

The Impact of the Economy on Crime Trends

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Prior Research

- Economy and crime hardly a hot spot of current research activity
- Research on unemployment and crime rates inconclusive
- Recent research on general economic conditions and crime more promising*

*Arvanites, Thomas M. and Robert H. Defina. 2006. "Business Cycles and Street Crime." *Criminology* 44:139-164.

Measuring Economic Conditions

- General v. specific measures
- Objective v. subjective measures
- Index of Consumer Sentiment (ICS)
 - Consumer expectations well validated as a leading economic indicator
 - Focus on *collective perceptions* relevant to economic and sociological crime theories

Theoretical Expectations

- Economic theory: benefits minus costs
- Sociological theory
 - Social context
 - Motivation v. opportunity effects
- Hypothesized mechanism:
Underground markets
- Plausibility of logic model

Hypotheses

H₁: Crime rates rise with *perceived* deterioration in economic conditions

H₂: Effects of ICS independent of those of unemployment, wages, or GDP

H₃: ICS accounts for sizable fraction of 90s crime drop

Collective Economic Perceptions and Property Crime*

- Four crime types: robbery, burglary, larceny, motor vehicle theft
- Time period: 1970-2003 (with extension to 2005)
- Regional panel models estimated on first differenced series (N = 4 regions x 34 years = 136)
- Controls: prisoners, police, age, race, unemployment, GDP, lagged ICS, lagged DV, trend, region effects

*Rosenfeld, Richard and Robert Fornango. 2007. "The Impact of Economic Conditions on Robbery and Property Crime: The Role of Consumer Sentiment." *Criminology* 45: 735-769.

Results

- Consistent ICS effects across all crime types – contemporaneous and lagged (except motor vehicle theft)
- Consistent imprisonment effects (except larceny)
- Less consistent effects for unemployment and GDP
- ICS explains appreciable fraction of 1990s crime drop

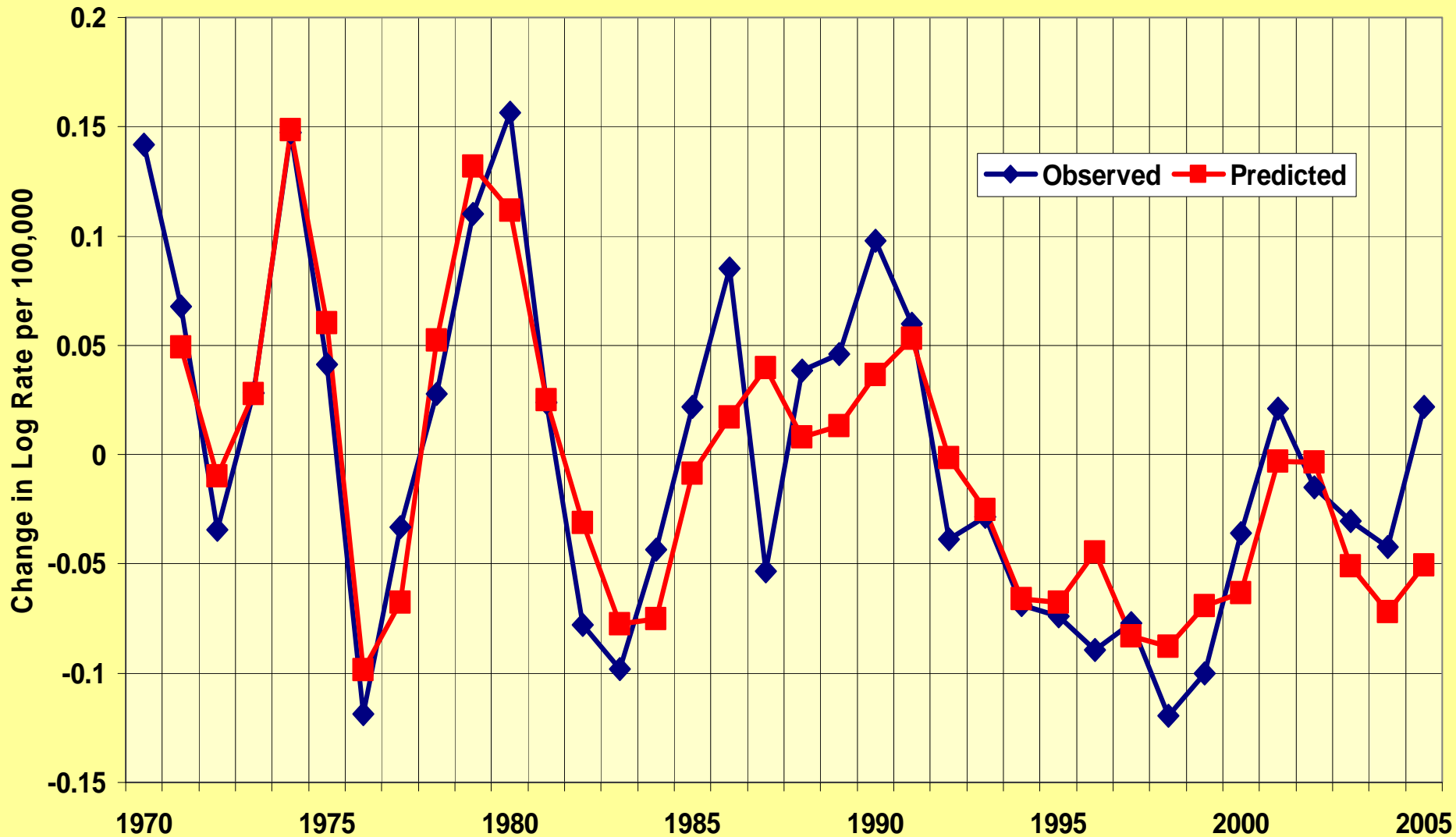
Robbery Burglary Larceny MV Theft

ICS	-.308***	-.241***	-.176***	-.340***
ICS-1	-.278***	-.195***	-.133**	ns
Unem	-.023**	ns	ns	-.024**
GDP	-.544*	ns	-.432**	ns
Prison-1	-.285***	-.276***	ns	-.253***
~R²	.650	.699	.593	.456

***p < .001 **p < .01 *p < .05

Police, age, race, lagged DV, region, trend suppressed. ~R² = square of correlation between predicted and observed values.

Figure 1. Year-Over-Year Change in Observed and Predicted Log Robbery Rates, 1970 - 2005 (Out-of-Sample Predictions for 2004 and 2005)



The 1990s Crime Drop

Average Yearly Change, 1992-2000

- Robbery -7.2%
- Burglary -5.7%
- Larceny -2.8%
- MV theft -5.2%
- ICS +4.3%
- Prison +4.7%
- GDP +2.5%

Percentage of the Crime Drop Attributable to Economy and Imprisonment

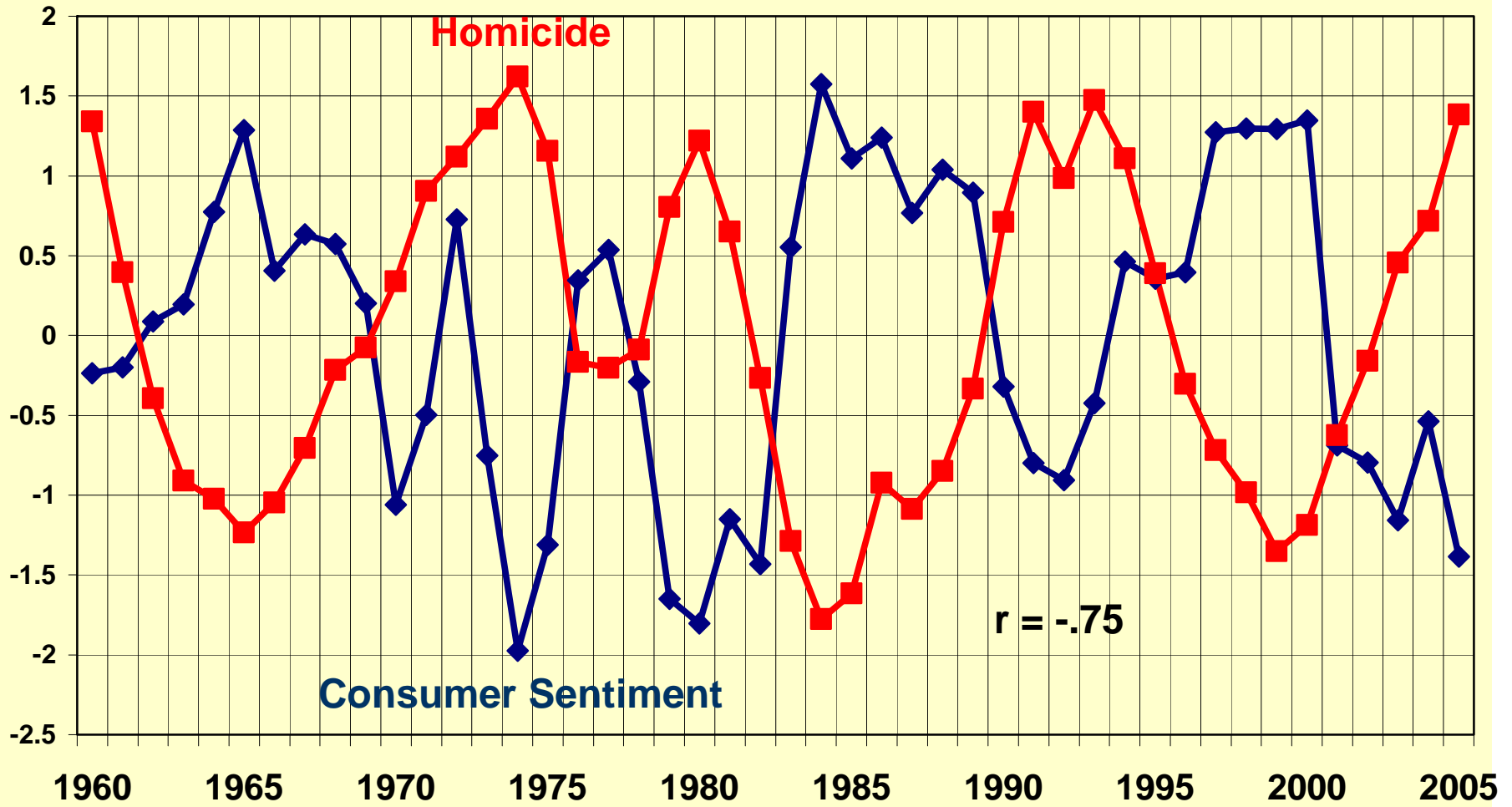
	<i>Robbery</i>	<i>Burglary</i>	<i>Larceny</i>	<i>MV Theft</i>
ICS	35.3%	33.0%	48.5%	28.5%
GDP	18.9%	--	39.1%	--
Prison	18.7%	22.7%	--	23.0%
Total	72.9%	55.7%	87.6%	51.5%

Extension to Violent Crime*

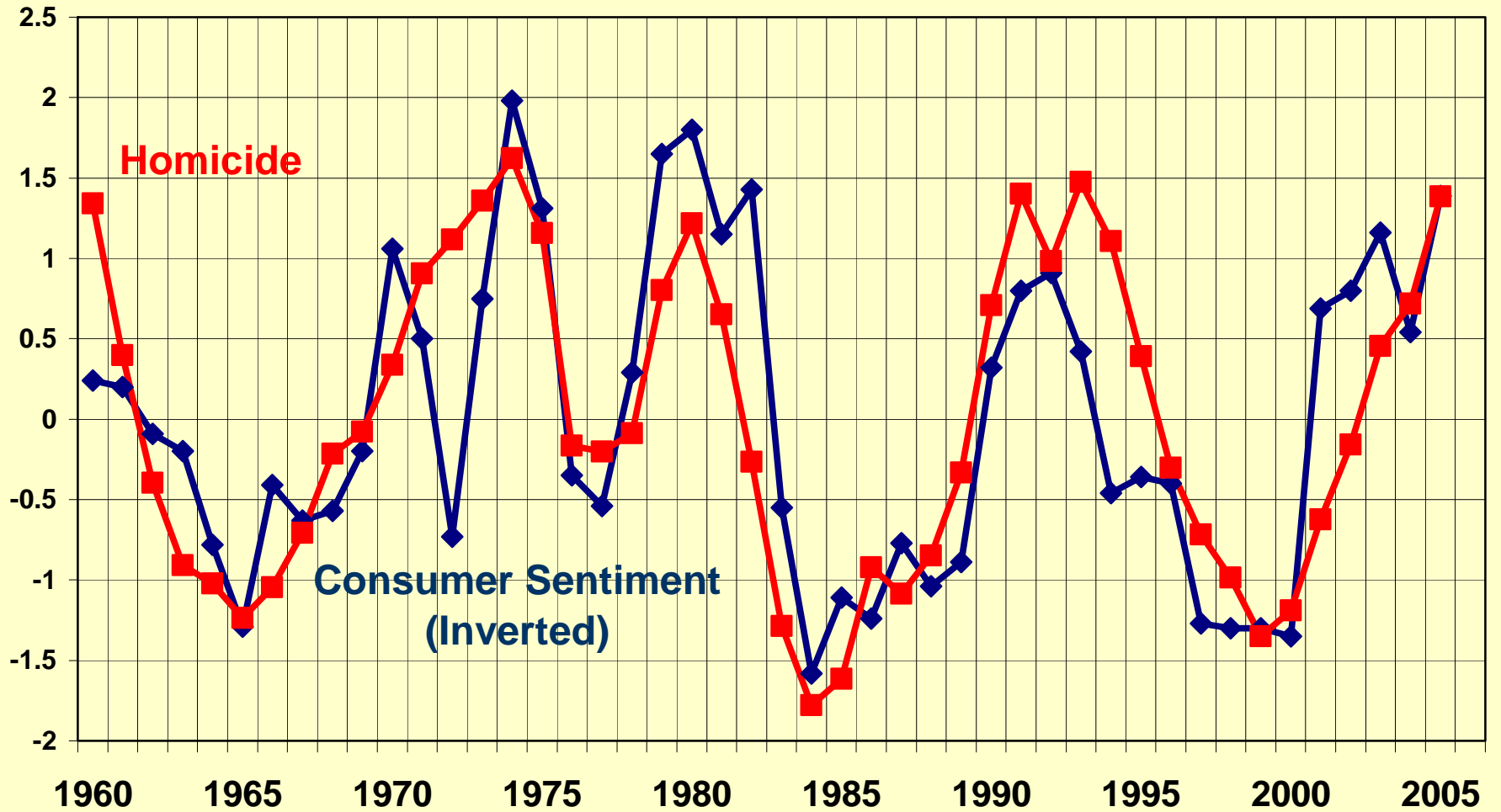
- Property crime affects violent crime
 - Violence as social control in “stateless” locations
- Property crime should mediate effect of ICS on homicide
- Replication of previous analysis on homicide rates

*Rosenfeld, Richard. 2009. “Crime is the Problem: Homicide, Acquisitive Crime, and Economic Conditions.” *Journal of Quantitative Criminology* 25: 287-306.

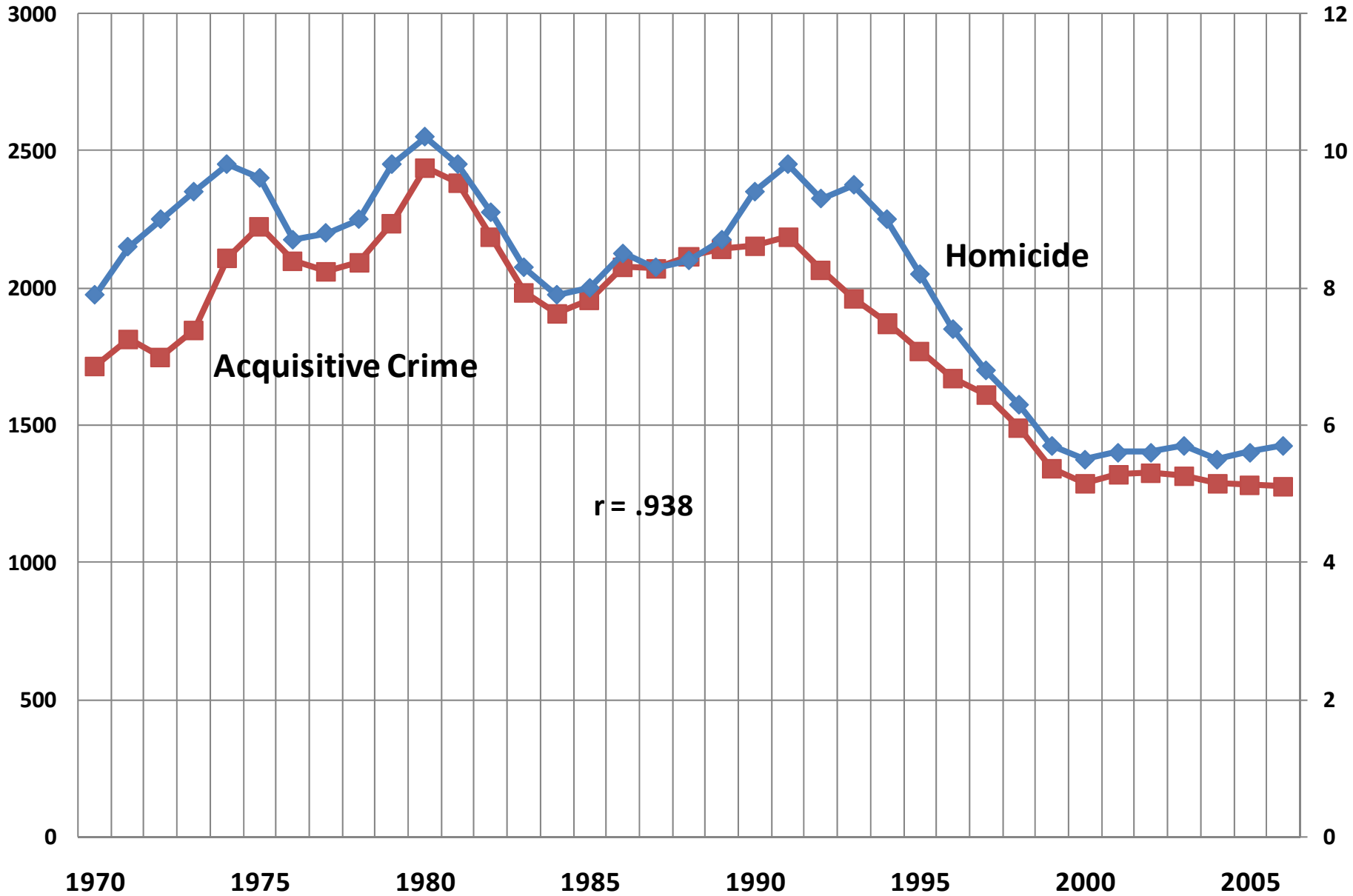
US Homicide Rates and Consumer Sentiment (Detrended), 1960-2005



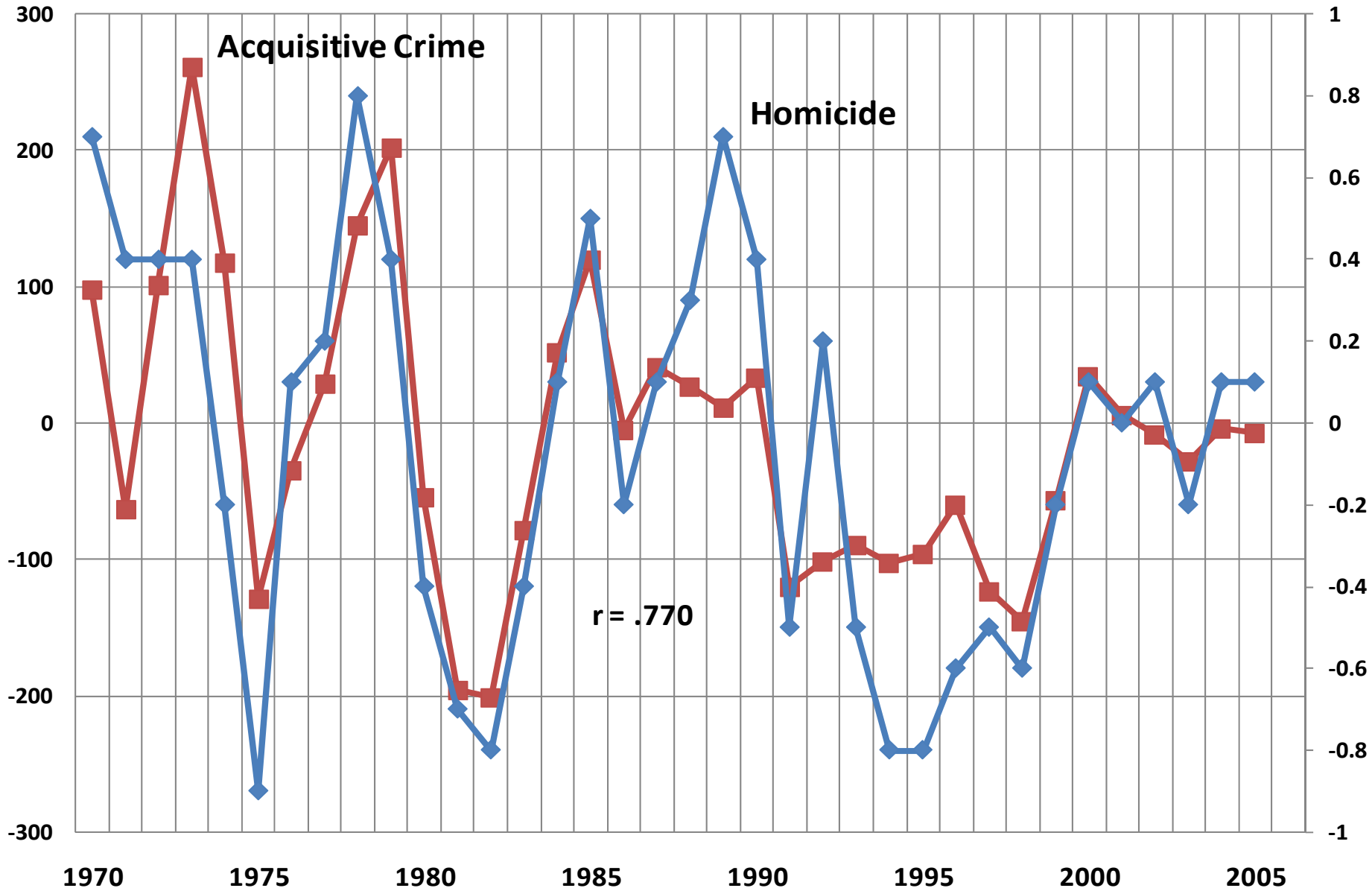
US Homicide Rates and Consumer Sentiment (Detrended), 1960-2005



A. Homicide and Acquisitive Crime Rates



B. Year-Over-Year Change in Homicide and Acquisitive Crime Rates

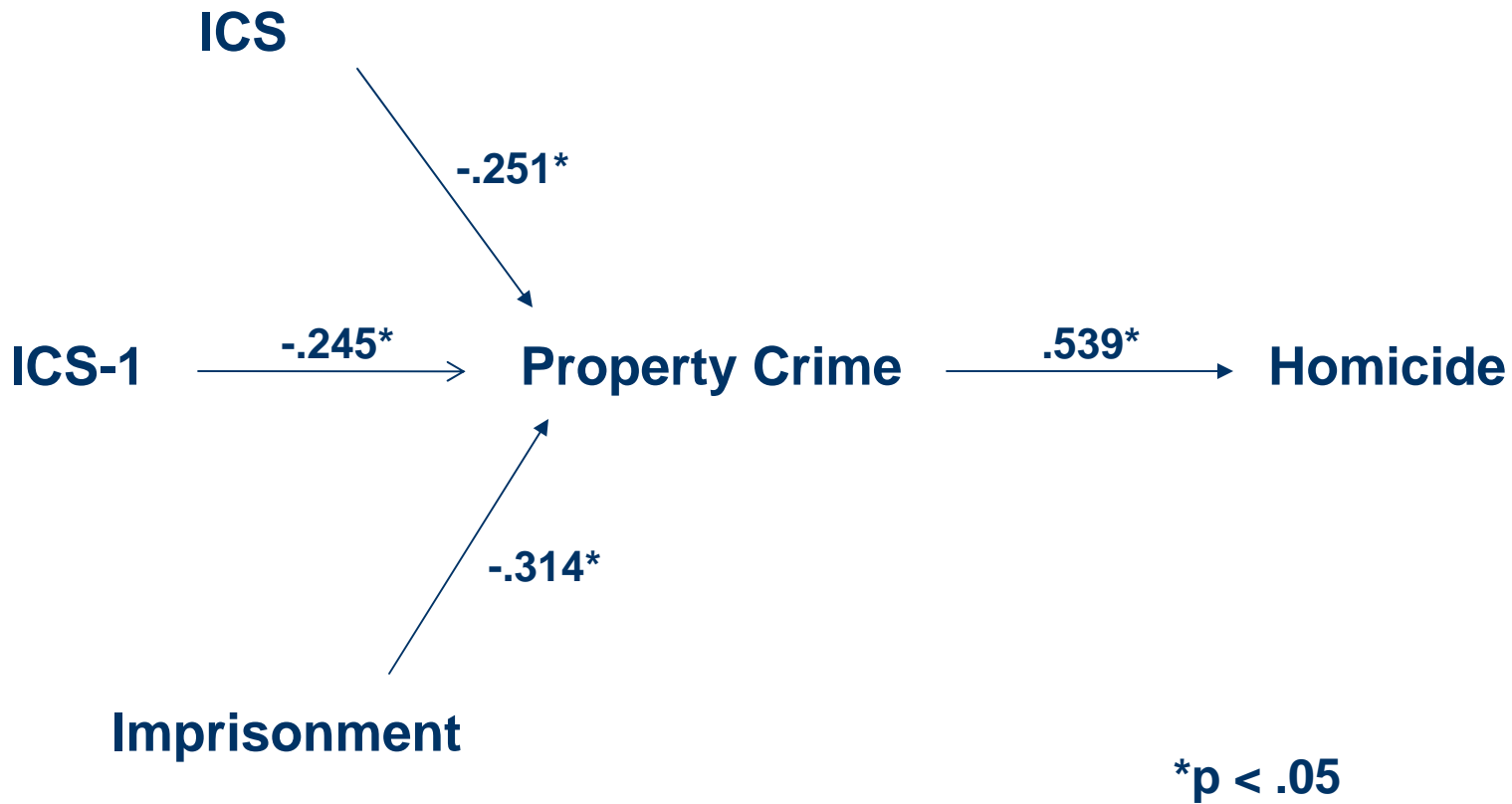


	Model 1 <i>Prop Crime</i>	Model 2 <i>Homicide</i>	Model 3 <i>Homicide</i>
Prop Crime	---	---	.539*
ICS	-.251*	-.314#	-.153
ICS-1	-.245*	-.212	-.065
Prison-1	-.314*	-.332*	-.148
R²	.839	.768	.782

*p < .05 #p < .10

“Prop crime” includes robbery, excludes larceny. Police, age, race, unemployment, GDP, region and year fixed effects not shown.

Direct and Indirect Effects of Consumer Sentiment and Imprisonment on Property Crime and Homicide



Conclusions

- Collective perceptions of economic conditions related to changes in property crime and robbery
- Crime reduction effects of consumer sentiment largely independent of those of other economic indicators
- Economy and imprisonment explain much of 1990s crime drop
- Effect of collective economic perceptions on homicide mediated by property crime

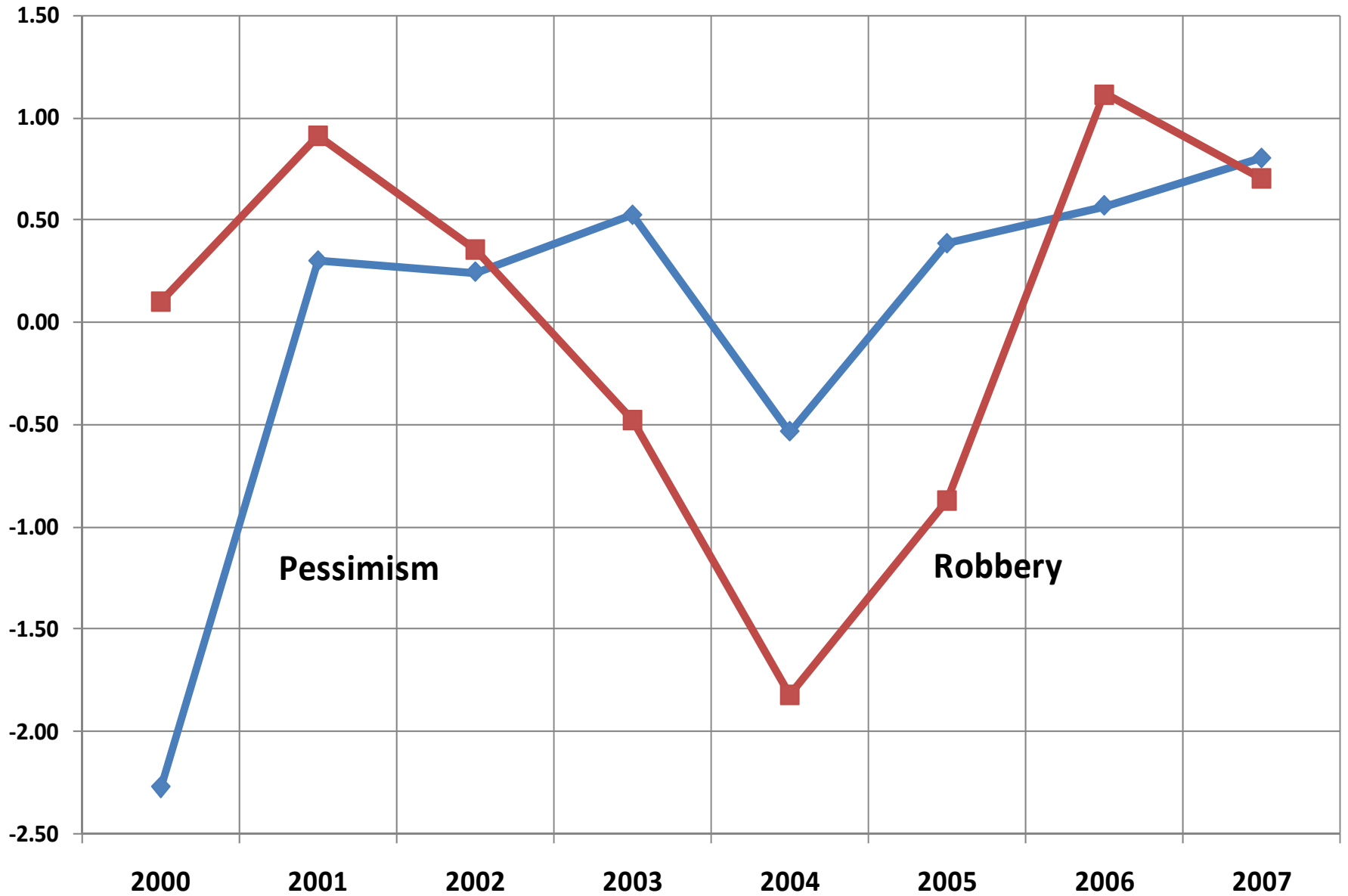
Implications for Crime Control

- Policy cannot stop the business cycle
- Forcible suppression of underground markets neither feasible nor desirable
- Strengthen participation of the poor, as consumers and workers, in the legitimate economy

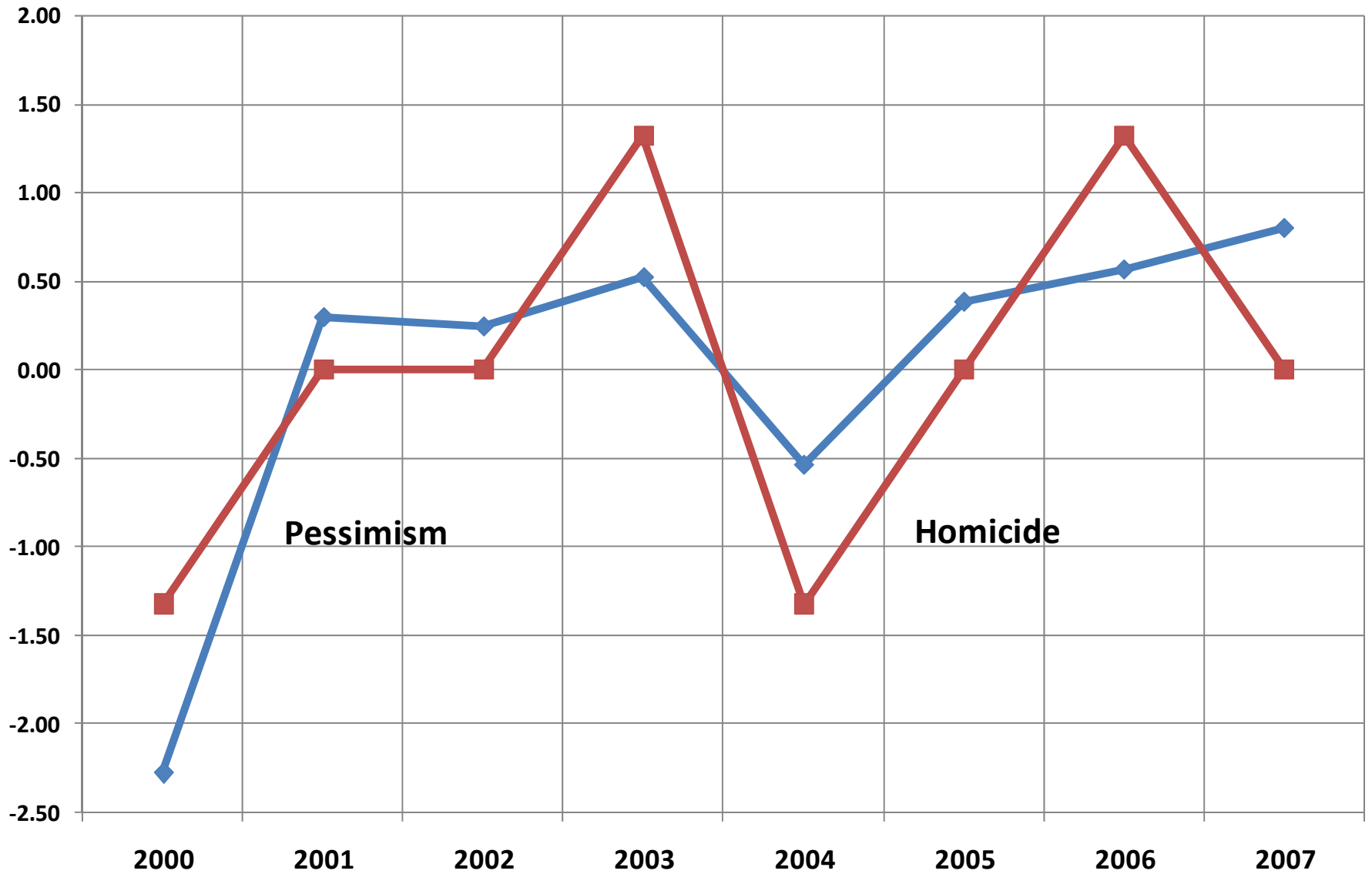
Recent Past*

***Rosenfeld, Richard and Brian Oliver. 2008. "Evaluating Recent Changes in Homicide and Robbery Rates." *Justice Research and Policy* 10: 49-65.**

Robbery Rate and Consumer Pessimism, 2000 - 2007 (Standard Measures)



Homicide Rate and Consumer Pessimism, 2000-2007 (Standard Measures)



Crime and the 2008-09 Recession

- Crime did not rise in 2008
 - Burglary up slightly
- Recession deepened with financial crash in fall 2008
- Some lag between economic conditions and crime
- No systematic data for 2009
- Need to improve crime-monitoring infrastructure