LAW AND ECONOMICS: MEASURING THE ECONOMIC EFFICIENCY OF COMMERCIAL LAW IN A VACUUM OF FACT

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This Article originated in my perusal of a new casebook on commercial transactions. A portion of the book is derived from and concentrated my attention on two articles: Security Interests and Bankruptcy Priorities: A Review of Current Theories by Alan Schwartz, and Secured Financing and Priorities Among Creditors by Thomas Jackson and Anthony Kronman. Both articles apply economic analysis to the

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3 Jackson & Kronman, Secured Financing and Priorities Among Creditors, 88 YALE L.J. 1143 (1979). Professors Jackson and Schwartz have responded to the present Article in Jackson & Schwartz, Vacuum of Fact or Vacuous Theory: A Reply to Professor Kripke, 133 U. PA. L. REV. 987 (1985). For the present I shall merely comment (a) that this response is principally concerned with that favorite topic of economic polemicists, the other fellow's methodology; but (b) that it deals only superficially and with gross distortions with the substance of the present Article, see infra notes 35, 40, 80; and (c) that it deals scarcely at all with the substance of my criticisms
questions why chattel security is permitted to exist and whether its protections should be changed under article 9 of the Uniform Commercial Code (UCC) and the Bankruptcy Code.\(^4\)

Professors Jackson & Kronman set out to explore the justification and proper scope of the purchase money priority under U.C.C. § 9-312.\(^5\) As a preliminary matter, they consider whether any chattel security is justified. They conclude that taking security is economically efficient and, therefore, justified because security serves as a monitoring device and can reduce the total monitoring cost for all creditors.\(^6\) I agree with the conclusion, but not with their reasoning.

Professor Schwartz questions the priorities accorded to security interests under the Bankruptcy Code. As a preface, he also considers the justification for chattel security. He rejects Jackson & Kronman's reliance on monitoring costs because he sees no need for monitoring in the case of short-term loans, yet he finds that security is nevertheless taken.\(^7\) After canvassing other economic theories for possible explanations, he concludes that the taking of security cannot be pronounced either efficient or inefficient and, therefore, that inadequate grounds exist to tamper with the present law of secured credit.\(^8\)

There is nothing wrong with the questions these articles ask. Indeed, I always ask my classes essentially the same question: why should the law allow discrimination in favor of certain creditors, through the device of contractual security, while invalidating discrimination in favor of other creditors through contractual arrangement with the debtor for preferred payment?\(^9\) This question becomes more difficult to answer as broadly encompassing security arrangements, such as after-acquired property clauses,\(^10\) future advance clauses,\(^11\) and the "floating lien,"\(^12\) of their respective articles.

\(^5\) See Jackson & Kronman, supra note 3, at 1144.
\(^6\) See id. at 1158-64.
\(^8\) See id. at 33, 37.
\(^9\) The UCC does permit contractual discrimination against a creditor (in other words, subordination) by contractual arrangement with it. See U.C.C. § 9-316 (1978).
\(^10\) After-acquired property clauses permit a secured creditor to obtain a security interest on property acquired by the debtor after the credit is extended. See U.C.C. § 9-204(1) & comment 1; see also id. § 9-108 & comment 1 (validating interests in after-acquired property).
\(^11\) Future advance clauses permit a creditor to obtain a present security interest for future advances of credit contemplated by the security agreement but not yet made. See U.C.C. § 9-204(3) & comment 5.
\(^12\) The term "floating lien" refers to a security interest that, by reason of after-acquired property and future advance clauses, "floats" over all of the debtor's inventory and receivables and possibly its equipment. It may include all of a debtor's assets, presently owned or later acquired. While the debtor is free to dispose of its inventory and
come into wider usage. Professors Countryman and Coogan, for example, have expressed their disapproval of increasingly expanded security interests.\textsuperscript{13}

Since both Jackson & Kronman and Schwartz conclude by proposing to leave the law unchanged for the present, I have no call to take issue with their conclusions. Rather, I write because these articles proceed in a world of academic reasoning reminiscent of the cloister and unfounded on any discussion of the factual world of commerce. They do not display an understanding of the role played by the system of secured financial credit in developing a distribution system for the great outpouring of goods that has occurred in the past century. In my opinion, they are unconvincing for that reason.\textsuperscript{14}

\textsuperscript{13} See Countryman, Code Security Interests in Bankruptcy, 75 Com. L.J. 269 (1970). Professor Countryman states, "[M]any practitioners and bankruptcy referees tell me... more and more bankruptcy cases emerge with every scrap of the bankrupt's property covered by some sort of a Code security interest.... That means, of course, that nothing will be distributed to any unsecured creditor, with or without priority." Id. at 269. Professor Countryman goes on to say that "[w]hatever may have been thought in an earlier day, it is now established that the bankruptcy power is adequate to prevent the secured creditor from reaching his collateral either immediately or at all." Id. at 280.

Professor Coogan has indicated concern about the ease of creating broadly encompassing security interests against users, as distinguished from inventory and receivables financing, made possible by notice filing and the validation of after-acquired property clauses and future advance clauses. See Coogan, Article 9 of the Uniform Commercial Code: Priorities Among Secured Creditors and the "Floating Lien," 72 Harv. L. Rev. 838, 879-80 (1959).

I raised the same question myself but was overruled during the very early stages of the drafting of the UCC, even before Professor Coogan joined the group working on secured transactions. Subsequently, I have come to believe that, although notice filing presents dangers to an uninformed person, one who is aware of how the UCC works has ample means of protecting herself. See Kripke, UCC Brief No. 5: Recapitulation of Priority Problems Under the Uniform Commercial Code, Prac. Law., Mar. 1967, at 23, 25-27. In my opinion, notice filing for user financing has not worked badly. The convenience of having a uniform filing procedure in all situations outweighs the few cases where the expectations of incautious persons have been disappointed.

\textsuperscript{14} If the most vocal wing of the Conference on Critical Legal Studies (CCLS) were to take notice of this Article, they would no doubt "trash" it as an example of purported legal reasoning used "instrumentally" to support current economic and financial arrangements. See, e.g., Kelman, Trashing, 36 Stan. L. Rev. 293 (1984). The message of this Article is that the legal structure of secured credit developed to make possible mass production and the distribution of goods, and I would hope that the Law and Society wing of CCLS would find merit in that analysis. See Schlegel, Notes Toward an Intimate, Opinionated, and Affectionate History of the Conference on Critical Legal Studies, 36 Stan. L. Rev. 391, 393-97 (1984). I unashamedly think that these developments have increased human welfare, much as I deplore Archie Bunkerism, some of the other pop-culture aspects of our society, and the social disequilibrium that has resulted from the rapid rate of change in this century. My nonphilosophic, nonjurisprudential position is that neither critical legal studies nor law and economics has as much relevance to human welfare as patient, incremental amelioration of law
I suspect, however, that these articles are not much different from other articles that apply the techniques of law and economics to the commercial world. I am concerned because these abstractions, and reliance on secondary sources for an understanding of the business world, are very different from the techniques that Robert Braucher and I applied as drafters of the present form of UCC article 9, and very different from the kind of reasoning that we submitted to the Review Committee composed of practicing lawyers, judges, and academics of an older generation. My present colleagues and I on the Permanent Editorial Board continue to apply to the UCC "conventional" reasoning of the sort that these articles reject in favor of economic analysis and belittle as "the accepted wisdom."

My concern is not based on any broad opposition to the applica-
and economic organization and patient correction of imperfect efforts, abuses, and inefficiencies in governmental intervention.

Other authors have leveled similar criticisms at law-and-economics scholarship. See, e.g., Shuchman, Theory and Reality in Bankruptcy: The Spherical Chicken, Law & Contemp. Probs., Autumn 1977, at 66 (commenting on Meckling, Financial Markets, Default and Bankruptcy: The Role of the State, Law & Contemp. Probs., Autumn 1977, at 13). Meckling argues that if the consequences of bankruptcy are made less onerous, more debtors will elect bankruptcy, lending will cost more, and lenders will pass on these increased costs to borrowers. See Meckling, supra, at 22-27. Under these assumptions, bankruptcy reform would be self-defeating. Shuchman points out that neither of Meckling's two premises is empirically supported: borrowers' decisions to enter bankruptcy do not follow the model of economic rationality, and lenders do not always pass on to borrowers increases in their cost of lending. See Shuchman, supra, at 76-91; see also S. Maital, Minds, Markets and Money: Psychological Foundations of Economic Behavior (1982) (pointing out psychological factors that determine behavior but are ignored by economists).

Other lawyers, both academics and practitioners, have pointed out the unrealistic assertions of economists in the area of corporate and commercial law. For example, the lawyers who drafted American Law Institute, Principles of Corporate Governance: Analysis and Recommendations (Tent. Draft No. 2, 1984), stated that the assertions underlying some of the recent economic literature on agency costs "appear highly questionable in the context of publicly held corporations." Id. § 3.02 reporter's note at 75. The articles referred to are Fama, Agency Problems and the Theory of the Firm, 88 J. Pol. Econ. 288 (1980); Fama & Jensen, Agency Problems and Residual Claims, 26 J.L. & Econ. 327 (1983); Fama & Jensen, Separation of Ownership and Control, 26 J.L. & Econ. 301 (1983); Jensen & Meckling, Theory of the Firm: Managerial Behavior Agency Costs and Ownership Structure, 3 J. Fin. Econ. 305 (1976). Professor Jensen has asserted to me that the ALI authors provide no analysis or evidence to support their comment. Letter from Michael Jensen to Homer Kripke (Oct. 14, 1984). But that observation misses the point of the ALI criticism, which is that the authors of the articles do not know how the world works in fact. I am personally satisfied that the ALI authors speak from a wider background in the real corporate world than the economists.


Schwartz, A Review, supra note 2, at 2. See, e.g., Jackson & Kronman, supra note 3, at 1146 n.16; Schwartz, A Review, supra note 2, at 2, 3, 7.
tion of economic analysis to law. Elsewhere I have strongly advocated the application of economics to regulatory problems and have criticized the Securities and Exchange Commission for not incorporating into its own system the conclusions of economic studies of capital markets. Conversely, Schwartz and Jackson & Kronman have demonstrated a sound ability to use conventional legal analysis in their other writings. Their rejection of that approach in the two articles considered here suggests a point of view later articulated by Professor Edmund W. Kitch:

"The principal "intellectual foundation" of law and economics was its success vis-a-vis the competition. Yet there has been no discussion of the competition. The reason is that there is none that offers anything like the range of methods, insights, and institutions that law and economics has, nor is there any competition that has been associated with a comparable quantity and quality of useful scholarly work on law."

This point of view is a cause for alarm in the older generation, and calls for a response.

In this Article I will defend most of secured chattel financing by using conventional legal reasoning based on realistic observation of the commercial world. I will also make some adverse comments on the Schwartz and Jackson & Kronman articles. I do not undertake to pass


I confess to a prejudice in favor of secured chattel financing going beyond that of most conventional teachers of commercial law. I have a vested intellectual interest, having practiced in the field for 22 years as inside and outside counsel for secured lenders, and having taught, written, lectured, and consulted in the field during my subsequent years as professor of law. I was one of the early advisors to the first drafters of UCC article 9, see Mentschikoff, Reflections of a Drafter: Soia Mentschikoff, 43 OHIO ST. L.J. 537, 544 (1982), and the primary drafter of the present, 1972 version, see Dedication to Professor Homer Kripke, 56 N.Y.U. L. REV. 1, 11, 14 (1981) (remarks of Grant Gilmore). Currently, I am a member of the Permanent Editorial Board for the UCC. As a member of the National Bankruptcy Conference, I participated actively in the drafting of the new Bankruptcy Code, and resisted efforts to undo that Code the support that the UCC gives to secured creditors. See Kripke, Some Reflections After a Quarter-Century of the Uniform Commercial Code and on the Inception of a New Bankruptcy Code, 87 COM. L.J. 124, 127-28 (1982).
judgment on whether more useful discussion could come from different applications of economic analysis, for I am at most a wader in the shallows of the sea of law and economics, hardly competent to discuss it broadly.\footnote{When the study of law and economics came dramatically to public attention with the publication of R. Posner, ECONOMIC ANALYSIS OF LAW (1st ed. 1972), my modest formal college training in economics was already more than forty years out of date. Yet I have since read much on the economics of capital markets and somewhat at random in other areas. In connection with this Article I have read the recent massive symposia, Symposium on Efficiency as a Legal Concern, 8 Hofstra L. Rev. 485 (1980); A Response to the Efficiency Symposium, 8 Hofstra L. Rev. 811 (1980); The Place of Economics in Legal Education, 33 J. Legal Educ. 183 (1983). I have also refreshed myself on several law-and-economics articles and compilations, especially Economic Policy and the Regulation of Corporate Securities (H. Manne ed. 1969); The Economics of Contract Law (A. Kronman & R. Posner eds. 1979); Economics of Corporation Law and Securities Regulation (R. Posner & K. Scott eds. 1980); The Economics of Legal Relationships: Readings in the Theory of Property Rights (H. Manne ed. 1975). In addition I have read three recent surveys of law and economics: C. Goetz, Law and Economics (1984); A. Polinsky, An Introduction to Law and Economics (1983); Coleman, Economics and the Law: A Critical Review of the Foundations of the Economic Approach to Law, 94 Ethics 649 (1984). While these demonstrate that economics can add much to legal analysis, they do not provide any support for the subject articles' failure to achieve an understanding of the factual context before attempting to apply economic reasoning. In contrast, Judge Richard Posner of law-and-economics fame recently decided a company's suit against its auditors for missing a fraud by managers by looking to the factual reality of who would benefit by a recovery. See Cenco, Inc. v. Seidman & Seidman, 686 F.2d 449, 455-57 (7th Cir. 1982).}

In Part I, I will state my own analysis of the justification and need for secured credit in the chattel field, which I think will support most present practices. In Part II, I will analyze the Schwartz and Jackson & Kronman articles, justifying my remarks in this preface about their uselessness in explaining secured credit. In Part III, I will point out some of the areas of secured credit that are not fully explained by my discussion in Part I and suggest that research along conventional lines, rather than by economic analysis, may provide a more productive basis for passing judgment on security in these areas of credit.

I. A Traditional Fact-Oriented Justification for Secured Credit on Personal Property

A. Most Secured Credit Is in the Nature of Purchase Money Financing

My essential starting point is the obvious rule that, unless otherwise agreed, tender of payment is a condition of the seller's duty to deliver the goods. This is codified in U.C.C. § 2-511(1). Section 2-507(1) states the equally obvious converse: tender of the goods is a con-
dition of the buyer's duty to pay. Many present-day secured credit arrangements developed directly from this basic principle.

When credit entered the picture, it was historically an easy step to the concept that, despite physical surrender of the goods, the seller retained title until paid. This was the origin of the conditional sale contract, which was initially thought to be different from a chattel mortgage loan and did not require the same publicity by filing.28

Although we are long past that primitive point, the concept remains that security taken for purchase money is not only legitimate, but also entitled to favorable treatment.24 This recognition showed up in early cases protecting purchase money security against floating mortgages29 and against the federal tax lien26—originally, in the latter case, without a filing requirement. Similarly, in the 1962 edition of U.C.C. § 9-313 the purchase money security interest in fixtures taken before accession to the real property had priority even without any filing against prior real estate creditors.27 Here too, we now require filing,28 but the purchase money security interest continues to receive favorable treatment in the present version of the UCC.29

Recognition of the purchase money priority of a seller's security interest leads readily to the further recognition that the same rights must be accorded to a bank or other financial institution that, at the time of the transaction, provides the buyer with funds to pay off the seller—as provided in U.C.C. § 9-107(b).

Many types of chattel security not directly covered by the UCC's narrow definition of purchase money are nevertheless essentially equivalent to purchase money security for purposes of this discussion. Thus, a loan for refinancing purchase money security interests does not technically fit the definition of purchase money, but logically should be given the same recognition in the law. In fact, there is already a close analogy in the UCC: the construction mortgage is recognized as a purchase money type of loan and accorded favorable treatment, and

24 See U.C.C. § 9-302(1)(d); J. WHITE & R. SUMMERS, UNIFORM COMMERCIAL CODE § 23-7 (2d ed. 1980). This point is acknowledged in Jackson & Kronman, supra note 3, at 1144 & nn.5-7.
refinancing of the construction mortgage receives the same treatment.  

Finally, much long-term financing has as its purpose the acquisition of new facilities by the debtor. The security taken may not fall within the definition of a purchase money security interest or the definition of a refinancing mortgage. As financing intended to facilitate the acquisition of new assets by the debtor, however, such a loan deserves to be treated like the purchase money security interests for purposes of our inquiry into the legitimacy of secured credit.

Surprisingly, neither Schwartz nor Jackson & Kronman seem to realize that these priorities represent a recognition that one who contributes new assets to the debtor is entitled to be paid for them and should not be required to give up a hold on the assets until paid. Instead, much of the discussion in these two articles proceeds on the assumption that what the secured creditor gets is taken away from unsecured creditors and, therefore, does not increase either the debtor's or the creditors' welfare.  

Seemingly, these authors view secured credit as a zero-sum game. None of the authors explicitly recognizes that in purchase money situations the secured party has added to the assets of the debtor, and that since the purchase money priority requires the secured creditor's funds to be traced into new assets, the secured creditor and the debtor have taken nothing away from the unsecured creditors. The most remarkable example of this blind spot appears in Professor Schwartz's article. A hypothetical prospective debtor with $100 of assets (and pre-

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80 See U.C.C. § 9-313(6).
81 Both articles are replete with remarks that seem to assert that what the secured party obtains in added safety from security the unsecured creditors necessarily lose. For example, Jackson & Kronman state,

[I]t may seem unfair that a debtor should be allowed to make a private contract with one creditor that demotes the claims of other creditors from an initial position of parity to one of subordination.

. . . When a debtor grants a security interest to one of his creditors, he increases the riskiness of other creditors' claims by reducing their expected value in bankruptcy.

Jackson & Kronman, supra note 3, at 1147 (footnote omitted). See also id. at 1154 (“If the debtor grants C1 a security interest in his property, he reduces the expected value of C2's recovery in the event of the debtor's insolvency.”).

Professor Schwartz writes, “When a creditor becomes secured, . . . the chance that the debtor's unsecured creditors will collect their debts correspondingly decreases. . . . [T]he unsecured creditors will charge higher interest rates because the pool of assets available to satisfy their claims has shrunk.” Schwartz, A Review, supra note 2, at 7. Similarly, he states, “[S]ecurity increases the costs of unsecured creditors by as much as it reduces the costs of secured creditors; in consequence, firms have no incentive to issue it.” Id. at 9-10. In addition, “[t]he existence of security raises the expected cost of default for unsecured creditors by reducing the available asset pool and thus creates incentives for these parties to monitor more extensively.” Id. at 10.
sumably of net worth) borrows $200 from two creditors (one of whom takes security) and immediately thereafter still has only $100. The concept that loans increase the borrower's assets is never mentioned. We cannot assume that business losses eliminated the $200 of new assets, for the example asserts that the firm "has $100 in available assets and both creditors assume this value to be stable over time." Professor Schwartz then attempts to demonstrate mathematically that the total cost of interest to the debtor is unchanged whether security is taken or not. Any interest expense saved by granting one creditor a security interest correspondingly increases the unsecured creditor's risk and, therefore, increases the interest rate that the unsecured creditor will charge. No doubt Professor Schwartz could have made his mathematical point using believable figures, but when accompanied by remarks suggesting that the debtor's assets are not increased, the article shows a lapse of understanding that demands correction.

Similarly, Jackson & Kronman seem to assume a set of facts in which the debtor starts with various assets and two unsecured creditors; one creditor then obtains security without furnishing additional consideration. On this set of assumptions it is undoubtedly true that what the one creditor gains, the other loses. But it is unrealistic to suppose that the losing creditor would accept this calmly. Such a transaction would be a voidable preference if it occurred within the preference vulnerability period and quite likely would be upset by the filing of a

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33 Id. at 8.
34 See id. at 9.
35 See Jackson & Kronman, supra note 3, at 1147-48.

In their reply, Professors Jackson and Schwartz erroneously assert in a footnote that I imply a disapproval of all secured financing that is not purchase money financing. See Jackson & Schwartz, supra note 3, at 994 n.25. Seemingly, they deduce this from the fact that I support secured purchase money financing because it adds to the assets of the debtor, and that I contrast it with the case in Jackson & Kronman, supra note 3, at 1147-48, which assumes that an existing unsecured creditor takes security in existing assets without contributing any new asset to the debtor. Of course, there is no such implication. Obviously a loan of new money adds to the assets of the debtor, and may be justified, for it makes available to the pool of creditors a new asset to replace the one that is partially withdrawn by being taken as collateral. Jackson & Schwartz should have understood this from my note 60, infra, and from my text following note 30.

A curious feature of Jackson & Schwartz's discussion in this area is their assertion that "[n]o one denies that a debtor can use borrowed funds to increase its net wealth." Jackson & Schwartz, supra note 3, at 994. This may be true, but their mentors Modigliani and Miller certainly come close to saying that it is inefficient for a firm to borrow at all instead of maintaining a one-class capital structure, without borrowed money. See infra notes 123-30 and accompanying text. Smith & Warner, infra note 128, say this expressly. Where does this leave Jackson & Schwartz's assertion?
bankruptcy petition and invalidation of the preference. At any rate, in my experience the kind of preference envisioned by Jackson & Kronman does not happen often enough without being upset to pose any general question of economic efficiency.

The more usual case can be represented by the following simplified set of facts:

*Automobile Dealership*

*Balance Sheet 1*

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities and Net Worth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$20,000</td>
</tr>
<tr>
<td>Auto Repair</td>
<td>$40,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>$80,000</td>
</tr>
<tr>
<td>Owners' Equity</td>
<td>$60,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$100,000</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$100,000</strong></td>
</tr>
</tbody>
</table>

It will be noticed that in this situation it is not clear how the business will operate. The owners have no inventory to sell.

Let us suppose that the owners now buy an inventory of automobiles, and start to sell them. The owners do not have the cash to pay for their purchase of inventory. Their supplier, B, insists on a security interest in the automobiles to secure the unpaid purchase price.

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37 See Darlin & Soloman, *Baldwin-United Is Forced to File for Chapter 11*, Wall St. J., Sept. 27, 1983, at 3, col. 1. The article describes the company's filing of a voluntary petition after creditors filed an involuntary petition. The latter petition had been filed to stop the running of time that would have made the discriminatory taking of collateral by pre-existing bank creditors invulnerable to a preference attack.

For a similar purpose, I myself, representing General Electric Credit Corporation and two other creditors, filed against Continental Vending Corporation one of the few involuntary petitions ever filed under Chapter X of the old Bankruptcy Act.
Our set of facts now looks like this:

\textit{Balance Sheet 2}

\begin{tabular}{llll}
\textbf{Assets} & \textbf{Liabilities and Net Worth} \\
Cash & $20,000 & Unsecured Creditor A & $40,000 \\
Inventory & & & \\
\hspace{0.5cm} (automobiles subject to security interest of B) & 60,000 & Secured Creditor B & 60,000 \\
Auto Repair Equipment & 80,000 & Owners' Equity & 60,000 \\
\end{tabular}

\begin{tabular}{llll}
\textbf{TOTAL} & \textbf{TOTAL} \\
$160,000 & $160,000 \\
\end{tabular}

From this oversimplified illustration we may draw a few conclusions, none of which is explicitly recognized by Professors Schwartz and Jackson & Kronman. First, in some industries suppliers customarily demand security in goods sold until they are paid. Second, when security is taken for new consideration, the pool of assets available for the unsecured creditors is not necessarily diminished. The old unsecured creditors have not given up any claim to assets on which the new secured creditor has a security interest, because the old creditors had no claim to the assets until the debtor negotiated to obtain them by meeting the supplier's terms. The new creditor furnished additional assets in return for the security. Sometimes the transaction may be three-cornered: a financial creditor, such as a bank, may finance the acquisition of inventory while the supplier is paid in cash. The net result, however, is unchanged.

Note that the Owners' Equity is unchanged, as are the unencumbered assets. On the face of things, Creditor A is the only one who need resort to them, for B can be satisfied out of the inventory or its proceeds. Admittedly A's risk is somewhat increased: if the new assets prove insufficient to satisfy the debt to B, then B will attempt to recoup this deficiency by competing with A for the remaining pool of assets. But this would be equally true if B had made its loan unsecured.

The above example assumes that the owners obtained their inventory entirely on credit. If, instead, they made a 20% down payment
($12,000), then the situation would be as follows:

**Balance Sheet 3**

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities and Net Worth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash</strong></td>
<td><strong>Unsecured Creditor A</strong></td>
</tr>
<tr>
<td><strong>$8,000</strong></td>
<td><strong>$40,000</strong></td>
</tr>
<tr>
<td><strong>Inventory</strong></td>
<td><strong>Secured Creditor B</strong></td>
</tr>
<tr>
<td>(automobiles subject to security interest of B)</td>
<td><strong>48,000</strong></td>
</tr>
<tr>
<td><strong>60,000</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Auto Repair Equipment</strong></td>
<td><strong>Owners' Equity</strong></td>
</tr>
<tr>
<td><strong>80,000</strong></td>
<td><strong>60,000</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>TOTAL</strong></td>
</tr>
<tr>
<td><strong>$148,000</strong></td>
<td><strong>$148,000</strong></td>
</tr>
</tbody>
</table>

This is also a case where apparently nothing has been taken from the unsecured creditor, A. A still has access to assets of the same value as before, which now include $12,000 equity in the encumbered collateral instead of $12,000 in cash. B, however, has first claim on that equity to cushion any decline in the value of the inventory. In other words, the secured creditor is "more equal" as to the equity in the collateral, and "equally equal" with the unsecured creditor as to unencumbered assets for any deficiency. But this potential increase in the unsecured creditor's risk is a far cry from the seeming contention of the two articles that whatever the secured creditor gets is necessarily taken away from the unsecured creditor.

More importantly, recall that on Balance Sheet 1 the company had no inventory and no business. On Balance Sheet 2, the company is in business and can perhaps prosper—eventually paying both creditors. This may or may not happen, but the possibility belies the zero-sum-game assumptions of Schwartz and Jackson & Kronman. They do not explicitly recognize that by increasing the debtor's resources everyone, including the unsecured creditors, may be better off.

Unsecured creditors of small businesses are typically suppliers, not lenders. They have a substantial interest in developing a prospering and active customer able to buy from them and pay them and able to generate cash with which to take trade discounts on its payables. Thus, when some creditors demand security, there is room for Judge Posner's conception of economics as considering whether each of the parties is making a reasonable calculation of its own best interests. This should apply both to the debtor who grants security and to the unsecured cred-

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58 *Cf.* G. ORWELL, ANIMAL FARM 148 (1944) ("All animals are equal, but some animals are more equal than others.").

59 *See* R. POSNER, ECONOMIC ANALYSIS OF LAW 3 (2d ed. 1977).
itor who acquiesces when another creditor takes security.

The authors would answer, of course, that they recognize that everyone involved may realize economic advantages when the owner borrows or buys on credit, as long as the return from investment of the credit proceeds is more than the interest charge. They would insist, however, that it does not follow that the new credit must be secured. Thus, I argue next that in most situations involving secured credit, the credit could not have been obtained without granting security.\textsuperscript{40}

\textbf{B. The Need for Credit and Its Sources}

My principal purpose in writing this Article is to show that one cannot practice economics in a vacuum of fact. To do this, I concentrate on the commercial realities of some principal business contexts in which security is taken for credit and, in particular, on the financing of the distribution of goods.\textsuperscript{41}

The increased mechanization of our society has resulted in consumer and other user satisfactions being embodied in durable goods. A decision to purchase such goods involves a commitment to purchase several years of satisfactions in advance. For example, purchase of an automobile may be compared to the purchase of a bus ticket good for five years, or purchase of a washing machine may be likened to contracting for a person's laundry services for five years. There would be relatively few instances in which a buyer could afford to buy this long-lasting package of satisfactions at once. The installment payment contract is a device for permitting the user to pay for the satisfactions more closely to when they are realized.

The durability of goods is also largely responsible for a widespread feature of our system of manufacturing and distribution—the working capital shortage of small business. With the breakthrough of mass production after the turn of the century, most small businesses found themselves insufficiently capitalized and unable to invest the required working capital in inventory and receivables. The basic problem is that a business has to pay its supplier of inventory—even if the sup-

\textsuperscript{40} Professors Jackson and Schwartz accuse me of confusing the question whether money should be borrowed with the question whether borrowing should be secured. See Jackson & Schwartz, supra note 3, at 994. They could make this charge only by ignoring the text above, and the remainder of Part I.

\textsuperscript{41} I have not attempted any methodical field survey. No doubt this Article will be criticized as relying on facts that are anecdotal or based on the distillation of only one man's experience. That is true, but this criticism would apply with even greater force to the Schwartz and Jackson & Kronman articles, which marshal no factual evidence whatsoever. I, at least, write from 40 years of practical experience in the world of commercial finance.
plier extends some credit—before the business succeeds in selling the inventory and in collecting the resulting credit that it ordinarily extends to the next person in the chain of distribution. Even if this extension of credit by the business were for the same length of time as the credit extended to the business by its supplier, the receipt of the cash will lag behind the maturity of the payable by the time needed for sale and collection of the account. The problem is especially severe in hard goods fields where the credit extended to the user is typically an installment contract payable over eighteen months to five years, and the cash collection lags behind the maturity of the payable by many times the period of the supplier's credit. Indeed, aggregate receivables may constitute many times the value of inventory carried at any one time. Small business, therefore, has to obtain credit beyond supplier credit and, with minor exceptions, such additional credit can come only from financial capital. Each supplier at every step in the chain of distribution extending credit generates a receivable, not cash, with which to pay its own accounts payable. The supplier may be as pinched for cash as its customer and must find a financial entity to "cash" its own receivables. Thus, ultimately a large part of the working capital of small business comes not from equity or from suppliers' trade credit but from financial lenders.42

As consumer satisfactions are increasingly embodied in larger purchases such as automobiles or appliances, and as industrial and commercial labor is increasingly replaced or supplemented by machines, chattel paper43 becomes a type of receivable created by sellers in ever greater amounts. The credit may last three to five years, with credits from the sales of several years ago still partly outstanding. Working capital pressures on the dealers and distributors of these con-  

42 See Board of Governors of the Federal Reserve System, Financial and Business Statistics, 58 Fed. Reserve Bull., May 1972, at A1, A56-57 (Financial institutions accounted for 99% of all automobile credit extended in March 1972.). The Federal Reserve's 1983 statistical survey shows consumer installment credit in July 1983 of $358,020 million. Of the total credit, $4356 million was held by gasoline companies and $27,900 million by other retailers, leaving 91% held by various financial lenders. See Board of Governors of the Federal Reserve System, Financial and Business Statistics, 69 Fed. Reserve Bull., Dec. 1983, at A1, A40. I have been unable to construct similar figures from the data in the Federal Reserve Bulletin for installment financing of nonconsumer users, and it has not seemed worthwhile to press the point further.

Total consumer noninstallment credit was $85.9 billion at the end of 1982. Id. at A40 note. Much of this undoubtedly involves department store charge accounts and the like. It is not separately indicated how much was financed for the stores through loans from banks and other financial lenders.

43 Chattel paper is "a writing or writings which evidence both a monetary obligation and a security interest in . . . specific goods . . . ." U.C.C. § 9-105(1)(b).
sumer hard goods and all types of equipment are enormous and require much financing whether by loans or by purchase of the receivables. The purchase of receivables—principally accounts and chattel paper—from the seller is just as much a form of working capital financing as is lending on the security thereof.44

Financing of specific items of inventory and of receivables is typically short-term. However, when the inventory is sold, or the receivable collected and the financing retired, the debtor has to buy new inventory and renew the cycle. One loan for inventory, or one financing of a receivable, is replaced by another. Although the individual commitment is short, the relationship is not. Because items of inventory move in and out, the creditor can keep contractual commitments short-term, gear the amount of credit to the inventory or receivable needs of the moment, and retain some freedom of action as circumstances change. But the debtor's need for financing is so overriding that the lender cannot lightly close it off and refuse to renew or to extend replacement credit without precipitating a liquidation costly to both parties. Thus the legal form of short-term financing does not present the full picture; the need for inventory or receivables financing is just as much a long-term requirement as the need for financing of fixed assets like buildings and machinery.45 This is contrary to the Schwartz and Jackson & Kronman articles' characterization of inventory and receivable financing as subject to fewer risks by virtue of its short term.46 Financing of short-term current assets carries the same risk of financial deterioration and "misbehavior" of the debtor as contractually long-term financing.

Although the above discussion focuses on small businesses, the same considerations frequently apply to large businesses as well. The necessary investment in inventory carried expands with business growth, especially when the goods produced become more complicated, of better quality, and more diverse. Larger units of business prove to be equally short of working capital and are forced to resort to financial lenders to supplement their funds.

Trade credit47 is a frequent source of short-term funds for businesses, but much of what appears to be trade credit is ultimately finan-

44 See infra text accompanying notes 169-70.
46 See, e.g., Jackson & Kronman, supra note 3, at 1159 & n.58; Schwartz, A Review, supra note 2, at 3-4, 11-13. But see Schwartz, A Review, supra note 2, at 12.
47 Trade credit is the credit extended to buyers during the period between the receipt of the purchased goods and the time of actual payment. See J. VAN HORNE, FINANCIAL MANAGEMENT AND POLICY 487 (5th ed. 1980).
cial credit. The most obvious example is the practice of factoring in textiles and related fields. Here, the textile mill or other supplier in the chain of distribution extends trade credit in the first instance. But the mill does not ordinarily extend the credit unless a financial factor has approved it in advance and agreed to buy the resulting receivable from the mill without recourse. Thus, this is really financial credit and only momentarily trade credit in form.

Similarly, when an automobile dealer or other dealer in hard goods sells a car or appliance on installment terms, the credit is in the first instance supplier or trade credit, and in this instance it is secured credit. Yet the dealer almost always sells the resulting chattel paper to a bank or finance company, and the credit is ultimately carried long term by financial, not supplier, credit.

The same result occurs, although not as obviously, when a seller chooses not to sell its receivables to a financial entity, but to borrow on the security of the receivables up to seventy-five or eighty percent of the face amount. Here too, while the credit remains in form supplier credit, the supplier could not extend credit unless it was "cashing" its receivables through a loan of nearly the entire amount from a financial entity.

These examples illustrate that, in short, most participants in our present distribution system are largely dependent on the availability of financial capital.

Financial capital, however, is free to move where it chooses; it need not necessarily be engaged in loans to finance the distribution of goods. Instead, it can be invested in the securities or commodities markets, used to develop real estate, or used to engage in any other business activity. If it is used to engage in financing the distribution of goods, lenders can largely dictate the terms to which both debtors (manufacturers or dealers) and suppliers, who are the bulk of unsecured creditors, have to agree. For reasons that we will later explore, the lender's terms will often require security.

For instance, despite statements to the contrary by Schwartz and Jackson & Kronman, even much trade credit is actually secured credit. When an automobile or appliance manufacturer extends secured

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48 Yet the financial capitalist's bargaining power does not present the whole story. Unsecured creditors are advantaged when a business stays in operation (as in the elementary balance sheet examples above); when it is able to buy from its suppliers, pay them promptly, and thus relieve their burden of carrying receivables; and when, as frequently happens, it becomes profitable enough to graduate to unsecured credit.

49 See infra text accompanying notes 68-79.

50 See Schwartz, A Review, supra note 2, at 4 n.10. But see id. at 12, 14.

51 See Jackson & Kronman, supra note 3, at 1158-60.
credit directly or through wholly owned subsidiaries to enable dealers to purchase inventories of automobiles or appliances, the transaction must be characterized as secured trade credit.\textsuperscript{52} General Motors Acceptance Corporation, General Electric Credit Corporation, Westinghouse Credit Corporation, and numerous other "captive" finance companies in the automobile and appliance field have long extended such credit. The same is true to a lesser extent of manufacturers of all sorts of business equipment, with credit extended by the manufacturers or their wholly owned finance subsidiaries. Historically, there was a significant period when inventory credit to dealers of Ford and Chrysler cars, and those of the former independent automobile manufacturers, was extended by independent finance companies. As these companies withdrew from the field, the manufacturers had to create subsidiary finance companies to supply secured inventory credit for their dealers.\textsuperscript{53}

Moreover, even this secured trade credit is ultimately financial credit. The manufacturers' wholly owned finance subsidiaries are merely financial intermediaries through which financial credit is routed to their dealers. The reason that these manufacturers do not extend the credit directly, but use finance company subsidiaries, is that they can borrow much more in the financial markets by segregating their receivables from their industrial business and by heightening the quality of their receivables by obtaining security for them.

A manufacturing company should appropriately borrow not more than thirty-five to fifty percent of its capitalization.\textsuperscript{54} If the receivables arising from sales, or the debt incurred to finance the receivables, were left in the manufacturing operation, this principle would severely limit the manufacturer's use of credit. By segregating the receivables into a separate subsidiary, thus giving lenders the first claim on them, manufacturers can obtain vastly greater funds.\textsuperscript{55} The segregation of receiv-

\textsuperscript{52} Finance companies such as these accounted for over 25% of all automobile credit granted in 1982. See Board of Governors of the Federal Reserve System, \textit{Financial and Business Statistics}, 69 \textsc{Fed. Reserve Bull.}, Dec. 1983, at A1, A40.

\textsuperscript{53} I was Assistant General Counsel of C.I.T. Financial Corporation and witnessed its withdrawal and the withdrawal of Commercial Credit Corporation in the 1950's. The Ford and Chrysler sales finance subsidiaries were activated to step into the breach.

\textsuperscript{54} See infra note 130 and accompanying text.

\textsuperscript{55} The ability to borrow such large amounts depends on the quality of the receivables and, in particular, on whether and by what collateral they are secured. Receivables secured by hard goods inventories or consisting of chattel paper arising from the distribution of these goods can command borrowings of eight to ten times the amount of the equity capital behind them. These were common multiples available to the major sales finance companies, both factory-controlled and independent, when I was active in the field in the 1950's. The multiples have since increased along with the increased multiples of bank deposits to bank capital. See Gadient, \textit{Funding the Captive Finance}}
ables in a separate subsidiary is the practical equivalent of the manufacturers borrowing on the security of the receivables segregated in the finance subsidiary.

C. The Need for Rapid Credit Decisions and the Use of Security

Our enormous manufacturing system for equipment and consumer goods depends on a distribution system that permits rapid sales on credit at the point of distribution without extended delays involved in the passing of credit and incidental legal matters. One need only contrast the delays and transaction costs involved in closing a sale of real estate to a householder with the procedures for buying an automobile or even a major piece of equipment. The latter can occur at the dealer's place of business, on standard forms, and with the credit decision frequently involving no more than a telephone call. Compare this with the elaborate business of negotiated contracts, search of title, and adjournment to lawyers' offices or bankers' closing rooms that is characteristic of real estate transactions. If we had to close contracts for the sale of automobiles, refrigerators, or even industrial equipment using the mechanics of real estate loans, we could never have achieved our present distribution system. Similarly, when a bank makes a loan in substitution for a dealer's extension of credit, it has to pass credit expeditiously, without the leisure of a detailed credit investigation of either the consumer or the industrial borrower.

The key to this ability to consummate credit sales rapidly is the system of secured credit. The lender's risk is reduced by the taking of security. If the loan is properly structured with a down payment adequate to overcome the depreciation that occurs when a new object becomes used and to keep ahead of future wear and tear, the risks to the seller or lender on most items of durable goods will be relatively small, given the resale value that can be realized readily on repossession. This reduced risk is taken into account in determining whether to make the loan and in establishing the amount of the down payment, the length of the period of credit, and the extent of the credit investigation.


Lesser amounts of financing, but still multiples of the equity, are available to factoring companies and companies making loans against receivables in other contexts. Still lesser multiples of equity are available to the small loan companies, whose receivables are essentially unsecured and, by their nature, less trustworthy than the other kinds mentioned.

68 See infra text accompanying notes 163-74.
In the case of consumer credit, the consumer is seldom a good balance-sheet risk. Her principal assets are household goods, which would be almost worthless on an execution sale and in many states are exempt from execution sale except in purchase money situations. The consumer's principal other "asset" is her job. One can check on the existence and duration of the job by telephone, but this gives no assurance that the job will continue. The lender places additional reliance on the salvage value of the goods sold subject to a security interest.

Beyond making it possible to grant more installment credit at the point of sale, the effect of security is enormous in keeping the sale primarily a commercial transaction and not a banking event. Whether the buyer is a consumer or a small business, passing credit in the absence of security would be a time-consuming and expensive job. I do not mean to suggest that credit is not checked in dealer-secured sales, but with security in the goods, credit checking is much simpler, more rapid, and less consequential. The transaction costs are lower. The dealer can usually check the credit adequately in time for prompt delivery of the goods and with reasonable assurance that a bank or finance company will finance the chattel paper.

Similar considerations arise in the context of loans to retailers and wholesalers for inventory and receivables. The size of these borrowers may be sufficient to permit a reasonable amount of careful credit checking, and continuous contact with the same borrowers may make credit checking worthwhile. The amounts involved, however, frequently far exceed the borrower's net worth. This is particularly true in the case of dealers in automobiles and major consumer appliances. Under these circumstances the amounts of credit necessary for carrying inventory could not be extended to the average dealer were it not for security in the goods. For the same reason, the necessary amount of financing of

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67 This is particularly true if her household goods are valued at resale value instead of cost. See Kripke, Gesture and Reality in Consumer Credit Reform, 44 N.Y.U. L. REV. 1, 26-28 (1969) (discussing D. CAPLOVITZ, THE POOR PAY MORE 116 (1963), in which Caplovitz puzzles over consumers' ability to obtain credit despite their seeming insolvency, as he calculates it).


69 Despite the diminished resale value of consumer goods after long use, the taking of security and the consequent ability to repossess in the event of default or breach of warranty by the buyer adds a significant amount of protection against the risk of immoral buyers who never intended to pay.

60 Although I have been speaking of purchase money situations that meet the standards of U.C.C. § 9-107, many secured capital loans are subject to similar comments. The value and availability of the collateral taken provides a simple basis for credit that might not otherwise be available and certainly would not be available without extended delays.
receivables could not be extended without security in the receivables. This reasoning includes those methods of financing receivables that take the legal form of a purchase instead of a secured loan. 61

The importance of this point cannot be overemphasized. It is fair to say that a large part of the financing of our distribution system for capital goods and consumers’ durable goods depends on the existence of an economic and legal structure making possible both the rapid extension of secured credit for the purchase of goods and the availability of financial lenders to hold the credit. The readiness of Schwartz and Jackson & Kronman to overlook differences among situations in which credit is extended and to disregard the necessities of our distribution system at basic stages of their analysis suggests that they miss fundamental characteristics of our economy. 62

D. Reasons for the Favored Position of Secured Credit

An essential aspect of granting security, from the viewpoint of both the secured creditor’s interests and society’s interest in plentiful credit and rapid credit decisions, is the favored treatment of secured creditors in the law of bankruptcy and creditors’ rights. This treatment inspires frequent discussion of fairness, distributive justice, and economic efficiency.

Security is desirable because it makes available summary legal procedures that bypass the slowness with which the mills of justice grind. Creditors are entitled to peaceful self-help repossession, 63 instead of the cumbersome stages of service of process and complaint, trial, judgment, and execution. In bankruptcy, secured credit opens up such possibilities as reclamation, 64 adequate protection, 65 freedom from bearing a portion of the expenses of administration 66 and of priority claims, 67 and other advantages. No doubt these procedural advantages are included in the unfairness indictment against secured credit. Sub-

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61 The purchase without recourse of unsecured receivables in “old line” factoring does not fit comfortably within the assertions made in this Article. See infra notes 78-79, 178-80 and accompanying text.

62 See, e.g., Jackson & Kronman, supra note 3, at 1152 n.40.

63 See U.C.C. §§ 9-503, 9-504; see also, e.g., Adams v. Southern Cal. First Nat’l Bank, 492 F.2d 324, 329 (9th Cir. 1973) (Self-help repossession procedures provided by the California Commercial Code do not constitute state action and thus are not subject to constitutional limitations.), cert. denied, 419 U.S. 1006 (1974).

64 See 11 U.S.C. §§ 554(b), 725 (1982); 2 COLLIER BANKRUPTCY MANUAL ¶ 554.03 (L. King 3d ed. 1985); 3 id. at ¶ 725.01.


66 See 2 COLLIER BANKRUPTCY MANUAL, supra note 64, at ¶ 506.05.

67 See 11 U.S.C. § 506(c) (1982); 2 COLLIER BANKRUPTCY MANUAL, supra note 64, at ¶ 506.05.
stantively, there seems to be little doubt that at the time of default we are in a zero-sum game. When creditors seek to collect, the secured creditor's advantage is the unsecured creditor's disadvantage. In bankruptcy, where, uniquely, litigants bear the expense of the judicial system, what the secured creditor escapes the unsecured creditor suffers more heavily.

Looking to the facts of commercial transactions, however, one finds that the types of financing usually undertaken on a secured basis often involve situations of severe risk. Only the unique opportunity for rapid repossession that security offers can sufficiently mitigate these risks. This section next considers in more detail certain credit risks in financing our system for distribution of goods that are ameliorated by the advantages of secured credit.

1. The Special Risks of Inventory and Receivables Financing

a. Inventories

As noted above, inventories of hard goods may represent several times the distributor's and dealer's net worth. A merchant with this loan ratio is operating on a high break-even basis and a slight slackening in business or other adversity can put the merchant in a position of loss or a cash shortage. Inventories are mercurial: stocks of finished goods and, to a lesser extent, of raw materials are readily salable. Under sufficient inducement, a dealer can make them disappear rapidly. The dealer may sell off the inventory dishonestly. More likely, the dealer may put on a sales drive, sell the inventory to buyers in ordinary course, and either divert the proceeds—for example, by using them for payroll or general expenses—or decamp with them. The secured party's claim to the goods will in most cases be lost, as will any claim to the proceeds.

It is naive for Jackson & Kronman to assert that the debtor has more opportunity for misbehavior on long-term loans. Short-term inventory and receivables financing is subject to real, not merely theoretical, risks. A large portion of inventory can rapidly disappear, representing a loan exposure far exceeding the debtor's capital. Firms

\textsuperscript{68} See supra text following note 60.  
\textsuperscript{69} UCC article 6 was drafted primarily against this contingency. See U.C.C. § 6-101 comment 2.  
\textsuperscript{70} See U.C.C. § 9-307(1).  
\textsuperscript{71} See U.C.C. §§ 9-306, 9-308, 9-309.  
\textsuperscript{72} See Jackson & Kronman, supra note 3, at 1159 & n.58.  
\textsuperscript{73} See supra text following note 60.
experienced in inventory financing guard against this risk by having “floor checkers” monitor the dealer’s inventory, examining it periodically and demanding an immediate accounting for missing items on which the loans have not been paid.

I will make some adverse comments below on the importance that Schwartz and Jackson & Kronman attach to monitoring. The important point here, however, is that monitoring that can usefully supplement loan terms and covenants depends on security, that is, property rights, which enable the secured party to act fast when trouble is discovered. The remedy of self-help is vital to make monitoring worthwhile and to stop the loss. A higher interest rate or a shorter term cannot compensate for these kinds of risk. The risk is there the day that the extension of credit is made, and only the power of a security position makes these “jumbo risks” bearable.

b. Chattel Paper

The chattel paper risk is much the same as the inventory risk. If the inventory loan is not paid upon sale, the claim to the paper as proceeds of inventory may be lost to another creditor under U.C.C. § 9-308 or 9-309. Only the property right of security in or purchase of chattel paper enables the secured party to move swiftly.

c. Accounts—Indirect Collection

Accounts financing through the indirect collection method—in which the debtor collects the accounts and makes payment to the creditor—is subject to risks of a different nature. First, the existence of the account is evidenced primarily by an invoice unilaterally prepared by the seller, objectively verified neither by an account debtor’s signature on a note, nor by direct collection of the account from the account debtors. There is, therefore, a substantial risk of fraudulent invoices and debtor-generated pseudo-payments which remain undetected until the house of cards collapses. As with inventory and chattel paper financing, the risk is there from the first day. Apart from the risk of totally fraudulent invoices and collections, there are the risks of prebilling (writing

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74 See infra text accompanying notes 131-38.
76 In pre-UCC days, the prevailing form of inventory financing was a trust receipt under the then existing Uniform Trust Receipts Act. See generally Kripke, Inventory Financing of Hard Goods, 1956 U. ILL. L.F. 580. Under the terminology of that Act, the creditor took ownership from the supplier and “entrusted” the goods to the dealer. The entrusting concept supplied the legal basis for self-help on default. See UNIF. TRUST RECEIPTS ACT § 6, 9C U.L.A. 247 (1957).
76 See infra text accompanying notes 80-95.
invoices and borrowing on them before the goods are shipped); consignment wrongly described as a sale creating an account; an informal undisclosed understanding with the account debtor that the seller will accept return of the goods, thus terminating the account; and numerous other ingenious devices. The greatest risk is that as the debtor’s financial position weakens, collections will be diverted to other business needs or even to personal needs. This kind of financing necessitates that the lender maintain an internal crew of field auditors to review the borrower’s books periodically. Here again, only a security interest or a property right puts the lender in a position to monitor effectively.

d. Accounts—Factoring

Factoring is the purchase of accounts receivable outright—the account debtor pays the factor directly, and the factor is without recourse to the seller of the account. The likelihood of fraud is somewhat reduced, but not eliminated, by the direct contact of the factor with the account debtors and by the generally higher credit ratings attributable to the use of this arrangement in more traditional types of business. Thus, factoring presents a more equivocal case for security.

2. The Need for Security Is Not Obviated by Higher Interest Rates

Professor Schwartz argues that the risk against which creditors seek security could as well be mitigated by increased interest charges.

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78 Even in factoring, frauds can occur. A recent instance is described in RCA Unit Sues Ex-President and 3 Firms, Alleging Fake Billings of Over $15 Million, Wall St. J., Aug. 24, 1983, at 6, col. 1.
79 See infra text accompanying notes 178-80.
80 Schwartz does not explicitly state this in his article. He does, however, challenge the assertion that higher interest is not a substitute for security. See Schwartz, A Review, supra note 2, at 7 n.23, 29 n.50. He explicitly assumes that, when some creditors have security, unsecured creditors will raise their interest rates higher than otherwise. See id. at 7.

Professor James White rebutted Professor Schwartz’s views on this point by analyzing some of the psychological and other motivations for the differential appraisal of risk in the taking of security. See White, Efficiency Justifications for Personal Property Security, 37 Vand. L. Rev. 473 (1984). In particular, he pointed out the institutional concerns of regulated bank lenders as against unregulated companies, and the differences in risk aversions of lending officers (as distinguished from lenders), who face the risk of losing their jobs for having made bad loans. See id. at 491-502. Professor White’s paper is excellent. Its only fault lies in trying to meet Professor Schwartz on the level of academic economics, with corrections only by some realism about the lenders’ appraisals of risk, instead of looking to the realities of the need for secured lender capital in the distribution process in which secured chattel credit chiefly occurs.

Professor Schwartz rebutted White in Schwartz, The Continuing Puzzle, supra note 2, at 1060-1065, stating that “such risk aversion cannot exist if credit, capital, or
However, in a classic study of fundamental security analysis, Graham, Dodd, and Cottle ("Graham & Dodd") conclude that abnormally high interest rates cannot compensate for high risk. These authors deny that there is any precise mathematical relationship between yield and risk and that actuarial calculations are practicable; instead they believe that yield and risk are incommensurable.

In opposition to their own position, Graham & Dodd cite two studies by W.B. Hickman showing that over long periods low-grade bonds produced a higher net return than high-grade bonds. Even "junk bonds" with the lowest or no ratings find a ready market in the hands of knowledgeable underwriters and investors. A recent study by Professor Edward Altman confirms the Hickman study by concluding that although rates of default and of losses are greater for junk bonds than for higher-rated bonds, the net rate of return for the junk bonds is higher. The post-World War II abandonment of security in the public industrial bond market seems also to disprove Graham & Dodd's
thesis.86

Yet it does not follow that the experience of the bond markets can simply be carried over into the types of commercial lending discussed in this Article. The unimpressive difference in the frequency of bankruptcy or other defaults in the lower-rated bonds as against the higher-rated public bonds suggests that the lower ratings may be due more to insufficient track records, insufficient knowledge or extreme cautiousness by the rating agencies, or current temporary adverse circumstances of the issuers, than to the actual, or even perceived, existence of a substantial risk of default.

Graham & Dodd also reject the theory of safety through collateral securing the bonds. They contend that safety is not measured by a specific lien but depends on the ability of the issuer to meet all of its obligations.87 Admitting the validity of the traditional view that security makes debt independent of other business risks, they comment that this approach would be “excellent” if it worked.88 They contend that it does not work, however, because of shrinkage in the value of the collateral and difficulty and delay in asserting rights to the collateral.89

But Graham & Dodd’s concerns about the feasibility of this “excellent” approach do not properly apply to short-term security interests in inventory and receivables, or to middle-term credits held outside the public securities markets and protected by security interests in consumer or industrial goods. In these contexts shrinkage in the value of the collateral is part of the lender’s necessary calculations. Resale values are excellent for many consumer goods, such as automobiles, and for many types of inventory or equipment. Due to the availability of self-help remedies, delays in enforcement are much briefer than those faced by public bondholders, who must rely on judicial foreclosures and rights of redemption for real property in many states,90 or experience the delays of reorganization under the Bankruptcy Code.

87 See GRAHAM & DODD, supra note 81, at 310.
88 See id.
89 See id. at 310-11.
90 For the complicated history and final repeal in Illinois of a twelve-month period of redemption from foreclosure sale for the mortgagor and an additional three-month period for creditors, see ILL. ANN. STAT. ch. 77, §§ 18-20 (Smith-Hurd 1966 & Supp. 1983) (repealed 1982).

Certain provisions of the Bankruptcy Code, however, provide countervailing difficulties in the enforcement of the secured creditor’s expedited self-help remedies. See 11 U.S.C. §§ 361-65 (1982); see also Kripke, supra note 21, at 127 (discussing possible tension between the treatment of security interests under the UCC and under the Bankruptcy Act).
The fundamental reason for the inapplicability of Graham & Dodd's view of security to the commercial context is the difference between the public bond issues with which they were concerned and asset-based commercial lending by a single lender. Bond issues cover large plants in which going-concern value is an essential element and in which reorganization, not liquidation, is usually appropriate in the event of default. In contrast, asset-based financing by private lenders frequently may not involve reorganization after default, and the liquidation value of collateral is a real protection—indeed, a principal protection—against the sudden risks described above. Professor Schwartz refers to this distinction, but fails to draw from it any support for secured credit financing.

An additional reason for the inapplicability of the relationship between risk and yield found in public bond markets is that many creditors are not free to choose their borrowers. Their credit extension starts with a sale, and the seller who needs to extend trade credit in order to make a sale cannot lightly turn away buyers who will not or cannot pay interest rates high enough to compensate for credit risk.

Other considerations defeat Schwartz's hypothesis as well. Contrary to his basic assumptions, the interest rate on secured financing is often necessarily higher than the prime rate to the best borrowers because even with security some commercial loans carry more risk and expense to administer than large loans to the best borrowers. There are limits to the amount of interest that a debtor can pay before a loan arrangement becomes impractical both for financial reasons and for le-

91 See supra text accompanying notes 68-79.
93 Professor Schwartz has asserted that the seller's calculations of the profit on the sale are independent of the profit and risk on the credit extension. Letter from Alan Schwartz to Homer Kripke (Aug. 4, 1983). Separate analysis is no doubt desirable, not only to simplify economic analysis, but also to help the businessperson understand her business. But it cannot be true that the business permits separate calculations of the profitability of credit extensions to be decisive when credit extension is necessary to make a sale. We had a notable example of this in 1983, when General Motors and Ford advertised financing rates of 10.9% per annum. The rate was attractive because it was commonly known that this was below rates available elsewhere at the time and was indeed at times below their own prevailing money cost. The prime rate was 11% for a good deal of 1983. See Board of Governors of the Federal Reserve System, Financial and Business Statistics, 71 Fed. Reserve Bull., Mar. 1985, at A1, A23. The car companies obviously thought it worth taking some loss on the financing in order to help their dealers sell the cars. Two other examples come readily to mind. First, my own experience as counsel to a large automobile inventory financer, not factory affiliated, showed that such firms might charge less than a remunerative rate on inventory loans in expectation of making up the loss from the profit on retail chattel paper, which would be sold to them to pay the inventory loans. Second, textile mills have assumed credit risks that factors rejected in order to make sales. See infra note 179.
94 See supra text accompanying notes 68-79.
legal reasons such as usury laws. Unlike Schwartz's hypothetical business that can freely choose between secured and unsecured credit, real businesses in need of credit to operate may have no alternative to secured financing.95

I have not asserted in this Part that all of secured chattel credit is defensible as necessary to our distribution system: there are anomalies in need of further exploration. But before turning to these in Part III, I shall consider in Part II the uselessness of exploration using the type of economic analysis exemplified in the articles by Schwartz and Jackson & Kronman.

II. THE SCHWARTZ AND JACKSON & KRONMAN ARTICLES

A. Abstract Logic as a Key to a World of Conflicting Interests

Jackson & Kronman seek to apply economic analysis to the problem of the purchase money priority.98 They reject two standard authorities of traditional legal scholarship97 because the conclusion of those works "rests upon the questionable premise that a debtor's existing creditors wish to cripple him financially."99 Jackson & Kronman also contend that these authorities do not adequately explain the tracing requirement of the purchase money priority.99

Jackson & Kronman's perception of the assumption that creditors wish to cripple their debtors rests on casual but admittedly infelicitous language used by Professors Braucher and Reigert suggesting that through an after-acquired property clause a creditor acquires a position "which would enable him to take advantage of the debtor."100 All that this means, however, is that a security agreement with an after-acquired property clause would, but for the priority the law gives to purchase money security interests, permit the creditor to refuse to make additional loans against new collateral and at the same time to refuse to

95 Even if the debtor could pay additional interest charges, many secured lenders may prefer not to be known as interest gougers and would rather have the safety of security than an extra reserve for bad debts.
96 See Jackson & Kronman, supra note 3, at 1146 n.16.
97 See id. at 1145 & n.9 (criticizing R. Braucher & R. Riegert, Introduction to Commercial Transactions (1977) and J. White & R. Summers, Uniform Commercial Code (1st ed. 1972)).
98 See id. at 1145.
99 See id.
100 R. Braucher & R. Riegert, Introduction to Commercial Transactions 464 (1977), quoted in Jackson & Kronman, supra note 3, at 1145 n.9. No such language is used by Professors White and Summers, although Jackson & Kronman also cite to them. See Jackson & Kronman, supra note 3, at 1145 n.9 (citing J. White & R. Summers, supra note 97, at 914).
give such consent for subordination as would permit the debtor to get
the needed loan from another creditor. The purpose of such a clause is
not to cripple the debtor financially but to enable the creditor to moni-
tor the debtor and to prevent it from overextending itself to what the
creditor perceives as the latter's detriment. Since the debtor may see the
situation differently than the creditor, the law steps in to limit the po-
tential misuse of the after-acquired property clause by permitting the
debtor to give purchase money security with priority over the earlier
security interest arising from the after-acquired property clause.\textsuperscript{101}

Jackson & Kronman question the function of the tracing require-
ment as a condition of the purchase money priority. They laboriously
conclude that it is necessary to preserve the basic "first in time," "first
in right" system of property priorities.\textsuperscript{102} This seems to me obvious. As
the name suggests, a purchase money priority applies only to collateral
that has been purchased with the credit for which it is security. This
requirement limits the purchase money priority to those additional as-
sets into which the funds provided by the new lender can be traced.
Thus, this priority should not prejudice the original secured party, or,
indeed, any unsecured parties.

But perhaps the point is obvious to me only because I have a long
UCC memory. In the very early days of drafting what became article 9,
Professor Austin Wakeman Scott suggested that money-tracing litiga-
tion (which he had encountered in the law of trusts) could be avoided
by eliminating the tracing requirement. He would have extended the
purchase money priority to all credits extended to the debtor within ten
days of the debtor's acquisition of an item of property. Those working
on the topic dutifully tried to draft the idea, but it generated so many
conflicting purchase money priorities that we became entangled in the
necessity of setting up a hierarchy of priorities within the purchase
money priority. At that stage I persuaded Karl Llewellyn, the Chief
Reporter, that Scott's idea had to be abandoned.

A better question deserving an answer is one not posed by Jackson
& Kronman: why does article 9 contain three separate purchase money
priorities, and why does each one have different conditions? This ques-
tion goes to the heart of my objection to the Schwartz and Jackson &
Kronman articles, and to my challenge to Professor Kitch's assertion
that the economic analysis of law has no competition.\textsuperscript{103}

The main priorities section of article 9, U.C.C. § 9-312, describes
two purchase money priorities. First, under section 9-312(4) a purchase

\textsuperscript{101} See U.C.C. §§ 9-312(3), 9-312(4).

\textsuperscript{102} See supra text accompanying note 20.

\textsuperscript{103} See supra text accompanying note 20.
money security interest in collateral other than inventory has priority over earlier perfected security interests. The purchase money security interest has priority even against subsequent security interests arising in ignorance of its existence and before it is perfected, provided that the purchase money security interest is perfected no later than ten days after the debtor received the collateral. Why would anyone create a priority that can defeat innocent intervening lenders through a subsequent perfection? What logical rigor or economic model could explain it?

Quite clearly, this is a case of legislative accommodation to resolve, to the extent possible, two conflicting but legitimate interests. On the one hand there is the interest of a subsequent lender to be protected against undisclosed and unperfected prior interests. On the other hand there is the need of our economy to have a distribution system by which secured credit can be extended at the point of sale, with a reasonable time to perfect a resulting security interest with priority. Neither theory nor abstract logic could dictate or predict the relative importance of these considerations or predict how the conflict would be resolved. Could rigorous logic determine that ten days was the right period?

The second provision, section 9-312(3), provides a purchase money priority in the acquisition of inventory. Here, a different set of conditions applies. There is not the same need for prompt sales to users and, therefore, no opportunity is afforded to defeat an intervening security interest by a later filing within ten days. Filing must have occurred by the time the debtor gets the collateral. Even filing is not enough—the earlier secured party must be given direct notice of the purchase money financing to be given priority. This notice enables the secured party to avoid making a fresh advance against new inventory, as its financing arrangement may contemplate. The notice is good for five years.

Why the requirement of actual notice when the collateral is inventory but not when the collateral is something other than inventory? Because the drafters believed that the likelihood of the earlier secured party making advances in the case of inventory newly acquired by the debtor is greater than in other cases. Perhaps this could be empirically verified, but the vast diversity of situations covered suggests not. In any event, its advantages could not be rigorously proven in retrospect because the statute itself may have altered commercial behavior and precluded further inquiry.

The third purchase money priority, U.C.C. § 9-313(4)(a), gives under certain conditions a purchase money financier of chattels that become fixtures priority over a prior mortgagee of real estate. The doctrine of accession gives the mortgagee a right to the chattels equivalent
to the right afforded by an after-acquired property clause in a security agreement when the chattels become part of the real estate, that is, when they become fixtures. This situation is analytically equivalent to that addressed in section 9-312(4), the noninventory priority discussed above. Indeed, in its present form, section 9-313(4)(a) is modeled on section 9-312(4). The two sections differ in that the holder of the purchase money security interest is not here granted the leeway to take ten days for filing and still defeat an intervening real estate interest. What logic could explain this difference between these two sections?

Peter Coogan and I spent the equivalent of two full weeks working out the present form of section 9-313 with a joint committee representing the Section on Real Property of the American Bar Association and the American Land Title Association. It would not overstate matters to say that we had there a clash of two cultures: the world of real estate and the world of commerce. The techniques of anthropology might have been more suited to handle the conflict than economics or logic. Anyone who knows the ritual of a real estate closing—with someone stationed in the Recorder's office to advise the persons present at the closing by telephone that there have been no last minute recordings of relevant instruments—can understand that the real estate world could not conceive of acquiescing in a system in which outstanding but later-filed purchase money security interests could outrank real estate interests acquired at the closing. But by our assessment, the commercial lawyers did not give up any legitimate needs of our distribution system, for we felt that there is generally not the same need for simplic-

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104 In fact, the best tool to understand this situation may be the techniques of alternative dispute resolution, such as mediation and negotiation, with their emphasis on accommodating the legitimate interests of all parties as much as possible. For example, Fisher and Ury's emphasis on principled negotiation might seem to provide a logical theoretical structure. See, e.g., R. Fisher & W. Ury, Getting to Yes 86-88 (1981); H. Raiffa, The Art and Science of Negotiation (1982). See generally Alternate Dispute Resolution in the Law Curriculum, 34 J. Legal Educ. 229 (1984); Wheeler, Book Review, 34 J. Legal Educ. 326 (1984) (reviewing H. Raiffa, supra). Principled negotiation techniques may be of only limited usefulness in situations where both parties have principled but conflicting positions that cannot be measured as right or wrong. In this situation an emphasis on mediation to arrive at mutual gain may be more appropriate. See R. Fisher & W. Ury, supra, at 73. This is the technique that we used in drafting article 9 of the UCC.

105 Dissatisfaction of the real estate world with the original section 9-313 of the UCC had led to refusal to enact that section in California and other states. This situation was destructive of uniformity and was one of the principal reasons that the Review Committee for Article 9 and two Reporters were appointed in 1966, starting a process which culminated in the 1972 amendments to article 9. See Report No. 3 of the Permanent Editorial Board for the Uniform Commercial Code, reprinted in Uniform Commercial Code, 1978 Official Text with Comments at xxxiii (9th ed. 1978); Foreword to 1972 Official Text with Comments, reprinted in Uniform Commercial Code, 1978 Official Text with Comments, supra, at xxxvii.
ity and expedition in the sale of goods intended for installation on real estate as there is in other cases. Again, there was no way that abstract reasoning, economic theory, or rigorous logic could have led to the adjustment of that situation.106

B. Another Purchase Money Puzzle

Throughout the Schwartz and Jackson & Kronman articles it is assumed that what the secured creditor gets in security is taken from the unsecured creditors.107 Others, such as Professor Countryman, have bewailed the lot of the unsecured creditor who finds on the debtor’s bankruptcy that the secured creditor’s interest covers all of the debtor’s assets.108 The most obvious example of this situation is the supplier who has delivered inventory to the debtor on unsecured credit but finds, on the debtor’s bankruptcy, that all inventory is encumbered in favor of a secured lender. Yet it would have been easy for the supplier to avoid this situation by taking a purchase money security interest in the inventory that it supplied under U.C.C. § 9-312(3). Contrary to several intimations in the Schwartz article,109 the cost would have been trifling.

If their hypothesis were correct, Professors Schwartz and Jackson & Kronman, as well as Professor Countryman, should have predicted that the suppliers would frustrate the secured lenders by invariably taking purchase money security interests with priority. These authors do

106 These limitations of abstract economic theorizing have been pointed out by Ira Millstein, a distinguished practicing lawyer with a scholarly bent:

Economics, like other social sciences, can be used improperly by the courts (and everyone else). The danger is especially great whenever particular economic theories become faddish and are then propounded as beguiling concepts to avoid any further thinking about and looking at the facts.

"Economics is not constitutive, it is a constructed logic, at best an 'as if' model of how some resource distributions would be made if individuals acted in a specified 'logical' way. . . . [T]here is no intrinsic order, there are no 'economic laws' constituting the 'structure' of the economy; there are only different patterns of historical behavior."

Oliver Wendell Holmes’ axiom is as true today as when it was written in [The Common Law]: “The life of the law has not been logic: it has been experience.” Economics is but a specially useful form of logic—it cannot supplant the experiences that are the stuff of which the law is made.


107 See supra note 31.
108 See, e.g., Countryman, supra note 13, at 269, 280.
109 See Schwartz, A Review, supra note 2, at 9, 12, 23, 27.
not discuss this point or consider what might be learned from the failure of such a prediction—for in fact the prediction would have failed. Much inventory is supplied on unsecured credit.\textsuperscript{110}

The reason for the failure of the prediction lies in the fact that taking security will delay payment to the suppliers. If the supplier takes a purchase money security interest on inventory, no financial lender will lend on the already encumbered inventory. If the supplier's security interest in the inventory carried through to the receivable with priority, the outside financer would not be able to lend on the receivable, and as a practical matter the supplier could not get paid until the receivable was paid. Even if the accounts financing was in place first, the accounts financer could not safely continue financing if later purchase money inventory financing would carry through to the accounts with priority.\textsuperscript{111} Thus the supplier's hope of prompt payment depends on the availability of inventory and receivables collateral for financing from financial lenders. As a practical matter, while some suppliers do take security interests in the inventory supplied, they do not in general attempt to inhibit accounts financing, because it is in their own interest to permit that financing to go forward and supply the funds with which they can immediately be paid.\textsuperscript{112}

An unsecured supplier will on occasion appear to have been harmed when its debtor becomes insolvent and a financial lender has

\textsuperscript{110} This is the basic factual foundation for Professor Countryman's complaint, see Countryman, \textit{supra} note 13, at 279, which is also cited in Schwartz, \textit{A Review, supra} note 2, at 5 n.13. Schwartz also cites J. \textsc{Van Horne}, \textsc{Financial Management and Policy} 458-69, 476-77 (4th ed. 1977), to the effect that unsecured trade credit (which, of course, is inventory financing) is the largest single source of short-term corporate debt. See Schwartz, \textit{A Review, supra} note 2, at 4 n.10. The existence of trade credit is, of course, confirmed by my text above and my descriptions of accounts receivable financing and factoring. See \textit{supra} text following note 76. To state that trade credit is typically unsecured is a faulty generalization. See \textit{supra} text accompanying notes 50-53.

\textsuperscript{111} The latter difficulty could not be avoided by an accounts financer refusing to take as security accounts that arose from the encumbered inventory. Picking and choosing among accounts presents practical difficulties as well as the danger of mistakes. In some situations it would be impossible even with care to segregate the accounts arising from encumbered inventory. For example, the encumbered inventory might have been unassembled parts or findings to an assembled product that produced the receivable; or worse, there might be numerous claims to the account as proceeds of a variety of inventory claims to separate components of the assembled product.

\textsuperscript{112} See Kripke, Haydock, Hirsch & Moore, \textit{Inventory and Receivables Financing Under the Uniform Commercial Code and the Bankruptcy Act}, 87 \textsc{Banking L.J.} 579, 594-603 (1970). Presenting this material on the floor of the American Law Institute in these terms, I was sustained by the Institute against an attempt to reverse the Reporters' draft, which refused to provide that the purchase money priority in inventory automatically carried through to the resulting accounts. See \textsc{American Law Institute, Proceedings} 1971, at 341-47 (1972).
security in the inventory or receivables that originated with the supplier. But in perhaps hundreds of cases that have not ended in insolvency, the supplier may for years have been receiving payments much faster than the debtor would have been able to provide had there not been a financial lender ready to supply secured credit. The problem is not all or none; it is not a zero-sum game. Rather, debtors and their suppliers are both advantaged by a system that permits the debtors' typically insufficient capital to be supplemented by financial lending practices based on security. How much of this practical situation would rigorous logic have deduced, in the absence of any reference to the factual commercial context?

C. The Key Assumptions of the Schwartz and Jackson & Kronman Articles

1. Testing Hypotheses

The two articles under discussion are notable for their use entirely of examples with assumed facts made up to illustrate their theories and for the absence of any attempt to determine whether these factual assumptions are typical of real world events.

This technique may appear at first glance to be justified by a statement of no less an authority than a Nobel Laureate in Economics, Milton Friedman. In The Methodology of Positive Economics,\(^\text{113}\) Professor Friedman considered the frequent criticism that economic hypotheses do not conform to reality because of unrealistic assumptions. He answered,

\[\text{[T]o suppose that hypotheses have not only "implications" but also "assumptions" and that the conformity of these "assumptions" to "reality" is a test of the validity of the hypothesis different from or additional to the test by implications ... is fundamentally wrong and productive of much mischief.}\]

\[\text{...[T]he relevant question to ask about the "assumptions" of a theory is not whether they are descriptively "realistic," for they never are ... [The validity of a theory can only be ascertained] by seeing whether the theory works, which means whether it yields sufficiently accurate}\]

predictions.\textsuperscript{114}

Thus Friedman sanctions the use of unrealistic assumptions designed to hold constant all except one of the factors that impinge on any business problem for the sake of developing an abstract model. Although the mathematical or logical validity of an abstract model may not depend on empirical verification, if it is to be used for any application or for policy guidance the model's soundness must be tested against the real world by testing its predictions in factual investigation. Therefore, the usefulness of those economic models in law is subject to compliance with Professor Friedman's test: does the model produce real results either in ordering the seeming diversity of past events or in correctly predicting future events?

Economic analysis may have something to contribute to commercial law, but there is great danger in hypotheses neither premised on nor tested by facts, even in situations where getting the facts may not be easy.\textsuperscript{115} Abstract mathematical models based on hypothetical illustrations may be useful, but it is well to bear in mind the cautions urged by the distinguished economist and mathematician Oskar Morgenstern:

\[\text{[T]he question of the limits of mathematics in economics must be approached cautiously. . . . The limitations arose mostly because a faulty economic model was set up and ana-}\]

\textsuperscript{114} Id. at 14-15.

Professor Lon Fuller calls for even more circumspection in the use of abstract models:

The necessity to work with, and to think in terms of, simplified models is as much a necessity in the social sciences as it is in physics. . . . In the social sciences the transition from abstract models to the actualities of social living is not so simple. Though it is probably safe to say that in the social sciences the degree of abstraction exceeds by far anything normally encountered in the physical sciences, the very bulk and complexity of this abstraction makes it difficult to state plainly just what has been left out. This has the unfortunate result that as the potential damage done by misapplications of theory increases, the likelihood that such misapplications will occur also increases. Sometimes, accordingly, the only safe course is to disregard theories derived from abstract models when one is confronted with the problems of actual human existence.


\textsuperscript{115} See Rizzo, The Mirage of Efficiency, 8 HOFSTRA L. REV. 641, 642 (1980) ("Unless the empirical counterpart to a theoretical standard can be identified, advocacy of the latter cannot lead to any change in or validation of existing law."); Scott, Answers Are More Needed than Perspectives, 33 J. LEGAL EDUC. 285, 286 (1983) ("[Y]ou do finally need some empirical results."); Tullock, Two Kinds of Legal Efficiency, 8 HOFSTRA L. REV. 659, 668 (1980) ("[T]he statement is made that . . . this particular rule is the most efficient. It may or may not be. The only way to tell is to engage in careful research . . . .").
lyzed mathematically . . . .

. . . . [T]he primary task is to discover the true nature of the underlying economic phenomenon and to concentrate efforts in that direction, instead of stopping short and branching out into the mathematical treatment of an ill-defined and vaguely described situation.\textsuperscript{116}

Professor Hansmann has phrased this warning more explicitly: "Recent years have brought an increasing level of formal modeling in the law-and-economics literature. . . . Increasing formalization, however, also brings with it the possibility that scholars will come increasingly to be concerned with the characteristics of formal models rather than with the characteristics of reality."\textsuperscript{117} Similarly, Professor McCall, in his review of a seminal work on the economics of signaling, asserts,

Too much of modern economic theory resides in a realm remote from economic reality. . . . [A] science is healthy only if its theoretical constructs eventually illuminate empirical phenomena and subsequent theories are enriched by this empirical contact. . . .

A theory that refrains from empirical testing should abstain from policy. . . . Certainly economic theorists recognize that empirical testing is a necessary prelude to policy. Nevertheless, there is a tendency to go directly from theory to policy.\textsuperscript{118}


\textsuperscript{117} Hansmann, \textit{supra} note 116, at 229.

\textsuperscript{118} McCall, Book Review, 14 \textit{J. Econ. Literature} 465, 466 (1976) (reviewing A. Spence, \textit{Market Signaling: Information Transfer in Hiring and Related Screening Processes} (1974)).
The financing of our system of distribution is simply too important to risk tinkering on the basis of untested formal economic models. Professors Schwartz and Jackson & Kronman have thus far shown commendable restraint in refusing to conclude that their adverse conjectures were confirmed. Until their predictions and premises prove more accurate, this restraint must continue.

Professor Schwartz appears to be most conscious of these admonitions. He constantly tests his various hypotheses to determine whether the world conforms to them, even rejecting some because they do not correctly predict the facts as he sees them. I have already suggested that his view of the facts is often incomplete, and, as I shall try to show in the next section, he does not carry through his testing at the most significant points of his article. Indeed, my strongest disagreement with Schwartz's approach is that he seems to consider law-and-economics research as consisting of rummaging through economic hypotheses formulated in other contexts for other purposes, in the hope of finding a fit for his current problem, instead of formulating his own hypotheses by first looking at the facts and at history. As shown above, looking at the facts is a necessity before any theories of law and economics can have practical value.

2. Stratification Theory

Although it is discussed only in a single footnote by both Schwartz and Jackson & Kronman, a key premise of their articles is reliance on stratification theory, a concept originally propounded by

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119 See, e.g., Schwartz, A Review, supra note 2, at 33 ("It is not known with assurance whether security is efficient . . . or inefficient . . . [N]ormative reasons for altering current law are also hard to find.").

120 As Professor Michelman has said,

If an elegant theory appears to explain, in the correlational sense, a respectable amount of the variance in a set of observations, there will be some tendency to picture the variance remaining unexplained by that theory as unsystematic, random, impenetrable muck lacking significance . . . .

Critics of law and economics (myself included) believe the opposite is true: that is, that the marginally trading-off (some critics would call it the "commodity") form of consciousness and behavior posited by law and economics is only one side of the story of what people—are and can be like; that the story has other sides, no less coherent or authentic to whoever is in a frame of mind to receive them . . . .


122 See Jackson & Kronman, supra note 3, at 1154 n.46.
Professors Modigliani and Miller.\textsuperscript{123} Modigliani and Miller argued that altering a firm’s capital structure will not increase its value. Stratification or leveraging of a corporate capital structure is not more efficient because the reduced cost of capital to investors who are given a priority position increases the riskiness of the capital provided by others, who will correspondingly demand a higher return for their capital.\textsuperscript{124} Schwartz and Jackson & Kronman extend this theory by treating the giving of security as a case of stratification and, therefore, assume that what the secured party gets in added safety, the unsecured creditors correspondingly lose,\textsuperscript{125} with no net change in the total cost of credit to the debtor.

Professor Schwartz’s article begins by demonstrating that logically firms should never issue secured debt because they do not save any cost of capital while incurring the additional costs of documenting and monitoring the security arrangement.\textsuperscript{126} Schwartz concludes, “[T]o generalize, firms would never sell secured debt but would instead pay interest rates that reflect their risk category . . . . Because short-term secured debt is often seen, however, something must be going on that is not accounted for in the above analysis . . . .”\textsuperscript{127} Schwartz then begins to rummage through various economic theories looking for an answer.

His method, however, is built on a weak reed. Not only does stratification theory not reign undisputed in economic circles,\textsuperscript{128} but also it

\textsuperscript{124} See id. at 288-91; see also R. BREALEY & S. MYERS, PRINCIPLES OF CORPORATE FINANCE 357-59 (2d ed. 1984) (In a perfect market, changing a firm’s capital structure does not alter its total value.).
\textsuperscript{125} See supra note 31.
\textsuperscript{126} See Schwartz, A Review, supra note 2, at 7-9.
\textsuperscript{127} Id. at 9.
\textsuperscript{128} See, e.g., Durand, The Cost of Capital, Corporation Finance, and the Theory of Investment: Comment, 49 AM. ECON. REV. 639 (1959). Other articles qualify the theorem. See, e.g., Baxter, Leverage, Risk of Ruin and the Cost of Capital, 22 J. FIN. 395, 402 (1967) (“[W]hen the restrictive assumptions of Modigliani and Miller are relaxed in accordance with existing institutions, the result is the traditional cost of capital curve, declining at low amounts of debt but rising where leverage becomes substantial.”). In Smith & Warner, On Financial Contracting: An Analysis of Bond Covenants, 7 J. FIN. ECON. 117 (1979), the authors conclude,

Since observed debt covenants have real costs, there must be some benefit in the firm’s capital structure; otherwise, the bondholder-stockholder conflict can be costlessly eliminated by not issuing debt. Hence our evidence indicates not only that there is an optimal form of the debt contract, but an optimal amount of debt as well. The benefits from issuing risky debt are not well understood . . . .

Id. at 154.

In contrast, Posner and Scott accept that Modigliani and Miller’s theory has now been conclusively proved, but only with an enormous assumption that the capital mar-
fails Milton Friedman's test of accurate prediction for failing to predict the almost universal presence of stratified capital structures among corporations, and the wide use of security. Stratification theory overlooks numerous practical considerations that lead real firms to prefer different capital structures. There is a whole body of finance theory on optimal capital structures and the appropriate leveraging of corporations. It is a failure to let the facts distract him from his preconceptions that sends Professor Schwartz out on his fruitless quest through abstractions of economics.

3. Monitoring

Both articles give extensive consideration to the concept of monitoring. Monitoring considerations assume that managers will misbehave, that is, divert and misappropriate as much of firm resources from other owners and creditors as possible. The authors of the leading article on monitoring draw mathematical charts and produce exact formulae to determine just how much the owner-manager can divert and therefore how much the other owners and creditors should spend on monitoring costs to inhibit the diversion. The expenses of monitoring are termed agency costs.

Following this lead, Jackson & Kronman assume that, once the owner has acquired funds at a fixed interest charge, it will be to the owner's advantage to increase the risks to which the funds are subject. In effect, the owner saves interest expense if it can use funds borrowed at low-risk interest rates for high-risk projects. They then build a whole structure of speculation and purported demonstration on the ass-
sumption that the risk of debtor misbehavior is greatly feared, and that the attention that creditors give to monitoring and its costs is pervasive. From this they deduce that security will be demanded and willingly given chiefly as a trade-off to reduce monitoring costs, and thus to reduce the interest rates required. They even assume that some creditors cheerfully acquiesce in the preferential giving of security to other creditors because the total monitoring cost for all creditors is thereby reduced. They are right that security is—among other things—a monitoring device, but they misapprehend how it serves this function.

The absence of any indication in concrete operating terms of the meaning of monitoring is notable in this and other academic economic discussions. One must ask initially how an unsecured creditor could monitor beyond reading the debtor’s financial statements and independent audit reports, and beyond requiring restrictive covenants in the loan documents. Does the unsecured creditor stand on the shipping dock, checking what goes out, or at the billing machines, checking the invoices? That kind of monitoring by unsecured creditors does not happen and would be no small task to achieve meaningfully.

Monitoring

See id. at 1150-58.


Although for over a decade “monitoring” had been the ruling theory of what a corporate board of directors is supposed to do, the American Law Institute’s project on corporate governance met such strong criticism of the implications of the term that the Institute had to abandon the term and substitute “oversee.” See MacAvoy, Cantor, Dana, & Peck, ALI Proposals for Increased Control of the Corporation by the Board of Directors: An Economic Analysis, in STATEMENT OF THE BUSINESS ROUND TABLE ON THE AMERICAN LAW INSTITUTE PROPOSED “PRINCIPLES OF CORPORATE GOVERNANCE AND STRUCTURE: RESTATEMENT AND RECOMMENDATIONS,” supra, at C-1 n.1 (exhibit C).

Similar recognition of the practical difficulties of monitoring is largely absent from the academic law-and-economics writing discussed in this Article. See, e.g., Jackson & Kronman, supra note 3, at 1149-61; Levmore, supra, at 68-75; Schwartz, A Review, supra note 2, at 9-14; Scott, Bankruptcy, Secured Debt, and Optimal Capital Structure, 32 J. FIN. 1, 13-16 (1977); Smith & Warner, Bankruptcy, Secured Debt, and Optimal Capital Structure: Comment, 34 J. FIN. 247, 247-50 (1979); Scott, Bankruptcy, Secured Debt, and Optimal Capital Structure: Reply, 34 J. FIN. 252 (1979).

Levmore, for example, characterizes enforcement actions by secured creditors or by the bondholders’ trustee as monitoring devices that signal trouble to stockholders. See Levmore, supra, at 68-70, 72-73. It is undoubtedly true that in all of these situations common stockholders get a signal of trouble, but Levmore does not distinguish between
by unsecured creditors scarcely exists outside of reviewing financial statements and including restrictive covenants. Even these covenants are of diminishing importance and frequently are not used in transactions with small businesses.

Other monitoring occurs almost entirely in the case of secured transactions because it is based on the property rights that security gives. The secured creditor has sufficient rights in the collateral to act promptly and curtail losses. The unsecured creditor lacks any comparable rights. Jackson & Kronman's trade-off between interest rates and monitoring costs can hardly exist where there is no monitoring. Nor can it exist in those large areas of open account trade credit where no interest is charged. Thus, the Jackson & Kronman armchair voyage of exploration of monitoring never reaches the real world.

It is strange that Jackson & Kronman defend security as a monitoring device but later puzzle over after-acquired property clauses and speculate on the motives of the secured party in taking such rights. Their elaborate economic explanation fails to note the simple manner in which the after-acquired clause serves as a monitoring device: the debtor must come to the secured party for permission to make new secured borrowings from others (except as this power is limited by the purchase money priority). Again, the effectiveness of monitoring is based on a property right, and the device is inoperative only when the new money is traced into new assets.

Professor Schwartz, in disputing that monitoring can explain the existence of security, reasons that security should be unnecessary in short-term lending because the shortness of time precludes the debtor from despoiling the secured parties' rights. Schwartz realizes that security is nevertheless taken in some short-term debt situations such as inventory and accounts receivable financing. He concludes that monitoring therefore cannot be the explanation. If he had considered the real-world risk of these short-term loans, however, as discussed above, he would have understood that monitoring based on property

financial trouble innocently experienced and the kind of "misbehavior" on which theories of credit monitoring are based. Nor, unfortunately, does Levmore explain how signals from senior claimants that the barn door is open will be useful to the common stockholders after the horse is stolen. Only Smith and Warner come close to a realistic discussion of the role of security in monitoring. See Smith & Warner, supra, at 250.

See U.C.C. § 1-201(37) ("'Security interest' means an interest in personal property . . . ."); cf. United States v. Security Indus. Bank, 459 U.S. 70, 75 (1982) (A security interest is a property interest with greater protection from a retroactive taking than the mere contractual right to payment of the debt secured.).

See supra text accompanying notes 100-01. Compare Jackson & Kronman, supra note 3, at 1149-61 with id. at 1166-75.

See supra text accompanying notes 68-79.
4. Signaling

Professor Schwartz also considers secured debt as a signal.\textsuperscript{139} He looks to the new economic doctrine of signaling and to applications of it in the financial field, speculating that "[a] firm willing to encumber its assets is, thus, 'signaling' that, in its view, its prospects justify these potential costs."\textsuperscript{140} The costs involve giving secured creditors greater leverage over the firm's behavior and making it more difficult to reschedule debts in the event of hard times. Schwartz goes on to state that

\[ \text{the apparent property of secured debt to communicate accurately to creditors a firm's true estimate of its expected earnings indicates that the existence of secured debt may be explained as a signaling phenomenon. The information conveyed by the issuance of secured debt enables firms to borrow on terms that more accurately reflect their risk.}\textsuperscript{141} \]

He concludes that "[t]his signaling explanation is promising but, unfortunately, has serious difficulties. A security-interest signal may be ambiguous . . . ."\textsuperscript{142}

I have elsewhere expressed my view that the concept of signaling, even if it may be a promising new tool of economic analysis in other contexts, has not been brought over successfully to financial markets.\textsuperscript{143} The effort to apply it here strengthens my view.

If Professor Schwartz had ventured into the factual world by even casual inquiry to formulate a hypothesis instead of trying to adapt a theory formulated in different factual contexts, he would have learned that incurring secured debt does indeed "signal" a firm's risk class, but the information conveyed is the exact opposite of what he conjectures. He would have been told in no uncertain terms that firms that can avoid giving secured debt do so. There is no signaling to demonstrate ability to survive the restrictions of security. On the contrary, the grant-

\textsuperscript{139} See Schwartz, A Review, supra note 2, at 14-21.
\textsuperscript{140} Id. at 15.
\textsuperscript{141} Id.
\textsuperscript{142} Id. at 17.
ing of security is an involuntary signal of the opposite kind, namely that the debtor cannot borrow unsecured because creditors think the risk is too great. It is the termination of the necessity to borrow on a secured basis that demonstrates and may signal strength, not the entry into such an arrangement. If Professor Schwartz had been attentive to markets and their history, he would have noted that for a long period there was active opposition to a requirement of public notice of security in accounts receivable financing, exactly because secured borrowing on accounts was deemed to be a signal of weakness, not strength. The words of success used to be, "He's out of the finance companies [i.e., secured loans] and into the banks [i.e., unsecured loans]."

I have not exhausted the list of hypotheses discussed by Professor Schwartz as possible explanations for the existence of security. For example, Professor Schwartz devotes several pages to the possibility that the explanation of security is that it increases welfare by reducing uncertainty on the part of creditors. He treats "uncertainty" as an economic concept floating in a sea of abstraction. But in this context the only relevance of the term would have been "uncertainty of payment of the debt." Its converse would be "certainty of payment of the debt." As we have seen, in some situations this comes best from a security interest.

Elsewhere in his article Professor Schwartz asserts, "When a creditor becomes secured, . . . certain . . . assets of the debtor are set aside to help insure that this creditor is paid; in consequence, its chance of collecting its debt are [sic] much increased. . . . [T]he chance that the debtor's unsecured creditors will collect their debts correspondingly

\[144\] See, e.g., N.Y. LAW REVISION COMM'N, COMMUNICATION AND STUDY RELATING TO ASSIGNMENT OF ACCOUNTS RECEIVABLE (N.Y. Leg. Doc. No. 65(k) (1946)); Koessler, Assignment of Accounts Receivable, 33 CALIF. L. REV. 40, 57-60 (1945). The commentary to section 9-302 of the UCC states that under prior accounts receivable statutes the jurisdictions were split on whether to require public notice of accounts receivable financing by filing. See U.C.C. § 9-302 comment 5.

The late Soia Mentschikoff, Associate Reporter for the UCC, commented that at one time there was the business of screaming that if you had to file on an assignment of accounts, the world would end. In any event, the assignment of accounts receivable business would disappear. Accounts receivable would no longer be appropriate subject matter for a secured loan . . . . But none of these things happened.

Mentschikoff, Uniform Commercial Code—20 Years After, in N.Y. STATE BAR ASS'N, ADDRESSES AT ANNUAL MEETING OF BANKING, CORPORATION AND BUSINESS SECTION 37, 45 (Jan. 27, 1972).

\[145\] This remark would no longer be appropriate because banks have now moved into asset-based secured lending themselves. See infra notes 157-59 and accompanying text.

\[146\] See Schwartz, A Review, supra note 2, at 24-27.
decreases." But his conclusion belies this premise: "[T]he existence of secured debt seems not to increase uncertainty for a firm's other creditors . . . ."\(^{148}\)

Yet his conclusion is right—it is his premise that is wrong. As we have seen in Part I,\(^{149}\) secured credit that makes possible the purchase of additional assets takes nothing from unsecured creditors, and may benefit all parties.

I believe I have sufficiently indicated the flavor of Professor Schwartz's article. I have not thought it worthwhile to meet him four-square on the substance of other discussions, all of which end inconclusively or with rejection of the application of the economic theory discussed. I simply cannot believe that the study of abstract concepts developed in other contexts for other purposes can in any way contribute to an understanding of practical commercial law or policy.

D. Disregard of the Judgment of the Market

Writers in law and economics frequently espouse the laissez-faire theme that government should not interfere with the market unless it is clear that there exists a market failure, such as a monopoly or oligopoly, that prevents free market competition from determining prices, supply, or demand.\(^{150}\) If this test were applied to the market for chattel security in commercial lending, one would have to conclude that the market has no apparent competitive failures. It is not dominated by any one lender, by an oligopoly of lenders, or by any particular type of lender. There are numerous commercial banks, retail banks, finance companies, and factors.\(^{151}\) There are also insurance companies, pension funds, savings and loan associations, and credit unions, as well as other more specialized lenders. Each competes with the others and the present trend is toward increased competition by expanding the power of these various lenders to make different types of loans in diverse areas of commerce.\(^{152}\) The credit market is a textbook case of strong market

\(^{147}\) Id. at 7.

\(^{148}\) Id. at 24.

\(^{149}\) See supra text accompanying notes 57-95.

\(^{150}\) See, e.g., Kitch, supra note 20, at 191-92.

\(^{151}\) The National Commercial Finance Association has 200 members, including banks and bank affiliates. There are, of course, thousands of banks, large and small.

competition.

The market for secured credit is also a market of strong competition. Yet borrowers have always recognized that giving security is somewhat restrictive and undesirable.153 If most lenders in a particular class of transactions did not agree about the necessity for security, other lenders willing to make loans on an unsecured basis would drive the secured lenders out of the market, but this has not occurred. Nor is there any clamor from groups representing borrowers, or from credit associations and other groups representing unsecured lenders, for change in the state laws that permit secured credit, or change in the Bankruptcy Code, which recognizes the rights of secured creditors.

Those who question the fairness or the economic efficiency of security arrangements ought to carry the burden of showing why the judgment of the market is not to be accepted.154 Professor Schwartz's thesis that higher interest rates should be a suitable substitute for security is unsupported by any general movement of the competitive market away from secured financing arrangements.

When the market no longer finds security necessary and can accept the proposition that an increased interest rate is an adequate substitute, the market may abandon security. This abandonment has already happened in certain areas of financing that involve numerous small loans and where the available collateral has slight value. For many years, major household appliances were sold subject to security in the goods and with installment payments. In the last two decades, many stores began to sell these goods on revolving credit plans without security. Revolving credit plans typically require payment of at least ten percent of the principal per month rather than the substantially lesser percentages that were required under eighteen to thirty-six month installment plans. The effective interest rate may also be higher than under the security arrangement.155 The same result occurs when goods

153 See supra note 144 and accompanying text.

154 One may argue that the government has already intervened in the marketplace for credit by establishing the rights of secured creditors under the UCC. The UCC, however, merely codifies and simplifies prior commercial practice—it does not alter the nature of credit transactions. Cf. Adams v. Southern Cal. First Nat'l Bank, 492 F.2d 324, 330 (9th Cir. 1973) (the right of peaceful repossession under the California Commercial Code codified existing law and practice), cert. denied, 419 U.S. 1006 (1974). Moreover, even if secured credit was legally unenforceable, the market would find alternative ways to achieve the same result. See infra text accompanying notes 167-74. In any event, governmental intervention through the UCC and the Bankruptcy Code does not defeat the market's ability to choose between secured credit and other credit arrangements.

155 But the rates may coincide because both are at or close to the statutory maximum. Compare UNIF. CONSUMER CREDIT CODE § 2.201(2), 7 U.L.A. 651 (master ed. 1978) (maximum rate provisions on sales not pursuant to open-end credit) with id. §
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formerly bought on secured credit are bought with merchant or bank credit cards. Some stores offer the consumer a choice between these types of financing. In this area of consumer credit, where the collateral value is slight, practice confirms Schwartz’s thesis that increased interest rates and accelerated payments can be a substitute for security.\textsuperscript{166} Similar change is noticeably absent, however, in other areas of secured financing.

When the individual exposure is large and the collateral of substantial value, all types of lenders seem increasingly to be moving toward secured loans. Neither Schwartz nor Jackson & Kronman have observed the strongest example of this trend: the changing role of banks from being primarily unsecured lenders to becoming secured lenders engaged in asset-based financing, in much the same circumstances as the finance companies and for the same reasons.\textsuperscript{157}

2.202(3), 7 U.L.A. 659 (maximum rates on open-end credit).

\textsuperscript{166} Similar market influences apply in the small-loan business. The amounts involved are typically kept small by statute because of the high interest rates permitted. See, e.g., Unif. Consumer Credit Code § 2.401(2), 7 U.L.A. 671 (master ed. 1978); J. Spanogle & R. Rohner, Consumer Law 481 (1979). The kinds of collateral possessed by borrowers who need to pay these high interest rates usually have little resale value, and the loans are generally unsecured. In addition, enforcement remedies in non-purchase-money cases on household goods are generally restricted. See, e.g., Unif. Consumer Credit Code §§ 5.112, 5.116, 7 U.L.A. 773, 775-76 (master ed. 1978).

\textsuperscript{157} One indication of this trend is the recent creation by the American Bar Association’s Section on Corporation, Banking, and Business Law of a committee to specialize in the law of asset-based financing. It is also notable that while in its early days the National Commercial Finance Conference (NCFC) did not admit bank-affiliated lenders to membership; in 1982, 65% of the members were bank affiliates, including many of the largest banks in the United States.

Stephen C. Diamond, a Senior Vice President of the First National Bank of Chicago, states that asset-based financing by banks, as with finance companies, “still involves the extension of credit, based on a relatively high weighting of collateral and a relatively low weighting of the borrower’s financial strength.” Asset-Based Lending, 39 NCFC J., Apr. 30, 1983, at 22, 22 (statement by S. Diamond). Robert Martinsen, Chairman of Citicorp Industrial Credit, Inc., discusses the movement of banks into asset-based lending as the result of market pressures:

What’s happened in the past 15 years? The equity markets have dissolved. Long-term debt sources have dried up. 

Our industry will continue to grow as the use of secured lending surges. Healthier companies will have difficulty meeting the credit criteria required for unsecured borrowers. 

The middle market has always been perilous for the banker, who has consistently financed it with insufficient security and inadequate monitoring. As the shake-out from the current recession occurs, more and more lenders will realize that the way to finance the middle market is through the asset-based lending product.

\textit{Id.} at 30-31 (statement by R. Martinsen).
Banks found a large need for financing among small and moderate-sized corporate borrowers. These borrowers, unlike giant corporations, were unable to borrow unsecured at or close to the prime rate. The banks appear to have decided that this market could not be served merely by charging a higher interest rate but must be served through the safety of a security interest.\textsuperscript{158} When the banks first learned this lesson, they entered the field by participating in secured finance company loans. They then began, either directly or through their holding companies, to buy finance companies—not to obtain capital, but to obtain their expertise. Banks could not operate in this tricky field with traditional bank lending officers skilled only at studying financial statements. In asset-based financing, lending officers had to understand the worth of the collateral in supporting credit and the practical operating risks and protective methods of the business. Banks, therefore, had to buy the finance companies to get trained personnel.\textsuperscript{159} As a result, the independent commercial finance companies of thirty years ago are today often subsidiaries or departments of banks.

There is evidence that other countries are experiencing a movement similar to our own in validating chattel security. Several Canadian provinces have copied or adapted article 9.\textsuperscript{160} An international or-

\textsuperscript{158} The banks have learned that lowering the standards for unsecured loans creates increased percentages of credit losses; that is, it creates problems not fully compensated by higher rates. Thus, banks are turning for the first time to secured loans. As one commentator has noted:

[H]eightsened competition among banks . . . has resulted in much price-cutting on credit terms. That squeezes banks' spreads between their interest costs and interest income.

Thus, they have had to look elsewhere for new business sources, and many are pleased with what they have found. For Citicorp, for instance, asset-based lending is the fastest-growing and most profitable U.S. credit business.


\textsuperscript{159} See Reisman, \textit{What the Commercial Lawyer Should Know About Commercial Finance and Factoring}, 79 Com. L.J. 146, 147 (1974). In 1983, Manufacturers Hanover Corp. bought C.I.T. Financial Corp., which, until its acquisition a few years earlier by R.C.A., had been the largest independent financing and factoring group. Fuji Bank of Japan outbid a large bank holding company, Security Pacific Corp., for the finance subsidiaries of Walter E. Heller International Corp. These are the latest in a long series of transactions extending over at least 25 years by which banks acquired finance companies. Security Pacific Corp. is now negotiating to purchase Commercial Credit Corp., formerly the second largest independent financing and factoring group, from Control Data Corp. See Wall St. J., May 2, 1985, at 3, col. 1.

ganization, UNIDROIT, is engaged in drafting a set of rules for international leasing transactions that, in their present form, can also be used for the type of security interest we used to call a "conditional sales contract."^161

Although Judge Posner has concluded that in many situations the common law leads to economically efficient rules,^62 Schwartz and Jackson & Kronman have great difficulty in reaching that conclusion about the legal rules that permit secured credit. A look at the increased use of secured credit in commercial practices, instead of highly abstract reasoning, would have provided a useful perspective and a less uncertain conclusion.

E. Failure to Consider the Feasibility of Abolishing Secured Credit

In questioning bankruptcy priorities as to secured credit, Professor Schwartz quite clearly questions the justification for secured credit altogether, with the implicit hypothesis that perhaps it ought to be limited or abolished.\^183 Yet there is little chance that secured credit could be restricted or abolished without immediate evasion. It should be apparent to anyone with a practical orientation that other closely related devices are available to accomplish the same result.

First of all, as Jackson & Kronman acknowledge,^164 and as experienced people in this field know, the UCC merely codifies and simplifies prior commercial practice. There is nothing that the UCC permits that could not be done without it.\^165 The UCC reduced the interest cost of inventory and accounts receivable financing, to the benefit of debtors and unsecured creditors, in two ways. First, it eliminated many legal risks and uncertainties and made filing easier, thus reducing creditors' operating costs.\^166 Second, the reduction of uncertainty also encouraged the banks to begin asset-based financing, furnishing competition to the finance companies and reducing rates because of banks' lower cost of money.\^167 Restricting the rights and priorities afforded secured credi-

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164 See Jackson & Kronman, supra note 3, at 1157.
166 For example, the UCC eliminated the requirement of Benedict v. Ratner, 268 U.S. 353 (1925), that the lender exert "dominion"^5 over the proceeds of these kinds of collateral. See U.C.C. § 9-205 & comment.
167 Before the UCC and during my period of active involvement in the business,
tors under the UCC would increase the cost of secured financing, but would not eliminate it.

There is, however, a more fundamental obstacle to any effort to restrict the giving of security in receivables. Receivables are obligations owed the manufacturer or merchant for the sale of goods for which the processes of the seller have been completed. Receivables can be collected approximately as well by selling them as by borrowing against them or by holding them until maturity. U.C.C. § 9-102(1)(b) recognizes that sales and loans secured by receivables are nearly identical in economic effect and treats them all as secured transactions. Wisely, the UCC does not attempt to control the holder's decision of which alternative to follow for "cashing" receivables.68

The law could hardly prohibit a businesswoman who needed cash from selling her receivables any more than it could refuse to allow her to sell tangible assets. It is hard to see how the law could prohibit even a sale of receivables with recourse. In the case of chattel paper, there is substantial authority to the effect that a sale with recourse is nevertheless a true sale for various purposes.169 The fundamental question in negotiating the "cashing" of receivables is who bears the credit losses, and this can be accommodated in several ways, such as by adjusting the price of the transfer.

Consider, for example, three different ways that a department store offering charge accounts can obtain relief from the working capital pressures that result from its extension of credit to customers. Assume that credit losses average one percent of the total credit extended and that the average account is paid off in two months.

the prime bank rate was in the neighborhood of six percent, and the typical secured commercial finance rate was double the prime rate. Since banks have entered the finance picture this spread has been reduced. The assertions in the text are generally supported by the panel discussion in Asset-Based Lending, supra note 157, at 22-35. Of particular interest are the remarks of Mr. Lowell L. Byron of McKinsey & Co., Inc., id. at 23-24, Mr. John F. Nickoll of the Foothill Group, Inc., id. at 26, and Mr. Robert Martinsen of Citicorp Industrial Credit, Inc., id. at 30-32.

168 Accountants draw distinctions that the UCC draws only partially between a sale of receivables with recourse and a secured loan. See U.C.C. §§ 9-502(2), 9-504(2) (distinguishing between sales and loans only for purposes of deficiency judgments and treatment of surplus proceeds). Cf. Financial Accounting Standards Board, Statement of Financial Accounting Standards No. 77, Reporting by Transferors for Transfers of Receivables with Recourse, app. C, ¶ 19 (Dec. 1983) ("Although transfers of receivables with recourse may have many of the same characteristics that collateralized loans have, the Board concluded that a substantive distinction can and should be made between transactions accounted for as sales of receivables with recourse and loans collateralized by receivables.").

169 See Kripke, Conceptual Obsolescence in Law and Accounting—Finance Relations Between Retailer and Assignee of Retail Receivables, 1 B.C. Indus. & Com. L. Rev. 55, 56, 60-61 (1959).
First, the store can borrow up to one hundred percent of the face amount of its accounts from a bank, pay twelve percent interest, and grant a security interest in the accounts. Over an average two-month maturity, the bank will earn two percent on each account. With this procedure the bank does not suffer any credit losses on the accounts. Second, the store can sell the accounts to the bank for ninety-eight percent of their face amount, with recourse—that is, the store agrees to cover any credit losses. The bank will collect one hundred percent of the face amount, thus earning the same two percent per account. Third, the store can sell the accounts to the bank for ninety-seven percent of the face amount, without recourse. The bank will absorb the one percent default rate and collect ninety-nine percent of the face amount, again earning a two percent return. There is no real economic difference among these three transactions.170

There is, finally, a fourth way in which a corporate seller of goods can finance its receivables. It can segregate them in a wholly owned finance company subsidiary, and then have the subsidiary borrow to obtain the funds with which to extend the credit represented by the receivables. The borrowing need not be on a secured basis because the segregation of the receivables in the subsidiary gives to the lenders of the subsidiary claims to the assets ahead of the claims of the parent company's creditors, and thus presents almost the exact equivalent of borrowing by the parent company on the security of the receivables.171

Similar difficulties would arise in any attempt to inhibit businesses from acquiring tangible assets, such as inventory or equipment, on secured credit. Much of this credit is purchase money financing. The person who supplies the goods on credit, or who supplies the financial credit with which the goods are purchased, could instead keep or take ownership of the property, making it available to the user by various means.172

170 A similar example could be devised using dealer sales of chattel paper. Cf. Kripke, Book Review, 46 N.Y.U. L. Rev. 1220, 1224-25 (1971) (reviewing AMERICAN BAR FOUNDATION, COMMENTARIES ON INDENTURES (1971)) (demonstrating difficulty of distinguishing sales from loans on factual characteristics of transaction). Even when business realities may lead to identical accounting classifications, there is still the possibility that differences in form may have important consequences in other areas such as taxation and the application of indenture restrictions. See Kripke, supra note 169; Simpson, Loan Participations: Pitfalls for Participants, 31 Bus. Law. 1977, 1978-79 (1976).

171 It is well known that the automobile manufacturers have finance company subsidiaries for this purpose. It is perhaps not equally well known that companies like Sears and Montgomery Ward have similar subsidiaries to finance open account receivables. Obviously, any attempt to outlaw secured borrowing on receivables would simply lead to further development of this practice. See Kripke, Captive Finance Companies: Legal Aspects, in AMERICAN MANAGEMENT ASSOCIATION, supra note 55, at 13; Wallen, supra note 55, at 30.
relationships other than as secured creditor and borrower. In particular, equipment may be leased,\footnote{UCC article 9 still recognizes a distinction between true leases and leases in which the lessee has the option to acquire ownership for a nominal amount beyond the lease rentals. The UCC categorizes the latter type as "leases intended as security" and treats them as security interests. U.C.C. § 1-201(37). Presumably any rules abolishing or restricting secured credit or changing its priority would apply to such leases. Yet it seems likely that owners of goods who have been unwilling to entrust them to users without security might get an approximate equivalent by refusing to sell and instead leasing them under "true leases." There would be some greater economic risk for the lessor, but it might still be better than a credit sale without retained security. On the elusive distinction between the true lease and the security lease, see B. FRITCH & A. REISMAN, EQUIPMENT LEASING—LEVERAGED LEASING (2d ed. 1980); Kripke, Book Review, 37 BUS. LAW. 723 (1982) (reviewing B. FRITCH & A. REISMAN, supra); Boss, Lease Chattel Paper: Unitary Treatment of a "Special" Kind of Commercial Specialty, 1983 DUKE L.J. 69; Coogan, supra note 161.} Finally, if any attempt were made to change the present rules.

\footnote{As Professor Kronman has noted, "Any incomplete regulation of a contractual relationship, that is, any regulation which stops short of imposing a compulsory contract on the parties, is unlikely to achieve its redistributive purpose. . . . [T]he parties to a contract remain free to modify their arrangements in ways not already subject to governmental control . . . ." Kronman, Contract Law and Distributive Justice, 89 YALE L.J. 472, 506 (1980).}
by discriminating in favor of trade credit, as Professor Schwartz seems to prefer, similar problems would arise in differentiating trade credit from financial credit.\textsuperscript{174}

III. Agenda for Research on Article 9

While the Schwartz and Jackson & Kronman articles do not seem to me to have advanced the cause of improving commercial law to any significant extent, I do think that there remains room for factual research on specific questions. This section offers concrete examples of questions open to research.

A. Confirmation of the Importance of Chattel Security to Our Distribution System

I have asserted throughout this Article that most small business is undercapitalized and needs the working capital that is supplied by inventory and receivables lending from financial lenders. If these assertions need verification, they may readily be checked through banks and credit organizations.

I have suggested that cases in which the supplier finds itself unsecured while financial creditors hold as security the inventory that it supplied\textsuperscript{175} are few compared to instances of the successful use of secured credit. If suppliers customarily took purchase money security interests in inventory and if the priority of the security interest carried through to the resulting receivables, then financial lenders could not extend credit on inventory and receivables. Therefore, I believe that, on balance, suppliers have benefitted from the willingness of secured financial lenders to step into the picture and limit the amount of credit that suppliers need extend. The occasional losses suffered by suppliers as a result of the bankruptcy of their debtors should be balanced against the many cases where there is no bankruptcy and where suppliers have been paid over the course of long and successful credit relationships.

Even as to this there are differences of opinion. Professor Fairfax Leary, Jr., has told me that in areas of Philadelphia there is little supplier credit because too much lending is preempted by broad financing assets used in the enterprise that the wholly owned finance subsidiary provides in the case of receivables: that is, they provide the functional equivalent of secured debt while escaping that classification.

\textsuperscript{174} See supra notes 47-56 and accompanying text.

\textsuperscript{175} This is the predicament of which Professor Countryman complains. See Countryman, supra note 13, at 269.
statements of secured creditors. Researchers could usefully try to determine how suppliers generally adapt to the existence of broad inventory and receivables security interests. Do they put the debtor on a C.O.D. basis, as Professor Leary seems to suggest? Does the secured party formally or informally guarantee the supplier credits, or use field audits to make sure that debt to suppliers is not accumulating?

It would not be too difficult a research project to learn what actually happens in those cases where broad financing statements cover inventory and receivables. A survey of moderate-sized bankrupt companies that have had such relationships with financial lenders could be made either by examining court records or by consulting with bankruptcy judges and commercial lawyers. Some judgment might be reached on a firmer factual basis than is presently available as to whether, on the whole, trade suppliers have benefitted from long-term relationships in which they were promptly paid, or whether they have lost because inventory that they furnished in short-term relationships with failing debtors was subject to the security interests of secured lenders.

Research through bankruptcy specialists would, however, present only one side. It would not show the results of the many cases of secured lending that either continue for many years satisfactorily for all concerned, or that reach the point where the debtor graduates to unsecured borrowing. One potential source of information on these cases is surveys of commercial lawyers or their commercial lender clients. Another is the files of the National Commercial Finance Association, which for many years has given annual awards to companies that started with commercial financing and graduated into unsecured borrowing or public financing.

Although a claim of logical "rigor" could not be made for the proposed empirical study, it would be based on the same kind of inquiry that legislators and businessmen regularly use in their determinations of policy. Such an empirical study might give a more balanced view of this problem than abstract economic hypothesizing can provide.

B. The Unsecured Character of Factoring

Another focus of inquiry might be why the receivables involved in factoring are unsecured, and why the factor, unlike most commercial financers, has only "one name paper"—that is, a trade obligation of the account debtor without recourse against its assignor except for breach

176 Conversation between Fairfax Leary, Jr. and Homer Kripke (1983).
177 Id.
of warranty and without security.

One answer lies in the circumstances of factoring. This form of financing appears at every level of the production process. No doubt part of the answer is historical. Factoring began early in the nineteenth century. For many years, there were no statutes facilitating the taking of security in receivables.\textsuperscript{178} A more practical reason why the factor can afford to succeed to the seller’s risk on an unsecured basis is that the factor is highly selective in taking risks, and will reject those that seem undesirable on an unsecured basis.\textsuperscript{179} The factor can do this because it deals with a seller that frequently sells to the same customer in a chain of manufacture and distribution. Enough business is provided by each account debtor so that the factor can and does maintain elaborate credit files on each one and can exert sufficient effort to determine whether unsecured risks are reasonably safe.\textsuperscript{180} These transactions generally involve more credit-worthy debtors than those involved in commercial receivable lending with recourse, and factoring relationships tend to be more continuous. Finally, another explanation is that the factor may hold back from the face of the account not only an amount to pay for the use of its money but also a discount to cover the expected credit losses. Yet the contrast with the general secured position of commercial financing is strong, and the explanations are not wholly satisfying. Perhaps research would disclose other explanations.

\section*{C. Other Anomalies in Secured Credit}

Another subject for study might be why security formerly taken is no longer taken in some situations but is still taken in other comparable situations. For example, industrial secured borrowing through public bond issues, reasonably common before World War II, has almost vanished.\textsuperscript{181} Why has this happened? Professor Schwartz offers the sugges-
tion that creditors do not take security in firms likely to be reorganized rather than liquidated, presumably because reorganization does not permit resort to the collateral.\textsuperscript{182} Professor Schwartz's reasoning would be consistent with the fact that private industrial borrowings from institutional lenders are still frequently secured by real estate mortgages and the like; the absence of public bondholders' interests makes it less likely that resort to reorganization would be attempted, or at any rate that it would succeed. But his explanation is unsatisfying because even if the secured creditor cannot carry away its collateral in the case of a big industrial reorganization, the collateral does give it priority in the distribution of the reorganization securities. Moreover, that explanation would not, in any event, explain why railroad public debt issues and public utility public debt issues are still secured, even though those companies are more likely to be reorganized than liquidated.

Disputes over the desirability of recent rapid expansions of secured credit seem to focus on the sweep of the after-acquired property clause and of notice filing.\textsuperscript{183} There may be room for considering a limitation on the availability of such credit in the case of financing for users, where there is no continuing commitment or arrangement for new loans against newly-acquired property. Such a limitation would present a drafting problem for accessions and replacements. But even assuming that the drafting problem could be solved, it is by no means clear that change is called for. In inventory and receivables situations, where continuing loans are normally assumed, change in this respect would greatly disrupt our present system and would be undesirable unless the empirical investigations proposed above showed abuses in the present system.

As a final example, there has recently been a spate of criticism concerning potential abuses in leveraged buyouts. A leveraged buyout is a financial transaction in which members of management or outside entrepreneurs take a company private—that is, buy out the public stockholders of a company with funds obtained from borrowings secured by the company's assets. Several years ago, the Securities and Exchange Commission (SEC) expressed concern about the need for full disclosure of the fairness of the transaction in relation to the advantages obtained by management against the public stockholders.\textsuperscript{184} More recently, in an SEC memorandum, I raised the question of the possible illegality of this substitution of secured borrowing for equity, in relation

\textsuperscript{183} See supra note 13.
to unsecured creditors.\textsuperscript{185} This concern was later independently echoed by SEC Chairman Shad in terms of the danger of bankruptcy because of excessive leverage.\textsuperscript{186} Thus these potentials for abuse of secured credit are being handled through the securities laws and the law of fraudulent conveyance. They need not affect the propriety of secured credit in other applications.

There are no doubt other problems concerning the appropriate scope and governing rules of secured credit in the chattel field that would warrant further research. I believe that research can best be carried out by factual inquiry among those practicing in the field. If the Schwartz and Jackson & Kronman articles are typical, economic analysis without factual investigation does not have much to offer in as highly practical a field as commercial law.

**Conclusion**

It may be presumptuous to draw conclusions from intensive study of only two articles. In any event, it seems to me that articles like these cannot be meaningful or persuasive to conventional academics in commercial law, to practicing lawyers and businessmen in the field, or even to the judges and legislators who have ultimate jurisdiction over the laws of secured credit and bankruptcy.\textsuperscript{187} The articles have no link to


There are, however, two concerns that in my view may be of special significance: (1) the likelihood that lawyers and judges will not be able to use or to assess economic analysis accurately or efficiently, and (2) the risk that its introduction may find its way into judicial opinions in cases in which it is highly unlikely that the litigants will be able to understand why the court decided as it did. We already have evidence that even ex-
the reality of secured transactions, and their abstractions are untested by any empirical research. Both enthusiasts and nonenthusiasts for law and economics have cautioned that policy recommendations based on economic theories must be tied to empirical studies and that these studies will not be easy.\footnote{188}

I strongly believe that academicians in the field of commercial law must get some practical feel for the field and for the role of financing in our systems of manufacturing and distribution. This will not come from reading appellate cases or the writings of academic economists who unsuccessfully try to describe and reduce to formulae an intensely practical field. It could come from participation in the work of the American Bar Association's Committee on Commercial Financial Services and by reading practice-oriented material in such journals as The Business Lawyer, The Commercial Law Journal, and the NCFA Journal. There is preeminently a need for the old goal of legal realism: to get beyond appellate opinions into trial records and beyond those records into life itself. The academic and abstract coloring of the articles discussed here belies the frequent assertion that law and economics is the successor to legal realism.\footnote{189}

\footnote{188} Law-professors sitting on the bench can have a great deal of difficulty in applying economic analysis. It also seems likely that ordinary lay people will not be able to understand and to feel the force of many justifying reasons given by judges in the name of economic analysis. What is at stake here is nothing less than a basic precondition for respect of the law. Again, one must await the accumulation of further evidence before passing final judgment.


Professor Kornhauser, who is not merely a lawyer practicing economics but also a scholar with academic credentials in both fields, has sounded a note that translates at a minimum into a caution against the overzealous application of law-and-economics techniques:

Careful scrutiny of the descriptive claim [i.e., that the law is in fact efficient in an economic sense], like scrutiny of the normative claim [i.e., that the law should be efficient in that sense], therefore raises grave doubt as to its validity. These doubts call into question these claims as a justification for the enterprise of law and economics.


\footnote{188} See Horwitz, Law and Economics: Science or Politics?, 8 HOFSTRA L. REV. 905, 905 (1980); Kitch, supra note 20, at 184; M. Schwartz, Economics in Legal Education, 33 J. LEGAL EDUC. 365, 366 (1983). In a conversation with the author on April 4, 1985, Professor Jackson expressed the view that law and economics should not be considered a successor to legal realism.
If these articles are indicative, one may well conclude that law and economics has "peaked out" and will prove to have been just a legal fad without continuing promise. Others, of course, will disagree. The truth may be that too much is being attempted too early. Perhaps these articles were written before economic tools were ready for the task. Professor Summers has stated that "[t]he limits of economic analysis of law as well as its important uses will become better understood in the immediate future. There is already a growing literature on the limitations of positive economics as a source of models for the prediction and explanation of legal phenomena." If this expectation of greater understanding is correct, then, while I still grade these articles low for accomplishment, I can grade them high for effort, and applaud them as examples of necessary failures along the way.

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189 See Horwitz, supra note 189, at 905. Since Professor Horwitz is a member of the Conference on Critical Legal Studies, see supra note 14, a group competing with law and economics for the hearts and minds of legal academe, his conclusion is not surprising.

191 See, e.g., Kitch, supra note 20, at 196.

192 Summers, supra note 187, at 340 (footnote and emphasis omitted).