

Table A22. The Impact of Severity of Punishment on Crime Rates - Macro level Longitudinal Studies

Study	Sample	Analysis	Causal Order	Design	Sample Type	Severity	Crime Type	#IV	INCAP	Findings		
Titte (1969)	50 states, 1958-1963	Tau-c	Lags	Pooled	CE	Time Served	Index	1	No	+, p> .05		
							Index2			+, p> .05		
							Index3			+, p> .05		
							Rape			+, p< .05		
							Battery			+, p> .05		
							Theft			+, p> .05		
							Robbery			+, p> .05		
							Burglary			+, p> .05		
							Murder			-, p< .05		
							Auto Theft			+, p> .05		
Chiricos & Waldo (1970)	50 U.S. states, 1960-1964	Phi-Coeff..	Lags	% Change	CE	Time Served	Homicide 61-65	1	No	+, p> .05		
							Robbery			+, p> .05		
							Assault-			+, p> .05		
							Burglary			-, p> .05		
							Larceny			+, p> .05		
							Auto Theft			+, p> .05		
							Homicide 63-67			1	No	+, p> .05
							Robbery					+, p> .05
							Assault					-, p> .05
							Burglary					-, p> .05
Larceny	+, p< .001											
Auto Theft	-, p> .05											
Logan (1972)	50 states, 1958-1963	OLS.	Lags	Pooled	CE	Time Served	Index	1	No			-, p = ?
							Murder					-, p = ?
							Robbery					-, p = ?
							Rape					-, p = ?
							Battery			-, p = ?		
							Burglary			-, p = ?		

Study	Sample	Analysis	Causal Order	Design	Sample Type	Severity	Crime Type	#IV	INCAP	Findings
							Larceny			-, p = ?
							Auto Theft			-, p = ?
Bailey (1977)	50 states, 1946-1950	OLS	Lags	Pooled	CE	Time Served	Rape	4	No	-, p < .001
	50 states, 1956-1960									-, p < .01
Ehrlich (1977a)	50 states with DP, 1940/50	GLS	Lags	Pooled	Non Prob.	Time Served	Murder	7	No	-, p < .05
Landes (1978)	U.S., Quarterly, 1961-1976	OLS	Lags	Time Series	CE	Sentence Length	U.S. Hijackings	14	No	-, p < .05
							World Hijacks			-, p > .05
							Time Bet. Hij.			-, p < .05
							Flights Bet. Hij.			-, p < .05
Votey (1978)	Santa Barbara, 1970-74	OLS	Lags	Time Series	CE	Time Served	Property	5	No	-, p > .10
Wolpin (1978)	England/Wales, 1894-1967	OLS	I.V.	Time Series	CE	Sentence Length	Theft	15	Yes	+, p < .05
							Burglary			-, p > .05
							Robbery			+, p > .05
							Auto theft			-, p > .05
							Battery			-, p > .05
							Agg. Battery			+, p > .05
							Personal			+, p < .025
							Multiple			+, p > .05
Bailey (1980b)	31 states, 1956-1960	OLS	Lags	Pooled	CE	Time Served	Homicide	8	No	-, p > .05
Wopin (1980)	England/Japan/CA, 1955-71	OLS	I.V.	Panel	CE	Time Served	Robbery	11	Yes	-, p < .01
	England, 1955-71			% Change				5	Yes	+, p = ?
	Japan, 1955-71			% Change						-, p = ?
Wahlroos (1981)	Finland, 1948-1975	2SLS	I.V.	Time Series	CE	Sentence Length	Larceny	7	No	-, p < .05
							Robbery			-, p > .05
Bailey (1983b)	35 states, 1950-60	OLS	Lags	Panel	Non Prob.	Time Served	Homicide	13	No	-, p = ?
Selke (1983)	Midwestern town, 1970-1976	Correl.	Lags	Time-Series	Non Prob.	Sentence Length	Burglary	1	No	+, p > .05
Witte & Woodbury (1985)	567 U.S. zip codes, 1967-1970	WLS	I.V.	Panel	CE	Time Served	Tax Fraud	11	No	?, p > .05
Von Hoffer (1989)	Sweden, 1869 – 1985	OLS	Lags	Time Series	Non Prob.	Sentence Length	Theft	3	No	-, p > .05
	Sweden, 1907 – 1985							12	Yes	-, p > .05
Cornwell & Trumbell (1994)	90 counties, N.C, 1981-87	2SLS	I.V.	Panel	Non Prob.	Sentence Length	Index	20	No	-, p > .05
Farrington, et al (1994)	U.S./England/Sweden, 1981-91	Correl.	None	Panel	CE	Sentence Length	Multiple	10	Yes	-, p > .05
						Time Served				-, p > .05
	U.S./England/Sweden, 1981-87					Sentence Length				-, p > .05

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	U.S./England/Sweden, 1987-91					Time Served				-, p> .05
						Sentence Length				-, p> .05
						Time Served				-, p> .05
Viren (1994)	13 countries, 1979-1990	2SLS	I.V.	Panel	CE	Severity of Penalty	Multiple	4	No	-, p< .05
Wong (1994)	England & Wales, 1857-1892	OLS	Lags	Time Series	CE	Sentence Length	All Crime	8	No	-, p< .05
Reilly & Will (1996)	42 police zones, England, 1980	OLS	Lags	Pooled	Non Prob.	Sentence Length	Burglary	3	No	-, p< .05
							Theft			-, p> .10
							Robbery			-, p> .10
Bodman & Maultby (1997)	6 Australian states, 1982-1991	2SLS	I.V.	Pooled	CE	Sentence Length	Robbery	12	No	-, p< .05
							Burglary			-, p< .05
							Auto Theft			-, p< .05
							Fraud			-, p< .05
Marselli & Vannini (1997)	19 regions in Italy, 1980-89	GLS	GLS	Panel	Non Prob.	Time Served	Murder	9	No	-, p< .01
							Robbery			-, p< .05
							Theft			-, p< .01
							Fraud			-, p> .10
Ehrlich & Liu (1999)	50 states, 1940/1950	GLS	Lags	Pooled	CE	Time Served	Murder	12	No	-, p< .05
Carmichael & Ward (2000)	15 regions, Wales, 1985-95	OLS	None	Panel	Non Prob.	Sentence Length	Combined	5	No	-, p> .10
Kovandzic (2001)	58 Florida counties, 1980-88	Granger	I.V.	Panel	CE	Sentence Length	Murder	13	Yes	-, p> .05
							Rape			-, p> .05
							Robbery			-, p> .05
							Battery			-, p> .05
							Burglary			-, p> .05
							Theft			-, p> .05
							Auto theft			-, p> .05
Funk & Kugler (2003)	Switzerland, 1984 - 1998	VAR	Lags	Time Series	CE	Sentence Length	Theft	1	No	-, p< .05
							Robbery			-, p< .05
Mustard (2003)	214 U.S. counties, 1977-1992	OLS	Lags	Panel	Non Prob.	Sentence Length	Murder	11	No	+, p> .10
							Rape			+, p> .10
							Robbery			+, p> .10
							Agg. Assault			+, p> .10

Study	Sample	Analysis	Causal Order	Design	Sample Type	Severity	Crime Type	#IV	INCAP	Findings
Liu (2004)	Death penalty states, 1940-50	GLS	Lags	Panel	CE	Time Served	Burglary	10	No	+, p> .10
	Larceny						+, p> .10			
Machin & Meghir (2004)	Abolitionists states, 1940-50	OLS	Lags	Panel	Non Prob.	Sentence Length	Auto Theft	7	No	+, p> .10
	Urban Murder						-, p> .05			
Baltagi (2006)	42 regions, Eng. Wales, 1975-96	2SLS	I.V.	Panel	CE	Sentence Length	Property	21	No	-, p< .05
Vaillant & Wolff (2010)	90 Counties, N.C., 1981-1987	2SLS	I.V.	Panel	CE	Sentence Length	Multiple	9	No	+, p> .05
Bandyopadhyay et al (2012)	30 court areas, France, 1988-93	2SLS	I.V.	Panel	Non Prob.	Sentence Length	Rape	8	No	+, p> .05
							Burglary			+, p> .05
Dusek (2012)	43 PFBs, En +Wales, 19 93-08	SUR	I.V.	Panel	Non Prob.	Sentence Length	Theft	9	No	+, p> .05
							Robbery			+, p< .05
Barbarino & Mast. (2014)	8 reg., Czech Rep., 1980-2000	2SLS	I.V.	Panel	Non Prob.	Sentence Length	Fraud	9	No	+, p> .05
							Murder			-, p> .05
Selke (1983)	20 regions, Italy, 1962-1995	2SLS	I.V.	Panel	Non Prob.	Sentence Length	Robbery	9	No	-, p> .05
							Theft			-, p> .05
Selke (1983)	Midwestern town, 1970-1976	Correl.	Lags	Time-Series	Non Prob.	Time-crime to arrest Time-arrest to sent.	Rape	1	No	+, p> .05
							Battery			-, p< .05
Selke (1983)	Midwestern town, 1970-1976	Correl.	Lags	Time-Series	Non Prob.	Time-crime to arrest Time-arrest to sent.	Multiple	1	No	+, p> .05

Study	Sample	Analysis	Causal Order	Design	Sample Type	Swiftiness	Crime Type	#IV	INCAP	Findings
Selke (1983)	Midwestern town, 1970-1976	Correl.	Lags	Time-Series	Non Prob.	Time-crime to arrest Time-arrest to sent.	Burglary	1	No	-, p> .05
										-, p> .05

Clarification of Commonly Used Abbreviations in Table 22

Column Headings

#IV- Number of Independent Variables in the Analysis
INCAP- Did the study control for an incapacitation variable?

Abbreviations Located Under Column Headings

Agg. Battery- Aggravated Battery
Agg. Assault- Aggravated Assault
Barbarino & Mant- Barbarino & Mastobuoni (2008)
CA- California
CE- Complete Enumeration
Combined- Combined Measure of Crime
Correl- Correlation Coefficient
Czech Rep.- Czech Republic
D.P.- Death Penalty
En.- England
Eng Wales- England and Wales
GLS- Generalized Least Squares Regression
Homicide 61-65- Homicides for 1961-1965; all other crimes below it are from 1961-1965
Homicide 63-67- Homicides for 1963-1967; all other crimes below it are from 1963-1967
I.V.- Instrumental Variables
Multiple- Multiple Crimes
N.C. - North Carolina
Non. Prob. – Non Probability
OLS- Ordinary Least Squares Regression
PFBs- Police Force Beats
Phi-Coeff.- Phi Coefficient
Reg.- Region
Rep- Republic
Sent.- Sentence
SUR- Seemingly Unrelated Regression
Time Arrest to Sent. – Time: Arrest to Sentence
Time Bet. Hij.- Time Between Hijackings
Flights Bet Hij. – Flights Between Hijackings
VAR- Vector Autoregressive Model
WLS- Weighted Least Squares Regression
World Hijacks- World Hijackings