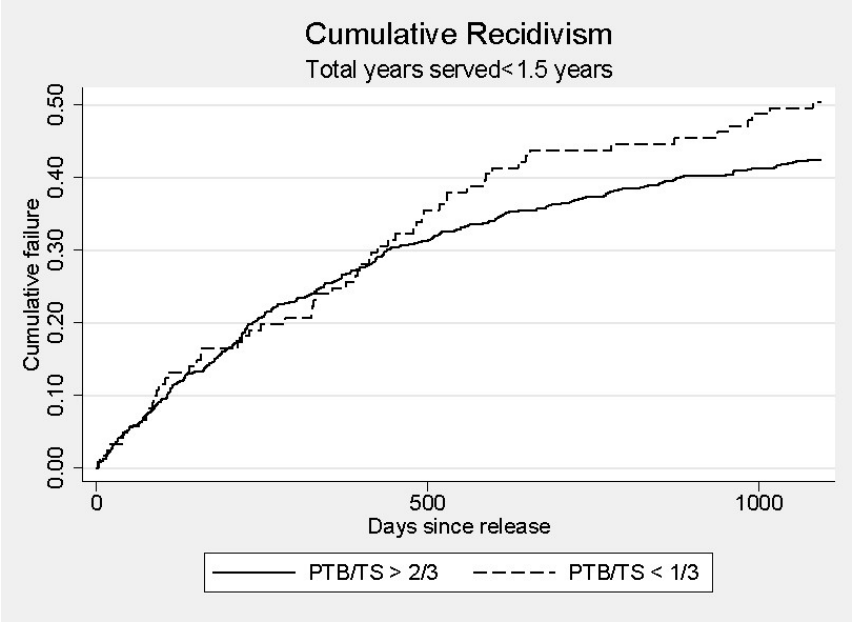
Changes in Arrests by the Fraction of the Mass Layoff



RESULTS PRISON CONDITIONS AND CRIME

- Open and more humane prison conditions reduce recidivism

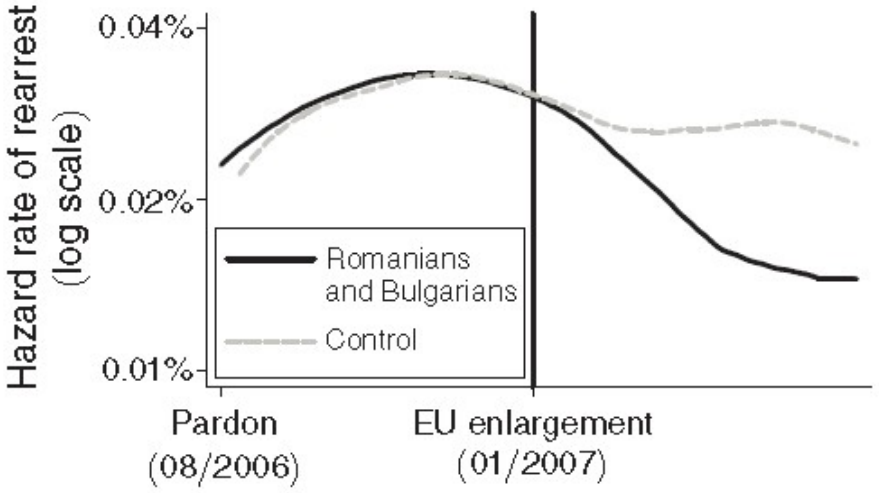




RESULTS LEGAL STATUS AND CRIME

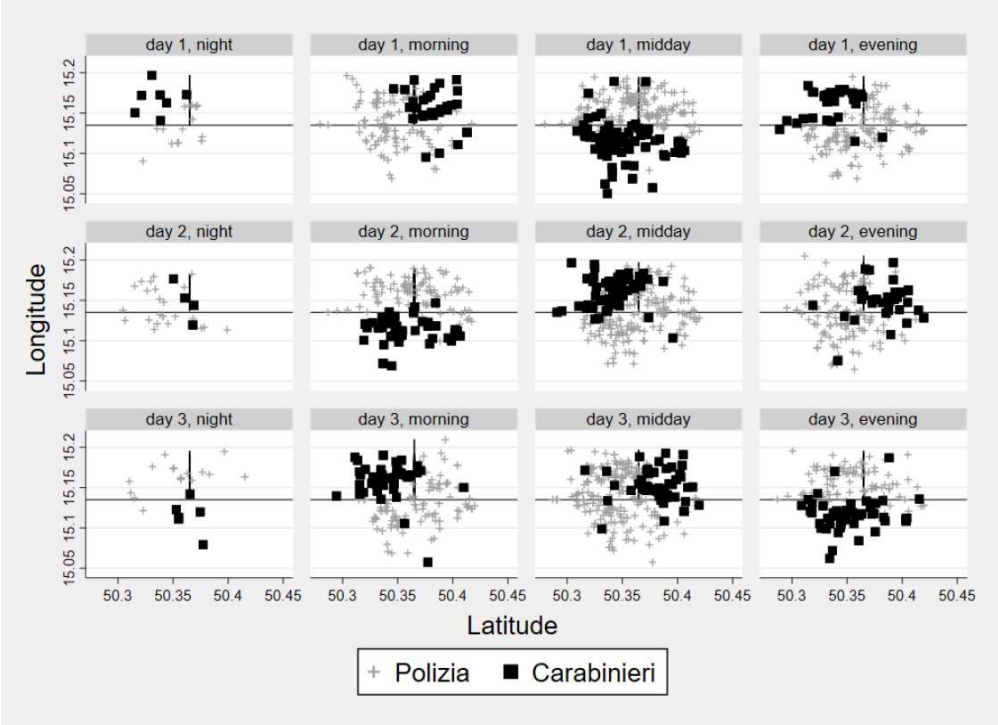
- EU-acquired legal status (Romania and Bulgaria) reduces inmates' recidivism

2007 EU Enlargement



RESULTS PREDICTIVE POLICING

- Predictive policing (KeyCrime) increases clearance rates



	First event		Subsequent events	
	Carabinieri	*Polizia*	*Carabinieri*	*Polizia*
C=	0.130	0.148	0.056	0.150
SD=	(0.338)	(0.355)	(0.230)	(0.358)
N=	*161*	*420*	*161*	*513*

RESULTS MOBSTERS' CENTRALITY

- Italian-American mobsters with more INNATE CONNECTIONS (informative content of last names) have more housing wealth

Table 4

Housing Value Regressions and Closeness Centrality

	(1)	(2)	(3)	(4)	(5)
	log Housing value				
log Closeness	2.069***	2.524***	1.418***		
	(0.406)	(0.452)	(0.497)		
Closeness				0.036***	0.020***
				(0.007)	(0.007)

FUTURE

Financial crimes: I look forward the opportunity to expand my research and collaborate with Intesa Sanpaolo.

THANKS

- long list of coauthors, colleagues, friends & family
- INTESA SANPAOLO, CSP & CCA

Research
Education
Outreach

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