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AN ECONOMIC ANALYSIS OF THE DETERRENT EFFECT OF LAW ENFORCEMENT ON CRIMINAL ACTIVITY*

LLAD PHILLIPS** AND HAROLD L. VOTEY, JR.†

INTRODUCTION

Economics has been referred to as "the dismal science," an appellation which probably stems from Thomas Malthus' 18th century essay on population,¹ in which he predicted dire consequences for the world's people as a consequence of rapid rates of population growth. While the immediate conclusions from some of our research on the economics of crime may seem to contribute to a dismal outlook, we would prefer to argue that a problem is dismal only if we cannot see a clear path to a solution and thus run out of hope.

A recent headline in the *Los Angeles Times*² read "L.A. Crime Rate Could Collapse Justice System, Computer Says." Allowing for the tendency of the press to attribute occult powers to computers, we find that a research team from the University of Southern California has predicted a possible collapse of the system of criminal justice in Los Angeles as a consequence of an overload on facilities at all levels. However, from an examination of the formal documentation of the work performed by the USC group, it appears that their analysis was based on a "simplistic" inertial model in which crime generation and crime countermeasures were treated as inertial forces. Although this very extensive study has produced projections that will be

invaluable in alerting policy-makers to the very real consequences of allowing present trends to go unchecked, it does little to provide an understanding of how the criminal justice system will respond to continuing rates of change. This is because simplistic inertial models are not designed to analyze underlying processes, and consequently do not yield an understanding of how a system works, nor do they provide clues to action necessary for controlling the various forces within a system.

The dire predictions about the consequences of continually rising crime rates raise a number of questions. Where do we break into this system to bring crime levels within reasonable limits? Are there alternative approaches or solutions to the problem? What will happen to law enforcement effectiveness and crime rates if we continue with present expenditure policies? How much would it cost to keep law enforcement effectiveness from deteriorating? Can we afford to hold constant or reduce the current level of offenses?

In this study we have utilized the techniques of economics for evaluating and controlling economic systems in an analysis of crime control. Using the most recently available data including that from the Uniform Crime Reporting Section of the FBI and the California Bureau of Criminal Statistics, our study analyzes the processes generating crime, the productivity of law enforcement agencies, and welds these two processes together in a model that permits an analysis of underlying causes and the various appropriate responses to the crime problem.

ECONOMIC MODEL OF CRIMINAL JUSTICE

This study is based on a model which incorporates interaction between the process that generates crime and the system of law enforcement. We postulate that law enforcement not only responds to crime for the purpose of meting out punishment, but more importantly that it creates a deterrent effect which tempers the process of crime generation. In this more sophisticated model, one of the potential theoretical outcomes will still be the collapse of the criminal justice system. More important for our purposes, however, is the use of such a

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¹ The reference was "to respectable professors of the dismal science." T. CARLYSLE, *LATTER DAY PAMPHLETS*, No. 1 (1850).

² Drummond, *L.A. Crime Rate Could Collapse Justice System, Computer Says*, *Los Angeles Times*, Sept. 13, 1970, § B, at 1, col. 4. This story was based upon McEachern, *et al.*, *Criminal Justice Simulation Study: Some Preliminary Projections*, June 30, 1970 (Public Systems Research Institute, U.S.C.).

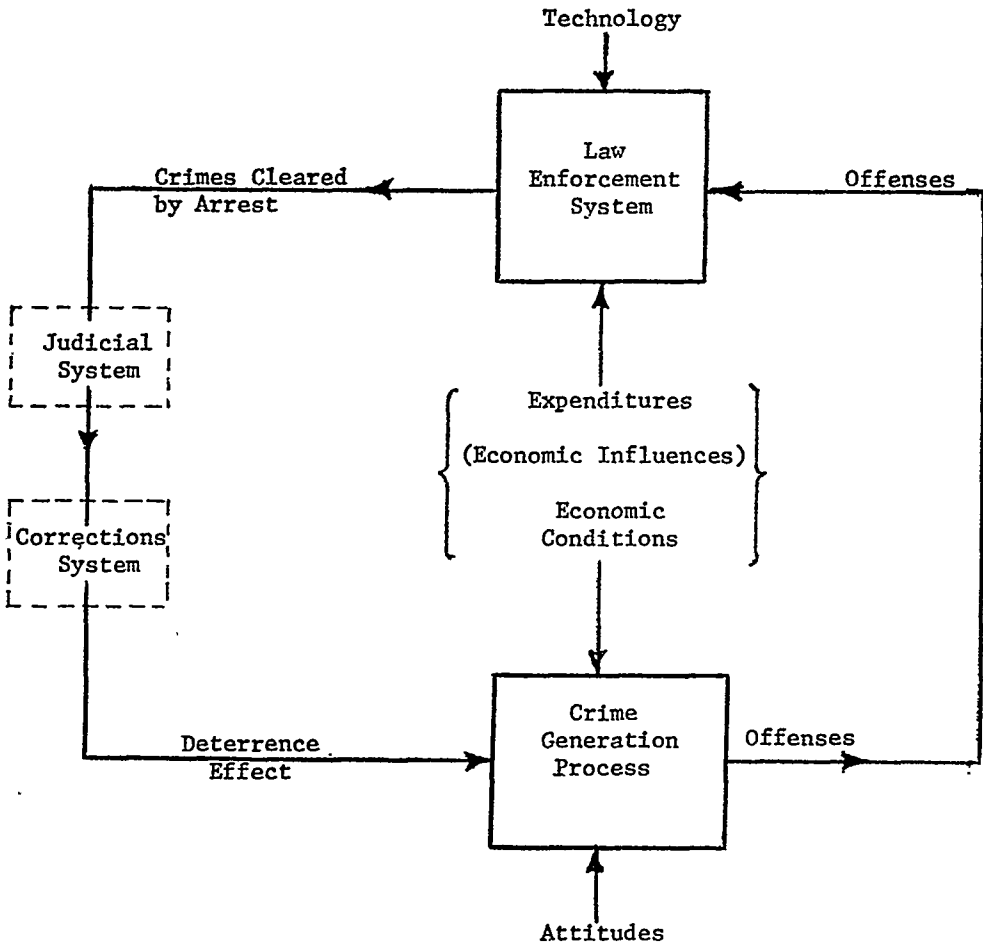


FIGURE 1.
SCHEMATIC DIAGRAM OF THE CRIMINAL JUSTICE SYSTEM

model to critically examine the processes of crime generation and crime control.

Our study deals primarily with the major felonies which may be classified as economic crimes: crimes for which there is a clear-cut economic motive. Many of the results, however, are more general in nature and will apply to non-economic crimes as well. Our analysis conveniently breaks down into three parts. We will deal separately with the process of crime generation and with the analysis of law enforcement viewed as a service industry, finally synthesizing these results to create an interacting system. This system is illustrated schematically in Figure 1. The logic of this schematic is as follows: Law enforcement is viewed as acting on offenses and clearing them by arrest. The effectiveness of law enforcement is determined by technol-

ogy and expenditures on law enforcement. The effectiveness of law enforcement is, in turn, presumed to affect the behavior of offenders. In addition to law enforcement, attitudes and economic conditions are postulated to determine offense rates. The inclusion of the impact of the judicial and correctional systems on offense rates is illustrated by broken lines to indicate that these systems have not been analyzed in the present study, but could readily be incorporated within this conceptual framework.

In our empirical analysis of crime generation we included larceny, burglary, auto theft, and robbery as defined and reported in the Uniform Crime Reports of the Federal Bureau of Investigation. Our study breaks the population down into subsets classified by age, sex, and race. There are sound

reasons for this. For example, the evidence shows rather emphatically that these crimes are largely a youthful phenomenon. We find that both the distribution of crimes by age and the rates of increase of crimes by age are greater for the ages under twenty. Consequently, we selected 18-19 year olds as an appropriate group to study. We found further that for these crimes, except for larceny, 94% or more are committed by males in the 18-19 year old group. For larceny the figure is 75%. We also observed that arrest patterns vary by race for reasons which became apparent as the study progressed.

CRIME GENERATION

For several centuries criminologists have been suggesting economic motives as one of the possible causes of property crimes. Illegal gains are an alternative to income earned honestly. The critical question is how does one choose between socially acceptable and illegal alternatives for earning income. Here economic theory can make an important contribution. Theory tells us that a rational individual will, implicitly at least, consider all of the alternatives open to him in terms of a benefit-cost analysis. From normal employment, the benefit is a stream of wage payments. The associated costs include the every-day costs of acquiring and maintaining a job. In the case of a crime, the benefits are any returns from its commission. The costs include the direct costs associated with the actual commission of a crime; advance research, transportation, the transactions' costs of disposing of illegally obtained goods.³ In addition, there may be the costs associated with being apprehended, including the cost of having an arrest on one's record, the cost for legal defense, the loss of income from being incarcerated, and the psychic cost of being branded a criminal. The expected cost of these latter possibilities will be the cost associated with the event multiplied by the probability that the event (arrest, trial, imprisonment) takes place. When our rational individual considers this whole array of possibilities he will quite naturally choose that activity which yields him the greatest net material and psychic benefits. Should some elements of this choice set be eliminated for any reason, the individual would, of course, choose from those alternatives remaining.

The next step is to see how this theory of choice relates to economic realities for the 18-19 year old

³The benefit (value) the criminal receives from illegal goods may be considerably less than the market price.

group. What do we know about their set of alternatives? If we look at the data for the period 1952 through 1967 (Fig. 2) we find that unemployment rates for white males go from a low of 7.0% in 1952 to a high of 16.5% in 1958, then decline erratically to 9.0% in 1967. Over the same period, unemployment rates for non-whites go from a low of 10.0% in 1952 to a high of 27.2% in 1959, then decline to 20.1% in 1967. By contrast, average unemployment rates for the total labor force never rise above 6.8% over this entire period.

Another measure of the economic well-being of a population subset is the group's labor force participation rate. This is a measure of the proportion of the group who are either employed or actively seeking work. A decline in participation rates for youths generally comes about for one of two reasons. An individual may be attending school, or he may be so despondent about the possibility of obtaining work that he leaves the labor force. Referring to Fig. 3, we observe that in terms of their participation rates, 18-19 year olds are worse off than the population as a whole, and non-whites are again relatively disadvantaged.

The impact of school enrollment on this process is also important. Going to school represents an investment in greater future earning power for the individual. A rational individual will look at the lifetime possibilities associated with greater schooling as compared to immediate full time employment. The array of opportunities facing an 18-19 year old thus has a time dimension and includes schooling as one of the legal activities from which he can choose. However, the choice of further education may also depend on immediate employment opportunities, since schooling requires an immediate investment for a return that may commence years hence. Consequently, lacking either savings or a job, the opportunity to attend school may be eliminated from an individual's alternatives for reasons beyond his control. Referring to Fig. 4, which depicts statistics for school enrollment, we find that in 1952, 38.1% of 18-19 year old white males were enrolled in school. This may be contrasted with 34.6% for non-white males of the same age. By 1967 these figures had risen to 61.5% and 53.5% respectively. Once more we see that non-whites have become relatively disadvantaged.

To study the impact of economic opportunity for youth on their criminal activity one can formulate a probability model of behavior based on a population breakdown by labor force characteristics. Figure 5 is a Venn diagram of such a breakdown. It

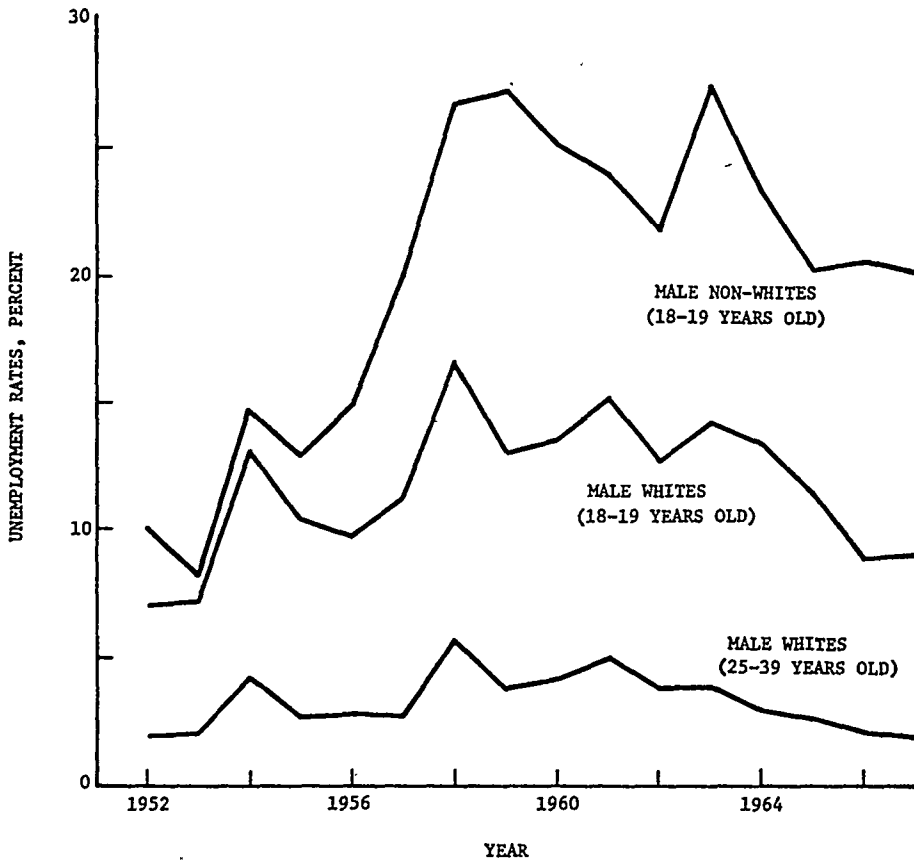


FIGURE 2.

MALE UNEMPLOYMENT RATES BY RACE, SELECTED AGE GROUPS

Source: Based on data from DEPT. OF LABOR, MANPOWER REPORT OF THE PRESIDENT, (1970).

is obvious that crimes committed by this age group must involve individuals in one of the subsets of the total 18-19 year old population. The shaded area in the center represents those who have committed crimes in a given year. If we believe that employment status and school enrollment status affect the individual's inclination to commit a crime, then we would expect the probability of arrest to vary according to the subset of the population in which an individual is found. As noted above, we know that the number of individuals in each of these categories varies over time and have data on this variation. We also have data on how arrest rates for 18-19 year olds vary over the same period. If we use arrest rates as a measure of the probability of arrest and the data on school enrollment and labor force status to represent the probability of being in one of these population groups, we can estimate the impact of changing school enrollment and job opportunities on arrest rates. We find

that we can "explain" 98% of the variation in arrest rates for 18 and 19 year olds by changes in their economic opportunities.⁴

This suggests that an improvement in economic opportunities for youth in terms of some form of education or immediate employment will have an ameliorating effect on youthful crime rates. This in itself is hardly a new idea. Although sociologists have been asserting this for some time, the important thing here is that solid statistical verification of this relationship is provided within a formally specified analytical framework.⁵

The policy implication from our result is that

⁴H. VOTEY & L. PHILLIPS, *ECONOMIC CRIMES: THEIR GENERATION, DETERRENCE AND CONTROL* 41, 23a, 27a (National Technical Information Service P B 194 984, 1969).

⁵For the development of our analytical framework and a discussion of earlier studies by others, see Phillips, Votey & Maxwell, *Crime, Youth, and the Labor Market*, 80 J. POL. ECON. 491 (1972).

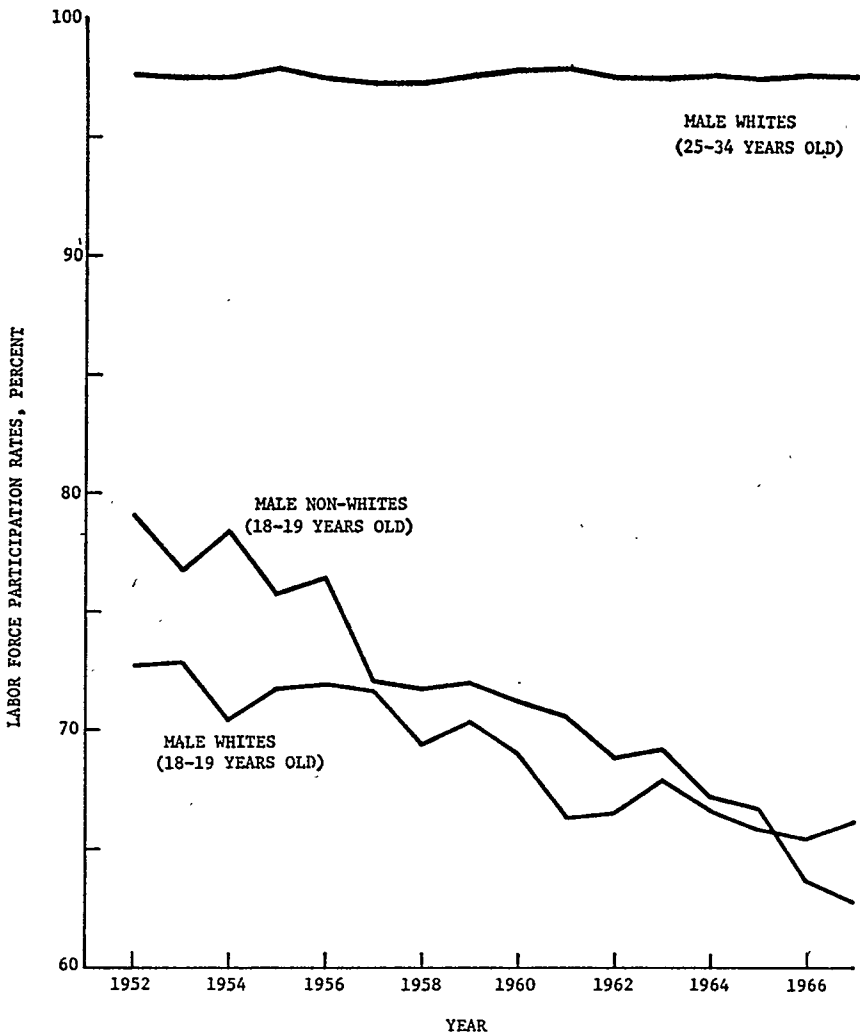


FIGURE 3.

MALE LABOR FORCE PARTICIPATION RATES BY RACE, SELECTED AGE GROUPS

Source: Based on data from DEPT. OF LABOR, MANPOWER REPORT OF THE PRESIDENT (1970).

there is a trade-off between policies which control crime and those which affect the generation of crime. An important aspect of the latter policy is a cumulative one. The evidence on recidivism is discouraging. Once an individual commences on a pathway of crime as the source of economic sustenance, it is difficult to reroute him toward socially acceptable earning activities for a number of reasons. Thus, any measures which tend to remove the incentive for crime generation may have both an important immediate effect on crime rates and a more important long-run effect on the level of crime.

LAW ENFORCEMENT PRODUCTION FUNCTION

So far we have analyzed crime generation on the assumption that the impact of law enforcement on the process is constant. Since we cannot be sure this is true it is equally important to analyze the process of law enforcement from an economic point of view. To an economist, a law enforcement agency may be viewed in essentially the same manner as a firm in a service industry. A firm will maximize profits, given the prices it can charge for its services and the cost of inputs. Similarly, a law enforcement agency will maximize its output, given the annual budget determined by some external public body.

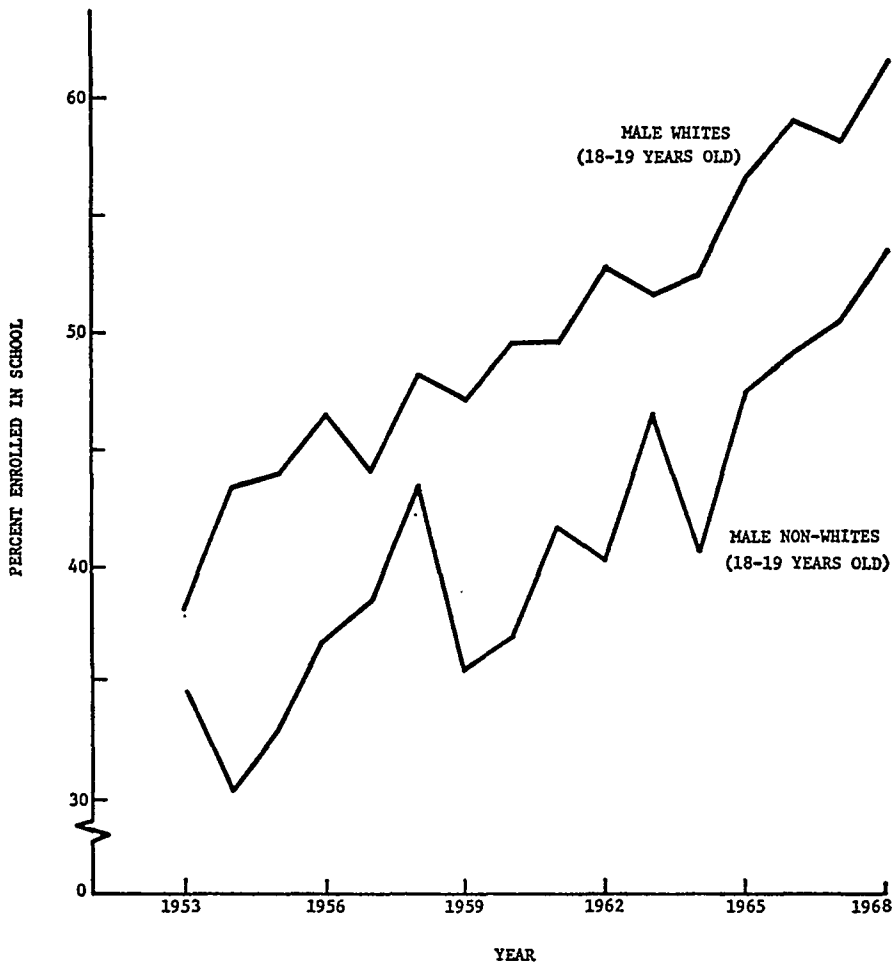


FIGURE 4.
MALE SCHOOL ENROLLMENT RATIOS BY RACE

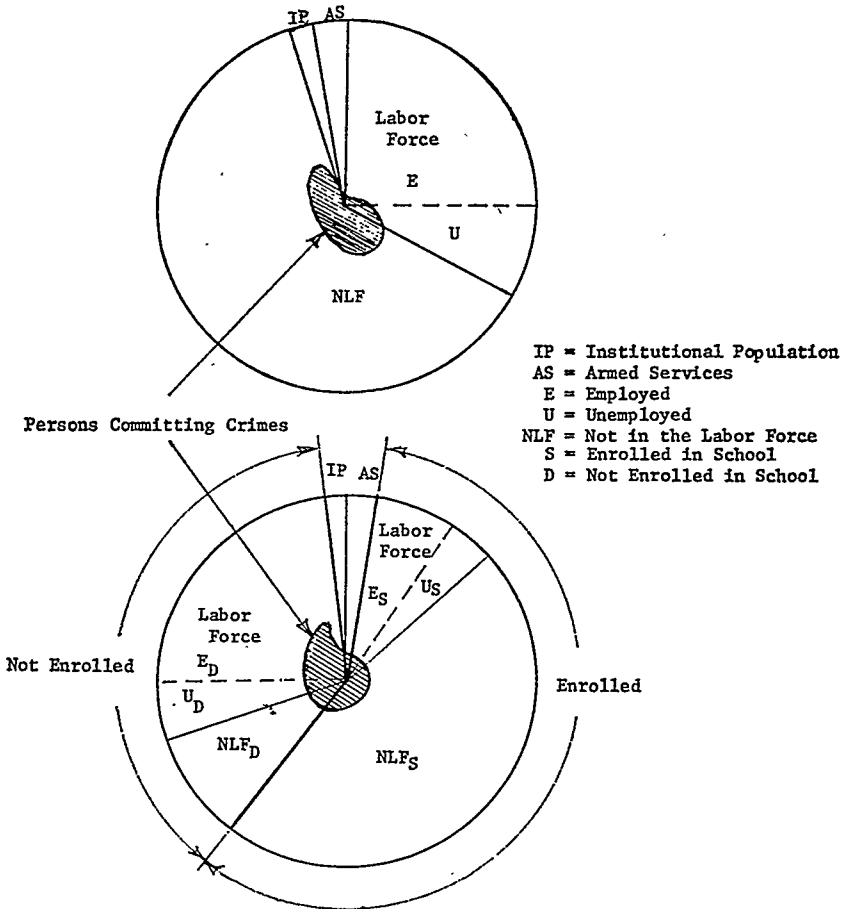
Source: Based on data from DEPT. OF COMMERCE, BUREAU OF THE CENSUS, CURRENT POPULATION REPORTS, SERIES P-20, selected issues.

To acquire a conceptual understanding of the analysis of such an agency from an economic point of view, refer to Fig. 6. The activity of the agency (police department) may be regarded as a process into which flows an array of reported offenses. Police personnel operate on these offenses utilizing their time and capital equipment consisting of patrol cars, communication equipment, laboratories, etc., and produce a list of crimes cleared by arrest. For our analysis, we do not concern ourselves with the disposition of those arrested, but only assume the process works beyond the point of arrest.

The production function approach to law enforcement serves to emphasize a very important point. If offense rates are increasing, expenditures

on law enforcement must be increased fast enough, or police effectiveness will fall. The necessary rate of increase in expenditures can be determined. If the offense rate increases and there is no increase in expenditures on law enforcement and no improvement in law enforcement technology, offenses cleared by arrest will increase but at a diminishing rate, as police resources are stretched more thinly. Beyond some point police will be unable to clear further crimes without being allotted additional resources. Consequently, police effectiveness as measured by the clearance ratio (the ratio of offenses cleared by arrest to offenses) will fall. (Refer to Fig. 7.) Conversely, if the offense rate is not changing and there are increases in expenditures or

a. Labor Force Model



b. Labor Force - School Enrollment Model

FIGURE 5.

VENN DIAGRAMS OF POPULATION CATEGORIES USED IN MODELS OF CRIME GENERATION

The ratio of shaded area to total area, which may be measured by age, specific arrest rates for any given age population, represents the probability of arrest.

improvements in technology, police effectiveness will increase. If both offense rates and expenditures are increasing, the nature of the relationship between inputs and outputs will determine the impact on police effectiveness.

The important thing is that it is possible to estimate statistically the parameters of this production relationship. Based on national experience we can determine what percentage of increase in clearances one might expect with a one-percent increase in police manpower or from a one-percent increase in capital equipment. This information is of importance in making general estimates of how to allocate resources for the control of a particular crime, given

that we wish to obtain a particular outcome in terms of the level of clearances for that crime. These "elasticities," *i.e.*, percentage changes in output for a given one-percent change in one of the inputs, are shown in Table I.

One would expect a relatively larger coefficient on Other Expenditures on Law Enforcement for crimes which require a more intensive use of capital in their solution. The crimes which we find to be more capital intensive by this reasoning are robbery and auto theft. These results seem to be consistent with a casual inspection of law enforcement experience. Robbery appears to be a crime whose solution depends upon a high degree of mobility of the

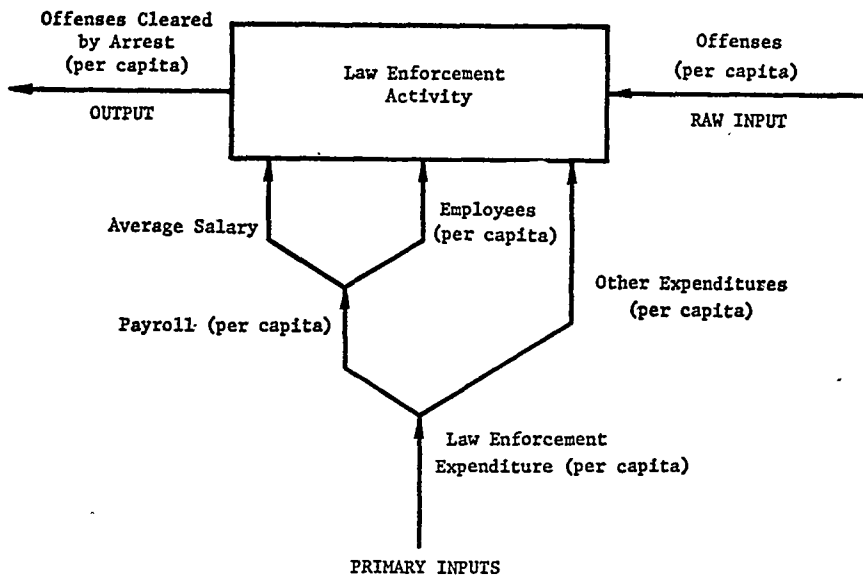
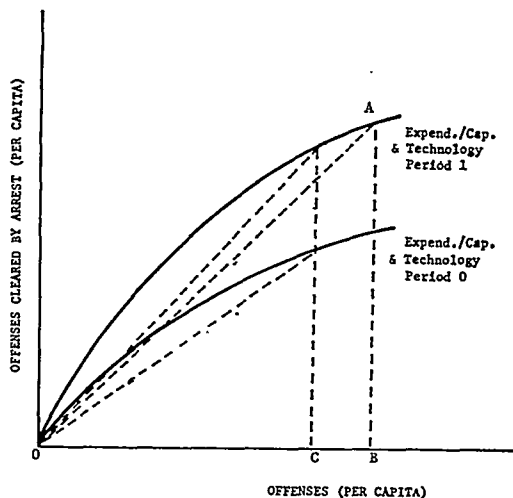


FIGURE 6.
SCHEMATIC DIAGRAM OF A LAW ENFORCEMENT PRODUCTION PROCESS

police force and on communications since typical robberies are committed in areas in which continued surveillance is virtually impossible. Clearances for auto theft also seem to depend upon the mobility of the police force and more recently on computerized tracing techniques, all highly capital intensive. Thus it should not be surprising that Other Expenditures appears more important in these estimated relationships. On the other hand, burglary solutions seem to depend more upon analytical techniques of a detective force and upon surveillance. Here we find that Police Personnel is a more important input in terms of the relative size of the coefficients. The solution of larceny (theft) depends almost entirely on surveillance and once more the variable Police Personnel is relatively more important than Other Expenditures on Law Enforcement.

The policy implications of these results are illustrated for the case of robbery in Fig. 8. The solid line represents the actual experience of police in clearing crimes over the period studied. Over this is superimposed the predicted values based on our production function.

Our estimated production function fits the actual experience quite well. We see that whereas expenditures for law enforcement (police personnel and other expenditures on law enforcement) were rising fairly steadily over the entire period, offenses, which remained fairly steady through 1960, were rising



$$\frac{AB}{OB} = \frac{\text{offenses cleared by arrest per capita}}{\text{offenses per capita}} = \text{clearance ratio}$$

FIGURE 7.
DIAGRAM OF THE PRODUCTION FUNCTION FOR LAW ENFORCEMENT WITH ALTERNATIVE LEVELS OF EXPENDITURES/CAPITA AND TECHNOLOGY

much more rapidly from that year on. The consequence of this was that police effectiveness deteriorated rapidly in the latter period following a moderate rise from 1952-1957. If there had been a properly balanced increase in police personnel and other expenditures on law enforcement from 1960

TABLE I
EFFECTIVENESS OF INPUTS INTO THE
LAW ENFORCEMENT SYSTEM

Crime	Percentage Change in the Crimes Cleared by Arrest for a One Percent Change in		
	Offenses	Police Personnel	Other Expenditures on Law Enforcement
Larceny.....	.628	.405	.143
Burglary.....	.186	.722	.303
Auto Theft.....	.546	*	.287
Robbery.....	.529	*	.131

* Police personnel did not have a statistically significant impact on crimes cleared by arrest for auto theft and robbery.

Source: Votey & Phillips, *Police Effectiveness: The Law Enforcement Production Function*, 1 J. LEGAL STUDIES 423 (1972).

onward to offset the rise in offenses, law enforcement agencies would have been able to maintain the level of police effectiveness.

SIMULTANEOUS SYSTEM OF CRIME
GENERATION AND CONTROL

At this point, we have two relationships which comprise a simplified model of crime generation and control. Referring to Fig. 1, we recall that deterrence is the link between crime control and crime generation. Fig. 9 shows clearance ratios for the index crimes from 1952 to 1967 for the cities covered by the Uniform Crime Reports of the FBI. The clearance ratio is both an index of police effectiveness in apprehending criminals and a measure of the probability of a criminal being arrested for a single offense. This probability should enter the potential criminal's cost calculations when he is choosing between economic alternatives. As the clearance ratio falls with no change in other varia-

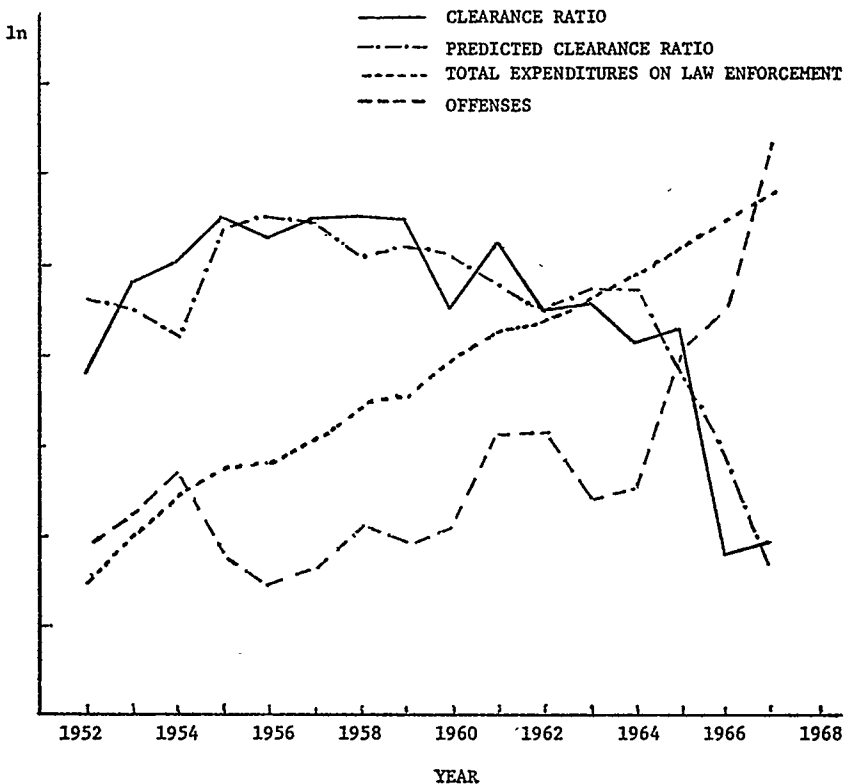


FIGURE 8.

THE TIME PATTERN OF (The logarithms of) THE CLEARANCE RATIO, PREDICTED CLEARANCE RATIO, TOTAL EXPENDITURES ON LAW ENFORCEMENT, AND OFFENSES

Sources: Data from the Uniform Crime Reports of the Federal Bureau of Investigation and DEPT. OF COMMERCE, GOVERNMENTAL FINANCE, selected issues.

bles in the system we would expect more criminal activity since the probability of arrest has fallen. This is in fact what we have observed. Figure 10 shows the alarming rise in offenses over the same time period.

The interaction of rising offenses with an insufficient rise in expenditures for law enforcement has resulted in the clearance ratio tracing a pattern resembling an inverted U as illustrated in Figs. 8 and 9. The two relationships we have derived are illustrated in Fig. 11a in such a manner as to reveal the interaction between them. The clearance ratio is plotted on the vertical axis. If law enforcement activity were completely successful the clearance ratio would be 1.0, *i.e.*, clearances would equal offenses. The lower limit to the ratio is zero. For a given level of police technology and law enforcement expenditures, we would expect the clearance ratio to fall as offenses rise. Law enforcement personnel will be spread thinner and thinner in terms of the job they face, until only a small proportion of crimes is effectively dealt with. This relationship

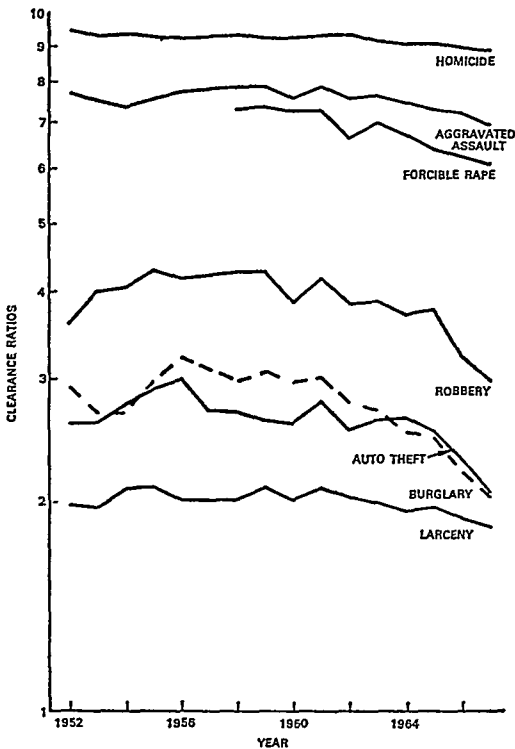


FIGURE 9. POLICE EFFECTIVENESS FOR THE FBI INDEX CRIMES

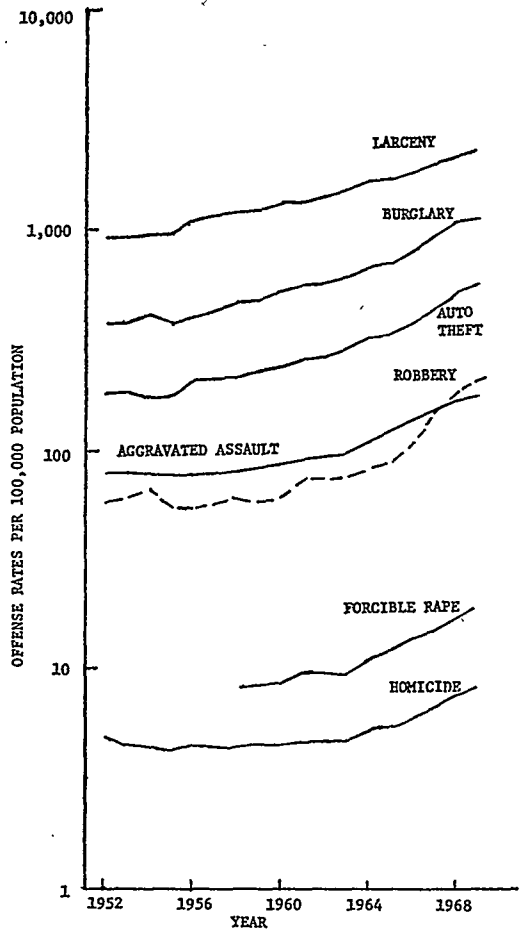


FIGURE 10. OFFENSE RATES FOR THE FBI INDEX CRIMES
Source: Based on data from Uniform Crime Reports, Federal Bureau of Investigation.

is illustrated by the solid line. Simultaneously, we must consider the crime generation function, which indicates how the offense rate will vary with the probability of arrest, given a particular state of affairs as determined by economic opportunities and social attitudes. That relationship is illustrated by the broken line. The two relationships will lead to an equilibrium solution with all forces in balance at point A. If the relationship is as we have drawn it, we will have a stable equilibrium.

Note that Fig. 11a illustrates the determination of the clearance ratio and the offense rate (point A) for a given level of expenditures and state of technology for law enforcement and a given state of economic conditions for crime generation. As law

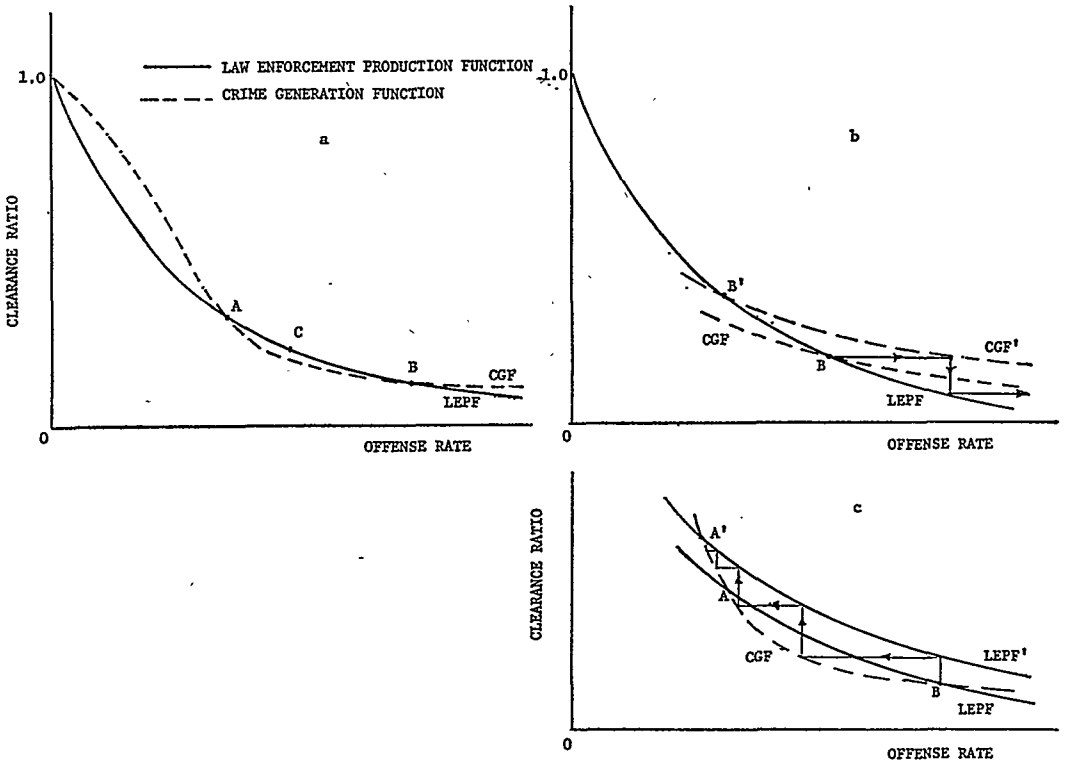


FIGURE 11.
THE INTERACTION OF CRIME GENERATION AND CRIME CONTROL

enforcement expenditures rise or the state of technology improves, the crime-control curve will rotate upward and to the right. (The endpoint on the vertical axis representing a clearance ratio of one will remain fixed.) As economic conditions or social attitudes worsen the crime generation function will also tend to rotate in this same manner. If economic conditions worsen or social attitudes deteriorate, expenditures will have to increase in order to maintain the effectiveness of law enforcement. However, even in this case the offense rate will rise. If the equilibrium had been at some point C to the right of A and there had been a change in socio-economic conditions (e.g., a decline in unemployment rates) to shift the crime generation function such that the new equilibrium would be at A, we would find that the level of the clearance ratio, as indicated by C on the crime control function, produces a greater probability of arrest than that anticipated by criminals. In successive moves a lower level of offenses will prevail until we reach the equilibrium point of A. Should offenses have been below A, a similar but opposite situation would exist such that

we would find a lower clearance ratio than anticipated and crimes would rise until the system is once more in balance. This stable equilibrium represents the situation which we believe prevails in the United States at this time.

An example is the case of auto theft,⁶ in which we note that the equilibrium is stable. A decline of 0.75 percent in the clearance ratio will induce a one-percent increase in the offense rate, which in turn only causes a decline of 0.66 percent in the clearance ratio. Thus we see that changes precipitated by shifts in crime generation (or shifts in crime control caused by changes in law enforcement expenditures) will damp out and for auto theft the system will approach a point like A. Consequently, the system remains subject to control.

Using the results of simultaneously estimated

⁶ It should not be surprising that auto theft, which of the seven major felonies had one of the lowest average clearance ratios (26%) over the period 1952-1967, had one of the highest average offense rates (264 auto thefts per 100,000 population), suggesting that a low level of deterrence is directly linked to a high level of offenses.

relationships such as those we estimated independently for the crime generation function and law enforcement production function, it is possible to calculate some of the alternative rates of change for the clearance ratio and offense rates for auto theft which would have been possible to achieve by varying law enforcement expenditures.⁷ These are presented in Table II. We observe that during this period the per capita offense rate for auto theft was growing at 6.1% per year, and the rate of offenses cleared by arrest per capita was growing at 4.8% per year. Consequently, the clearance ratio was falling at the average rate of 1.3% per year. Implementation of the estimated relationships yields the results that per capita expenditures on law enforcement should have increased at the rate of 3.6% per year to keep the clearance ratio from falling. In fact, law enforcement expenditures were growing at only 2.9% per year. Even if expenditures on law enforcement had grown at 3.6% per year, the per capita offense rate for auto theft would have risen at 4.5% per year. It would have been necessary to increase per capita expenditures on law enforcement at the rate of 5.4% per year to maintain the auto theft offense rate at a constant level during this period. Referring to Table II we see that if there had been no decrease in law enforcement effectiveness (0% rate of growth of the clearance ratio) offenses would have grown by 4.5% compared to the actual rate of increase of 6.1%. We conclude that approximately 75% of the observed rise in offense rates is attributable to changes in crime generation forces and only 25% to the failure to maintain law enforcement effectiveness.

The finding of stability over this period gives no grounds for complacency, however, for we can envision another altogether different situation. It

⁷ The estimated functional relationships are:

$$\begin{aligned} \ln CR_t &= \ln k + \lambda t + (\alpha - 1)\ln O_t + \beta \ln E_t \\ \ln O_t &= \ln j + \theta t + \gamma \ln CR_t + \delta \ln(\mu\rho)_t, \end{aligned}$$

where CR, O, t, and $\mu\rho$ are defined as the clearance ratio, offense rate, time, and the product of the unemployment rate and participation rate, respectively. Time is included in the crime control function to measure changes in productivity due to technological change and in the crime generation function to measure systematic changes in social attitudes. The estimates for auto theft are:

$$\begin{array}{cccccc} \alpha & \beta & \gamma & \delta & \lambda & \theta \\ 0.339 & 0.222 & -1.330 & -0.193 & 0.022 & 0.045 \end{array}$$

A detailed explanation of the calculations for Table II can be found in Votey & Phillips, *supra* note 4, App. C, at 5.

TABLE II

POSSIBLE CHANGES IN ANNUAL MEASURES FOR AUTO THEFT GIVEN CRIME GENERATION FORCES AND ALTERNATIVE RATES OF GROWTH OF EXPENDITURES ON LAW ENFORCEMENT

Growth of Expenditures on Law Enforcement	Consequent Changes of Clearance Ratio	Resultant Increase in Offense Rates
2.9%	-1.3%	6.1%
3.6	0.0	4.5
5.4	3.3	0.0

is conceivable that police effectiveness could fall so low that we approach another equilibrium point as shown at B. Here we have an unstable equilibrium such that a shock to the system moving us in either direction from B will find no correcting force to bring about a return.

Should the law enforcement production function shift upward from LE_{PF} to LE_{PF'}, as illustrated in Fig. 11c, as a consequence of a rise in expenditures on law enforcement, starting from B we would find an increased probability of arrest leading to a decrease in offenses. We would reach a new stable equilibrium at A'.

Suppose, however, that instead unemployment rates increase so that the crime generation function shifts from CGF to CGF' as illustrated in Fig. 11b. In this case the clearance ratio (and the probability of arrest expected by criminals) will be lower than anticipated and crimes will increase unchecked with the system out of control. This is the analogue in the sophisticated model to the collapse predicted by the simplistic inertial model.

There is another dynamic and presently un-evaluated aspect of this system. It is conceivable that there may be an indirect and possibly inverse relationship between expenditures on law enforcement and the shape of the crime generation function. A heavy emphasis on law enforcement to the neglect of economic conditions could have the effect of worsening social attitudes in the form of a resentment of law enforcement and a general attitude of antagonism between levels of society.

SUMMARY

The value of the sophisticated model is that the outcome results from a number of plausible causes. Policy makers at one level may simply not be providing sufficient resources to combat

crime, while policy makers at another level may not be taking sufficient action to maintain economic opportunities for an important segment of the population. In addition, social attitudes may be changing as a consequence of what leaders on all levels do or fail to do in attempting to cope with serious social problems. The solution to the problem is largely one of society's being willing to pay both the costs of law and order and the costs of maintaining healthy economic conditions and social attitudes. In the past we simply have not kept abreast of the problem.

What then is the appropriate policy for the nation or the state to follow to control crime? It is clear to us that law enforcement should be bol-

stered substantially. We are also convinced that such measures alone may be insufficient. We must control crime generation for two reasons. First, this is the only way to guarantee that we have control of both processes and thus can maintain social stability and, second, because the social cost of crime through recidivism is certain to be lower if we remove the incentives for the first offense. Our model serves to emphasize a point made by ex-Attorney General of the United States, Ramsey Clark, who said, "Law enforcement can only deal with the symptoms of crime. It's like bailing out the basement without turning off the water." We are in favor both of turning off the water and bailing out the basement.