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# TOWARD AN ECONOMIC THEORY OF CONFLICT CHOICE

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This paper is a preliminary attempt to build a framework for the study of disputant choice. It represents an effort to join the insights from the general "dispute processing" literature with some pockets of economic analysis. The latter provides the beginnings of an analytical structure which I have attempted to expand to cover the concerns of the former. I am new at the task of analyzing dispute processing. While anyone interested in the law has been exposed to the problems of litigation choice and the role of alternatives to formal litigation, it is only recently that I have been faced with a systematic consideration of these issues. That exposure stems from my role in the "civil litigation research project," a joint venture of the Disputes Processing Research Program at the University of Wisconsin and the Program for Justice System Research at the University of Southern California. My role in the project began in earnest only this past February. I have scurried through the dispute processing literature in such fields as anthropology, sociology and political science. I also reviewed literature with which I was more familiar -- the economic analysis of the law and, in particular, litigation choice, as well as economic literature on collateral issues such as household choice, the economics of information and the economics of idiosyncratic relationships (what I have come to call the "economics of substitution"). My reading at this stage is woefully incomplete.

With these caveats (and more which will follow), I venture to some generalities about the present approaches. The disputes processing literature is rich in detail. It is also filled with sweeping theories. It is, however, a bit short on building the links between the detail and the theories.

It contains two general maxims of particular interest to my task. First, it generally supposes or concludes that the big win over the small. The big are often conceived of as "organizations" -- large, bureaucratic, efficient and generally market oriented. The small are "individuals" -- relatively short on resources and experience. A corollary to this maxim would view litigation among individuals as dominated by the "big" in the form of the "rich" -- the rich are willing to litigate more and are more successful with the tool. Second, it is generally supposed that the litigation process is becoming increasingly irrelevant or ineffective. The increasing prevalence of "lumping it" -- absorbing a loss without any formal disputing -- is viewed as a sign of this demise.

I am sure that I have slighted many important nuances in these broad statements. Even to the extent that I have captured the core of the maxims, there is controversy within the literature especially as to the second maxim. (Lempert 1978) However, these articulations do capture my impression of commonly held beliefs. I think there are important truths in these sweeping maxims, but there are also important exceptions. More importantly, there has been little explanation or critical appraisal of the factors which produce these results.

The literature on litigation by economists reveals a more careful consideration of the mechanics of choice. It has concentrated on the choice to settle or go to trial. This choice has been structured in terms of a small number of determinants. The

results of this simplified analysis are useful. However, as we shall see, there has been little attempt to identify those forces which cause variations in these determinants and little attempt to consider a broader range of disputing alternatives.

It is the purpose of the present paper to expand the analytical structure provided in the economic literature on litigation choice both in terms of the causes of variation in choice and in the scope or variety of choice. In the first section of this paper, I will briefly explore the simple litigation choice model of the law and economics literature. In the second section I will expand the inquiry of litigation or conflict choice in the contexts of "organizations." In the third, I will turn to "individual" litigants. There I will introduce a simple framework which will treat individual disputants in a manner analogous to the treatment of organizations. To allay the fears of those readers who are shocked by the suggestion of such a treatment, the analogous structure does not imply equality or uniformity of litigation or dispute skills between these two groupings. To the contrary, it suggests a mode for charting differences between the groupings as well as variations within the groupings.

## II. The Economic Approach to Settlement Choice

Within the so-called "law and economics" literature, there have been some important insights on litigation choice provided by a relatively simple analytical framework. This analysis has been focused on the narrow "settlement-trial" choice and employs a limited set of determinants. Both its power and its limitations are a product of this focus. The analysis was initially expounded

by William Landes (1971) and expanded by John Gould (1973) and Richard Posner (1973). The proposition is straightforward. Given that litigation (going to trial) is more expensive to the litigants than settlement, there exists a basis for a bargain -- settlement -- and, therefore, the avoidance of trial. Further, given the greater litigation expenses, why would anyone go to trial rather than settle?

The decision or choice is modeled in simple terms. Trial is seen as producing an uncertain or probablistic outcome. Thus, the expected outcome of trial has two components -- the probability of plaintiff success (p) and the stakes or award to be given (A). The process is described in terms of a simple binomial distribution but can easily accommodate more complex probability distributions.

The present analysis explains the choice to go to trial rather than settle in two ways: divergence between the perceptions of the two parties on the outcome of trial and variations in risk taste. I will handle the divergence in perceptions first by momentarily assuming the parties are risk neutral. Given this assumption, so long as the parties (plaintiff and defendant) perceive the trial outcome in the same way (and the trial costs exceed settlement costs), there will be no trials. It is important to stress two elements of this rather straightforward result. First, it does not matter whether the expected trial outcome is favorable to the plaintiff or not. The probability of success can be quite low or quite high. Second, it is not dependent on the distribution of the trial

costs. They could fall substantially on the plaintiff or substantially on the defendant.

So long as there exists a net total difference between settlement and trial costs and identical perceptions of outcome, settlement should always occur. The distribution of costs and the probability of success may be important in determining the terms of the settlement, but not on the occurrence or rate of settlement. In this connection, Burns' (1979) assertion that lower settlement rates in Indonesian courts relative to United States courts is due to the greater proportion of costs borne by defendants in the latter is difficult to understand. Proportion of costs borne by the parties may explain the rates of suit -- indeed litigation is filed less frequently in Indonesia. But it cannot stand as an explanation for different rates of settlement.

The present literature tends to stress difference in perceptions concerning the probability of success at trial. This divergence must be in the direction of "optimism" by both parties concerning their chances at trial. This optimism can be expressed in terms of a single probability -- the plaintiff's chance of success. Thus, if the plaintiff views his/her chances of success as greater than the defendant views the plaintiff's chances of success, a condition for trial exists. This condition is not sufficient. It then becomes a question of whether the perceived difference in the cost of trial (relative to settlement) exceeds the perceived difference in expected outcomes.

A simple numerical example might help at this point. Suppose that the cost of trial (relative to settlement) were $1000 to each contestant. If the parties viewed the chance of success at trial (and an award of $10,000) in the same way, there would not be a trial. Thus, assume that both view the plaintiff's chances of success as .4. The plaintiff would be willing to accept an amount in excess of $3,000 (.4 x 10,000 - 1,000) in lieu of trial. The defendant would be willing to pay an amount less than $5,000 (.4 x 10,000 + 1,000) in lieu of trial. There exists an overlap in the bargaining zones and settlement will occur.

However, if the parties diverge sufficiently in their perceptions of probabilities, trial would be the predicted outcome. Suppose the plaintiff viewed his/her chance of success as .5 which the defendant viewed the plaintiff's chances as .2. Now the plaintiff would accept no less than $4,000 (.5 x 10,000 - 1,000) and the defendant pay no more than $3000 (.2 x 10,000 + 1,000) in lieu of trial. There is now no overlap and trial should ensue. If the divergence had been smaller, settlement still might have been the outcome.

Now let us drop the assumption of risk neutrality. The choice to go to trial can now be associated with the parties' perceptions of the relative merits of a certain outcome (settlement) and an uncertain outcome (trial). Here we are dealing with the concept of risk taste. Thus, assume that both parties believe the plaintiff has a .4 chance of prevailing at trial with an associated reward of $10,000 and that the costs of trial (over settlement) are $1,000 to each.

If one or both parties prefer risk (view a .4 chance of $10,000 as more attractive than $4,000 with certainty), there exists a condition which may produce a trial. Thus, assume that the plaintiff prefers the bet (trial) to the certainty (settlement) at a premium of $2,000 (would require a payment of $6,000 to forego the bet) and the defendant places a similar premium on trial (would be willing to pay no more than $2,000 to avoid the bet). Now, despite the similar perception of the probabilities, no settlement would take place: the plaintiff's minimally acceptable settlement ($6,000 - $1,000 = $5,000) now exceeds the defendant's maximum acceptable settlement ($2,000 - $1,000 = $1,000). Thus if either party has sufficient risk preference, trial can be the outcome. The existence of risk averseness (the view that .4 chance of $10,000 is less attractive than $4,000 with certainty) would work in favor of settlement.

These two conditions for trial have received the attention of the analysts. The analysis as presented is useful and has been extended to questions about litigant choice and the impact of various rules of procedure. But a great deal remains to be explored. First, even given the simple parameters of the model, the observant reader will have noted that one element in the choice mechanism has not been considered -- divergence in perceptions concerning the award or stakes. In general, the analysts have assumed that the award has the same impact on both sides and is viewed similarly. In the context of a simple damage award, such an assumption is probably a fair approximation. However, there are contexts in which the stakes

(not just perceived outcome) can differ between the parties. [1] The literature in both economics and sociology suggest the "multiple litigation" element in which one or more of the parties may have a number of cases or claims of a nature similar to the one in question. To the extent that precedent or procedural rules give the individual trial or appellate decision weight in the outcome of subsequent litigation, the stakes may be magnified for one side relative to the other.

But this variation in stakes only scratches the surface. There may be non-pecuniary outcomes associated with trial such as vindication or spite which raise the attractiveness of trial relative to settlement for one of the parties. (There may be analogous non-pecuniary outcomes such as embarrassment or anxiety which make trial relatively less attractive also.) There may be valuable relationships which will be harmed more by trial (rather than settlement). I will return to this point when the discussion is broadened beyond the settlement-trial choice.

Consideration of divergence in stakes is only a part of the remaining tasks. More important are questions concerning the source of variation in the basic parameters. What conditions produce variation

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[1] The existing literature does consider variation in stakes but not variation in stakes between the parties. Thus, the existing literature notes that, other things equal, the larger the stakes in a given case the more likely it is that trial rather than settlement will occur. The reasoning is simple. The higher the stakes, the greater the chance that any divergence in perceived probability will exceed sufficiently the costs of litigation. To check this point, the reader need only substitute an award of $20,000 for the assumed award of $10,000 in the first numerical example. Even a smaller probability divergence (for example .5 and .4) could now yield a trial.

in stakes or variations in perceived probability? Posner (1973) has suggested that an important function of discovery is its ability to cause the parties to converge in their perceptions of trial outcome. This argument serves to remind us of the importance of knowledge or information in litigation choices. In general, factors which cause variations in information or sophistication (the reception or integration of information) can affect litigation choice.

Perhaps even more important is a consideration of those factors which would cause variation in the costs of litigation. The present literature simply assumes dollar amounts of litigation costs without analysis of the sources of variation.

In addition, all of these questions must be asked in a broader context than the settlement-trial choice.

The existing literature provides a simple framework to examine a narrow choice. It does not pretend to answer the questions I now pose. But my task forces me to extend the analysis.

## III. An Expanded View of Disputing--The Case of Organizations

In the next two sections of this paper, I will attempt to expand the scope of inquiry. The range of alternatives facing the potential disputant will be broadened. I will also inquire into the sources of variation in costs and stakes which, in turn, produce variation in disputant response.

This section will handle that broad category of disputants described as organizations. The next will discuss individual disputants. In the process, I hope to break down the dichotomy between these groupings. Here I will examine organizations not as monolithic entities whose size is an unabashed disputing virtue but rather a range of entities defined by organizational structure and, in turn, by the configuration of their productive processes. The venture again forces me into an area of sociology and economics about which at present I can claim little expertise. The insights will be sim although, I hope, interesting and useful.

The term "organizations" cover a broad range of entities -- General Motors, the corner grocery store, the Department of Justice, the American Medical Association, the Boy Scouts of America, etc. Indeed, as I shall indicate, it covers the other grouping, "individuals" (at least under my transformation to "households"). However, where the term is used in the dispute processing literature, it carries an image closer to General Motors or other large scale, profit-making, market-oriented entities. The determinants of choice by non-profit, even public entities, provide an interesting area of inquiry by itself. For present purposes, I will operate with the more conventional core image.

These organizations can face a wide range of potential conflict associated with their operations -- conflicts concerning their products (products liability or problems in more traditional contractual settings), conflicts concerning their inputs (labor problems or other contractual problems as buyers), or conflicts concerning their

basic operations (personal injury caused by employees or conflicts with stockholders). Thus, conflict choice (either prevention before the fact or resolution after the fact) are an inherent part of the production process. They are "products" of a sort -- activities which themselves impact on the ultimate goals of the organization (for profit-making organizations, this goal is often truncated by economists to "profit maximization").

Two elements deserve emphasis. Conflict choice is or can be an important and integral productive process or activity of the firm. It is an output of the firm's efforts. A market firm (and indeed a non-market firm) produces outputs by combining various inputs -- labor, capital, material inputs -- within a technological process or structure to obtain outputs. These outputs may be inputs into subsequent processes or sold directly on the market (so-called "final products").

Second, the range of conflict choice now under consideration has been expanded beyond the narrow confines of litigation choice. In connection with this expansion in scope I am prone to add a choice not often included among the spectrum of dispute processing alternatives -- prevention.

Any given societal actor (organization or individual) faces an incidence or probability for conflict. It is common to treat this incidence as given or exogenous to the actor and concentrate on the choices of modes of dealing with conflict when it arises. But the incidence itself varies and it becomes important to ask what factors affect this incidence. In fact, it is useful to go one step further and examine the effect of efforts by societal actors upon the incidence and the interaction of these "prevention"

efforts and other "post-conflict" disputing choices.[2] These prevention choices will be traced both for organizations and individuals. However, to first emphasize conflict choice as a "productive process" within the firm, it is perhaps easiest to first envision the disputing product in the narrow contexts of litigation. Thus, suppose our organization is involved in litigation -- a complaint has been filed and now choices such as investigation, discovery, settlement, type and scope of trial must be made.

Conventionally, we might consider the process simply. The firm hires lawyers and its productive process is simple -- it pays lawyers' bills and perhaps ultimately receives (or pays) an award. We might throw in a few tangential expenses such as the time of executives for depositions, some expenses for travel, investigation and some court fees. But an important element would be missing. Who would supervise the lawyers? In other words, would we expect a simple passive approach to litigation once the matter was placed in the hands of lawyers?

The answer would seem to me to vary among organizations. Consider, as a possible polar case, an insurance company involved in litigation over a substantial claim associated with its conventional coverage. Here we might expect allocation of organizational resources in supervising the legal action. These resources may take the form of established protocals or rules for settlement and legal resource investment or more flexible on-going activities of organizational officials in supervision and choice.

[2] In my own early work on "criminal victimization" (Komesar 1973), I examined the trade-off between household prevention activities and insurance. In a sense, insurance represents a "post-incident" mechanism--a mechanism which operates after the victimization and allows recovery of all or some of loss. Similarly, the broader range of disputing alternatives available on the civil side are themselves modes of recovery of a loss already occurred. As shall be s these "post-conflict" remedies interact with the "pre-conflict" prevention activ

Insurance companies are organizations whose basic operation is substantially concerned with dispute processing and, in the narrow context, litigation choice. It is for this reason that one might expect more resources allocated to litigation and disputing choices and policies than one would expect for an organization of similar size (payroll, total expenditure, total revenue, etc.) with less disputing activity.

Such a surmise stems from some basic economics of information or economics of knowledge. This is the crucial point. It seems to me that here there is a significant potential for analytical effort. Investigation, supervision and the production of rules, protocols and organizational apparatus is expensive. Returns to those expenditures often depend on the amount of the activity to be scrutinized. Thus, it would be foolish to set up an expensive apparatus which could potentially save 10% of the expenses associated with an activity which seldom occurred.

This is a variety of the "repeat players" idea which has led so often to the notion that bigness is better. One can envision economies of scale. But the scale is related to disputing or perhaps to disputing of a particular variety, not necessarily to the size of the entity in general. It is the economies of scale associated with conflict of the variety in question not the scale of the operation in general which is important.

In fact, it is quite feasible that as to size in general there may be diseconomies of scale in the disputing or litigation context. Here I will venture briefly into Earl Johnson's topic. It is often

asserted that in the context of large cases clients are less likely to scrutinize legal outlays than in small cases. Often the reasoning behind the perception is that if $10,000,000 is at stake, a misspent $90,000 expenditure will more likely be overlooked than would a misspent $9,000 expenditure in a $100,000 case simply because the stakes are higher. But on close inspection something is wrong with the reasoning.

As I have indicated, supervision of expenditure involves outlays for supervisory investigation, expertise, etc., which tend to be "fixed" (or do not increase in direct proportion to the size of the matter involved).[3] If such were the case, it is more likely (not less likely) that the potential of larger scale excess spending would engender scrutiny.

However, there are a number of other reasons which would explain the perceived lax client scrutiny in large cases. First, as the simple economic model in the last section indicated, a large stakes case will promote more litigation expenditures given the same divergence in perceptions of success.[4] But such an explanation does not indicate that the expenditure is "misspent." Second, there may be hidden subsidies in the tax context of the parties which reduces the actual private costs of the litigation step to a greater extent for the larger litigant.

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[3] This assumption is consistent with the general analysis of the economies of information or search. Stigler 1961, 1968. It appears explicitly in an analogous application concerning research and development or induced technological expenditures. Becker 1971, pp. 133-34.

[4] It should be noted that it will also engender more expenditures on estimating the true chance of success and, therefore, be less likely to produce the divergent perceptions.

But there remains another possibility. If larger cases are associated with larger entities, but not necessarily with entities who have a large proportion of their activities in disputing, we may observe diseconomies of scale. In large corporations, there exist substantive potential for separation between the interests of "owners" (shareholders) and managers. It is the former who are concerned primarily with costs savings. The latter's concern for costs savings usually derives from the concern for their continued employment and compensation (salary). Thus, the managers' concern is derivative of the shareholders' concern. More importantly, it depends on the ability of the shareholders to recognize success or failure in the managers' efforts.

Once again we return to a variety of analysis of the economics of information. The larger and more complex the corporation and the smaller the proportion of disputing to total output, the less likely it is that shareholders will react to variations in litigation costs. In fact, given some simple "economics of information" analysis, it might be argued that there will be a tendency to "overinvest" in litigation by corporate management. While shareholders might be relatively insensitive to increments in litigation costs, they might be more aware of a loss in a given case. That event is more dramatic. In turn, this fact might induce management to invest in avoiding even this rare but dramatic event beyond the point that a fully informed shareholder population might direct them.

The shareholders (those most concerned with net revenue) of large corporations with several tiers of management may find it ever more

difficult to supervise the spending of "their" money. They may only react to dramatic changes -- such as the loss of a large case. As such, those within the corporation who decide on litigation expenditure may be constrained less in their expenditure or constrained to investment more in avoiding the dramatic event.

I am not arguing that the large entity is "inefficient" in general. There would presumably be some competitive pressure against such structures. It is sufficient to argue that they are less efficient or effective at some forms of litigation or disputing supervision or cost control because of their organizational structure.

Thus, there appear to me to be two basic attributes worth considering in connection with costs of litigation for organizations -- scale of disputing and scale of general operation. The first might generate more effective litigation or dispute choice; the second might do the opposite. I should emphasize two features of this discussion. First, the directions of the effects are not as crucial as the reminder that there are several factors at work and that conceptual frameworks such as the economics of information (or technology) may aid in separating out effects and generating hypotheses.[5] Second, the effects of "scale of disputing" may be quite spec particular sorts of disputes. A large scale operation may seldom face produ

[5]The analysis contained in the sources in footnote 4 and their more complicated counterparts (Rothschild 1973) provide the ingredients for such an effort. In subsequent work, I hope to develop this framework further.

liability claims, but often deal with labor problems.

When we broaden the scope of dispute alternatives, other features of organizations come into play. I have suggested that one form of dispute behavior or, more importantly conflict behavior, is prevention. One can imagine a large number of preventative steps available to organizations. In general, two varieties come to mind. Unilateral efforts can be exercised to reduce product defects (and therefore suits by injured or disgruntled purchasers). Perhaps more interesting are bilateral efforts -- contracts or protocols aimed at eliminating or reducing conflict or dispute by either contracting for the contingency or, at least, establishing protocols or procedures for resolution of the disagreements at the least cost or with the least disruptive quality.

There are several points worth exploring here. First, like the various litigation choices considered previously, it is likely that the scale of operation and the scale of potential conflict will make a substantial difference in the frequency with which prevention is employed. Both unilateral and bilateral prevention require significant long-range planning and quite possibly specialized staffing. Low levels of potential incidence of conflict would provide limited incentives for such preventative activities. Thus, we would expect to see such efforts for organizations or firms with more specialization of activities and for activities with high potential conflict.

Second, the benefits of prevention may extend beyond the savings in the costs of litigation. These costs themselves extend beyond outlays for lawyers or even organizational efforts in support or supervision of litigation. Litigation (or even arbitration and mediation) are uncertain propositions. The organizations may find the variation or fluctuation in outcomes as a separate cost no matter what the expected net return of litigation.

More importantly, conflict or dispute may be disruptive of the other functions of the firm or organization. Labor disputes are the most obvious example. Because of a number of institutional constraints -- including those imposed by the labor laws, there are unique aspects of this buyer-seller (labor inputs) arrangement. Disruption--strikes--can involve cessation of all firm activity.

This is perhaps the most extreme example of the "continuing relationship" problem described by Macaulay (1963). Disputing can cause substantial disruption of relationships important to one or both of the parties. This impact may vary depending on the disputing technique employed. Clearly, prevention is the most desirable in this respect because no conflict arises. If circumstances change in a manner for which the parties have not set a protocol or agreed outcome, negotiation or simple acceptance by one of the parties may be superior to litigation which may sacrifice long-term advantages for short-term recovery.

There are two aspects of this phenomenon worth exploration: the conditions which produce valuable continuing relationships and the conditions which vary the rate at which they are traded off within the disputing process.

The value of continuing relationships is tied to the ability of the parties to substitute another partner. This process has been described as the "economics of idiosyncracy" (Williamson ) and tied to the "uniqueness of the relationship." I believe a broader based analysis could be tied to a term and framework which emphasized "the economics of substitution." The important variable is the cost of substitution. Every on-going relationship implies costs associated with disruption and acquisition of a substitute. These costs of substitution will vary with the type of product or service and with the importance of the purchase (or sale) to the total operation of the firm in question.

There has been substantial emphasis given to the duration of the relationship. Duration can be a proxy for the acquisition of information about another party's attributes -- abilities, reliability, etc. However, the uniqueness is not produced just by the long history of prior bargaining. In general, it is insufficient to point to a long buyer-seller relationship. A particular firm may have purchased some input from one seller for a long period. But if the input is readily available from alternate suppliers, there would be little long-term loss from disruption associated with aggressive disputing behavior.

The conditions for the long-term effect lie in the phrase "readily available." Labor relations form an extreme example of unique relationships. In a sense, there is a monopolistic element to the sale of labor. There may be a bilateral monopoly with the employer in question as the sole purchaser.

Alternative supplies of labor may not be readily available to the employer even if the labor input is not highly or uniquely skilled. Some attempts to hire elsewhere would violate legal constraints imposed by labor legislation. Others would cause disruption of supplies of other factors.

Labor relations is only one example. Other relationships may involve unique or complex products. A product would be complex in this sense if it had many attributes, some or all of which were expensive to regulate or check. Once a given seller revealed the capacity to meet the quality demands, it would be costly to lose the relationship in the sense that new start-up or search costs would be necessary to identify another supplier and to establish protocols or systems for quality control. In a sense, prevention efforts themselves may establish some level of uniqueness. The parties who have negotiated methods to deal with some sources of conflict would have to expend search and negotiation costs if they allowed a conflict not covered by the agreement to end the relationship.

Given the existence of the costs of substitution and their variation across types of transactions, we can now turn to the second aspect of the analysis: the conditions for trading-off continuing relationships. We observe litigation between parties in prior relationships even if disruption is the result. We observe strikes and disruptions which are costly and which, like the costs of litigation in the settlement-choice context, provide incentives for efforts at prevention or negotiation.

We observe these results because the short-term gains associated with the disruptive tactics -- litigation or striking -- outweigh the losses. At the stage of prevention, it is expensive to cover all possible contingencies - investigation, research, and planning can be expensive. The risk taste of the

parties may operate against binding themselves to an outcome when faced with an uncertain future. At the negotiation stage, the parties may perceive the short-term stakes as sufficiently sizeable and have such different perceptions of the litigation outcome to make litigation attractive even given the long term losses associated with disrupted relationships.

Here a general and perhaps obvious point should be made: the costs of litigation and parameters of perception and risk taste which were important in the narrow "trial-settlement" choice provide an important element in the broader choices of prevention and negotiation. Indeed, an even more general point is called for: an exogenous change in the parameters of any disputing or conflicting alternative can have important ramifications on choices over a wide range of conflict behavior.

We might then ask ourselves what it means to speak of a decrease in the use of formal adjudication as a means of dispute or conflict resolution. It is not uncommon to speak of "lumping it" as though it were a sign of some institutional deterioration. I have stayed away from normative considerations and will generally do so. However, the prior analysis may indicate that normative conclusions will be difficult.

Litigation may have decreased (if it has) due to a number of factors which are not obviously the sign of social decay. There may have been an exogenous increase in litigation costs due to the secular trend of higher real wages and therefore higher cost time inputs into litigation relative to other modes of dispute settlement especially doing nothing. Is this bad?

It may have decreased because the contexts of dispute or conflict in some areas have stabilized so that prevention, or negotiation, have become more feasible alternatives. In part, this stabilization could be the product of judicial efforts which have clarified areas of the law such that disputant perception is likely to converge producing settlement on a pre-litigation level.

The configuration and scale of societal activity may have produced conditions which justify the planning, negotiation and bargaining techniques which, in turn, make non-litigation disputes settlement or prevention more feasible.

I do not mean to argue either that these suggestions are obviously benevolent or that they explain all or most of the trends toward decreased litigation. These are hypotheses which deserve exploration. But I do suggest that the implication of the trends are not obvious precisely because of the many interacting alternatives and, therefore, the many potential sources of variation which can produce the single observation.

## IV. AN EXPANDED LOOK AT DISPUTING--THE CASE OF INDIVIDUALS AND HOUSEHOLDS

We observe individual litigants as well as organizational ones. Like organizations, individuals must allocate scarce resources to litigation. Like organizations, individuals are faced with the settlement-trial decision with the same general parameters: stakes, costs, tastes. We might treat individuals, as we did organizations, at the outset of the last section, as merely hiring lawyers. The only resource in question would then be these outlays. But as with organizations, other resources, or combinations of inputs are actually involved even in the narrow trial-settlement choice. Individuals as litigants must appear at trial, and aid their lawyers in preparation of trial. Thus, there are costs in the form of the time of the individual which must also be considered. Indeed one could conceive of various combinations of laywers' and litigants' time in the "production" of the trial.

When the disputing spectrum is expanded, the potential for realistic variation in the use of lawyers and the use of disputant time increases. The disputants may negotiate without a lawyer, complain to a governmental agency, or expend efforts in reducing the incidence of conflict itself (prevention). Thus, like the organization, the individual can be viewed as a "firm" with a variety of alternatives and a variety of combinations of inputs in achieving varying levels of success in conflict prevention or resolution.

It has been common for both the social sciences and legal institutions to treat the individual unit not as a single individual but rather as a somewhat larger grouping--the household. In a sense,

the household is often the significant functioning entity in the production of a wide variety of activities. Children, meals, recreation, etc. are not really produced by individuals but rather by large units--households.

Thus, an analyst of disputing could easily be drawn to a framework which viewed the "individual" as part of a household and the household as a "productive" or choice unit analogous to the market firm. There has been such a movement within the field of economics itself. It has evolved a theoretical construct called "household production theory."

When the field of economics dominantly limited its scope of inquiry to market activities, households were viewed as passive entities which consumed goods and services from the market. These goods and services were obtained for pecuniary payment which was in turn obtained by sale of labor on the market. What households did within the confines of their nests was off limits: goods and services came in one door and workers came out the other.

The conventional approach functioned passably for the study of market activities, but it was awkward and unyielding when it came to non-market activities. There were "non-market" activities close enough to the market concerns to soon cause problems with the conventional conception. If labor was important in market activities, then the determinants of its quantity and quality were important. But this interest required some inquiry into household or non-market choices. In particular, "fertility," the potential quantity of labor and "human capital," the "quality" of labor focused interest on the household.

The pressure yielded a different approach to the household. The transformation was basically straightforward. Households were treated as small firms or factories. Goods and services from the market were viewed as inputs into the production of more amorphous but more sensible final products: meals, health, childrearing, recreation, etc. Goods and services were combined with other inputs--dominantly the time of household members directly employed in household activities. Thus, meals were produced by material inputs (food, condiments, candles, beverages), capital inputs (stoves, refrigerators, dishes, etc.) and the time in preparation (shopping, cooking, setting the table, washing the dishes, etc.).

The major importance of the new emphasis was the explicit attention to household time. The new approach meant a broader recognition of time than the conventional approach. Under the latter, time was recognized only to the extent that it was allocated to market activities in return for wages and, in turn, for goods and services from the market. In effect, the budget of the household was its pecuniary income. This implied that there were only 40 relevant hours per week. Under the newer approach, some of the household's time was allocated to the market and, in turn, to the acquisition of the market inputs--goods and services--which were part of the set of inputs into household production. But there remained another part of the set of inputs--time directly spent in household production. Now, the time budget included the full 168 hours per week.

This reformulation allowed for some interesting insights into a wide variety of human activity such as leisure time and recreational activities (Owen 1969), medical services and the production of health (Grossman 1972), modes of passenger transportation (Gronau 1970), criminal victimization (Komesar 1973), marriage (Becker 1973, 1974; Freidan 1974), fertility (Ben Porath 1973, Michael 1973, Schultz 1973, Willis 1973), personal injury loss (Komesar 1974), and criminal activities (Ehrlich 1973). As can be seen from the list, I have employed the framework in several settings and I refer the reader to the explanations there and also to the basic work on the subject: Becker (1965), Lancaster (1971), Michael and Becker (1973).

For present purposes, the household production theory has some interesting advantages. First, it treats household and organizations in an analogous manner--productive units or firms who allocate similar inputs in the process of conflict prevention and resolution. Second, it gives explicit and integrated attention to an important resource whose cost can easily be ignored or slighted in other frameworks--household time expended on conflict alternatives. To the extent that households vary in the value of their time inputs, they may vary in their conflict choices. Thus, one hypothesis is that variation in the value of household time inputs will produce variation in conflict choice. In particular, as the opportunity cost of household time increases, one would expect conflict choices which were less time intensive to appear more attractive. I have alluded to this effect on a secular level in the discussion of "lumping it" and the trends in litigation at the close of the previous sections.

But the framework suggests other insights. In the context of organizations, I suggested certain structural factors such as size or concentration on particular activities which might affect the conflict choice and productive processes of those firms. These factors affected the setting in which the basic conflict inputs were combined and, therefore, the cost conditions and the ultimate conflict choices. There are structural factors which affect the productivity or capacity of households.

Education--both formal and informal--is one such attribute which links closely with even a narrow sense of household production. The productivity of a firm--market or non-market--is a function of technology as well as the amount of factor inputs. Education, experience, native intelligence, etc. are household counterparts of a greater technology or productivity in market firms. For any set of inputs, the output would be higher given this greater productivity.

Thus, a household better able to understand and deal with a broad range of alternatives, choose and vary market inputs (such as lawyers), and appreciate the range of outcomes may be better able to produce a given outcome at less cost--less outlay of the basic inputs.

There are a wide range of other household attributes which may affect conflict choices. Many of these--like elements of capacity--are endowed states vis a vis conflict choice. They are exogenous to the process of conflict choice and cannot be considered variable for a given household in the context of

conflict choice. Here location, race, and size of the household may be important. These are commonly referred to as "environmental variables" in the household production literature.

I will discuss some of the implications of location subsequently. To the extent that some forms of disputing may be biased along racial grounds, one might suppose that efforts by disputants who have minority racial characteristics will yield lower returns than similar efforts by majority households.

Household size and makeup can act in many directions. A household that has a larger proportion of children may have higher opportunity costs for the time of adult members in other activities such as disputing. Larger households may in general have higher incidence of conflict--both intrahousehold and interhousehold. On the other hand, greater size may also provide more available time and material resources as well as greater expertise and experience.

It may be useful at this point to see the analysis in operation in the context of a more conventional household activity or product--thermal comfort. Under the conventional theory, the purchase of heating fuel or sweaters would be the end of the analysis. To the extent that there were substitutes among heating fuels, a rise in the price of one might be considered important in predicting the consumption of the other. But study of these interactions was limited to market products. Here household production would expand the possibility of these interactions. If the price of all conventional fuels rose, we might observe use of less conventional fuels

such as wood (unconventional by recent standards). But would all households respond similarly? Wood burning generally requires more substantial inputs of time by the household--cutting, stacking, feeding the fire, removing ashes, etc. It is likely that households with less valuable time inputs available would first turn to the wood burning substitute. Environmental variables also play a substantial role here. Certainly the general climate will determine both the mix of inputs and the end output. Despite greater efforts and resources expended, it is unlikely that the average January temperature in a Wisconsin home will equal that in a Florida home.

Before turning to a discussion of stakes in the household context, there are two general points which require discussion. First, I have emphasized somewhat different factors in the household firm than in the market firm context.

It is worth noting the differences between market and household firms which cause me to emphasize these different factors. One household factor emphasized is the time of the household participants. I did not emphasize variation in the value of labor inputs in the market firm context. The omission was not an oversight. I assume that there is sufficient mobility of labor and, particularly executive labor inputs, to make it unlikely that there will be significant variation among firms in this attribute.

In general, it is far more likely that household firms will be defined by the attributes of its participants or personnel -- such as the value of time or the level of education and experience. Mobility is substantially limited

by social and legal constraints. Although even here, choice and mobility have been considered (Becker 1973, 1974).

In turn, although I will speak of scale of operation briefly subsequently, I have not emphasized either scale of operation nor variation in mix of firm activity in the household context as I did in the market firm context. This stems from my perception that there is relatively little variation in scale of activities or activity mix among households especially relative to the more heterogeneous, market firm category.

These choices on my part are hardly irreversible. They are guesses for present purposes. Indeed I suspect that given further thought I may find more to analogize in the two frameworks.

Second, I have suggested that variation in value of time and variation in capacity or productivity should produce variation in conflict choice. By this time, the astute reader even if he/she accepts the importance of these two factors, must be asking themselves which variations in conflict choice match with which variations in value of time or variation in education. I have suggested that the more time-intensive forms will seem the least attractive to the household whose time inputs are more valuable. But this merely delays the question. I do not know which forms of conflict prevention or resolution are least time intensive--except perhaps one: lumping it. I also do not know which forms match best with attributes of capacity. It may be that formal education is best matched with more formal procedures. But that is little more than a wild guess.

Here my own limited expertise runs out. Here those with more experience with disputing alternatives, who may also be interested in the analytical framework I propose, may be able to suggest meaningful hypotheses.

Let us now turn to questions concerning stakes. In the context of organizations, I suggested that the "economics of substitution" would affect the long-term implications of disputing behavior. This "continuing relations" effect is sometimes referred to as the "multiplex" effect in the individual context. The anthropological literature is apparently replete with examples of cultures where relationships with others in extended families, towns and even regions are so important that disruption is a serious element to be weighed in conflict choice (Nader and Todd 1979). Often these closely knit cultures provide informal mechanisms which resolve disputes with less disruption than the formal alternatives and are significantly preferred for that reason. It would be interesting to speculate on the attributes of these cultures which produce these configurations of relationships. Are there analogues to the determinants of the "economics of substitution?" The analysis suggested by Felstiner (1974) with its emphasis on social and economic mobility as determinants of the availability of (demand for) disputing institutions implies the existence of such factors.

Indeed, Felstiner (1974, 1975) and others argue that within our society these informal mechanisms are not available. While I find Felstiner's general

analysis persuasive, I wonder whether our society does not possess variation sufficient to produce some pockets of informal decision-making. One general example is inherent in the "household firm" framework. As Coase (1937) notes, activities are handled within market firms rather than subcontracted where the firm mechanism with its internal controls requires less resources than the negotiation and transactions costs associated with market purchase (subcontracting) of the given productive stage. Posner (1977) has picked up the point and suggested that the household firm has certain advantages over even the market firm associated with the positively overlapping or interacting utility functions of the household "firm" members. This set of relationships is highly special to the participants. The costs of substitution associated with disruption of these relationships must be substantial. Therefore, intrahousehold conflict choice must reflect many of the attributes of extended families and village groupings in other cultures which come closer to Felstiner's concept of "technically simple poor societies." (TSPS).

Beyond the household, there may exist multiplex relations and even informal networks in those settings within our society which most closely resemble TSPS. One might imagine rural or small town life where there has been little geographic mobility and where, therefore, cooperation and social interaction depend on long-term relationships and perhaps, where informal ties and institutions provide alternative analogous to TSPS and unavailable to the transient, urban populations. The occupation and living patterns may affect the frequency of non-disruptive conflict resolution. With gross measures, there may appear to be more "lumping it" in such settings.

In general, I believe we have too easily assumed that informal networks or choices do not play an important role in our society. While village courts or elders on the village square may not be in evidence, intrahousehold resolution of disputes is. Beyond this level, there may be available many other techniques which we now relegate to the residual of "lumping it" which provide modes more analogous to (if less observable than) techniques observed in simpler societies. In this connection, an imaginative use of the framework suggested by the "economies of substitution" might yield a more sensitive picture of informal dispute or conflict resolution in the United States.

Prevention is a trickier subject in the "household firm" than in the "market firm" setting. It is likely that the incidence or probability of conflict varies substantially among households. My own work on criminal victimization (a subset of conflict) revealed substantial variation based on pupulation density, race, marital status, education, income, as well as other standard socioeconomic variables (Komesar 1973). For civil conflict or disputing, one might imagine a number of factors including most of those listed for criminal victimization which would affect incidence.

However, many of these effects are exogenous. It is unlikely that households alter these factors with the purpose of reducing conflict incidence. While one can visualize market firms altering modes of production or expanding resources on negotiation and planning in an attempt to prevent conflict, it is not so easy to visualize analogous steps by households. However, perhaps due to an economist's bias, I would expect to find actual conflict prevention activity by household. In the criminal victimization context, one might envision locational change, altered social patterns, purchases of locks, dogs, guns, etc., as prevention measures.

Civil conflict is more diffuse and less dramatic. The "economics of information and planning" may not justify such substantial efforts. However, households may allocate both time and material resources in search efforts in an endeavor to find and obtain products (or services) which will possess less chance of going wrong. They might alter patterns of travel to decrease the possibility of accident either as perpetrator or victim.

Whatever the efforts taken, it is interesting to return to a theme suggested in the last section. The amount expended in prevention is directly related to the availability (price or cost) of alternatives. Thus, if there were a cheap, accurate and generous system to litigate consumer complaints, there would be less need for (and less of) search for product quality.

Before closing the discussion of the "household firm" and dispute choice, I should like to return to the maxim or hypothesis that "rich people or households litigate more" and examine it in terms of the analysis suggested here and the information roughly necessary to test it. The proposition may be true but there is a great deal going on within its seemingly simple bounds. I suspect that those who propose this hypothesis simply associate the presence of more money with more litigation as part of the general proposition that "rich people do everything more." Clearly it is wise to examine the steps in the analysis more closely.

First, I suppose consistent with their perverse nature, most economists would immediately see grounds to reach the opposite conclusion: "the rich litigate less." If the "richness" is the

product of wage or time income, the time price of litigation would increase as income increased. Thus, other things held constant, the hypothesis would be "rich people litigate less."

However, there are other effects. First, litigation may be the least time-intensive approach to the conflict. Second, the stakes may be pecuniary stakes which also increase with income. Thus, it is important to attempt to gain independent and accurate measures of pecuniary stakes. Without such measures, variations in income would pick up variations in stakes. Third, we may be picking up "education" or other human capital effects. To the extent that income and education are positively correlated (and they are) and education is positively correlated with productivity in litigation, the "income" variable may be picking up another nonincome effect. The "richer" household may in fact be prepared to allocate less time to litigation than the "poorer" one, but may get more out of the smaller allocation. This point stresses the importance of good measures of education or other human capital.

Fourth, we could be picking up a "pure income" effect which swamps the "time price" effect. To the extent that the sole goal of the litigation is pecuniary, this would not occur. But there may be "joint products" -- spite, pride, vindication -- which may also be at play. This is an income effect, but it translates the seemingly simple propositions that "rich people litigate more" to "spite, pride, or vindication are superior goods (goods which become proportionally more attractive as income increases)."

This discussion does not exhaust the possibilities of the "rich litigate more" analysis. It might be that income which is correlated with expenditure and, therefore, more transactions might be a proxy for household sophistication or scale in litigation. I suspect that the relatively small variations in expenditure and income along with low frequency of litigation for any household make this effect unlikely. However, it suffices to warn us that many effects may be operating and the necessity of obtaining reliable measures of surrounding variables and of making careful statements.

Summary

I have attempted to build an analytical framework which addresses the issues associated with conflict choice. I began with the simple, narrow but useful framework suggested by the economic analysis of the trial-settlement choice. I attempted to expand that analysis in two ways. First, I expanded the scope of inquiry to a larger range of conflict choice. In that connection, I introduced the idea of "conflict prevention." Second, I attempted to build a framework which would reveal the determinants of such basic variables as litigation costs, and stakes. Here the basic building block was an expanded theory of the firm. I applied this analysis to both market firms (organizational disputants) and household firms (individual disputants). I suggested that conflict choice by market firms might be examined productively by emphasizing scale of disputing or potential conflict and scale of total operation. In the context of the household, I stressed the value of

the time of household members and the inherent capacity or productivity of these household members.

This attempt is a preliminary effort to build a general theory about a complex and important subject. It suffers from my own low level of expertise in the particulars of the disputing process and the rich and extensive literature on the subject. As with most efforts of this sort, each attempt to articulate a framework produces new insights and texture to its author. In that sense, the writing of this draft has been a valuable learning experience for me. Hopefully, it provides some interesting and useful material for others as well.

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