THE CONTEXT OF PUBLIC BUREAUCRACIES: AN ORGANIZATIONAL ANALYSIS OF FEDERAL DISTRICT COURTS

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An organizational approach to the study of dispositions in United States District Courts is outlined, focusing on the pressures created by the combination of an increasing demand for service together with a relative decline in resources. The functions of courts are identified as adjudication, judicial administration, and policy-making. After stating some of the general theoretical issues involved in the approach taken here, courts are described in terms of the following organizational characteristics: (1) they are networks of organized activities with a mixed collegial and bureaucratic authority structure, as well as informal political processes of coordination, (2) heteronomous, (3) a labor-intensive professional service, (4) a branch of government, (5) nonspecialized, (6) passive, (7) vertically and horizontally interrelated with other organizations, (8) whose tasks are influenced by the demographic, economic, and legal-governmental characteristics of the jurisdictional environment

Theoretically, the output of courts (e.g., the volume and nature of dispositions) is seen as determined by the environmental profile and the complexity of the task structure, with fiscal resources and organizational structure as intervening variables. These major organizational dimensions and variables are illustrated with data on the six District Courts of the Second Circuit.

A preliminary statistical analysis presents the effects of the jurisdictional environment on various types of filings in all United States District Courts in 1950, 1960, and 1973. The results confirm one aspect of the historically increasing involvement of government in the economy and society, namely, that which is mediated by the federal courts. The increasing governmental presence is shown in civil litigation involving the United States government as defendant and plaintiff, as well as in the contextual effects on filings of governmental agencies at the federal, state, and local levels.

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The paper concludes with a brief discussion of three types of responses to the current crisis of the judiciary: the judicial response, emanating from the law-finding and adjudicatory role of courts; the bureaucratic response, reflecting the progressive transformation of adjudication into administration; and the technocratic response, emerging as a synthesis of adjudication and administration and stressing the policy-making function of courts within the context of the modern American political economy.

I. INTRODUCTION[1]

This paper has three parts. The first sketches some general theoretical and analytic considerations that I believe may be helpful in orienting the reader to the broader framework within which this study is located: the theory of the state as it pertains to the changing relations between the judiciary and the other two branches of government, on the one hand, and between government and the economy, on the other. Specifically, I propose to approach the analysis of the judiciary from a perspective that links the peculiar organizational characteristics of courts to their sociohistorical context and to certain features of their environment. The second part deals with the research design by means of which I have begun to study courts empirically. Here, I am illustrating the environmental and organizational characteristics of six United States District Courts by means of descriptive statistical data for four sets of variables: environment, task structure, resources, and output. In the third part, I present preliminary findings from a larger empirical study of all U.S. District Courts for 1950, 1960, and 1973. In this part, I focus on one set of relationships: the effect of demographic, economic, and governmental variables on the task structure of courts, measured by caseloads.

To avoid arousing expectations I cannot satisfy, I would like to spell out the intended linkages among the three parts. The empirical work reported in the second and third parts reflects my continuing interest in the study of organizations, but from a macrosocial and critical perspective. In the course of conducting the larger study of federal district courts and analyzing the qualitative and quantitative data, I found that I had to come to grips with some broader theoretical issues that had been only implicit, or were simply ignored, in my own thinking and in the relevant literature on courts and the judiciary. The first part is thus an attempt to sketch, in what I hope is not too brief a compass, some of the insights and conclusions derived from my empirical work and from a reading of this literature. I have used this overview to construct the elements of a more comprehensive framework for

1. In introducing this paper, I have adopted the format of exposition used by Edward Lauman and Richard Senter (1976:1305) which I found extremely helpful and suggestive.

examining the transformation of the judiciary and its context. Such a framework necessarily raises more questions than can be answered in the empirical parts of the paper, for it extrapolates from them. Nevertheless, I hope this framework will clarify the place of the empirical material in the emerging theory of law and the state.

A. Courts and the Fiscal Crisis of the State

The immediate problem giving rise to this study is the characteristic double-bind of the modern state: an increasing demand for governmental services generated by the economic and social structure of the larger society and, simultaneously, a relative decline in the economic resources of the state. This problem, in the making at least since the New Deal and World War II, has begun to surface in various forms under the general label of the "fiscal crisis of the state" (O'Connor, 1973). The specific facets of this general historical tendency—from massive state intervention on behalf of the economy to the expansion of the Health, Education, and Welfare complex and other government services—are well known and need not be documented here in detail (see, e.g., H. Kaufman, 1965; Kolko, 1963; McConnell, 1966; Shonfield, 1965; Weinstein, 1968; Williams, 1961). However, the increase of demand simultaneous with the relative decrease of resources is beginning to create a "structural gap" (O'Connor, 1973:9) between government expenditures and revenues which is particularly visible and consequential in the "third branch" of the federal government, the judiciary. The problems of the federal courts are mirrored in state and local courts, where they are even more acute (Saari, 1970a; Hazard *et al.*, 1972; Baar, 1975a, 1975b).

I argue that the crisis of the judiciary reflects the fiscal crisis of the state as a whole, and that neither can be understood without understanding the contradictory role of the modern state in the larger society. To begin, we may ask: why should the judiciary and the courts be particularly affected by the fiscal crisis of the state? A complete answer to this question would exceed the scope of the present paper, but I believe that a beginning can be made by examining the special functions and organizational characteristics of courts.

According to Jacob (1972:21), courts have at least two potentially conflicting functions: norm-enforcement and policy-making. Norm-enforcement includes law-finding, as well as the administration of justice (i.e., the application of rules to the resolution of legal disputes) and involves principles of formal legal rationality, due process of law and, in the common law world, the

adversary system. It is accomplished by adjudication or some other form of authoritative decision or "disposition" (Goldman and Jahnige, 1971:201).

As a process of decision-making, norm-enforcement or adjudication can be seen to engender a second major function of courts—policy-making, and even the quasi-legislative function of law-making (Jacob, 1972:27; Goldman and Jahnige, 1971:214; Abraham, 1969:105; see also Schubert, 1965; Wells and Grossman, 1968). In contrast to the formal legal characteristics of adjudication, policy-making implies the use of "substantive rationality" (Weber, 1966:224), i.e., a rationality "guided by the principles of an ideological system other than that of the law itself" (Rheinstein, 1966:l).

Although norm-enforcement can be seen as more typical of trial courts, and policy-making of appellate tribunals, students of courts suggest that both functions are found in each type of judicial forum and, indeed, in all dispute institutions (Abel, 1973:303; Jacob, 1972; Goldman and Jahnige, 1971; Roche, 1968; Schur, 1968:13; Richardson and Vines, 1970; Chambliss and Seidman, 1971:51; Dolbeare, 1969; Wells and Grossman, 1968; Krislov, 1968; Shapiro, 1968; A. Miller, 1968: Murphy, 1964:12; Murphy and Pritchett, 1974:3; Balbus, 1973; Fish, 1973; Friendly, 1973; Galanter, 1974). Furthermore, the "substantively rational" or policy-making element in judicial decision-making is also apparent in the influence that the social background and political attitudes of judges exert over their decisions (Cook, 1973; Vines, 1964; Grossman, 1966; Goldman, 1966; Danelski, 1966; Schubert, 1963).

A full discussion of the general organizational characteristics of courts will be offered in the next section of this paper. However, it may be useful to anticipate one particularly crucial element: the fact that courts are labor-intensive professional service organizations in the public sector, structured around the decisional activities of judges.

In addition to the dichotomy between judicial and legislative decision-making, many scholars also differentiate judicial and administrative behavior (Davis, 1969; Wright, 1970; Fish, 1973; Rosenblum, 1974). These concepts correspond to some extent to the division of powers between the judicial and executive branches of government (Roche, 1968:26-38; Goldman and Jahnige, 1971: 277-84; Wheare, 1964:53-74). They also echo Weber's (1947:392-507) distinction between bureaucratic and collegial-professional authority, and the development of these concepts in the later sociology of organizations (Stinchcombe, 1959; Scott, 1966; Freidson, 1973; Benson, 1973; Heydebrand and Noell, 1973;

Montagna, 1977; Dill, 1977). For example, administrative decision-making implies the routine application of technical rules and precedent to particular cases under conditions of agreement on both the facts and the desired outcome (Thompson and Tuden, 1959; Lorch, 1969:119; Mohr, 1976:628). By contrast, judicial decision-making, or adjudication, is based on a high degree of discretion and the exercise of professional judgment in the articulation and interpretation of legal norms, especially when there is disagreement over the facts, i.e., when there is a measure of uncertainty (Goldman and Jahnige, 1971:44; Murphy and Pritchett, 1974:344, 380, 406, 442).

The distinction between administrative and judicial decision-making is particularly important within the common law tradition (Kahn-Freund, 1949:13; Weber, 1966:224, 301, 349; Abraham, 1968). Judges in Anglo-Saxon countries tend to enjoy a relatively independent, discretionary professional status somewhat removed from, if not hostile to, the routines of bureaucratic hierarchies. By contrast, in countries dominated by highly codified law and characterized by the inquisitorial model of fact-finding as well as close ties between the judiciary and executive, judges tend to be bureaucratically oriented and have a comparatively low-paid civil service status.[2]

These multiple dichotomies within the judicial role and the organization of courts—professional versus political or legislative versus administrative functions—suggest some of the ways in which the fiscal crisis of the state may affect the judiciary and the courts. Specifically, one may ask to what extent do these functions come into conflict under the twin pressures of fiscal restriction and increasing demand for judicial services, and how are these conflicts resolved? For example, are organizations of professional adjudication turned into administrative agencies and extensions of the executive arm of the state? To what extent would these changes subvert the postulated autonomy of the judiciary? Would these changes transform the basic character of the adversary system, of the due process provisions of the Fifth and Fourteenth Amendments, and of courts as the institutional guardians of liberal-democratic values?

In considering such questions, Weber and others have suggested that the "substantive rationality" of the modern state and its need for pervasive political control may come into contradiction with the "formal rationality" of law and its provisions of due

2. See also the propensity of certain categories of judicial officers under such systems to engage in unionization, e.g., Italy (Moriondo, 1969), and France (Reifner, 1976), though not Spain (Toharia, 1975).

process (Weber, 1966:224; Trubek, 1972a; Abel, 1973:301). Stated more concretely, the government's bureaucratic and technocratic strategies for managing a crisis-ridden economy and polity can be seen to move toward a confrontation with the "rule of law" (Wolff, 1971; Balbus, 1973; Schroyer, 1973; Habermas, 1975; Offe, 1973:107; Wolfe, 1973; Reich, 1972; Hofmann, 1968; Rosenbaum, 1972; Hart, 1974; Hirsch, 1974; Gerstenberger, 1972; Negt, 1973). As Weber put it prophetically:

> Formal justice guarantees the maximum freedom for the interested parties to represent their formal legal interests. But because of the unequal distribution of economic power, which the system of formal justice legalizes, this very freedom must time and again produce consequences which are contrary to the substantive postulates of religious ethics or of political expediency. [1966:228]

One might add that today, under the growing impact of the fiscal crisis of the state, mere political expediency is superseded by the political necessity of state intervention in law, economy, and society if the present system of capital accumulation and political legitimation is not to collapse (O'Connor, 1973:9). Among concerned observers of the judicial system, there is considerable consensus that the increasing demand on court services and the routinization of tasks threaten to turn adjudication into administration, to paraphrase Karl Mannheim's observation that bureaucratic conservatism tends "to turn all problems of politics into problems of administration" (1936:118; see also Friedman and Percival, 1976; Rosenberg, 1965; Mileski, 1971; Blumberg, 1967; Packer, 1968; Balbus, 1973; Kirchheimer, 1961; Fish, 1973; Landes, 1971; Zeisel *el al.*, 1959; but see Feeley, 1973, 1975; Church, 1976; Heumann, 1975).

The transformation of adjudication into administration implies not only the routinization of tasks performed by courts but also a tendency for the trial rate to decline or to remain low and, conversely, a tendency for the proportion of pretrial dispositions in civil cases and of pretrial guilty pleas in criminal cases to increase. It implies the introduction of bureaucratic procedures and rules, administrative strategies, and new technologies into a public professional service organization for the purpose of raising the productivity of labor (including that of judges) and the cost-effectiveness of court services.

Thus, the special vulnerability of the judiciary to the fiscal crisis of the state is rooted partly in the historical relation between the judiciary and the other two branches of government, and partly in the nature of judicial activity itself insofar as it is susceptible to rationalization and bureaucratization. Both of these factors facilitate the transformation of the judiciary from an independent branch to a partner in a coalition with the executive branch and of the judicial process from an adjudicatory to an administra-

tive mode of decision-making. The fiscal crisis of the state, therefore, has consequences that deepen the particular crisis of the judiciary and elicit various responses to this crisis from within the judiciary. I will briefly indicate the nature of these responses at the conclusion of this paper.

In sum, I have laid out a general perspective toward the transformation of the judiciary that results from changes in its socio-economic and political context which generate an increasing demand for judicial services at a time of relative decline in fiscal resources. Having established this perspective I will now turn to a discussion of the organizational characteristics of courts.

B. Organizational Characteristics of Courts

From a general theoretical and comparative perspective, trial courts share crucial attributes with certain other organizations: public bureaucracies and government agencies staffed by a civil service and, to a lesser extent, hospitals, school systems, and welfare agencies. On the whole, however, the similarities are probably out-weighed by the differences and by the rather special features of courts.

In the following, I will specify eight organizational characteristics of courts. I will focus on entire courts as the organizational units, however small they may be, rather than on courtrooms as the public workplaces of particular judges. Moreover, I am using an organizational framework of analysis that takes into account not only the internal structural characteristics of courts, but also their interorganizational relations and their interaction with the larger environment (Heydebrand, 1973b; Aldrich and Pfeffer, 1976).

1. Courts are *networks of organized activities* rather than bureaucratically integrated formal organizations. In trial courts, this network includes the activities of judges, courtroom deputies, law clerks, magistrates, judicial secretaries, court reporters, clerks, public defenders, probation officers, and court-appointed counsel. It also includes two categories of personnel from the executive branch (the Department of Justice in federal courts): prosecutors and court-based law enforcement officers. This operational definition of the court's organizational boundaries includes positions that are permanent and integrated into the daily work process of the court, i.e., it excludes private attorneys and their clients, witnesses, jurors, news reporters, and bail bondsmen.

The total work process of courts as organizational units is in many ways similar to the teamwork approach of multiservice organizations (e.g., hospitals) since there is little formal or exter-

nal coordination, but much reliance on self-direction, functional interdependence, and self-coordination. However, judicial work routines involving recurrent types of decision-making are probably more permanent, patterned, established, and stable than those of teams or task forces, which tend to be more activist, ad hoc, target-oriented, and nonroutinized.

There are three theoretical advantages of looking at courts as networks of organized activities rather than as unitary systems or integrated formal organizations. First, particular sets of activities may vary independently in terms of different organizational characteristics, e.g., types of authority (Weber, 1966), centralization (Leibenstein, 1960), or bureaucratization (Hall, 1963). For example, the internal governance of courts is traditionally based on the *collegial authority* of judges. Matters of judicial administration are handled by a chief judge, a *primus inter pares* who, in larger courts, is assisted by a committee of judicial colleagues in the formulation of court rules and policy, as well as in procedural matters such as hiring and firing nonjudicial personnel. The collegial nature of judicial organization is probably still dominant even in those state and local courts that are ruled by an administrative judge.

By contrast, the organization of the clerk's office probably comes closest to the notion of *bureaucratic authority*. A strong chief clerk may provide coordination and bureaucratic control in a way that foreshadows the functions of a court administrator.

Still another dimension of organizational control can be found in the collegial-professional network of lawyers, which includes attorneys, prosecutors, and judges. Such a network may dominate the respective chains of decision-making which, though not without conflicts, are nevertheless highly interdependent. Different alliances may form among these three groups of lawyers, depending on whether the issues are, for example, speed and efficiency of court procedures (prosecutors versus judges and attorneys), strategic delay and the quality of legal representation (judges and prosecutors versus attorneys), or the sanctity of judicial autonomy and judicial review (judges versus attorneys and prosecutors).

Second, a loosely connected network of activities such as a court of law leaves much room for *political processes* such as the formation of coalitions, conflict, negotiation, bargaining, exchange, and compromise between the various groups and actors (Cole, 1970; Thompson and Tuden, 1959; Cyert and March, 1963; Thompson, 1967). Although these processes are designed to minimize losses, maximize gains, and reduce uncertainty, the outcomes are not wholly predictable. An additional element of insta-

bility and uncertainty derives from the fact that private attorneys, defense counsel, and assistant district attorneys or United States attorneys tend to rotate relatively frequently and thus play a somewhat episodic role, whereas judges are more permanent fixtures, especially federal judges who are appointed for life.

Third, the role, salience, and differential access to power of various actors may be seen to *change historically* in different and uneven ways. For example, the ascendancy of the "treatment model" of criminal justice has given rise to large, professionalized probation departments with considerable input into judicial decision-making (Greenberg, 1975; Schur, 1973; Kittrie, 1971; American Friends Service Committee, 1971). The emphasis on law enforcement and crime control in the 1960s has accentuated the gatekeeping function of prosecutors and United States Attorneys (Alschuler, 1968; Cole, 1970; Goldman and Jahnige, 1971; Hartje, 1975). Most interestingly, court administrators, the latest arrivals on the scene, are beginning to deal with the same kinds of organizational problems and role definitions that hospital administrators encountered fifty years ago (Saari, 1970b; Friesen *et al.*, 1971; Perrow, 1965). Court administrators are both creating, and responding to, the increasing bureaucratization of court procedures.

2. Courts are legally and politically *heteronomous* rather than *autonomous* organizations. This means that resources (budgets, positions, and major appointments), organizational structure and boundaries, and jurisdiction (domain) are externally defined and controlled by legislatures or executives. Indeed, legislation specifies the organization, boundaries, personnel structure and jurisdiction of the federal courts (28 U.S.C.). In addition, courts are often politically responsive to their local environment and thus tend to be constrained by aspects of local political culture (Richardson and Vines, 1970; Peltason, 1955; Cook, 1970; Dolbeare, 1969; Chase, 1972).

The inability of courts to control the resources necessary for their operation has particularly important consequences for their goal-attainment capacity and effectiveness since the limitation of resources may change the character of their means as well as their ends (Blumberg, 1967; Packer, 1968). It must be noted, however, that federal district courts are also functionally independent units within the relatively decentralized structure of the federal judiciary. Hence, their low level of legal and political autonomy does not necessarily imply operational or functional dependence. For example, the annual or biennial allocation of a budget and the virtual monopoly of courts over the service they provide (au-

thoritative decision-making) also render them economically and functionally less dependent on their immediate environment than business corporations are on their markets and suppliers. This functional autonomy is a well-known characteristic that courts share with government agencies and other budgeted organizations (see, e.g., Niskanen, 1971).

3. Courts are *labor-intensive professional service organizations*. This means that an essential service—in this case "justice"—is provided to clients (litigants) by a trained labor force (the judicial service) under the direction of professionals (judges). Thus, even though the formal organizational functions are externally defined in terms of jurisdictional authority and domain, judges, as the central professional core, *specify the functions and the task structure*, and they direct and carry out decisions and services on the basis of special knowledge of substantive and procedural rules.

The work organization of courts is, on the whole, still characterized by prebureaucratic forms of production and coordination. Professional autonomy is relatively high and is jealously guarded by a collegial status group. A sharp distinction is maintained between doctrinal "judicial" matters and nondoctrinal "administrative" issues (Wright, 1970:49; American Bar Association, 1974:86). Machine technology is largely absent, although there is a trend toward the gradual adoption of information and data-processing equipment.

A comparison between the professional work of judges and hospital-based physicians reveals an interesting set of differences. Physicians have fairly extensive control over both their professional mandate and their operating resources, but are relatively dependent on a complex medical technology and division of labor at the work place. Judges operate under an externally defined mandate and restricted resources, but have considerable discretion and autonomy in the courtroom (Newell, 1974; Rueschemeyer, 1969).

4. Courts are an *arm of government*. Although courts possess de jure independence as the "third branch" in the American federal system, they are central to the structure of public authority and the continued legitimation of the social order. As Weber observed, the state has a monopoly over the means of violence. Courts constitute an integral part of the state's capacity to use coercive sanctions, to specify legislative and constitutional provisions, and to implement policy-decisions of the executive branch and administrative agencies. Among these different outputs of courts, dispositions (judgments, decrees, acquittals, convictions, etc.) are rela-

tively easy to measure. By contrast, questions of judicial policy-making, judicial quality, and effectiveness are difficult to specify and require broad historical and political yardsticks (Black, 1973a:42; Nonet, 1976:532).

For purposes of this study, a relatively neutral conception of output will be adopted: terminations and dispositions specific to different types of cases, e.g., the proportion of civil corporate cases coming to trial or the proportion of U.S. cases disposed of before trial.

5. Courts are, for the most part, *nonspecialized or "generalist"* organizations, i.e., they are geared to dealing with all, or at least many different, types of cases. This is true of state trial courts of general jurisdiction and of the federal trial courts studied here (United States Department of Justice, 1973a; Council of State Governments, 1970; Institute of Judicial Administration, 1971).

Apart from the issue of general versus limited jurisdiction, one may observe other patterns of specialization and division of labor *among* courts which have a bearing on specialization *within* certain types of courts. For example, federal trial courts are "specialized" in that almost three-fourths of their dockets consist of civil cases of which three-fourths, in turn, involve federal statutes ("federal question") or the federal government. By contrast, state and local trial courts deal mainly with criminal cases and with civil actions which tend to be fairly routinized. Hence, the American judicial system is characterized by a division of labor between state and federal courts. This largely neglected, yet important, fact may create difficulties for any attempt (including the present one) "to analyze the flow of business in a single forum that is part of a larger complex" (Galanter, 1975:365; see also Friendly, 1973; McGowan, 1969).

6. Courts are relatively *passive organizations* within a demanding environment or, one might say, "reluctant organizations in an aggressive environment" (Maniha and Perrow, 1965; see also Friedman, 1975:191, Black, 1973b). Trial courts initiate few activities themselves but rather respond—more or less reluctantly—to the demands for service that emanate from their jurisdictional environment, mediated by lawyers and prosecutors. However, judicial passivity should not be overstated. One can observe historical shifts between different degrees of passivity and activism, related to changes in emphasis between judicial policy-making as against law-finding and norm-enforcement.

7. Although they have strict boundaries, courts are also highly enmeshed in a *vertical and horizontal interorganizational*

network. For example, courts are *vertically* tied into higher levels of the judicial-professional hierarchy and authority structure, such as appeals courts, judicial councils and conferences, and congressional committees. *Horizontally*, courts are interacting with other trial courts and jurisdictional domains, with police and prosecution, the bar, prisons, probation and parole, and various administrative and social agencies from which cases are received or to which they are transferred, "removed," or "diverted."

8. Finally, it is assumed here that the volume and complexity of cases brought before the courts reflect the *demographic, socio-economic, and legal-governmental profile of their jurisdictional area*. In federal district courts, this jurisdictional area is a geographical unit composed of a number of counties that make up either one of the fifty states or, in highly urbanized areas, part of a state. Hence, such factors as caseload, case mix, judicial composition of the court, local rules and practices, as well as the nature and speed of dispositions, both reflect and feed back into the jurisdictional environment (Jacob, 1972; Friedman and Percival, 1976; Goldman and Jahnige, 1971; Richardson and Vines, 1970; Peltason, 1955; Hart and Wechsler, 1953; Frankfurter and Landis, 1928). The advantage of studying the effects of the environment on *federal courts*, of course, is that substantive rules are uniform throughout the federal system (excluding diversity jurisdiction). Hence, federal statutes and case law are differentially activated in federal jurisdictions by the economic, legal-governmental, and demographic dynamics of the districts.[3]

In considering the environmental profile, the questions of the product and the effectiveness of the courts come back full circle to the thorny issue of the relation between the functions of courts and the nature of their tasks. I have already indicated that the empirical research presented here is confined to a recursive analysis of environmental effects on caseloads and on dispositions for specific categories of cases. To study the effective feedback of courts to their environment in terms of both dispositions and policy output would obviously require a much more elaborate research design. For purposes of this study, it must be assumed that the federal judicial system *as a whole* is serving the surrounding political economy *as a whole*. In other words, the structural and historical

3. An early study of federal courts (American Law Institute, 1934) describes the characteristics of jurisdictional districts that affect the "initiation" of litigation (in contrast to the "conduct" of litigation). Among those viewed as relevant are "attitudes and policies of local administrative and judicial officials, the trends of business, the customs of the bar, the comparative efficiency, cost, and speed of state and federal courts and the differences in rules of law which they follow, and other non-statistical factors" (American Law Institute, 1934: Part II, 50).

contingencies affecting the functions, tasks, and output of courts and other public bureaucracies vary from one sociohistorical context to another. Hence, the effectiveness of courts can be evaluated only in specific historical terms, not by means of transhistorical, universal criteria. As Friedman and Percival put it: "The functions of courts change as their societies change" (1976:267).

Nevertheless, *within* a given context, public bureaucracies such as courts do not respond automatically to their environment. It is, therefore, possible to study the extent to which specific environmental factors such as the actions of economic and governmental entities generate specific kinds of demands on courts (e.g., civil cases or cases in which the federal government is a party) and, ultimately, the way in which such categories of cases are disposed of. Only by adopting such a research strategy can we deal with the problem that "the idea of a *system* of law, to which we are asked to give general and undiscriminating support, disguises the differences among various categories of law" (Zinn, 1971:24).

The theoretical and methodological challenge of the present project is to combine the study of a historically unique phenomenon (the federal judicial system within the present context) with the analysis of structural variations among the courts within that system. The latter requires the treatment of courts as abstract organizational and statistical units of analysis. The former requires sensitivity to the contextual and historical factors which have played a role in the formation of federal district courts. Consequently, studying specific environmental effects on the courts within a quasi-historical sequence affords an opportunity to combine both perspectives.

Let me now turn to a discussion of the empirical framework within which I have begun to attempt such an analysis.

II. SIX FEDERAL DISTRICT COURTS

A. Empirical Indicators and Relationships

Given the organizational characteristics of courts as outlined in the previous section, it is now possible to develop a descriptive model of the basic dimensions of analysis and to indicate some of the assumptions about the causal relations between these dimensions. Basically, we are dealing with four major clusters of variables: (1) environmental structure and change within the jurisdiction; (2) the nature of the organizational task, i.e., the volume and complexity of cases to be processed; (3) the nature and size of available resources, specifically, the level of funding and the size and internal differentiation of the organizational labor-force; and (4) the outcome of organizational activities in terms of disposition

rates, e.g., trials, pretrial dispositions, guilty pleas. Figure 1 represents a schematic view of these four clusters of variables and the causal interrelationships I expected to find. Each of the four main dimensions consists of a set of specific analytical elements; for example, task structure includes the nature and volume of tasks. Some of these more specific concepts are, in turn, measured by multiple indicators. The general causal assumption represented by this diagram is that the environment of the court is the independent variable, output is the dependent variable, and task structure and especially resources are intervening variables.

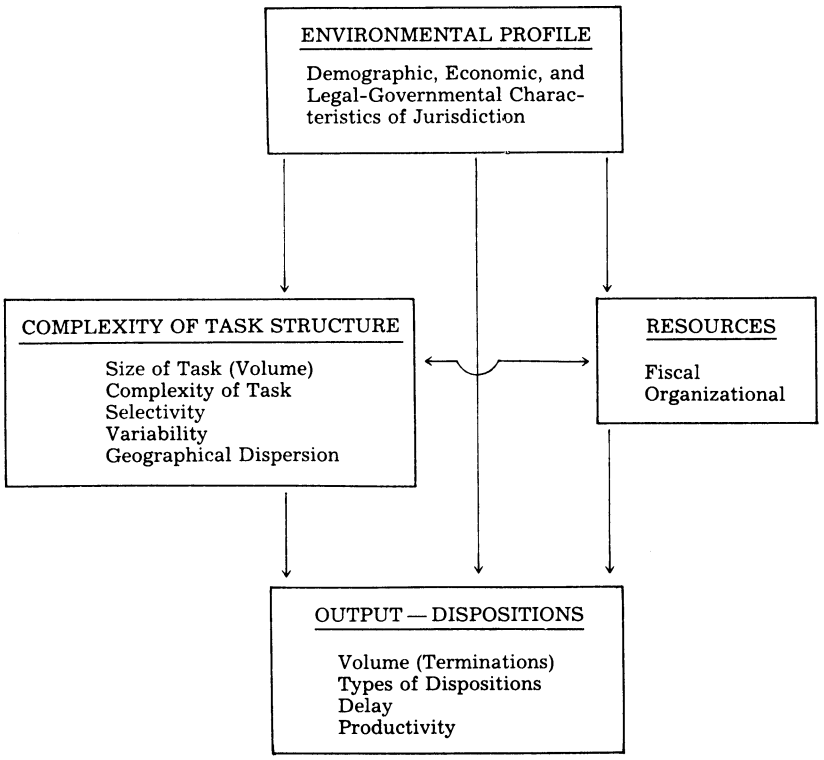

FIGURE 1: Descriptive model of four basic dimensions for the analysis of federal district courts. Arrows indicate the assumed direction of causal influence.

The present model is recursive, i.e., it assumes one-way causation flowing from the environment to the organization and its output, although output at Time 1 may certainly have an independent feedback effect on task structure, resources, and environment at Time 2. However, the analysis presented in this paper is time-ordered, i.e., I will examine certain changes between 1950, 1960, and 1973. In addition, I will explore the connection between the jurisdictional environment and the task structure of the courts over time, leaving the remaining links for a more comprehensive analysis.

In general, the environment can be expected to have direct and indirect effects on output, the indirect effects being mediated by the intervening variables (see Figure 1). Thus, *aggregate environmental characteristics* such as population density or the number of lawyers will have a direct effect on the volume of the task, i.e., the total number of civil and criminal filings. The caseload will have an effect on budget and number of personnel (size of court) which, in turn, is expected to affect the volume and nature of output.

Similarly, *structural environmental characteristics* such as the organization of appellate courts, or the corporate and governmental presence within the jurisdiction, are expected to affect the nature of the task, the skill structure of court personnel, the median time to disposition, the percentage of backlog, and specific disposition rates, e.g., the relative number of pretrial dispositions of corporate civil suits or civil rights cases.

A particularly important theoretical focus of this study is the role of the federal government in the affairs of the economy and society. For example, by analyzing the changing role of all civil cases involving the United States government ("United States Cases") or of civil suits brought by the United States Department of Justice ("United States Plaintiff"), it will be possible to document the historically increasing involvement of the federal government in the American economy and the civil society.

In sum, a simplified causal structure such as that represented in Figure 1 may be a useful theoretical framework in which to observe the different sources of variation and their interrelationships, control for their multiple effects, and interpret their significance. What is to be explained, therefore, is, not only the positive output profile in itself, such as variations in the trial rates specific to certain categories of cases, but also the kinds of cases that *do not* come to trial and instead are disposed of either without court action, or during and after a pretrial conference. The components of pretrial dispositions are as important as the trial rate. Furthermore, from an organizational perspective the mix of skills between judicial and administrative personnel can itself be seen as an outcome, especially if various nonjudicial categories of personnel should be found to have a direct effect on pretrial dispositions. Since budget size and other externally imposed constraints are crucial determinants of the total number of personnel, as well as the number of judges, resources can vary independently of the volume and complexity of the task to be performed, a divergence that may be critical for the administration of justice. Here, the lack of fiscal autonomy of courts and their dependence on the

political and social structure of the environment has obvious consequences.

The approximately 90 federal district courts studied here constitute the universe of such courts in the United States at this time. They are the trial courts of the federal judicial system and are divided among eleven circuits. The Circuit Courts of Appeal constitute the appellate level between the trial courts and the United States Supreme Court. Appellate judges are also members of the Judicial Council of their respective circuits. Until the recent appointment of Circuit Executives, those Circuit Councils were seen as the "rusty hinges of federal judicial administration," but now they constitute the "linch-pins of administration" in the federal judiciary (Fish, 1973:379). The district courts vary greatly in size, task complexity, geographical dispersion, and other organizational characteristics including, of course, output. Although the district courts are the basic units of analysis, their environments, i.e., their jurisdictional areas and respective circuits, also become units of analysis in their own right for certain purposes.

B. A Comparative Profile

Let me illustrate the operational definitions of the main variables by means of statistical data for the six constituent federal district courts of the Second Circuit, New York Southern (NYS), Eastern (NYE), Western (NYW), and Northern (NYN), Connecticut (CO), and Vermont (VT). The choice of these district courts was partly determined by the author's access to, and initial fieldwork in, some of these courts,[4] partly by the relative importance of the Second Circuit within the federal judicial system (Burak, 1962; Fish, 1973), and partly by the wide range of organizational variation conveniently available for comparative purposes (Lipscher, 1975). The comparative profile presented here serves the heuristic functions of introducing the main variables used in this study, providing a concrete description of the organizational dimensions laid out in Figure 1, and illustrating the range of empirical values assumed by the variables in very large, urban, multijudge districts as well as in small, statewide districts.

It should be noted that Tables 1 to 4 correspond to the four clusters of variables suggested in Figure 1: environment, task

4. Interviews with judges, the circuit executive, magistrates, law clerks, probation officers, court reporters, assistant United States Attorneys, and United States Marshalls were conducted in New York Southern, Eastern, and Northern districts, and in Connecticut, between January 1973 and November 1974. The following persons assisted in the fieldwork: Tamara Georges, Barbara Isgur, Nathan Kolodner, and Carroll Seron. Carol Morrow assisted in the bibliographical research. The original research design is described in Heydebrand (1974).

structure, resources, and output. These tables are based on 1974 statistical data for the six districts unless otherwise indicated. Tables 5 to 8 represent the results of a preliminary statistical analysis of 84 United States district courts for 1950, 1960, and 1973.

1. Environmental Profile

Table 1 shows three groups of selected variables for the six judicial districts of the Second Circuit: three demographic, five economic, and four legal-governmental. The rationale for selecting them is derived from the theoretical focus of the analysis outlined above. Thus population size (1) and density (2) indicate the basic dimensions of size and urbanization of the environment. Black population dynamics (3) have affected the federal courts, especially since the civil rights movement of the 1960s. All three demographic variables (1-3) show the highest values in New York Eastern and then in New York Southern. In the other four districts, these variables tend to follow the pattern set by population size (1), i.e., they show much lower values, with Vermont ranking lowest.

A somewhat different pattern can be observed in the economic characteristics of the environment. White collar population size (4) is an indicator of the development of the tertiary economic sector and, generally, of the structural differentiation of the environment. The absolute number of white collar workers is highest in NYE and lowest in VT. But taken as a percentage of the total population, the white collar population is largest in NYS, with NYE and CO following closely behind. Thus, there is a smaller degree of variation among the districts of the Second Circuit with respect to the relative size of the white collar population.

The total volume of savings capital deposited in the financial institutions of a jurisdiction (5) yields a rough measure of the individual wealth and consumption potential within the district. The number of corporations with over 100 employees (6), corporate mergers (7), and the volume of retail and wholesale trade (8) are measures of corporate economic development and activity likely to generate business for the federal courts. As we can see, NYS emerges at the top in terms of corporate economic indicators (6-8), a fact which makes it economically the most "complex" district of the six compared here, and probably in the nation as well.

Finally, lawyers (9) and local, state, and federal governmental agencies (measured by number of employees, 10) in a district mediate between court and environment, but they also generate

TABLE 1

ENVIRONMENTAL PROFILE OF SIX FEDERAL DISTRICT COURTS IN 1970

		NYS	NYE	CO	NYW	NYN	VT
	A. *Demographic*						
1.	Population (millions)	4.91	7.44	3.03	2.96	2.93	0.44
2.	Population density[a]	9,748.7	13,364.6	603.5	231.4	148.7	49.4
3.	Black population (absolute in millions, and as a percentage of total)	0.9 (17.8)	1.0 (14.1)	0.2 (5.9)	0.2 (5.9)	0.6 (2.1)	— —
	B. *Economic*						
4.	White collar population (absolute in millions and as a percentage of total)	1.2 (23.6)	1.7 (22.8)	0.7 (21.6)	0.5 (18.0)	0.5 (18.6)	0.1 (17.4)
5.	Savings capital ($1,000,000s)	2,995.4	4,518.2	1,337.5	1,266.0	732.5	78.7
6.	Number of corporations with more than 100 employees (1,000s)	118	107	46	46	50	8
7.	Number of corporation mergers[b]	316	32	59	24	6	0
8.	Retail and wholesale trade volume ($1,000,000)	41.61	12.68	6.04	6.22	5.90	0.68
	C. *Legal-Governmental*						
9.	Number of lawyers[c] (absolute and per 100,000 population)	38,744 (789.1)	6,555 (88.1)	5,583 (184.3)	5,417 (183.0)	5,122 (174.8)	611 (138.9)
10.	Number of government employees (absolute in 1,000s, and as a percentage of all white collar employees)	309.83 (26.7)	506.47 (29.9)	164.33 (25.0)	168.12 (31.6)	213.27 (39.2)	25.37 (32.7)

11.	Number of federal civilian employees (absolute in 1,000s, and as a percentage of all government employees)	71.64 (23.1)	43.04 (8.5)	15.93 (9.7)	16.70 (9.9)	15.41 (7.2)	3.28 (12.9)
12.	Number of Justice Department employees (absolute in 1,000s, and as a percentage of all federal civilian employees)	3.10 (4.3)	0.35 (0.8)	0.40 (2.5)	0.41 (2.4)	0.25 (1.6)	0.21 (7.6)

a Mean population density in persons/square mile of all counties within judicial district.
b Compiled by Carroll Seron.
c For multidistrict states, the number of lawyers practicing was first determined for Standard Metropolitan Statistical Areas in each judicial district. The residual number of lawyers was then allocated in proportion to the residual population in each district.

Sources: Variables 1-6, 8, 10: U.S. Bureau of the Census (1972)
Variable 7: National Industrial Conference Board (1970)
Variable 9: American Bar Foundation (1972)
Variable 11, 12: U.S. Civil Service Commission (1971)

judicial business. The relative concentration of lawyers is illustrated by the number of lawyers per 100,000 population (9), a rate which is almost ten times as large in NYS as in NYE. It must be noted, however, that the high concentration of lawyers in New York Southern (mostly Manhattan) does not mean that their practice is confined to that district, or that there is no overlap between NYS and NYE (Brooklyn, Queens, and the rest of Long Island). When the number of government employees is calculated as a percentage of the white collar population (10) an interesting reversal of the typical pattern occurs: the smaller districts have higher rates than the larger ones. Thus, the presence of government agencies can be seen to vary independently of population size and other demographic factors, an important condition for analyzing the determinants of caseloads, as we shall see later.

The number of "federal civilian employees," both absolute and as a percentage of all government employees (11), indicates the presence of federal agencies and commissions that are heavily involved in the regulation of economic affairs and hence may lead to suits by private corporations against the federal government. "Department of Justice Employees" (12) refers to a subcategory of federal employees who play a particularly active role in law enforcement (FBI), prosecution (United States Attorneys), and government initiated civil suits against private corporations. Here, too, the number of such employees calculated as a percentage of all federal civilian employees (12) can be seen to vary independently of the absolute figures.

2. *Complexity of Task Structure*

Table 2 provides a comparison of the relative complexity of the task structures of the six district courts. NYS leads in terms of the sheer *size of the task*, cases filed (the "incidence" of demand) (1) and total cases (cases filed and cases pending from previous years i.e., the "prevalence" or total demand) (2). The numbers of civil filings (3) and cases filed involving the United States as a party (U.S. cases) (9) follow a similar pattern, with NYS having the largest and VT the smallest. However, the smaller courts show considerable *task complexity*, in terms of such variables as the litigation rate (4), the percentage of civil filings (5), or of complex filings (8), thus reducing the difference between the large metropolitan courts and their counterparts upstate or in rural states. "Complexity" refers here to nonroutine and time-consuming cases: copyright, patents, trademark, civil rights, and antitrust cases on the civil side (6), and forgery, counterfeiting, fraud, homicide, robbery, assault, and sex offenses on the criminal side

TABLE 2

COMPLEXITY OF TASK STRUCTURE IN SIX FEDERAL DISTRICT COURTS (FY 1974)

		NYS	NYE	CO	NYW	NYN	VT
	A. *Size of Task*						
1.	Cases filed (1,000s)	6.79	2.85	1.50	0.96	0.73	0.47
2.	Total caseload (filings plus total cases pending at end of preceding year) (1,000s)	18.16	6.16	2.86	2.31	1.63	0.86
	B. *Complexity of Task*						
3.	Civil filings (1,000s)	5.64	1.96	1.13	0.64	0.56	0.34
4.	Civil filings per 100,000 population (litigation rate)	114.8	26.3	37.3	21.5	19.1	76.4
5.	Civil filings as a percentage of total filings	83	69	76	66	77	71
6.	Complex civil filings as a percentage of all civil filings	12	13	16	12	9	17
7.	Complex criminal filings as a percentage of all criminal filings	33	19	26	39	28	8
8.	Complex filings as a percentage of total filings	15.4	15.1	18.2	20.7	13.1	14.6
9.	Number of cases filed involving the federal government as a party	973	527	399	184	169	66
10.	Types of cases filed as a percentage of total types of cases[a]	92	88	86	86	82	74

TABLE 2

(continued)

		NYS	NYE	CO	NYW	NYN	VT
	C. *Selectivity*						
11.	Percentage of criminal cases which U.S. Attorney "accepts"[b]	38.6	40.5	23.1	29.3	23.5	37.0
12.	Criminal cases in which there is court action as a percentage of all criminal cases filed	74.1	73.4	71.3	51.4	81.3	86.0
13.	Percentage of civil cases which U.S. Attorney "accepts"[b]	81.4	69.0	92.1	82.0	85.4	31.1
14.	Civil cases in which there is court action as a percentage of all civil cases filed	58.4	60.3	78.8	65.5	70.7	63.8
15.	Cases pending at end of preceding year as a percentage of total caseload	63	54	48	58	56	45
15a.	Civil cases pending at end of preceding year as percentage of total civil caseload	65	52	48	56	54	48
15b.	Criminal cases pending at end of preceding year as a percentage of total criminal caseload	40	57	48	62	58	38
15c.	Criminal cases pending at end of preceding year as a percentage of total cases pending at end of preceding year	7	36	25	40	26	22

	D. *Variability of Task*						
16.	Percent increase in total filings (1970-74)	1	20	52	27	16	21
17.	Percent change in civil filings as a proportion of total filings (1970-74)	-3	+13	+57	+14	+17	+1
18.	Juror usage index	27.9	23.6	14.7	21.6	18.3	15.5
19.	Percentage of jurors not serving	57	43	26	35	39	45
20.	Percentage of jurors challenged	12	13	15	9	10	7
	E. *Geographical Dispersion*						
21.	Number of staffed locations in district at which court is held	1	2	4	2	4	6

a Cases are categorized as falling into 50 types, 32 civil (16 involving the United States as a party, and 16 involving only private parties) and 18 criminal.

b Values for variables 11 and 13 were calculated from four sets of data published routinely by the U.S. Attorney's office: (1) the number of "criminal matters received" by the U.S. Attorney of a given district court either through the FBI, the police, the U.S. Attorney's own efforts, or from another jurisdiction; (2) the number of "criminal cases filed"; (3) the number of "civil matters received"; (4) the number of "civil cases filed." Variable 11 is the proportion of criminal matters filed (accepted for prosecutorial action) out of the total number of criminal matters reaching the U.S. Attorney's office. Similarly, variable 13 is the number of civil cases filed as a proportion of the total number of civil matters received. Criminal complaints may be "closed" "without reaching court dockets." Of the total number "closed," 82.9% "were closed by declination of prosecution." Similarly, civil matters may be "terminated without reaching court dockets" (U.S. Attorney's Office, 1973:4,6). It is not known what happens to "matters received" which are not filed in the court, but presumably they are judged to be either less important than those filed, lacking in evidence, or not in conformity with due process provisions.

Sources: Variables 1-3, 9, 12, 14, 15(a-c): Administrative Office of the U.S. Courts (1974a: Tables C1, C4A, D1, D6)
Variables 6-8, 16, 17: Administrative Office of the U.S. Courts (1974b)
Variable 10: Administrative Office of the U.S. Courts (1974a: Tables C3, D3)
Variables 11, 13: U.S. Attorney's Office Statistical Report (1973)
Variables 18-21: Administrative Office of the U.S. Courts (1973)

(7).[5] The number of different types of cases (10), or *case diversity*, tends to vary with environmental complexity, as expected.

The *selectivity* with which courts respond to the demand on their services and assign priorities can be seen as a further aspect of complexity. Organizational selectivity may be defined as the rate at which demands for service are accepted. For service organizations, one might argue that the lower the acceptance rate, the greater the selectivity and hence the capacity to concentrate on the important cases and emergencies, and the greater the ability of the organization to reduce the amount of "irrelevant" and system-clogging work, i.e., work that does not maximize its resources and effectiveness. At the same time, however, selectivity may imply lower accessibility, thus reducing effectiveness in a larger sense (Galanter, 1974, 1975; Orren, 1976).

What does selectivity imply for courts? Here, we must first distinguish the actions of the gatekeepers of the system, e.g., the United States Attorney's Office in federal courts, from those of the court itself. In criminal cases, the gatekeeper's selectivity can be expressed by the proportion of cases "accepted for action" out of the total number of criminal matters received or "developed" (11). In such cases, selectivity clearly helps to maximize the prosecutor's batting average in obtaining guilty pleas and convictions (Cole, 1970; Klein, 1957; Eisenstein, 1973; Newman, 1966). Needless to say, plea-bargaining and cooperation between prosecution and defense play an important role in these decisions.[6]

In contrast to the gatekeeper's decisions, judicial decisions to hear or dismiss cases involve a different level of discretion. Thus, the extent to which cases introduced into the system, or "filed," are subsequently discarded by the court itself (e.g., the percentage of "dismissals" in criminal cases or its inverse, the percentage of "court action") (12) can be seen as an aspect of the court's selectivity. Though it is true that judges should be "passive" under the theory of adversarial proceedings, there may be a considerable degree of de facto participation by judges in the early stages of a case, a phenomenon sometimes described in terms of "judicial

5. These percentages were calculated from figures published in the *Management Statistics for U.S. Courts* (Administrative Office of the U.S. Courts, 1974b). These categories were defined as time-consuming and, therefore, complex on the basis of the *Federal District Court Time Study* (Federal Judicial Center, 1971); see also Friendly, (1973:70; but see Gillespie, 1974, 1975).
6. For an excellent review of different models of plea-bargaining as well as a proposal to expand the role of magistrates in the conduct and supervision of plea-bargaining, see *Harvard Law Review* (1977); see also Alschuler, (1968, 1975a, 1975b); Newman (1966); McIntyre and Lippman (1970); Mather (1973); Skolnick (1967); Sudnow (1965); Vetri (1964); Heumann (1975); Church (1976).

dominance," "discretionary jurisdiction," or an "adversary judicial system" (Kaufman, 1962:213; Glaser, 1968:233; McIntyre, 1968; Levin, 1971; Frankel, 1975; Baum, 1975).

In civil cases, the matter of selectivity is much more complicated. Here, private attorneys are the gatekeepers, although some civil cases are filed by the United States Attorney. Obviously, it is less useful here to speak of "acceptance" or "rejection" since an out-of-court settlement, or a settlement after filing that is designated "no court action," is a function of complex interaction and negotiation among the litigating parties, often with the prompting or tacit approval of magistrates and judges (see, e.g., Ross, 1970; Sarat, 1976). However, it may be possible to measure the relative selectivity of the U.S. Attorney's office by using the proportion of civil cases "accepted for action" out of the total number of civil matters received (13). Similarly, the proportion of civil cases filed but disposed of with "no court action" could be used to gauge the relative capacity of the courts to persuade parties to withdraw or settle without expending excessive judicial time and resources. The inverse of this proportion is the percentage of civil cases disposed of by "court action" (14).[7]

In sum, selecting cases for action tends to reduce the volume or size of the task, but increases the complexity of cases accepted for the next stage of the process. From this perspective, one might expect to find that the greater the demand for service, the greater the organizational selectivity. Specifically, the greater the number of cases filed, the smaller the number of cases accepted for court action. As noted before, selectivity may translate into efficiency from one point of view, but into diminished accessibility and inequity from another.

If we now take another comparative look at selectivity (Table 2, 11-14), we can observe considerable differences among the six courts as well as among their affiliated prosecutor's offices. For example, the prosecutors' criminal case "acceptance" rates are much lower than those of the courts (11, 12), indicating that the prosecution anticipates a guilty plea or a conviction in the cases it accepts and that the court must act in one way or another in a higher proportion of criminal cases. The exact opposite is true of civil cases. The rate of civil cases accepted by the U.S. Attorney (13) is much higher (except in Vermont) than the proportion of

7. For some historical evidence that dismissals and discontinuances of civil cases may, from time to time, serve a "house-cleaning" function and thus reflect selectivity and discretion exercised by the court coping with large caseloads and pending cases, see American Law Institute (1934: Part II, 37).

civil cases filed that involve some court action (14). But I hasten to add that my interpretation of court action in civil cases in terms of selectivity remains problematic, especially since most civil litigation is initiated by private parties rather than the U.S. Attorney.

The percentage of cases pending (15) may be seen as still another aspect of selectivity which has consequences for both a court's task structure and its performance record. Cases pending at the end of the preceding fiscal year add to the volume and complexity of the court's task since they often constitute more than half of the current year's total caseload (Connecticut and Vermont are the only exceptions among these six courts). Historically, the pending rate for civil cases increased steadily until the early 1970s, undoubtedly reflecting the rise in civil litigation (Friendly, 1973:15). However, a second element in the growth of backlogs is speed of disposition, measured by the number of months between the filing of a case and its final disposition. Speed of disposition is one measure routinely reported for cases moving through federal courts and is sometimes used to evaluate court performance (Flanders, 1976). Clearly, delay and pending rates are reciprocally related. However, in the present context, I am focusing mainly on the consequences of the pending rate for the court's workload, leaving the question of delay to be examined later in connection with the court's output and performance (see Table 4).

Backlog, crudely measured by the pending rate, is influenced by many factors. It is, therefore, useful to examine civil and criminal cases separately. The contribution of pending civil cases to total civil caseload (15a) may indicate whether cases are complex or routine. The pressure to achieve a speedy disposition of criminal cases tends to be much greater, resulting in the adoption of special rules and procedures, e.g., priority treatment of criminal cases or "speedy trial" rules. Nevertheless, in four of the six courts (NYE, CO, NYW, NYN), the criminal pending rate (15b) is as high as or higher than the civil pending rate (15a). Yet it should also be noted that these are the four courts in which criminal cases constitute the largest percentages of the total number of cases pending (15c).

An important aspect of the pending rates is the way they change over time, indicating whether courts are falling behind or catching up with demand (Flanders, 1976:65). Thus, backlogs may reveal not only how discretion and internal selectivity are exercised *within* a given court, but also the success of policy measures within the federal judicial system as a whole (e.g., restriction of federal jurisdiction; see, e.g., Friendly, 1973; Rosenberg, 1965).

Uncertainty and unpredictability are introduced into the task structure of a court by changes in demand over time (16), changes

in certain types of demand, e.g., civil filings (17), and the variable requirements of jury trials (18-20). For example, a high "juror usage index" and a high percentage of "jurors not serving" can indicate poor management, and tend to earn district courts a low mark for efficiency. A high percentage of "jurors challenged," on the other hand, may indicate the effect of an urbanized task environment and a "sophisticated bar."[8]

Finally, the geographical dispersion of court staff (21) tends to increase problems of communication and coordination, placing additional burdens on the clerk's office, as well as on judges' time. However, this variable tends to be inversely related to other aspects of environmental complexity since it is highest in statewide and rural jurisdictions. Consequently, the effects of geographical dispersion upon complexity tend to cancel out.

In sum, Vermont and Connecticut are much closer to New York Eastern and Southern in terms of task structure (see Table 2) than they are in terms of environment (see Table 1).

Let us now turn to another aspect of courts, namely fiscal resources and internal organizational structure.

3. Resources and Organization

Table 3 shows selected measures of the resources allocated to courts in the 1973-74 congressional budget authorizations for the judiciary, based on the recommendations of the Judicial Conference, the governing body of the federal judiciary. The data include total salaries of judges and supporting personnel (1), fees and expenses of court-appointed counsel for services rendered under the Criminal Justice Act of 1964 (18 U.S.C. § 3006A) (5,6), and fees of jurors (4). Figures on travel, miscellaneous expenses, and expenses of magistrates and referees could not be obtained and are not included. The category of "resources" (7) gives a rough idea of the magnitude of the courts' annual budgets as well as the differences between them. For example, in terms of total personnel (9), Connecticut has three times as many employees as Vermont, but its budget is little more than twice as large. Similar relationships between size and scale can be observed among the other courts.

A crucial economic variable is the percentage of total salaries devoted to administrative personnel (2). This variable, sometimes related to the notion of "administrative overhead" or "support staff," tends to decrease with increasing organizational size, a common phenomenon in work and service organizations. Such a decrease is traditionally interpreted as an economy of scale, i.e.,

8. Interview with Eliot Mishler, Chief Judge, U.S. District Court, New York Eastern (July 13, 1973). See also Schulman *et al.* (1974:592).

TABLE 3

RESOURCES OF SIX FEDERAL DISTRICT COURTS (FY 1974)

		NYS	NYE	CO	NYW	NYN	VT
	A. *Fiscal Resources (in $1,000)*						
1.	Total court salaries	4,937.0	2,063.4	1,071.3	546.0	444.9	416.5
2.	Nonjudicial salaries as a percentage of total court salaries	78.1	82.6	85.1	78.0	82.0	80.8
3.	Mean nonjudicial salary	13.8	13.2	14.7	14.2	14.0	17.7
4.	Jury expenses	1,225.3	641.6	96.7	135.5	66.9	103.8
5.	Criminal Justice Act service expenses	58.6	60.1	13.2	7.9	7.4	0.9
6.	Court appointed counsel expenses	257.0	160.6	64.5	44.8	45.5	23.9
7.	Resources (1+4+5+6)	6,477.9	2,925.7	1,245.7	734.2	564.7	545.1
8.	Ratio of salaries of U.S. Attorneys to total court salaries	0.98	1.38	0.66	1.32	1.30	0.64
	B. *Organizational Resources*						
9.	Number of employees	310	146	66	39	35	21
10.	Number of judgeships	27	9	4	3	2	2
11.	Judges as a percentage of total employees	8.7	6.2	6.1	7.7	5.7	9.5
12.	Judicial support as a percentage of total employees	30.3	21.2	19.7	17.9	17.1	28.6
13.	Clerk's office as a percentage of total employees	31.0	28.8	31.8	28.2	31.4	38.1

14.	Magistrate's office as a percentage of total employees	3.9	4.1	3.0	17.9	20.0	—
15.	Probation office as a percentage of total employees	15.8	28.8	18.2	17.9	20.0	9.5
16.	Other employees as a percentage of total employees	10.32	11.0	21.2	10.25	5.7	14.3
17.	Gini index (based on variables 11-16)	0.665	0.670	0.682	0.790	0.709	0.580
18.	Mean log probability (based on variables 11-16)	0.888	0.886	0.892	0.957	0.914	0.810
19.	Number of job titles	20	17	20	16	13	10
20.	Mean grade-step (nonjudicial)	9.11	9.11	7.01	7.93	9.03	9.80
21.	Mean number of Assistant U.S. Attorneys	84	44	10.6	11.4	9.6	2
22.	Ratio of Assistant U.S. Attorneys to judges	3.1	4.9	2.7	3.8	4.8	1.1
23.	Mean number of court-appointed counsel	447	337	102	124	104	91
24.	Ratio of court-appointed counsel to judges	16.6	41.9	25.5	41.3	52.0	45.5

Sources: Variables 1-3, 9-16, 19, 20: Administrative Office of the U.S. Courts (1973-74)
Variable 4: Administrative Office of the U.S. Courts (1973)
Variables 5, 6, 23: Administrative Office of the U.S. Courts (1974c)
Variables 8, 21: U.S. Department of Justice (1973b)

larger production or service units effect savings in administrative and labor costs and are therefore more efficient than smaller units.[9] However, administrative salaries also reflect local conditions such as the labor market which provides the metropolitan courts with cheaper labor at skill levels (20) comparable to, or even higher than, those of smaller courts (see, e.g., the average nonjudicial salary, variable 3).

Finally, since both United States Attorneys and Marshalls are employed by the Justice Department, the ratio of their salaries to total salaries (8), may serve as a further indicator of the relative dominance of the executive branch over the judicial branch (see also variable 22). But the relatively large law enforcement units in NYE, NYW, and NYN also reflect local conditions such as the presence of airports (NYE) and an international border (NYW, NYN).

The second panel in Table 3 (Organizational Resources) shows the size, composition, and internal differentiation of the court's labor force, the central resource of all labor-intensive service organizations. Since NYS, with 310 employees (9) in 1974, is the largest federal district court, it constitutes the upper size limit. That Vermont has only 21 employees, and some one-judge courts have even fewer, underlines the fact that these courts on the average are not very large organizations.

Apart from size, however, they resemble other service organizations in their internal composition, differentiation, and skill structure. Of particular interest here is the considerable variation in the proportion of the labor force devoted to judicial support (12) or located in the clerk's office (13). Judicial support personnel typically include two law clerks, a court deputy clerk, and a secretary for each judge, but in practice there was a considerable range in the allocation of these crucial resources.

Since the magistrate system is still relatively new—it was introduced to replace the old United States Commissioner's sys-

9. From a more critical perspective, one might consider the effects of interaction between organizational size and complexity on administrative salaries and budget levels. Smaller and structurally simpler units may have certain inherent inefficiencies from the point of view of administrative overhead and optimal budgeting. But smaller units are also often more labor-intensive and able to achieve a more unrestricted, hence efficient, utilization of labor-power. By contrast, larger organizations may develop complexities of communication and coordination that offset the gains from scale. Larger units may, therefore, require either an increase in the administrative overhead proportional to the increase in structural complexity, or an altogether different form of organization and administration capable of dealing with structural complexity. The practice of assuming that larger units are by definition more cost-effective reflects the managerial ideology of business administration which is influencing courts, just as it did hospitals some fifty years ago, even though courts are still much less thoroughly rationalized.

tem in 1968 and became fully operational only in 1971—the distribution of this category (14) reflects a decidedly uneven development. But since organizational development is seldom completely passive and tends to reflect innovation and the adoption of new practices, the higher proportion of magistrates in NYW and NYN may indicate a greater degree of administrative innovativeness on the part of these courts.

With the historical ascendancy of the "treatment model" of criminal justice, the probation office (15) has played an increasingly important role in judicial decision-making in recent years. It is a sizable component of the total court labor force. Its variability among the courts reflects socioeconomic environmental conditions and the effect of criminal filings, but also parallels the personnel levels of the United States Attorney's office (21) and court-appointed counsel (23). Especially noteworthy here are the ratios of Assistant United States Attorneys (22) and court-appointed counsel (24) to judges, since high ratios might indicate increased work pressure confronting judges collectively, yet independently of caseloads. The personnel category designated "other" (16) consists mainly of court reporters, but includes auxiliary specialists such as librarians, and even a court-based nurse (NYS).

To gauge the degree of structural differentiation within these courts, I used two measures of evenness of distribution of the organizational labor force, the Gini index (17) and the mean logarithmic probability (18).[10] Both show NYW and NYN to be most differentiated, and Vermont the least. These indices gain in validity as the number of personnel categories increases, although the six categories used here (11-16) are adequate. For example, if we use the number of job titles (19) as a measure of occupational differentiation, NYS and Connecticut emerge at the top. The average grade-step for nonjudicial personnel (20), based on judicial service categories similar to civil service grades, shows Connecticut to be lowest, and Vermont highest. The discrepancy between average grade-step (20) and average salary (3) suggests that salary and resource differences among the courts do not only reflect differences in tasks, personnel, and skills, but real differentials in resource allocation.

10. Both of these measures reflect the way in which the total number of employees is distributed among a given set of categories of employees. Holding these categories constant for a class of organizations, we can say that the more evenly employees are distributed among the categories in a certain organization, the higher the value of the index and the greater its degree of internal structural differentiation. A detailed discussion of the use of the Gini index to measure the degree of structural differentiation within organizations is presented in Heydebrand (1973a:260-72). For a discussion of the mean logarithmic probability, which has similar measurement implications, see the so-called "information function" as described in Miller (1965:307-13). I am grateful to Norman Hummon for having drawn my attention to this measure.

TABLE 4

DISPOSITIONS IN SIX FEDERAL DISTRICT COURTS (FY 1974)

		NYS	NYE	CO	NYW	NYN	VT
	A. *Volume of Output*						
1.	Number of terminations	8,771	2,890	1,243	946	868	432
2.	Ratio of terminations to filings	1.29	1.01	0.83	0.98	1.19	0.91
3.	Ratio of terminations to total cases (filings plus cases pending from previous years)	0.48	0.46	0.43	0.40	0.53	0.50
	B. *Types of Dispositions*						
4.	Number of trials completed	880	404	165	103	81	107
5.	Civil trials as a percentage of civil terminations	7.4	9.9	14.6	6.8	8.8	24.9
6.	Criminal trials as a percentage of criminal terminations (by case)	27.8	20.4	9.9	15.4	10.7	24.3
7.	All trials as a percentage of all terminations	10.0	14.0	13.3	10.9	9.3	24.8
8.	Pretrial dispositions as a percentage of civil terminations	52.5	54.4	69.5	62.4	63.3	42.9
9.	Guilty pleas as a percentage of criminal terminations (by defendant)	52.5	60.0	63.5	41.2	73.6	74.0
10.	Number of appeals	898	346	98	57	57	38
11.	Appeals as a percentage of terminations	10.2	12.0	7.9	6.0	6.6	8.8

	C. *Delay*						
12.	Median period between filing and disposition of civil cases (months)	18.0	10	12	13	16	10
13.	Median period between filing and disposition of criminal cases (months)	5.7	6.4	7.9	12.1	7.1	4.8
14.	Percentage of civil cases pending more than 3 years	18.0	12.9	8.9	10.8	10.1	1.0
15.	Percentage of criminal cases pending more than 1 year	73.5	48.4	22.2	59.3	—	4.0
	D. *Productivity*						
16.	Mean of ranking among six courts for actions per judgeship for three types of actions[a]	4.0	3.7	3.3	2.0	4.7	2.0
17.	Mean of ranking among six courts for actions per nonjudicial employee for three types of actions[a]	2.0	3.3	3.3	4.3	4.7	2.0
18.	Rank of weighted filings per judgeship[b]	1	5	6	3	4	2
19.	Rank of weighted filings per nonjudicial employee[b]	1	4	5	6	3	2

a The three types of actions per judgeship in terms of which the three courts are ranked are: filings per judgeship, terminations per judgeship, and the inverted rank of pending cases per judgeship.

b For a definition and discussion of weighted filings, see note 11.

Sources: Variables 1-3, 12-19: Administrative Office of the U.S. Courts (1974b)
Variables 4-11: Administrative Office of the U.S. Courts (1974a: Tables B3, C4A, C7, D1, D6)

4. Output: Dispositions, Delay, and Productivity

How are these differences among the courts in terms of environment, task complexity, and resources reflected in such output characteristics as the volume and nature of dispositions, speed of disposition, and productivity? Table 4 shows a series of selected indicators designed to shed some light on this question.

The purely quantitative aspect of output, the volume of terminations (1), reflects the volume of filings in these courts, as shown in Table 2. NYS leads in the number of terminations as well as the raw numbers of such actions as trials completed (4) and appeals (10). However, NYS shares with NYN and NYE the distinction of terminating more cases than are filed (2), a process which, if sustained over time, would permit these courts to reduce their backlog of pending cases and catch up with the current volume of filings. The ratio of terminations to total cases (filings and cases pending at the end of the preceding year) (3) provides still another way of showing the relative lag between total demand and output performance.

Turning now to selected types of dispositions, i.e., the more qualitative aspects of output, we can see important differences emerging among the six courts. For example, CO and VT have a relatively high civil trial rate (5), corresponding to their high proportion of complex civil filings (Table 2, variable 6). However, the criminal trial rate (6) as well as the appeals ratio (11), both of which are comparatively high in the two metropolitan courts (NYS and NYE) and in Vermont appear to correspond more to the high rate at which the U.S. Attorney "accepts" criminal cases (Table 2, variable 11) than to the complexity of criminal cases filed (Table 2, variable 7).

NYW provides still another example of the complicated relationship between task, work process, and output. NYW has the highest level of complex criminal filings (Table 2, variable 7) and a high degree of selectivity with respect to criminal cases (Table 2, variables 11, 12), but its percentage of criminal trials (6) is lower than that of NYE and NYS. At the same time, the median number of months from filing to disposition for criminal cases (13) is highest for NYW, and the percentage of criminal cases pending more than one year (15) is second only to NYS. Thus, the output of NYW is low compared to that of the other five courts, even though NYW matches NYE and CO in task complexity. NYE, on the other hand, despite a relatively high trial rate (7) and the highest appeals rate (11), is nevertheless a relatively "fast" court, as measured by the median number of months from filing to disposition (12, 13).

There is clearly a trade-off among different types of dispositions: the combined trial rate (7) in all six courts is relatively low compared to the pretrial disposition rate (8) and the proportion of guilty pleas (9), not to mention dismissals and discontinuances. Although this situation is not new, these data highlight the administrative character of court proceedings or, at the very least, the relative erosion of the adjudicatory role of judges and the courts.

What about the comparative standing of these courts in terms of productivity? Valid and reliable indices of productivity in service organizations are notoriously difficult to construct. The present attempt is no exception. Nevertheless, it is instructive to compare the rank distribution of actions per judgeship (16) with that of "weighted filings" per judgeship (18).[11] The volume of output (e.g., terminations per judgeship) does not appear to be related to the more qualitative aspects of output productivity as indicated by the "weighted filings" per judgeship: NYS and NYN are highest for the first index, and CO and NYE for the second.

One problem with measuring productivity in courts is the assumption that judges are the sole producers, so that productivity can be measured by output per judge. To avoid this error, we calculated ratios of actions (17) and weighted filings (19) per nonjudicial personnel (judicial support staff and clerk's office).

Though the use of this denominator changes the "weighted filings" ratio only slightly, it tends to *reverse* the productivity rating of courts. One is tempted to speculate that the high proportion of magistrates (Table 3, variable 14) in the two high-ranking courts (NYW and NYN) may make a significant difference in the overall productivity of these courts. This possibility suggests, in turn, that magistrates should be adopted generally, and it raises the question why more courts have not done so.

Another method of evaluating output would be to combine qualitative and quantitative aspects in a composite index, for instance by means of factor analysis. For present purposes, however, the overall comparison may suffice as a preliminary way of showing the considerable variations among the six courts in terms of output characteristics. Moreover, it is conceivable that qualitative and quantitative output characteristics (for example, types of

11. "Weighted filings" are based on the average amount of time it takes judges to dispose of different types of cases. Case categories requiring one-half of "average" judge time are given a weight of 0.5, whereas complex and time-consuming cases receive a weight of 2.0. (Federal Judicial Center, 1971; Flanders, 1976:61). For a specification of the problem of caseload weighting from an economic perspective, see Gillespie (1975).

dispositions versus volume of terminations) are not consistent with each other, but exhibit a contradictory relationship. Increased productivity and efficiency may alter or counteract the probability that certain types of cases will be disposed of in a certain manner, given sufficient time and labor power.

In sum, the descriptive and comparative material presented here may have helped to dispel the notion that courts are relatively simple, invariant structures. Instead, we have seen that these trial courts and their jurisdictional environments exhibit considerable complexitites regardless of size, that there are wide variations among them, and that there are certain patterned relationships among the four major dimensions of environment, task structure, resources, and output, even though the correspondence between these dimensions is far from perfect. With respect to the profile of the jurisdictional environment there is a wide range of variation and a fairly consistent decrease in heterogeneity from NYS to Vermont. The degree of complexity of the courts' task structures also tends to decrease in the same way, but the range is much smaller and there are more inconsistencies and exceptions. There is even less pattern in the distribution of fiscal and organizational resources, and in the differences among the courts in the volume, speed, and nature of dispositions.

A major conclusion to be drawn from these observations is that environmental and task characteristics of courts are fairly consistent with each other, but that resources and output characteristics cannot directly and unequivocally be inferred or predicted from them.

Resources, in particular, emerge as the crucial factor intervening between task and performance, a major premise of this study (see the discussion of Figure 1, *supra*). Since resources are externally allocated and controlled, their variability introduces an element of unpredictability and uncertainty into the judicial work process. The restriction of resources relative to the increasing demands of the task environment may, as I shall attempt to demonstrate elsewhere, force a gain in efficiency and an increase in the quantitative output of courts, especially when output is measured by terminations regardless of type and when productivity is measured by terminations per judgeship (Flanders, 1976). But gains in efficiency may also change the nature and distribution of dispositions as well as the qualitative character of the judicial process.

III. JURISDICTIONAL ENVIRONMENT AND CASELOADS

In this part of the paper, I address the question: what is the effect on courts of their socioeconomic and political environment?

Specifically, how do demographic, corporate economic, and governmental forces affect total caseloads as well as the categories of cases filed in federal courts?

The relation between the organizational task structure of courts and the larger social structure has received considerable attention in the relevant literature either as a general theoretical issue (Abel, 1973; Durkheim, 1947; Friedman, 1975; Goldman and Jahnige, 1971; Jacob, 1972; Trubek, 1972a, 1972b; Weber, 1966), as an untested general assumption with a high degree of plausibility, useful for studying the business and behavior of courts (Frankfurter and Landis, 1928; Hart and Wechsler, 1953; Peltason, 1955; Casper and Posner, 1974), or as an empirical proposition to be tested by research (Friedman and Percival, 1976; Goldman *et al.*, 1976; Grossman and Sarat, 1975; Richardson and Vines, 1970; Schwartz and Miller, 1965). Among the latter studies, only one asserts "the relative unimportance of external, environmental factors" and suggests that changes in federal law "uniformly applied in all federal courts, may help to account for [this] relative unimportance" (Grossman and Sarat, 1975:344). But, as noted at the beginning of this paper, it is precisely the uniformity of federal law and the relative passivity of federal courts that permit us to study the differential effects of environmental factors. This logic of inquiry also holds, of course, where federal law changes over time, since the change is introduced into the federal judicial system *as a whole* (see also Goldman *et al.*, 1976:216).[12]

In order to begin tracing the causal relationships between environment and task structure, I examined the effect of a selected set of environmental variables on total filings and types of filings at three points in time. Table 5 shows the simple correlations (Pearson's r) between twelve environmental variables and four categories of filings—total filings (civil and criminal), civil filings, civil filings involving the United States as a party, and civil filings where the United States is the plaintiff—for 1950, 1960, and 1973, for 84 United States District Courts.[13]

12. Clearly, this argument does not apply to diversity jurisdiction where the federal courts are administering state law, which naturally varies among the states. I will report elsewhere the results of a comparative analysis of environmental effects on the four major bases of federal civil jurisdiction: U.S. Plaintiff, U.S. Defendant, Federal Question, and Diversity. This analysis is expected to shed further light on the way in which environmental factors affect variations in federal litigation by controlling for the types of statutes activated in legal disputes.
13. For 1950, the District Court for the District of Columbia was excluded because of missing data. This analysis also excludes the federal courts with local jurisdictions, i.e., the territorial districts of the Canal Zone, Guam, Puerto Rico, and the Virgin Islands, as well as those of Alaska and Hawaii. Data for variables 9, 11, and 12 were available only for 1973, and for variables 4, 5, 7, and 10 only for 1973 and 1960.

TABLE 5

CORRELATIONS (PEARSON'S *r*) BETWEEN FILINGS AND JURISDICTIONAL ENVIRONMENT IN THE U.S. DISTRICT COURTS IN 1950, 1960, AND 1973[a]

		FILINGS											
		1950 (N=83)				1960 (N=84)				1973 (N=84)			
	JURISDICTIONAL ENVIRONMENT[b]	Total Cases	Civil Cases	U.S. Cases	U.S. Plaintiff	Total Cases	Civil Cases	U.S. Cases	U.S. Plaintiff	Total Cases	Civil Cases	U.S. Cases	U.S. Plaintiff
	A. *Demographic*												
1.	Population	.48	.63	.71	.71	.15	.15	.33	.38	.71	.63	.65	.75
2.	Population density	.34	.60	.58	.54	.47	.61	.60	.44	.56	.59	.50	.39
3.	Black population	.10	.24	.23	.22	.25	.25	.24	.18	.74	.72	.67	.72
	B. *Economic*												
4.	White collar population	—	—	—	—	.22	.24	.45	.49	.79	.72	.67	.73
5.	Savings capital	—	—	—	—	.25	.30	.50	.51	.70	.66	.70	.73
6.	Number of corporations	.30	.42	.43	.42	.22	.23	.44	.51	.70	.67	.61	.70
7.	Number of corporate mergers	—	—	—	—	.50	.64	.71	.70	.68	.67	.59	.63
8.	Retail and wholesale trade	.29	.40	.40	.38	.21	.25	.41	.44	.74	.66	.67	.77

	C. *Legal-Governmental*											
9.	Number of lawyers	—	—	—	—	—	—	—	—	.80	.74	.74	.81
10.	Number of government employees	—	—	—	—	.47	.51	.78	.74	.73	.65	.67	.76
11.	Number of federal civilian employees	—	—	—	—	—	—	—	—	.72	.69	.76	.51
12.	Number of Justice Department employees	—	—	—	—	—	—	—	—	.85	.76	.84	.78

a Several judicial districts were subdivided between 1950 and 1970 (e.g., California, Florida, Louisiana); others were combined (e.g., South Carolina); and Alaska and Hawaii were added. The total number of judicial districts was 84 in 1950, 86 in 1960, and 94 in 1973. For 1950, the District of Columbia was excluded due to missing data.

b Variables 1-8 and 10 are in logarithmic (base 10) form.

This analysis reveals a strong and significant relationship between the jurisdictional environment and the four categories of filings for 1973, but weaker relationships for 1950 and 1960.[14] For 1973, total filings are associated strongly and directly with the major demographic indicators (1-3), with all the indicators of economic development and activity (4-8), and with the indicators of legal-governmental presence (9-12), notably the number of practicing lawyers (9) and the number of Justice Department employees (12).[15]

The effects of the environmental variables on the other three categories of filings for 1973 remain strong, on the whole. Only the correlation between population density (2) and United States plaintiff cases is moderately low.

This set of correlations supports the proposition that federal caseloads are strongly related to the magnitude of social, economic, and legal-governmental activity. Moreover, the courts are not simply passive receptacles for federal cases generated by the environment. Insofar as the government is the plaintiff, using federal courts as one instrumentality for administrative and regulatory purposes, it enters directly into the affairs of the economy and society.

Although this observation that the state intervenes in the political economy is hardly novel, the question arises whether this has always been the case and whether there are historical changes in the extent to which the U.S. government, through the federal courts, is involved in the "private" sector of society.

A. Comparing Environmental Effects over Time

A comparison between 1973 and the two earlier time points, 1960 and 1950, suggests that there has been a considerable amount of change in the role of the state as mediated by the courts. First of all, environmental factors do have a direct, positive effect on caseloads and filings in 1950 and 1960, even though it is not as strong as it is in 1973. The main increase appears to occur between 1960 and 1973. By contrast, the differences between 1950 and 1960 are small and suggest a certain stability in the task structure of the federal district courts in the two decades following World War II.

14. Given a total N of at least 83 cases, the following values for correlation coefficients are statistically significant: $r \geq 0.32$ at the 0.001 level, $r \geq 0.25$ at the 0.01 level, and $r \geq 0.18$ at the 0.05 level.
15. It should be noted that all demographic and economic environmental variables, as well as the number of government employees (10), were aggregated from county census data to the district level, thus reflecting the actual characteristics of the courts' immediate task environments and their potential client populations. The data on legal-governmental indicators also represent districts, but were obtained from other sources as described in Table 1.

However, despite the emergence of certain patterns, the observable changes are by no means uniform. The effects of population size fluctuate between 1950 and 1973.[16] The effects of population density, a rough indicator of urbanization, reveal even more complex changes between 1950 and 1973: the effect of density on total filings increases; for civil cases and U.S. cases the relationships are relatively stable; but for U.S. plaintiff cases we can observe a decline in the effect of density. Significantly, the effect of economic variables on U.S. plaintiff cases is the exact opposite of the demographic effect of density. The effect of economic indicators on all categories of filings increases, especially between 1960 and 1973. The slight decrease in the effect of corporate mergers (7) between 1960 and 1973 probably means that very large corporations increasingly engage in out-of-court settlements and are relatively successful in keeping civil litigation out of the courts, especially that initiated by the Justice Department (Friedman and Percival, 1976:292, 299; Friedman, 1975:134; Galanter, 1974, 1975; Macaulay, 1966). Some empirical support for this interpretation can be derived from the fact that the mean number of U.S. plaintiff cases has gradually decreased from 208 in 1950, to 173 in 1960, to 162 in 1973 (see Table 6, variable X_7). It should be noted, however, that this aggregate decrease is likely to hide an increasing concentration of such cases in certain districts as well as an increase in the average size or importance of the suits.

The general tendency for the federal government to become increasingly involved in civil society can be dramatically observed in the effects of black population (3) on filings. Blacks had little opportunity in 1950 and 1960 to generate business for the federal courts, the famous school desegregation case of *Brown* v. *Board of Education* (347 U.S. 483, 1954) notwithstanding. However, during the 1960s the federal courts experienced a sharp increase in civil rights filings,[17] an historical phenomenon that expressed itself in part in the strong black population effect on all types of filings in 1973 (see also Graham, 1970; Friendly, 1973:16).

16. The decline in the strength of the correlations between demographic variables and filings from 1950 to 1960 is difficult to interpret without additional analysis. Since mean total filings and civil filings remained relatively constant between 1950 and 1960 (see Table 6, variables X_5, X_6), it is conceivable that fluctuating population changes together with stable federal court business in different districts produced a low overall correlation. This might also explain some of the other low correlations for total and civil filings in 1960.
17. "Civil rights" actions increased from 142 in 1950 to 280 in 1960, or 97 percent. By contrast, between 1960 and 1970 such cases increased from 280 to 3985—*1323* percent (Administrative Office of the United States Courts, 1950:143; 1960:232; 1970:232).

Finally, it is noteworthy that legal-governmental factors (9-12) have a strong effect on all types of filings. In the case of lawyers (9), this effect reflects their vital role in mediating between the court and its environment. There is an equally obvious relationship with employees of the Department of Justice (12), who are responsible for law enforcement (F.B.I.) and prosecution (United States Attorneys) in federal district courts. But the effect of the number of government employees at all levels (10), and of federal civilian employees (11) in particular, underlines the fact that government agencies generate business for the courts by being targets of civil litigation (especially in United States cases, which include the United States as a defendant) or by the fact that many federal criminal cases involve federal civilian employees.

Let us now turn to the question of the relative importance of demographic, economic, and governmental factors in influencing the various categories of filings for 1973, 1960, and 1950. For purposes of this analysis, I have selected population density, the number of corporations, and the number of government employees as representative indicators. Table 6 provides an overview of the basic relationships, i.e., the means of the relevant variables for 1950, 1960, and 1973, as well as the simple correlations.[18] The means for population density (X_1) and number of corporations (X_2) are relatively constant between 1950 and 1973. There is a sizable increase in the number of government employees (X_3) between 1960 and 1973 (as noted earlier, data on government employees were not available for 1950).

Total filings (X_4) and civil filings (X_5) changed little from 1950 to 1960. However, between 1960 and 1973, mean total filings increased by 40 percent and civil filings by 69 percent. U.S. cases (X_6) decreased slightly from 1950 to 1960, but increased by 31 percent between 1960 and 1973. By contrast, U.S. plaintiff cases (X_7) decreased steadily from 1950 to 1973, implying a complementary rise in the number of cases in which the government is a defendant.

Some patterns in the basic relationships between the variables may be noted. First, the strength of the relation between population density (X_1) and number of corporations (X_2) increases between 1950 and 1960, and then remains stable. The relation between population density (X_1) and number of government employees (X_3) is moderately strong in 1960, but decreases by half in 1973. By contrast, the relation between number of corporations (X_2) and

18. Population density (X_1) number of corporations (X_2), and number of government employees (X_3) had skewed distributions and were transformed into logarithmic scales, whereas variables X_4-X_7 are given in raw form.

TABLE 6

CORRELATIONS (PEARSON'S r), MEANS, AND STANDARD DEVIATIONS FOR THREE ENVIRONMENTAL VARIABLES AND FOUR CATEGORIES OF FILINGS IN THE U.S. DISTRICT COURTS IN 1950, 1960, AND 1973

		1950 (N=83)							1960 (N=84)							1973 (N=84)						
		X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_1	X_2	X_3	X_4	X_5	X_6	X_7
X_1	Population density	—							—							—						
X_2	Number of corporations	.39	—						.55	—						.53	—					
X_3	Number of government employees	—	—	—					.61	.51	—					.31	.57	—				
X_4	Total filings	.34	.30	—	—				.47	.22	.47	—				.56	.70	.73	—			
X_5	Civil filings	.60	.42	—	.64				.61	.23	.51	.78	—			.59	.67	.65	.96	—		
X_6	U.S. cases	.58	.43	—	.59	.87	—		.60	.44	.78	.64	.77	—		.50	.61	.67	.90	.84	—	
X_7	U.S. plaintiff cases	.54	.42	—	.51	.75	.97	—	.44	.51	.74	.37	.41	.86	—	.39	.70	.76	.86	.82	.83	—
	$\bar{X}$	1.89	4.42	—	1149	528	257	208	2.03	4.48	4.42	1157	666	243	173	2.05	4.46	5.26	1617	1126	319	162
	SD	.69	.55	—	1354	680	273	218	.70	.55	.37	1529	1084	223	154	.67	.33	1.20	1541	1081	279	138

number of government employees (X_3) increases slightly between 1960 and 1973. The intercorrelations among the four categories of filings are moderately high in 1950, drop on the average slightly in 1960, and are high again in 1973. The data in Table 6 are presented mainly to provide a statistical background for the multivariate analysis shown in Table 7, which permits a more meaningful substantive interpretation of the relationships between environmental variables and categories of filings.[19]

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19. For the reader concerned with the statistical procedures involved in this analysis, three methodological comments are in order in connection with Tables 6 and 7.

(1) Tests of statistical significance have been omitted since we are dealing in Part III of this paper with the "universe" of federal district courts, not a sample. Although one may, of course, treat the total number of courts analyzed here as a sample of a potentially infinite population of courts, such an assumption would be useful mainly if the analysis were focused on prediction rather than covariation, as is the case here. Consequently, correlation coefficients below $r = 0.32$ with a probability level of more than 0.001 will be interpreted as *substantively* "low" or "weak" rather than as *statistically insignificant*.

(2) The problem of multicollinearity among the independent variables in this analysis has not been eliminated, although it can be considered tolerable. Adopting a value of $r = 0.60$ as a standard, we can see from Table 6 that the intercorrelations are generally below that level (only in 1960 is $r_{13} = 0.61$). Similarly, the intercorrelations among independent variables (X_1-X_3) should be lower than their correlations with the dependent variables (X_4-X_7). This condition is met for 1950 and 1973, but not for 1960. Hence, the multivariate analysis of the effects of environmental variables on filings in 1960 must be interpreted with caution. For a discussion of the issues involved, see Darlington (1968) and Gordon (1968).

(3) The conceptual and operational relation between the independent and dependent variables used in this study requires a methodological comment. To demonstrate the effect of environmental variables on filings, it would be possible to use filings per 100,000 population or filings per corporation as indicators. For instance, the number of civil suits filed per 100,000 population ("litigation rate") could serve as a measure of the extent of litigation relative to the population in a given judicial district, especially if there were a compelling reason to assume that demographic rather than economic, political, or cultural dimensions of the environment are crucial for explaining litigation. But there is neither theoretical nor empirical justification for assuming this to be the case. Moreover, population, number of corporations, number of government employees, etc., are all highly correlated with the number of filings, as the analysis in Table 5 has shown. If x is the population, and y/x the ratio of filings to population, then the correlation between x and y/x is bound to be contaminated by the presence of the same variable, or highly correlated variables, in both terms. For some purposes, the *rate* of filings may be analytically as important as the *raw* number of filings. Since we cannot assume that the variations among districts in the ratio of caseloads to population is either systematic or uniform, and since I am interested here in the *multiple effects* of the jurisdictional environment on filings, not just the effects of population, I have chosen to use the raw number of filings rather than ratio variables. I believe that the multiple and partial regression analysis presented in Table 7 deals adequately with these problems; (1), by choosing theoretically significant but moderately correlated indicators of the environment as independent variables; and (2) by considering the partial effects of the independent variables, i.e., by holding the demographic effect (population density) on filings constant while examining the effects of the other variables on filings, and vice versa. In this way, we can estimate the importance of environmental variables for filings *relative to each other* without unduly violating algebraic of statistical assumptions. Relevant discussions of these problems are presented by Fuguitt and Lieberson (1974) and Schuessler (1973).

TABLE 7

ZERO-ORDER CORRELATIONS (r), STANDARDIZED PARTIAL REGRESSION COEFFICIENTS (b^*), AND SQUARED MULTIPLE CORRELATION COEFFICIENTS (R^2) OF THREE ENVIRONMENTAL VARIABLES ON FOUR CATEGORIES OF FILINGS IN THE U.S. DISTRICT COURTS IN 1950 (N=83), 1960 (N=84) AND 1973 (N=84)

		Total filings			Civil filings			U.S. cases			U.S. plaintiff cases		
		1950	1960	1973	1950	1960	1973	1950	1960	1973	1950	1960	1973
Population density	r	.34	.47	.56	.60	.61	.59	.58	.60	.50	.54	.44	.39
	b^*	.26	.35	.25	.51	.57	.32	.49	.20	.24	.45	- .09	.02
Number of corporations	r	.30	.22	.70	.42	.23	.67	.43	.44	.61	.42	.51	.70
	b^*	.20	- .14	.28	.21	- .23	.28	.24	.00	.20	.24	.20	.40
Number of government employees	r	—	.47	.73	—	.51	.65	—	.78	.67	—	.74	.76
	b^*	—	.33	.50	—	.29	.39	—	.66	.49	—	.69	.53
	R^2	.15	.29	.70	.40	.44	.63	.38	.64	.57	.34	.57	.69

Table 7 gives the results of a multiple and partial regression analysis, i.e. the separate (b^*) and joint (R^2) effects of density, corporations, and government on the four categories of filings at three time points. It shows, first of all, that the joint effects (R^2) for the environmental variables on types of filings tend to increase from 1950 to 1973. Between 1960 and 1970, the change is most dramatic for total filings, but it is also quite strong for civil filings and United States plaintiff cases. For U.S. cases, however, the (R^2) drops from 0.64 to 0.57 due to a decline in the effect of the number of government employees ($b^* = 0.66$ in 1960 to $b^* = 0.49$ in 1973).[20]

What about the separate effects of the three environmental variables on filings? As we saw in Table 5, the simple (zero-order or r) correlations between population density and each of the categories of filings in 1973 tend to be lower than the corresponding correlations for number of corporations and number of government employees. By contrast, in 1950 and 1960 the simple correlations between population density and all four categories of filings were higher than those between number of corporations and all categories of filings, except for U.S. plaintiff cases where the reversal occurred in 1960. From 1960 to 1973, we had observed a similar pattern of increased correlations between number of government employees and total and civil filings, as well as higher correlations in 1973 for number of government employees with U.S. cases and U.S. plaintiff cases than for population density and number of corporations. On the basis of these findings, I had argued that the effect of "demographic" variables on U.S. cases and U.S. plaintiff cases tended to decline between 1950 and 1973, but that the effect of "economic" variables tended to increase, while the effect of "governmental" variables remained stronger than the other two in both 1960 and 1973.

The standardized partial regression coefficients (b^* or beta weights) shown in Table 7 tend to confirm the results of the previous analysis. But there are some modifications. First, the partial environmental effects are reduced when compared to the simple correlations, especially those for number of corporations and number of government employees. This is probably due to the fact that the analysis controls for the effect of population density

20. Note, however, that there are only two variables in 1950 and that the addition of government employees as a third variable in 1960 necessarily maintains or raises the percentage of "variance explained" as expressed by R^2. Hence, the 1950-1960 difference in R^2 is not strictly comparable to the 1960-1973 difference. Given the enlargement of the explanatory model in 1960 to include number of government employees, the change for total filings (from $R^2 = 0.29$ in 1960 to $R^2 = 0.70$ in 1973), for example, means that in 1960 less than one-third of the variance in total filings was "explained" by these particular variables, whereas in 1973 over two-thirds were "explained" in this way.

and hence reduces the influence of other factors (such as the numbers of corporations and of government employees) also associated with urbanization and the structural differentiation of the environment.

Second, the pattern of change of the environmental effects over time shows a greater degree of variation by category of filing, i.e., by the nature of the court's task. Thus, the effects of population density on total and on civil filings increase from 1950 to 1960, but drop again by 1973. For U.S. cases and U.S. plaintiff cases, the drop in the effect of population density has already occurred in 1960; indeed, for the latter, the demographic effect has practically been eliminated. The pattern of change in the "economic" effect of number of corporations upon total and civil filings is quite uniform: the relatively low effect in 1950 drops further in 1960, but climbs back to a moderate level in 1973. The negative coefficients in 1960 appear to reflect two substantive factors: a temporary decline in the strength of economic effects in 1960, and a weak association between number of corporations and certain subcategories of filings (namely criminal filings) subsumed under total filings, and certain private filings (e.g., diversity cases) subsumed under civil filings. However, both of these substantive factors require further documentation and analysis.[21]

The effect of number of corporations on U.S. cases is also eliminated in 1960, possibly due in part to the strong effect of "government" variables. However, the effect of number of corporations on U.S. plaintiff cases increases from 1960 to 1973, while the effect of "governmental" variables drops slightly. This double process is reflected in corresponding changes in the effect on U.S. cases, of which U.S. plaintiff cases represent, of course, a subcategory. For U.S. plaintiff cases, then, number of government employees exercises a stronger partial effect than number of corporations both in 1960 and 1973, even though we can see that some convergence has occurred by 1973.

We can conclude that in civil cases where the U.S. government is a proactive party, both corporate and governmental forces are at work in shaping the demand on, and the use of, federal district courts. It is in this sense that those courts provide a public forum for the confrontation between state and economy. However, this is not to deny that there are other strategies of conflict and conflict

21. In the absence of further analysis, one cannot dismiss the possibility that the negative coefficients in 1960 are in part the result of multicollinearity among the independent variables. Hence, their validity must be treated with caution. However, the total pattern of relationships shown in Tables 6 and 7 suggests to me the soundness of a historical and substantive interpretation of the deviant findings, rather than treating them as statistical artifacts.

resolution between state and economy (e.g., administrative or economic) and that in the relatively small numbers of federal court cases we see merely the tip of the iceberg of corporate-governmental interaction. For example, such interaction is immediately visible in the business of the bankruptcy divisions of the federal district courts (Seron, 1976; Kennedy and Seron, 1975), but it also translates into other forms of corporate litigation (e.g., private corporate cases that arise under administrative-regulatory statutes) and other types of "federal question" jurisdiction (Friendly, 1973:109).

In sum, the growth of governmental bureaucracies—itself a function of the advancing crisis of the corporate capitalist economy—has had an increasing effect on litigation over time. This effect is reflected in the sizable relationships between total filings and total number employed at all levels of federal, state, and local government. In addition, for 1973, a more specific relationship has been demonstrated between all filings and U.S. cases, on the one hand, and, on the other, federal civilian government employment reflecting the presence of administrative and regulatory agencies, the Justice Department, the F.B.I., etc. Clearly, the demographic changes in aggregate population and population density have become less important for explaining federal litigation, while economic and especially legal-governmental factors have become relatively more important. As Goldman *et al.* (1976:230) conclude from their caseload forecasting study in federal district courts: ". . . fluctuations in federal court caseload over time have more to do with changes in the economic marketplace, the availability (and cost) of legal services, and the activity of the federal government than with quantifiable changes in the general population."

B. Cross-Lagged Environmental Effects: 1950-1960, 1960-1973, 1970-1973.

In the preceding analysis, the effects of the environment on caseloads were examined from a quasi-historical perspective, i.e., by comparing the environmental effects at three different points in time (Tables 5-7). However, an interesting question is the timing of the effect of environment on the size of the organizational task, as measured by filings and caseloads. How long does it take for environmental dynamics to translate into business for the courts? On the whole, little is known about the nature of these effects for service organizations in general, and for courts in particular. It stands to reason that the environment has different effects upon civil and criminal cases, and their subcategories. Moreover, the environment itself is a composite, and has different time dynamics

depending on which aspect we single out, and how frequently we observe it.

Ideally, the dynamic causal analysis proposed here should be based on an annual inventory of quantitative-environmental and qualitative-historical changes and on a corresponding inventory of institutional and organizational changes. Unfortunately, the present attempt is limited to a crude approximation, based on 3-year, 10-year, and 13-year intervals, using census data for 1950, 1960, and 1970 to establish environmental profiles for each of the federal District Courts and their jurisdictional areas. This procedure allows us to examine the effect of the environment at Time 1 (e.g., 1950) on filings ten years later at Time 2 (1960). Table 8 shows the cross-lagged correlations between total filings and selected environmental variables for three time periods: 1950-1960, 1960-1973, and 1970-1973.

This analysis displays moderate "diachronic" effects of the 1950 environment on 1960 caseloads and of the 1960 environment on 1973 caseloads, but a relatively strong effect of the 1970 environment on 1973 caseloads.[22] These findings suggest that there may be a significant time lag between environmental dynamics and organization tasks, so that courts are only affected by changes in their environments several years after they have begun to occur. For example, population density and number of corporations in 1950 explain only 15 percent of the variance in 1950 total filings, but 26 percent of the variance in 1960 total filings. The main share of the total effect in 1960 comes, of course, from the partial effect of 1950 density on 1960 filings ($b^* = 0.47$).[23]

Perhaps more revealing is the effect of the 1960 environment on 1973 filings. First of all, we can now observe that the effect on caseloads of number of government employees in 1960 increases diachronically from 1960 to 1973. The joint effect of all three environmental variables in 1960 also increases considerably during that period, but most of that increase is explained by the effect of number of government employees, while the partial effects of population density and number of corporations essentially disappear in 1973. Hence, the effect of governmental presence in 1960

22. Table 8 shows the effects of environment on total filings only. The results of a separate analysis of environmental effects on civil filings are very similar.
23. The unstandardized (b) and standardized (b^*) partial regression coefficients are given mainly to provide the interested reader with a proportional estimate of the *diachronic* partial effects of population density, number of corporations, and number of government employees on total filings. The auto-correlations among total filings for the three time points are $r = 0.63$ for 1950-1960, $r = 0.62$ for 1950-1973, and $r = 0.61$ for 1960-1973.

TABLE 8

SIMULTANEOUS (SYNCHRONIC) AND CROSS-LAGGED (DIACHRONIC) ZERO-ORDER CORRELATIONS (r), UNSTANDARDIZED (b) AND STANDARDIZED (b^*) PARTIAL REGRESSION COEFFICIENTS, AND SQUARED MULTIPLE CORRELATION COEFFICIENTS (R^2) OF THREE ENVIRONMENTAL VARIABLES ON TOTAL FILINGS IN U.S. DISTRICT COURTS

	Time 1			Time 2			Time 3		
	1950 Total Filings			1960 Total Filings			1973 Total Filings		
	r	b	b^*	r	b	b^*	r	b	b^*
Population density 1950	.34	510.8	.26	.50	986.5	.47	—	—	—
Number of corporations 1950	.30	492.0	.20	.26	265.6	.10	—	—	—
R^2			.15			.26			—
Population density 1960	—	—	—	.47	754.4	.35	.52	204.5	.09
Number of corporations 1960	—	—	—	.22	-400.9	- .14	.44	131.6	.05
Number of government employees 1960	—	—	—	.47	1387.0	.33	.74	2786.3	.67
R^2			—			.29			.56
Population density 1970	—	—	—	—	—	—	.56	577.1	.25
Number of corporations 1970	—	—	—	—	—	—	.70	1329.0	.28
Number of government employees 1970	—	—	—	—	—	—	.73	637.2	.50
R^2			—			—			.70

can be said not only to persist but to increase throughout the 1960s.[24]

Possibly the most interesting result emerges from an analysis of the effect of the 1970 environment upon 1973 filings. Not only is that joint effect (R^2) stronger than any other, but we can also observe that the partial effect of number of government employees on total filings continues to dominate the partial effects of number of corporations and population density, both of which are reduced, although not as much as in the 1960-1973 equation.

How can these differences between "synchronic" and "diachronic" effects be interpreted? Let us briefly reexamine the data base for the three time comparisons in Tables 5 through 8. For 1950 and 1960 environmental and caseload data are almost exactly synchronic: the court's "fiscal year" starts on July 1 of the calendar year preceding that in which the census is conducted. Consequently, there is only a very small time difference between court and environmental data for 1950 and 1960. Census data for the 1970 calendar year, however, are related to court data for FY 1973, which began July 1, 1972. Here, then, the time lag may begin to translate into more pronounced effects on court filings, as shown by the much more substantial correlation coefficients.

In other words, we may reinterpret the "synchronic" 1970-1973 effect as one that is, in fact, produced or mediated by the three-year interval. This might help to explain why the 1973 correlations are generally higher than those for 1960 and 1950. Thus, we can hypothesize that the relatively strong 1970-1973 effects reported here indicate that three years is a more adequate interval for studying environment-court effects over time than ten or thirteen. This hypothesis could be tested by comparing 1970-1970 and 1970-1973 effects, and by making corresponding comparisons for 1960 and 1950. Seron (1976) conducted such a test and found that the 1970-1970 effects of environment on bankruptcy courts are, in fact, stronger than the comparable synchronic effects in the two previous decades.

Hence, we cannot reject a more "historical" interpretation for the observation that environmental factors affected federal caseloads more strongly in 1973 than in 1960 and 1950. In examining the evidence presented in Tables 5-7, we may be confronted with a methodologically important "negative case" that supports a

24. An interesting rival interpretation would be that increased filings in 1960 may be a partial cause of an increased governmental presence in 1973. However, though it is obvious that judicial and executive activities mutually influence each other in a number of ways, I would still expect the executive branch to dominate the judiciary. Of course, such an expectation can only be fully tested by means of a nonrecursive causal model.

basically valid relationship. Although the 1950s saw some changes in population and some economic growth, it was a relatively "slow" decade. Similarly, in the courts total filings increased only by 8 percent from 1950 to 1960, while criminal filings actually decreased by 15 percent. On the whole, it can be demonstrated that the task structure of the federal judiciary was relatively stable. The 1960s, however, were a period of unprecedented change. Total filings increased by 46 percent, criminal filings by 56 percent, and the proportion of pending cases to total caseload was 43 percent greater in 1970 than in 1960. The number of federal district judgeships increased by 69 percent from 226 in 1960 to 382 in 1970, whereas there had been only a 13 percent increase in the previous decade. This qualitative, historical comparison suggests that the organizational task structure of federal courts may, indeed, have been relatively "independent" of environmental effects in the two decades after World War II. However, the cumulative effects of corporate economic growth and government expansion during this period may have appeared in the caseloads of federal courts only years later. If, to these economic and governmental developments, we add the emergence of various social movements—civil rights, antiwar, and consumer protest—we can see that different social processes, each with its own historical timetable, were translated into business for the federal courts, making the 1960s a qualitatively different decade from the 1950s (see also Graham, 1970; Packer, 1968; Jones, 1965).

There is still a great deal of work to be done before we can claim an adequate comprehension of the temporal and causal relationship between courts and their environments. We do not know the exact length of causal intervals, especially since the period of "mediation" between cause and consequence is likely to vary. To establish the time lags, it will be necessary to pinpoint historical events and environmental changes by plotting them every year, to do the same for organizational variables, and to analyze the changing levels of asssociation in such time series. Moreover, for courts and their jurisdictional areas, such a procedure requires the aggregation of census data to the level of the jurisdictional area of the district, rather than the state or some other geographic entity.[25] And the effects of environment on other

25. Failure to aggregate environmental data to the jurisdictional level may explain the failure of Grossman and Sarat (1975) to find any significant environmental effects on the litigation rate of district courts. However, another reason may have been their decision to focus on litigation rates rather than on the number of civil filings. Hence, low or negative correlations can, in part, be attributed to the use of ratio variables or rates (e.g., filings per 100,000 population) and need not indicate the absence of

aspects of the task structures, and on the resources and dispositions of these courts, will have to be analyzed—something that will be done in subsequent reports. But it is at least possible to conclude from the present analysis that political-economic variables do have a powerful effect on various categories of filings at different points in time, as well as over time, and that such variables provide a crucial baseline for the analysis of the task structures of courts.

IV. CONCLUSION

In this paper, I have presented the first steps of a broad argument that organizational phenomena cannot be understood or changed without understanding their context. This is particularly true of courts as public bureaucracies, since both the nature of their tasks and the allocation of their resources can ultimately be traced to the characteristics and dynamics of their environment. Obviously, this is not to deny that federal courts are legally autonomous, or that substantive legal and procedural issues are important for understanding the judicial process. Federal law often emerges in response to legal issues of national significance and is binding throughout the federal system, but it is activated in different districts by the characteristics and processes of their jurisdictional environment. The data are consistent with an interorganizational and environmental perspective on courts, in which the demographic, economic, and legal-governmental profile of federal judicial districts has strong effects on the task structures of courts since much of their workload is generated in and by that environment. However, we are not dealing with a simple one-to-one relationship, but rather with a diachronic causal process. The social and structural complexities of the political economy do not necessarily affect legal and governmental processes in a direct and immediate fashion, as a simple base-superstructure model would suggest, but in a form mediated by intervening historical processes.

Similarly, I argue that the process of organizational resource allocation must be understood in terms of both the complicated technical requirements *and* the changing political role of courts, and that both reflect environmental changes which have contradictory implications for courts and which tend to surface only after a certain time period.

environmental effects on the task structure of courts (see my discussion in note 19, *supra*; see also Goldman *et al.*, 1976:201). Finally, environmental effects may be present but unobservable if there is no provision for an adequate causal interval between environmental dynamics and litigation.

As a result, there is a lack of correspondence between the task complexity of courts and their resources, which suggests that resources might follow task requirements after a certain "causal interval" has elapsed, just as the task (measured by filings) tends to follow environmental changes. However, this model probably assumes too much rationality in the allocation of resources. Changes in the environment and task structure of federal courts produce political feedback in Washington which may or may not translate into changed allocations. In any case, we might expect a considerable time lag between the communication of judicial needs and the political response. In addition, governmental resources are becoming increasingly scarce, compelling the development of priorities and further time lags in the allocation process. Like pending cases in courts, courts themselves are becoming pending cases in Congress. It is not surprising under these circumstances that courts have growing difficulties in disposing of their cases, with the result that they accumulate large backlogs and impose long delays.

Three kinds of "organizational" response are conceivable in this situation: judicial, bureaucratic, and technocratic. Each is a product of the changing functions and organizational characteristics of courts described in Part I. The traditional, judicial-professional response is articulated by those who would maintain or enhance the law-finding, adjudicatory role of courts within the American constitutional framework. The professional strategy of reform is to increase the level of resources in order to enable courts and judges to respond more adequately to the increasing demands made upon them by their environment. Significantly, this response does not envisage any change in the work or the authority structure of judges. Instead, it calls for more judges and judicial support personnel, as well as the perpetuation of judicial autonomy, professional-collegial self-determination, and control over the quality of services provided, e.g., by continued control over the selection of qualified judges (Grossman, 1965; McGowan, 1969; Jones, 1965; Winters and Allard, 1965; Frank, 1950; Packer, 1968; Bazelon, 1971; Greene, 1972; Chase, 1972).

The bureaucratic-administrative response is to make more efficient use of existing resources, to change the nature of work organization by further division of labor and downward delegation of authority, and to subordinate all work functions, especially nonjudicial functions, to centralized administrative control. An important innovation in bureaucratic-administrative reform is rules of procedure, which both expedite the judicial process and constrain its participants, e.g., the pretrial discovery rules of the

Federal Rules of Civil Procedure (see Glaser, 1968; see also Flanders, 1976). In general, the bureaucratic strategy seeks to raise the productivity of courts and the speed with which they dispose of cases. Rather than adding more judges, it favors the delegation and transfer of some judicial functions to nonjudicial personnel, e.g., court administrators and parajudicial personnel (Breitel, 1960; Clark, 1971; Guerney, 1972; Gazell, 1972, 1975; Berkson and Hays, 1976; Parness 1973). Although judicial and administrative functions are still seen as separate, the professional discretion involved in law-finding and adjudication is gradually replaced by administrative decision-making. Well-known early advocates of administrative reforms in the courts were Roscoe Pound (1906) and Arthur Vanderbilt (1938), but as recently as 1974 the American Bar Association Commission on Standards of Judicial Administration (American Bar Association, 1974) has proposed a similar program. Needless to say, the bureaucratic-administrative strategy is, on the whole, not popular with lawyers and judges (Fish, 1973); nor is it thought to be particularly effective, or appropriate to the organizational nature of courts (Saari, 1976; Gallas, 1976).

Finally, the technocratic response to the crisis of the judiciary is emerging as a kind of synthesis of the other two, which retains elements of each yet transcends both.[26] The technocratic strategy is based on the recognition and affirmation of the policy-making function of the judiciary, and of the necessity that this function be adapted to the political needs of the modern state. Hence, this strategy seeks to integrate specific judicial and administrative reforms with the development of a national, centralized system of justice and represents the most comprehensive attempt to manage the judicial crisis (see Wheeler and Whitcomb, 1976).

The technocratic strategy seeks to expand resources (e.g., judgeships), but also to raise the productivity of judges. It favors the introduction of technical innovations (e.g., data processing systems, video technology), changes in the nature of work organization (e.g., court administrators, systems management, and the team approach to court management) (Saari, 1970b; Coffey, 1974; Ebersole, 1969; Friesen *et al.*, 1971), and the redefinition of traditional professional functions (e.g., in-service training seminars for new judges and other court personnel) (Cook, 1971; Federal Judicial Center, 1973; Bird, 1975) or the use of paralegal and parajudicial personnel (Parness, 1973).

But in addition, the technocratic strategy aims at changing the nature of the task itself, as well as the nature of the output of

26. For a discussion of the impact of "scientism" and "technocratic thought" on legal sociology, see generally Black (1973a:45).

courts. Examples are proposals for procedural change, such as the transfer of federal jurisdiction over diversity cases to state courts or the simplification of pre-trial, trial, and appellate procedures (Burger, 1976; Friendly, 1973; Klein and Witztum, 1973). Another example is no-fault insurance, rationalizing the procedures for compensating injuries and rendering litigation unnecessary in most cases (Calabresi, 1965, 1970; Posner, 1972; Polinsky, 1974; Brennan, 1966; Selznick, 1969; Nonet, 1969).

Not only are the three types of strategies outlined here in conflict with each other, but there is no evidence that either of the two dominant contenders—judicial and technocratic reform—could resolve the judicial crisis in a manner acceptable to the other. As I have tried to show in Part III of this paper, the demand on court services is not only increasing, but is also determined more and more by the dynamics of the surrounding political economy and, specifically, by governmental activities. Thus, instead of remaining autonomous of the executive branch and presiding over the conflicting claims of polity, law, and economy, i.e., of "substantive," "formal," and economic rationality, the judiciary is itself jeopardized by the consequences of expanding state intervention in the American economy and society. It is in this sense that the resolution of conflicts attempted at the level of the political economy as a whole tends to generate new conflicts at the level of the state, i.e., between the executive and judiciary branches, and within each.

In this paper I have focused on the conflicts emerging *within* the judiciary due to the fiscal crisis of the state. But I have also suggested that the fiscal crisis of the state is itself a result of the deepening crisis of the American political economy, a crisis which, in turn, generates new demands for conflict-resolution made on the judiciary. The concrete nature of these conflicts raises considerable theoretical and empirical doubts about the validity of the conceptions of law and state as monolithic and autonomous entities. It also renders inadequate the notions of the state as merely reproducing the economy, and of the judiciary as merely legitimating the actions of the executive branch. Instead, our analysis suggests that the historically expanding attempts at solving the problems of the political economy by state intervention create new problems for both the state (the fiscal crisis) and the judiciary (the judicial crisis), without ultimately appearing to solve the problems of either.

REFERENCES

ABEL, Richard L. (1973) "A Comparative Theory of Dispute Institutions in Society" 8 *Law & Society Review* 217.
ABRAHAM, Henry J. (1968) *The Judicial Process*. New York: Oxford.
——— (1969) *The Judiciary* (2d ed.). Boston: Allyn & Bacon.
ADMINISTRATIVE OFFICE OF THE U.S. COURTS (1950) *Annual Report of the Director*. Washington, D.C.: Administrative Office of the U.S. Courts.
——— (1960) *Annual Report of the Director*. Washington, D.C.: Administrative Office of the U.S. Courts.
——— (1970) *Annual Report of the Director*. Washington, D.C.: Administrative Office of the U.S. Courts.
——— (1973) *Juror Utilization in U.S. Courts*. Washington, D.C.: Administrative Office of the U.S. Courts.
——— (1973-1974) *Payroll Data Tapes*. Washington, D.C.: Administrative Office of the U.S. Courts.
——— (1974a) *Annual Report of the Director*. Washington, D.C.: Administrative Office of the U.S. Courts.
——— (1974b) *Management Statistics*. Washington, D.C.: Administrative Office of the U.S. Courts.
——— (1974c) *Report to the Judicial Conference Committee to Implement the Criminal Justice Act*. Washington, D.C.: Administrative Office of the U.S. Courts.
ALDRICH, Howard E. and Jeffrey PFEFFER (1976) "Environment of Organizations," 2 *Annual Review of Sociology* 79.
ALSCHULER, Albert (1968) "The Prosecutor's Role in Plea Bargaining," 36 *University of Chicago Law Review* 50.
——— (1975a) "The Defense Attorney's Role in Plea Bargaining," 84 *Yale Law Journal* 1179.
———(1975b) "The Supreme Court, the Defense Attorney, and the Guilty Plea," 47 *University of Colorado Law Review* 1.
AMERICAN BAR ASSOCIATION, COMMISSION ON STANDARDS OF JUDICIAL ADMINISTRATION (1974) *Standards Relating to Court Organization*. Chicago: American Bar Association.
AMERICAN BAR FOUNDATION (1972) *1971 Lawyer Statistical Report*. Chicago: American Bar Foundation.
AMERICAN FRIENDS SERVICE COMMITTEE (1971) *Struggle for Justice*. New York: Hill & Wang.
AMERICAN LAW INSTITUTE (1934) *A Study of the Business of the Federal Courts*. Philadelphia: American Law Institute.
BAAR, Carl (1975a) "The Limited Trend toward State Court Financing," 58 *Judicature* 322.
———(1975b) *Separate but Subservient: Court Budgeting in the American States*. Lexington, Mass.: D.C. Heath & Co.
BALBUS, Isaac D. (1973) *The Dialectics of Legal Repression: Black Rebels before the American Criminal Courts*. New York: Russell Sage Foundation.
BAUM, Lawrence (1975) "The Judicial Gatekeeping Function: A General Analysis and a Study of the California Supreme Court." Presented at the Annual Meetings of the American Political Science Association, San Francisco.
BAZELON, David L. (1971) "New Gods for Old: 'Efficient' Courts in a Democratic Society," 46 *New York University Law Review* 653.
BENSON, Kenneth (1973) "The Analysis of Bureaucratic-Professional Conflict: Functional vs. Dialectical Approaches," 14 *Sociological Quarterly* 376.
BERKSON, Larry and Steven W. HAYS (1976) "Injecting Court Administrators into an Old System: A Case of Conflict in Florida," 2 *Justice System Journal* 57.
BIRD, Susan Willett (1975) "The Assignment of Cases to Federal District Court Judges," 27 *Stanford Law Review* 475.
BLACK, Donald J. (1973a) "The Boundaries of Legal Sociology," in D. Black and M. Mileski (eds.) *The Social Organization of Law*. New York: Seminar Press.
———(1973b) "The Mobilization of Law," 2 *Journal of Legal Studies* 125.
BLUMBERG, Abraham S. (1967) *Criminal Justice*. Chicago: Quadrangle Books.
BREITEL, Charles D. (1960) "The Quandary in Litigation," 25 *Missouri Law Review* 225.

BRENNAN, James T. (1966) *The Cost of the American Judicial System*. West Haven: Professional Library Press.
BURAK, Paul H. (1962) *History of the United States District Court for the Southern District of New York*. New York: Federal Bar Association.
BURGER, Warren E. (1976) "Agenda for 2000 A.D.—Need for Systematic Anticipation." Keynote Address at the National Conference on the Causes of Popular Dissatisfaction with the Administration of Justice, St. Paul, Minnesota.
CALABRESI, Guido (1965) "The Decision for Accidents: An Approach to Non-Fault Allocation of Cost," 78 *Harvard Law Review* 713.
——— (1970) *The Costs of Accidents: A Legal and Economic Analysis*. New Haven: Yale University Press.
CASPER, Gerhard and Richard A. POSNER (1974) "A Study of the Supreme Court's Caseload," 3 *Journal of Legal Studies* 339.
CHAMBLISS, William J. and Robert B. SEIDMAN (1971) *Law, Order and Power*. Reading, Mass.: Addison-Wesley.
CHASE, Harold W. (1972) *Federal Judges: The Appointing Process*. Minneapolis: University of Minnesota Press.
CHURCH, Thomas W., Jr. (1976) "Plea Bargains, Concessions and the Courts: Analysis of a Quasi-Experiment," 10 *Law & Society Review* 377.
CLARK, Tom C. (1971) "Judicial Reform: A Symposium," 23 *University of Florida Law Review* 217.
COFFEY, Alan R. (1974) *Administration of Criminal Justice: A Management Systems Approach*. Englewood Cliffs, N.J.: Prentice-Hall.
COLE, George F. (1970) "The Decision to Prosecute," 4 *Law & Society Review* 331.
COOK, Beverly B. (1970) "The Politics of Piecemeal Reform of Kansas Courts," 53 *Judicature* 274.
——— (1971) "The Socialization of New Federal Judges: Impact on District Court Business," [1971] *Washington University Law Quarterly* 253.
——— (1973) "Sentencing Behavior of Federal Judges: Draft Cases—1972," 42 *Cincinnati Law Review* 597.
COUNCIL OF STATE GOVERNMENTS (1970) *State Court Systems*. Chicago: Council of State Governments.
CYERT, R. M. and J. G. MARCH (1963) *A Behavioral Theory of the Firm*. Englewood Cliffs, N.J.: Prentice-Hall.
DANELSKI, David J. (1966) "Values as Variables in Judicial Decision-Making: Notes toward a Theory," 19 *Vanderbilt Law Review* 721.
DARLINGTON, R.B. (1968) "Multiple Regression," 69 *Psychological Bulletin* 161.
DAVIS, Kenneth C. (1969) *Discretionary Justice: A Preliminary Inquiry*. Baton Rouge: Louisiana State University Press.
DILL, Forrest (1977) "Contradictions in Judicial Structure: Law and Bureaucracy in American Criminal Courts." Presented at the Conference on Social Science Research in the Courts, Denver, Colorado.
DOLBEARE, Kenneth M. (1969) "The Federal District Courts and Urban Public Policy: An Exploratory Study (1960-1967)" in J. Grossman and J. Tanenhaus (eds.) *Frontiers of Judicial Research*. New York: Wiley.
DURKHEIM, Emile (1947) *The Division of Labor in Society*. Glencoe: Free Press.
EBERSOLE, J. L., V. T. CERF, L. S. LOCKETT, R. E. MARTIN, P. B. MORANDA, G. M. POND and E. H. URBANIEC (1969) *A Management and Systems Survey of the United States Courts* (2 vols). Anaheim, Calif.: North American Rockwell Information Systems Co.
EISENSTEIN, James (1973) *Politics and the Legal Process*. New York: Harper & Row.
FEDERAL JUDICIAL CENTER (1971) *1969/70 Federal District Court Time Study*. Washington, D. C.: Federal Judicial Center.
——— (1973) *Annual Report*. Washington, D. C.: Federal Judicial Center.
FEELEY, Malcolm M. (1973) "Two Models of the Criminal Justice System: An Organizational Perspective," 7 *Law & Society Review* 407.
——— (1975) "The Effects of Heavy Caseloads." Presented at the Annual Meeting of the American Political Science Association, San Francisco.
FISH, Peter G. (1973) *The Politics of Federal Judicial Administration*. Princeton: Princeton University Press.
FLANDERS, Steven (1976) *District Courts Studies Project: Interim Report*. Washington, D. C.: Federal Judicial Center.
FRANK, Jerome (1950) *Courts on Trial*. Princeton: Princeton University Press.
FRANKEL, Marvin (1975) "The Search for Truth: An Umpireal View," 123 *University of Pennsylvania Law Review* 1031.
FRANKFURTER, Felix and James M. LANDIS (1928) *The Business of the Supreme Court: A Study of the Federal Judicial System*. New York: Macmillan.

FREIDSON, Eliot (1973) "Professions and the Occupational Principle," in E. Freidson (ed.) *The Professions and Their Prospects*. Beverly Hills, Calif.: Sage Publications.
FRIEDMAN, Lawrence M. (1975) *The Legal System: A Social Science Perspective*. New York: Russell Sage Foundation.
FRIEDMAN, Lawrence M. and Robert V. PERCIVAL (1976) "A Tale of Two Courts: Litigation in Alameda and San Benito Counties," 10 *Law & Society Review* 267.
FRIENDLY, Henry J. (1973) *Federal Jurisdiction: A General View*. New York: Columbia University Press.
FRIESEN, Ernest C., Jr., Edward C. GALLAS and Nesta M. GALLAS (1971) *Managing the Courts*. Indianapolis: Bobbs-Merrill.
FUGUITT, Glenn V. and Stanley LIEBERSON (1974) "Correlation of Ratios and Difference Scores Having Common Terms," in H. L. Costner (ed.) *Sociological Methodology 1973-1974*. San Francisco: Jossey-Bass.
GALANTER, Marc (1974) "Why the 'Haves' Come Out Ahead: Speculations on the Limits of Legal Change." 9 *Law & Society Review* 95.
——— (1975) "Afterword: Explaining Litigation," 9 *Law & Society Review* 347.
GALLAS, Geoff (1976) "The Conventional Wisdom of State Court Administration: A Critical Assessment and an Alternative Approach," 2 *Justice System Journal* 35.
GAZELL, James A. (1972) "State Trial Courts: The Increasing Visibility of a Quagmire," 9 *Criminology* 379.
——— (1975) *State Trial Courts as Bureaucracies: A Study in Judicial Management*. New York: Dunellen.
GERSTENBERGER, Heide (1972) "Elemente einer historischmaterialistischen Staatstheorie," 2 *Kritische Justiz* 125.
GILLESPIE, Robert (1974) "Measuring the Demand for Court Services: A Critique of the Federal District Court Case Weights," 69 *Journal of the American Statistical Association* 38.
——— (1975) *Judicial Productivity and Court Delay: A Statistical Analysis of the Federal District Courts*. Washington, D.C.: National Institute of Law Enforcement and Criminal Justice, U.S. Department of Justice.
GLASER, William A. (1968) *Pretrial Discovery and the Adversary System*. New York: Russell Sage Foundation.
GOLDMAN, Jerry, Richard L. HOOPER, and Judy A. MAHAFFEY (1976) "Caseload Forecasting Models for Federal District Courts," 5 *Journal of Legal Studies* 201.
GOLDMAN, Sheldon (1966) "Voting Behavior on the United States Courts of Appeals, 1961-1964," 60 *American Political Science Review* 374.
GOLDMAN, Sheldon and Thomas P. JAHNIGE (1971) *The Federal Courts as a Political System*. New York: Harper & Row.
GORDON, Robert A. (1968) "Issues in Multiple Regression," 73 *American Journal of Sociology* 592.
GRAHAM, Fred P. (1970) *The Due Process Revolution: The Warren Court's Impact on Criminal Law*. New York: Hayden Book Co.
GREENBERG, David (1975) "Problems in Community Corrections," 10 *Issues in Criminology* 1.
GREENE, Harold H. (1972) "Court Reform: What Purpose?" 58 *American Bar Association Journal* 247.
GROSSMAN, Joel B. (1965) *Lawyers and Judges: The ABA and the Politics of Judicial Selection*. New York: Wiley.
——— (1966) "Social Backgrounds and Judicial Decision-Making," 79 *Harvard Law Review* 1551.
GROSSMAN, Joel B. and Austin SARAT (1975) "Litigation in the Federal Courts," 9 *Law & Society Review* 321.
GUERNEY, Edward J. (1972) "Crisis in the Courts: The Need for Reform," 46 *Florida Bar Journal* 196.
HABERMAS, Juergen (1975) *Legitimation Crisis*. Boston: Beacon Press.
HALL, Richard (1963) "The Concept of Bureaucracy," 69 *American Journal of Sociology* 32.
HART, Dieter (1974) "Vom buergerlichen Recht zur politischen Verwaltung," 3 *Kritische Justiz* 274.
HART, Henry M. and Herbert WECHSLER (eds.) (1953) *The Federal Courts and the Federal System*. Brooklyn, N.Y.: Foundation Press.
HARTJE, John (1975) "The Systems Approach to Criminal Justice Administration," 25 *Buffalo Law Review* 303.
HARVARD LAW REVIEW (1977) "Note: Plea Bargaining and the Transformation of the Criminal Process," 90 *Harvard Law Review* 564.
HAZARD, Geoffrey, Jr., Martin B. McNAMARA, and Irwin F. SENTILLES III (1972) "Court Finance and Unitary Budgeting," 81 *Yale Law Journal* 1286.

HEUMANN, Milton (1975) "A Note on Plea Bargaining and Case Pressure," 9 *Law & Society Review* 515.
HEYDEBRAND, Wolf (1973a) *Hospital Bureaucracy: A Comparative Study of Organizations*. New York: Dunellen.
HEYDEBRAND, Wolf (ed.) (1973b) *Comparative Organizations: The Results of Empirical Research*. Englewood Cliffs, N.J.: Prentice-Hall.
HEYDEBRAND, Wolf (1974) *Administration vs. Adjudication: An Organizational Analysis of Federal District Courts*. Research Proposal submitted to the Russell Sage Foundation.
HEYDEBRAND, Wolf and James J. NOELL (1973) "Task Structure and Innovation in Professional Organizations," in W. V. Heydebrand (ed.) *Comparative Organizations: The Results of Empirical Research*. Englewood Cliffs, N.J.: Prentice-Hall.
HIRSCH, Joachim (1974) "Zur Analyse des politischen Systems," in H.G. Backhaus *et al.* (eds.) *Gesellschaft: Beitraege zur Marxschen Theorie I*. Frankfurt: Suhrkamp.
HOFMANN, Werner (1968) "Die Krise des Staates and das Recht," 1 *Kritische Justiz* 1.
INSTITUTE OF JUDICIAL ADMINISTRATION (1971) *A Guide to Court Systems*. New York: Institute of Judicial Administration.
JACOB, Herbert (1972). *Justice in America*. Boston: Little, Brown.
JONES, Harry W. (ed.) (1965) *The Courts, the Public, and the Law Explosion*. Englewood Cliffs, N.J.: Prentice-Hall.
KAHN-FREUND, O. (1949) Introduction to Karl Renner's *The Institutions of Private Law and their Social Functions*. London: Routledge & Kegan Paul.
KAUFMAN, Herbert (1965) "The Growth of the Federal Personnel System," in W. S. Sayre (ed.), *The Federal Government Service* (2d ed.) Englewood Cliffs, N.J.: Prentice-Hall.
KAUFMAN, Irving R. (1962) "The Philosophy of Effective Judicial Supervision over Litigation," 29 *Federal Rules Decisions* 207.
KENNEDY, Louanne and Carroll SERON (1975). "Historical and Ecological Analysis of Organizational Formation: The Need for a Combined Approach." Presented at the Annual Meetings of the American Sociological Association, San Francisco.
KIRCHHEIMER, Otto (1961) *Political Justice*. Princeton: Princeton University Press.
KITTRIE, Nicholas N. (1971) *The Right to be Different*. Baltimore: Johns Hopkins University Press.
KLEIN, Fannie J. and Ruth J. WITZTUM (1973) "Judicial Administration 1972-73" [1972/73] *Annual Survey of American Law*, 717.
KLEIN, Richard (1957) "District Attorney's Discretion Not to Prosecute," 32 *Los Angeles Bar Bulletin* 323.
KOLKO, Gabriel (1963) *The Triumph of Conservatism*. Glencoe: Free Press.
KRISLOV, Samuel (1968) *The Supreme Court and Political Freedom*. New York: Free Press.
LANDES, William N. (1971) "An Economic Analysis of the Courts." 14 *Journal of Law and Economics* 61.
LAUMAN, Edward O. and Richard SENTER (1976) "Subjective Social Distance, Occupational Stratification, and Forms of Status and Class Consciousness: A Cross-National Replication and Extension," 81 *American Journal of Sociology* 1304.
LEIBENSTEIN, Harvey (1960) *Economic Theory and Organizational Analysis*. New York: Harper & Row.
LEVIN, Martin A. (1971) "Urban Politics and Judicial Behavior," 1 *Journal of Legal Studies* 193.
LIPSCHER, Robert D. (1975) *Annual Report, U.S. Courts for the Second Circuit, Fiscal Year 1975*. New York: U.S. Second Circuit.
LORCH, Robert S. (1969) *Democratic Process and Administrative Law*. Detroit: Wayne State University Press.
MACAULAY, Stewart (1966) *Law and the Balance of Power*. New York: Russell Sage Foundation.
MANIHA, John and Charles PERROW (1965) "The Reluctant Organization and the Aggressive Environment," 10 *Administrative Science Quarterly* 238.
MANNHEIM, Karl (1936) *Ideology and Utopia: An Introduction to the Sociology of Knowledge*. New York: Harcourt, Brace.
MATHER, Lynn M. (1973) "Some Determinants of the Method of Case Disposition: Decision-Making by Public Defenders in Los Angeles," 8 *Law & Society Review* 187.
McCONNELL, Grant (1966) *Private Power and American Democracy*. New York: Knopf.

McGOWAN, Carl (1969) *The Organization of Judicial Power in the United States*. Evanston: Northwestern University Press.
McINTYRE, Donald M. (1968) "A Study of Judicial Dominance of the Charging Process," 59 *Journal of Criminal Law, Criminology, and Police Science* 463.
McINTYRE, Donald M. and David LIPPMAN (1970) "Prosecutors and Early Disposition of Felony Cases," 56 *American Bar Association Journal* 1154.
MILESKI, Maureen (1971) "Courtroom Encounters: An Observation Study of a Lower Criminal Court," 5 *Law & Society Review* 473.
MILLER, Arthur S. (1968) *The Supreme Court and American Capitalism*. New York: Free Press.
MILLER, George A. (1965) "Models for Language," in S. Sternberg, V. Capecchi, T. Kloek and C. T. Leenders (eds.) *Mathematics and Social Sciences*. The Hague: Mouton.
MOHR, Lawrence B. (1976) "Organizations, Decisions, and Courts," 10 *Law & Society Review* 621.
MONTAGNA, Paul D. (1977) *Occupations and Society: Toward a Sociology of the Labor Market*. New York: Wiley.
MORIONDO, Ezio (1969) "The Value-System and Professional Organization of Italian Judges," in V. Aubert (ed.) *Sociology of Law*. London: Penguin Books.
MURPHY, Walter F. (1964) *Elements of Judicial Strategy*. Chicago: University of Chicago Press.
MURPHY, Walter F. and C. Herman PRITCHETT (eds.) (1974) *Courts, Judges, and Politics* (2d ed.). New York: Random House.
NATIONAL INDUSTRIAL CONFERENCE BOARD (1970) *Announcements of Mergers and Acquisitions*. New York: National Industrial Conference Board.
NEGT, Oskar (1973) "Thesen zur marxistischen Rechtstheorie," 6 *Kritische Justiz* 1.
NEWELL, Robert L. (1974) "A Comparison of Medical and Legal Management," 48 *Legal Economics News* 1.
NEWMAN, Donald J. (1966) *Conviction: The Determination of Guilt or Innocence without Trial*. Boston: Little, Brown.
NISKANEN, William A. (1971) *Bureaucracy and Representative Government*. Chicago: Aldine.
NONET, Philippe (1969) *Administrative Justice*. New York: Russell Sage Foundation.
——— (1976) "For Jurisprudential Sociology," 10 *Law & Society Review* 525.
O'CONNOR, James (1973) *The Fiscal Crisis of the State*. New York: St. Martin's Press.
OFFE, Claus (1973) *Strukturprobleme des Kapitalistischen Staates*. Frankfurt: Suhrkamp.
ORREN, Karen (1976) "Standing to Sue: Interest Group Conflict in the Federal Courts," 70 *American Political Science Review* 723.
PACKER, Herbert L. (1968) *The Limits of the Criminal Sanction*. Stanford: Stanford University Press.
PARNESS, Jeffrey A. (1973) *The Expanding Role of the Para-Judge in the United States*. Chicago: American Judicature Society.
PELTASON, Jack (1955) *Federal Courts in the Political Process*. New York: Random House.
PERROW, Charles (1965) "Hospitals: Technology, Structure, and Goals," in James G. March (ed.) *Handbook of Organizations*. Chicago: Rand McNally.
POLINSKY, A. Mitchell (1974) "Economic Analysis as a Potentially Defective Product: A Buyer's Guide to Posner's Economic Analysis of Law," 87 *Harvard Law Review* 1655.
POSNER, Richard (1972) *Economic Analysis of Law*. Boston: Little, Brown.
POUND, Roscoe (1906) "The Causes of Popular Dissatisfaction with the Administration of Justice," 29 *American Bar Association Reports* 395.
REICH, Norbert (1972) "Marxistische Rechtstheorie zwischen Revolution and Stalinismus: Das Beispiel Pashukanis," 2 *Kritische Justiz* 154.
REIFNER, Udo (1976) "Gewerkschaftliche Orientierung von Anwaelten in Frankreich," 9 *Kritische Justiz* 258.
RHEINSTEIN, Max (ed.) (1966) *Max Weber on Law in Economy and Society*. Cambridge, Mass.: Harvard University Press.
RICHARDSON, Richard J. and Kenneth VINES (1970) *The Politics of Federal Courts*. Boston: Little, Brown.
ROCHE, John P. (1968) *Courts and Rights, the American Judiciary in Action*. New York: Random House.

ROSENBAUM, Wolf (1972) *Naturrecht und positives Recht*. Neuwied: Luchterhand.
ROSENBERG, Maurice (1965) "Court Congestion: Status, Causes, and Proposed Remedies," in H. W. Jones (ed.) *The Courts, the Public, and the Law Explosion*. Englewood Cliffs, N. J.: Prentice-Hall.
ROSENBLUM, Victor G. (1974) "On *Davis* on Confining, Structuring, and Checking Administrative Discretion," in C. C. Havighurst (ed.) *Administrative Discretion: Problems of Decision-Making by Governmental Agencies*. Dobbs Ferry, N. Y.: Oceana Publications.
ROSS, H. Laurence (1970) *Settled Out of Court: The Social Process of Insurance Claims Adjustment*. Chicago: Aldine.
RUESCHEMEYER, Dietrich (1969) "Lawyers and Doctors: A Comparison of Two Professions," in V. Aubert (ed.) *Sociology of Law*. London: Penguin Books.
SAARI, David J. (1970a) "Open Doors to Justice: An Overview of Financing Justice in America," in James R. Klonoski and Robert I. Mendelsohn (eds.) *The Politics of Local Justice*. Boston: Little, Brown.
——— (1970b) *Modern Court Management: Trends in the Role of the Court Executive*. Washington, D. C.: United States Department of Justice.
——— (1976) "Modern Court Management: Trends in Court Organization Concepts—1976," 2 *The Justice System Journal* 19.
SARAT, Austin (1976) "Alternatives in Dispute Processing: Litigation in a Small Claims Court," 10 *Law & Society Review* 339.
SCHROYER, Trent (1973) *The Critique of Domination*. Boston: Beacon.
SCHUBERT, Glendon (1963) "Judicial Attitudes and Voting Behavior: The 1961 Term of the United States Supreme Court," 28 *Law and Contemporary Problems* 100.
——— (1965) *Judicial Policy-Making*. Glenview, Ill.: Scott, Foresman.
SCHUESSLER, Karl (1973) "Ratio Variables and Path Models," in A. Goldberger and O. D. Duncan (eds.) *Structural Equation Models in Social Science*. New York: Seminar Press.
SCHULMAN, Jay, Phillip SHAVER, Robert COLMAN, Barbara EMRICH and Richard CHRISTIE (1974) "Recipe for a Jury," in W. F. Murphy and C.H. Pritchett (eds.) *Courts, Judges, and Politics* (2d ed.). New York: Random House.
SCHUR, Edwin M. (1968) *Law and Society: A Sociological View*. New York: Random House.
———(1973) *Radical Non-Intervention*. Englewood Cliffs N.J.: Prentice-Hall.
SCHWARTZ, Richard D. and James C. MILLER (1965) "Legal Evolution and Societal Complexity" 70 *American Journal of Sociology* 159.
SCOTT, W. Richard (1966) "Professionals in Bureaucracies—Areas of Conflict," in H. M. Vollmer and D. L. Mills (eds.) *Professionalization*. Englewood Cliffs, N.J.: Prentice-Hall.
SELZNICK, Philip (1969) *Law, Society, and Industrial Justice*. New York: Russell Sage Foundation.
SERON, Carroll (1976) *Court Reorganization and Judicial Reform: An Analysis of the Federal Bankruptcy Court*. Ph.D. Dissertation, Department of Sociology, New York University.
SHAPIRO, Martin (1968) *The Supreme Court and Administrative Agencies*. New York: Free Press.
SHONFIELD, Andrew (1965) *Modern Capitalism: The Changing Balance of Public and Private Power*. London: Oxford University Press.
SKOLNICK, Jerome (1967) "Social Control in the Adversary System," 11 *Journal of Conflict Resolution* 51.
STINCHCOMBE, Arthur (1959) "Bureaucratic and Craft Administration of Production: A Comparative Study," 4 *Administrative Science Quarterly* 168.
SUDNOW, David (1965) "Normal Crimes: Sociological Features of the Penal Code in a Public Defender Office," 12 *Social Problems* 255.
THOMPSON, James D. (1967) *Organizations in Action*. New York: McGraw-Hill.
THOMPSON, James D. and Arthur TUDEN (1959) "Strategies, Structures, and Processes of Organizational Decision," in J. D. Thompson, P. B. Hammond, R. W. Hawkes, B. H. Junker and A. Tuden (eds.) *Comparative Studies in Administration*. Pittsburgh: University of Pittsburgh Press.
TOHARIA, José J. (1975) "Judicial Independence in an Authoritarian Regime: The Case of Contemporary Spain," 9 *Law & Society Review* 475.
TRUBEK, David (1972a) "Max Weber on Law and the Rise of Capitalism," 1972 *Wisconsin Law Review* 720.
——— (1972b) "Toward a Social Theory of Law: An Essay on the Study of Law and Social Development," 82 *Yale Law Journal* 1.

U.S. ATTORNEY'S OFFICE (1973). *Statistical Report*. Washington, D.C.: U.S. Department of Justice.
U.S. BUREAU OF THE CENSUS (1972) *City and County Data Tapes*. Washington, D.C.: U.S. Bureau of the Census.
U.S. CIVIL SERVICE COMMISSION (1971). *Annual Report of Federal Civilian Employment*. Washington, D.C.: U.S. Civil Service Commission.
U.S. DEPARTMENT OF JUSTICE (1973a) *National Survey of Court Organization*. Washington, D.C.: U.S. Department of Justice.
——— (1973b) *Annual Report of the Attorney General*. Washington, D.C.: U.S. Department of Justice.
VANDERBILT, Arthur (1938). "For Business Management of Federal Courts" 21 *Journal of the American Judicature Society* 195.
VETRI, Dominick R. (1964) "Note: Guilty Plea Bargaining: Compromises by Prosecutors to Secure Guilty Pleas," 112 *University of Pennsylvania Law Review* 865.
VINES, Kenneth N. (1964) "Federal District Judges and Race Relations Cases in the South," 26 *Journal of Politics* 338.
WEBER, Max (1947) *The Theory of Social and Economic Organization*. Edited by Talcott Parsons. New York: Free Press.
——— (1966) *Max Weber on Law in Economy and Society*. Edited by Max Rheinstein. Cambridge, Mass.: Harvard University Press.
WEINSTEIN, James (1968) *The Corporate Ideal in the Liberal State*. Boston: Beacon Press.
WELLS, Richard and Joel B. GROSSMAN (1968) "The Concept of Judicial Policy-making" in S. Goldman and T.P. Jahnige (eds.) *The Federal Judicial System*. New York: Holt, Rinehart & Winston.
WHEARE, K. C. (1964) *Federal Government* (4th ed.). New York: Oxford University Press.
WHEELER, Russel R. and Howard R. WHITCOMB (eds.) (1976) *Judicial Administration: Text and Readings*. Englewood Cliffs, N.J.: Prentice-Hall.
WILLIAMS, William A. (1961) *The Contours of American History*. Cleveland: World Publishing Co.
WINTERS, Glenn R. and Robert E. ALLARD (1965) "Judicial Selection and Tenure in the United States," in H. W. Jones (ed.) *The Courts, the Public, and the Law Explosion*. Englewood Cliffs, N. J.: Prentice-Hall.
WOLFE, Alan (1973) *The Seamy Side of Democracy*. New York: David McKay.
WOLFF, Robert Paul (ed.) (1971) *The Rule of Law*. New York: Simon & Schuster (Touchstone).
WRIGHT, Charles Alan (1970) *Handbook of the Law of Federal Courts* (2d ed.) St. Paul, Minn.: West Publishing Co.
ZEISEL, Hans, Harry KALVEN, Jr. and Bernard BUCHHOLTZ (1959) *Delay in the Courts: An Analysis of the Remedies for Delayed Justice*. Boston: Little, Brown.
ZINN, Howard (1971) "The Conspiracy of Law," in R. P. Wolff (ed.) *The Rule of Law*. New York: Simon & Schuster (Touchstone).