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Secured Financing and Priorities
Among Creditors*

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One of the principal advantages of a secured transaction is the protection it provides against the claims of competing creditors. A creditor asserting a security interest in his debtor's property is likely to find himself in competition with a wide assortment of other claimants. For example, his security interest may be challenged by another creditor with a consensual security interest, by a creditor with a judgment or execution lien, by a creditor claiming a right to the collateral under some general statutory entitlement such as a repairman's lien, by a seller to or a buyer from the debtor, or by the debtor's trustee in bankruptcy. To a considerable extent, the value of a security interest depends upon the degree to which it insulates the secured party from the claims of the debtor's other creditors.

Article 9 of the Uniform Commercial Code contains detailed rules for resolving conflicts between secured creditors and various third parties—rules that tell the secured party what he must do in order to prevent his security interest from being overridden by a competing claimant, or, conversely, what a competitor must do in order to circumvent an existing security interest in the debtor's property. These rules are called "priority" rules since it is their function to determine

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1. Protection against third parties is, of course, not the only advantage afforded by a security interest. A creditor with a security interest in his debtor's property may also find it easier to enforce his claim against the debtor in the event the debtor defaults. Upon default, and unless otherwise agreed, the secured party may take possession of the collateral without judicial process if he can do so without breaching the peace. U.C.C. § 9-503 (1972 text) [hereinafter cited by section number only]. Unless reference is made to another version, this article will refer to the U.C.C.'s 1972 official text with comments.
the order in which competing creditors may satisfy their claims from particular assets belonging to their common debtor's estate.\textsuperscript{2} Taken together, they define the principal advantages and limitations of a consensual security interest in the debtor's personal property.

One of Article 9's most striking innovations is its relatively comprehensive and systematic treatment of priority questions. In this regard, Article 9 represents a distinct improvement over the various pre-Code chattel security statutes, which treated priority problems in an ad hoc and inconsistent fashion.\textsuperscript{3} Nevertheless, the analytic justification for many of Article 9's most important priority rules remains obscure. This is especially true of the overriding priority enjoyed by purchase money lenders.\textsuperscript{4} Established long before the enactment of the Code\textsuperscript{5} and carried forward in Code sections 9-107 and 9-312(3) and (4), the purchase money priority\textsuperscript{6} enables a lender or seller who has financed the debtor's acquisition of an asset to create a security interest in the asset that is superior to any prior interest claimed by another secured party. The overriding priority afforded purchase money lenders occupies an especially important place in the Article 9 scheme because it constitutes an exception to the general rule that competing security interests are to be ranked temporally, with earlier interests prevailing over later ones.\textsuperscript{7}

\begin{enumerate}
  \item The Code's priority rules are concentrated in §§ 9-306 to -316, although various other sections in Article 9 may be viewed as-or may affect-priority rules. For an authoritative treatment of priorities under Article 9, see G. Gilmore, Security Interests in Personal Property §§ 25.1-40.6 (1965).
  \item See id. at 655-57.
  \item See Jackson & Kronman, A Plea for the Financing Buyer, 85 Yale L.J. 1, 2 n.8 (1975) ("While many statements are found which accept the [purchase money] doctrine, the economic or jurisprudential rationale for the existence of that preference has never been explored fully.")
  \item See p. 1164 infra.
  \item The notion that new money lenders should be treated with special deference is of ancient vintage. See note 5 supra. The Article 9 priority scheme has been shaped at a number of points by acceptance of this idea. The idea can be seen at work, for example, in the complex rules governing conflicts between personal and real property mortgagees, §§ 9-313(4), (6); see 2 G. Gilmore, supra note 2, §§ 28.3-4, at 758-59, in the presumption of priority for certain statutory lienors who have furnished "services or materials with respect to goods subject to a security interest," § 9-310, Comment 1, and in the special priority rules governing accessions, § 9-314, Comment 2.
  \item Special deference to certain forms of new money has also developed outside the chattel security field. For example, in corporate reorganizations under the Bankruptcy Act, priority is granted to the holders of "trustee's certificates." 11 U.S.C. § 516 (1976), re-
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Viewed uncritically, the purchase money priority may appear to strike a sensible balance between the interests of prior lenders, who retain their priority with respect to their original collateral, and the interests of the new lender, who obtains a special priority in the particular item or items of property the acquisition of which he has financed.\(^8\) It has been said that a rule of this sort prevents prior secured creditors from “tying their debtor’s hands,” thereby making it impossible for him to obtain fresh capital.\(^9\) But such an explanation is ultimately unsatisfying.\(^10\) It not only rests upon the questionable premise that a debtor’s existing creditors wish to cripple him financially, but also fails to explain one of the most prominent features of the purchase money security interest, its limitation to loans that are used to finance the acquisition of identifiable new collateral.\(^11\)


\(^9\) See, e.g., R. Braucher & R. Riegert, Introduction to Commercial Transactions 464 (1977) (“Its purpose is to prevent a creditor from obtaining the exclusive right to make loans to a debtor on the collateral of a particular type of after-acquired property, thereby acquiring a position which would enable him to take advantage of the debtor.”); J. White & R. Summers, Uniform Commercial Code 914 (1972); [T]he debtor needs some protection from a creditor who has filed a financing statement with respect to his goods, but who is unwilling to advance additional funds. If such a creditor can find a lender willing to finance a new line of merchandise, the purchase money provisions enable him to give that new lender a first claim on the new merchandise notwithstanding a prior filing by another creditor.

\(^10\) See, infra Policy Decisions and Security Agreements Under the Uniform Commercial Code, 9 WAYNE L. REV. 556, 568-71 (1963) (opponents of floating lien argued that it allows creditor to force debtor to tie up all of his assets).

\(^11\) This limitation is commonly described as a “tracing requirement.” It is currently
The purpose of this article is to develop a unified theory that explains several of the most important priority rules in Article 9. More particularly, our theory attempts to explain three salient features of the Article 9 priority scheme: why, generally speaking, the claims of secured creditors are ranked in temporal order, the first in time being first in right; why purchase money lenders are excepted from this rule; and why this exception is itself limited to loans that can be traced to identifiable collateral, rather than applying more broadly to all subsequent advances that increase the value of the debtor's estate. We also examine the particular form given to the first-in-time rule by the Code's system of "notice filing."

In our view a theory of the sort we have just described can be developed in detail only after a series of more fundamental questions has been addressed. Why does the law permit secured financing in the first place? Put differently, why does the law allow a debtor to prefer some creditors over others by securing their claims, instead of requiring all creditors to share ratably in the debtor's estate? And even assuming there is no principled objection to debtor-created preferences of this sort, what explains the widespread use of secured financing, and why do some classes of creditors typically finance on a secured basis and others on an unsecured one? We address these preliminary questions in Part I, and the answers we suggest provide the backdrop for our discussion, in Part II, of priorities among secured creditors.

embodied in the "in fact so used" language of § 9-107(b) and, by implication, in § 9-107(a), since the "seller of the collateral" must necessarily be able to identify the collateral he sold. See 2 G. GILMORE, supra note 2, at 782.

12. This article is exclusively concerned with the system of priority rules for resolving conflicting security interests in personal property, as set forth in Article 9. We recognize, of course, that a number of the doctrines we discuss have parallels in the law of real property. Compare pp. 1162, 1164-66 infra (discussing first-in-time, first-in-right general rule of priority among secured creditors and purchase money priority exception) with G. OSBORNE, supra note 5, at 313-15, 338-46, 387-94 (analogous rules for real property mortgages). Although all our examples are drawn from the personal property field, we are confident that our discussion could be extended to the principles that govern real estate mortgages.

13. § 9-312(5)(a).
14. § 9-312(3), (4).
15. § 9-107.
16. Throughout this article, we rely on economic analysis. Although many of the concepts we employ have been developed by specialists interested in problems of corporate finance and organization, see notes 24, 30, & 46 infra, the general principles these concepts express provide, in our view, a useful framework for analyzing many different legal and institutional phenomena, including those discussed here. We hope that our treatment of the Article 9 priority scheme—though necessarily limited in focus—suggests the fertility of these principles and the range of their application.
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I. The Economic Basis of Secured Financing

A. Secured Credit and Freedom of Contract

The law permits a debtor to encumber his assets in order to secure a money debt. If the debtor has a number of creditors, the effect of securing only one, or a few, of his obligations is to give secured creditors priority over those creditors who remain unsecured. Should the debtor become insolvent, his secured creditors have the right to appropriate as much of their collateral as is necessary to satisfy their claims in full before the debtor's unsecured creditors get anything.  

At first blush, it 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. This thought may in turn suggest that debtors should be denied the power to prefer some creditors over others, and that all creditors should instead be required to share equally in the event of their common debtor's insolvency, each receiving a pro rata portion of his claim.  However, the idea that all creditors should be treated equally, regardless of the private arrangements they may have made with their debtor, has played an important role in the evolution of the federal bankruptcy system. Reported case law is replete with references to the bankruptcy "principle" that "equality is equity." 

Despite its apparent appeal, however, the principle of equal treatment has never succeeded in supplanting, even in the Bankruptcy Act itself, a basic recognition of the debtor's contractual power to prefer one creditor over another. 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. It is a fair

18. Cf. Statement of Referee Daniel R. Cowans, in PROCEEDINGS OF THE FIFTH SEMINAR FOR REFEREES IN BANKRUPTCY 337 (1968) ("philosophy" of Article 9 is that financial institutions deserve higher rights than "employees, service trades, . . . or anyone else. It seems to reject the idea that those who took the risk of extending credit to a man in business should in the event of his failure share in proportion to the amount of credit they have outstanding or, in other words, pro rata.")
21. See 2 G. GILMORE, supra note 2, § 45.2, at 1284, 1287.
22. For any given loan, a creditor will face a number of possible outcomes ranging from prompt repayment of all principal and interest to failure by the debtor to pay any
assumption, however, that these other creditors will be aware of this risk and will insist on a premium for lending on an unsecured basis, will demand collateral (or some other form of protection) to secure their own claims, or will search for another borrower whose enterprise is less risky. In general, whatever level of risk he faces, if his transaction with the debtor is a voluntary one, a creditor may be expected to adjust his interest rate accordingly and to take whatever risk-reducing precautions he deems appropriate. Since creditors remain free to select their own debtors and to set the terms on which they will lend, there is no compelling argument based upon considerations of fairness for adopting one legal rule (debtor can rank creditor claims in whatever way they see fit) rather than another (all creditors must share equally in the event of bankruptcy).

The claim that fairness requires equal treatment for all creditors is made most frequently in connection with secret liens and preferential transfers occurring shortly before bankruptcy. There is, in fact, a powerful reason for invalidating transactions of this sort, but it is an economic reason that has nothing to do with considerations of fairness. If inequality itself is the vice, there is little to distinguish a secret lien from a well-publicized one, or a last-minute preference from a preferential transfer made long before bankruptcy. The objection to such transactions comes from a different quarter; if secret liens and eve-of-bankruptcy preferences were legally enforceable, creditors would either refuse to lend at much below the unsecured rate or would have to part of either. Throughout this article, the terms “risk" and “riskiness" refer both to the expected value of a loan and to the variance of possible outcomes, holding the loan’s expected value constant. See V. Brueney & M. Chirelstein, Cases and Materials on Corporate Finance 984-99 (1972) (discussing expected value and variance in financial contexts).

23. By use of restrictive covenants in the loan agreement, for instance, an unsecured creditor may limit the dollar volume of the debtor’s subsequent secured borrowing, and may demand that his loan be secured equally and ratably with subsequent secured loans. See American Bar Foundation, Commentaries on Indentures 349-67 (1971) (examples of such restrictive covenants).


26. Cf. Report, supra note 19, at 19 (“knowledge of insolvency” test does not have “any rational connection with the objective of [the preference] provision, i.e., to achieve a more equitable distribution among all of the creditors”).

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incur substantial costs in policing their loans, with the result that the principal advantage of secured financing would be lost.\textsuperscript{27}

The argument we have just sketched suggests that certain ethical objections to secured financing are without merit.\textsuperscript{28} The utility of secured financing, however, remains to be explained. It is one thing to deny that there are strong reasons for prohibiting secured transactions, and quite another to show that transactions of this sort have a positive value that accounts for their widespread use. We now turn to this second problem.

B. Debtor Misbehavior, Monitoring Costs, and Secured Credit

The price a creditor charges for extending credit—the interest his debtor must pay for the privilege of borrowing—varies directly with the riskiness of the loan itself.\textsuperscript{29} There is almost always some risk that a loan will not be repaid. As this risk increases, the interest rate set by the creditor making the loan will also increase. Once a creditor has agreed to make a loan at a specified rate of interest, however, that rate normally cannot be changed during the period when the loan is outstanding. Because the interest rate is fixed, the debtor has an incentive to increase the riskiness of the loan, since, by doing so, he effectively obtains a higher-risk loan at an interest rate reflecting the lower risk level anticipated by the creditor when the loan was made. By behaving in this way, the debtor gets something for nothing\textsuperscript{30} (ignoring, for the sake of argument, any reputational loss he may suffer as a result).\textsuperscript{31} We shall refer to this phenomenon, a species of opportun-

\textsuperscript{27} The reasons supporting this claim are developed at pp. 1149-54, 1162-64 infra. A related argument is developed in Meckling, supra note 24, at 15-16, 21-24.

\textsuperscript{28} As long as individual creditors are free to set the terms on which they will extend credit initially and are aware of the range of terms that can be included in other loan agreements, there is no inherent unfairness in the fact that some creditors fare better than others in their common debtor's insolvency.

\textsuperscript{29} See note 24 supra (citing authorities).


\textsuperscript{31} In most cases, debtors will be deterred from misbehaving if they think their misbehavior will be discovered and their reputation, a valuable asset in its own right, will be damaged as a result. See Leff, Injury, Ignorance and Spite—The Dynamics of Coercive Collection, 80 YALE L.J. 1, 25-36 (1970) (importance of reputation in credit transactions). But if a debtor believes he can conceal his misbehavior—if he plans to deal with other creditors in the future and his present creditors do not have sufficient incentive to communicate information about his trustworthiness—or if he intends to go out of business altogether, his concern with reputation may not be enough, by itself, to deter him from misbehaving. Concerning the last possibility, see R. Posner, supra note 24, at 294 n.4. Indeed, if the debtor's creditors could usually count on a concern of this sort to dissuade the debtor from acting against their interests, they would not have to impose as many restrictions on his behavior. For an illuminating discussion of the restrictions on debtor
ism,\textsuperscript{32} as the "threat of debtor misbehavior."

Naturally, a creditor will take this threat into account before agreeing to make his loan. One possible response the creditor may make is simply to increase the interest rate on his loan above what it would be in the absence of a threat of misbehavior.\textsuperscript{33} Alternatively, he may attempt to reduce the risk of misbehavior itself. One way to do this is to monitor the debtor's conduct after the loan has been made, or to require the debtor to assume contractual responsibilities, such as the preparation of periodic financial statements, that make it easier for the creditor to assess the financial consequences of the debtor's actions.\textsuperscript{34}

We shall refer to a strategy of this sort as a "monitoring" or "policing" strategy.\textsuperscript{35}

The degree to which a creditor will rely on monitoring, rather than simply demanding increased compensation for bearing a greater risk,\textsuperscript{36}


32. The general concept of opportunism is discussed in O. Williamson, Markets and Hierarchies 26-28 (1975). Commentators have noted numerous examples of opportunism in many different contexts. See, e.g., id. at 31-35, 203-04; cf. note 78 infra (authorities discussing economic situations in which opportunistic behavior is likely to occur).

33. See, e.g., R. Posner, supra note 24, at 294.

The rate that the creditor would charge in the absence of the threat of misbehavior should not be confused with the riskless rate, since even if the debtor has no incentive to misbehave, there will probably still be some risk associated with the loan.

34. See, e.g., id.; Jensen & Meckling, supra note 30, at 308, 327-39. Professors Black, Miller, and Posner note:

The supervision that the lender undertakes and the restrictions that he imposes on the borrower are not intended to substitute his judgment for the borrower's in matters related to the general conduct of the borrower's business, but rather to prevent acts that would benefit the borrower or other creditors at the expense of the lender, such as siphoning off the borrower's assets to the stockholders in the form of dividends, increasing the riskiness of the business, or pledging some of the assets to another creditor.

Contractual requirements are not self-enforcing. . . . The various costs associated with the creation and implementation of contractual restrictions designed to limit the lender's risk—what may be termed the "administrative costs" of lending—will tend to be higher for high-risk loans. . . . And since, with a riskier loan, the borrower will have more to gain by doing things that help him at the expense of the lender, such as increasing the risk of his assets or business, supervision costs will be higher, the borrower will have to be supervised more closely, and the use of formal collateral will be more desirable.


35. The need for monitoring as a response to opportunism in contractual relations is discussed generally in O. Williamson, supra note 32, at 31-37, 241-44, 252-58.

36. Conceivably, a creditor might choose to protect himself against the possibility of debtor misbehavior by procuring third-party insurance. There are two reasons, however, why this does not impinge on the incentives to monitor and thus does not affect the results concerning the utility of secured financing. First, engaging a third-party insurer may be inefficient because it will be too costly to transmit enough information to the
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is determined by two factors—the cost of monitoring, and the magnitude of the risk that the debtor will misbehave. Assume that by spending $X on monitoring a creditor can entirely eliminate the risk of debtor misbehavior. If $X is less than the additional interest the debtor would have to pay in the absence of any monitoring, it will be to the debtor's advantage to be monitored. The debtor will in fact have an incentive to propose such an arrangement, and to pay the creditor something for agreeing to it. However, if $X is greater than the additional interest the creditor would demand in the absence of any monitoring (which might be the case if the creditor believes the risk of misbehavior to be very low, and the cost of monitoring is very high), both parties will be better off without any monitoring.

Similar considerations will determine the allocation of monitoring responsibilities between the two parties. If the creditor can monitor his debtor by gathering relevant financial information at a cost of $X, but the debtor himself can produce the same information and the creditor can verify its accuracy for a total cost of $X - 1, there will be a cost saving to be shared between the parties if the debtor assumes contractual responsibility for producing the information in question.

In a credit transaction of any complexity, it is reasonable to think that creditors will engage in some monitoring themselves, will require their debtors to undertake some monitoring-related responsibilities, and will also demand additional compensation for whatever risk of misbehavior remains after all cost-justified monitoring steps have been taken. Consequently there are three costs associated with the risk of

insurer to enable him to set his rates in a way that reflects the risk of debtor misbehavior. See Goetz & Scott, Liquidated Damages, Penalties and the Just Compensation Principle: Some Notes on an Enforcement Model and a Theory of Efficient Breach, 77 Colum. L. Rev. 554, 580 (1970); Posner & Rosenfield, Impossibility and Related Doctrines in Contract Law: An Economic Analysis, 6 J. Legal Stud. 83, 91 (1977). The second and more important reason is that insuring against the danger of debtor misbehavior does nothing, by itself, to reduce the likelihood of its occurrence—insurance merely shifts the risk of misbehavior from the creditor to a third-party insurer. Even if a third-party insurer is able to bear this risk more cheaply than the creditor himself, there are likely to be cases in which it will be cost-justified actually to reduce the risk of debtor misbehavior by monitoring of one sort or another. See id. at 90 ("[p]revention is only one way of dealing with risk; the other is insurance," but "[d]ischarge would be inefficient in any case where the promisor could prevent the risk from materializing at a lower cost than the expected cost of the risky event"). Thus, even supposing a creditor does procure third-party insurance, we would expect him to monitor up to the point where he would be insuring only against risk that could not be efficiently eliminated. In addition, the creditor's risk may not be insurable at all unless some monitoring is undertaken. Cf. A. Alchian & W. Allen, Exchange and Production: Competition, Coordination, and Control 210 (2d ed. 1977) ("Each insured person is often required to take special precautions as a condition of getting insurance.")

37. See Jensen & Meckling, supra note 30, at 337-39.
38. Id. at 338-39.
debtor misbehavior: first, the cost of the creditor's monitoring activities; second, the cost of whatever monitoring the debtor undertakes himself; and finally, the cost of the increased compensation the creditor will demand for assuming any risk of misbehavior that cannot be eliminated by cost-justified monitoring. Both parties will have an incentive to arrange their transaction in a way that minimizes the sum of these three costs, since they can share any savings between them.  

One can gain a general understanding of the utility of secured financing by considering the hypothetical case of a debtor with only two creditors, each of whom is contemplating some form of credit transaction with the debtor. Suppose that in negotiations between the debtor and one of his creditors, CI, a question is raised as to whether CI's loan should be secured by property of the debtor, for example, his equipment or inventory. The creation of a security interest in CI's favor will benefit him in two ways. First, it will reduce the riskiness of his loan by making it more likely that the loan will be repaid in the event of the debtor's insolvency. Second, the existence of

39. The theory underlying the foregoing analysis is developed at greater length in an important article by Professors Michael Jensen and William Meckling. See id. The Jensen and Meckling article argues that once transaction costs are taken into account, any given firm can be shown to have an optimal capital structure that maximizes the firm's value. Jensen and Meckling use the concept of monitoring costs, a kind of transaction cost, to explain why a firm will issue a particular amount of debt and thus have one capital structure rather than another. Id. at 333-51. They point out that costs of this sort are not invariant, but may be lower or higher for one party, including the firm itself, than for another, see id. at 337-39, 354, and they note that such variance helps to explain why, in any particular case, monitoring responsibilities are allocated in the way they are between the firm and its various suppliers of capital, see id. at 338-39. Once it is recognized that secured financing has an impact, not only on the debtor's relation with the secured creditor but on relations among the debtor's creditors inter se, the basic insight of the Jensen and Meckling article can be extended, in a natural way, to explain the economic utility of secured credit, and to help predict when and by whom such credit will be used. It might seem more straightforward to explain secured financing in terms of differential risk aversion on the part of creditors. Creditors, however, are likely to have alternative lending opportunities that involve the same level of risk as secured financing but lower transaction costs. Turning to the other side of the market, it might appear that debtors will try to use secured financing to divide their indebtedness into high and low risk bundles and thus reduce their total interest charges. It is unlikely that such a strategy would succeed, however. In an active credit market, demand for debt bifurcated by risk will drive up the prices of low and high risk packages and drive down the price of medium risk packages until any advantage in bifurcation is dissipated.

In our analysis of the utility of secured credit, we focus primarily on the demand side of the credit market. Although a more thorough examination of the supply side might also prove fruitful, we do not attempt such an analysis here. See id. at 356-57.

40. Credit can, of course, be extended in many different ways. A supplier who delivers goods against a promise of future payment, a worker who does not receive his paycheck until the end of the week, a utility company that bills on a monthly basis, and a lending bank or shareholder are all creditors. For present purposes, we may disregard the form in which our two would-be creditors anticipate extending credit to their common debtor. As we shall see, however, differences of this sort do become important at a later stage in the analysis. See pp. 1158-61 infra.
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collateral is also likely to reduce the cost of the monitoring required to guard against the debtor covertly increasing the riskiness of the loan.

Obviously, the mere existence of a security interest does not eliminate the risk of debtor misbehavior, since the debtor can still dissipate the collateral and thereby demote his creditor to unsecured status. But so long as the particular items of property securing his loan remain intact, a creditor will be immunized from the effects of his debtor’s misbehavior. Consequently, the monitoring required to prevent the debtor from increasing the riskiness of a secured loan is likely to be significantly less than that required when the loan is unsecured. A secured creditor can focus his attention on the continued availability of his collateral and is largely free to disregard what the debtor does with the remainder of his estate. By restricting his attention in this way, the secured creditor can reduce the number and complexity of his monitoring tasks and thus achieve a substantial savings in monitoring costs.

If C1 and the debtor agree that C1’s loan will be secured by an interest in specific items of collateral, C1 will charge a lower interest rate than he would charge if the loan were made on an unsecured basis. To some extent, this reduction in the interest rate will reflect the reduced riskiness of the loan, and to some extent it will reflect the lower monitoring costs that C1 must now incur or impose upon the debtor to protect against debtor misbehavior.

Were it entirely costless for the debtor to give C1 a security interest in his property, the debtor would almost certainly do so, in order to take advantage of this interest-rate reduction. In fact, however, grant-

41. Although granting a security interest in a particular item of property may not affect the debtor’s incentive to misbehave, the very fact that someone is monitoring the property in question may encourage the debtor to misbehave in ways that only affect other, less closely guarded, parts of his estate. This will have the effect, of course, of shifting the risk of the debtor’s misbehavior to his unsecured creditors, who may insist upon additional compensation for bearing this risk.

42. The likelihood that a secured creditor can realize a savings of this sort will be especially high if the debtor himself has an incentive to preserve the value of the collateral, relative to other property in his estate. When the debtor has such an incentive—as he might, for example, if the collateral is manufacturing equipment that must be kept in good working condition for the debtor to remain in business—the interests of the debtor and his secured creditor are likely to coincide rather than conflict, since neither party wants to see the collateral dissipated or allowed to run down.

43. Although these two effects may be hard to separate in practice, they are nonetheless conceptually distinct. Even in the absence of debtor misbehavior, if two creditors agree that one will have a prior claim on the debtor’s assets, the risk of nonpayment is reduced for one and increased for the other. It is analytically useful, therefore, to distinguish the decrease in interest rate attributable to priority itself from the decrease due to a reduction in the monitoring costs necessary to insure that the secured creditor’s investment is not jeopardized by opportunistic behavior on the debtor’s part.

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ing a security interest to C1 will have a costly impact on the debtor's relations with his other creditor, C2. 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. Consequently, if the debtor agrees to secure C1's loan, C2 will charge a higher interest rate to compensate for the increased risk of his own investment in the debtor's enterprise, and C2 will also be likely to spend more in monitoring the debtor's conduct, since the effects of misbehavior will now fall more heavily on C2 than they would if he had a pro rata claim to the debtor's entire estate.44

Weighing these effects together, the debtor can be expected to give a security interest to C1 when the resulting decrease in the cost of C1's loan more than offsets any increase in the cost of borrowing from C2. This is most likely to be the case when the two creditors have different monitoring costs—when C2 either needs to do less monitoring, or is able to monitor more cheaply, than C1.45 To see that this is so, let us temporarily eliminate monitoring costs from consideration by assuming the risk of debtor misbehavior to be zero, in which case neither C1 nor C2 will devote any resources, or require the debtor himself to devote any, to monitoring the debtor's conduct. Even on this unrealistic assumption, the interest that the debtor must pay on C2's loan will rise if he grants C1 a security interest in his property, since the riskiness of C2's loan will increase at the same time that the riskiness of C1's decreases. However, in a world without monitoring or other transaction costs, the increase in risk borne by C2 should exactly offset the corresponding decrease in the risk to which C1 is subject.46 There-

44. It is unlikely that C2 will be able to "free ride" on C1's monitoring and thereby reduce his own level of policing. After the debtor has received C2's loan, the debtor and C1 have a joint incentive to misbehave in ways that hurt C2, since the debtor and C1 can both be made better off—at C2's expense—by such misbehavior. Cf. pp. 1169-70 infra (analogous problem of collusion when C1 holds security interest with priority over that of C2).

45. Even if we assume that different creditors are equally efficient monitors, it may still be economical for each creditor to focus his monitoring efforts on a distinct aspect of the debtor's affairs. Two creditors with the same general monitoring abilities may be able to achieve a reduction in their total monitoring costs, at any given level of risk, through a simple division of labor. If, for example, a debtor has two separate machines, it may be desirable from everyone's point of view to have C1 monitor one machine and C2 the other. The creditors can thus avoid duplicate monitoring of the same assets, and each can become an "expert" at his particular task. See P. SAMUELSON, ECONOMICS 49 (8th ed. 1970) ("[S]pecialization may pay, even with no natural or acquired differences in skills . . . . [I]t avoids the wasteful duplication of tools that would be necessary if every man had to be a Jack-of-all-trades . . . .")

46. This proposition is an application of the net operating income approach to the valuation of the firm first developed in rigorous fashion in Modigliani & Miller, The Cost of Capital, Corporation Finance and the Theory of Investment, 48 AM. ECON. REV. 261 (1958). The essence of the Modigliani and Miller argument is that "the totality of risk
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For any change in the interest rates charged by the two creditors should just offset one another and leave the total cost of credit to the debtor unchanged. With transaction costs eliminated from consideration, it is difficult to see why the debtor would prefer giving $C_1$ a security interest in his property to granting each creditor an equal right to satisfy his claim from the entire estate, or how the welfare of the debtor and his two competing creditors could be increased by doing so.

Reintroduction of monitoring costs changes the picture dramatically, however. If the additional monitoring costs that $C_2$ must incur due to the creation of a security interest in favor of $C_1$ are less than the accompanying reduction in $C_1$’s monitoring costs, there will be a total cost saving to be shared among the three parties if $C_1$’s claim is secured.47

A numerical example may clarify this conclusion. Suppose that $C_1$ would charge $7 in interest on an unsecured loan of $100 if there were no risk of debtor misbehavior, but that in the face of possible misbehavior, he would be prepared to spend $3 in monitoring the debtor’s conduct.48 Suppose, in addition, that $C_1$ would charge $5 for making a secured loan in the absence of any risk of debtor misbehavior, but that given such a risk he would spend $1 on monitoring. If $C_1$ loaned on a secured basis, therefore, he would charge $6 in interest, $4 less than the cost of the same loan made on an unsecured basis. Finally, assume that in the absence of any risk of debtor misbehavior, $C_2$ would demand $7 interest on a $100 loan if both he and $C_1$ were entitled to a pro rata share of their claims in the event of the debtor’s insolvency;49 that under the same circumstances, given a risk of misbehavior, $C_2$

incurred by all security holders of a given company cannot be altered by merely changing the capitalization proportions. Such a change could only alter the proportion of the total risk borne by each class of security holders.” Durand, Costs of Debt and Equity Funds for Business: Trends and Problems of Measurement, in The Management of Corporate Capital 91 (E. Soloman ed. 1959). Although this thesis is commonly applied to the problem of choosing a debt-equity ratio, it applies with equal force to the choice of a priority structure for debt.

47. Creditors may have differential monitoring costs either because one creditor can police the debtor more cheaply than another, or because one creditor may simply think it less important to monitor the debtor in the first place. See pp. 1158-61 infra (factors likely to influence magnitude of monitoring costs).

48. Creditors may also insist that the debtor assume monitoring-related responsibilities of his own, such as providing regular financial reports for creditor inspection, that will add to the cost of the credit transaction. For simplicity, this discussion assumes all costs of this sort to be fixed and eliminates them from consideration.

49. The assumption of equal overall costs is consistent with longrun competitive equilibrium in the credit market. Attributes other than relative monitoring costs may, however, determine which creditors will actually be chosen by a given debtor. See notes 55, 62 & 99 infra.
would spend $3 in monitoring the debtor's affairs, and that, if C1 had a prior security interest in the debtor's property, C2 would charge $9 in interest if there were no risk of debtor misbehavior, and would spend $4 in monitoring the debtor if such a risk existed.\footnote{50}

If the debtor grants C1 a security interest in his property, the interest rate of C2's loan will increase by a total of $3, $2 representing the increase that would occur even in the absence of any risk of misbehavior on the debtor's part, and $1 the increase in C2's monitoring costs. However, although the cost of C2's loan has increased by $3, the cost of C1's loan has decreased by $4, $2 of which represents a decrease in C1's monitoring costs. Consequently, the benefit that the debtor realizes by granting C1 a security interest exceeds the cost of doing so by $1. Presumably, the debtor will be prepared to share this $1 gain with his two creditors by offering each of them a premium for agreeing to loan on a secured and unsecured basis respectively. On the facts as we have assumed them, then, the three parties are better off if C1 has a security interest than they would be if he did not.

It might be true that even greater cost savings could be realized if both C1 and C2 had security interests in different assets. Although this possibility raises additional complications involving the effect of each creditor's security interest on the riskiness of the other's loan, it poses no new theoretical problems. The same would be true if the number of creditors were increased from, say, two to twenty. The simple model set out here would be more difficult to apply in a complex, multiparty situation of this sort, but the validity of the basic principles on which it rests is not dependent upon the number of competing creditors who happen to be involved. The key idea is a simple one. If we assume that the sum of all parties' monitoring costs depends on the priority of creditor claims, there are likely to be some situations in which everyone concerned, including the debtor, will be better off if the interests of certain creditors are subordinated to those of others than they would be if all creditors were given equal priority.\footnote{51}

\footnote{50. C2's expected monitoring costs thus differ from those of C1. This discrepancy is deliberate, and is intended to build into the example the assumption that different creditors may have different monitoring costs. In particular, we assume that C2's monitoring costs increase more slowly than C1's as the level of risk itself increases.}

\footnote{51. The argument thus far, like Article 9 itself, assumes a system of priorities based upon security interests in identifiable collateral. It might be thought that this "reification" of creditor priorities would be likely to increase monitoring costs, and that, as a result, a priority system that did not depend upon identifiable pools of collateral would be preferable to the Article 9 system. For example, one can imagine a system of "horizontal" priorities, in which claims would be ranked against the debtor's entire estate, the holder of the top claim having the right to be paid off in full, from any of the debtor's assets, before the creditor with the next highest priority could receive anything,}
This approach suggests a more satisfactory answer to a question considered earlier: why does the law permit debtors to prefer some creditors over others by encumbering assets in their favor? Returning to the example, it should be clear that even if the debtor is prohibited by law from granting either of his creditors a consensual security interest in his property, both $C_1$ and $C_2$ will stand to gain by agreeing, between themselves, that $C_2$'s claim will be subordinated to $C_1$'s, at least with respect to certain assets of the debtor, in the event of insolvency. Such an agreement would allow the creditors to reduce their total monitoring cost, making each better off than he would be if both had an equal pro rata claim to the debtor's property. Consequently, if the law denied debtors the power to prefer some creditors over others through a system of security agreements, a similar network of priority relationships could be expected to emerge by consensual arrangement between creditors. Permitting debtors to encumber their assets achieves the same result, but in a simpler and more economical fashion. If a debtor has more than two or three creditors, freerider and holdout difficulties are likely to plague any attempt on the part of the creditors to work out a set of priority relationships among themselves. These transaction costs can be avoided by allowing the debtor himself to prefer one creditor over another. The rule permitting debtors to encumber their assets by private agreement is therefore justifiable as a cost-saving device that makes it easier and cheaper for the debtor's creditors to do what they would do in any case. This justification for

and so on down the line. Indeed, this system is reflected to some extent in the financial structure of corporations; the priority of preferred over common stockholders is a "horizontal" one in the sense that that term is used here.

In a horizontal, nonreified priority system, prior creditors will monitor less, and subordinate creditors more, than they would if all creditors shared equally in the debtor's estate. As compared to a pro rata priority scheme, then, horizontal stratification of claims will reduce total monitoring costs if creditors lower down in the priority chain are better monitors than those higher up. As an empirical matter, this will often be the case. See pp. 1158-61 infra.

A reified system, however, enjoys an advantage that neither a horizontal nor a pro rata system possesses. Because a reified system encourages creditors to focus their attention on different assets, it reduces the duplicate monitoring that both a pro rata and a horizontal system encourage, and allows creditors to take advantage of the efficiencies that come with specialization. See note 45 supra.

52. See R. Posner, supra note 24, at 44-48 (transaction costs associated with multiparty negotiations, when all parties must agree in order for there to be satisfactory solution); Calabresi & Melamed, Property Rules, Liability Rules, and Inalienability: One View of the Cathedral, 85 Harv. L. Rev. 1089, 1106-10 (1972) (freerider and holdout problems).

53. See generally Goetz & Scott, supra note 36, at 588 n.87:

Facing positive transaction costs, ... the legal system provides ready-made rules based on common assumptions about typical contracting behavior. These "off the rack" contract rules reduce the costs of exchange by specifying the legal consequences of typical bargains where the expected cost of explicit negotiation exceeds the utility derived from individualized exchange.

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the rule supplements and reinforces our earlier argument from the general principle of freedom of contract and suggests—as the idea of freedom of contract alone does not—why secured credit is such a widespread phenomenon.

C. Risk, Monitoring Costs, and Information

The foregoing explanation of the economic utility of secured credit rests upon the assumption that total monitoring costs can sometimes be reduced by giving certain creditors priority over others. One common situation in which this is likely to be true occurs when different creditors of the same debtor have different monitoring costs—when, that is, one creditor is prepared to invest more than another in policing the debtor’s conduct, or finds it more expensive to accomplish the same monitoring tasks.54 At this point, it may be useful to say something about the factors that are likely to affect the magnitude of a creditor’s expected monitoring costs.55

Three factors, in particular, appear to influence a given creditor’s desire and ability to monitor his debtor’s behavior. First, it is reasonable to think that the nature and extent of a creditor’s monitoring is directly related to the size of his loan. If monitoring involves fixed start-up costs, it may be uneconomical for creditors with small claims to do any monitoring at all. Creditors who find themselves in this situation will either seek alternative and less costly ways to monitor their debtors, or will simply increase the interest rate on their loans in compensation for the additional risks they must bear. It is worth noting that secured financing does involve fixed start-up costs, since a nonpossessory security interest, no matter how small, must be perfected by compliance with the Article 9 filing requirements.56 This may explain, at least in part, why certain small creditors, notably trade creditors, typically do not finance on a secured basis.

55. It might seem that the debtor should borrow all of his funds from the single creditor with lowest monitoring costs. There are, however, other reasons for a debtor to prefer some lenders for certain kinds of loans. See note 61 infra (financially sophisticated institutional lenders may be preferred over trade creditors even though trade creditors have lower monitoring costs). In addition, there may be situations in which it is desirable to have several creditors able to bid on a particular type of loan. Cf. note 99 infra (ability to exploit informational advantage gained by prior experience with debtor may be weakened by ensuring that competing creditors enjoy same advantage).
56. See § 9-302 (filing requirements to perfect security interest). Almost all nonpossessory security interests must be filed in order to be perfected. The exceptions are relatively unimportant. See, e.g., § 9-302(1)(d) (purchase money security interest in consumer goods); § 9-304(4), (5) (temporary perfection of instruments or negotiable documents).
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Second, the duration of a loan may also influence both the amount of monitoring done by a particular creditor and his choice of monitoring techniques.57 The longer the loan period, the more opportunities a debtor is likely to have for subtle forms of misbehavior that impair the creditor’s position gradually and in ways that are difficult to detect.58 In the case of a short-term loan, an opportunistic debtor may find that the speed with which he must act makes it harder, and hence more costly, to conceal misbehavior from his creditor. Since the use of collateral enables a creditor to focus his attention on identifiable items of property, secured financing is likely to become more attractive to the creditor as concealment by the debtor becomes easier. Other things equal, then, one would expect long-term loans to be made on a secured basis more frequently than short-term loans.

Finally, and most importantly, the expected monitoring costs of some creditors are almost certain to be lower than the costs of others, even at comparable levels of risk, and to rise more slowly in response to increases in risk as well, because of the comparative advantage these creditors enjoy in obtaining and assessing information about the debtor’s behavior.59 When the capacities of creditors differ in this

57. See Scott, Bankruptcy, Secured Debt, and Optimal Capital Structure, 32 J. Finance 1, 2 (1977) (trade creditors unlikely to employ restrictive covenants, because quick turnover allows for changes in credit terms in response to changes in debtor’s financial status).
58. Even if the threat of debtor misbehavior is constant over time, the riskiness of an investment increases as the timetable for repayment lengthens. See Modigliani & Pogue, An Introduction to Risk and Return, 30 Financial Analysts J. 68, 73 (1974) (“If the risk level . . . is maintained during each year, the portfolio risk for longer horizons will increase with the horizon length.”). This suggests that monitoring is especially desirable in the context of a long-term loan. See Black, Miller & Posner, supra note 34, at 384.
59. It is plausible that at least some of the special policing requirements of Article 9 are designed to exploit the informational advantage that certain creditors enjoy over their competitors. Consider, for example, the so-called four-month reperfection rule contained in § 9-103(1)(d)(i). When collateral is moved from one state to another, a creditor with a security interest in collateral perfected under the law of the first state must perfect his interest in the second state within four months of the time of removal or lose his perfected status, with the result that his interest will then be subordinated to the claims of competing creditors. The informational advantage that the prior creditor enjoys in this instance consists in knowledge of his own claim, a piece of information that would-be creditors could acquire only at substantial cost by searching files in multiple jurisdictions. Requiring the prior creditor to follow his collateral into another jurisdiction thus shifts the burden of avoiding a conflict between equally innocent victims of the debtor’s deceit to the creditor able to carry the burden at least cost. Cf. § 9-402(7) (with respect to after-acquired property, requires refiling within four months after “the debtor so changes his name or in the case of an organization its name, identity or corporate structure that a filed financing statement becomes seriously misleading”). But see In re Taylorville Eisner Agency, Inc., 445 F. Supp. 665 (S.D. Ill. 1977) (interpreting § 9-402(7)) (new creditors must bear monitoring responsibility in case involving change in form of debtor’s business, even if accompanying name change is “seriously misleading”). Another example concerns the Article 9 rules governing the priority of conflicting claims to the same chattel paper. See § 9-508. A security interest in chattel paper can be perfected either by filing or by possession. If the debtor retains possession, however, and

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regard, the benefits of a consensual security agreement giving one creditor priority over another are likely to be especially clear.

Consider, for example, the comparative informational advantage often possessed by a trade creditor. Even before he agrees to extend credit to a given purchaser, a supplier is likely to have detailed knowledge of existing conditions in the branch of industry to which both he and his would-be debtor belong. This knowledge may be viewed as a capital asset that the supplier will have acquired whether or not he makes the particular loan in question. With this preexisting knowledge, the supplier is in a particularly good position to evaluate representations made by the debtor, both at the time of the loan and afterwards, and to diagnose symptoms of financial trouble or debtor misbehavior as they develop.

60. Some theoretical work exists on the extension of trade credit. See, e.g., Schwartz, An Economic Model of Trade Credit, 9 J. FINANCIAL & QUANTITATIVE ANALYSIS 643 (1974); Wrightman, Optimal Credit Terms for Accounts Receivables, 9 Q. REV. ECON. & BUS. 59 (1969). These articles, however, do not attempt to account for the generally unsecured nature of trade credit. See Scott, supra note 57, at 2.

61. A similar informational advantage may be enjoyed by other creditors. For example, an employee is almost always a creditor of his employer. In some cases his intimate involvement in the employer's affairs may reduce the need for any independent policing on the employee's part. When this is true, knowledge acquired in the ordinary course of his employment can be viewed as a capital asset that allows the employee to police more cheaply than "outside" creditors of the employer.

The fact of employment does not, however, always provide an employee with superior knowledge concerning his employer's financial condition. It is not obvious, for example, that an employee on General Motors's assembly line has any special familiarity with the state of the company's business. Section 64(a)(2) of the Bankruptcy Act of 1898, 11 U.S.C. § 104(a)(2) (1976), repealed, effective Oct. 1, 1979, Pub. L. No. 95-598, §§ 401(e), 402(a), 92 Stat. 2683 (1978), seems directed precisely to employees of this sort. That provision gives a second priority in the payment of unsecured claims to "wages and commissions, not to exceed $600 to each claimant, which have been earned within three months before the date of the commencement of the proceeding, due to workmen, servants, clerks, or traveling, or city salesmen on salary or commission basis." The limitation of this special priority to "workmen, servants, clerks, or . . . salesmen" seems expressly designed to give priority to those subordinate employees who are least likely to be aware of the state of
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In contrast to the trade creditor, a bank or other large institutional lender that extends credit to borrowers engaged in a variety of different activities is less likely to possess detailed information regarding any particular debtor's business. As a result, it may be more difficult for a lender of this sort to verify the truth of the debtor's own representations and to assess other information concerning the debtor's financial soundness. Being at a disadvantage in this regard, an institutional lender may have to rely more heavily on formal procedures for gathering and evaluating information about the debtor, and may even decide to "contract out" much of the work to a specialist, such as a professional auditor. This will in turn increase the lender's expected monitoring costs; in effect, the institutional lender will be paying to acquire information that other creditors may already possess.

When the monitoring costs of some creditors, who enjoy an informational advantage of the sort we have just described, are lower than those of others, it is to the benefit of all concerned that monitoring burdens be shifted to those creditors who are able to bear them at least cost. This helps us to understand how a lending bank that does not enjoy an advantage of this sort and a group of trade creditors who do can jointly be made better off if the bank is given a prior claim against specific assets in the debtor's estate. If the bank lends a large amount for a long period of time, and the trade creditors each extend small amounts of credit for short periods, this conclusion is reinforced for the reasons described earlier.

II. Priorities Among Secured Creditors

A. First in Time, First in Right

To the extent his claim is secured by an interest in specific collateral, a creditor generally enjoys priority over his debtor's unsecured cred-


62. Although trade creditors may enjoy an advantage with regard to information about their customers, lending banks almost certainly enjoy an offsetting informational advantage over trade creditors with respect to the business of financial lending. Thus it is not surprising that there are specialized institutions, such as lending banks, that are primarily devoted to large-scale financing, and that trade creditors normally extend credit only in connection with their own business. See Posner, The Rights of Creditors of Affiliated Corporations, 43 U. Chi. L. Rev. 499, 522-23 (1976).

63. See pp. 1158-59 supra; Posner, supra note 62, at 505 ("The major difference between the trade creditor and the financial creditor is that the latter, because he is a specialist in credit and because the amount of credit that he extends to each creditor is apt to be larger, is much more likely to negotiate the terms of credit explicitly.")
tors: before the property in question may be appropriated to satisfy their claims, the debt owed to the secured party must be repaid in full. The same principle applies if a debtor has several creditors whose claims are secured by different assets. In this case, each creditor has priority with regard to his own collateral and a subordinate unsecured interest in any asset securing the claim of another creditor.

When two or more creditors claim a security interest in the same item of property, however, an additional problem arises as to how their claims are to be ranked inter se. An ordering principle of some sort is required to establish the relative priorities in this situation. In theory, there are a number of possible solutions. Competing security interests in the same property might be ranked on the basis of size or temporal order, or according to the nature of the transaction out of which they arose; or they might be assigned equal priority. The draftsmen of Article 9 chose a simple timing principle. Section 9-312(5) provides that conflicting security interests are to be ranked “according to priority in time of filing or perfection,”64 with the result that earlier security interests take precedence over later ones.65 This section codifies a principle—established in the chattel security field long before the enactment of the Code—that may be conveniently expressed by the slogan, “first in time, first in right.”66 In our view, the adoption of such a priority rule, at least as a baseline, is required in order to capture the special efficiencies that secured financing makes possible. Since this is not immediately obvious, a few words of explanation are in order.

Suppose that the law allowed the entire matter of priorities among competing secured parties to be decided by private (but publicly recorded) contractual agreement between the debtor and each of his...
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creditors. To see what priority relationships might be expected to emerge, consider the following case. C1 agrees to make a loan to his debtor. For reasons discussed in Part I, the parties conclude that a secured transaction will be to their mutual advantage, and the debtor offers as collateral a single piece of heavy-duty industrial equipment, worth approximately the amount of the contemplated loan. In order to maintain a collateral base for future borrowing, however, the debtor insists that he be allowed to give subsequent creditors a superior interest in the same property—an interest that will override C1's own claim.

C1's response is predictable. If the debtor ever exercises his power to grant later secured creditors priority over C1, C1's claim will be rendered at least partially unsecured. Furthermore, the debtor will have an incentive to exercise this power, since by so doing, he can effectively increase the riskiness of C1's loan without increasing its interest rate. Consequently, it would be irrational in this situation for C1 to treat his credit transaction with the debtor as anything other than an unsecured loan or to charge less than he would if there were no collateral securing it at all.

Therefore, if both parties agree that there is an advantage in making the loan on a secured basis, they will also agree to include a provision in their contract barring the debtor from granting any subsequent creditor a superior interest in the collateral. If a provision of this sort is not or cannot be included, the real savings made possible by a secured transaction will be lost.

This argument applies with equal force to a junior creditor, C2, who intends to make a loan secured by property already encumbered by a prior, superior lien in C1's favor. In setting the interest rate on his loan, C2 will take into account the risk that the property may decline in value, rendering C2's claim partially or entirely unsecured. But the mere existence of a prior claim against the property will not by itself make it irrational for C2 to charge less than he would for lending on an unsecured basis. There is, after all, some probability that the collateral will be worth enough to satisfy both claims in the event of the debtor's insolvency. It would be irrational for C2 to charge less than the unsecured rate, however, if the debtor can encumber the same property a third or fourth time and give subsequent creditors higher priority. Even a junior secured creditor will therefore insist

67. Thus, for example, if C1 loans the debtor $1,000, and the value of the collateral securing the loan is also $1,000, a subsequent loan of $750 that is given priority over C1's interest will reduce C1's "secured" claim to $250, and leave him with an unsecured claim for the remainder of the debt.
upon an agreement barring the debtor from giving any later lender a priority superior to that which the junior creditor enjoys at the time he makes his loan.

If the priority of competing secured claims were left entirely to private agreement, then, we would expect each creditor financing on a secured basis to insist that his claim be preferred to that of any later creditor asserting an interest in the same collateral. The result would be a series of agreements entitling individual creditors to satisfy their claims in the order in which they arose, each claim being subordinated to those that preceded it and superior to those that followed it in time. This is, of course, precisely the result achieved by a first-in-time, first-in-right priority rule. The justification for the rule, then, is that it does what the parties would do for themselves in its absence, and thereby achieves a savings in transaction costs.

B. The Purchase Money Priority

1. Introductory Remarks

If a creditor finances his debtor's acquisition of a specific new asset, either by selling to the debtor on credit or by advancing the funds necessary to purchase the property, he qualifies as a purchase money lender and, assuming he observes certain procedural requirements, may obtain a security interest in the property that is superior to the prior interests of competing creditors. The purchase money priority makes it possible for a later lender to override the established claims of

68. See § 9-107. A purchase money lender must be able to "trace" his loan to the acquisition of the asset claimed. See note 11 supra; 2 G. Gilmore, supra note 2, § 29.2, at 780-82; Jackson & Kronman, supra note 4, at 27-31. The tracing requirement is discussed at pp. 1175-78 infra.

69. The procedural requirements for obtaining a perfected purchase money security interest in inventory are set out in § 9-312(3). The most important is the requirement that there be notification in writing to the holder of the conflicting security interest if the holder had filed a financing statement covering the same types of inventory (i) before the date of the filing made by the purchase money secured party, or (ii) before the beginning of the 21 day period where the purchase money security interest is temporarily perfected without filing or possession (subsection (5) of Section 9-304). § 9-312(3)(b). The required notice must state "that the person giving the notice has or expects to acquire a purchase money security interest in inventory of the debtor, describing such inventory by item or type." § 9-312(3)(c). Compliance with these procedural requirements will not be costless. See note 92 infra.

The requirements for obtaining a perfected purchase money security interest in collateral other than inventory are simpler: it is only necessary that the interest be "perfected at the time the debtor receives possession of the collateral or within ten days thereafter." § 9-312(4). For a more detailed discussion, see 2 G. Gilmore, supra note 2, §§ 29.3, 29.5.
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other secured creditors. It therefore constitutes an important limitation on the general rule that conflicting claims to the same collateral are to be ranked in temporal order, with earlier creditors enjoying priority over later ones. The preceding section argued that a general rule of this sort is required if the debtor and his creditors are to realize the special cost savings associated with secured financing. It is useful to inquire how this dramatic exception to the first-in-time, first-in-right rule can be explained.

Two general characteristics of the purchase money priority should be noted at the outset. First, the special priority for purchase money lenders is linked logically to the recognition of security interests in after-acquired property. This follows from the definition of a purchase money security interest. To qualify as a purchase money lender, a creditor must make an "enabling" loan—a loan that makes it possible for his debtor to acquire rights in property that he did not previously have. If a debtor already owns a particular asset, he may of course use it to secure any number of loans, but no creditor making an advance against the property will be eligible for purchase money status. Since, by definition, a debtor cannot own the property securing a purchase money loan before the loan itself is made, a prior creditor can only claim an interest in such property through an "after-acquired property clause" in his security agreement, which extends his security interest to assets that subsequently become part of the debtor's estate. It is therefore not surprising that in the chattel security field the idea of a special priority for purchase money lenders did not emerge until courts had finally accepted the notion that a debtor can validly encumber property he does not yet own.

A second striking characteristic of the purchase money priority is its limitation to loans that can be traced to identifiable, discrete items of property. Loans made for unrestricted purposes such as general use in

70. If the law did not allow security interests in after-acquired property, no special priority rule for purchase money security interests would be necessary. See 2 G. Gilmore, supra note 2, § 28.1, at 746; Note, The Priority Conflict Between a Purchase Money Security Interest and a Prior Security Interest in Future Accounts Receivable, 22 Vand. L. Rev. 1157, 1159 (1969). Given the logical link between security interests in after-acquired property and purchase money security interests, it is not surprising that there is a strong and clear historical link between them. See Gilmore, supra note 5, at 1333-71; Jackson & Kronman, supra note 4, at 5-9.

71. If a clause of this sort is not legally enforceable, an enabling lender can always arrange to be the first creditor with an interest in the new collateral and consequently will have no need for a special priority which allows him to override earlier claims.

72. See note 70 supra.

The course of the debtor's business have never been accorded purchase money status, even if the loan can be shown to have increased the value of the debtor's estate or, more particularly, the value of the collateral securing a prior creditor's claim. Before a creditor can assert the rights of a purchase money lender, he must demonstrate that his loan has been used by the debtor to acquire a specific and identifiable asset. This limitation, which historically has been incorporated in the definition of a purchase money security interest, is today embodied in the tracing requirement of section 9-107.

These introductory remarks suggest three related issues that we shall address in the following sections in a way that builds upon and is consistent with the general theory already developed. The close link between purchase money priority and security interests in after-acquired property makes it logical to begin by considering why a debtor and his creditor would ever agree to include an after-acquired property clause in their contract. We then discuss the special difficulties created by an after-acquired property clause, difficulties that might explain the establishment of an overriding priority for purchase money lenders. Finally, we attempt to explain the limitation of purchase money status to those creditors who can trace their loans to identifiable items of property.

2. The After-Acquired Property Clause

It is sometimes assumed that the principal function of an after-acquired property clause is to decrease the riskiness of a particular claim by expanding the pool of collateral that secures it. If this were the only advantage of such a clause, however, it is hard to see what incentive the parties to a credit transaction would have to include an after-acquired property clause in their contract. For while the clause makes one creditor's claim less risky, it simultaneously increases the riskiness of loans made by the debtor's other creditors. In fact, in the absence of transaction costs, we would expect these effects to exactly offset one another, leaving the total cost of credit to the debtor unchanged; what the debtor gained by having the interest rate on one loan reduced, he would lose in increased payments to his remaining creditors.

When transaction costs are taken into account, however, both the advantages of an after-acquired property clause and a basis for predict-

73. See note 11 supra.
75. See p. 1164 & note 11 supra.
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ing when such a clause will be used emerge more clearly. If the collateral securing a loan is a type of property, such as inventory or receivables, that is turned over rapidly in the ordinary course of the debtor's business, both the debtor and his creditor are likely to view an after-acquired property clause as a cost-saving device. In a case of this sort, the clause saves the parties the expense of writing a new contract, or rewriting their original one, whenever individual items of collateral are liquidated and replaced by new items of the same kind. Because it allows transaction cost savings, a legal regime that recognizes the validity of after-acquired property clauses is more efficient than one that does not.

3. Situational Monopoly and the Purchase Money Priority

Although the after-acquired property clause saves costs, it also creates what economists call a "situational monopoly," in that a creditor with a security interest in after-acquired property enjoys a special competitive advantage over other lenders in all his subsequent dealings with the debtor. In our view, the purchase money priority is best thought of as a device for alleviating the situational monopoly created by an after-acquired property clause. Therefore, when a debtor and his creditor have an incentive to include such a clause in their contract, they are also likely to favor the inclusion of a provision empowering the debtor to create an overriding purchase money priority in subsequently acquired assets. These principles may be illustrated by a hypothetical case.

Suppose C1 makes a loan of $10,000 to a retail seller of hardware.

77. Cf. Coogan, Article 9 of the Uniform Commercial Code: Priorities Among Secured Creditors and the "Floating Lien", 72 HARV. L. Rev. 838, 879-80 (1959) (after-acquired property clause useful when repeat transactions are contemplated); Weeks, supra note 76, at 558 (floating lien necessary when security is inventory that is "continuously being acquired by the borrower" so that "[t]he multiplicity of the acquisitions makes it impractical to file an instrument for public record each time goods are added to inventory"). A clause of this sort may also be useful, for similar reasons, in other situations—for example, when the parties contemplate a series of loans over an extended period of time, with later advances being secured by property the debtor does not own at the time of the original agreement.

78. Such special "situational monopoly" advantages frequently result from particular legal rules or agreements. See, e.g., Demsetz, When Does the Rule of Liability Matter? 1 J. LEGAL Stud. 15, 23-25 (1972) (discussing monopoly profits realizable by parties having special legal position); Kronman, Specific Performance, 45 U. Cn. L. Rev. 351, 367 (1978) (when subject matter of contract is unique, additional premium may be extracted for releasing promisor from duty of specific performance).

79. In this hypothetical, we assume that the two creditors have identical monitoring transaction costs. The purpose of the assumption is to eliminate any inherent efficiency differences between the creditors, thus permitting us to consider whether the legal rules in question generate the proper incentives for cost savings.
The loan is secured by an interest in the debtor's presently owned inventory and in any after-acquired property of the same sort. To simplify matters, assume that the debtor's original inventory is worth exactly $10,000 and that its value remains unchanged during the relevant time period. Sometime after C1 has made his $10,000 loan, the debtor decides to expand his business by purchasing additional inventory at a cost of $1,000, and to borrow the money to pay for the new items, rather than purchasing them outright. Assume there are only two creditors who are prepared to lend him the money he needs: C1, to whom he is already indebted, and C2, a lender with whom the debtor has had no previous dealings.

If the debtor cannot offer C2 a purchase money security interest in the new inventory, both creditors will charge an identical rate for making the loan in the absence of monitoring and other transaction costs.

80. This limitation to collateral of the same type is demanded neither by the provisions of the Code, nor by our theory. The Code simply states in § 9-204(1) that "a security agreement may provide that any or all obligations covered by the security agreement are to be secured by after-acquired collateral."

81. Either of these assumptions could be relaxed without affecting our basic analysis.

82. We use this assumption for expositional clarity only, and do not mean to suggest that C1 is free from competition in making his initial loan. In fact, some of the points we make rely on the assumption of a competitive market for the original loan. See p. 1171 infra.

83. If the debtor cannot offer C2 a purchase money security interest in the new inventory, the best arrangement that the debtor can offer is a second priority lien on both the new and the original inventory. Presumably, if C2 has a second priority lien on the entire inventory, he will be prepared to lend at a rate below that at which he would lend if the loan were unsecured, since a subordinated security interest is better than no security interest at all. However, if C1's own security interest is limited to the original inventory—as it would be if there were no after-acquired property clause in his contract with the debtor—the debtor can offer C2 a first priority lien on the new inventory, and, in addition, a second priority lien on the original items securing C1's loan. From C2's point of view, this would be preferable to having a second priority lien on the entire inventory and, as a result, C2 would be prepared to lend at an even lower rate.

Suppose the debtor approaches C1 and inquires about the possibility of borrowing the $1,000 from him. If C1 makes the loan, his security interest in the new inventory will not be subordinated to the claim of any other creditor. It is therefore tempting to conclude that C1's $1,000 loan will be secured by a first priority lien on the new inventory and a second priority lien on the original inventory if he insists on receiving the right to satisfy any unpaid portion of the $1,000 loan out of whatever surplus remains after these original items have been sold and his initial $10,000 loan repaid. If this were true, C1 could make the $1,000 loan at less risk than C2 and, as a result, in the absence of a purchase money exception, would always be able to outbid C2.

In fact, this conclusion is mistaken—or, more precisely, it cannot be supported without introducing transaction costs into the analysis. Assume that C1 decides to keep his two transactions with the debtor entirely separate, instead of treating them as a single indebtedness. When he makes the $1,000 loan, C1 can do one of two things: he can nominally characterize his security interest in the new inventory as a first priority lien, or he can treat it as a second priority lien, subordinate to the distinct interest that secures his original $10,000 loan. In the latter case, C1 will face the same risks as C2, and will lend at an identical rate. Although C1 is not subordinated to any other creditor, his interest in the new inventory is subordinated to his prior interests in the same items under
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costs. When monitoring costs are taken into account, however, C1’s after-acquired property clause gives him a competitive advantage in bidding for the debtor’s future business. To illustrate, suppose that C1 refuses to subordinate his security interest in the new inventory. Assuming that C2 cannot override C1’s interest by obtaining a purchase money security interest for his own loan, his claim, should he make the loan, will only be secured by a second priority lien on the new inventory. Even if he had a first priority lien, C2 would probably expend resources in monitoring the debtor’s use of the new inventory. But if he has only a second priority lien, C2 will have an incentive to monitor the debtor’s use of the original inventory as well, because C2’s interest in the new inventory will be fully protected only if the original inventory continues to be of sufficient value to satisfy C1’s claim. In the event of the debtor’s insolvency, to the extent that C1 is unable to satisfy his claim wholly from the original inventory, C2’s loan will be unprotected.

It might seem that C2 could rely on C1’s own incentive to police the original inventory. But since C1 may now have an additional cushion, the new inventory, his incentive to monitor may be somewhat weakened. More importantly, C1 and the debtor now have a positive incentive to collude in ways that hurt C2. Suppose, for example, that the debtor wants to convert $1,000 worth of original inventory into cash, the after-acquired property clause in his original contract with the debtor. In setting the interest rate on the $1,000 loan, it should make no difference to C1 that his interest will be subordinated to his own prior claim rather than to the claim of some other creditor.

Suppose, however, that C1 decides to treat the interest securing the $1,000 loan as a first priority lien. It would be strange if C1 could gain a competitive advantage over C2 by what amounts to a bookkeeping readjustment. In fact, if we ignore transaction costs, the interest rate that C1 charges will be unaffected by the change. This can be seen most easily by considering, once again, the situation in which C2 finds himself.

If C2 wishes to obtain a first priority lien on the new inventory, he can do so by paying C1 to subordinate his own interest in the same property. C1 will undoubtedly charge C2 something for agreeing to subordinate his claim, and C2 will increase the interest rate on his loan to reflect this charge. When the cost of a subordination agreement is taken into account, the interest rate on C2’s loan should be exactly equal to what it would be if C2 had only a second priority lien on the new inventory.

Now if C1 himself makes the $1,000 loan, and treats it on his books as if it were secured by a first priority lien on the new inventory, the interest rate he charges will have to be large enough to compensate him for whatever advantage he foregoes by effectively agreeing to subordinate his own earlier $10,000 claim. Assuming zero transaction costs, it will cost as much for C1 to “purchase” a subordination agreement from himself as it would be for C2 to purchase such an agreement. Consequently, C1 will charge the debtor the same interest rate for making the $1,000 loan whether he treats it as secured by a first or second priority lien and, in either case, the rate he charges will be identical to the rate that C2 would charge.

The same point can be expressed in terms of opportunity cost. If C1 makes the new loan himself he foregoes a valuable opportunity—the opportunity of having his original $10,000 loan secured by additional collateral supplied by another creditor. This foregone opportunity represents a cost from C1’s point of view, and C1 will take this cost into consideration in setting the interest rate on the $1,000 loan if he chooses to make it.
and to use the cash to make a speculative real estate investment. C1 can be bribed into tolerating such misbehavior, and even assisting the debtor in concealing it from C2, as long as C1's investment is not affected—that is, as long as sufficient collateral remains to satisfy his claim in full.84 Because of the danger that C1 and the debtor may collude in this fashion, C2 will have an incentive to police the debtor's entire inventory, and will therefore incur larger monitoring costs if he has a second priority lien on the new inventory rather than a first priority lien.85

By contrast, if C1 makes the $1,000 loan, he should incur only those additional monitoring costs necessary to police the new collateral,86 since he need not worry about colluding against himself. Moreover, the money that C1 will already be spending on monitoring the original inventory is a sunk cost that can be ignored in fixing the interest rate on the new loan. In short, the additional monitoring costs that C1 must incur if he makes the loan are only those that are necessary to keep track of the new inventory. C2, on the other hand, must set his interest rate at a level that is sufficient to compensate him for policing not only the new inventory, but the original inventory as well.87 This means that if C1 refuses to subordinate his interest in the new inventory, his

84. In fact, C1's investment will be affected since C1's new cushion will be diminished, thus reducing the probability that his claim will be fully secured at the time of insolvency. To be precise, C1 must be bribed at least as much as is required to compensate him for the lower expected value of his loan in the event of insolvency.

The core of the argument here is simply an extension of the idea developed at pp. 1149-50 supra. Whenever the debtor obtains a loan at a fixed interest rate, he will have an incentive to increase unilaterally the riskiness of the loan. To the extent that C2's loan gives him an incentive to misbehave, the debtor will simply offer to share some of the expected benefits that would result from his own misbehavior with C1, in return for C1's agreement to look the other way. By making such an agreement, both C1 and the debtor can be made better off at C2's expense.

85. To some extent, the extra costs that C2 incurs in monitoring the original inventory may be viewed as a duplicative monitoring expense.

86. This will be true no matter how C1 characterizes his interest in the new inventory—whether he calls it a first or a second priority lien. See note 83 supra. This analysis ignores the possibility that making the new loan may decrease the diversification, and increase the riskiness, of C1's portfolio. See note 88 infra.

87. Even if the debtor grants C2 a purchase money security interest in the new inventory, there is likely to be some duplication of monitoring simply because there are now two creditors financing the debtor rather than one. If we assume that C2 has a second priority in the original inventory along with a first priority in the new items, he will not only incur costs in monitoring the new inventory but probably also some costs in monitoring the original items already being policed by C1. However, since the original inventory only provides a "backup" to C2's security interest in the new items, it is reasonable to assume that C2 will do relatively little monitoring of the original inventory. Thus, the magnitude of any resulting duplication is likely to be less than if C2 had only a second priority in the new, as well as the old items.
incremental monitoring costs will be lower than C2's and he can therefore underbid C2 for the new loan.\textsuperscript{88}

If there is no after-acquired property clause in C1's original contract with the debtor, and if C1 does not enjoy an independent informational advantage of the sort we shall describe,\textsuperscript{89} both C1 and C2 will have to incur the same monitoring costs in connection with the $1,000 loan. Each creditor in this case will have to spend whatever is necessary to monitor the new inventory, but no more. Since C2 can obtain a first priority lien on the inventory, he will have a diminished incentive to monitor C1's original collateral; and although C1 is already spending something on policing the original inventory, it is a sunk cost that he will ignore in setting his interest rate on the $1,000 loan.

Despite the transaction costs savings it offers, then, the after-acquired property clause gives a competitive advantage to the creditor in whose favor it is written. It also works to the disadvantage of the debtor by raising the cost of future credit above what it would be in the absence of the clause, because the advantaged creditor can exploit his monopoly power at any time after the clause is written. Consequently, if we assume that the debtor cannot override an after-acquired property clause by giving later lenders a purchase money security interest, we can expect him to insist upon and, if the credit market is competitive, to obtain a reduction in the interest rate on C1's original loan sufficient to offset the expected increase in the cost of subsequent credit attributable to C1's situational monopoly.\textsuperscript{90} The magnitude of this reduction will depend upon how large a premium the parties think the creditor making the original loan will be able to extract in future transactions as a result of the after-acquired property clause. Their

\textsuperscript{88} C1 and C2 are assumed to be equally efficient monitors at the outset. See note 79 supra. Consequently, any difference in their monitoring costs must be attributed to the situational monopoly that C1 enjoys after contracting with the debtor. One factor that might have the effect of giving C2 a competitive advantage over C1 should be noted, although we believe it will seldom be of any real importance. If a substantial portion of C1's assets are already invested in the debtor's enterprise, another loan may result in a nonoptimal amount of diversification on C1's part, and hence increase the overall risk of his loan portfolio. This may make a second loan more expensive for C1 than the same loan would be for C2 if C2 is not similarly underdiversified. This does not seem to us to be a realistic concern, however. First, lending more to C1 may reduce the portfolio risk if the risk involved in lending to C1 is negatively correlated with the risk of other loans in the portfolio. Also, a large institutional lender is unlikely to have a large enough proportion of its assets devoted to any single debtor to cause a new loan to alter perceptibly his level of overall risk. Moreover, if the debtor himself has diversified investments, even a large investment in his enterprise may not lead to underdiversification.

\textsuperscript{89} See p. 1174 infra.

\textsuperscript{90} If C1 must compete with other creditors for the original loan, the debtor is in a position to demand such a reduction; any resistance on C1's part will be thwarted by competitive bidding.
estimates regarding the size of this premium will depend, in turn, on the frequency with which they expect the debtor to require additional extensions of credit and, most importantly, on their predictions concerning the bargaining power each party is likely to exert in negotiations over the price term in any subsequent credit transaction.91

Suppose now that the parties are free to include a provision in their contract empowering the debtor to override an after-acquired property clause by giving later lenders purchase money priority. By including this provision, the parties can often blunt the situational monopoly created by an after-acquired property clause.92 In the absence of such a clause, a purchase money provision would of course be superfluous.93 But when an after-acquired property clause has been included in the contract, the purchase money provision often ensures that the debtor will be able to obtain future loans on nearly competitive terms94—whether from the original lender or from some other supplier of credit.95 To return to the hypothetical case, if the debtor can give C2

91. See, e.g., Kronman, supra note 78, at 367 n.58.
92. Even when a purchase money security interest can be obtained, the creditor secured by an after-acquired property clause may retain some situational monopoly power. Obtaining a purchase money security interest involves transaction costs that a creditor with an after-acquired property clause need not incur in order to get a first priority lien on new items covered by the clause. Under Article 9 a lender qualifies for purchase money status only if he has satisfied certain special requirements. These include both the requirement that he notify all prior lenders claiming an interest in the collateral if the collateral is inventory, § 9-312(3); see note 69 supra, and the “tracing” requirement, see notes 11 & 68 supra. It will always cost something to fulfill these requirements and, depending on the circumstances, it may cost quite a bit. See note 107 infra (discussing different measures required to fulfill tracing requirement). The extra cost imposed on the purchase money lender gives the after-acquired property clause holder some situational monopoly power even if the two creditors are equally efficient monitors at the outset. See note 79 supra.

An interesting question—but one which we shall not explore here—is why purchase money financing of inventory is subject to any restrictions other than the tracing requirements and the rudimentary filing requirements of § 9-312(4). The Code suggests:

The reason for the additional requirement of notification is that typically the arrangement between an inventory secured party and his debtor will require the secured party to make periodic advances against incoming inventory or periodic releases of old inventory as new inventory is received. A fraudulent debtor may apply to the secured party for advances even though he has already given a security interest in the inventory to another secured party. The notification requirement protects the inventory financer in such a situation .... § 9-312, Comment 3. This explanation rests upon the assumption that one creditor is in a better position than the other to prevent their common debtor from misbehaving. See note 59 supra (discussing situations when same explanation motivates legal rules).

93. See note 70 supra.
94. The terms may not be completely competitive because of some residual advantages possessed by the holder of the after-acquired property clause. See note 92 supra (clause holder faces lower transaction costs than purchase money lender); pp. 1174-75 infra (clause holder may have informational advantage over new lenders).
95. Cf. note 9 supra (purchase money priority provisions dilute after-acquired property clause holder’s exclusive rights).
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a purchase money security interest in the new inventory, the monitoring costs associated with the $1,000 loan will be the same for both creditors, just as they would be the same if C1's original contract with the debtor did not contain an after-acquired property clause in the first place.

Although a purchase money provision blunts the situational monopoly that would otherwise be created by an after-acquired property clause, it does not annul the savings in transaction costs that a clause of this sort makes possible. The debtor and C1 are still relieved of the need to rewrite their contract whenever one item of collateral is replaced by another. This explains why the parties to a credit transaction might prefer a contract that contained both sorts of provisions to one that contained neither. But when coupled with an after-acquired property clause, a purchase money provision weakens the situational monopoly that the creditor would enjoy in its absence, and we would therefore expect the price of a contract with both terms to be higher than one that contained only an after-acquired property clause.

One might think that the parties would be indifferent between a contract that contained an after-acquired property clause together with a purchase money provision and a contract that contained only an after-acquired property clause but also had a lower price term. The second package, however, is almost certain to be more costly to negotiate since it requires the parties to determine how much the price term must be reduced to compensate the debtor for the adverse effects of the creditor's situational monopoly—a determination that cannot be made without assessing a host of future contingencies and evaluating the relative bargaining strength of the parties themselves. Since both parties have an interest in avoiding protracted and expensive negotiations, they will agree to include a purchase money provision in their contract whenever they have independently decided to include an after-acquired property clause in order to reduce transaction costs. Inclusion of a purchase money provision leaves the parties in the same position they would have been in if they had simply reduced the contract price to reflect the cost to the debtor of the situational monopoly created by an after-acquired property clause, without involving the additional negotiation expenses that a price reduction would entail. The purchase money provision in Article 9 merely legislates a standard contract term that the parties would be likely to adopt in its absence.

96. See Jensen & Meckling, supra note 30, at 338.
97. Unlike many other provisions in Article 9, the priority afforded purchase money lenders does not appear to be subject to private contractual modification—at least in a way that would bind third parties. Suppose, for example, that the parties to a credit transac-
For the sake of clarity, the foregoing argument ignores a number of complicating factors. There is, however, one factor that is sufficiently important to mention at this point. In developing a rationale for the purchase money priority, we have stressed the competitive advantage created by an after-acquired property clause, and have suggested that the special priority afforded purchase money lenders may be viewed as a device for blunting this advantage. Even if his contract with the debtor does not contain an after-acquired property clause, however, a prior lender may nevertheless enjoy an advantage over his competitors. The very fact that he has made a previous loan to the debtor and is already engaged in monitoring the debtor’s behavior is likely to give the prior lender, C₁, an informational advantage over later lenders such as C₂. The cost of initially acquiring certain basic information about the debtor may be viewed as a start-up cost that every creditor will have to incur. Having already incurred this cost, C₁ can extend credit to the debtor on more advantageous terms than can a creditor who is dealing with the debtor for the first time. This undoubtedly explains, at least in part, why debtors engage in “repeat” transactions with particular creditors rather than shifting frequently from one supplier of credit to another.⁹⁸

If C₁ enjoys an informational advantage of this sort, however, it is due to his preexisting relationship with the debtor and not to the presence of an after-acquired property clause in their credit agreement. Furthermore, it is difficult to see how this informational advantage could be eliminated at reasonable cost, or why the parties would want to prevent C₁ from acquiring such an advantage in the first place. Although it is true that the information C₁ acquires in the course of his dealings with the debtor may give him a competitive advantage over other creditors in bidding for subsequent loans, the debtor is not likely to view this as a detriment at all. He is more likely to think of C₁’s in-

⁹⁸ See O. Williamson, supra note 32, at 34–35 (first party to have contract with organization may acquire informational, “first-mover advantage” over other parties competing for later business).
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formation as a capital asset that both parties can potentially exploit to their mutual advantage.99

4. The Limits of the Purchase Money Priority: Nonidentifiable Collateral and the Tracing Requirement

We have attempted to explain the purchase money priority by characterizing it as a device for eliminating the situational monopoly created by an after-acquired property clause. Nothing in the preceding discussion, however, explains what many might regard as the most striking feature of the purchase money security interest—its limitation to "identifiable" collateral.100 To claim the overriding priority afforded purchase money lenders, a creditor must show that his loan was used to acquire a discrete asset that the debtor did not previously own. The practical effect of this limitation is to bar certain creditors, for example, those whose advances are used for general business purposes, from asserting the special priority reserved for purchase money loans. Further analysis is required to explain why some creditors should be eligible for purchase money status and others should not.101

99. Cl has an incentive to offer, and the debtor has an incentive to insist upon, a discount on the initial loan in anticipation of later exploitation of an informational advantage by Cl. Cf. note 90 supra (competitive market will ensure debtor ability to obtain reduction in initial contract price exactly offsetting anticipated situational monopolistic power that will accrue to creditor in future as result of initial contract). The parties can thus share in any cost saving resulting from Cl's informational advantage. Eliminating this advantage by reducing Cl to C2's level of ignorance would therefore amount to destroying a valuable economic asset.

There will sometimes be several creditors of the same type who have all incurred start-up costs to gather basic information about the debtor. In such a case, the debtor may be protected from an attempt by any one creditor to exploit an informational advantage because of competition from the other creditors who enjoy the same advantage.100. The purchase money priority was first justified as an outgrowth of the right of a seller of goods to control the terms of sale. See, e.g., United States v. New Orleans R.R., 79 U.S. (12 Wall.) 362, 365 (1870); New Jersey Bldg., Loan & Inv. Co. v. Bachelor, 54 N.J. Eq. 600, 603, 35 A. 745, 746 (Ch. 1896). Although the status of third-party enabling lenders was somewhat less clear prior to the enactment of the Code, see 2 G. Gilmore, supra note 2, § 29.2, at 781, there have always been ways to arrange a financing transaction to allow an enabling lender to claim purchase money status, see id. The extension of purchase money protection to enabling lenders cannot be explained, however, simply by invoking the concept of ownership. See G. Osborne, supra note 5, at 391 ("[I]t would seem that the opposite conclusion could have been reached just as easily.... So... one is left unsatisfied as to why this one of two perfectly possible conclusions has been chosen.") Economic efficiency suggests one satisfying explanation. Cf. Priest, The Common Law Process and the Selection of Efficient Rules, 6 J. LEGAL STUD. 65 (1977) (efficiency of common law explained by evolutionary model wherein parties more likely to litigate inefficient than efficient rules); Rubin, Why Is the Common Law Efficient? 6. J. LEGAL STUD. 51 (1977) (judicial treatment of case law and interpretation of statutes is influenced by considerations of efficiency).

101. Cf. 2 G. Gilmore, supra note 2, § 29.2, at 781-82. (While suggesting that § 9-107 be applied flexibly, "the person claiming the purchase money interest will have to show (1) that his advance was made for the purpose of enabling the debtor to acquire the collateral and (2) was in fact so used").
Consider the following variation of the hypothetical case described in the preceding section. The debtor is a manufacturer of chemical products. C1 makes a $10,000 loan to him, secured by an interest in raw materials that the debtor plans to use in the manufacture of a particular chemical compound. At the time the loan is made, the materials are worth $10,000. The debtor subsequently borrows $1,000 from C2 in order to finance his production of the compound in question; the $1,000 is used to pay rent, utility bills, and wages.

If the only practical way of giving C2 the equivalent of a purchase money security interest for his $1,000 loan is to grant him an overriding interest in the whole of the finished product, C2 will obtain priority over C1 on the same indivisible pool of collateral that now secures both creditors' claims. As a result, C1's original interest will be demoted to a subordinate position. Of course, if the value of the pool of collateral has been increased by the amount of C2's loan, C1 will not suffer by being subordinated in this way. But C1 bears the risk that C2's loan will not generate a commensurate increase in the value of the collateral. Suppose, for example, that C2 loans $1,000 and the raw materials appreciate by only $800. If C2 has a purchase money security interest, or its equivalent, in the finished product, he will be repaid in full in the event of insolvency and C1 will absorb the $200 "loss."

As a practical matter, if the debtor is able to grant C2 a purchase money priority in the single pool of collateral that secures both creditors' loans, their claims will be ranked on a last-in-time, first-in-right basis. We have already seen that a ranking principle of this sort would undermine secured financing generally. Elimination of the tracing requirement—which in the hypothetical case now under consideration blocks the debtor from granting C2 a purchase money security interest—would have the same effect.

If the appreciation in the debtor's estate resulting from C2's loan can be linked to the debtor's acquisition of distinct items of property,
the debtor can grant C2 purchase money priority without occasioning a
de facto demotion of C1’s security interest. In the case discussed in the
preceding section, for example, the discrete nature of the property
acquired with C2’s loan made it possible to give C2 a first priority lien
on the new inventory without at the same time demoting C1’s interest
in the original inventory securing his own $10,000 claim. If the debtor
has the power to grant an overriding priority to purchase money
lenders, a prior creditor with an after-acquired property clause loses an
advantage he would otherwise enjoy. But as long as the collateral secur-
ing his claim can be segregated from the property acquired with the
purchase money loan, a prior creditor will know that the interest he
obtains in property owned by the debtor at the time of their transac-
tion, together with later proceeds, cannot be subordinated, without
his consent, to the claim of any subsequent lender. Unless this elemen-
tary condition is satisfied, no creditor will ever agree to lend on a
secured basis.

Because the costs of segregation vary according to the nature of the
collateral involved and the purpose for which the later loan is made,
purchase money financing is less costly in some situations than in
others. It would be a mistake, however, to think that financing of
this sort should be made more widely available by elimination of the
tracing requirement, since if this were done, no creditor—not even a
purchase money lender—would agree to extend credit on anything but

106. See § 9-306(1) ("'[p]roceeds' includes whatever is received upon the sale, collection
or other disposition of collateral or proceeds").
107. In some cases, the expense involved in segregating new collateral from old will be
relatively low. For example, when the new asset is a single machine, a simple bookkeeping
procedure may be sufficient to segregate this particular piece of equipment from similar
ones already encumbered in favor of another creditor. In other cases, the cost of segrega-
tion may be more substantial. If one creditor has an interest in the debtor’s raw ma-
terials, for instance, and the debtor borrows funds from a second creditor to purchase
more materials of the same sort, the debtor will have to segregate physically the new
materials from the old in order to give the second creditor a purchase money security
interest. He may also have to carry on two independent manufacturing processes to
preserve the distinct identity of the property securing his creditors’ claims. Even if this
is done, problems will remain, since there are likely to be substantial difficulties in
segregating the collateral in a way that does not over or undercompensate either of the
creditors. If, for example, the raw materials are worth $10,000 originally, but $12,000 after
assembly, it will be expensive to determine how much of the $2,000 increase is due to the
second creditor’s loan, how much of it is due to the increased value of the raw materials
themselves, and how much is attributable to other inputs. Unless the amount of each
creditor’s contribution can be determined, there is a risk that he will be improperly
compensated when the finished inventory is divided into two distinct collateral pools.

Finally, there are some cases in which any segregation is almost certain to be prohibi-
tively expensive. This is likely to be true, for example, when the later loan is made for
general business purposes, or to meet certain operating expenses, such as wages and rent.
Such payments may increase the total value of the debtor’s estate but they do not result
in his acquisition of an identifiable new asset.
an unsecured basis. Although eliminating the tracing requirement would have the desirable effect of alleviating the situational monopoly power created by an after-acquired property clause, it would do so only at the cost of destroying the advantages of secured financing generally. Consequently, if there is to be such a thing as a purchase money security interest, it must be limited to identifiable collateral.

C. Notice Filing and the First-in-Time Rule

Article 9 provides that the priority of conflicting security interests "dates from the time a filing is first made covering the collateral or at the time the security interest is first perfected, whichever is earlier." Thus if C1 files a financing statement on May 30, and C2 files a financing statement covering the same collateral on June 30, C1's interest in the property will have priority over C2's, regardless of the order in which they actually make their loans or satisfy the requirements for perfection. Suppose, for example, that C2 discovers on June 30 that C1 has already filed a financing statement and immediately calls the debtor who tells him that he has not yet borrowed a penny from C1. C2 then files a financing statement of his own and simultaneously advances the debtor $1,000 against collateral worth the same amount. As long as C1's financing statement continues to be effective, any loan that C1 makes to the debtor will enjoy priority over C2's $1,000 claim. Knowing this, C2 will do one of three things: look for other, unencumbered collateral, obtain a subordination agreement from C1, or make a loan at the unsecured rate. If C2 lends money

108. The tracing requirement imposes transaction costs on the purchase money lender and thus gives some additional scope to the exercise of situational monopoly power. The holder of an after-acquired property clause can exploit his situational monopoly until his monopoly profits equal the additional transaction costs that a purchase money lender must incur to make a loan of the same size, assuming the two lenders are otherwise equally efficient monitors. See note 92 supra.

109. Granting pro rata priority to the new lender would be no more satisfactory. The Code adopts a rule of this sort when two separate pools of collateral that have previously secured separate loans are commingled. See § 9-315. Although such a rule may make sense in this context, it should not be applied by analogy when one of the two competing loans has never been tied to any identifiable collateral whatsoever. General use of the § 9-315 rule would abrogate the first-in-time principle and would, in effect, substitute a no-priority rule, since all loans would rank equally. Moreover, it would exacerbate the problem of duplicate monitoring. See note 45 supra.

110. § 9-312(5)(a).

111. See First Nat'l Bank & Trust Co. v. Atlas Credit Corp., 417 F.2d 1081 (10th Cir. 1969) (interpreting § 9-303(1)) (creditor priority established by date of filing, regardless of credit agreement execution date); § 9-312, comment 5.

112. The example assumes that C2 has some way of verifying the debtor's assertion.

113. In most cases, a filed financing statement is effective for five years. See § 9-403(2).

114. See § 9-316 ("Nothing in this Article prevents subordination by agreement by any person entitled to priority.") Instead of obtaining a subordination agreement directly from
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to the debtor at the secured rate without obtaining a subordination agreement, the debtor will have an incentive to borrow money against the same property from C1, since by doing so the debtor can unilaterally increase the riskiness of C2's loan without having to pay a higher interest rate.

These results follow from the Code's adoption of a "notice-filing" system that keys priority to the time of filing, rather than to the time of completion of the loan transaction. Such a system appears to be consistent with the general rule that earlier claims should prevail over later ones. In one sense, however, notice-filing tends to subvert this fundamental ordering principle. Under a notice-filing system, unless a junior creditor obtains a subordination agreement, he runs the risk that the claims of senior lenders will be increased, without losing their seniority, after he makes his loan.115 Functionally, this puts the junior creditor in the same position he would be in if creditor claims were ranked on a last-in-time, first-in-right basis—with the important difference that it would be harder to contract around the risk of subordination in a regime of this sort than it is under a notice-filing system.

C1, a junior creditor in C2's position might attempt to achieve the same end by insisting that the debtor demand a termination statement from C1. See § 9-404(1) (nonconsumer goods) ("[W]henever there is no outstanding secured obligation and no commitment to make advances, incur obligations or otherwise give value, the secured party must on written demand by the debtor send the debtor...a termination statement to the effect that he no longer claims a security interest under the financing statement.") Of course, if C1 has made even a small advance before C2 makes his loan, C1 cannot be forced to execute a termination statement. The protection afforded by § 9-404 is therefore available in only a few cases. More importantly, it is costly to obtain.

As another possibility, C2 might seek to induce C1 to "release" some of his collateral. See § 9-406.

115. The problem arises in connection not only with the problem of multiple security agreements but also with the Code's treatment of the priority for future advances. Section 9-204 provides that "[o]bligations covered by a security agreement may include future advances or other value whether or not the advances or value are given pursuant to commitment." This section has provoked a debate over whether a future advance takes priority from the time the financing statement is filed in cases in which the security agreement itself does not provide for such advances. Compare Texas Kenworth Co. v. First Nat'l Bank, 564 P.2d 222, 226 (Okla. 1977) (denying priority measured from time of filing because "potential creditors who do inquire should be able to rely upon the security agreement itself") with In re Merriman, 4 U.C.C. Rep. Serv. 234 (S.D. Ohio 1967) (opinion of referee) (granting such priority). Under the prevailing interpretation, the priority of future advances in such cases is dated from the time of filing. See J. White & R. Summers, supra note 9, at 908. Surprisingly, many of the participants in the debate have overlooked the fact that the parties are always free to execute a separate agreement for any later advance, in which case the priority of the later loan will be dated from the filing date of the financing statement covering both agreements. See James Talcott, Inc. v. Franklin Nat'l Bank, 292 Minn. 277, 291-92, 194 N.W.2d 775, 784-85 (1972); § 9-312, Comment 7, example 5. But see Coin-O-Matic Serv. Co. v. Rhode Island Hosp. Trust Co., 3 U.C.C. Rep. Serv. 1112 (R.I. Super. Ct. 1966). In effect, this moots the question being debated and merges the problem of future advances into the more general one of assessing the soundness of the Code's notice-filing system.
in which the senior lenders with overriding claims can all be identified, in advance, by the junior creditor.

Because it forces junior creditors either to lend at the unsecured rate or to protect themselves by obtaining costly subordination agreements, a notice-filing system gives senior lenders a competitive advantage in bidding on subsequent loans whenever the collateral in question already belongs to the debtor's estate and so cannot be used to give the junior creditor an overriding purchase money security interest. In some cases, this may work to the debtor's disadvantage by raising his total credit costs. On the other hand, if the parties to a particular credit transaction contemplate a series of loans over a period of time, a notice-filing system permits them to reduce the costs of their transaction by eliminating the need to refile each time an advance is made. Thus, notice-filing "protects" the filing system by "allowing the secured party who has first filed to make subsequent advances without each time having, as a condition of protection, to check for filings later than his." 116

From the debtor's point of view, a notice-filing system has benefits as well as costs: although it increases the costs of subsequent borrowing from junior creditors, it also reduces the expense of transactions involving the repeated extension of credit from a single senior lender. 117 In some cases—perhaps in most—the advantages of a notice-filing system outweigh its disadvantages. But there are other situations in which this is not true—for example, when the debtor's available collateral is indivisible, and he would like to borrow against it on a secured basis from several different lenders. In such situations, notice-filing may work to the disadvantage of the debtor, and he might, in fact, be better off under a "transactional" filing system similar to those employed by a number of pre-Code chattel security statutes. 118

As its name implies, a transactional filing system requires each individual credit transaction with the debtor to be separately perfected by filing, and so does not permit filing before credit has actually been extended. Under this system, a junior creditor can determine, merely by inspecting the files, the maximum extent to which his interest can be subordinated to the claims of senior creditors. As a result, it is easier

116. § 9-312, Comment 5.
117. In this respect, adoption of a notice-filing system resembles the validation of security interests in after-acquired property. The debtor will be better off under a transactional system when the costs of negotiating over situational advantage exceed the savings in transaction costs made possible by notice-filing. See pp. 1171-73 supra.
118. Prior to the general enactment in the 1940s of Factor's Lien Acts and the Uniform Trust Receipts Act, most filing systems were transactional in character. See 2 G. Gilmore, supra note 2, § 94.3.
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and less costly for a debtor to borrow from junior creditors under a transactional system than under a notice-filing system like that employed by Article 9.

Although Article 9 adopts a notice-filing rule for all security interests perfected by filing rather than by possession, there seems to be nothing in the Code itself to preclude a debtor from contracting into a transactional priority rule if he wishes. A debtor could do this, for example, by expressly noting the effectiveness of a particular filing on the financing statement ("this filing is effective to secure an amount not to exceed $100,000"). Enforcement of such a limitation against the creditor making the loan secured by the filing in question would permit the debtor and his creditor to use a transactional filing system whenever they could benefit by doing so.

Assuming debtors are free to contract around the Code’s notice-filing rule, the only remaining question is whether notice-filing provides an appropriate baseline presumption—to be modified by private agreement on an ad hoc basis—for secured transactions of every sort. The presumption seems a sensible one when the collateral involved is either inventory or receivables, and the security interest must therefore take the form of a "floating lien," since a notice-filing system eliminates the need for repeated filings and reduces the parties’ transaction costs. On the other hand, the Code’s blanket presumption in favor of notice-filing seems less reasonable when the collateral consists of equipment or other large and relatively stable items of property. In such situations, a transactional filing system is likely to be more attractive to the parties, given the reduced need for repeated filings and the debtor’s desire to minimize the cost of borrowing against the same collateral from multiple creditors. For secured transactions involving large, stable assets, a presumption that the parties intend a transactional rule

119. If this were done, whether the issue involved future advances under an existing security agreement or loans made under a new security agreement, the aggregate indebtedness entitled to priority protection under the filing would be $100,000. If, for example, the financing statement instead said that "this filing secures only the first security agreement," the problem of future advances made under that agreement would recur. See note 115 supra. In order to limit effectively the advance’s priority, future advances would have to be limited to those specified or reserved in the security agreement. Pre-Code law treated future advances in this manner. See 2 G. Gilmore, supra note 2, § 35.4, at 927, 992. Under pre-Code law, obligatory future advances were accorded a general priority; voluntary future advances, on the other hand, received priority only over intervening loans of which the earlier creditor had no actual or constructive knowledge. In either case, however, it was clear that future advances had to be provided for in the security agreement.

120. The argument here is analogous to that made in connection with the competitive advantage created by an after-acquired property clause. See pp. 1167-73 supra (importance of negotiating costs when earlier creditor has legal right giving him competitive advantage over other creditors).
to apply—rather than the notice-filing rule presently imposed by the Code—would probably be more efficient.\footnote{121} If so, the Code's blanket presumption in favor of notice-filing should be replaced by a pair of presumptions applicable to security transactions of different sorts, reflecting the fact that the costs and benefits of a particular priority rule may vary with the nature of the transaction itself. We take comfort in noting that a similar proposal was made twenty years ago by Peter Coogan, and in the thought that we may, after all, only be rebottling an idea of established vintage.\footnote{122}

\footnote{121. \textit{See} I G. GILMORE, \textit{supra} note 2, § 15.3, at 479-80: Thus Article 9 provides both for notice filing and for transaction filing. It is surely to the advantage of everyone concerned, including the secured party, that the files give as much information as possible. Where the collateral is a shifting mass of inventory or accounts receivable handled under a revolving credit arrangement, a skeletal form of notice is appropriate: the best that can be done is to provide a mechanism under which information about the current state of things can be obtained from the parties to the financing transaction. But when the financing arrangement is itself more stable—say, a term loan on identifiable equipment—more information can, and should, be given, either by filing the security agreement itself as § 9-402 suggests or by giving more than the bare minimum of information which § 9-402 requires for "sufficiency."}

\footnote{122. \textit{See} Coogan, \textit{supra} note 77, at 879-80 (raises question as to whether "the use of notice filing with respect to collateral other than inventory should be limited in some way"); observes that although "[t]here is no doubt that this type of filing has been necessary in inventory and accounts-receivable financing . . . [t]he same reasoning does not apply to all other types of collateral"). Prior to its adoption of the 1972 version of Article 9, California granted priority to advances by the holder of the first perfected security interest only up to the maximum amount stated in the filed financing statement, or, "[i]f a maximum amount to be secured is not so stated, as to all obligatory advances, and as to all optional advances made by the secured party without knowledge of an intervening right." \textit{See} CAL. COM. CODE § 9312(7) (West 1964) (amended 1965). This was consistent with the treatment of future advances in California prior to the enactment of the Code. \textit{See} Project, \textit{California Chattel Security and Article Nine of the Uniform Commercial Code}, 8 U.C.L.A. L. REV. 806, 863-64 (1961). Such a system would have allowed a debtor and his creditor to specify in a publicly recorded financing statement the maximum amount entitled to a priority under the original filing.}