An Economic Analysis of the Guaranty Contract

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Abstract: Guaranty arrangements, in which one person stands as surety for a second person’s obligation to a third, are ubiquitous in commercial transactions and in commercial law. In recent years, however, scholarly attention to the topic has been scant; and there is still no theoretical treatment of this body of law or practice from an economic policy perspective. This paper, accordingly, attempts to outline the basic economic logic underlying the guaranty relationship, and applies the results to a variety of specific issues in government policy and private planning. It poses and answers three main questions: First, why would a creditor prefer to make a guaranteed loan rather than an unguaranteed one? The answer is not as obvious as might first appear, given that market competition over credit terms tends to adjust the interest rate paid by an individual borrower to reflect the specific default risk that he presents. Second, given that they bear the residual risk of debtor default, why would guarantors prefer to guarantee loans rather than make loans directly, thus foregoing the opportunity to earn interest payments that could help to compensate for the risk they bear? Third, even if it is efficient for one creditor to provide funds and another to provide insurance against default, why would the parties prefer to implement this arrangement through the triangular form of a guaranty, instead of simply having the former creditor lend to the latter and the latter lend to the ultimate borrower?

Keywords: Contracts, commercial law, guaranties and suretyships, risk allocation.


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An Economic Analysis of the Guaranty Contract

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I. Introduction

Guaranty arrangements, in which one person stands as surety for a second person’s obligation to a third, are ubiquitous in commercial transactions and in commercial law. They are at least as common, if not more so, as personal property security or real mortgages. The interrelated rights and duties arising out of guaranties and analogous legal and financial devices comprise a substantial part of several distinct bodies of law, including those governing secured transactions, negotiable instruments, letters of credit, and contractual assignments; and the distinctions among guaranties and alternate transactional forms are relevant to a wide array of regulatory regimes, including tax, banking, insurance, and securities law. Up until the 1950’s, indeed, the standard law school curriculum even included a required course on the subject, under the title of suretyships.

In more recent years, however, the law of guaranties has languished in a scholarly backwater. Lawyers specializing in the area lament that the field has “fallen between the cracks,”¹ and that bench, bar, and academy are all ignorant of its content and practical importance.² From a purely doctrinal viewpoint, fortunately, this situation is beginning to change. Three major new reformulations of guaranty law — the recent revisions of Articles 3 and 5 of the Uniform Commercial Code and the just-released Third Restatement of Suretyship and Guaranty — have been adopted in the last several years. Practicing lawyers will be forced to familiarize or re-familiarize themselves with the legal rules in this area, at the risk of liability for malpractice. But despite this flourishing of doctrinal work, and

¹. Donald J. Rapson, History and Background of the Restatement of Suretyship, 34 Wm. & Mary L. Rev. 989, 1011 (1993).


have some leeway to choose whether to pursue their goals through guaranties or through alternative devices; in those cases in which they do decide to enter into guaranties, they typically have freedom to contract out of the various default rules with which suretyship law provides them.\textsuperscript{6} A good commercial lawyer thus needs to understand the functional underpinnings of the transaction in order to help plan it — and in commercial settings, these underpinnings are economic.

Such a functional perspective is relevant in both the private and public spheres. For example, many government policies are intended to assist debtors, both individual and institutional. These policies, which include federal student loans, government–backed mortgages or farm loans, bailouts of private entities such as Chrysler or Lockheed, and international loan guaranties for foreign allies such as Israel or Mexico, are motivated by efficiency, distributional, or other considerations. Whatever the goals of such programs, however, it is in the public interest that they be pursued through an efficient transactional form. For instance, in the last few years federal support for education lending has shifted from a program of guaranteed student loans to one of direct student loans, on the supposed rationale of greater administrative efficiency; and a third alternative — the Clinton administration’s various proposals for new tax subsidies for student college loans — played a minor role in the 1996 presidential campaign.\textsuperscript{7} An economic perspective on guaranties can help shed light on which of these programs would be cheapest or most effective.

Nonetheless, the arguments to follow may well be of greater utility to business lawyers designing individual transactions than to legislators, judges, or public regulators. In my view, however, this is a strength of the analysis rather than a weakness. As I have argued elsewhere, contemporary legal scholars, even those associated with the relatively market–oriented perspective of law and economics, have focused disproportionately on analyzing the merits of particular public policies and have

\textsuperscript{6} See e.g., \textsc{Uniform Commercial Code} 1–102(3) [providing that rules of UCC may in general be varied by the parties’ agreement, and that obligations of reasonableness, diligence, and good faith, while not disclaimable, can be given specific content through agreement.]; \textsc{Restatement (Third) of Suretyship and Guaranty} §6 (1996) [both substantive and procedural rules of Restatement variable by agreement].

addressed themselves primarily to government decisionmakers. Because private actors also care about efficiency and distribution in ordering their affairs, however, the theoretical insights of economics are at least as valuable to them as they are to public officials. Just as the citizens of the United States must decide whether, through their federal government, to lend funds to the government of Mexico directly, to guarantee loans made to Mexico by a third-party lender, or to leave Mexico to its own financial devices, so must a commercial bank decide whether to demand that a credit applicant provide a co-signer, or whether to issue a standby letter of credit for one of its existing customers who is seeking additional funds from another lender. The same set of economic and functional issues are relevant whether one is making public or private policy.

In the succeeding sections of this paper, therefore, I lay out the basic economics of suretyships and guaranties. The paper poses three main questions. First, why would a creditor prefer to make a guaranteed loan rather than an unguaranteed one? The answer is not as obvious as might first appear, given that market competition over credit terms tends to adjust the interest rate paid by an individual borrower to the specific default risk that he or she presents. Second, why, given that they bear the residual risk of debtor default, would guarantors prefer to guarantee loans rather than make loans themselves, thus foregoing the opportunity to earn interest payments that could help to compensate for this risk? Third, even if it is efficient for one lender to provide funds and another to provide insurance against the borrower’s default, why would the parties prefer to accomplish such an arrangement through the three-corner form of a guaranty, instead of simply having the former lend to the latter and the latter on-lend to the ultimate borrower?

In brief, the answers to these questions are as follows. First, and most straightforwardly, creditors should prefer to make guaranteed loans when, and only when, there is a potential guarantor who can monitor the debtor more cheaply than the creditor can. Monitoring in this regard should be understood broadly; as I use the term it is intended to incorporate any and all activities that reduce the expected cost of nonpayment, including up-front investigation and underwriting, assessing the merits of the project the debtor proposes to finance, supervising the debtor and his project during the life of the loan, and enforcement, collection, and salvage in the event of default. Second, the person who is the lowest-cost monitor will prefer to act as guarantor, rather than as primary lender, when and only when her cost of liquidity — that is, the transaction costs she must pay to convert her assets into an acceptable means of ready payment — is less than that of potential third-party lenders. In

essence, suretyship is an economic arrangement in which one party specializes in providing liquid funds, and another specializes in providing informational monitoring and insurance. Third, and perhaps least obviously, guaranties are preferable to on-lending or other forms of intermediation when, and only when, the party who provides liquid funds attaches a higher value to the option to proceed directly against the ultimate borrower than does the party who provides monitoring — or, alternatively, than do the monitor’s other creditors.

To develop these ideas more fully, however, requires some groundwork. The succeeding section of this paper, accordingly, presents some background on the subject of guaranties. It sets out a variety of stereotypical situations giving rise to guarantor liability, outlines the various bodies of law that govern such situations, and summarizes the main questions and unresolved controversies that arise in those legal fields. Section III, which forms the heart of the paper, then compares the economic costs and benefits of guarantees with those of related transactional forms, and discusses why contracting parties would — and should — prefer one type of transactional form to another. Section IV then applies the theoretical analysis to two questions of public policy and private planning: how should the government operate when it wishes to subsidize borrowing, and what risks and duties should be encompassed within the guaranty that is made by a commercial bank upon issuing a standby letter of credit. Section V summarizes the analysis, suggests some further applications to analogous problems in law, policy, and planning, and offers general conclusions.

II. The law of guaranties and suretyships: a sense of the terrain

The number and variety of transactions that include or imply guaranty relationships are vast. In order to situate the problem in a business and policy context, this section surveys a sample of such relationships and summarizes the legal issues that arise from them.

A. The stereotypical guaranty relationship

Guaranties and suretyships take many forms, but the essence of the relationship is a contract among three parties: a creditor C, who is owed a duty, a debtor D, who owes the duty, and a guarantor or surety G, who promises to perform or pay damages on D’s behalf.9 Depending on the

9. Traditionally, a “suretyship” describes a relationship in which the guarantor and debtor are jointly and severally liable on the underlying obligation, while under a “guaranty,” the debtor’s actual default is a condition
Figure 1: Terminology of the guaranty relationship in alternative contexts

<table>
<thead>
<tr>
<th>Context</th>
<th>C</th>
<th>D</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restatement of Suretyship</td>
<td>Obligee</td>
<td>Primary obligor</td>
<td>Secondary obligor</td>
</tr>
<tr>
<td>Negotiable instrument</td>
<td>Holder</td>
<td>Accommodated party</td>
<td>Accommodation party</td>
</tr>
<tr>
<td>Sale of accounts</td>
<td>Assignee</td>
<td>Account debtor</td>
<td>Assignor</td>
</tr>
<tr>
<td>Letter of credit</td>
<td>Beneficiary</td>
<td>Applicant</td>
<td>Issuer</td>
</tr>
<tr>
<td>Lease assumption</td>
<td>Landlord</td>
<td>Subtenant</td>
<td>Primary tenant</td>
</tr>
</tbody>
</table>

context and the applicable body of law, however, these three parties are designated by different labels, as illustrated in Figure 1. In the terminology of the new Restatement (Third) of Suretyship and Guaranty, for instance, C is deemed the “obligee,” D the “primary obligor,” and G the “secondary obligor.” As this terminology suggests, as between D and G, D is expected to bear the burden of performance, and if G is called upon to perform or pay in D’s stead, it is ordinarily expected that D will reimburse her if he is able. The arrangement can be achieved through a single contract or through multiple contracts; in the latter case, G may contract with D alone, with C alone, or with both. It is even possible for a guaranty to be created without the knowledge of D or C, though in this case certain of the parties’ rights and duties will be altered in order to protect the uninformed party.

precedent to the guarantor’s obligation to perform. See RESTATEMENT (THIRD) OF SURETYSHIP AND GUARANTY, §15 (1996). Due to variations among provisions of individual guaranty or suretyship contracts, however, the two terms overlap substantially in actual practice. Id., comment b; see also id., §1, comment c. For this reason, I will use the terms interchangeably in this paper, except where the question of a condition precedent to guarantor liability is specifically relevant to the discussion.

10. RESTATEMENT (THIRD) OF SURETYSHIP AND GUARANTY, §1 (1996). The new Restatement is intended to supercede its most immediate predecessor, Division II of the Restatement of Security (1941). It also covers certain topics treated in the Restatement (Second) of Contracts.

11. In order to avoid ambiguity, when discussing generic guaranty transactions in this paper I will adopt the convention of referring to debtors and primary obligors with male pronouns, guarantors and sureties with female pronouns, and creditors with neuter pronouns.
This formal relationship is general enough to encompass a wide variety of business and policy contexts, as the following examples demonstrate.

1. **Interfamilial guarantees**

D, a college senior, is about to graduate and take his first job, and wants to buy a car. He has enough money for the down payment, but has not yet established a credit history. His only experience with borrowing consists of the student loans he took out to finance his education, which will not come due for six months and which, accordingly, he has not yet begun to repay. Because of this situation, the only finance companies that will deal with him on his own are those that specialize in lending to risky debtors, and those companies’ interest rates are substantially higher than the market average. If he can get his loan guaranteed by someone with an established credit record, on the other hand, he will be eligible for more conventional financing from C, a local bank. D arranges with his mother, G, to provide such a guaranty by co–signing his loan application. At C’s request, G also co–signs the promissory note that D executes in C’s favor before receiving funds.

2. **Intercorporate guaranties**

D, a limited liability corporation engaged in the production of baked goods, needs financing to modernize its capital equipment. C, a producer of cereal food products and D’s longstanding supplier of flour, is willing to lend D the necessary funds, but is concerned about the value of D’s marketable assets and about having to share them with other creditors in the event that D runs into financial trouble. As a condition of the loan, accordingly, C requests and obtains guaranties from D’s parent company, G1, and from G1’s sole shareholder, G2. In the commercial setting, furthermore, it is also common for such guaranties to be accompanied by other contractual covenants and protections for the lender. For example, both the underlying obligation and the guaranties might be secured by a purchase money security interest in the new machinery, or by mortgages on real property owned by D, G1, or G2.\(^\text{12}\)

3. **Standby letter of credit**

D, a software design company, wishes to borrow funds for a new project from C, a commercial bank with whom it has not previously dealt. Because this would entail a new credit investigation and

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\(^{12}\) The example is taken from the contract that formed the basis of the dispute in *In re Cushman Bakery*, 526 F.2d 23 (1st Cir. 1975).
C’s familiarizing itself with D’s business, C would have to charge D more than the prime rate on the loan. Instead, D goes to G, another bank with whom it has a longstanding relationship, and applies for a standby letter of credit naming C as beneficiary. This standby letter provides that if C presents G with certain documents attesting that D has defaulted on the loan, C will be entitled to draw on the letter to the extent of any funds it has at risk. In exchange for a payment in an amount proportional to the funds being lent, G issues the standby letter to D, who presents it to C. On the strength of the letter, C lends D the funds for the project at or below the prime rate.13

4. Construction suretyships

D, a construction contractor, submits the lowest bid on a job to build a new school on a site owned by C, a municipal school district. As a condition of awarding D the general contract on the school, C requires that D obtain a performance bond from a third–party surety insurer. D purchases such a bond from G, a company specializing in providing such insurance. Under the terms of the bond, G promises to undertake to complete the construction job if D does not, to pay all outstanding amounts owed to subcontractors and suppliers of materials, to remove any construction or mechanics’ liens on the property at the conclusion of the project, and to pay any penal sums owing to C under the underlying construction contract. By its terms, the performance bond also provides that all funds owed by C to D under the construction contract stand as collateral for any claims that G may acquire against D. Thus, if G completes the job in D’s stead, G, not D, will be entitled to receive the contract price.14

5. Statutory and fidelity bonds

Under various state and federal statutes, persons engaged in activities that are deemed especially likely to result in tort or criminal liability, or who take on substantial fiduciary duties, are required to post a bond sufficient to cover possible damages and monetary punishment. Bail bonds are a classic


14. Performance bonds such as these are a typical provision in government contracts at the state and local level, and are required for all federal public works projects under the Miller Act, 40 U.S.C.S. §§270a et seq. (1997). See generally T. Scott Leo, The Construction Contract Surety and Some Suretyship Defenses, 34 WM. & MARY L. REV. 1225 (1993).
example, but similar “fidelity bonds” are commonly required to be posted by a wide assortment of public officers and employees, by persons engaged in potentially hazardous activities such as toxic waste disposal, by ordinary tradepersons such as plumbers and roofers, and by officers and employees of financial institutions. While such persons may not be debtors in the immediate sense, they are contingently so, and need to set aside funds for the contingency. Instead of posting such bonds out of their own funds, however, many such contingent debtors arrange for bonding by a third–party guarantor in exchange for an up–front payment or insurance premium. In this case, the creditor C is the person or persons who would be entitled to payment should the debtor actually incur liability.15

6. Recourse assignment of accounts, chattel paper, or instruments

G, a dealer in consumer appliances, sells a refrigerator to D on credit. G then assigns her interest in D’s account, together with a number of other outstanding accounts, to C, a factor (i.e., a company in the business of buying such accounts), in exchange for an immediate cash payment. The underlying consumer debt may also be secured by an security interest in the refrigerator, in which case the assigned contract is referred to as “chattel paper;” alternatively or additionally, it may be embodied in the form of a negotiable promissory note signed by D as maker and indorsed by G over to C. In any of these cases, however, the amount of cash that C pays G for the account, chattel paper, or instrument will be less than its face value. This discount reflects the facts that payment will not be forthcoming for a time and that the factor must service the account in the interim and incur costs of collection. The assignment, however, is on a recourse basis: to the extent that the accounts are uncollectible (or more generally, to the extent that the shortfall in collections exceeds some agreed amount), G must refund C’s payment and retake possession of the bad account. This effectively renders G a guarantor of the underlying debt. A similar analysis applies to assignments of contractual rights more generally, so long as the assignment is with recourse.16


7. Assumption of leases and real estate mortgages

G holds a thirty–year lease on a downtown retail location owned by C at a rent substantially more favorable than current market rates. G wishes to move to a different location in order to expand her business, but she is reluctant to surrender the valuable lease. Instead, she sublets the premises to D, who agrees to assume her obligations to C under the original lease, and in addition to pay an additional monthly rent to G. C consents to the sublease in exchange for a side payment, but does not release G from the terms of the original lease. Thus, if D fails to pay the primary rent, C is entitled to collect it from G. A similar analysis applies to delegations of contractual duties more generally.17

8. Joint and several liability

Not only might there be multiple guarantors and multiple debtors in a single transaction, in some transactions parties might be debtors as to part of an obligation and guarantors as to the rest.18 Consider the following example: two law students, A and B, decide to room together and lease an apartment. The total monthly rent is $1000, but the students agree between themselves that A will take the larger bedroom and pay $600/month, and B will take the smaller bedroom and pay $400/month. The lease contract, however, provides that each tenant is jointly and severally liable for the entire rent. This provision renders A and B both primary obligors and guarantors with respect to their landlord. As to the $600 rent on the larger bedroom, A is primary obligor and B is guarantor; as to the $400 rent on the larger bedroom, B is primary obligor and A is guarantor. This is so whether or not the landlord knows of the students’ side agreement; indeed, one advantage of such an arrangement is that the landlord does not need to keep track of how its tenants apportion the lease obligations between themselves.

9. Government–sponsored enterprises

A number of U.S. government–chartered and sponsored institutions participate directly in credit markets. Among these are the Federal National Mortgage Association (“Fannie Mae”), the Federal Home Loan Mortgage Corporation (“Freddie Mac”), the Farm Credit System, and the Student Loan

17. Id. at __.

Marketing Association ("Sallie Mae"). In some instances these institutions operate as direct lenders, but in many other instances (especially when they issue mortgage–backed or student–loan–backed securities) they operate as guarantors of loans extended by private lenders. As indicated above, there has been substantial policy discussion in recent years over what mix of loans, guaranties, and grants would best serve home buyers, farmers, and students who are the ultimate beneficiaries of these programs.

Furthermore, while these various entities are now technically nongovernmental agencies, as a historical matter all were created and periodically infused with federal funding, and they continue to be subject to substantial federal regulation.19 While they have no formal legal claim on the assets or the general revenues of the federal government, their importance to the national economy — and more significantly, their political popularity — is such that if any one of them were in danger of failure, Congress would come under substantial pressure to step in and rescue it from default. In an informal political sense, accordingly, U.S. taxpayers stand as the ultimate guarantors of this debt.20 For this reason, the investor community is willing to lend to these entities at lower interest rates than it otherwise would demand from a comparable private borrower, notwithstanding the informality of this guaranty.

10. Guaranties between independent national sovereigns

On several recent occasions, the U.S. government has assisted allied countries in obtaining private sector financing for their national debts, both as a form of foreign aid and as a tool for pursuing other foreign policy objectives. For instance, in the fall of 1992 the U.S. guaranteed $10 billion in new loans taken out by the government of Israel for the purpose of financing housing for emigrants from the former Soviet Union; and in January 1995 it guaranteed $40 billion in loans to Mexico as part of an international aid package designed to prevent the Mexican government from defaulting on existing obligations after market pressures forced it finally to devalue the peso. In both instances the loan guaranties were the subject of substantial public controversy, both on fiscal and on foreign policy


20. For a discussion of the potential financial problems raised by the federal government’s responsibility for these entities, see id. at __.
grounds. Much of the controversy had to do with whether the U.S. should be extending aid to these beneficiary countries at all, as well as with which domestic actors should have the authority to make the decision, but some had to do with the guaranty form. Similarly, the U.S. government has routinely guaranteed smaller loans for specific purchases such as arms sales, both for foreign policy reasons and in order to assist American commercial interests in those areas.

B. The law governing guaranties

Because guarantor liability can be achieved through a variety of contractual devices and commercial specialties, the precise body of law that governs will depend on which device is used. Most generally, the parties’ relationship is governed by the common law. In the guaranty context, this includes not just the common law of contracts, but also the special and less widely known rules of the common law of suretyship; these latter doctrines have recently been recatalogued and republished in the new Restatement (Third) of Suretyship and Guaranty. If a guarantor G acquires her status by making or indorsing a negotiable instrument, however, then the parties’ relationship is governed first by Article 3 of the Uniform Commercial Code, which provides special rules for so-called “accommodation parties,” and next by any common-law rules that the UCC does not specifically displace. If the guaranty takes the form of a standby letter of credit, as is routine in transactions in which the guarantor is a commercial bank, the relationship is governed in part by Article 5 of the UCC, in part by the common law, and in most transactions with an international element, by the International Chamber of Commerce’s Uniform Customs and Practice for


Documentary Credits. 24 If the guarantor provides collateral to secure either the primary or the secondary obligation, and in all cases involving the sale or assignment of accounts, then Article 9 of the UCC provides various rules governing the parties’ respective rights and duties. The relationship could also be governed by state and federal statutes regulating the sale of financial options, because one common way to provide the functional equivalent of a guaranty is for G to sell C a put option on the right to collect from D, which C will subsequently wish to exercise if and only if the expected value of D’s performance falls below the exercise price. If the debtor files for federal bankruptcy protection, a variety of Bankruptcy Code provisions (the most important of which deal with preferences and fraudulent conveyances) also apply to the transaction; and outside of bankruptcy state rules of debtor-creditor law, including the law of fraudulent conveyances, also govern. And in the case of loans guaranteed by the US and by U.S.—sponsored institutions, either to private individuals or to other sovereign governments, federal statutes — and ultimately, implicit political contracts among Congress, the executive branch, international actors, and American voters — provide the basis for liability.

Whatever governing body of law, practice, or political understanding guaranties flow from, however, the functional issues they raise are much the same. Guaranties are a response to potential moral hazard and adverse selection on the part of the debtor; they help protect creditors against some of the risks of debtor misbehavior or insolvency by shifting those risks to guarantors. In so doing, they also enlist the guarantor’s efforts in reducing or managing those risks. As with any other insurance arrangement, however, guaranties are themselves subject to various types of moral hazard and adverse selection; each of the parties to the transaction can impose losses on the others by failing to take precaution or by withholding information. For example, guarantors have the power to hurt creditors (and perhaps debtors as well) by incautiously offering guaranties where the underlying financial situation does not warrant it, or by failing to monitor the debtor after money has been lent. Creditors may hurt guarantors (and perhaps debtors) by provoking debtors to default, by failing to collect from the debtor where possible, and by impairing the guarantor’s ability to seek recourse from the debtor after the fact. Debtors can injure guarantors and creditors alike by taking excessive risks and making inadequate efforts to meet their primary obligations. Moreover, the very creation of a

suretyship can itself raise incentive problems, particularly when one of the parties to the underlying primary contract had not anticipated that a three-corner relationship would arise. For instance, a creditor who privately and unilaterally arranges for a guaranty may substantially increase the debtor’s cost of compliance under the primary contract, multiplying the number of persons to whom he owes duties of care or disclosure. Similar problems arise when a creditor transfers its interest in the debtor’s account to a distant and unfamiliar assignee, or when a debtor delegates performance of contractual duties to an untested person with whom the creditor will nonetheless be obligated to make reasonable efforts to deal.

Because of these common functional problems, therefore, all bodies of formal guaranty law provide the three archetypical parties with various rights and duties that, on the whole, are designed to discourage opportunism and to encourage all persons concerned to take reasonable precautions against economic loss. Thus, all regimes of guaranty law provide as a default rule that if the debtor does not perform his primary obligation and the guarantor has to make good on her guaranty, then she will have a right of recourse against him. Under the common-law of suretyship, for instance, this right of recourse is protected in three ways; first, the guarantor is entitled to a right of reimbursement for any funds she actually pays out, plus reasonable expenses. Second and alternatively, if G satisfies D’s obligation to C in full, she is equitably subrogated to C’s rights against him. This subrogation right is valuable if C has some special status (such as that of holder in due course) that confers immunity to claims and defenses that D could otherwise raise (and specifically, that D could raise against G); it is also useful if C has priority over D’s other creditors through a lien or other interest in specific property. Third, G has a right to D’s performance, or what has sometimes been called the right of exoneration. This right is valuable because G can assert it even before it has been called upon to pay anything out, and such early action may increase the chances that D can still perform. Depending on the circumstances, exoneration may entitle G to specific performance from D, to an action against D for creating insecurity along the lines of the right of adequate assurances under §2–609 of the UCC, or to a right to declare the contract in default.


27. See id. §21.
Conversely, guaranty law provides a number of rules designed to protect guarantors against creditor action that materially increases guarantor risk. Thus, if the debtor’s breach of duty was occasioned by a countervailing breach by C — as when a credit buyer of goods withholds payment after discovering that the goods are unmerchantable — G is entitled under traditional common-law rules to set up C’s breach as a defense to her secondary liability to the same extent it would provide a defense to D’s primary liability. Similarly, she may be able to assert certain unrelated claims belonging to D by way of a set-off. Beyond such derivative claims, furthermore, G is entitled to the benefit of certain rights and defenses against C that D could not himself raise; these are the so-called “suretyship defenses.” For instance, if C modifies D’s underlying obligation, extends D’s time for performance, unreasonably refuses a tender of performance by either D or G, fails to supervise or preserve rights against collateral or against co–sureties and sub–sureties, G may be discharged from guarantor liability to the extent that she suffers resulting loss. Indeed, if C fails to disclose events that would support a good suretyship defense, under conditions where it should know of G’s ignorance of such events, G has a right to recover any amounts she has mistakenly and unnecessarily paid out.

The specific content of these various rights and duties, however, depends both upon the particular factual setting and upon the governing body of law. The substance of suretyship defenses and the duties of care owed by the creditor, for instance, are different under the common law of suretyship, Articles 3 and 9 of the UCC, and the law of letters of credit. So are the remedies that follow from

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28. See id. §34.

29. See id. §36.

30. See id. §37 et seq. (“Impairment of Suretyship Status”).

31. Id. §47 (1996).

32. For instance, the creditor’s release of the debtor presumptively releases the guarantor under the traditional common law of suretyship, but does not operate as a release under Article 3; compare Restatement (Third) of Suretyship and Guaranty §39 (1996) with UCC 3–605(b). Similarly, under the common law, the guarantor can raise most defenses against liability that the debtor would be able to, including failure of consideration, breach of warranty, and the like. Under Article 3, however, such defenses would not be good as against a holder in due course, and under new Article 5, they would be good only to the extent that they amounted to material fraud under 5–109. See generally Alces, supra note 24; Cohen, supra note 23.
a breach of the creditor’s duty to the guarantor; and so are the rules for contracting around the default rules that these various legal regimes provide.

As a result, the content of guaranty obligations depend primarily on the parties’ choice of transactional form. A person guaranteeing a promise embodied in a promissory note can opt into the rules of Article 3 by signing the note as accommodation party, or into the rules of the common law of suretyship by signing a separate written agreement. She can opt into Article 5 and the traditional law of letters of credit by casting her guaranty in the form of a letter of credit, or into Article 9 by offering specific property as collateral. Even within these broader transactional forms, furthermore, she can vary her rights and duties by using particular terms of art, as in the Article 3 distinction between guaranty of collection and guaranty of payment, or by providing specific conditions for transfer and presentment in a letter of credit. She can, by issuing a limited rather than an unlimited guaranty, mimic various risk-sharing devices common in insurance markets: including liability caps, deductibles, co-payments. And, apart from a few exceptions, it is possible to contract around the

33. Compare, e.g., Restatement (Third) of Suretyship and Guaranty, §§ 37 and 42 (1996), with UCC §§3-605(e) and (f).

34. Compare Restatement (Third) of Suretyship and Guaranty, §6 (1996) and UCC §3-605(I) (allowing guarantor to waive defenses based on suretyship and impairment of collateral) with UCC §9-501(3) (providing that certain rights of guarantor and duties of creditor with respect to disposition of collateral following default may not be varied or waived in advance of default, and others cannot be varied or waived at all).

35. Of course, the note must also be negotiable for Article 3 to apply. Ronald Mann, Searching for Negotiability in Payment and Credit Systems, 44 UCLA L. Rev. 951 (1997), presents empirical evidence that such negotiable promissory notes are relatively rare in modern business transactions.

36. See UCC §3-419(d).

37. See UCC §5-111 (providing that beneficiary, by transferring a letter of credit or demanding payment thereunder warrants that all necessary conditions of the credit have been complied with.)

38. See Alces, supra note 24, at 457. The form such limits can take depends on the type of guaranty used. For instance, if the guaranty takes the form of a put option on the underlying debt, the exercise price of the option implicitly determines the deductible. A face-value exercise price is equivalent to no deductible; lower exercise prices imply higher deductibles.
default rules of suretyship whatever the applicable legal regime.\textsuperscript{39} Indeed, such waivers of default are the norm in many lending markets.\textsuperscript{40}

To decide whether to cast one’s financial transactions in the form of a guaranty, which of the various legal regimes of guaranty law to opt for if one does, and to decide whether to accept or to disclaim the various default rules of each regime, therefore, it is necessary to understand the economic purposes that guaranty contracts serve. In the next section, accordingly, I present an account of why guaranties exist — why and when it is desirable to divide the functions of providing funds and of bearing the residual risks of debtor default between two different parties, and why and when it is desirable to use a three-corner conditional arrangement when doing so.

### III. Guaranties and their alternatives: the choice of transactional form

In this section, I discuss why parties would or should want to use guaranties as part of their credit transactions, as opposed to making alternative arrangements. The discussion focuses on the criterion of economic efficiency — that is, of maximizing the net surplus, monetary or otherwise, that results from the transaction. I do not attempt here to offer a rigorous defense of the efficiency criterion; rather, I will merely observe that it is a primary and widely shared goal in the commercial context.\textsuperscript{41} In most business dealings the parties are motivated in substantial part by the prospect of economic gain and have the opportunity to plan their arrangements deliberately and with the assistance of professional advisers. Because the law also allows them substantial leeway to shape their contractual

\textsuperscript{39} See e.g., Restatement (Third) of Suretyship and Guaranty, §6 (1996); UCC §1–102. But see UCC §9-501(3) for some possible exceptions. Whether the Article 9 limits on freedom of contract apply to guarantors as well as primary obligors is an question on which courts have differed. [Citations to be provided.]

\textsuperscript{40} See Cohen, supra note 2, at 1042–43; \textit{RESTATEMENT (THIRD) OF SURETYSHIP AND GUARANTY}, §48 (1996), comment a; Lynn LoPucki et al., \textit{COMMERCIAL TRANSACTIONS: A SYSTEMS AND PROBLEMS APPROACH} (forthcoming 1998), at __.

\textsuperscript{41} For more general discussions of the efficiency criterion, see Jules Coleman, \textit{MARKETS, MORALS, AND THE LAW} (1988), ch.4; Richard Posner, \textit{THE ECONOMICS OF JUSTICE} (1983), chs. 3 and 4; and the articles appearing in \textit{Symposium on Efficiency as a Legal Concern}, 8 \textit{HOFSTRA L. REV.} 485 (1980). More specifically, Louis Kaplow and Steven Shavell, \textit{Why the Legal System is Less Efficient than the Income Tax in Redistributing Income}, 23 \textit{J. LEGAL STUD.} 667, argue that even if distributional equity is an important social objective, it is more effectively promoted by using direct public instruments such as tax and transfer payments, rather than through the rules of private law.
relationship, they accordingly have both incentive and ability to conserve on transaction costs. Thus, an efficiency analysis operates in this setting as both an explanatory theory of commercial actors’ behavior, and as a normative benchmark by which to judge their efforts.\textsuperscript{42} The usual caveats and admonitions to such an approach, of course, will apply here just as they do anywhere else.\textsuperscript{43}

Before we begin the main discussion, however, two prefatory remarks are in order. First, though I will often talk of the guarantor’s receiving an economic benefit from the guaranty transaction, the analysis to follow applies equally well to guaranties that are uncompensated. In particular, the fact that many guaranties are uncompensated and some are gratuitous does not diminish the importance of the efficiency criterion, for persons with purely donative intent will ordinarily wish to make their gifts in an efficient manner. In this regard, efficient giftgiving minimizes unnecessary transaction costs while maximizing the value the beneficiary actually receives from a gift of given cost.\textsuperscript{44}

In the case of a donative guaranty, more specifically, there are numerous ways to assist a person in need of credit. One can lend the intended beneficiary funds at a below–market interest rate, guarantee the beneficiary’s loan with another creditor, or subsidize the beneficiary’s interest expenditures directly in an amount equal to the differential charged between high–risk and low–risk loans. Depending on the particular circumstances of the beneficiary and the donor, these various arrangements will have different costs and benefits, so that a guaranty may or may not be the most

\textsuperscript{42} Furthermore, so long as the transaction in question is an arms–length one, the parties have the option not to enter into it, and they know the relevant economic risks and legal consequences, there are no obvious distributional consequences from any change in the legal rules. As a general matter, the surplus from exchange tends to be divided among contracting parties in proportion to their relative eagerness to enter into the bargain. Any efficiency gains or losses resulting from a change in regime, accordingly, will be shared by all. See generally Richard Craswell, \textit{Passing on the Costs of Legal Rules: Efficiency and Distribution in Buyer-Seller Relationships}, 43 STAN. L. REV. 361 (1991).


cost–effective form of assistance. As I will show below, the factors that determine whether a guaranty is efficient in the context of a gift are analogous to those that determine its efficiency in the context of a bargain. 45

Second and more importantly, my focus on efficiency is not intended to suggest that individual profit maximization always leads to an efficient outcome, or that actual guaranties are always motivated by efficiency considerations. On the contrary, the standard litany of market failures — scale economies, monopoly, externalities, and imperfect information — are just as relevant here as in any other exchange setting. For instance, if guarantors underestimate the costs of making a guaranty, as some gratuitous guarantors surely do, private contracting will lead to too many guaranties and, conversely, too few interest subsidies or direct low–interest loans. 46 Similarly, the parties to a credit transaction may in many instances find otherwise inefficient arrangements to be

45. Admittedly, some of the social functions of giftgiving — for instance, the display of spontaneity, selflessness, extravagant generosity, or affluence — are in apparent tension with narrow stereotypes of efficiency and rational maximization. Compare, e.g., the accounts of giftgiving in Joel Waldfogel, The Deadweight Loss of Christmas. 83 AM. ECON. REV. 1328 (1993) (arguing that cash gifts are more efficient than noncash because they can be spent on whatever the recipient wishes, and calculating four billion dollars in annual deadweight losses from noncash holiday gifts), with those of Richard Titmuss, THE GIFT RELATIONSHIP: FROM HUMAN BLOOD TO SOCIAL POLICY (1970); and William I. Miller, HUMILIATION AND OTHER ESSAYS ON HONOR, SOCIAL DISCOMFORT, AND VIOLENCE (1993), ch. 1. In many instances, however, and especially in those situations mediated by the presence of a third party, the symbolic and expressive aspects of the gift relationship can be accommodated without sacrificing the efficiency of the transaction — as the existence of entire legal fields such as estate planning amply illustrates. Furthermore, as I suggest below (see text accompanying note 78, infra) some of the sociological and symbolic considerations that might favor the use of guaranties in the gratuitous context — for example, not wishing to establish an arms–length business relationship between the guarantor and the beneficiary — can be analogized to the more purely pecuniary transaction costs that animate guaranties in a commercial setting.

46. Indeed, several important doctrines of suretyship law are motivated primarily by concern for the incautious or noncalculating guarantor. These include the formal requirement of consideration, which has been interpreted to have rather less bite in the commercial as opposed to the donative context [see Restatement (Third) of Suretyship and Guaranty, §9 (1996)], the special Statute of Frauds for suretyships [see Restatement §11]; and the greater procedural and substantive scope given to suretyship defenses in the donative context [see, e.g., Restatement §49, providing that compensated but not gratuitous guarantors bear the burden of proof with regard to the extent of economic loss resulting from the creditor’s improper actions]. Modern consumer protection law offers additional safeguards for casual guarantors [see, e.g., the FTC’s Credit Practices Rules, especially those codified in 16 C.F.R. Part 444.3 (“Unfair or Deceptive Cosigner Practices”). And in addition, many courts have shown special solicitude to the special form–contract and boilerplate problems arising from guaranty contracts, leading those courts to interpret claims against guarantors strictly and defenses broadly. See generally Peter A. Alces, The Efficacy of Guaranty Contracts in Sophisticated Commercial Transactions, 61 N. CAROLINA L. REV. 655 (1983).
privately profitable because those arrangements allow the principals to extract rents from or to impose externalities on third parties.

In the context of commercial credit, the other creditors of D and G, both present and future, are obvious targets for such rent extraction. If such creditors are fully aware of the relationship among C, D, and G, of course, and if the market for credit is competitive, they can fully protect themselves by adjusting the terms of their contracts with D and G to compensate for any resultant changes in risk. Many outside creditors, however, will be unaware of the details of the participants’ arrangements (as in the case of incidental trade creditors whose loans are too small to make it worthwhile keeping track of D and G’s doings), unable to alter the terms of their loans in response (as is the case with tort claimants and other involuntary creditors), or both (as with employees not represented by collective bargaining who are creditors to the extent of unpaid wages and benefits). Accordingly, these third parties may suffer negative externalities if the parties to the principal credit transaction are allowed full freedom of contract.47

It is difficult, however, to know in which direction this factor cuts in the guaranty context. Because (in contrast with secured credit and mortgages) there is no centralized system of notice or recording for guaranties, and because it is difficult for parties not in contact with D to gauge his potential for default, G’s other creditors may inadequately adjust for the increased risk the guaranty poses for their claims. This would suggest an incentive for the issuance of too many guaranties. On the other hand, because parties not in contact with G may be unaware of or unable to appreciate the value of her guaranty, D’s and C’s other creditors are likely to adjust inadequately for the decrease in risk the guaranty provides them. This countervailing factor would imply that too few guaranties are being written.

Conversely, guaranties can also impose externalities on debtors with whom D is in competition for credit. To the extent that a guaranty from G allows D to improve his credit prospects by signaling his reliability, part of this gain comes at the expense of the general pool of credit applicants who share his observable characteristics. D will now be perceived as more reliable than average, but the others

47. This argument should be familiar to followers of the policy literature on mortgages and personal property security interests, where it has commonly been offered as a reason to limit the availability of and the priorities arising from secured credit. See Lynn M. LoPucki, The Unsecured Creditor’s Bargain, 80 VA. L. REV. 1887 (1994), Lucien A. Bebchuk and Jesse M. Fried, The Uneasy Case for the Priority of Secured Claims in Bankruptcy, 105 YALE L. J. 857 (1996), and Lynn M. LoPucki, The Death of Liability, 106 YALE L. J. 1 (1996).
in his risk pool will, as a direct consequence, be perceived as less reliable than average. Unless those other applicants are able to obtain their own guaranties, accordingly, they will receive less credit on less favorable terms than before. Additionally, those applicants who do go to the expense and trouble of providing a guaranty will find that the more guaranties are provided, the more their signaling value is diluted. The result, as in any market with costly signaling, may be a rat race in which all parties are worse off than if none had tried to signal in the first place.\textsuperscript{48} The proper policy response to such externalities if they exist, however, is not obvious; depending on the particular circumstances it may be possible to improve social welfare either by subsidizing information acquisition or by taxing it.\textsuperscript{49}

Various other commonly articulated rationales for guaranties can be understood in similar terms. For instance, it is often claimed that guaranties are preferred for accounting reasons — that they look better on one or more of the parties’ balance sheets than would an outright unguaranteed loan.\textsuperscript{50} This claim, if true, implies a set of externalities precisely analogous to those we have just discussed, for what it comes down to is that the accounting and auditing specialists who supervise the principal parties for the benefit of third party creditors and investors use imperfect categories to assess and communicate the parties’ financial health. If the combined financial statements of the principals appear stronger when they use guaranties instead than loans, then third party creditors and investors will be induced to deal with them on more favorable terms than they otherwise would. At the same time, the financial statements of competing actors who do not use guaranties will look relatively weak in comparison, reducing their credit prospects and increasing their borrowing costs. To the extent

\begin{quotation}
48. The classic formulations of this argument can be found in A. Michael Spence, \textit{Job Market Signaling}, 87 Q.J. \textsc{Econ.} 355–74 (1973); see also George Akerlof, \textit{The Economics of Caste and of the Rat Race and Other Woeful Tales}, 90 Q.J. \textsc{Econ.} 599-617 (1976).

49. See, e.g., Severin Borenstein, \textit{The Economics of Costly Risk Sorting in Competitive Insurance Markets}, 9 \textsc{Int’l Rev. L. Econ.} 25 (1989) [arguing that it may improve efficiency to prohibit insurers from spending resources to distinguish high–risk from low–risk insureds.]

50. For instance, under current rules of the Financial Accounting Standards Board (FASB), standby letters of credit need be disclosed only in the form of a footnote to the balance sheet, rather than being listed explicitly as a contingent liability. See, e.g., Medhat Helmi and Nitham Hindi, \textit{Raining on Banking’s Parade: New Rules Promote Fuller Accounting of Liabilities}, 40 \textsc{Natl. Pub. Accountant} 17 (1995) [advocating that FASB rules be amended to treat standbys as contingent liabilities, and offering empirical evidence to demonstrate that sufficient data exists to estimate the value of such contingencies]. Attempts to correct for the imperfections of such accounting practices are ongoing. Under the risk–based capital standards established in 1988 by the Basle Committee on Banking Regulation and Supervisory Practice and still in the process of implementation through various federal regulations, for example, most domestic banks will be required to include letters of credit when calculating their risk–based capital ratios. See Pawlowic, supra, note 13, at 416–417.
\end{quotation}
the apparent improvement on paper exceeds the real economic gains of the transaction, however, any benefit to the principals comes partly at these third parties’ expense.  

Guaranties can also be driven by tax considerations, since under the Internal Revenue Code the same transaction is taxed differently depending on whether it is structured as a guaranty, a loan, or the sale of a put option. For instance, the interest payable on a loan that extends over multiple years is taxed under the original issue discount rules, resulting in a relatively even pattern of deductions for D and income receipts for C over the life of the loan even where the actual interest payments are front-loaded. If the loan is guaranteed, in contrast, a portion of the interest payments are converted into suretyship fees, which can be fully expensed by D (and included as income for G) at the time they are paid. If D is in a higher marginal tax bracket than C, or if G is in a lower bracket than C, accelerating the realization of these matched payments has the effect of lowering the total present value of taxes paid. Various other tax advantages, and disadvantages, of guaranties leave ample room for tax arbitrage in the design of credit transactions. The reduction in the parties’ combined tax liability from such arbitrage, however, is effectively an externality imposed on the Treasury, and ultimately on the taxpaying public.

Finally, the parties may cast their relationship in the form of a guaranty in order to evade the substantive constraints of other formal or informal regulations. One straightforward example of such regulation would be the practical constraints imposed by public opinion regarding U.S. direct government subsidies to Israel or Mexico, which under current budgetary rules would require accompanying tax increases or cuts in other more popular programs. Federal loan guaranties to these countries, in contrast, have until been recently treated as entirely off-budget, and thus better able to escape both public and Congressional scrutiny. A second example, less obvious but commercially quite significant, is provided by the reserve requirements imposed by the Federal Reserve System and


53. Id., at __.

54. See, e.g., Kate Stith, Congress' Power of the Purse, 97 YALE L.J. 1343, 1379 (1988) [discussing loan guaranties as one of several “backdoor” appropriations mechanisms]; Sanford, supra, note 22, at 377–380 [discussing effect of recent budgetary reforms of as they affect such guaranties].
the lending limits imposed by the Comptroller of the Currency on federally chartered banks, both of which are intended to contain the risk of bank failures, to encourage depositor confidence, and to control the money supply as a whole. Under the Fed’s requirements, for instance, banks must hold a certain percentage of their liabilities on reserve in the form of cash or deposits with one of the Federal Reserve Banks; the effective result is that the amount of credit extended by any bank is limited to a given multiple of the reserves it keeps on hand.55 Because Fed deposits earn a lower interest rate than commercial loans, however, and because cash earns no interest at all, banks accordingly have a strong incentive to lend their reserves out to the limit. Until the late 1980’s, however, the Fed and the Controller failed to count guaranty obligations incurred under standby letters of credit against banks’ lending limits, on the theory that these obligations were merely contingent.56 These loopholes have been credited with encouraging the explosion of standby letters of credit in the 1980’s, as banks constrained not to make additional direct loans found that they could increase their effective lending by casting a portion of such loans in the form of guaranties.57

Notwithstanding these important non–efficiency explanations for guaranties, I abstract from them in the following discussion. I do this for three related reasons. First, an efficiency analysis is interesting in itself, and useful to both private and public actors planning transactions. Even if we grant that in the current political environment the way foreign aid is packaged for public consumption will always outweigh efficiency considerations, for instance, it is still important to know whether it is cheaper to provide such aid in one form rather than another. Second, a clear understanding of guaranties in efficiency terms is analytically prior to addressing any externalities and regulatory inefficiencies they may produce. In order to decide how guaranties should be taxed, for instance, or whether and to what extent they should be subject to bank reserve requirements, we need to know what they are and how they differ functionally from the other transactions for which they are a

55. See generally Lawrence S Ritter and William Silber, PRINCIPLES OF MONEY, BANKING, AND FINANCIAL MARKETS (1991), at __.

56. The loopholes were largely though not entirely closed by 12 C.F.R. §§32 and 208.8d (1990), which subjected standby letters, as appropriately discounted for risk, to the same lending regulations as ordinary loans. Because the categories for discounting such risk are imperfect, of course, some minor regulatory incentive to substitute standbys for direct loans still remains.

57. See, e.g., Barbara Bennett, Off-Balance Sheet Risk in Banking: The Case of Standby Letters of Credit, FEDERAL RESERVE BANK OF SAN FRANCISCO ECONOMIC REVIEW 19 (Winter 1986), at 22–23 [but concluding that the primary reason for growth in the use of standbys stemmed from real economic demand for guaranties rather than capital regulations].
substitute. Third, the non-efficiency reasons for guaranties are local and contextual; they vary in detail from industry to industry and regulatory regime to regulatory regime. The basic economic efficiencies underlying guaranties, however, are general and universal. A relatively short and simple set of principles suffice to explain analogous relationships across a wide and disparate number of legal and policy areas, allowing insights gleaned from one field to inform our understanding of all the others.

I begin, therefore, by considering the main alternatives to guaranty transactions, and the costs and benefits these alternatives produce. I then turn to a comparison of the alternatives.

A. Guaranties, unguaranteed lending, and intermediation

Consider the situation in which a debtor D seeks credit from two potential creditors, C and G. There are several ways to provide funds to D, the three main types of which are depicted in Figure 2, where arrows indicate the flow of credit. First, D could borrow from C alone, leaving G out of the transaction entirely; this possibility is depicted in part (a) of the figure. Second, D could borrow from C and supplement it with a guaranty from G. This possibility is depicted in part (b) of the figure;
the dotted arrows indicate that the extension of credit is contingent rather than unconditional. Specifically, if D does not repay the primary loan, then G will become indebted to C and D will become indebted to G. Third, G could borrow from C and independently lend to D, a possibility depicted in part (c) of the figure. In this case both obligations are unconditional rather than contingent. C would then have no direct claim against D, though G’s claim against D would be one of the assets to which C could ultimately look for satisfaction if G falls into default with C.  

For each of these three possibilities there exists an alternative and symmetric arrangement with G substituting for C and vice versa. For instance, D could borrow the entire amount from G rather than from C, and so on. Additionally, the parties could provide part of the desired funds through one form and the rest through another, as when C and G separately and independently lend D half of what he requests. These further possibilities are ignored in Figure 2 for the sake of simplicity, but they are discussed below where relevant.

The precise costs of credit will vary depending on the form of the transaction. In the simple case where C lends alone, there are three main components of credit cost. The first is the marginal cost that C bears in obtaining liquid funds to lend. This cost reflects the explicit or implicit interest rate, \( i_C \), that C must pay for such funds when borrowing, whether by drawing down its own savings, by reducing loans to other borrowers, or by engaging in financial intermediation with other potential creditors. It also reflects C’s individual cost of liquidity, \( l_C \), which should be understood here in a Coasian sense; as I use the term it denotes the transaction costs that C must incur to convert its assets into a readily acceptable medium of exchange. If, for example, all of C’s free assets happened to be tied up in a parcel of real estate, its liquidity costs would include all the expenditures and opportunity costs associated with mortgaging or selling the parcel, including commissions, appraisals, surveys, title insurance, transfer taxes, attorneys’ fees, and the like. Such liquidity costs will of course depend on the particular form in which C’s assets are held. If C’s assets all take the form of certificates of deposit, in contrast, its liquidity costs may be limited to the interest penalties it incurs for early withdrawal; and if C’s entire wealth is held in the form of cash in a mattress, its liquidity cost will be close to zero (though in both cases it is still necessary to consider, in an amount discounted

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58. Under §541 of the U.S. federal bankruptcy code, 11 U.S.C. §§101 et seq., all of a debtor’s legal or equitable property interests as of the commencement of bankruptcy, including unpaid accounts receivable, become property of the bankruptcy estate, to be collected and managed by the trustee for the benefit of creditors. In addition, the trustee has the discretion under §365 to assume any executory contract rights of the debtor.

for the probability of its occurrence, the additional transaction costs that C will have to incur if it loans out all its cash and has to borrow more funds in an emergency. Both of these determinants of C’s cost of funds, interest and liquidity, will in general depend on the amount of credit being extended, but to simplify the discussion I will speak as if total credit costs are strictly proportional to the amount being lent.

The second main component of C’s credit cost is its transaction costs of dealing with D. These include the ordinary incidents of processing a loan: underwriting, time spent by loan officers, clerks, and other administrators, the costs of drafting and executing a loan contract, and servicing the loan after it is made. They also include the costs of investigating D’s creditworthiness and auditing his behavior over the life of the loan. Such monitoring costs will depend on the amount being lent, but more importantly, they will also turn on the precise nature of C’s relationship with D. If C has never dealt with D before, it will need to spend time acquainting itself with D’s business affairs and credit history, with the merits of any projects D plans to pursue the funds being borrowed, with other competing demands on D’s resources, and with similar matters, before making any loan. These costs will be lower if C has dealt with other persons in D’s position in the past, and lower still if C has dealt with D personally. Conversely, if C plans to deal with D again in the future these costs can be amortized over multiple occasions, whereas if this is a one-shot transaction they will have to be recovered all at once.60 Similar considerations apply to the costs of supervising the loan after it has been made (since a rational creditor will want to keep tabs on its debtor to make sure he is using the funds appropriately), taking adequate precautions to ensure D’s ability to repay it, and maintaining the value of any necessary collateral. To emphasize the relational aspects of such monitoring costs, I denote them here with the symbol $m_{CD}$.

Third, even with optimal monitoring there still will remain some risk of debtor insolvency and default. The resultant loss to be expected depends both on the probability of such a default, and on the amount of funds that can be recovered afterwards. Both these quantities will depend on the amount of investigation and auditing that C has done, on C and D’s individual characteristics, and on external factors out of both parties’ control. Furthermore, because C must agree to accept this risk if it is to lend at all, C’s subjective assessments of risk, based on past experience with D and other

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60. See generally Robert E. Scott, A Relational Theory of Secured Financing, 86 Colum. L. Rev. 901 (1986) [emphasizing the importance of fixed investigative and monitoring costs in the credit context, and arguing that such costs explain why many individual debtor-creditor relationships tend to be long-term.]
debtors who appear in C’s eyes to be similar, are also relevant. Again, to highlight the relational aspect of such considerations, I denote the monetary value of this risk, as perceived by C, as \( r_{CD} \).

The total cost of credit under an unconditional loan from C to D is thus \( i_c + l_c + m_{CD} + r_{CD} \). In a competitive credit market — that is, one in which C contends with many other potential creditors for D’s business — competition among creditors will bid price down to marginal cost, so that this also is the amount that D will have to pay for credit. A competitive market, of course, does not ensure that the cost of credit is low. If D has little experience with borrowing, or if he resembles other debtors whose risk of default have been high in the past, or if the market’s subjective opinion of him are simply unfavorable, then the competitive price of credit he faces will be high, for the expected monitoring and default risk costs of creditors who deal with him will also be high. Furthermore, if he faces a non-competitive credit market, he will probably have to pay an additional mark-up above and beyond marginal cost. Still, there is no particular reason to think that the amount of any non-competitive mark-up will depend on the nonprice terms of the loan, or that lender market power will result in an inefficient mix of auditing, investigation, or other terms.61

Conversely, if D borrows directly and unconditionally from G, his expected price of credit will equal the quantity \( i_G + l_G + m_{GD} + r_{GD} \) — the sum of G’s costs of interest, liquidity, investigation and monitoring, and subjectively anticipated default risk when dealing with D on such a basis. In either case, D must also add to the market price of credit his own personal transaction costs from borrowing, which include not just time, trouble, and the expense of dealing with legal papers, but the costs of investigating and monitoring C and G in turn in order to ensure that they do not themselves act in an opportunistic or negligent fashion. The size of these transaction costs will also depend on the nature of D’s relationships with the other parties, and can be respectively denoted as \( t_{DC} \) and \( t_{DG} \). When choosing between G and C as potential direct creditors, accordingly, D will prefer to borrow where these total costs are least, other things being equal.

B. The cost of credit in a guaranty transaction

61. In general, while noncompetitive markets tend to produce inefficiently high prices (that is, prices in excess of marginal costs), they have no tendency toward inefficient nonprice terms. On the contrary, a profit-seeking monopolist or oligopolist will ordinarily want to choose the nonprice terms that best suit the preferences of the marginal consumer, for this maximizes the markup he or she can charge. For fuller explanations of this point, see A. Michael Spence, *Monopoly, Quality, and Regulation*, 6 BELL J. ECON. 407 (1975), William Comanor, *Vertical Price-fixing, Vertical Market Restrictions, and the New Antitrust Policy*, 98 HARV. L. REV. 983 (1985), and Richard Craswell, *Passing on the Costs of Legal Rules: Efficiency and Distribution in Buyer-seller Relationships*, STANFORD L. REV. 361 (1991).
The addition of a guarantor to the transaction unambiguously reduces C’s costs. This is so for several reasons. First, because C can anticipate that G will rationally wish to engage in some monitoring of D, C can reduce its own monitoring efforts to a corresponding extent. Second, even if G engages in no monitoring, her willingness to underwrite D’s debt credibly signals her subjective belief that D is relatively likely to perform. To the extent that C has reason to think G’s risk assessments accurate, this signal lowers its own expected costs of monitoring and default. As an illustration, consider a mother with two sons, one industrious and one irresponsible, both of whom are seeking credit. Because the mother knows that the former son is less likely to default than the latter, the expected cost to her of giving him a guaranty is lower. Other things being equal, accordingly, she is likelier to guarantee the former’s debt than the latter’s.62

Third, to the extent that D values his relationship with G, cares about G’s welfare, or anticipates that G will be better able to collect than will C alone, D has incentives to take greater precautions against default. And fourth and most obviously, should D become insolvent, C will have a backup source of funds to pursue. Except in the extreme case where D’s and G’s assets are essentially the same (as with a parent and subsidiary corporation that operate de facto as a single entity), the chance that both D and G will become insolvent simultaneously is an order of magnitude less than the chance that either one will become insolvent alone.63

As a result, C would plainly prefer adding G to the transaction if there were no costs associated with doing so. But of course there is a cost — the monitoring and risk costs that will be imposed on G in her role as guarantor. To the extent that C is relieved from the responsibility for monitoring, G is burdened with it. To the extent that C can recover from G following D’s default, G (and G’s other creditors) are at risk. Thus, many, though not all, of the costs saved by C on a guaranteed loan are simply shifted to G.

The total costs of a guaranteed loan can thus be calculated as follows. First, we start with C’s costs of interest, liquidity, monitoring, and default risk: \( i_C + l_C + m_{CD|G} + r_{CD|G} \). (The notation \( CD|G \)

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62. Unless she feels that the industrious son, being better able to take care of himself, is in less need of her largesse. But even so, the spendthrift’s default risk to creditors makes a guaranty a relatively costly way of lending him assistance.

63. This last factor explains why the wealth, financial strength, and credit reputation of the guarantor matters to lenders in actual guaranty transactions. Additionally, to the extent that G turns out to be de facto uncollectible after the fact, her incentives to monitor the debtor or accurately to signal his default risk are attenuated. On the issue of guarantor financial strength, see also subsection D, infra.
This is so even if the guaranty is a gratuitous one, for G’s ability and inclination to make gifts to D is presumably finite; any costs she incurs in making the guaranty will reduce the funds she has available for alternative and future gifts. Thus, D must count the direct costs to G as an approximation of the opportunity cost to him resulting from such a reduction.

Next, we must add in the expected costs that G incurs in her role as guarantor; these costs are of three types and differ in amount from the costs that G expends when making a direct loan. First, while G need not pay interest costs in order to provide a guaranty, she does incur some monitoring costs. Second, she also will perceive some risk of default, the cost of which will depend on her own assessment of D’s situation, the investigative efforts she undertakes, and her ability to collect from D. Both of these costs, furthermore, are influenced by C’s involvement in the transaction. The influence can cut one of two ways. In the event that C’s monitoring and investigation decreases D’s chances of default, this will lower G’s monitoring and default costs; on the other hand, if C behaves opportunistically toward D or toward the collateral, this may increase G’s costs. (Indeed, for this reason G may wish to engage in some investigation and monitoring of C as well as of D.) Accordingly, G’s monitoring and default costs under a guaranty will depend on her relationship with C, and are denoted here as $m_{GD|C}$ and $r_{GD|C}$.

Third and finally, in the event of a default G not only must pay out on her guaranty, she must also raise the necessary funds to do so; this will force her to incur personal liquidity costs at that time. Such liquidity costs need not be paid up front, however, and can be discounted by the probability of a default, $r_{GD|C}$. Thus, G’s total expected costs from a guaranty will equal $m_{GD|C} + r_{GD|C} (1 + l_G)$.

In a competitive credit market, D will have to pay the sum total of C’s costs and G’s costs in order to obtain a guaranteed loan. On top of that C must consider his own transaction costs of dealing with the creditor and guarantor, both of which will depend on his prior relationship with those parties. The total costs of dealing with both C and G together, moreover, are likely to be higher than the individual costs of dealing with either one alone under a direct unconditional loan, since there are now two persons to investigate and monitor and two persons to whom C owes a duty of care. Accordingly, we denote these transaction costs as $I_{DC|G} + I_{DG|C}$.

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64. This is so even if the guaranty is a gratuitous one, for G’s ability and inclination to make gifts to D is presumably finite; any costs she incurs in making the guaranty will reduce the funds she has available for alternative and future gifts. Thus, D must count the direct costs to G as an approximation of the opportunity cost to him resulting from such a reduction.
Without resorting to a great deal of tedious algebra, it should be apparent that a loan made by C and guaranteed by G is cheaper than a simple unguaranteed loan from C if, and only if, the expected savings achieved by shifting monitoring, investigation, and risk default costs from C to G outweigh the increased transaction costs — in terms of monitoring, investigation, and liquidity — that arise from having to maintain three relationships among the parties instead of just one. In short, guaranties are profitable because the guarantor, due to a sufficiently great comparative advantage in investigating, supervising, and collecting from the debtor in the event of default, is the least–cost monitor. The creditor pays the guarantor to do this monitoring, either explicitly or implicitly, and the guarantor either keeps the proceeds as her compensation or forwards them to the debtor as a gift.

This least–cost monitoring explanation of guaranties fits well with the stereotypical examples discussed above. Consider first the case of interfamilial guaranties. Parents generally know their children better than third party lenders do. They are ordinarily familiar with the children’s past financial behavior through their previous financial and emotional relationship; in most cases, they have relatively more accurate information about the children’s day–to–day doings. Because of the awkwardness and guilt most adult feel when being in debt to one’s parents, furthermore, and because of the utility they attach to their parents’ welfare, the children will work harder to avoid defaulting when the parents are potentially liable for filial debts. The parents are also better able to collect from their children in the event of default, not only because they have better information about hidden assets, but because the perceived moral obligation to repay a family member for a bad loan is likely to survive bankruptcy where a commercial obligation does not, and because ultimately parents have the option of collecting via a reduction in future gifts and bequests.  

Similarly, controlling shareholders hold a comparative advantage in investigating and supervising the corporations they oversee. As residual claimants, they enjoy the marginal benefits and suffer the marginal costs of the company’s actions, and hold the balance of power for certain critical decisions. They may even be entitled to dissolve the corporation entirely. All these considerations make them good candidates to guarantee corporate debts. Parent companies have similar comparative advantages in monitoring their subsidiaries, and sibling companies their siblings. Subsidiary companies may even have a comparative advantage in monitoring their corporate parents, especially when there is common or overlapping management.

65. On all these considerations, and for a general discussion of implicit financial contracts between parents and children, see Gary Becker and Kevin Murphy, The Family and the State, 31 J. LAW & ECON. 1 (1988).
In both the corporate and familial contexts, furthermore, such guaranties also serve as a safeguard against opportunistic behavior by the guarantors. For instance, because of limited liability, creditors of corporate debtors need to worry not only about whether the underlying project being financed is sound. They also must worry about whether the proceeds of the loan will remain within the corporation, as opposed to being funneled to a controlling owner, related entity, or other insider. Minimum capital requirements, the corporate law duties of care and loyalty, fraudulent conveyance law, and the doctrine of piercing the corporate veil all substantially help to police such misbehavior.\footnote{Guaranties by subsidiaries of their parent companies pose some special legal problems in this regard, however, since the owners of the parent have a somewhat diluted incentive to ensure that the subsidiary receives fair value for the parent’s guaranty. In the event that the subsidiary becomes insolvent, accordingly, its creditors are likely to attack the guaranty as a fraudulent conveyance or an impairment of required capital. On the problems raised by such “upstream” guaranties, see William H. Coquillette, \textit{Guaranty of and Security for the Debt of a Parent Corporation by a Subsidiary Corporation}, 30 CASE WESTERN L. REV. 433 (1980).}

In addition, however, many lenders insist on receiving guaranties from those actors deemed most subject to temptation. Similarly, a lender contemplating a loan to an individual borrower will often insist on receiving a guaranty from the borrower’s spouse, especially if the spouse holds a shared interest in property pledged as collateral or otherwise holds the power to disrupt attempts at collection. In these contexts, therefore, monitoring should be understood to include not just affirmative efforts to reduce the risk of default, but refraining from moral hazard and opportunism.

The general practice of standby letters of credit can also be understood in such terms. Commercial banks will have a comparative advantage in monitoring their existing credit customers, as their prior relationships with such customers allows them to obtain and evaluate relevant information at low cost. They also have many more ways to influence such debtors’ behavior after a loan is made. For instance, they can call in, refuse to renew, or exercise covenants on separate loans. In addition, they may have established general “floating liens” on the debtor’s property — that is, mortgages or security interests that cover after-acquired property or that provide that existing collateral will also serve to secure future advances.\footnote{Under U.C.C. §9–204, for instance, parties to a security agreement may provide that collateral acquired at any time secures advances whenever made, including subsequent advances made when making good on a guaranty. With limited exceptions [i.e., §§9–301(4), 9–307(3), 9–312(3), (4), and (7)], a security interest based on such future advances will have the same priority over competing creditors as the original security interest created by such an agreement.} Such cross-collateralization clauses improve the bank’s ability to collect on any advances it makes pursuant to a guaranty; they also give the bank substantial leverage over the debtor by making it difficult for him to engage in subsequent borrowing.
without the bank’s permission.\textsuperscript{68} Perhaps most importantly, the prior relationship gives the bank the power to ruin the customer’s reputation with other lenders. Since an unfavorable credit reference from a longstanding creditor carries great weight in underwriting decisions, the bank can credibly threaten to raise the customer’s cost of borrowing for the foreseeable future; such a threat serves as a powerful incentive for $D$ to repay.\textsuperscript{69} For all these reasons, then, bank guaranties can substantially cut the expected costs of monitoring and default relative to unguaranteed loans.

Construction suretyships and payment bonds have a similar underlying motive.\textsuperscript{70} A general contractor overseeing a construction project typically obtains significant advances from the project’s overall sponsor and small-scale trade credit from a variety of project participants: subcontractors, mechanics, materialmen. Rather than having each of these participants undertake the costs of investigating the contractor’s credit and monitoring his use of funds, however, it is far cheaper to hire a professional surety company to do the job and bear the associated risk of default. This arrangement saves on duplicative monitoring effort and better allows the various trade creditors to focus on their respective comparative advantages in plumbing, paving, and the like, enabling them to submit lower bids initially. The surety, due to its experience in the industry, is also likely to be more effective than the sponsor at picking up the pieces of the project and seeing it to conclusion should the contractor withdraw. Using a surety, accordingly, lowers the expected cost of project completion by enough to cover the required payment bond.

Finally, the example of joint and several liability among apartment co-tenants also fits our generic explanation. Apartment roommates have an independent and ongoing incentive to investigate and supervise each others’ reliability. They regularly extend each other petty credit in connection with shared household expenses, and more importantly, share access to each others’ personal property. They are also privy to each others’ daily comings and goings. With regard to claims such as damage

\begin{footnotesize}
\begin{enumerate}
\item See Ronald Mann, \textit{The Role of Secured Credit in Small–Business Lending}, 86 GEO. L.J. 1 (1997) [arguing and presenting empirical evidence that limiting subsequent borrowing by the debtor is the most important motivation for secured credit in actual practice.]
\item Thanks to Jim Bowers for suggesting this example and a good part of its analysis. Similar considerations apply in other businesses besides construction. See, e.g., Mark C. Phillips, \textit{The Role of Completion Bonding Companies in Independent Production}, 12 LOY. L.A. ENT. L.J. 97 (1992) [describing role of guarantors in motion picture industry ].
\end{enumerate}
\end{footnotesize}
to common areas, furthermore, the landlord is typically unable to determine individual responsibility at reasonable cost. It makes sense, therefore, for landlords to hire roommates to monitor each other by providing for joint and several liability rather than contracting for several liability alone — at least up to the liquidated amount of a security deposit.

C. Why does the guarantor guarantee rather than simply lend?

The foregoing account of guaranties is straightforward and intuitive, but it is not the whole story. Why, if guarantors have a comparative advantage at investigation, supervision, and collection, don’t they just make loans themselves, thus saving the extra transaction costs of a three-corner relationship? Or to take a specific example, why do commercial banks issue standby letters of credit to their customers, instead of directly lending to them? The answer cannot be that they wish to limit their exposure, for under the terms of the standby letter they are at risk for the customer’s entire debt in the event of default. The banks’ desire to exploit the previously mentioned loopholes in federal lending regulations may partly explain their use of standby letters in the early 1980’s, but today those loopholes have largely (though not entirely) been closed.71 Is there an efficiency explanation?

The answer to this question lies in recognizing that while monitoring and investigation are part of the cost of credit, they are not its entire cost. Recall that G’s credit costs as a direct lender also include its implicit interest rate \( i_G \) and its liquidity cost \( l_G \). As a guarantor, however, G avoids paying for implicit interest, and it only need pay for liquidity in the event of a default. Interest and liquidity costs do not disappear if G acts as guarantor, of course; they are simply transferred to the primary creditor C. But if C’s cost of liquid funds is sufficiently lower than G’s, it can more than make up for the extra information and transaction costs incurred by a three-corner arrangement.

The point is easily demonstrated with a numerical example. Consider the situation of a debtor D who applies for a $10,000 loan from potential creditor C, to be repaid after one year. Suppose for purposes of the example that the risk-free interest rate is 4%, reflecting the going rate of return on one-year Treasury bonds, and that C has ready access to liquid assets at no additional cost beyond this risk-free rate.72 Suppose also that if C lends to D, it will incur monitoring costs equal to 1% of

71. See notes 55–57, supra, and accompanying text.

72. For simplicity, we might imagine that C finances the loan to D by reducing its purchases of government bonds by $10,000. More generally, as the preceding discussion makes plain, all market interest rates can be decomposed into a component attributable to pure time value, a component attributable to liquidity, a
the face value of the loan, and that even after such monitoring, there will remain a 15% chance of
default. In this case, C will insist on charging a risk-adjusted interest rate of 20% \([= 4\% + 1\% + 15\%]\) if it is to make the loan. Depending on the project D is planning to finance, such a high cost of funds may prevent the transaction from going forward; and even if D is willing and able to pay C’s required rate of return, it may exceed the price ceiling established by the local usury laws.\(^{73}\)

Alternatively, suppose that if D borrows from G instead of from C, G’s superior ability to monitor
and collect from D will cut the expected cost of default to 10%. Adding this default risk to the risk–free interest rate of 4% and monitoring costs of 1%, this makes G’s cost of liquid credit 15%.\(^{74}\) But G holds her assets in relatively illiquid form, and thus bears a further 10% cost in making them available for use by D. This raises G’s required interest rate to 25%, making her a less desirable lender both from D’s viewpoint and from the social viewpoint.

If C makes the loan and G guarantees it, however, C’s access to liquid funds will keep the direct
cost of the loan down to 4%, and G’s superior monitoring ability will keep the cost of default down
to 10%. Of course, G will have to come up with liquid funds in the event of a default, but that event occurs only 10% of the time. Thus while G’s liquidity costs under a direct loan are 10%, her expected liquidity costs under a guaranty are equal to 10% of 10%, or 1%. Interest costs of 4% plus monitoring costs of 1% plus default costs of 10% plus liquidity costs of 1% equal 16%. Of course, there will be additional costs of structuring the transaction as a guaranty, including the costs of duplicative monitoring by C and G. If we denote these additional transaction costs as \(t\), then the total cost of credit under a guaranty becomes 16% + \(t\). If \(t\) is low enough, accordingly, a guaranty will be cheaper and more efficient than a direct loan from either C or G.

A guaranty, in short, is a credit transaction in which one party — the guarantor — specializes in information and monitoring, and another — the primary creditor — specializes in obtaining loanable


\(^{74}\) To keep the calculations simple, the example assumes that G’s comparative advantage in monitoring is reflected only in a reduced probability of default. The argument would be analogous, though more complex, in the case where her out–of–pocket costs of monitoring is also lower than C’s.
funds. All of the guaranty arrangements described above accord with this basic principle. Let us examine a few of them as illustrations.

Consider, for instance, our original example of the standby letter of credit. At any given moment, the marginal cost of interest and liquidity varies among large commercial banks. Such banks have different mixtures of long–term and short–term loans in their asset portfolios, and different risk exposures based on the specific commercial activities of their customers and on the particular investment products they have decided to back. It therefore makes sense for a bank with relatively heavy exposure in the area of commercial real estate, for instance, to decide based on that position that its marginal cost of liquidity is too high to justify a new loan to a longstanding client at market rates. If the client can obtain liquid funds elsewhere, however, the bank can trade on its informational investment in him by issuing a guaranty in his favor in the form of a standby letter of credit. Conversely, another bank with temporarily superior access to a pool of liquid funds due, for instance, to a special relationship with an institutional depositor, may find it worthwhile to make a loan to an untried applicant if that applicant’s current lender is willing to provide a guaranty. The standby letter of credit thus allows the borrower to benefit from the low monitoring cost that comes from establishing a long–term financing relationship, while still retaining the option of shopping around for the best pure price on liquid funds.75

Similarly, consider how our basic explanation operates in the context of a recourse sale of accounts receivable. Under this arrangement, a retailer sells receivables to an account financer or factor, promising to repay the factor for any accounts that turn out to be uncollectible.76 In the framework of our model, the factor takes the role of the creditor, the retailer takes the role of guarantor, and the consumers take the role of debtor. Asking why the guarantor doesn’t just lend in this context is equivalent to asking why the retailer doesn’t just keep her accounts instead of factoring them. The answer, apparent to anyone familiar with the business of factoring, is that the

75. In addition, the distinctive risk profile of a guaranteed loan may give it positive diversification value when combined with the rest of the issuer’s lending portfolio. See, e.g., M. Kabir Hassan, An Empirical Analysis of Bank Standby Letters of Credit Risk, 2 REV. FIN. ECON. 31 (1992) [presenting evidence of such value for largest US banks and holding companies]; contra, Brewer and Koppenhaver, supra, note 51 [presenting empirical evidence that the overall risk of issuing standby letters of credit is similar to the risk of balance sheet lending.]

76. Or alternatively, the factor could make a secured loan to the retailer with the accounts serving as collateral. With minor exceptions, these two arrangements are legally and functionally equivalent. See U.C.C. §9–102(1)(b) and associated comment 2.
retailer wants the money now instead of later. She wants liquid funds with which to pay current expenses and restock inventory, and this is her cheapest method of borrowing to obtain them. The factor, who has superior access to loanable funds, provides her with those assets, in exchange for the discount it gets on the accounts. But because the retailer is familiar with her own customer base, and because the value of the accounts depends on the future services she provides, she is the least–cost monitor, and thus appropriately bears the risk of consumer nonpayment.77

The typical circumstances surrounding the standard interfamilial guaranty also comport with our theory. A parent may be highly confident of her child’s ability to repay a loan and have quite effective means at her disposal to ensure that he actually does repay. As a result, she is willing to guarantee that loan while receiving relatively little in exchange; indeed, the expected cost to her may be low enough to justify making her guaranty a gift. But because the family assets are tied up in the house and in the parents’ retirement savings accounts, making the same loan out of pocket would be quite expensive. If the child should default, of course, the IRA’s will have to be cashed in and the house mortgaged; but the chance of this happening is low — low enough to be outweighed by the benefits conferred on the child.

Our model is also broad enough to encompass at least one plausible nonpecuniary explanation for guaranties within the family. It has often been claimed that arms–length economic transactions between friends and family members weaken the bonds of friendship and clan loyalty. For instance, Steven Kelman has suggested that market interactions can lead to a “feeling–falloff” effect that lead people to devalue their personal relationships with those with whom they deal; and some feminist critics of law and economics, notably including Frances Olson and Margaret Radin, have argued that economic analysis (and economic analysis of family law in particular) tends to commodify family relations, undermining the love and altruism that are essential to the maintenance of household cooperation and the healthy upbringing of children.78 If such claims are true, and if a direct

77. If she were not the cheaper monitor, conversely, the sale would be on a nonrecourse basis, not a recourse one. The factor would then act as a direct lender, bearing the risk of default as well as providing liquid funds. See generally Janet Kiholm Smith and Christjahn Schnucker, An Empirical Examination of Organizational Structure: The Economics of the Factoring Decision, 1 J. CORP. FIN. 119 (1994) [presenting evidence that factors are more likely to be used to finance trade credit, ceteris paribus, when the seller’s information and monitoring costs are high].

debtor–creditor relationship is somehow more destructive of familial feeling than are the indirect and contingent obligations that arise from a guaranty, then guaranties will help conserve on such psychic and emotional costs in the same way they conserve on liquidity costs. Given the possibility of default, there is always a chance that any guaranty will turn into an unconditional debt, with resulting cost to both fisc and fabric of the family unit. But these costs can be substantially discounted if the probability of incurring them is low.

D. Why doesn’t the guarantor simply act as an intermediary?

We are not quite done with the analysis. The guarantor’s comparative advantage in informational monitoring explains why she should bear the residual risk of the debtor’s default; and the creditor’s comparative advantage in liquidity explains why it should obtain the funds. But neither of these explanations tells us why the relationship should take the form of a guaranty, for these same advantages could be achieved through pure intermediation or on–lending. Specifically, C could obtain funds and lend them to G, who would then turn around and lend to D.79 Under such an arrangement, G would bear the costs of monitoring D and dealing with any default on his part, since she would remain liable to C whether or not D managed to repay. There would, moreover, be only two relationships to manage and monitor as opposed to three. What, then are the advantages of guaranties as opposed to such intermediation? Or to put the question differently, what are the advantages of giving C a direct right of recovery against D as well as against G?

It turns out that there are two answers to this question: one applicable in the ordinary situation where the guarantor is fully able to meet all her financial obligations, and one applicable in the contingency that she is not. In the former case, the advantage of a guaranty is that the guarantor’s comparative advantage in monitoring may be incomplete. Recall that monitoring as we have used the term incorporates a variety of distinct business functions: underwriting, credit investigation, drafting and executing contracts, auditing, superintending assets, collection, salvage, and the ultimate bearing of risk following default. It is quite possible for G to have a comparative advantage in some of these tasks and C to have a comparative advantage in others; and if so, it will pay to have C and G specialize in different types of monitoring. For instance, consider a loan made for the purposes of financing a startup enterprise. The borrower’s family members may be better able to assess his overall

79. Or alternatively, we could reverse the timing and have G first lend to D, and then replenish her supply of liquid funds by borrowing from C. The point is that C could supply the ultimate source of funds without having to deal directly with D.
honesty and industriousness, keep track of his personal assets, and collect from him in the event of a business failure. On the other hand, they may know relatively little about the specific line of business he is contemplating or may lack experience in evaluating whether such startup projects have what it takes to succeed. For these latter reasons, they may not wish to incur the risk of financing the project out of their general pool of credit. Once the project has been evaluated and underwritten by an commercial lender with a background in the relevant industry, however, the residual risk to the family members of guaranteeing the borrower’s debt is substantially lessened.

One way to achieve such specialization in monitoring, of course, would be through direct subcontracting of the relevant activities; one party could make the loan, while hiring the other to conduct underwriting or collection. Indeed, such subcontracts are not uncommon, as the existence of credit reporting companies like TRW illustrates. But the very fact that a party has a comparative advantage in some aspect of monitoring makes it difficult for others involved to tell whether he or she is carrying out that monitoring effectively. For that reason, it is typical to assign hired monitors some portion of the risk they are hired to monitor; for instance, a collection agency hired to hunt down delinquent accounts might be paid a commission based on the amounts it actually manages to extract from recalcitrant debtors. In order actually to make use of C and G’s comparative advantage in different types of monitoring, accordingly, it is necessary to provide both of them with incentives optimally to perform their assigned tasks.

A guaranty promotes such dual incentives better than pure intermediation does. Under intermediation, the risk of D’s default is borne almost entirely by G, and hardly at all by C. C has no direct connection with D and no specific obligation to monitor him; so long as G retains other assets sufficient to repay her loan, C is fully protected against loss. Under a guaranty contract, in contrast, both parties have good incentives to engage in monitoring. Specifically, G’s incentives to monitor D are provided by the fact that, absent some excuse or defense, she will be liable for his default. C’s incentives, conversely, are provided by the fact that if it fails to act reasonably or to live up to its other contractual obligations, G will acquire just such a defense. For under the law of suretyship and guaranty, C owes special duties toward G — duties it does not owe to other ordinary creditors or debtors. These are the so–called “suretyship defenses.” Failing to perform duties owed the debtor, failing to maintain rights against the debtor or against any collateral, granting the debtor unreasonable extensions or modifications — all operate in the guaranty context to release the guarantor from her obligation. As §37 of the Restatement provides: “If the obligee acts to increase the secondary obligor’s risk of loss by increasing its potential cost of performance or decreasing its potential ability
to cause the principal obligor to bear the cost of performance, the secondary obligor is discharged...”

The law of suretyship, accordingly, provides C and G with incentives to engage in monitoring in the same way that the law of negligence provides dual incentives to take precautions against accidents, or the duty to mitigate damages provides dual incentives to lessen the costs of contract breach. Under all these regimes, one party — the victim in tort, the promisor in contract, the guarantor in a surety relationship — is presumptively liable for a loss, and so has optimal incentives to take care to prevent it. The presumption is reversed, however, if the other party breaches a legal duty of care. The threat of that reversal gives that other party — the potential tortfeasor, the contract promisee, the primary creditor C — optimal incentives to take care. The result is what may be called “double responsibility on the margin.”

Of course, it is not always efficient to try to provide the parties with such double responsibility as a legal matter. If there is relatively little that one side can do to influence the underlying risk, or if the tribunal charged with enforcing the relevant duty of care is not good at determining whether it has really been breached, then the attempt to provide dual incentives may be more costly than it is worth. This is why, for instance, strict liability in tort is sometimes more efficient than a negligence rule. Similarly, if one of the parties already has good incentives to take care based on extralegal considerations such as reputation, it may be better for that party to disclaim liability for negligence or similar breaches of duty, reserving legal sanctions for the purpose of motivating the party not

80. Restatement (Third) of Suretyship and Guaranty, §37 (1996) [“Impairment of Suretyship Status”]. For the content of suretyship defenses more specifically, see id., §§38–49.


82. See Steven Shavell, Strict Liability Versus Negligence, 9 J. Legal Stud. 1 (1980) [formal comparison of precaution incentives under competing rules]; Guido Calabresi and Jon Hirschoff, Toward a Test for Strict Liability in Torts, 81 Yale L.J. 1055 (1972) [informal comparison of incentives]. Similar considerations of relative ability to reduce risk and institutional capacity also determine which party should be made presumptively responsible for a loss under a negligence-type rule, and which party’s breach of duty should operate to reverse that initial presumption. For instance, if courts are extremely good at detecting and punishing unreasonable behavior on the part of injurers, negligence is the most efficient rule of tort liability. If conversely they are better able to evaluate victims’ behavior, it is better to have a rule of strict liability with a defense of contributory negligence. Id. In the guaranty context, analogous factors determine which of C and G should take the role of creditor, and which the role of guarantor.
subject to such extralegal incentives. For all these reasons, then, it may be desirable to cast a credit transaction in the form of intermediation rather than a guaranty. Such factors can also help explain why it might be efficient for guarantors to waive their rights to assert the standard suretyship defenses; indeed, such explicit waivers are routine in many important commercial settings.

The foregoing analysis applies to the extent that G stands ready to perform her financial obligations in full. It is always possible, however, for G herself to turn out to be uncollectible in the event of D’s default. While debtors and their guarantors hold entitlements to distinct groups of assets — else there would be no point in incurring the transaction costs of a guaranty in the first place — the values of these respective assets will in general be correlated. The fortunes of families tend to rise and fall together; so do the financial situations of affiliated companies, of banks and their depositors, and of suppliers and their customers. Indeed, even if the risks of D’s and G’s insolvency are totally independent, there will still exist a possibility that G will be unable or unwilling to make good on her promises to C. The same is true, of course, if the transaction takes the form of pure intermediation.

In such event, however, guaranties and intermediation have different consequences. Under intermediation, C will have no contract or property claim allowing it to reach any of G’s assets in particular. In order to collect from D directly in such an instance, rather, C would first have to win a lawsuit against G for breach of contract, and then obtain and enforce a judgment lien against G’s interest in D’s loan. Such remedies, however, can be costly and, more importantly, in the time it takes under state collection law to pursue them, any value remaining in the loan could be dissipated. Furthermore, if G actually turns out to be insolvent, C will be forced to participate in bankruptcy proceedings and will have to share any proceeds arising from D’s debt (and from G’s other remaining

83. See, e.g., Benjamin Klein, Transaction Cost Determinants of ‘Unfair’ Contractual Arrangements, 70 Am. Econ. Ass’n Papers & Proceedings 356 (1980) [defending unrestricted right of franchisors to terminate franchise contracts without proof of cause, on grounds that their tendencies toward opportunism are restrained by reputation while franchisees’ are not].

84. See sources cited in note 40, supra. Admittedly, such waivers could also result from guarantor unsophistication or lender overreaching; on this possibility see note 46, supra, and accompanying text.

85. This risk is nontrivial even when dealing with large commercial guarantors and issuers of standby letters of credit, as the 1982 failure of Penn Square Bank illustrated. See Michael A. Goldberg and Peter R. Lloyd-Davies, Standby Letters of Credit: Are Banks Overextending Themselves?, 16 J. Bank Research 28 (1985).
assets) with all of G’s other creditors on a pro rata basis. Under a guaranty, in contrast, G gets an expedited collection procedure and an effective priority in D’s debt over G’s other creditors.

These last observations suggest a second and distinct advantage of guaranties. Even if G is better at all aspects of monitoring than C, there remains a chance that G will be uncollectible while D is not. In this event, C will value the option of obtaining repayment directly from D; and under a guaranty, it has that option. Of course, giving such an option to C is not costless; to the extent that C is able to satisfy itself out of the proceeds of D’s debt to G, there will be fewer assets left for G’s other creditors. Whether it is efficient to give C a priority in those proceeds, however, depends on whether that priority is more valuable in C’s hands than in the hands of G’s other creditors — or equivalently, whether C gains more from the priority than the other creditors lose.

But there already exists a well–established account of how one should allocate priority among creditors in the event of insolvency; it can be found in the economic literature on secured credit. This account begins with the observation that secured credit has higher direct transaction costs than unsecured credit: it is necessary to write a special contract, file a public notice, restrict the use of collateral, and so on. Security is only worthwhile, on this account, if its other advantages justify these costs. This can be the case only if the secured lender places a higher value on a specific interest in the collateral than do the debtor’s other creditors; else the cost the debtor will pay when seeking other financing after having encumbered her assets will more than outweigh the benefits she receives in exchange for granting a security interest. The secured lender’s higher value in specific collateral can arise from various factors: from superior information regarding its market or use–value, from a comparative advantage in salvage, from superior ability to monitor the collateral’s whereabouts or to prevent it from being diverted to other uses — or from a relatively inferior ability to monitor, evaluate or make use of the debtor’s other assets. If any of these factors are present, value is created


87. Although both these advantages may be limited in degree by federal bankruptcy law. See, e.g., Trimec, Inc. v. Zale Corporation, 150 B.R. 685 (N.D. Ill. 1993) [applying automatic stay provision of the Bankruptcy Code, 11 U.S.C. §362, to defer a creditor’s attempt to collect from a nonbankrupt debtor, where such debtor shared substantial business identity with a bankrupt guarantor].

when the secured lender takes priority in the collateralized asset, leaving other, unsecured creditors to take their compensation through other property or through an increased price or risk premium. 89

The choice between intermediation and guaranties is precisely analogous to the choice between unsecured and secured lending. Guaranties have higher direct transaction costs than intermediation. While no public notice is required to create a guaranty, one does need to write a special contract, keep track of rights and duties of three parties, and restrict the manner in which the guarantor and creditor deal with the debtor. Guaranties are only worthwhile compared to intermediation, accordingly, if C places a sufficiently higher value on a having a direct claim against D than do G’s other creditors; else the costs that G incurs in her dealings with these other creditors will outweigh any benefits she gets when giving or selling the guaranty. This condition will be satisfied if C has superior information than those other creditors regarding the value of D’s obligation to G, if C has superior ability to supervise D’s behavior, or C has superior ability to collect from D — in short, if G has a sufficient comparative advantage in monitoring D compared to G’s other creditors.

The condition seems to be met in most cases in which guaranties are used. Because C has had some prior dealings with D, has investigated D, enjoys some special leverage over D, or expects to do any of these things in the future, it makes sense for it to look specifically to D out of all of G’s assets, rather than to G’s assets in general. As a simple illustration, consider the position of an automobile dealer who lends to a college student on a loan co-signed by the student’s parent, where the parent’s other main liability arises out of the mortgage on the family house. The auto dealer will place a much higher value on the right to proceed against the student than will the parent’s mortgage lender, for the latter does not know anything about the student and may not even be accustomed to dealing with cars. Accordingly, it loses the mortgagee little to allow the auto dealer priority in whatever value may lie in the student’s promise to pay.

Similarly, consider the case of a recourse sale of consumer accounts. As we saw in the previous subsection, recourse financing corresponds to a three-corner guaranty; the consumers play the role of D, the account factor the role of C, and the retailer, who bears the ultimate risk of uncollectible

89. See generally Schwartz, A Theory of Loan Priorities, supra, note 3; Triantis, supra, note 3; Scott, supra, note 3; Buckley, supra, note 4. In addition, as Ronald Mann has argued, secured credit may also, by hindering the flexibility of the debtor’s business, have the advantage of providing a credible commitment against excessive future borrowing. See Mann, supra note 68; Ronald Mann, Explaining the Pattern of Secured Credit, 110 HARV. L. REV. 625 (1997) [arguing that this last consideration provides the best explanation of the empirical evidence relating to the use of security.]
accounts, the role of G. Nonrecourse financing, where the factor both provides funds and bears the residual risk of default, corresponds to a direct loan from C, the factor, to D, the consumers. The direct loan from G to D was mirrored in the possibility of not factoring the accounts at all. What retail financing transaction, then, corresponds to pure intermediation or on–lending?

Recall that with on–lending, the creditor C provides funds relying only on G’s commitment to repay; G then uses those funds to finance D’s borrowing. The analogous arrangement here is for the factor to lend to the retailer on the strength of her general credit, without taking any specific interest in the retailer’s contract rights against her customers, and for the retailer to sell on credit to consumers. Such an arrangement makes little sense when dealing with a professional factor, however, because it sacrifices the factor’s valuable expertise. The reason that a retailer can get more from a factor for her accounts than she can from the undifferentiated run of unsecured creditors is that the factor specializes in account financing and is expert in assessing and monitoring their value. Other lenders such as finance companies and trade creditors, who know relatively little about accounts or their collection, will only lend against them at an extreme discount. Accordingly, it makes sense for the factor to have a direct right of action (and perhaps a security interest as well) in the accounts, rather than sharing them with these other lenders.

The harder cases for guaranties are those in which C and D have had no prior dealings, as when the guaranty relationship is established through an assignment of contract rights or a delegation of contract duties. But even in such cases, it may be better to have C look to both G and D for performance, rather than just to G alone. Consider as an illustration a sublease on an apartment, where the landlord has no role in choosing the subtenant. In this situation, the parties could arrange to have the subtenant primarily liable to the landlord for the rent and the tenant secondarily liable — a guaranty arrangement — or they could have the subtenant liable only to the tenant, who would in turn be unconditionally liable to the landlord — a form of intermediation. Most likely, however, the parties as a group will be better off having the landlord look for payment to both the original tenant and her subtenant. The tenant, who has moved to another location and taken her personal possessions with her, may well prove uncollectible beyond the amount of her security deposit. The value of any payments made by the subtenant, conversely, will likely depend on how well the landlord keeps up its corresponding obligations under the primary lease. Similarly, the landlord, through its management of the building and adjoining realty, has information regarding the subtenant’s activities and whereabouts, and control over any misbehavior on his part that the original tenant’s other
creditors lack. All this causes the landlord to place a higher value on the subtenant’s payments than would these other creditors, making it efficient for it to have priority over them in the rent.

Guaranties are more efficient than pure intermediation, in short, when C has some special interest or comparative advantage in monitoring D — either relative to G, or to G’s other creditors. The former comparison will be relevant in the event that G is solvent, and the latter comparison will be relevant in the event that she is not. Of course, since there is some chance of either of these situations arising ex ante, both will bear on transactional planning in proportion to their respective probabilities. Intermediation, in contrast, makes sense when the ultimate creditor has no comparative advantage in monitoring the ultimate borrower. As a stereotypical example, consider commercial banking as it has traditionally been practiced: the bank obtains liquid funds from various individual depositors and lends them out to various business and consumer borrowers. Here the plainly efficient arrangement is for the bank to act as a pure intermediary. Since the depositors are in no position to evaluate or supervise the bank’s lending decisions, there is no reason for them to take priority in or to have a direct claim against any particular loan or group of loans. The transaction costs of doing so — including, most importantly, the substantial inconvenience to the depositors of having to concern themselves with the bank’s lending portfolio, and the corresponding inconvenience to borrowers of having to deal with inquiries from a multitude of small, scattered creditors — would simply be wasted.90

IV. Applications, public and private

To summarize the argument thus far: the previous sections of this paper have set out a theoretical framework that can serve to unify our understanding of guaranty transactions across a wide variety of legal and policy contexts. This current section seeks to show how that framework can also be used to improve the quality of transactional planning. It focuses on two extended examples: first, we will consider how our economic framework bears on the optimal design of government–provided credit assistance. Second, we will consider what conditions, if any, should be placed on the liability of commercial issuers of standby letters of credit.

90. For a formal economic model reaching similar conclusions, but which focuses on the bank’s ability to diversify risk as an explanation of its incentives to monitor effectively, see Douglas W. Diamond, Financial Intermediation and Delegated Monitoring, 51 REV. ECON. STUD. 393 (1984).
In addition to providing one problem drawn from the public policy arena and one from private commerce, the examples are also intended to illustrate how our overall theory can be applied at various stages of planning and levels of detail. The discussion of Federal credit policy, accordingly, stands for the broader problem of choosing basic transactional form; that is, should such credit assistance be provided through guarantees, through direct government lending, or through a program of outright grants and subsidies? To address this broader problem, we will need to apply the analysis of the previous section at a general level: asking who is the least-cost monitor, whose cost of liquidity is lowest, and who places the highest value on a claim against the debtor. The example of standby letters of credit, conversely, stands for the narrower problem of choosing which individual incidents of suretyship should be included or excluded in a particular transaction, once the decision has been made to use the form of a guaranty. To address this latter problem, accordingly, we will need to focus on more detailed considerations of comparative advantage: what are the specific risks the transaction is meant to address, what are the particular types of monitoring to be undertaken, and which of the parties is best placed to bear each of these individual obligations?

One caveat before beginning, however: for both these examples, the discussion that follows should be understood as a mere sketch of the sort of inquiry that would be needed to resolve such questions in the context of actual decisionmaking. For a policymaker to authorize the commitment of public resources, or for a private attorney to induce the trust and reliance of clients, he or she ought to have substantially more detail factual support than can reasonably be developed in the space available to us here. The point of this exercise, then, is not to reach definitive conclusions, but rather to set out a method by which such conclusions might ultimately be reached.

A. The government as guarantor

Many government policies and expenditure programs are designed with the purpose of assisting individual borrowers; beneficiaries of such programs include farmers, small businesses, students, home buyers, U.S. exporters and their foreign customers, banks, municipalities, and independent sovereign governments. The motives for providing such assistance are diverse. They range from redistribution (e.g., farm credit, urban enterprise zones) to subsidizing purchases deemed to have some significant public good aspect (e.g., home ownership, foreign aid) to correcting some externality or informational failure in the relevant credit market (e.g., deposit insurance). Some policies, such

as support for educational borrowing and the much–debated bailout of the Chrysler Corporation in the late 1970’s, can be defended (or attacked) on all these grounds.

As we have seen, however, there are various means through which credit assistance can be provided. Most straightforwardly, the state could directly subsidize interest payments, either by outright cash transfers to borrowers or through some sort of tax expenditure. The federal income tax deduction for residential mortgage interest provides the classic example of this first strategy. Alternatively, the state could itself lend funds to the intended beneficiaries at more generous terms than private creditors would be willing to offer; the National Direct Student Loan program is the model here. And perhaps most indirectly, the state could let beneficiaries borrow on the open market but assume a portion of their risk of default by offering a guaranty, as with the Chrysler and Mexico bailouts. Each of these approaches would lower the beneficiaries’ effective price of credit; from the government’s perspective, each would entail some expected cost. The payments that would actually need to be made \textit{ex post} under these three schemes, however, could differ substantially in timing and variance.

In the areas of housing, higher education, foreign aid, and assistance to small business, all three of these approaches have been tried over the years. More recently, however, there has been a distinct trend away from implementing such programs through direct expenditures, and toward implementing them through loans or guaranties. Obviously, many of the causes of this trend have little to do with efficiency. Casting a credit subsidy in the form of a guaranty or a loan has many practical political advantages; it can reduce the subsidy’s visibility to potential opponents or competitors, vest the jurisdiction of the program in one agency or Congressional committee rather than another, or assist its proponents in logrolling a majority coalition by manufacturing an opportunity to share the wealth with other organized political constituencies such as institutional lenders. Furthermore, the current political context may lend such considerations special weight. Popular resistance to taxes and to new government spending is probably the most salient feature of contemporary American politics; it explains a wide variety of recent events such as the growth of deficit spending, the move to increased tax expenditures, and the various attempts to limit the fiscal power of government through constitutional and quasi–constitutional procedures such as the balanced–budget amendment, the Gramm–Rudman–Hollings Act, and the line–item veto. In such an environment, there is always

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92. Alternatively, such a tax expenditure could take the form of a tax credit (refundable or otherwise), or of deferral or exclusion of income ultimately produced by the underlying project for which the loan is extended.
strong pressure to structure new initiatives, and to restructure new ones, in a form that minimizes the constraints posed by formal and informal budgetary procedures. For a variety of institutional reasons — some statutory, some administrative, some simply political — loans and guaranties have often been easier to enact and implement than direct expenditures.  

While it would be unrealistic to wish such considerations entirely away, it is still worth investigating which of the possible methods by which the government subsidizes credit is most cost-effective. At least for certain categories of credit, the choice among these methods remains a live political issue. In 1993, for instance, Congress overhauled the federal student loan program, significantly substituting direct lending for guaranties. While this policy change was largely justified by its proponents on grounds of administrative efficiency, critics of the change questioned at the time whether these efficiencies were likely to be realized in practice, and economic studies that have since appeared suggest that the net outcome was in fact to increase the costs of the program. A fuller analysis that made use of our conceptual framework could have improved the quality of the debate by helping to clarify the specific costs and benefits of these alternative transactional forms.

Moreover, recent policy initiatives toward “reinventing government” and rationalizing the budgetary process hold out some hope that the design of future credit assistance programs can be evaluated on the basis of their substantive economic merits. Under the Federal Credit Reform Act of 1990, for instance, guaranties and other contingent government obligations are no longer

93. See, e.g., Stith, supra, note 54, Kate Stith, *Rewriting the Fiscal Constitution: The Case of Gramm-Rudman-Hollings*, 76 CALIF. L. REV. 595, 605–621 (1988); H. Leonard, *CHECKS UNBALANCED* (1986) (discussing political appeal of various forms of indirect and off-budget government spending, including loans and guaranties). Note that incentives may be shifting in this regard; with rise of GOP Congress since 1995, strong tendency to cast such programs as tax expenditures that can be characterized in election campaigns as tax cuts.

94. *Omnibus Budget Reconciliation Act of 1993*, Pub. L. 103–66, §13131(b), 107 Stat. 312, 342–43 (1993). The changeover was phased in over a five-year period, with the result that in fiscal 1998 60% of federal student loans are to be made on a direct rather than a guaranteed basis. See Brody, supra, note 7, at 507.

95. Id., at 507–509.

96. See Zimmerman and Miles, supra, note 7; Miles and Zimmerman, supra, note 7 (finding that budget savings from direct lending were overestimated because credit risks absorbed by the federal government were ignored, budget scorekeeping rules pushed recognition of some administrative costs beyond the five-year budget window, and potential increases in administrative costs and government borrowing costs were ignored).
automatically treated as off–budget. Instead, the estimated net present value of any new loan or guaranty, taking into account factors such as the interest rate, repayment period, and risk of default, or of any action that alters the terms of existing loans or guaranties, must be reflected in the President’s budget and go through the Congressional appropriations process. Admittedly, the Act does not apply to all federal guaranties, specifically exempting student loans, veterans’ home loans, and other entitlement programs from its coverage. Other loopholes and accounting devices that privilege guaranties over direct expenditures still remain. Nonetheless, such reforms suggest that there is some political support for closing such loopholes and eliminating such privileges. As the sophistication of financial regulators continues to improve, and as the private sector also develops more accurate methods of accounting for contingent liabilities, candid evaluations of the comparative transaction costs of alternative government programs should increasingly find an audience.

Accordingly, consider how such programs could best be structured, focusing on the specific examples of higher education, housing purchases, and foreign aid. As the previous section of this paper demonstrated, the answer to this question turns on two key factors: the comparative costs of liquidity and of monitoring debtors. More specifically, if the government has lower liquidity and lower monitoring costs than do private lenders, then other things being equal direct government loans are the most efficient means of assistance. If private lenders have lower liquidity and monitoring costs, conversely, it is most efficient for the government directly to subsidize interest payments on private loans. Government guaranties are best if the government has a comparative advantage in monitoring while private lenders have an advantage in liquidity. And if the government has lower


98. Id. §661(c).

99. Id. §661(c)(1).

100. See, e.g., Humphrey, supra, note 21, at 196–200 [describing how Clinton administration succeeded in putting together multilateral aid package of over $51 billion, including $20 billion in currency swaps and loan guaranties from the U.S. Treasury and Exchange Stabilization Fund, despite Congressional and popular opposition]; Zimmerman and Miles, supra, note 7, at 780 [describing how budget scorekeeping rules put in place under the FCRA resulted in understating the administrative costs of direct loans, most of which are incurred in years beyond the five–year budget window].

101. See discussions at notes 50, 51, and 56, supra.
liquidity costs but higher monitoring costs, then the government ought to make the loans, but have the private sector guarantee them and bear the risk of default.

Let us then assess these two factors in turn. First, does the government have any comparative advantage in liquidity? The answer is unclear. The government can borrow at a lower interest rate than private borrowers can, to be sure, because its obligations are perceived by the debt market as virtually risk-free. In contrast, even a loan to an established bank or blue-chip corporation entails some chance of default. This risk differential, however, does not reflect a true difference in cost from the social point of view. The reason that U.S. government bonds are deemed less risky than private bonds is that the government has a clear and credible option that private borrowers who get into financial trouble lack — namely, it has the power to raise funds by levying taxes or printing money. But these sources of revenue are not costless. When the government raises taxes, it imposes liquidity costs on the citizens whose tax liabilities are increased, and engenders further efficiency costs in the form of deadweight loss or excess burden. Similarly, when the government prints money, it imposes a real tax on owners of cash and other money balances whose holdings are consequently devalued, and redistributes wealth from creditors whose contracts are denominated in nominal terms to their debtors; both of these consequences create real inefficiencies and the former reduces the liquidity of cashholders. In addition, both levying taxes and printing money can have serious and

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102. Save the risk of inflation, of course. This risk, however, can be largely eliminated by indexing the schedule of payments for inflation or by contracting for a variable interest rate. The Treasury has recently announced a plan to start selling just such variable-rate obligations. [Cite contemporaneous news accounts.] Whatever the fate of this plan, however, (it met with considerable skepticism from relevant Congressional and regulatory actors at the time) roughly equivalent hedges against inflation are widely available on private financial markets.

103. While it is theoretically possible that the federal government could someday choose to default on its general obligations, the market rightly judges the chances of this contingency, given political realities, to be trivial. (Recall how during the 1995–1996 shutdown of the federal government, both Congress and officials in the executive branch took great pains to assure financial markets that funds would be available without interruption to pay off government bonds as they came due. [Cite from contemporary press accounts.] The risk of gradual repudiation of such debts through a policy of deliberate inflation is a more serious one; still, the vesting of discretion over the money supply in the Federal Reserve, a legally and politically independent agency, substantially reduces (while not eliminating) the risk that monetary policy will be used for such opportunistic ends.

104. The deadweight loss or excess burden of a tax is the efficiency loss caused by taxpayers substituting away from the taxed activity in favor of another, less high taxed activity — for instance, working fewer hours under a wage tax, saving and investing less under a tax on interest income. See generally Harvey Rosen, PUBLIC FINANCE (3d ed. 1992), chap. 4 (“Tools of Normative Analysis”).
adverse macroeconomic effects, crowding out investment and worsening the tradeoff between unemployment and inflation. Properly calculated, then, the government’s liquidity costs include all of these potential consequences of increased borrowing, discounted for their respective probabilities and expected time of occurrence.

As a theoretical matter, if the government always acted with perfect information and rationality, its expected cost of borrowing would have to be lower than that of private sector. The reason is that the government’s option to raise funds via taxes or the printing press — like all options — has a positive expected value. If the option turns out to be less expensive than other sources of liquidity, it can be exercised, while if it turns out to be more expensive, it can be freely ignored. For a fully informed rational actor, it follows that having an option is always better than not having one. But of course, the government does not always act perfectly when making fiscal or monetary policy. Because of imperfect information, agency problems, the absence of any property rights in the surpluses that could be created by efficient policies, and other costs of administration, the option of tax–based or money–based finance does not necessarily translate into reduced borrowing costs. Coase’s critique of the theory of market failure is apposite here; it is misleading to focus on deficiencies in private credit markets while ignoring the transaction costs of the government’s financial activities.

As a first approximation, therefore, it is reasonable to treat the government’s cost of liquidity, all things considered, as roughly the same as that of private lenders. In any event, I will make this assumption in what follows, while recognizing that the question is an empirical one and there is room to disagree. Indeed, one’s views regarding current macroeconomic policy can serve as a rough proxy for an answer to the comparative liquidity question. If one believes that the government’s marginal costs of liquidity are really less than the private sector’s, then it follows that the government ought to increase its overall lending to the private sector compared to current levels, or, what is the same thing, reduce its overall borrowing. If one thinks, however, that the current level of government debt is approximately optimal, however, than it is hard to see where any liquidity advantage from shifting between government and private credit would come from.

105. Cite any macro textbook on these propositions, especially one by Barro or one of the other new classicists.

Turn then to the other half of our inquiry: is there reason to think that the state can engage in monitoring more cheaply than private lenders? In the areas of small business lending, student loans, and housing, such a general claim seems problematic. Consider first the component of underwriting and risk assessment; the available evidence suggests that, if anything, government credit standards are weaker than those of the private sector. The government’s debt pool is riskier than that of private lenders; and it tends to suffer from disproportionate default. Some of this risk differential, of course, stems from the adverse selection that comes with being a lender of last resort. But surveys of the government’s actual credit practices tend to show that, if anything, it makes lending decisions based on less information and less sophisticated methods of evaluation than do private lenders. Indeed, it is hard to see how it could be otherwise. Many of the government’s credit assistance programs have been created as entitlement programs, so that both legal authority and the political atmosphere encourage leniency in applying program criteria. There is no obvious capacity the government has in this regard that private auditors lack; and the latter have the advantage of greater experience, more up-to-date information technology, and the incentives for honing their techniques that come from the spur of the profit motive in a competitive market.

With regard to supervision of the debtor during the life of the loan and collection following default, the case for governmental comparative advantage is only marginally more compelling. Possibly the federal government can more cheaply trace debtors’ or their assets across state lines — an argument that has frequently been put forward in the context of unpaid child support — but the actual opportunity costs of federal investigative and policing resources would need to be more fully accounted for in considering such a claim. The government’s collection costs could also be lower than the private sector, especially if such costs were combined with or offset against other public collection or payment activities. Recent proposals to use the Internal Revenue Service to collect unpaid student loans illustrate this last possibility; similar economies of scope might also be achievable through the welfare or Social Security systems. In this regard, however, it is worth noting that the IRS has fought all such proposals to draw on their enforcement resources tooth and nail; and other agencies such as the Social Security Administration can be expected to offer similar resistance.

107. See, e.g., Zimmerman and Miles, supra note 7, at __; U.S. General Accounting Office, High-Risk Series: Guaranteed Student Loans, GAO/HR–93–2 (1992), at 30–31 (“... the inventory of known problems in the [Education] Department’s administration of guaranteed student loans raises questions about its ability to adequately manage a direct lending program.”)
In the end, accordingly, the case for public provision of such functions must be made on a more detailed accounting of the relative administrative costs in private and public settings. For some types of collection, such as payroll deductions for loans made to government employees or persons serving in the military, the government may have a real comparative advantage. More generally, however, proponents of bringing credit monitoring services within the government sector should probably be assigned the burden of proof — especially in light of the unwarranted claims of administrative efficiency that they recently made in the area of direct student loans.

There are two specific instances, however, in which the government may have a real comparative advantage in monitoring over private lenders. One of these arises in contexts where the justification for government subsidy stems from racial, ethnic, or gender discrimination; this justification has commonly been offered in markets for home mortgages and, to a lesser extent, small business loans. If private lenders discriminate on such grounds, whether out of animus, stereotype, or cultural distance from borrowers, then government agents less subject to such cognitive limitations may do a better job of gauging default risk and auditing ongoing loans. In such cases, accordingly, loan guaranties may be more cost–effective than straight interest subsidies, and direct loans more effective than guaranties, in providing discriminated–against borrowers with credit.

The argument here for direct loans or guaranties, however, is a fairly narrow one. Discrimination in lending markets can occur for a number of reasons: bias in evaluating credit risk, discomfort on the part of lending officers when dealing with particular classes of applicants, lenders’ inexperience in evaluating property values in certain neighborhoods or certain categories of assets such as “sweat equity,” leading them to add in an extra markup reflecting the associated risk premium from their standpoint. Or it could simply result from the fact that the discriminated–against applicants have lower wealth or propose to invest in neighborhoods that are economically more marginal. For the government to have a comparative advantage in monitoring, two conditions must be satisfied: first, the cause of discrimination must be noisy information rather than a simple reluctance to lend; and second, the government’s assessments of risk must have lower variance than those of private lenders, not just lower mean. Unless the government is actually more accurate than private lenders at

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108. See, e.g., Charles W. Calomiris, Charles M. Kahn, and Stanley D. Longhofer, *Housing–Finance Intervention and Private Incentives: Helping Minorities and the Poor*, 26 J. MONEY, CREDIT & BANKING 634 (1994) [presenting and analyzing different several economic models implying such a result].
distinguishing between high-risk and low-risk applicants, it would do better in efficiency terms simply to provide a general interest subsidy for applicants in the relevant group. 109

Second, the government may have under consideration other programs that will affect the ability of borrowers to repay. For instance, during the period in the late 1970's in which the Chrysler guaranties were extended, the federal government had several opportunities to revisit its automobile emissions and fuel economy standards, as well its program of voluntary import restraints that effectively placed a quota on the number of Japanese cars sold in the United States. 110 All these policies had the potential for a major effect on Chrysler’s profits; and the fuel economy standards in particular arguably played a key role in helping Chrysler to reverse its fortunes by competing more effectively with the other Big Three auto companies. When government has the power to influence the risk of a borrower’s default in this fashion, private lenders face a relatively high cost in monitoring and bearing that risk. Just as a guaranty from a corporate manager or other insider gives the insider to take stronger precautions to ensure the corporation’s ability to repay, so would a government guaranty provide the government with more credible incentives to implement risk-reducing policies and refrain from risk-increasing ones.

Whether such incentives are actually welfare-enhancing on balance, however, is unclear; the government’s potential liability on its guaranties may lead it to take an excessively short-term or narrow financial perspective, distorting its decisions on other policies. The relationship between US air pollution standards and Chrysler’s financial health in the 1970’s and 80’s illustrates the potential for such a conflict of interest. Furthermore, this argument threatens to swallow up the entire private market for credit and to force the government to stand as potential guarantor for all debt contracts in the economy, for when the overall effects of fiscal and monetary policy on interest rates and unemployment are taken into account, there is virtually no loan whose risk is not influenced by

109. Indeed, here is an instance where economic efficiency and procedural norms of equal treatment may be in tension. If the government has reason to believe that women or racial minorities are unfairly discriminated against by lending officers on average, for instance, but is no better than these same lending officers at distinguishing high-risk from low-risk applicants within demographic categories, the more efficient policy would be to subsidize all loans made to women and minorities. Such a policy, however, would undoubtedly be attacked on grounds of “reverse discrimination.” A more facially neutral policy of guaranteeing all applicants regardless of race or gender would, ironically, be less effective and more costly.

government action. Absent some specially significant connection between government actions and the risk of default, accordingly, it is probably best on balance to ignore this factor.

Additionally and finally, while we have focused on economic efficiency in the discussion thus far, even if the government has no particular advantage in monitoring or liquidity, a program of guaranties may be more desirable than direct loans or general interest subsidies on distributive grounds. Specifically, guaranties may in some cases have the advantage of better targeting the benefits of government credit assistance to those borrowers who are deemed most needy or most deserving.111 The benefits of interest subsidies are enjoyed by all borrowers regardless of their risk of default. Guaranties and direct low–interest loans, in contrast, primarily benefit those borrowers who face high costs on the private credit market. For the same reason, guaranties and direct loans may be better at directing benefits to marginal borrowers who could not otherwise obtain credit, while interest subsidies are paid to marginal and inframarginal borrowers (i.e., those who would be able to obtain credit even without a subsidy) alike. This last advantage is unimportant if the government has a full array of alternative redistributive tools at its disposal, or if it is feasible to restrict interest subsidies to those who could or would not otherwise borrow. In a second–best world where efficiency and distribution must be traded off for one another, however, it cannot be ignored.112

Apart from these last few considerations, however, the efficiency case for either government direct loans or government loan guaranties seems weak. If the state has no comparative advantage in either monitoring or liquidity, it should get out of the lending business. This does not mean that the government should not support borrowers; rather, it should do so through direct subsidies such as tax deductions and credits. Indeed, carefully designing such deductions and credits could be a way of more precisely targeting them to those most in need.113 I suspect, accordingly, that the main reason

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111. Thanks to Scott Masten for suggesting this point.

112. Compare Calomiris et al., supra, note 108, who show that applying for loans is expensive, rationing subsidies to a random subset of applicants also provides a way to direct assistance to the most needy, by giving those who could obtain credit on their own an incentive to self–select out of the program. They observe that delay in processing benefits, furthermore, is a common way that government benefits programs encourage such self–selection.

113. The personal income tax provides a particularly flexible set of tools through which to do this; credits or deductions could be limited to borrowers below a certain level of income, could be phased out as the borrower’s income rises, or could be deferred over a period of years. See, e.g., Brody, supra, note 7 (advocating a system of student loans, administered through the tax system, in which the obligation to repay would be income–contingent).
for the popularity of direct loans and loan-guarantees stems is not economic but political; more precisely, the statutory and procedural constraints of the budgetary process described above make guaranties the cheapest way to assist borrowers through the political process.

It is worth discussing whether this ultimate result could be justified on second–best efficiency grounds. After all, the constraints of the political process are real constraints; and an economist interested in maximizing the sum of benefits over costs should take them into account. Similarly, it might be argued that choosing an inefficient transactional form can be justified on grounds of paternalism. If credit assistance is sufficiently worthwhile, on this view, an inefficient program of assistance is better than no program at all; and if concealing the assistance or disguising its costs by casting it in the form of a guaranty is the only way to get it enacted, so be it. Something like this seems to have been the rationale of the Clinton administration in fashioning the recent Mexican bailout, and perhaps also was the Bush administration’s justification for proposing Israeli loan guaranties some years earlier. Indeed, we might colloquially call this last argument the “Lend–Lease” argument, in honor of Franklin D. Roosevelt’s famous pre–World War II policy of assisting Britain and France against Nazi Germany before the American public was ready to support such assistance, and disguising the extent of the assistance though the use of a legal form.

While misrepresenting the costs and benefits of public programs might be justifiable on pragmatic grounds in exigent circumstances such as FDR faced, however, paternalism of this sort cannot form a basis for government policy in general. Since this paper aims to provide a general method for policy analysis and planning, it must therefore put such considerations aside. It is worth noting, however, that the utilitarian argument for deception by political elites is particularly weak when used in the service of policies (such as the student loan program) that command the support of a broad–based middle–class constituency. Instead, this argument has traditionally been asserted most frequently in the setting of foreign policy setting, on the grounds that the legislature — and popular opinion as well — structurally underappreciates the value of expenditures on foreign assistance.114

The foreign policy setting, however, actually offers a more plausible case for the use of loan guaranties on efficiency grounds. While the argument that the government has a comparative advantage in liquidity is no stronger here than anywhere else, its advantage in monitoring loans made

114. Though of course there is a similarly long tradition in American politics of celebrating the *vox populi* as a bulwark against the danger of foreign entanglements. With regard to these competing traditions, take your pick.
to foreign allies may be quite real. For one thing, U.S. officials have superior access to at least some of the political and economic information relevant to the risk of such countries’ default, an advantage partly based on classified materials, intelligence operations, and confidential diplomatic contacts. While not all this information is available to the particular actors who are charged with making lending decisions, those actors still have better access to it than do private lenders. Second and more significantly, the U.S. government has more leverage than private lenders do in the event of default. A disappointed private creditor is for most purposes limited to calling in outstanding loans, refusing future extensions of credit, and publicizing the debtor’s default to other lenders. The U.S. qua lender can do all of these things as well. In addition, however, because of the many dimensions in which nations interact in the international arena, it has at its disposal a much wider array of foreign policy tools to be used as carrots and sticks — diplomatic concessions, reductions in informal trade barriers, state visits and other gestures of political theatre, the exercise of voting rights in multilateral organizations, and so on. As a result, the U.S. will generally find it easier and cheaper to collect following a default — or to turn the default to its advantage by trading debt forgiveness for other foreign policy concessions it should subsequently find valuable. These comparative advantages in collection and salvage, accordingly, make it likely that the government will be the more effective residual creditor.

Furthermore, as the theoretical framework of the previous section suggests, whether it is better for the U.S. government to make such loans directly or instead to guarantee loans made by private lenders depends upon whether its advantage in monitoring is partial or complete. Most likely, however, this advantage is partial. While the government possesses some relevant information that private lenders lack, private lenders may conversely possess some information that the government lacks. For instance, such lenders may have greater expertise in project evaluation and risk assessment, especially if the loan is intended (as in the case of the Mexican but not the Israeli loan guaranties) for the purposes of economic development or financial reform. The participation of private lenders at the underwriting stage, moreover, also helps to guard against the danger that the government will make an economically unsound loan for unrelated (and possibly unwarranted) political purposes. For all these reasons, then, the total costs of such a transaction are likely to be minimized by structuring it as a guaranty, as opposed to an direct government loan.

B. The scope of defenses to liability under standby letters of credit
In recent years, an increasing proportion of commercial guaranties have been created through the device of the standby letter of credit (SLC).\textsuperscript{115} The popularity of SLC’s is mainly due to two related factors. First, the administrative costs of processing payment under a letter of credit are relatively low. Under the law and traditional practice in the letter–of–credit field, a beneficiary C’s rights against an issuer G depend only on its formal compliance with the conditions of the letter under which it seeks payment. Ordinarily, these conditions are confined to the presentation of documents attesting that C is entitled to draw on the credit; for this reason, letters of credit are also referred to as “documentary credits.”

For example, under a traditional commercial letter of credit (CLC) designed to support an international sale of goods, the buyer–applicant might engage an issuing bank to promise to pay the seller–beneficiary upon presentation of documents showing that the goods have been shipped. The required documents might typically include invoices, packing lists, bills of lading, etc.\textsuperscript{116} Under this arrangement, all three parties are reasonably well protected against default. The seller can safely part with the goods in advance of payment, because the issuer’s obligation to pay is absolute once the documents have been properly presented. The buyer, conversely, is protected by the issuer’s obligation to pay only against the requisite documents. And the issuer, for its part, is protected by its control over the documents, which the buyer will need to retrieve the goods from the carrier, as well as by the fact that the buyer often puts down cash up front to buy the letter of credit initially. (Indeed, if the buyer does not put down cash, it will have to meet the issuer’s usual standards for a short–term loan, complete with covenants and collateral).\textsuperscript{117} A standby letter of credit differs from a traditional CLC only in the type of documents that must be presented at drawing; under a standby letter of credit, the issuing bank promises to pay the creditor–beneficiary upon receiving documents

\textsuperscript{115} The dollar value of standby letters of credit issued by US and foreign banks increased from $51 billion in 1980 to $225 billion in 1986; and estimates of the current outstanding volume range between $400 and $500 billion worldwide and approximately $250 billion in the United States alone. See Boris Kozolchyk, The Financial Standby: A Summary Description of Practice and Related Legal Problems, 28 U.C.C.L.J. 327, 328 (1996).


\textsuperscript{117} Of course, the buyer (or the issuing bank, in the unlikely event that the buyer is uncollectible) does bear the risk that the documents, while conforming to the formal terms of the LC, inaccurately describe the goods that have been shipped or that the goods themselves are defective or fail to conform to the underlying contract. This risk is somewhat lessened by the (admittedly costly) option of suing the seller for breach of contract in its home jurisdiction, however, and can be further minimized by proper specification of the requisite documents.
averring that the issuer’s standby obligation has come due. As with an ordinary CLC, the specific documents to be presented depend on the terms of the letter, and could range from a final judgment against the debtor as issued by a court of competent jurisdiction to the creditor’s sworn statement that the debtor has defaulted on his underlying obligation to a mere sight draft.

Standby letters of credit, of course, support quite different types of economic transactions from traditional CLC’s and thus contain different terms and payment conditions. For instance, SLC’s typically involve higher fees, cover larger loans, have fewer restrictions on transfer, and provide for a much longer expiration period than CLC’s. For the same reasons, banks issuing SLC’s usually require different types of security from their applicants than they do when issuing traditional CLC’s. Most obviously, it is not feasible to require a SLC applicant to pay cash up front, since the primary point of the transaction is to provide him with liquid credit. Nonetheless, despite these economic differences, the SLC offers a way for banks to adapt and apply their traditional expertise in guaranteeing long–distance payment to a much wider set of business transactions, including real estate developments, performance bonds, sales of corporate commercial paper, leases, private placement of securities, and public offerings of municipal debt and other securitized assets. The result is that SLC’s today dominate CLC’s in commercial importance.

The characteristic feature that unites the standby and commercial letters of credit, however, and the key to its low administrative costs, is that the conditions precedent for payment are essentially documentary. As a result, C need not go to the expense of establishing the actual fact of D’s default in order to collect from G under a letter of credit; and G need not investigate the substance of the

118. See Kozolchyk, supra, note 115, at 329, 334 (reporting author’s survey of practices at six major national banks).


120. See Kozolchyk, supra, note 115, at 337 (estimating that quarterly average of new SLC issuance in 1994 was approximately $140 billion, as opposed to $32 billion in total CLC’s outstanding). The ratio of SLC to CLC activity is even greater than this estimate indicates, since SLC’s are typically outstanding for a longer period of time than CLC’s.
underlying transaction before paying. Instead, C simply obtains the requisite documents and G checks them against the formal requirements of the letter. 121

The second major advantage of the SLC is that it allows the role of guarantor to be played by a commercial bank. As a general matter, US banks are prohibited by a variety of federal and state regulations from issuing ordinary contractual guaranties; and under most traditional interpretations of bank charters, furthermore, issuing a guaranty would be regarded as an ultra vires (and hence voidable) act. 122 Such restrictions have traditionally been justified on the grounds that guaranties do not accord with sound banking practice, cannot adequately be supervised under standard accounting procedures, and pose too great a risk to solvency. 123 They have also been motivated by independent political goals, such as the populist desire to limit banks’ economic power and to prevent them from competing with other financial institutions such as sureties and insurance companies. 124

These general restrictions on bank guaranties, however, have not been interpreted to prevent banks from offering standby letters of credit that are the functional equivalent. In large part this distinction is an accident of history and of the deliberate exploitation of regulatory loopholes. Commercial banks’ authority to issue letters of credit is well–established and uncontroversial, dating back to the early days of the law merchant. 125 Indeed, the traditional purpose of a letter of credit — ensuring payment between merchants dealing at a distance — lies at the core function of banking. While standby letters are used in different sorts of transactions from traditional CLC’s and present different sorts of risks, they follow take the identical form as CLC’s and are often indistinguishable from them on their face. This is especially so for “clean” letters of credit — that is, those that are

121. This central aspect of the letter of credit is part of its legal definition. UCC §5–102(a)(10), defining “letter of credit,” and (a)(6), defining “document,” provide that letters of credit can condition payment only on the presentation of specified records. Similarly, the Comptroller of the Currency’s Interpretive Ruling 7.7016, 12 CFR §7.7016 (1994), directs that “As a matter of sound banking practice, . . . the bank must not be called upon to determine questions of fact or law at issue between the account party and the beneficiary.” But see Kozolchyk, supra, note 115, at 358 (while criticizing such practice as legally unsound, indicating that nondocumentary conditions in letters of credit are common).


123. Id. at 56–57.

124. Id. at 56; see also Bank of Michigan v. Niles, 1 Doug. 401 (Mich. 1844).

payable upon the beneficiary’s mere statement that payment is due and presentation of a draft. The
law of letters of credit, accordingly, has drawn no distinction between CLC’s and SLC’s.126

As a practical matter, moreover, because letters of credit constitute a mercantile specialty, their
legal and economic consequences have historically been appreciated by only a small subgroup of
commercially sophisticated practitioners and judges. The esoteric quality of the standby letter
undoubtedly made it harder for generalist judges and regulators (not to mention the banks’ economic
competitors) from recognizing its potential as a device for offering guaranties. Instead, by the time
the commercial uses of the SLC became fully apparent in the late 1970’s, the political climate for
banking regulation had drastically changed. The 1980’s ushered in a period of general financial
deregulation, in which a host of traditional restrictions on commercial banks, ranging from limits on
branch banking to the prohibition of paying interest on demand deposits to restrictions on bank’s
entry into the credit card business, were loosened.127 As a result, whatever regulatory concerns may
have justified traditional restrictions on bank guaranties are today substantially tempered. With the
development and deployment of accounting techniques that better enable regulators and outside
investors to evaluate the risk of guaranties, furthermore, such restrictions are likely to become
increasingly obsolete with the passage of time.128

In light of these economic and historical facts, however, one can understand why the letter of
credit’s documentary nature, and its formal separation from the underlying transaction for which it
serves as security, are viewed by most specialists in the field as critical to its commercial utility. This
separation is referred to in the relevant literature and statutory commentary — and celebrated — as
the “independence principle.”129 On this orthodox view, keeping the issuing bank’s obligation to the

126. In this regard, UCC Article 5 does not even make reference to the term “standby letter of credit,” and does
not prescribe what specific documents might serve as a condition for drawing on a letter of credit.

127. See generally Daniel Fischel, Andrew M. Rosenfield, and Robert S. Stillman, The Regulation of Banks and

128. See, e.g., the developments discussed in notes 50, 56, and 97, supra (describing accounting innovations
implemented under auspices of the Federal Credit Reform Act, Federal Reserve, Comptroller, Basle
Committee on Banking Regulation and Supervisory Practice, and FASB). In addition, allowing a bank to
increase its leverage by issuing guaranties may help to counteract other incentive problems, such as the bank’s
incentive to pass up investments that, by reducing the risk of outstanding debt claims, effect a wealth transfer
from stockholders to debtholders. On this last possibility, see Christopher James, The Use of Loan Sales and

129. See, e.g., Harfield, supra, note 13; Trimble, supra note 125, Alces, supra note 24.
beneficiary formally independent from the underlying transaction, and from any claims the issuer or the applicant might have against the beneficiary arising out of that transaction, is essential to keeping the costs of a letter of credit low and its market value high.\(^\text{130}\)

The specialists’ concern for independence stems from considerations that are familiar from the law of negotiable instruments and its doctrine of the holder in due course. If it were a defense to issuer liability that the beneficiary had breached some substantive duty toward the applicant such as shipping nonconforming goods or failing to provide promised security for its own performance, it would no longer be possible to judge letters of credit on their face. Instead, a letter of credit’s value would have to be discounted by the possibility that a substantive dispute would develop (or be opportunistically manufactured) before drawing. This risk would not only make processing and paying letters of credit more expensive; it would also substantially reduce the beneficiary’s certainty of receiving payment. For this reason, while modern letter of credit law does not entirely exclude substantive considerations arising out of the underlying contract, it tries to keep them to a minimum. Under the 1995 revision of Article 5, for instance, while an issuer retains the discretion to refuse to pay claims that are materially fraudulent or based on forged documents, and while applicant may be entitled to enjoin payment on proof of such fraud or forgery, the standards for establishing such a defense or obtaining such an injunction have been substantially heightened.\(^\text{131}\)

For our purposes here, however, the main relevance of the independence principle is that it has served to wall off the doctrinal and policy analysis of letters of credit from that of guaranties. Throughout their writings, letter–of–credit specialists repeatedly stress that while the standby letter might serve some of the economic functions of a guaranty, it is not a guaranty, it is not a type of guaranty, it is a grave analytic error to call it a guaranty, and most importantly, it is not subject to the law of suretyship.\(^\text{132}\) The specialists’ insistence on this distinction, however, is hardly a matter of

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130. The drafters of revised Article 5 took pains to make this point with special clarity. As that article’s Prefatory Note states: “Revised Article 5 clearly and forcefully states the independence of letter of credit obligations from the underlying transactions that was unexpressed in, but was a fundamental predicate for, the original Article 5. . . Certainty of payment, independent of other claims, setoffs or other causes of action, is a core element of the commercial utility of letters of credit.”

131. Compare revised §5–109 (requiring “material fraud by the beneficiary on the issuer or applicant”) with old §5–114 (employing broader and vaguer standard of “fraud in the transaction”).

132. See, e.g., White and Summers, supra, note 116, at 117 (“In short, a letter of credit is a letter of credit. As Bishop Butler once said, ‘Everything is what it is and not another thing.’ ”)
abstract formalism; nor is it solely motivated by the aforementioned regulatory loopholes that allow commercial banks to issue letters of credit but not guaranties. Rather, the specialists also wish to protect the certainty and reliability of letter of credit transactions. Walling off standby letters of credit from suretyships achieves this result in two ways.

First, as we have seen, suretyship law typically allows guarantors to raise a broad variety of substantive defenses to liability, including both the claims of the primary obligor, and the special suretyship defenses that are based on actions of the creditor that may have increased the risk of default. While it is possible to contract out of these defenses — for example, by having the guarantor waive them in advance — such arrangements are often disfavored by courts and regulators. Even when such waivers are enforceable, furthermore, having to arrange for them adds to the cost of the overall transaction.

Second, suretyship law, as a branch of the common law, includes among its doctrines a variety of general equitable and quasi-equitable principles such as reasonableness, due care, waiver, estoppel, and the like. These doctrines make suretyship law much less rule-oriented than letter of credit law, much more subject to judicial expansion in the face of sympathetic facts, and hence much less predictable to commercial specialists. Such specialists and their clients are repeat players in the guaranty game; and as such they place high value on knowing what their rights and duties are and avoiding interpretative disputes. From their perspective, applying general common-law principles in the letter of credit field merely threatens to disrupt a clear and well-functioning set of specialized usages and commercial practices.

For these reasons, representatives of issuer and beneficiary interests fought hard — and for the most part successfully — to keep letters of credit outside the scope of the new Restatement of Suretyship and Guaranty. As a result of their efforts, §4(2) of the Restatement explicitly states that obligations governed by the law of letters of credit are excluded from its coverage. To the same

133. See Restatement (Third) of Suretyship and Guaranty, §4, comment c (“The reason for this exclusion is practical. The law governing letters of credit is quite well developed, and is generally understood to govern all letters of credit, both traditional and standby. No good purpose would be served by disturbing that state of affairs. To the extent that the law governing letters of credit is silent as to a particular issue, however, suretyship law is a potential source of generally appropriate analogies.”) For an insider’s account of the politics of drafting the Restatement, see Rapson, supra, note 1; for an analogous account of the Article 5 revision process, see James J. White, The Impact of Internationalization of Transnational Commercial Law: The Influence of International Practice on the Revision of Article 5 of the UCC, 6 J. INTERNATIONAL L. BUS. 189(1995).
end, the new 1995 revision of Article 5 goes out of its way to stress that letters of credit constitute a distinct commercial specialty not governed by ordinary principles of contract or suretyship, and also introduces several changes from prior law that are plainly intended to further formalize the parties’ rights and duties and to discourage interpretative disputes.

Other legal commentators in the guaranty field, however, especially some of those involved in the preparation of the new Restatement, maintain that it was a mistake to treat standby letters of credit and guaranties as conceptually distinct transactions subject to wholly separate theories of liability. Peter Alces, for instance, has argued that the difference between standby letters of credit and guaranties is merely a matter of degree and that, accordingly, the compromise that excluded SLC’s from the scope of the new Restatement was unprincipled and unjustified. As Professor Alces points out, because SLC’s remain subject to the defense of material fraud, it is misleading to view them as entirely independent of the substantive transactions that underlie them. Even though fraud may be difficult to prove, determining whether it has occurred necessarily requires reference to the substance of the underlying transaction; and materiality is always in the eye of the beholder. Conversely, the parties to a letter of credit are always free to specify documentary conditions that turn on underlying substance, such as certificates evidencing independent third parties’ determinations of fact or law. For these reasons, he argues, fraud and simple breach of contract — and thus independence from the underlying transaction and interdependence with it — are most usefully understood as points along a single continuum.

134. As comment 1 to revised §5–103 states: “This article does not apply to secondary or accessory guarantees and it is important to recognize the distinction between letters of credit and those guarantees. It is often a defense to a secondary or accessory guarantor's liability that the underlying debt has been discharged or that the debtor has other defenses to the underlying liability. In letter of credit law, on the other hand, the independence principle recognized throughout Article 5 states that the issuer's liability is independent of the underlying obligation. . . Only staunch recognition of this principle by the issuers and the courts will give letters of credit the continuing vitality that arises from the certainty and speed of payment under letters of credit. To that end, it is important that the law not carry into letter of credit transactions rules that properly apply only to secondary guarantees or to other forms of engagement.”

135. These changes include defining good faith as mere “honesty in fact,” in contrast to the more equitable standard of “reasonable commercial standards of fair dealing” found in Article 2 and the proposed revision of Article 1 [see new §5–102(a)(7)]; substituting a strict compliance principle for the doctrines of waiver and estoppel that would otherwise apply under section 1–103 [new §5-108(a)]; eliminating consequential damages and, more strikingly, the duty to mitigate damages [new §5-111(a)]; and providing that courts must award attorneys’ fees to the prevailing party in any dispute that arises over the issuer’s duty to pay [new §5-111(e)].

136. See Alces, supra, note 24.
To Professor Alces’ arguments we may add the observation that even if the status of the parties’ underlying transaction is irrelevant to the issuer’s immediate duty to honor a standby letter of credit, it is still quite relevant to whether the beneficiary is ultimately entitled to retain payments received under that letter. Even under revised Article 5, a beneficiary who draws on a letter of credit impliedly warrants (to the issuer) that no material fraud or forgery has taken place and (to the applicant) that the drawing does not violate the underlying agreement between beneficiary and applicant. For instance, if the underlying contract authorized the beneficiary to draw on the letter of credit only upon the applicant’s default, a beneficiary who drew in the absence of default (or in the mistaken belief that there had been default) would be obligated to return to the applicant any funds wrongfully obtained and to make him whole for any additional losses that had foreseeably resulted from the wrongful draw. Similarly, if a standby letter of credit required the beneficiary to present a sworn affidavit that it had exercised best efforts to collect from the applicant or levy on his collateral, and it knowingly and falsely so swore, the issuer would be entitled to the return of any funds advanced on the basis of the false affidavit.

Thus, while the letter of credit places the burden of inertia on the applicant in the event of a substantive dispute, and while it may force the applicant and issuer to pursue the beneficiary in a distant and inconvenient jurisdiction, it does not insulate the beneficiary from its obligations to comply with its substantive contractual duties. To restate Alces’ point in somewhat stronger terms, the difference between standby letters of credit and guaranties is not substantive, but procedural. From a functional vantage point, and from the viewpoint of parties choosing what terms to include in their contractual arrangements, guaranties and SLC’s are analogous devices. Indeed, the drafters of revised Article 5 conceded the analogy with in their treatment of the specific question of whether an issuer who extends funds should be subrogated to the beneficiary’s rights against the applicant. Prior case law, while not unanimous on the point, had tended to deny subrogation on the grounds that denial was necessary to maintain the formal distinction between letters of credit and guaranties. Revised section §5–117, however, provides that an issuer who honors a beneficiary’s presentation,

137. See revised §5-110(a); compare previous §5-111.

and an applicant who reimburses his issuer, will be subrogated to the same extent they would be if the transaction were a suretyship. 139

With all this as background, we are now in a position to ask: what bearing does our general economic framework, as laid out in the previous sections of this paper, have on this debate? What implications does it suggest for the possible conditions that might be put on the liability of letter–of–credit issuers?

First of all, it suggests that Professor Alces is correct that the independence principle so sacred to letter–of–credit specialists is ultimately just a shibboleth. While it might well be appropriate to limit issuers’ defenses to liability — just as it is sometimes appropriate to limit or waive guarantors' defenses under suretyship law — any difference in legal treatment between standby letters of credit and conventional guaranties ought to turn on functional differences in the nature of the risks being allocated and on the particular monitoring and liquidity obligations being assigned to the various participants, not on abstract formalisms. Furthermore, while there do exist some functional differences between guaranties and standby letters of credit, those differences are smaller than the differences between standbys and traditional CLC’s.

More specifically, the configuration of monitoring and liquidity costs under a standby letter of credit is closer to that of a conventional guaranty than to that of a traditional letter of credit. This is true for two main reasons. First, letter–of–credit specialists typically regard the administrative costs of processing payment as the primary factor determining a letter’s commercial value. 140 This view makes good sense in the case of a traditional commercial letter of credit, where payment is intended to occur in the ordinary course. With a standby letter of credit, however, the parties’ ordinary expectation is that the applicant will make good on his underlying obligation and the letter will never need to be drawn against. While the specialists acknowledge this distinction (and, often, draw attention to it), most of them tend to fail to recognize its main economic implication — that costs of payment make up a much smaller fraction of the issuer’s expected transaction costs under a standby letter of credit, and are thus far less important to the standby letter’s commercial value.

139. See §5–117, official comment 1 (specifically referencing the Restatement (Third) of Suretyship and Guaranty).

140. See, e.g., White and Summers, supra, note 116, at __; Dolan, supra, note 116, at __; Kozolchyk, supra, note 115, at __.
For standbys, these payment costs are dwarfed by the costs of investigation, underwriting, monitoring, collection, and the bearing of losses following default.

Second and similarly, in the event that a standby letter does come to be drawn on, there is a much higher chance than under a traditional CLC that the applicant will be uncollectible.141 Because of the substantive nature of the transactions supported by standby letters, standbys are typically outstanding for a much longer period of time than CLC’s and do not require the applicant to put down cash up front. As a result, the beneficiary’s ability and incentives to monitor the applicant are much more important in the standby than in the traditional context.

Admittedly, with some types of standby letters, the beneficiary’s ability to monitor is very limited, as in asset securitization arrangements in which a bank guaranty effectuated through a standby letter of credit allows mortgage- or municipal–bond–backed securities to be marketed to small and distant investors.142 For other types of SLC’s, however, the beneficiary may well be in a position to do some part of the monitoring. The fact that a bank has a comparative advantage in assessing its customer’s overall creditworthiness and collecting from him in the event of default, for instance, does not necessarily imply that it is the best underwriter with regard to the line of business in which he now proposes to invest. Assigning at least some monitoring tasks to the beneficiary, accordingly, and backing up that assignment with some legal consequences if those tasks are mishandled, may well lower the total expected costs of the underlying loan.

The default rules and understandings of traditional letter of credit law, however, are motivated by the needs of the traditional CLC transaction, and as such do not provide beneficiaries of SLC’s with particularly good incentives to engage in monitoring. Under a traditional CLC, the main task of the beneficiary is to ship conforming goods, not to monitor the applicant’s ability to pay. The beneficiary’s main incentives to perform its assigned task, furthermore, do not come from any promise or warranty it makes to the issuer, as material fraud in the transaction is difficult to prove and the issuer will likely be looking primarily to the applicant for reimbursement. Rather; its incentives come from the fact that if the beneficiary does not perform it will be liable to the applicant for breach of the underlying contract, subjecting it to damages in its home forum. A breaching beneficiary,

141. See White and Summers, supra note 116, at __; Dolan, supra, note 116, at __.
furthermore, is also likely to forfeit future business from the applicant and possibly from his business acquaintances.

Under a SLC, in contrast, these enforcement devices are substantially weakened. The insolvency of the applicant reduces the chance that it will pursue its legal rights against the beneficiary in a distant forum, and largely eliminates the factor of future business. More importantly, the beneficiary’s failure to engage in efficient monitoring will probably not even be a breach, for its main legal duty to the applicant is to provide him with liquid funds, not to monitor him. 143 Indeed, the benefit of such monitoring accrues primarily to the issuer rather than the applicant. But under a standard letter of credit, standby or otherwise, the beneficiary owes the issuer no legal duty to monitor. At most, the beneficiary is obligated not to engage in outright fraud and not to present materially false or forged documents when drawing on the letter.

Based on the foregoing analysis, therefore, I tentatively conclude that Article 5’s default provisions regarding liability, defenses, and risk allocation are not optimally suited to the stereotypical SLC transaction. Such a conclusion should not be regarded as especially surprising, given that the default rules of letter of credit law were developed and refined long before SLC’s were invented, and that the transactions governed by SLC’s have been cast in that form in large part to evade regulatory restrictions that, while possibly justifiable in their original historical context, are in today’s financial markets increasingly obsolete. If SLC were today being designed from scratch, they might well be structured as ordinary guaranties and governed by the Restatement. To the extent that they include significant nondocumentary conditions precedent to payment, in fact, they are already governed by the Restatement notwithstanding the intentions of their drafters. 144

This conclusion, however, does not necessarily imply, pace Professor Alces, that Article 5 needs to be amended or that all standby letters of credit should have been made subject to the new

143. But see Daniel R. Fischel, The Economics of Lender Liability, 99 YALE L.J. 131, ___ (1989) (surveying case law under which inept debtors were allowed to recover from creditors who should have known better than to lend to them.)

144. See revised §5-102, comment 6, which states that: “when a document labelled a letter of credit requires the issuer to pay not upon the presentation of documents, but upon the determination of an extrinsic fact such as applicant’s failure to perform a construction contract, and where that condition appears on its face to be fundamental and would, if ignored, leave no obligation to the issuer under the document labelled letter of credit, the issuer’s undertaking is not a letter of credit. It is probably some form of suretyship or other contractual arrangement and may be enforceable as such.”
Restatement. Many of Article 5's rules are default rules, after all, subject to change by the contracting parties if they choose. The process for amending the UCC is cumbersome, and as a practical matter requires the substantial assent of the main interest groups affected. Furthermore, the preference of letter-of-credit specialists for rules over standards and for well-established trade usages over contextual common-law principles is a legitimate one.

The conclusion does suggest, however, that parties transacting under Article 5 should give serious thought to developing contractual provisions and documentary conditions that more closely resemble the substantive risk allocations and monitoring duties provided under the Restatement for stereotypical guaranties. For instance, parties drafting loan contracts intended to be supported by a standby letter of credit might consider including a term stating that the issuer of the standby letter is to be considered a third-party beneficiary of any promises made by the lender/beneficiary to the borrower/applicant. This clause would allow the issuer to assert claims for breach of such promises under the underlying contract, even though it could not independently assert any such claim under the letter of credit. Similarly, a bank drafting a standby letter of credit might consider including among its documentary conditions the requirement that the beneficiary present a certified judgment of an independently selected arbitrator that the applicant is actually in default, or alternatively, a sworn affidavit, signed by the beneficiary, stating that it has undertaken all commercially reasonable efforts to monitor the applicant and maintain all rights against collateral during the period leading up to default. Similar affidavits dealing with underwriting and credit investigation could also be required at the outset of the transaction as a condition for issuing the standby letter in the first place.

Parties who attempt to draft such arrangements, of course, may well ultimately decide that the arrangements are not worth bothering with, or may discover that beneficiaries are unwilling to agree to them. But such an outcome should only follow if the costs such arrangements impose on beneficiaries exceed the savings they create for applicants and issuers. If the beneficiaries of standby letters of credit do have a comparative advantage in some aspects of monitoring, on the other hand, they should be willing to accept such provisions in exchange for changes in other terms of the bargain that benefit them — such as an increase in the rate of interest they receive for lending funds.

Similarly, such provisions and conditions should not be inherently objectionable to bank regulators, since if the participants were to agree to them they would operate to reduce issuers’ risk

rather than increase it. In this regard, that banks originally began writing SLC’s in order to evade prohibitions on their issuance of guaranties constitutes a significant irony. To the extent that the beneficiaries of standby letters of credit owe issuers duties of care, and to the extent that those issuers can enforce duties owed by beneficiaries to applicants, bank solvency will only be strengthened. By the same token, bank depositors and the FDIC, though perhaps not the banks’ business competitors, will only benefit.
V. Conclusions

This paper has demonstrated that the stereotypical guaranty transaction is motivated by a basic economic logic; its thesis is that a short and simple list of principles can explain the structure and purpose of such transactions across a wide variety of legal and policy contexts. To recapitulate the main argument, supplying credit entails various costs: including monitoring costs (defined here to include such things as investigation, risk-assessment and underwriting, auditing, insurance, collection and salvage), liquidity costs, miscellaneous administrative costs, and the time value of money. In an ordinary direct loan, the creditor incurs all these costs and charges the debtor for them in the form of interest. A guaranty, in contrast, provides a way for a lender to unbundle some of the risks of the debtor’s default, together with associated monitoring obligations, and sell it to another party. This other party is the guarantor. Such an arrangement makes sense if and only if the guarantor has a comparative advantage in monitoring, and the original lender has a comparative advantage in liquidity; else it will be cheaper and more efficient for either one just to lend on an unconditional basis. In cases where these conditions are met, however — or more precisely, where the advantages of specialization are large enough to warrant incurring the additional transaction costs of writing and enforcing a three-corner arrangement — such unbundling can lower the total costs of making the loan, creating a transactional surplus that can be shared among all three participants.

The paper also explained how and when guaranties are superior, as measured by the criterion of economic efficiency, to alternative three-corner transactions such as straight intermediation. The distinctive feature of a guaranty relative to intermediation is that the creditor buys an option to collect directly from the debtor, instead of collecting from the guarantor and having her collect from the debtor. Granting the creditor such an option is efficient when, and only when, the creditor holds a comparative advantage in some aspect of monitoring, relative to the guarantor or to her other creditors. Otherwise, the rights that attach to the option will be more valuable remaining in the guarantor’s hands.

The foregoing analytic framework helps us to integrate and synthesize a disparate body of knowledge from multiple fields of legal and commercial practice — including, inter alia, personal property security, mortgages, negotiable instruments, corporations, letters of credit, the law of contract assignment and delegation, government contracts, and Federal expenditure programs aimed at encouraging the greater availability of credit. In so doing, it also enables insights from one field to be translated and analogized for the purposes of critiquing and improving transactional planning in others. In the previous section of the paper, for instance, we saw that our framework implies that
government loans and guaranties are inefficient unless the government has some comparative advantage in monitoring debtors, and that the default rules provided by U.C.C. Article 5 probably do not provide an optimal mix of rights and duties in the context of standby letters of credit.

In addition, though we did not focus on the possibility here, the framework could also be used to help clarify ambiguous transactions for the purposes of other social policies or legal doctrines. As just one illustration, courts applying the common-law Statute of Frauds have often found it difficult to tell whether a given transaction should be deemed a suretyship, and hence subject to the formal requirement of a signed writing, or rather an agreement to engage in financial intermediation, enforceable even when oral. \(^{146}\) The analysis above, however, suggests an answer to this problem. As we have seen, the functional difference between a guaranty and straight intermediation is that under the former, the creditor C has some comparative advantage in monitoring the debtor D, and thus retains the obligation and incentive, legal or practical, to engage in such monitoring. If C cannot plausibly be assigned any type of monitoring obligation, conversely, the transaction is not properly a guaranty from the economic viewpoint, notwithstanding that the parties may have denominated it as such or formally preserved C’s right to proceed against D. This economic distinction, furthermore, accords with the functional purposes of requiring guaranties but not intermediation agreements to be put into writing. An intermediary G who knows that she is the only person with the capacity or incentive to engage in monitoring the debtor is likely to take the prospect of responsibility for his default very seriously. If G assumes that the ultimate creditor C will undertake a significant portion of the risk and the associated monitoring, however, she may enter into the transaction with much less forethought. Requiring a writing in this latter case, accordingly, promotes the overall cautionary and channeling purposes of the Statute. \(^{147}\)

Other extensions and potential applications of the framework abound, for the basic principles of the guaranty contract touch virtually every field of commerce and industry. The factors that influence whether a guaranty is efficient, for instance, are analogous to those that arise when analyzing problems of reinsurance, financial options, trusts, and the practice of asset securitization. Similarly,

\(^{146}\) See generally Charles C. Marvel, Annotation, *Promise by One Other than Principal to Indemnify One Agreeing to Become Surety or Guarantor as Within Statute Of Frauds*, 13 A.L.R.4th 1153 (1996). Thanks to Allan Axelrod for suggesting this application.

the incentive properties of suretyship are akin to those provided by the doctrines of fraudulent conveyance law; indeed, with only a small stretch the duties imposed on transferees by such doctrines could be reconceived as those of a guarantor. And as the discussion in subsection III.D, supra, made plain, the economic incentives provided under guaranty relationships also closely resemble those of secured credit. In this last regard, it is additionally noteworthy that guaranties and security interests are commonly used in tandem. It would be worth exploring in subsequent research the close connection between these alternate devices, and the extent to which they may operate as substitutes or complements in particular instances.

Furthermore, this paper has focused almost entirely on the problem of minimizing transaction costs for the three parties to the potential guaranty. As the introductory discussion to section II above indicated, however, guaranties also can impose significant external costs on competing creditors and debtors. Now that the basic economics of the guaranty transaction have been laid out, an obvious next step would be to consider how such third–party externalities could best be addressed and internalized. Possibilities in this regard might include improved accounting standards, stronger financial disclosure requirements, or a centralized filing system for guaranties on the model of the one currently provided for security interests under Article 9 A full discussion of such alternatives, however, and of how they might play out in the multiplicity of contexts in which guaranties are used, is better saved for another paper and another day.

In short, the importance of the guaranty contract in law and commerce is vast — so vast, in fact, that it is remarkable that its incentive structure has apparently never been investigated using the tools of the economic analysis of law. The actual amount of economics needed for the task, furthermore, is not especially complicated. Once one asks the basic question — why a guaranty? — and draws the connections between the various contexts in which the guaranty relationship arises, the rest of the analysis follows in fairly straightforward fashion. The primary contribution of this paper, accordingly, is to have asked the question and drawn the connections.