

SECURITIZATION: A LOW-COST SWEETENER FOR LEMONS

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I. INTRODUCTION

Securitization¹ was invented in the early 1970s.² Since then, the transaction volume has exploded. By the end of 1994, more than \$ 1.9 trillion securitization securities were outstanding, and more than \$ 500 billion of securitization transactions were done in 1994 alone.³ And securitization is expected to remain a significant source of financing in the years to come.⁴

1. A great deal has been written about securitization, both by academics and practitioners. In fact, LEXIS devotes a database (Fedsec Library, Cmo File) exclusively to the securitization of mortgages. One major treatise on securitization is Tamar Frankel, *Securitization: Structured Financing, Financial Asset Pools, and Asset-Backed Securities* (1991 & Supp. 1994). Another treatise on this subject is *Securitization: Asset-Backed and Mortgage-Backed Securities* (Ronald S. Borod ed., 1994) [hereinafter Borod, *Securitization*]. Steven L. Schwarcz, a leading scholar and practitioner in the field, has also written extensively on securitization. Steven L. Schwarcz, *Structured Finance: A Guide to the Principles of Asset Securitization* (2d ed. 1993); Steven L. Schwarcz, *The Alchemy of Asset Securitization*, 1 *Stan. J.L. Bus. & Fin.* 133 (1994) [hereinafter Schwarcz, *Alchemy*]; Steven L. Schwarcz, *The Parts Are Greater Than the Whole: How Securitization of Divisible Interests Can Revolutionize Structured Finance and Open the Capital Markets to Middle-Market Companies*, 1993 *Colum. Bus. L. Rev.* 139 [hereinafter Schwarcz, *Divisible Interests*]; see also Standard & Poor's, *S&P's Structured Finance Criteria* (1988) [hereinafter S&P's *Criteria*]; *Structured Financing* (Law Journal Seminars-Press 1987); George J. Benston, *The Future of Asset Securitization: The Benefits and Costs of Breaking Up the Bank*, 5 *J. Applied Corp. Fin.* 71 (1992); Committee on Bankr. and Corp. Reorg. of the Ass'n of the Bar of the City of New York, *Structured Financing Techniques*, 50 *Bus. Law.* 527 (1995) [hereinafter *Financing Techniques*]; Joseph C. Shenker & Anthony J. Colletta, *Asset Securitization: Evolution, Current Issues, and New Frontiers*, 69 *Tex. L. Rev.* 1369 (1991); Robert B. Titus, *Asset Securitization: Marvel of the Marketplace, But Should We Be Uneasy?* 73 *B.U. L. Rev.* 271 (1993) (reviewing Frankel, *supra*).

2. See Frankel, *supra* note 1, 2.4.2 ("True securitization by pooling ... began in the 1970s...."). However, securitization has its roots in transaction structures in use in the 1200s. *Id.* 6.2. Indeed, transactions sharing some of securitizations' features have been "with us since the nineteenth century." *Id.* 2.1. The history of securitization in its current form is discussed in Appendix D, *infra*.

3. See *infra* Appendix A.

4. Shenker and Colletta note that "one observer projects that before the end of this decade at least eighty percent of all new loans are likely to be securitized." Shenker & Colletta, *supra* note 1, at 1372 (citing the testimony of Lowell L. Bryan of McKinsey & Co. before the Sen. Comm. on Banking, Hous., and Urb. Affairs, Oct. 1987); see also Frankel, *supra* note 1, 1.4; Robert E. Litan, *The Revolution in U.S. Finance* 20-23, 36-43 (1991).

Securitization involves two types of securities: mortgage-backed securities, and asset-backed securities. Historically, mortgage-backed securities have represented the vast bulk of securitization transactions. See *infra* Appendix A. However, primarily due to the movement of interest rates, the mortgage-backed securities market has recently been "in the doldrums," with issuance of mortgage-backed securities falling 64% in the 12 month ending Aug. 31, 1995. Stephanie Strom, *CS First Boston Newcomer to Build Mortgage Products*, *N.Y. Times*, Aug. 31, 1995, at D6. The "slack" has, to a small extent, been taken up by increases in the issuance of asset-backed securities. See Tom Pratt, *Wall Street's Deep Freeze, Investment Dealers' Dig.*, Jan. 9, 1995 at 12; Anita Raghavan, *Sales of Asset-Backed Issues Boom, but Mortgages Stall*, *Wall St. J.*, Oct. 2, 1995, at C12.

Securitization is a technique firms use to raise financing. In securitization transactions, financiers purchase securities payable from collections on a firm's receivables. Contrasted with many other financing techniques, securitization looks very complex.⁵ Complexity is rarely, if ever, costless. If financing decisions are made rationally, securitization transactions must offer benefits that simpler financing techniques do not.

Practitioners tout securitization's ability to enable: (1) a low quality firm to, in effect, issue high quality securities, and (2) cash flow streams saleable only at sizeable discounts on lower priced financial markets to be transformed into securities saleable at much smaller discounts on higher priced capital markets.⁶ The claim, more generally, is that securitization is a method for packaging cash flow streams of receivables for higher valued (and higher priced) uses, at a cost lower than the increment of value added.⁷

The famous Modigliani and Miller capital structure irrelevance theorem holds that capital structure - the way a firm carves up its cash outflows into

5. There are different definitions of securitization. My definition is broader than some, and narrower than others. Frankel includes in her definition different sorts of transactions, such as loan participations, but concentrates largely on loan receivables owed to banks. Frankel, *supra* note 1, 1.2. My definition deals not only with what Frankel calls securitization by pooling, but also addresses receivables other than loans, and obligees other than banks. My definition accords with that of Shenker and Colletta:

We will define "securitization" for our analysis as the sale of equity or debt instruments, representing ownership interests in, or secured by, a segregated, income-producing asset or pool of assets, in a transaction structured to reduce or reallocate certain risks inherent in owning or lending against the underlying assets and to ensure that such interests are more readily marketable and, thus, more liquid than ownership interests in and loans against the underlying assets.

Shenker & Colletta, *supra* note 1, at 1374-75.

Appendix B illustrates a typical securitization transaction.

6. See generally James A. Rosenthal & Juan M. Ocampo, *Securitization of Credit* (1988); Schwarcz, *Alchemy*, *supra* note 1 (emphasizing increased access to capital markets).

7. Some commentators think securitization's benefits have been oversold. See Benston, *supra* note 1; see also David W. Leebron, *First Things First: A Comment on Securitizing Third World Debt*, 1989 *Colum. Bus. L. Rev.* 173 (expressing skepticism at securitization's ability to easily transform poorly performing third world debt into higher quality debt). Schwarcz notes that Benston's criticisms, while apt, may apply only to a subset of securitization transactions. Schwarcz, *Alchemy*, *supra* note 1, at 134 n.5 (asserting that Benston's analysis is limited to the costs and benefits of securitizing a bank's own loans to its customers and, therefore, is misleading when applied to the broader universe of securitization transactions).

one or more layers of debt or equity - is irrelevant to firm value.⁸ Financing transactions, such as securitization, are the principal means by which firms create their capital structures. In a Modigliani and Miller world, securitization would not exist, as it would offer no advantages over less costly alternatives.

Of course, the real world has a plethora of different capital structures. It is highly implausible that an entire industry devoted to inventing and selecting capital structures is wasting its time and a great deal of other people's money. Modigliani and Miller's result only applies in an idealized world where certain unrealistic (and in some cases, obviously false) assumptions are true.⁹ Included among the assumptions is the absence of many real-world costs, such as information costs, transaction costs, and, implicitly, agency and regulatory costs. Academics use the Modigliani and Miller theorem as a framework to consider which of its assumptions might be violated for particular capital structures - which real world costs a particular capital structure may help reduce.

The academic work on capital structure has largely focused on broad categories: debt versus equity, secured debt versus unsecured debt, and senior debt versus junior debt. Some academics think they have found the Modigliani and Miller assumptions such capital structures violate; others are more skeptical, and consider the "puzzle" of capital structure unresolved.¹⁰ There has been some work on the narrower categories involved in more complex capital structures, but little dealing with the features of a particular transaction structure. There has, however, been work done on the securitization transaction structure by a leading scholar and practitioner in the field, Steven L. Schwarcz. This article takes Schwarcz's work as a point of departure. Schwarcz in effect characterizes securitization as exploiting the

8. The seminal article is Franco Modigliani & Merton H. Miller, *The Cost of Capital, Corporation Finance and the Theory of Investment*, 48 *Am. Econ. Rev.* 261 (1958). See *infra* Part IV.A.

9. See *infra* notes 111-13 and accompanying text. Shupack describes the Modigliani and Miller assumptions as "heroic." Paul M. Shupack, *Preferred Capital Structures and the Question of Filing*, 79 *Minn. L. Rev.* 787, 789 n.5 (1995).

10. See, e.g., F.H. Buckley, *The Bankruptcy Priority Puzzle*, 72 *Va. L. Rev.* 1393 (1986); Thomas H. Jackson & Anthony T. Kronman, *Secured Financing and Priorities Among Creditors*, 88 *Yale L.J.* 1143 (1979); Michael C. Jensen, *Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers*, 76 *Am. Econ. Rev.* 323 (1986); Alan Schwartz, *The Continuing Puzzle of Secured Debt*, 37 *Vand. L. Rev.* 1051 (1984). Finance academics also have done some work in this area. Their work, while sometimes dealing with specific transaction structures, has not focused in much depth on the non-quantitative terms of the transactions. See, e.g., Robert R. Moore, *Asymmetric Information, Repeated Lending, and Capital Structure*, 25 *J. Money Credit & Banking* 393 (1993); Edgar Norton, *Factors Affecting Capital Structure Decisions*, 26 *Fin. Rev.* 431 (1991). 11. See Schwarcz, *Alchemy*, *supra* note 1; see also Shupack, *supra* note 9, at 809.

"spread" between financing costs in different markets;¹¹ I consider the sources of the "spread," and how securitization might help exploit it at lower cost.

I use a Modigliani and Miller framework to analyze securitization transactions, identifying the real-world costs securitization could help reduce. Regulatory cost reductions are apparently a large part of the securitization story. Securitization in its present form was essentially created in the 1970s as part of U.S. Government efforts to encourage a secondary market in mortgages.¹² Even now, a significant percentage of mortgage securitization transactions effectively enjoy government subsidies.¹³ Moreover, regulatory benefits may be a factor in many other securitization transactions. If securitization's main effect was to take skillful advantage of regulatory benefits, it would be more a triumph for practitioners than a phenomenon of interest to academics.¹⁴ I argue, however, that securitization offers significant nonregulatory (efficiency) benefits as well. The largest such benefits seem to involve reductions of information costs.

The magnitude of securitization's efficiency benefits is hard to measure. For firms with many other financing possibilities, the benefits seem quite small. The more financiers (and prospective financiers) a firm has, the more widely available information about the firm is likely to be. Indeed, such firms seem often to use securitization as one more way to arbitrage small differences in financing markets.¹⁵ In these cases, securitization may merely be no more costly than the alternatives.

The efficiency benefits seem largest for firms with the fewest alternative

11. See Schwarcz, *Alchemy*, supra note 1; see also Shupack, supra note 9, at 809.

12. See *infra* Appendix D, 1.

13. *Id.*; see also Meir Kohn, *Financial Institutions and Markets* 625 (1994); Michael Carroll, *Masters of Beltway Capitalism*, *Institutional Investor*, July 1995, at 60.

14. One account of securitization's benefits is that securitization exploits clientele effects (that is, systematically different investor preferences); the effect given as an example is the regulatory regimes that encourage many of the largest investors, such as insurance companies, money market mutual funds, and pension plans, to favor higher rated securities. See Shupack, supra note 9, at 815. As discussed in Part IV.B.2.b, *infra*, the regulatorily-inspired demand may have caused a demand premium. Securitization is a way to issue highly rated securities; thus, firms could use securitization to capture part of this demand premium. But firms have many ways of issuing higher-rated securities. The issued securities can be accorded a high priority, backed by high-quality collateral, insured, or otherwise credit enhanced. An account, therefore, is needed, as to why securitization is a better way to achieve higher ratings. My account considers, but does not rely on, clientele effects to explain securitization; rather, it points to various cost savings, particularly in information costs, to show how higher quality and higher ratings could be achieved more cheaply by securitization.

15. See *infra* notes 205-06 and accompanying text.

financing possibilities.¹⁶ Available information about such firms is often limited (as is the case for smaller firms), unfavorable (as is the case for firms in financial distress), or particularly difficult to appraise (as is the case for firms in volatile industries or firms potentially subject to large liabilities). These firms have the most severe "lemons"¹⁷ problems: potential investors fear that what they do not know can hurt them. And those fears are costlier to dispel. But comparatively few of those fears involve the firm's receivables. Thus, fears associated with the receivables can be dispelled at far lower cost than other fears associated with the firm.¹⁸ Securitization removes, and sweetens, a slice from the lemon - while leaving the remainder not appreciably sourer than it was before.

This Article proceeds as follows. Part II provides an overview of securitization transactions. Part III describes the terms of securitization transactions. These two sections are for readers desiring an understanding of the transaction structure and its complexities. Part IV contains the main argument of this Article: it explains the source of securitization's benefits using a Modigliani and Miller framework. Part V offers concluding remarks. This Article also contains 4 appendices: Appendix A is a chart setting forth the dollar amounts of securitization securities (i) issued in 1994, and (ii) outstanding as of December 31, 1994; Appendix B illustrates a typical securitization transaction; Appendix C illustrates other financing structures; and Appendix D describes the historical and regulatory context in which the present-day securitization transaction structure was created.

II. OVERVIEW OF SECURITIZATION TRANSACTIONS

Firms¹⁹ can raise money in a variety of ways.²⁰ They can issue stock,

16. See Schwarcz, *Alchemy*, supra note 1, at 134; Shupack, supra note 9, at 809.

17. The seminal exposition of the lemons problem is George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q.J. Econ. 488 (1970).

18. Receivables are, nearly tautologically, less costly to appraise than a firm containing receivables. Lemons firms are costlier to appraise than nonlemons firms, but appraisal of the receivables of lemons firms may not be commensurately costlier than appraisal of receivables of nonlemons firms. Thus, I argue that securitization permits greater aggregate information cost reductions for lemons firms' financiers than for nonlemons firms' financiers. See *infra* Part IV.B.1.

19. I use the term "firm" generically to mean an entity, whether in corporate, partnership, or other organizational form, which wishes to raise funds.

20. Appendix C illustrates typical financing structures, ranging from a simple stock sale to more complex secured loan and sale leaseback structures.

borrow money,²¹ sell assets (and lease them back), and sell rights to receive future monies. Raising money by selling rights to receive future monies (which is called "factoring"²²) is, in its simplest form, one of the oldest financing techniques.²³ Securitization is, in a sense, a type of factoring.

In a securitization transaction, a firm sells²⁴ its rights to receive certain future monies (receivables) to an entity (the "pool"²⁵). The pool's assets consist almost entirely of the receivables. The receivables often, but not always, have similar terms, maturities, and other salient characteristics.²⁶

The pool sells interests ("pool securities"²⁷) to investors;²⁸ the sales may be private placements or public offerings. Purchasers of pool securities may be institutional investors (such as pension funds, insurance companies, and

21. A firm can borrow money from banks, institutional investors (insurance companies, mutual funds, or pension funds), or other investors. In connection with a borrowing, a firm may grant a security interest in some or all of its assets.

22. "Factoring" refers to the sale or assignment of accounts receivable, and the buyer of the accounts is the "factor." See Peter M. Biscoe, *Law and Practice of Credit Factoring* (1975).

23. Schwarcz, *Alchemy*, supra note 1, at 144; see also Donald Kieso & Henry Weygandt, *Intermediate Accounting* 342 (8th ed. 1995).

24. The seller often is, but need not be, the entity who originally extended the loan or credit (the "originator"). Some pools are comprised of receivables from multiple originators, or multiple sellers. See Schwarcz, *Alchemy*, supra note 1, at 140. Such pools may be used by a group of firms, no one of whom has sufficient receivables to make a securitization transaction worthwhile. My discussion of the securitization transaction structure omits separate consideration of multiple seller or multiple originator pools; however, it should be noted that these involve added complexities and costs.

25. The pool can be a corporation, a trust, or a partnership, but is often a trust. See *infra* Part IV.B.2.a for a discussion of certain benefits arising from the use of a trust.

26. Increasingly, different types of more heterogeneous receivables are being securitized. See, e.g., Lyn Perlmuth, *Pumping Up the ABS*, *Institutional Investor*, May 1995, at 36 (growth in securitization of lower-rated auto loan receivables); *Bucking the Trend, Asset-Backed Securities Climb 25% to \$ 75 Billion*, *Asset Sales Rep.*, Jan. 9, 1995, at 1 (growth in securitization of auto leases and student loans); *Monolines Look to Expand Horizons within ABS*, *Asset Sales Rep.*, Feb. 6, 1995, at 6 (securitization of international receivables) [hereinafter *Monolines*]. I consider the added complexities involved in transactions with heterogeneous receivables in Part IV.B.1, *infra*.

27. I use the term "pool securities," "securities issued by a pool" or "securitization securities" to mean the interests acquired by investors in securitization transactions, regardless of the extent to which the interests are "securities" for any or all purposes of the federal or state securities laws. Thus, my definition may be broader in some respects, and less broad in others, than those of securities laws. For instance, my use of the term "securities" includes commercial paper, which are short-term obligations often exempted from the registration requirements of the federal securities laws.

28. In some transactions, the receivables may be sold to an entity which sells the receivables to another entity; that second entity then sells the pool securities to investors. This dual entity structure is used in a number of contexts, including some where the seller's financial condition is precarious. Schwarcz, *Alchemy*, supra note 1, at 142. My discussion of the securitization transaction structure omits separate consideration of the dual entity structure; however, it should be noted that the structure adds complexities and costs. I consider such structures briefly in Part IV.B.2.a, *infra*.

mutual funds),²⁹ or, sometimes, individuals. The pool securities represent rights to receive payments from the receivables in the pool; however, the terms of the pool securities are often significantly different from the terms of the underlying receivables.³⁰ The pool uses the proceeds from the sale of pool securities to pay the firm for the receivables.

The pool securities can take many forms. They can be debt (senior or subordinated), equity (in one or more classes), or debt or equity payable only from the principal, or interest, on the pool receivables. The debt can be long or short term, and it can carry a fixed or floating interest rate. The equity also can have a stated interest rate. The debt is an obligation of the pool, secured by the pool's assets, the receivables. The equity represents an interest in the pool's assets.

The same pool can, and often does, have many different classes of pool securities. The prospective purchasers of the pool securities, or an underwriter or a placement agent anticipating sales of the pool securities,³¹ negotiate with the seller as to the pool securities' terms. The terms of the pool securities are also determined to some extent by the characteristics of the underlying receivables. Particular payment schedules, for instance, may be more often associated with pools of credit card receivables than pools of commercial loans.³²

New securities - ways of carving up the cash flow from the receivables - are constantly being developed. Pools of mortgages, in particular, have generated many classes of exotic securities. For instance, one pool might issue securities: (i) payable only from principal payments made on the mortgages; (ii) payable only from interest payments made on the mortgages; (iii) with a fixed interest rate; (iv) with an interest rate adjusted in accordance

29. This contrasts with a factoring transaction, see *supra* note 22, where the buyers ("factors") are specialists in buying receivables, and the sales are always private. But, as Schwarcz points out, the distinction between factoring and securitization can sometimes blur. Schwarcz, *Alchemy*, *supra* note 1, at 144. A private transaction with an investor who actively negotiates the transaction terms may, for instance, be in form a securitization but in other respects quite close to factoring.

30. This also contrasts with factoring because factors acquire what the seller sells. For a discussion of the relationship between the terms of securitization securities and those of the underlying receivables, see *infra* notes 120-24 and accompanying text.

31. I omit discussion of underwriters and placement agents because their roles in securitization transactions do not differ from their roles in other financing transactions in respects that would affect my analysis. For a general discussion about the roles of underwriters and placement agents in financing transactions, see 1A Harold S. Bloomenthal, *Going Public and the Public Corporation* 8.01-.09 (1996).

32. *The Changing Market in Financial Services* 10 (R. Alton Gilbert ed., 1992) [hereinafter, *Changing Market*].

with the movement of a specified floating rate index; and/or (v) with an interest rate adjusted inversely to the movement of a specified floating rate index.³³

A pool containing receivables with an aggregate face value of \$ 100 million will very rarely, if ever, issue pool securities with an aggregate face value in excess of \$ 100 million. Indeed, not infrequently, the receivables in the pool have a face value in excess of the face value of the pool securities. This excess amount is referred to as overcollateralization. In such cases, the selling firm is given, in addition to the other consideration for the receivables, a subordinated equity interest³⁴ in the pool,³⁵ which it may retain or sell.³⁶ The

33. See Kohn, *supra* note 13, at 619-23; Peter Jordan & John Schiavetta, *Derivative Investment Policy in the Public Sector*, *Gov't Fin. Rev.*, Feb. 1995, at 44. One type of securitization transaction involves the issuance of a "Collateralized Mortgage Obligation" ("CMOs"). The pool in such a transaction consists of residential mortgages (or, sometimes, residential mortgage-backed securities). One pool often issues many classes (tranches) of securities. See generally *Bond Portfolio Analysis-Mortgage Research*, Salomon Brothers Inc., *Collateralized Mortgage Obligations III: An Investor's Guide*, in *Mortgage and Asset Securitization 273* (Robert L. Kuhn ed., 1990). Residential mortgages have no prepayment penalties, and thus are often prepaid when interest rates decline. See Roberta P. Brooks et al., *Salomon Brothers Inc., Securitization Design for Commercial Mortgage Securities*, in *Mortgage and Asset Securitization*, *supra*, 184, 192. Investors will pay more for pool securities whose payment schedules are more predictable. Thus, pools of residential mortgages may be crafted in which junior securities "absorb" the prepayments so that the senior securities can receive predictable payments. See *id.* at 198-200.

Interestingly, this problem does not arise with commercial mortgage-backed securities ("CMBS"). Commercial mortgages are more difficult to securitize than residential mortgages. However, they typically contain prepayment penalties. Thus, they are not prepaid as readily in response to interest rate movements. For this reason a CMBS transaction typically would not contain as many tranches as a CMO transaction. See generally *Real Estate Investment: The Four Quadrants*, *Institutional Investor*, June 1996, at 61, available in LEXIS, Busfin Library, Bis file.

34. The subordinated interest must be equity rather than debt. Transactions in which the subordinated interest is debt will not qualify for a legal opinion that the conveyance of the receivables is a "true sale" for bankruptcy purposes; such an opinion is necessary to the rating agencies rating the transaction (and any insurer providing insurance) and to potential purchasers of the pool's securities.

35. If the selling firm's interest were not subordinated, the transaction would not receive "sales" treatment for accounting purposes. The applicable standard is set forth by the Financial Accounting Standard 77, promulgated by the Financial Accounting Standards Board ("FASB") in *Reporting by Transferors for Transfers with Recourse*, *Statement of Financial Accounting Standards No. 77* (Financial Accounting Standards Board 1983) [hereinafter *FAS 77*]. One of the requirements for sales treatment under *FAS 77* is that the transferor "surrenders control of the future economic benefits embodied is considered to have surrendered control of the receivables." *FAS 77*, *supra*, 5. A transferor who acquires only a subordinated interest in the receivables' future economic benefits for purposes of *FAS 77*. FASB standards are applicable to companies which use Generally Accepted Accounting Principles ("GAAP"). Although most companies use GAAP, some specialized types of companies may use other accounting principles in addition to or instead of GAAP. Banks, for instance, use GAAP for public reporting purposes, but they are required to use Regulatory Accounting Principles ("RAP") when preparing regulatory financial reports.

36. Obtaining sales treatment is harder under RAP than GAAP. RAP may prohibit the retention of the subordinated equity interest in cases where; GAAP would not. See Borod, *Securitization*, *supra* note 1, 2.02.D.1; Frankel, *supra* note 1, 7.14.3, .4.

subordinated equity interest (the "B piece") represents the right to receive amounts remaining in the pool after the more senior pool securities have been paid.

Publicly offered pool securities are typically rated by one of the major rating agencies, Moody's Investors Service or Standard and Poor's Corporation.³⁷ Privately offered pool securities are sometimes also rated, if the investors so desire.³⁸ There are many possible grades of ratings.³⁹ The

37. For a discussion of the supremacy of Moody's and Standard & Poor's and the attempts of other companies to gain a toehold in the rating business, see *Credit-Rating Agencies: Beyond the Second Opinion*, *The Economist*, Mar. 30, 1991, at 80. The other rating agencies, Duff & Phelps and Fitch Investors Service, have made some inroads into the rating business. Schwarcz, *Alchemy*, supra note 1, at 136 n.14.

38. For instance, an insurance company, limited in its purchases of low or non-rated securities, would likely want the seller to obtain a rating. This assumes, of course, that the rating obtained would be sufficiently high. See Schwarcz, *Alchemy*, supra note 1, at 139 n.21; see also infra notes 39-43.

39. Standard and Poor's, Moody's, and Fitch's Investor Service, offer the following ratings:

[SEE TABLE IN ORIGINAL]

Fitch and Standard & Poor's may use + or - to modify some ratings. Moody's uses the numerical modifiers 1 (highest), 2, and 3 in the range from Aa1 through Ca3.

John Downes & Jordan E. Goodman, *Dictionary of Finance and Investment Terms* 353-54 (3d. ed. 1991).

The highest two grades (AAA and AA) are clearly investment grade. The next two highest grades (A and BBB) are also investment grade in most contexts. However, some definitions of "investment grade" include only the two (AAA and AA) or three (AAA, AA and A) highest grades. See, e.g., Colo. Rev. Stat. 24-75-601.1(m) (1995) (highest two grades); Conn. Gen. Stat. 38a-102c (1993) (no specification beyond "investment grade"); N.Y. Ins. Law 1402-1404 (McKinney 1985) (for some purposes, only the two highest grades count; for other purposes, the three highest grades count). The lower grades, from BB to D, are sometimes called "junk." Downes & Goodman, supra, at 218.

The foregoing relates to ratings for "bonds". Securitization securities also take the form of "commercial paper," which are short-term obligations. The categories of ratings for commercial paper are designated differently. For convenience my discussion speaks as though all ratings applicable to securitization securities were the bond-style ratings.

highest rated debt is virtually certain, in the rating agency's estimation, to be timely and fully repaid in accordance with its terms. The lowest rated debt is significantly less likely to be timely and fully repaid. The highest several grades of debt are "investment grade;" the remainder are "below investment grade."⁴⁰ Different classes of securities from one pool can have different ratings; the same pool might have both highly rated and less highly rated securities. If a pool has only one class of securities, that class will likely have the highest or second highest rating the rating agencies give.⁴¹ If a pool has multiple classes, the most senior class - that is, the class entitled to be paid first - will likely receive the highest, or the second highest, rating.

The higher rated pool securities can be bought by entities who would be constrained from buying lower rated securities. Many regulated entities such as insurance companies⁴² and money market mutual funds⁴³ may be restricted from investing in securities rated below the higher investment grades. Entities with investment discretion over others' funds, such as trustees of pension funds, may be reluctant to invest in lower rated debt, fearing vulnerability to a breach of fiduciary duty claim.⁴⁴

Rating agencies dictate a significant amount of the structure of securitization transactions. When the transactions were initially being structured, the ratings agencies were heavily involved.⁴⁵ Subsequently, they

40. See Structured Financing, supra note 1, at 275 (Moody's rating criteria for structured financing); S&P Criteria, supra note 1, at 3-5. The rating does not address the likelihood that events permitting less than full payment under the securities' terms (for instance, a particular movement of interest rates) will occur. See Jordan & Schiavetta, supra note 33, at 44. A new type of rating, used in some private placement transactions, addresses only the likelihood of full payment and not the likelihood of timely payment. Financing Techniques, supra note 1, at 540.

41. This statement, and the other general statements in this article concerning industry practice, reflect numerous conversations I have had with lawyers, investment bankers, and rating agency personnel specializing in securitization transactions.

42. Some statutes regulating insurance companies limit "riskier" investments, such as investments below the highest investment grades. See Shenker & Colletta, supra note 1, at 1398 n.137; see also Colo. Rev. Stat. 24-75-601.1(m) (1995) (highest two grades); Conn. Gen. Stat. 38q-102c (1993) (investment grade only); N.Y. Ins. Law 1402-1404 (McKinney 1985) (either top two or three highest grades).

43. The Investment Company Act of 1940 regulates mutual and money market funds. 15 U.S.C. 80a-1 to -64 (1994). Rule 2a-7, promulgated under provisions of the Act, effectively prohibits money market funds from investing in lower quality securities. 17 C.F.R. 270.2a-7(c)(3) (1996).

44. See, e.g., Employer Retirement Income Security Act of 1974 (ERISA), 404(a)(1)(B), 29 U.S.C. 1104(a)(1)(B) (1988).

45. In the early 1980s, I was involved in the structuring of one of the earliest lease-backed receivables transactions. The rating agencies virtually dictated many aspects of the transaction structure, and no significant aspect of the transaction was seriously considered without a consultation with their representatives or counsel.

issued very specific and detailed criteria for these transactions.⁴⁶ And when a securitization transaction with novel features is being considered, the rating agencies are consulted at an early stage.

Rating agency criteria describe the required legal opinions regarding important commercial and bankruptcy law issues.⁴⁷ The criteria include very specific eligibility standards for the entities that receive and distribute payments to pool securities holders: these entities must have a specified minimum capital and surplus, a minimum rating, and be subject to federal or state regulatory supervision.⁴⁸

A transaction may include a guarantee⁴⁹ of repayment of the pool securities by a highly rated third party guarantor. The guarantee may qualify the transaction for a higher rating. A transaction also may include overcollateralization, in lieu of or in addition to third party insurance; indeed, overcollateralization at a certain level may be required by the insurer. Liquidity facilities - short term sources of funds - also may be needed if the repayment patterns of the underlying receivables are less predictable. Although rated transactions set the market standard; however, the terms of unrated transactions generally are not significantly different from those of rated transactions.⁵⁰

46. See, e.g., *Structured Financing*, supra note 1, at 275; *S&P's Criteria*, supra note 1.

47. See supra notes 46-47 and accompanying text.

48. One typical provision setting forth eligibility criteria is as follows:

The Indenture Trustee shall be (a) a corporation organized and doing business under the laws of the United States of America or of any state thereof, (b) authorized under such laws to exercise corporate trust powers, (c) have a combined capital and surplus of at least \$ 50,000,000 (or whose obligations hereunder are guaranteed by a bank or trust company authorized to exercise corporate trust powers and subject to examination by Federal or state authority, of good standing and having a combined capital and surplus aggregating at least such amount) and be subject to supervision or examination by federal or state authorities, and (d) have (or have a parent which has) a long-term unsecured debt rating of at least BBB- by Standard & Poor's and at least Baa3 by Moody's.

49. Indenture Between [Issuer] and State Street Bank and Trust Co., as Indenture Trustee 6.11 (June 1, 1994) (on file with author) [hereinafter Indenture].

Throughout this Article, I use the terms "guarantee" and "insurance" synonymously, and the terms "guarantor" and "insurer" synonymously. My use of the terms also includes letters of credit issued by banks in securitization transactions, because these essentially serve the same function as insurance.

50. This article generally speaks as though all transactions were rated and insured. The direct benefits rating and insurance provide are, of course, largely absent in transactions where rating and insurance are absent. However, as discussed above and in Part IV.B.1, *infra*, the benefits of the rating agency-developed standards and guidelines in unrated transactions are quite significant. Where insurance is not obtained, the parties presumably are confident that the transaction's quality is sufficiently high without it.

Pool securities are almost always passive investments. Many investors make no investigation or appraisal of the securities or the underlying collateral, the receivables, beyond simply reviewing the offering documents. Rather, ratings and a third party guarantee, (and perhaps overcollateralization) often substitute for investor appraisal of the receivables. Investors need consider only the terms of the pool securities, the rating, and the stature of the guarantor. The transaction also does not require or contemplate that investors take an active role in monitoring payments made on the receivables.⁵¹ The transaction documentation provides for the mechanics of collecting (servicing) the receivables, and payment of the amounts collected to the pool securities holders.

Securitization's aim, often, is to package cash flow streams of receivables into securities that are of high quality, as evidenced by a high rating, and saleable on the capital markets. As discussed above, higher ratings require relatively high assurance of (re)payment.⁵² Some firms' financial condition is sufficiently precarious that no security they issue will be highly rated. Securitization enables such a firm to issue, in effect, a highly rated security. Securitization extracts from a lower rated firm some of its receivables; it leaves behind the firm and its undesirable attributes. It then crafts the receivables into securities, adding third-party appraisal(s), and credit enhancement in the form of third party insurance and/or overcollateralization. The securities thus issued command a higher rating, and hence a higher price, than securities the firm could have issued directly. The higher price will be passed along to the firm in the form of purchase price paid by the pool for the receivables. The increase in price is greater than the associated costs; otherwise, securitization would be zero-sum, or even negative sum.⁵³

Securitization also packages cash flow streams or receivables into securities that can be sold on the capital markets. Capital markets are the "deepest" and most "liquid" of all financial markets,⁵⁴ offering the greatest

51. By contrast, in factoring transactions, factors appraise the receivables and compute the purchase price accordingly. Factors also typically take an active role in assuring payment of the receivables. Schwarcz, *Alchemy*, supra note 1, at 144; see infra Part IV.B.1.a.

52. See supra notes 37-40 and accompanying text.

53. See infra note 115 and accompanying text.

54. I use the term "financial markets" to refer to what the academic literature typically refers to as "capital markets." I do so in order to distinguish between markets on which claims having certain characteristics are traded and markets on which claims not having such characteristics can be traded. Financial markets are markets where all types of financing can be raised. Capital markets are a subset of financial markets, and include the stock market, the bond market, and money markets, but do not include markets on which banks loans are made or on which factors buy receivables. Downes & Goodman, supra note 39, at 59.

number of investors and transactions and often the lowest cost source of financing. By comparison, other financial markets, such as the market where bank loans are made, have fewer investors, fewer transactions, and often, higher financing costs. Institutional investors often invest on both capital and other financial markets; however, individual investors will most likely invest on the capital markets and not on other financial markets.⁵⁵

To be saleable on the capital markets, securities must have characteristics that permit liquidity. They must be comparatively cheap and easy to appraise, buy, hold, and sell. Adequate appraisal must be possible from the "four corners" of the offering documents. Purchases and sales also must be comparatively easy: the security's general features, such as payment terms and denominations, must be of more than idiosyncratic appeal, and the transaction costs of purchasing and selling the security must be comparatively low. In addition, an investor's ongoing responsibilities in connection with the security must be limited. Hands-on monitoring of the security's issuer generally will not be necessary. Securities sold on financial markets other than capital markets may have some or all of these features; however, securities sold on capital markets must have all of these features, or they will not succeed (that is, find buyers) on the capital markets.

Receivables, by themselves, are not suitable capital markets securities. They require extensive and costly appraisal and monitoring. Moreover, the payment terms of particular receivables within a group can vary significantly, making standardized interests difficult to fashion. Nonstandardized interests might be of only limited appeal, and hence, difficult and costly to sell. Thus, until securitization, sales of receivables would rarely, if ever, occur on capital markets.

Securitization fashions a group of receivables into securities of sufficiently general appeal to investors. As discussed above,⁵⁶ the receivables are often pre-appraised and insured. Monitoring of the payment flow servicing the pool securities (that is, the receivables) is provided for, and thus need not be a primary concern of pool

55. My account presents the distinction between capital markets and other financial markets in a somewhat stylized manner. Some noncapital market claims are very similar to some capital markets claims. For instance, a privately placed security sold to one investor will often be very similar to a bank loan. But whether one views the two markets as qualitatively different or merely part of a continuum, the general notion is the same: the capital markets, or the capital markets part of the financing continuum, is generally lower cost than the noncapital markets part. Securitization aids the move from the higher cost market to the lower cost market.

56. See supra notes 49-52 and accompanying text.

securities holders. Because the cash flows into the pool can be crafted into pool securities that meet purchasers' needs, pool securities can easily and cheaply be fashioned to have general appeal to many purchasers, or specific appeal to a known purchaser. Securitization thus gives a firm a new way to access the capital markets: the firm can create a security by packaging together receivables with other items that enhance quality and liquidity. This greater access is particularly valuable to firms which would otherwise find the capital markets inhospitable, such as firms in poor financial condition and smaller firms.⁵⁷ Capital markets are also less hospitable to lower-quality securities - indeed, such securities are likely to find fewer ready buyers. Thus, for firms whose alternatives are lower quality securities, wherever sold, or other financial markets, securitization is likely to be particularly valuable.

More generally, securitization can package cash flow streams for sale either to a new group of investors, or for a higher price, or both. For instance, securitization has packaged cash flow streams of firms outside the United States for sale to United States capital or noncapital markets investors, who were willing to pay more than the firms' domestic investors.⁵⁸ And there may be temporary market "mispricings" among various types of securities, such that one type (securitization securities, for instance) is overvalued relative to others.⁵⁹

Securitization transactions often involve large dollar amounts; a transaction involving several hundred million dollars is not unusual.⁶⁰ As

57. Schwarcz, *Alchemy*, supra note 1, at 151-52. The size constraint likely reflects the limited trading volume for smaller firms. I use the term "smaller firm" to refer to firms having less than \$ 300 million in gross revenues. The rewards for producing the kind of information capital markets would require might be insufficient. This problem may be more self-perpetuating than it at first seems. Small, less established firms may be less constrained by reputation, and thus, markets might require much more information about them than otherwise comparable firms that are larger and more established.

58. See, e.g., Borod, *Securitization*, supra note 1, 1.07 (loans to exporters from an African Bank); Dean Foust et al., *Financing World Growth*, *Bus. Wk.*, Oct. 3, 1994, at 100 (Aeromexico's ticket receivables).

59. Schwarcz, *Alchemy*, supra note 1, at 143. Indeed, this is presumably one reason why chief financial officers responding to a poll taken by the Institutional Investor often cited "diversifying funding sources" as one of the main reasons their firms would do a securitization transaction. See *Securitization Hesitation*, *Institutional Investor*, June 1994, at 241; see also infra notes 203-07 and accompanying text.

60. Minimum effective transaction size is shrinking as the costs of securitization decline. Minimum effective transaction size for a private transaction may now be \$ 25 million, and should shrink further. Martin Essenburg, *Securitizing Receivables: When This Financing Fits*, *Corp. Cashflow Mag.*, Mar. 1, 1995, at 30, available in *1995 WL 1001120*.

stated in the Introduction, securitization transactions presently represent a large dollar volume of financing, and will likely continue to represent a significant volume in the future. Present issuers will likely continue and, perhaps, expand their securitization activities, new issuers will join the market, and new types of receivables will be securitized. As discussed in Part IV.C, present issuers include banks, finance companies, and many types of commercial businesses. Some issuers are large, some are small, some are highly rated, and some are not.⁶¹

Mortgages began the securitization boom, and a significant amount of the volume of securitizations is still in mortgages.⁶² The first mortgage securitization transactions were done by issuers sponsored by the U.S. Government, and these issuers are still responsible for most mortgage transactions outstanding.⁶³ The aggregate value of all mortgage-backed securities outstanding as of December 31, 1994 was more than \$ 1.7 trillion dollars.⁶⁴ After mortgages, the most common receivables securitized are credit card receivables (more than \$ 94 billion outstanding as of December 31, 1994)⁶⁵ and auto loans (more than \$ 35 billion outstanding as of December 31, 1994).⁶⁶ Recently, mortgage securitizations have declined significantly, and non-mortgage securitizations, particularly credit card securitizations, have increased.⁶⁷

Other receivables that have been securitized include: lease receivables (including automobile, equipment, and aircraft leases), trade receivables, commercial loans, defaulting loans,⁶⁸ boat loans, loans to low-quality borrowers, loans to small businesses, insurance premiums, export credits, franchise fees, airline ticket receivables, toll road receivables, health care

61. See *infra* Part IV.C.

62. See *infra* Appendix A.

63. *Id.*

64. *Id.*

65. *Id.*

66. *Id.*

67. See Pratt, *supra* note 4; Raghavan, *supra* note 4; Strom, *supra* note 4; see also Rupert Chisholm, *New Issuers, Refinancing to Spur Record Year for Credit Receivables*, *Asset Sales Rep.*, Jan. 23, 1995, at 1; Perlmuth, *supra* note 26.

68. Securitizations of defaulting loans tend, unsurprisingly, to be very overcollateralized. The principal amount of defaulting loans in a pool might be several times the principal amount of the senior securities sold by the pool. See, e.g., Steven Davidson, *Rating the B&C Secondary Market: B and C Mortgage-Backed Securities*, *Am. Community Banker*, Aug. 1995, at 38 (noting that Moody's typically requires twice the collateral for B and C rated loans than for pools with A rated loans).

receivables, nursing home receivables, mortgage servicing rights, rights to royalties, and tax receivables.⁶⁹ These transactions represent a small, but increasing, percentage of securitization transactions.⁷⁰

To date, the securitization structure generally has fared well, surviving legal challenges largely intact.⁷¹ Pool securities generally have yielded their promised returns, with investors receiving what they bargained for.⁷² But investors purchasing some of the more exotic pool securities found that their "bargain" included outcomes - losses - they had not expected.⁷³

III. COSTS: STRUCTURAL AND LEGAL ISSUES IN SECURITIZATION TRANSACTIONS

As Appendix B illustrates, securitization involves considerable complexity. Securitization involves: (1) selection ("pooling") of the receivables to be conveyed; (2) creation of the entity (the "pool") to which the receivables will be conveyed; (3) establishment of the terms of the securities to be issued by the pool;⁷⁴ (4) conveyance of the receivables; (5) issuance of the pool securities; (6) establishment of mechanisms by which the receivables

69. See Borod, *Securitization*, supra note 1, at xxi; Frankel, supra note 1, 2.4.4; Henry A. Fernandez, *Globalization of Mortgage Backed Securities*, 1987 *Colum. Bus. L. Rev.* 357; Leebron, supra note 7, at 179; Alfred J. Puchala, Jr., *Securitizing Third World Debt*, 1989 *Colum. Bus. L. Rev.* 137, 137-41; Shenker & Colletta, supra note 1, at 1380; *Financing Techniques*, supra note 1, at 532; Kirk Cypel, Comment, *Federal Assignment-Backed Securities (Fast Backs): Financing Federal Accounts Receivable Through Securitization*, 27 *Loy. L.A. L. Rev.* 1195 (1994); Gregory R. Salathe, Note, *Reducing Health Care Costs Through Hospital Accounts Receivable Securitization*, 80 *Va. L. Rev.* 549 (1994); M. Cathy Anderson Coleman, *The Tricky Business of Securitizing Business Loans*, *Institutional Investor*, Jan. 1994, at 74; *Ginnie-Freddie Giant MBS*, *Nat'l Mortgage News*, Aug. 1, 1994, at 1; *Look for Securitized Servicing*, *Nat'l Mortgage News*, Feb. 7, 1994, at 20; *RTC Set to Restart Securitization Program this Summer*, *Nat'l Mortgage News*, Apr. 25, 1994, at 25; *Securities Market Sees B, C, Growth*, *Nat'l Mortgage News*, July 11, 1994, at 45; *Structured Finance "Rehabilitates Dickey Deals"*, *Wall St. J.*, Nov. 2, 1993, at 1. International and foreign securitizations are for the most part beyond the scope of this Article.

70. See *infra* Appendix A.

71. See, e.g., *Financing Techniques*, supra note 1, at 565.

72. See *id.* at 539, 567.

73. See *infra* note 133.

74. Some pool securities simply "pass through" amounts paid on the receivables rather than crafting new cash flows payable from those amounts. An example of a pass-through security is one entitling the holder to payments on the underlying pool receivables when received by the pool. Other pool securities, which may be called "pay-through" securities, entitle the holder to payments on a specified schedule. The schedule would likely resemble, but probably not duplicate, the schedule of payments on the underlying receivables. The only difference for purposes of my analysis is that the passed-through cash flows do not involve the crafting costs or benefits. I treat all securitizations as though they involved crafted cash flows, because noncrafted cash flows is the easier special case.

will be serviced (collected), and the amounts collected held until payment to the pool's securities holders; and (7) often, the issuance of the rating agency's rating and the insurer's guaranty.

Each of the many players involved in a securitization transaction adds additional complexities. Each player will impose terms and conditions on its participation, including terms and conditions relating to the financial condition and good conduct of the others.

The many statutes, regulations, and caselaw precedents involved in obtaining the desired legal and regulatory treatment must be identified and complied with.⁷⁵ One matter of paramount concern is that the conveyance of the receivables be respected. The conveyance of the receivables might not be respected in a seller bankruptcy. For instance, a bankruptcy court might: (i) recharacterize the transaction as a secured borrowing rather than a "true sale;"⁷⁶ (ii) characterize the transfer of the receivables from the seller to the pool as a "fraudulent transfer" or "fraudulent conveyance;"⁷⁷ or (iii)

75. My discussion is meant to be illustrative rather than exhaustive; thus, I do not give full consideration to all applicable statutes and regulations.

76. The leading case on what constitutes a "true sale" is *Major's Furniture Mart, Inc. v. Castle Credit Corp.*, 602 F.2d 538 (3d Cir. 1979) (noting that intent of the parties and structure of the transaction determines whether a transfer of receivables is a sale or secured loan). However, it should be noted that Major's Furniture Mart is not a bankruptcy case. Rather, it arose under 9-502 of the Uniform Commercial Code concerning rights to surplus. *Id.* at 502. Article 9 applies to all transfers of receivables. U.C.C. 9-102(b) (1995). However, there are different default rules depending upon whether a transfer of receivables is a sale or a secured loan. U.C.C. 9-502(b) (1995). Given contractual silence, the Major's Furniture Mart court needed to determine whether the transaction was a sale or secured loan to determine which default rule to apply. 602 F.2d at 542-43. The bankruptcy analysis of securitizations treats Major's Furniture Mart as the seminal case on "true sales" for bankruptcy purposes. See generally Financing Techniques, supra note 1, at 527; Thomas E. Plank, Sacred Cows and Workhorses: The Sale of Accounts and Chattel Paper Under the U.C.C. and the Effects of Violating a Fundamental Drafting Principle, 26 *Conn. L. Rev.* 397, 471-72 & n.312 (1994). But see *Octagon Gas Sys., Inc. v. Rimmer*, 995 F.2d 948 (10th Cir. 1993) (stating that regardless of the intent of the parties or the structure of the transaction, a transfer of accounts receivable will be viewed as a secured financing, rather than a sale). The holding in *Octagon Gas* has been widely criticized and, to date, has not been adopted by any other circuit. For a general discussion of "true sales," see Borod, Securitization, supra note 1, 7.06, and Financing Techniques, supra note 1, at 542, 544 n.49. Schwarcz notes that for higher quality firms, bankruptcy is less of a concern, and there may be less of a need to structure the transaction as a "true sale" for bankruptcy purposes. Schwarcz, Alchemy, supra note 1, at 142.

77. Both federal bankruptcy law and state insolvency laws have "fraudulent transfer" or "fraudulent conveyance" statutes. Under these statutes, certain transfers which occur while the transferor's financial condition is precarious, or which cause the transferor's financial condition to become precarious, may be voided. See, e.g., 11 *U.S.C.* 548 (1988); N.Y. Debt. & Cred. 270-281 (McKinney 1990). To be voidable under these statutes, a transfer need not involve actual fraud; constructive fraud will suffice. Moreover, the transferor's receipt of less than sufficient consideration in the transaction may suffice to show constructive fraud. See David. G. Epstein et al., Bankruptcy 6-46 to -47 (1992).

"substantively consolidate" the pool with the seller.⁷⁸ If any of these occur, the payment stream from the pool to the pool securities holders (that is, payments on the pool securities) could be interrupted, thus undermining the basic premise of the securitization transaction that securitization investors' fortunes do not depend on the financial condition of the seller.⁷⁹ Compounding the problem, the conveyance will most likely be challenged precisely when the seller's financial condition is deteriorating and the deleterious effects on investors are most pronounced.⁸⁰

Avoiding the possibility of recharacterization of the transaction as a secured borrowing⁸¹ adds additional complexities. There is no surefire ways to avoid the possibility of such recharacterization⁸² consistent with the parties' other aims. Some of the features which might support a recharacterization⁸³ are considered desirable, and are therefore present in many securitization transactions.⁸⁴ For example, transactions involving debt are often structured as borrowings for tax purposes. The seller often continues to service the receivables, and notice of the transfer usually is not given to the receivables' obligors. Also, there may be some recourse to the seller if the receivables are defective.⁸⁵

Avoiding secured borrowing treatment is often critical for reasons other than bankruptcy. Securitization transactions typically need to pass muster as

78. Substantive consolidation involves treating the assets and liabilities of separate legal entities as though they belonged to a single entity. In a bankruptcy proceeding, the creditors of an insolvent entity might attempt to reach the assets of a related solvent entity by arguing that the two entities should be substantively consolidated. See generally Epstein et al., supra note 79, 2-4.

79. See Schwarcz, *Alchemy*, supra note 1, at 256.

80. Even if the conveyance were respected, the seller's bankruptcy during the transaction term would likely have other adverse effects on the transaction parties. For instance, if the seller's financial condition deteriorates during the transaction term and, as is common, the seller is also the servicer of the receivables, the flow into the pool of receivables payments might be interrupted, thereby interrupting payments to the pool securities holders. Moreover, an ailing seller in an end-game might be more likely to behave opportunistically by, for instance, not turning over the servicing receipts in a timely fashion.

81. For a general discussion of the differences between a secured borrowing transaction and a securitization transaction, see Frankel, supra note 1, 1.1.

82. Schwarcz, *Divisible Interests*, supra note 1, at 145.

83. See, e.g., *Major's Furniture Mart, Inc. v. Castle Credit Corp.*, 602 F.2d 538, 545 n.12 (3d Cir. 1979) (nature and extent of recourse given to transferor); *In re Mid Atlantic Fund, Inc.*, 60 Bankr. 604 (Bankr. S.D.N.Y. 1984) (administration and collection of accounts).

84. See Schwarcz, *Divisible Interests*, supra note 1, at 145-49; *Financing Techniques*, supra note 1, at 543-47.

85. See infra note 87 and accompanying text.

sales for accounting purposes.⁸⁶ While accounting standards differ from bankruptcy standards, there is a significant overlap. Applicable accounting standards deny "sales" characterization to transactions in which the seller guarantees that all, or some portion, of the receivables will be successfully collected.⁸⁷ A representation by the seller that the receivables will be collected would constitute a guarantee for this purpose; thus, representations in securitization transactions may address the "character" of receivables (that is, no impediments to collectibility) but not their "performance" (that is, actual collection). Moreover, an overly expansive seller guarantee of the receivables would cast doubt on whether the transaction was a "true sale" for bankruptcy purposes.⁸⁸ In sum, selling a right to receive money (receivables) while retaining the risk that the receivables will not be collected (whether by guaranteeing performance or by some other means) is essentially equivalent to borrowing money secured by the receivables. The purchaser in such a transaction is not acquiring the risks of ownership but rather, advancing funds

86. Frankel, *supra* note 1, 7.14.1; Shenker & Colletta, *supra* note 1, at 1416. The benefit of accounting sales treatment is typically presumed without explanation. See Schwarcz, *Alchemy*, *supra* note 1, at 142-43; Shenker & Colletta, *supra* note 1, at 1395-96. Indeed the explanation is not obvious, except insofar as accounting standards somehow trigger some legal or regulatory consequence. For financial institutions, the consequence is clear. See *infra* Appendix D, 2. For other firms, it is often less clear. One quasi-regulatory benefit, however, involves rating agencies. In rating firms, the agencies apply capital adequacy standards not dissimilar to those applied by regulators of financial institutions. Different rating agencies have different standards as to how securitization transactions reduce the capital maintenance requirements applicable for a particular firm. See Davidson, *supra* note 68, at 38 (discussing rating criteria). Some agencies permit far greater reductions on the basis of capital requirements than others. For instance, Fitch has developed models to more precisely measure the effect securitization should have on a firm's risk profile. See *Fitch Unveils New CBO/CLO Rating Criteria*, *Corp. Financing Wk.*, Apr. 22, 1996, at 6 (discussing Fitch's rating methodology). Supported by this model, Fitch allows firms using securitization to retain less capital than do some other rating agencies, yet still obtain high debt ratings. In any event, all rating agencies consider accounting sales treatment a necessary, though not sufficient, condition to permitting any reductions. Again, why rating agencies would permit capital reductions based on an accounting treatment is not clear.

More likely, the accounting sales treatment is valued as an assessment by experts that the firm has become less risky. The treatment itself, then, is not what is valued, rather, the value lies in the information it conveys. The accountants are making a (perhaps somewhat arbitrary) demarcation along the continuum between a sale and a borrowing, and others, such as lenders, defer to the accountants' expertise. I discuss the benefits of particular accounting treatments at length in Claire A. Hill, *Why Financial Appearances Might Matter: An Explanation for "Dirty Pooling" and Other Financial Cosmetics*, 22 *Del. J. Corp. L.* (forthcoming 1997).

87. FAS 77, *supra* note 35, 5. RAP is similar but more emphatic than GAAP on the issue of guarantees; RAP might deny sales treatment for transactions that would pass muster under FAS 77. Borod, *Securitization*, *supra* note 1, 2.03.C; Shenker & Colletta, *supra* note 1, at 1416-18; see *supra* notes 34-36.

88. See *supra* note 76.

in anticipation of later payment of the receivables.

Representations as to the receivables' quality are less important in the closest alternatives to securitization, secured loans and factoring transactions. In a secured loan, such performance representations would not be precluded. Furthermore, because the loan terms would likely provide the lenders access to the borrower's other assets, availability of such representations would be of less concern. By contrast, if the transaction was a factoring transaction, performance representations also would not be possible; factoring transactions also seek accounting sales treatment. But factors are well situated to make their own investigation of the receivables' quality.⁸⁹ Investors in securitization transactions, however, are specialized in investing generally but not in acquiring assets which require appraisal and monitoring, such as receivables. Thus, factors have far less need for the comfort performance representations would provide than do securitization investors. Furthermore, factors pay significantly less than face value for receivables:⁹⁰ this discount, which is functionally equivalent to a higher interest rate, helps compensate the factor for the absence of performance representations.

Securitization, by contrast, is structured so that investors pay an amount closer to face value for receivables. Since securitization investors can neither obtain performance representations nor make an adequate investigation, they require alternate and costly means to assure the quality of the receivables. As discussed in Part II, these assurances typically include all or some combination of a rating, a guaranty, a liquidity facility, and overcollateralization.⁹¹

Securitization transactions also require attention to many other legal and regulatory considerations. There are federal and state securities law issues,⁹² as there would be for any financing transaction. But these issues are more complicated than those raised in simpler transaction structures. The extra entity may itself create an extra layer of regulation and disclosure. While there are exemptions from some federal and state securities law requirements,⁹³ especially those involving filing and disclosure, the

89. See Biscoe, *supra* note 23, at 39-63 (describing information typically acquired by a factor).

90. See Schwarcz, *Alchemy*, *supra* note 1, at 144-45; see also *infra* Part IV.B.1.a.

91. See *supra* notes 46-51 and accompanying text.

92. See *infra* notes 94-98 and accompanying text.

93. See Borod, *Securitization*, *supra* note 1, 5.01. Securities to be offered must be registered under the Securities Act of 1933, *15 U.S.C. 77a-77aa* (1994), or qualify for an exemption. Exemptions which might be available for offerings of pool securities include: (3)(a)(2), *15 U.S.C. 77c(a)(2)* (1994) (securities issued or guaranteed by governmental authorities); 3(a)(5), *15 U.S.C. 77c(a)(5)* (1994), (securities issued by savings and loan associations); 4(2), *15 U.S.C. 77d(2)* (1994), (private placements); and 4(5), *15 U.S.C. 77d(5)* (1994), (certain mortgages). See Borod, *Securitization*, *supra* note 1, 5.03.C.1, .C.3, .D.1-2; see also *infra* Appendix D, 1.

Outstanding securities are often subject to the registration and periodic disclosure requirements of the Securities Exchange Act of 1934. An exemption which might be available for pool securities is 15(a) & Rule 3a 12-4 (excluding certain mortgage-backed securities). *15 U.S.C. 78c(a)(4)*, (5), (12)(i), *78o(a)(1)* (1994); 17 C.F.R. 240.3a 12-4 (1996); Frankel, *supra* note 1, 13.4.3, .6.

State securities laws also impose registration and disclosure requirements. The Secondary Mortgage Market Enhancement preempts these requirements for private mortgage-backed securities. Secondary Mortgage Market Enhancement Act of 1984, Pub. L. No. 98-440, 106(c), 98 Stat. 1689, 1692 (codified at *15 U.S.C. 77r-1(c)* (1994)); Shenker & Colletta, *supra* note 1, at 1385-86 & n.78. These securities can receive the same exemptions available to government agency sponsored mortgage-backed securities.

Investment Company Act of 1940 exemptions typically used in securitization transactions are set forth in *infra* note 97.

transaction must be carefully structured to ensure the exemptions' availability.

Securitization transactions raise issues under the Investment Company Act of 1940 ("1940 Act").⁹⁴ The 1940 Act regulates companies whose assets are principally securities.⁹⁵ Pools consisting of receivables fit within the statutory definition of investment company,⁹⁶ and are potentially subject to regulation under the 1940 Act. Compliance with the 1940 Act is sufficiently costly that virtually all securitization transactions are structured to meet one of the exemptions;⁹⁷ this endeavor also is costly.

Tax statutes and regulations present other important considerations. Parties typically want the transaction to be treated as a borrowing for tax purposes. Such treatment should avoid entity-level taxation of the pool, permit the seller to deduct interest payments made on pool securities which are structured as debt, and prevent the recognition of gain (or loss) on the conveyance of receivables to the pool.⁹⁸ Tax statutes and regulations specify conditions that must be met for a transaction to be treated as a borrowing for

94. *15 U.S.C. 80a-1 to -64* (1988).

95. *15 U.S.C. 80a-1, -3* (1994).

96. *15 U.S.C. 80a-3(a), -2(a)(36)* (1994).

97. See Borod, *Securitization*, supra note 1, at 5.05.A; Shenker & Colletta, supra note 1, at 1413 n.231. Typical exemptions from the Investment Company Act of 1940 used in securitization transactions include the "private investment company" exemption under *15 U.S.C. 80a-3(c)(1)* (1994) for issuers who do not make a public offerings and whose securities are held by no more than 100 persons; *15 U.S.C. 80a-3(c)(3)* (1994) for issuers who are banks or insurance companies; *15 U.S.C. 80a-3(c)(5)(C)* (1994) for issuers who are primarily engaged in acquiring mortgages and liens on real estate; and Rule 3a-7, 17 C.F.R. 270.3a-7 (1996) for issuers of asset-backed securities. Borod, *Securitization*, supra note 1, 5.05.C.

98. Most pool securities are structured as debt for tax purposes, but some are structured as equity. See Frankel, supra note 1, 8.10-12.

tax purposes;⁹⁹ these must be taken into account in structuring the transaction. And if a pool wishes to issue certain complex mortgage-backed securities, it can avoid federal entity-level taxation only by qualifying as a Real Estate Mortgage Investment Conduit ("REMIC").¹⁰⁰

Matters specific to the seller of the receivables must be considered.¹⁰¹ There may be particular accounting rules, for instance, which govern "sales" treatment for particular types of sellers. For example, financial institutions have accounting requirements that must be met to assure the desired treatment of the transaction.¹⁰²

Matters specific to the types of receivables involved also must be considered. Often, pool receivables are themselves secured. For instance, typical receivables in securitization transactions are mortgages and auto loans.¹⁰³ These receivables are secured by, respectively, particular real estate and automobiles. The purchasers of pool securities will want, in addition to the right to the receivables, a right to foreclose on the underlying collateral.¹⁰⁴ For example, in a mortgage securitization transaction, the pool securities holders will want the ability to foreclose on the real properties owned by defaulting mortgagors.¹⁰⁵

And of course, transaction costs must be considered. Standard securitization transactions involve the smallest costs because they are sufficiently alike that an investment in structuring or understanding one transaction can be amortized over many.¹⁰⁶ Less standard transactions are considerably more costly.¹⁰⁷

99. See, e.g., I.R.C. 671 (1954); Treas. Reg. 1.671-3(a)(1), 301-7701-4(c) (as amended in 1969); see also Borod, *Securitization*, supra note 1, 4.02.A, .C.1, .03.B.1, .C.2.

100. See generally Borod, *Securitization*, supra note 1, 1.04.C, 4.04.A-B. Legislation which would provide a simple means to avoid entity-level taxation in securitization transactions other than mortgage securitization transactions has recently been proposed. See, e.g., H.R. 1967, 104th Cong. 1st Sess. (1995).

101. See Shenker & Colletta, supra note 1, at 1407 n.191.

102. See Borod, *Securitization*, supra note 1, 2.03(c), 2.04; see also supra notes 35-36.

103. See infra Appendix A.

104. See infra Part IV.C.

105. Also, there will likely be state law requirements regarding matters such as transfer of the rights of the secured parties. See Frankel, supra note 1, 7.23.5.3.

106. The legal, accounting, and rating agency costs of securitization can be significant; however, the bulk of these expenses are incurred in the first transaction of a securities program. Martin D. Essenburg, *Considering Securitization? Look Beyond Cost*, Corp. Cashflow Mag., Mar. 1995, at 32. For the more standard types of transactions, once a securitization program is established, costs for subsequent transactions using the program's template are generally competitive with, or lower than, the costs associated with other types of financing. *Id.*

107. See Schwarcz, *Alchemy*, supra note 1, at 144-45; see also Monolines, supra note 26, at 6.

IV. BENEFITS: WHY ARE SECURITIZATION TRANSACTIONS DONE?

The foregoing has considered the complexities and costs of securitization transactions. I next consider what offsetting benefits securitization might offer.¹⁰⁸

A. The Modigliani and Miller Capital Structure Irrelevance Theorem

Like other financing transactions, securitization affects a firm's capital structure.¹⁰⁹ Modigliani and Miller's famous irrelevance theorem holds that capital structure does not affect firm value: a firm cannot increase its value by having one capital structure rather than another.¹¹⁰ But clearly, firms spend enormous time, energy and expense choosing among, and sometimes developing, different capital structures. This behavior can be seen as rational only in a world where the theorem's underlying assumptions are violated, and the theorem therefore does not hold.

The Modigliani and Miller assumptions can be stated as follows:

(1) Financing decisions are independent of investment decisions, broadly construed: a firm's capital structure decision will not affect its future receipts and expenditures (cash flows).¹¹¹ Agency, regulatory, and other costs affect a firm's future cash flows; financing decision independence means that there are no such costs which a firm's capital structure can affect.

(2) Financial markets are perfect. For my purposes, this means they are strong-form efficient,¹¹² with all participants costlessly having, and correctly assessing, all available information. This also means that there are no transaction costs to issue, buy, or sell.

108. This article does not generally address the third-party effects of a firm's use of securitization. Some of these effects are positive; some are negative. See generally Frankel, *supra* note 1, 3.1-5.11.6. For a discussion of some third-party effects, see *infra* notes 121, 154, 196, and Appendix D, 1.

109. A firm raising money in a securitization transaction generally will have more equity and less debt (for accounting purposes) than an otherwise comparable firm raising money using secured (or unsecured) borrowing.

110. Modigliani & Miller, *supra* note 8.

111. For this purpose, a firm's expenditures do not include the dividend or interest payments it would pay if all the Modigliani and Miller assumptions were true.

112. See generally Ronald J. Gilson & Bernard S. Black, *The Law and Finance of Corporate Acquisitions* 135-45 (2d ed. 1995) (discussing the different forms of the efficient capital markets hypothesis).

(3) Financial markets are complete. For my purposes, this means principally that perfect substitutes for everything are available.

(4) Financial markets do not discriminate between those seeking financing and those providing financing: each has the same opportunities available to them on the same terms.¹¹³

The first assumption, coupled with the traditional finance principle that a firm's value is the net present value of its expected future cash flows, implies that there is only one correct value for a firm, regardless of its capital structure. The remainder of the assumptions imply that a price difference between two equally valuable firms (or cash flow streams) should not persist as it would be arbitrated away. And it is not only differences between equally valuable firms or cash flow streams that will be arbitrated away. Each firm (and cash flow stream) has a correct price; if perfect arbitrage is possible, it also will assure that the relationship between the price of any two firms or cash flow streams is correct.

The world of Modigliani and Miller's theorem is, of course, not our world. In our world, there are many costs, including information costs, agency costs, regulatory costs, and transaction costs. And there are benefits which particular capital structures can provide.

B. How Might a Firm Benefit from Using Securitization?

Generally, a securitization security can command a higher price either because of its higher quality, greater access to financing sources ("liquidity"), or both. Unsurprisingly, higher quality securities command higher prices than lower quality securities. And more liquid securities - that is, securities more cheaply and readily saleable to more investors - command higher prices than less liquid securities.

Quality and liquidity are related. A security will only be liquid if its quality is readily known; similarly, a security will only command the "high quality" price if its quality is readily known to be high. Thus, there is significant overlap between what must be done to make a security high quality, and what must be done to make it liquid.

113. Statements of the assumptions include Modigliani & Miller, *supra* note 8; Buckley, *supra* note 10, at 1397 n.9; and Eugene F. Fama, The Effects of a Firm's Investment and Financing Decisions, *68 Am. Econ. Rev.* 272 (1978).

Securitization, its proponents claim,¹¹⁴ offers a better - cheaper - way of achieving higher quality and liquidity. Implicit in this claim is that higher quality is achieved without a commensurate decrease in the quality of the remainder of the firm. Securitization must, somehow, make the sum of the firm's more and less valuable parts greater than the whole.¹¹⁵

I now explore the cost reductions and other benefits securitization could offer. I first consider benefits which contribute both to higher quality and to liquidity.

1. Securitization May Reduce Financiers' Information Costs

Firms engaging in financing transactions, like firms engaging in most any transaction, suffer from the well-known "lemons" problem.¹¹⁶ The borrower (in this case, the seller of the receivables) knows more about the firm than the lender (in this case, the buyer of pool securities) does, and has an incentive to exaggerate the firm's quality. The lender knows this, and offers the borrower only a "lemons" price based on her worst-case estimate. The borrower can get the lender to offer more only if the borrower can convince the lender that the borrower is not a "lemon." Some firms have more severe lemons problems than others: The financial community - that is, the community of prospective financiers - has insufficient information to appraise such firms' prospects or their potential liabilities, and cannot learn more without incurring considerable expense.

Of course, implicit in the lemons problem is a violation of the Modigliani and Miller assumption of complete and costless access to information. Securitization may offer a lower cost solution to the lemons problem. The subject matter of the conveyance consists of securities backed by receivables. Thus, information is needed both about the securities and the receivables. And, as discussed in Part III, information is also needed about the firm selling the receivables.¹¹⁷ Securitization offers a low cost, credible way for such information to be produced and provided to investors.¹¹⁸

114. See supra notes 6-7 and accompanying text.

115. Benston has difficulty seeing how securitization makes the parts worth more than the whole. He also notes that given securitization's costliness, it would have to offer a large increment of value to avoid being negative-sum. See Benston, supra note 1, at 76; see also Leebron, supra note 7, at 178.

116. See supra notes 16-18 and accompanying text.

117. See supra notes 76-80 and accompanying text.

118. The discussion in Part IV.B.1 applies less to private placement transactions. The investors in such transactions are more sophisticated, and better situated to make their own appraisals of the receivables, the securities, and the firm. Moreover, these transactions may not involve rating agencies and insurers, or if they do, the rating agencies and insurers may be serving a regulatory function rather than an informational function. See supra notes 38, 42-44 and accompanying text. Thus, the sales price for securities in private placement transactions tends to be lower than the price for comparable securities in transactions open to less sophisticated investors.

a. Information About a Firm's Receivables

Securitization may help firms learn and demonstrate more easily that their receivables are not "lemons." Securitization permits economies of scale and scope in the acquisition and dissemination of information about a firm's receivables.¹¹⁹ Firms, knowing they will be securitizing their receivables, can work with specialist appraisers (rating agencies and insurers) to develop receivables that are more easily appraised. Prospectively, receivables can be standardized, as to terms, documentation, and underwriting criteria.¹²⁰

For some receivables, this process is comparatively easy.¹²¹ For others, it is quite difficult.¹²² And for some receivables, the difficulties may be such that

119. See *infra* Part IV.B.1.b.

120. Benston notes some of the "costs" of loan standardization: Borrowers with less standardizable financing needs will have to pay a premium for loans tailored for their needs and borrowers who desire flexibility during the loan term also will have to pay more. Benston, *supra* note 1, at 75; see also Borod, *Securitization*, *supra* note 1. 1.03.B.3. Litan points out that by making standardization of loans more profitable, securitization has made the traditional banking business of making and holding nonstandardized loans, much less profitable. Litan, *supra* note 4, at 15; see also Jonathan R. Macey & Geoffrey Miller, *Bank Failure: The Politicization of a Social Problem*, 45 *Stan. L. Rev.* 289 (1992).

121. One example is mortgages securitized by the government sponsored entities ("GSEs"), Fannie Mae, Freddie Mac, and Ginnie Mae. The mortgages were not difficult to securitize. The GSEs were able to dictate standardized terms, documentation, and underwriting criteria. Because mortgages to "A" borrowers are familiar types of instruments, payment patterns have been comparatively easy to predict, and cash flows for pool securities were easy to craft. See *infra* Appendix D, 1.

122. Mortgages other than those securitized by the GSEs were much more difficult to securitize. These mortgages were, overall, less familiar instruments because payment patterns were less familiar, and terms, documentation, and underwriting criteria were far less standardized. Another now commonly securitized receivable, credit card receivables, also was initially difficult to securitize. These receivables had payment patterns that were difficult to craft into pool securities. The patterns bore little resemblance to a payment schedule pool securities purchasers investors would have found desirable. Underwriting criteria, too, varies significantly among credit card issuers. However, the problems in securitizing these receivables have been surmounted, and they are now among the most commonly securitized receivables. See *supra* notes 66, 68 and accompanying text.

In the case of commercial mortgages, the work was done by the Resolution Trust Company - its need to dispose of a very large portfolio of such loans (approximately \$ 50 billion) made the work worthwhile. William Seidman, then-chairman of the Resolution Trust Company (and former chairman of the Federal Deposit Insurance Corporation) estimated that disposing of the RTC's portfolio at the rate of \$ 1 million every day would take 120 years. See Sally R. Bourrie, R.I.P. RTC: After Five Controversial Years and Enough Bad Ink to Sink an Ocean Liner, *Denver's RTC Office Fades Quietly Away*, *Colo. Bus.*, Mar. 1, 1995, at 48. Instead, using securitization, the RTC was able to dispose of nearly \$ 40 billion of its portfolio in less than 4 years. More recently, RTC issuances have declined as it liquidates, and private issuances have increased. *Id.*; see also *infra* Appendix D, 1.

securitization simply is not worthwhile.¹²³

Appraisal techniques have been developed by rating agencies in tandem with the development of the securitization transaction structure.¹²⁴ The techniques exploit particular features of the transaction, such as the size and composition of the pool. As discussed in the next subpart, securitization permits capital markets investors, who are in fairly large supply, to acquire interests in receivables; thus, the pools of receivables to be financed can be quite large. And securitization's large pool sizes permit careful pool composition. For example, receivables can be selected for geographic and other types of diversity. If a single firm does not have sufficient receivables to achieve the desired pool composition, a multi-seller pool can be formed.

By contrast, factoring is a far more active and specialized pursuit,¹²⁵ thus, the volume of factor financing available is likely to be far smaller.¹²⁶ With a smaller transaction volume, development of the securitization-inspired techniques might not have been worthwhile. Factoring transactions can make use of such techniques, but the techniques are most profitably used in transactions of greater volume, such as securitization transactions.¹²⁷

Credit enhancement techniques, such as insurance and overcollateralization, also operate to reduce information costs about receivables. Insurers "piggyback" on rating agencies' appraisals.¹²⁸

Rating

123. See Schwarcz, *Alchemy*, supra note 1, at 144-45. For example, one type of receivable that has not been securitized is health care receivables due from individual payors (in instances in which neither third-party nor government insurance is available). Sunasir Sen & James P. Lawler, *Securitizing Receivables Offers Low-Cost Financing Option*, *Healthcare Fin. Mgmt.*, May 1995, at 32. Another type of receivable that has not been securitized is professional firm receivables (that is, receivables of law or accounting firms or investment banks). Such receivables would be very difficult to standardize. Moreover, both the payors and payees might want confidentiality as to the amount of the receivable or even the existence of the relationship. Finally, both would likely want flexibility to negotiate deviations from the stated terms of the obligations without third party involvement.

124. See S&P's *Criteria*, supra note 1; *Structured Financing*, supra note 1, at 275. Even in transactions where rating agencies are not involved, their techniques and standards are nevertheless employed. See supra note 50 and accompanying text.

125. See Schwarcz, *Alchemy*, supra note 1, at 144.

126. The common understanding that capital markets offer increased access to capital suggests that this must be the case.

127. See Schwarcz, *Alchemy*, supra note 1, at 144-46.

128. Indeed, according to lawyers specializing in these transactions, some insurers require the rating agencies to state that a transaction would have received an investment grade rating even without insurance. The insurer is willing to add three ratings grades, but not more - that is, it is willing to enhance a "BBB" transaction to the level of "AAA", but it is not willing to enhance a "BB" transaction to "AAA."

agencies and insurers have both specialized skills in appraising receivables¹²⁹ and strong stakes in performing diligently and honestly. The rating agency's main asset is its reputation; because rating is a highly public activity, an ill-considered rating will likely inflict serious damage. The insurer, of course, could suffer both reputational and immediate monetary damage.¹³⁰

Insurers "piggyback" as well on the firm's promise to make the insurers whole for any losses in connection with the transaction. The firm not only has a considerable reputational and financial stake in good performance, but also the most information of any party as to the quality of the receivables. Better and cheaper appraisal should lead to cheaper third-party insurance, since the appraisal includes much of the information necessary to price the risk to be insured.

The firm also provides additional "insurance" and signals the receivables' quality with representations, and sometimes, overcollateralization of the transaction. The signal is particularly strong if, as is sometimes the case, the residual rights in the pool - whatever is left of the overcollateralization after the senior pool securities have been paid - are retained by the firm.¹³¹ And the signal's credibility is enhanced by reputational constraints: unless a firm is in an "end-game,"¹³² it likely wants to preserve its reputation in the financial markets. The small size of the securitization community suggests that misbehavior likely will be discovered.

129. Transactions without a rating agency or insurer, or both, are likely to involve more sophisticated investors who are willing, and presumably able, to perform their own appraisals. Some transactions, regardless of whether a rating agency or insurer are involved, require investor appraisal, not so much of the quality of receivables (that is, whether they will be paid according to their terms) but of the terms themselves. One example is commercial mortgage-backed securities. For this reason, the investors willing to purchase such securities have been banks and other institutions with considerable experience with commercial mortgages. The prices of such securities, consequently, has been relatively low. However, as more of these mortgages are securitized, the process of disclosing information has become more standardized. More investors are becoming comfortable making these investments, and the prices of the securities are rising. See *A New Breed of Bond*, Institutional Investor, Mar. 1995, at 69.

130. Insurers increasingly are taking a more active role in designing securitization transactions, as their premiums from insuring the more standard types of transactions decline in a competitive market. Presumably, the transactions they help design are those in which they have expertise in appraising and bearing the risks involved. See *Monolines*, supra note 26.

131. To obtain the desired regulatory treatment, the selling firm may be required to sell this interest, which is sometimes called the B piece. See supra note 36. Rating agencies will not rate highly pool securities in a transaction where the B piece is exceptionally large; they probably believe the firm is signalling a problem with the transaction or the receivables.

132. See infra notes 141-42 and accompanying text.

b. Information About a Firm and Its Securities

I argued above that a firm's receivables are most cheaply appraised in bulk as part of an assembly line process designed for use in securitization transactions. That process crafts, from a firm's receivables, securities with different terms designed to appeal more to investors. In appraising these securities, investors appraise both the securities' terms and source of (re)payment.

Many investors do not make an independent appraisal of the source of (re)payment, the receivables, relying instead upon the appraisal made by the rating agency and insurer. This seems appropriate because many securitization investors are not well-situated to appraise the quality of receivables. Specialized, and often hands-on, skills are required, and the rating agency and insurer have, and are well-known to have, such skills.

By contrast, investors are far better situated to appraise the terms of a firm's securities. They can understand the pool securities' terms, and apply "armchair" financial models to evaluate what the expected payouts will be under various different scenarios, using skills they have developed and used in the context of their other investments. And different investors may be better at appraising different types of pool securities. For instance, some investors may be better at appraising more senior risks of receivables pools, whereas others may be better at appraising residual risks of those same pools.¹³³

More generally, aggregate information costs of a firm's financiers may be

133. See Schwarcz, *Alchemy*, supra note 1, at 143. Some such "specialists" may be prepared to relinquish the designation. They were purchasers of exotic interests, including residual interests, in certain pools of mortgages. These interests, dubbed "toxic waste" on Wall Street, proved to be disastrous investments. Some of the "specialists" who bought these interests later claimed not to have understood the terms. Among those suffering significant losses from such interests were Lew Ranieri, "a founding father of mortgage-backed securities market." See Michael Carroll & Alyssa A. Lappen, *Mortgage-Backed Mayhem*, *Institutional Investor*, July 1994, at 81. A large mutual fund, run by David Askin, with \$ 600 million under management, became insolvent largely from investing in these interests. *Id.* Since the collapse of Mr. Askin's fund, he has been hired as a lecturer at Columbia Business School to teach a course called "Debt Markets". Jack Willoughby, *Columbia B-School Hires Askin to Teach Finance*, *Investment Dealers' Dig.*, Feb. 6, 1995, at 5; see also Kohn, supra note 13, at 623 (noting \$ 300 million loss suffered by Merrill Lynch, and \$ 250 million loss suffered by Salomon Brothers, on these types of interests); Jordan & Schiavetta, supra note 33 (discussing money-losing investments of some government entities in these exotic interests). Many of these "toxic waste" interests were the most junior residual tranches of Collateralized Mortgage Obligation ("CMO") securitizations. Indeed, transaction volume in the CMO market has declined precipitously, with investors now demanding simpler structures. See Paul Muolo, *Who's Killing New CMO Issues?*, *U.S. Banker* (Nat'l ed.), Mar. 1996, at 77.

reduced by securitization. By carving up the lemons inquiry into tasks amenable to specialization, securitization can help a firm more cheaply show that it is not a lemon. Appraising risks relating to a group of specified assets, such as receivables,¹³⁴ may be a different skill than appraising and bearing more general risks, such as those associated with a firm's overall operations. Some types of financiers might be better at appraising risks associated with prospects of particular assets, whereas others might be better at appraising prospects of entire firms.¹³⁵ Financiers more specialized in bearing general firm risks might buy common stock; common stockholders are betting on the residual results of the firm. Someone better at appraising a particular risk also may be better at bearing it.¹³⁶

Risks associated with securitization securities may be particularly amenable to appraisal by capital markets investors. Tautologically, information costs to investigate firms less well-known to the financial community will be higher. Less well-known firms may be less well-known for good reason: They may be particularly costly to appraise; they may be subject to uncertain, but possibly sizeable, liabilities; their businesses may be very specialized; they may be subject to unsettled or obscure regulatory regimes; or their small size may limit the potential audience for information,

134. Securitization generally involves betting only on the performance of one specified group of assets. The receivables included in the transactions will have certain characteristics. Depending on the type of transaction, these particular receivables may be identified at the inception of the transaction and/or during the transaction term. Indeed, the bet typically only covers a subset of the risks of those assets. An important risk, the credit risk of the receivables, will largely have been covered by some form of credit enhancement, such as insurance.

135. See Buckley, *supra* note 10, at 1425. Buckley's article notes, in the context of secured lending, that there may be economies of specialization in the tasks of valuing repayment rights and valuing bankruptcy rights. *Id.*; see also D. Bruce Johnsen, *The Quasi-Rent Structure of Corporate Enterprise: A Transaction Cost Theory*, 44 *Emory L.J.* 1277 (1996); Schwarcz, *Alchemy*, *supra* note 1, at 151.

136. And, indeed, institutional investors typically do have specialists who acquire expertise in, for instance, securities issued in securitization transactions or securities issued by particular types of companies. Such differentiations arguably imply a benefit to specialization.

Some CMO transactions provide particularly strong evidence of benefits to risk-bearing specialization. These transactions repackage standard mortgage-backed securities into different tranches, including senior tranches with predictable repayment schedules, and more junior tranches, representing the residual interest. See *supra* note 33 and accompanying text.

There is another suggestive piece of evidence that securitization transfers risks to better situated risk bearers. Rating agencies impose capital requirements on firms; rating agencies will not rate highly securities issued by firms with insufficient capital. Some rating agencies lower capital requirements for firms using securitization. If a firm uses securitization, some rating agencies may rate subsequent issuances of the firm's own securities more highly than they would the securities of an otherwise comparable, but debt financed, firm with the same capital level. See *supra* note 86.

and thus the rewards to obtaining it.¹³⁷ These are the firms with the most severe lemons problems (I will call these firms "lemons firms").

For any transaction to occur, the parties' valuation of the subject matter of the transaction must be within a sufficiently narrow range. A transaction will not occur if, for example, the borrower thinks it is an "A" credit risk, and the lender thinks the borrower is a "C" risk, or the seller thinks its firm is worth \$ 10,000, and the buyer thinks it is worth \$ 1. Buyer and seller agreement as to the valuation of an interest in receivables should be comparatively easy to achieve. Receivables are, after all, rights to receive money from others. The valuation of the money is not at issue, only the likelihood that it will be paid.

By contrast, valuation of a firm's other, more general interests may require more extensive consideration of the firm's firm-specific assets,¹³⁸ as well as its prospects, potential liabilities, management, and other matters. Seller and buyer agreement as to valuation of general interests in a firm will always be harder and costlier to achieve than agreement as to valuation of interests in receivables. But the increment of difficulty should be greatest for lemons firms. Receivables are probably the least firm-specific of all assets because receivables involve only a right to payment by a third party; there is little about the firm that affects the receivables' value once they have been originated.¹³⁹ Thus, the receivables of a lemons firm should not be appreciably harder to appraise than receivables of a nonlemons firm (a firm with fewer lemons problems). The remainder of the lemons firm, however, should be much harder to appraise than the remainder of the nonlemons firm. In other words, the gains to specialization are likely greater in the case of the lemons firm because appraisal of a lemons firm is likely a more specialized endeavor.

After the receivables have been securitized, the firm, of course, has fewer

137. See, e.g., Schwarcz, *Alchemy*, supra note 1, at 153 (suggesting that securitization provides "unlimited opportunities" for foreign originators to cheaply access U.S. capital markets); see also Foust et al., supra note 58 (describing securitization's role in fostering global economic growth by providing financing for below investment grade firms and projects); Richard House, *Europe's Flyer in Aircraft Finance*, *Institutional Investor* (Int'l ed.), Mar. 1995, at 25 (discussing view of the CEO of an airline finance subsidiary that securitization can enable airlines to obtain financing from financial markets because absent securitization, airlines' ability to seek financing from such markets is complicated by the "notoriously cyclical, debt ravaged" nature of the airline sector), available in LEXIS, Busfin Library, Bis File.

138. See generally Oliver E. Williamson, *Corporate Finance and Corporate Governance*, 43 *J. Fin.* 567, 576 (1988). My reference to firm-specific assets follows Williamson's concept of asset specificity.

139. See supra 56-67 and accompanying text.

assets available to other interest holders. And those assets, and the firm, still have a lemons problem. The lemons problem is no worse - but it now extends to fewer assets. The lemons "taint" has been removed from the assets for which it was cheapest to do so: the receivables.¹⁴⁰

A firm's lemons problem might even decrease if its use of securitization were seen as a positive signal. Receivables are frequently among the best and most valuable assets of a firm. Securitization presumes that a firm's receivables are of higher, and sometimes significantly higher, quality than the rest of the firm.¹⁴¹ When a firm's receivables are of significantly higher quality than the firm, and the firm has no regulatory or other special reason to sell its receivables, a securitization transaction makes the most sense in two possible and opposite scenarios. One scenario is the good news scenario. Unbeknownst to the markets, good news is imminent, and the firm's aggregate value will increase. However, the firm needs financing sooner. The good news will not cause the receivables to increase in value: their value is a function of the receivables' obligors, and is not affected by the firm or its prospects. The good news, however, will cause an increase in the value of the remainder of the firm. Thus, the firm can get full value for the (high quality) receivables in a securitization transaction, but not suffer fully the negative effect on its residual value. When it needs the additional financing, the firm reasons, its residual value will be higher.

The other possible scenario is the bad news scenario. Unbeknownst to the markets, the firm is in an "end-game," and is engaged in a last desperate high-risk ploy to obtain financing. The involvement of rating agencies and insurers in securitization transactions should preclude the bad news scenario. Rating agencies and insurers will catch a firm that is a real lemon.¹⁴² Thus, any signal presented by securitization should be positive and reliable. At the time of the securitization transaction, the firm's residual value might not decrease by as much as the sale of the firm's high quality assets might otherwise indicate. In

140. The same principle - concentrating a lemons taint to a smaller group of assets - is involved in the structuring of securitization transactions. The receivables pool issues different levels of securitization securities, with the lemons taint concentrated in the lower levels. Valuation of the lower-level securities is difficult, and investments in these securities have led to some spectacular losses. See *supra* note 133.

141. Indeed, securitization has been said to weaken the financial condition of some of its users, particularly banks who engaged in such transactions to improve their financial condition to meet regulatory standards; they "cherry pick" their best assets to securitize, leaving the dregs behind. See Macey & Miller, *supra* note 120, at 296.

142. See Schwarcz, *Alchemy*, *supra* note 1, at 136-37, 147.

fact, the firm's residual value might even increase. Any negative effects of the asset sale would be countered by the positive effect of the signal of imminent good news. Thus, the firm's choice to engage in the securitization transaction, in tandem with procedures the transaction requires, may serve as a low-cost signal¹⁴³ that the firm is as it represents itself,¹⁴⁴ thereby reducing aggregate information costs of all of a firm's financiers.

In sum, securitization may be able to reduce information costs associated with a firm, its securities, and its receivables. But some firms will benefit more than others. Securitization requires appraisal only of a firm's least firm-specific assets. The difference between the cost to appraise nonfirm-specific assets and firm-specific assets will be greatest for lemons firms. Thus, lemons firms should benefit most from securitization's reduction of information costs. The cost difference for nonlemons firms is much smaller. Investors know enough, or can learn enough at comparatively low cost, to greatly discount the worst case scenario. Thus, nonlemons firms can issue securities representing secured, unsecured, or residual claims for which investors will pay high prices.

2. *Securitization May Increase a Firm's Future Cash Inflows*¹⁴⁵

a. Effects of Specialization, Economies of Scope and Reductions in Agency Costs

Securitization more readily permits specialization in receivables' origination or retention.¹⁴⁶ The firm engaging in the securitization transaction - selling its receivables - generally originates the receivables. Most large, repeat securitizing (selling) firms are specialized in origination.¹⁴⁷

143. Another positive signal securitization may give is that the firm's treasury department is creative and makes use of sophisticated financing techniques.

144. But note that this argument is culture-specific. It depends on securitization's frequent use and acceptance in the United States. In Europe, use of securitization has been viewed as a signal of a bad news scenario, and investment bankers attempting to promote its increased use have spent considerable energy fighting this perception. See Margaret Popper, *The Asset-Backed Culture Clash*, Institutional Investor, Feb. 1994, at 135, available in LEXIS, Busfin Library, Bis File.

145. There is some overlap between the arguments in this part and those in Part IV.B.1 above. Appraising receivables more cheaply reduces information costs to a firm and its investors. But better appraisal can also be part of more efficient dealings with receivables generally which results from actual and anticipated scrutiny - the firm's cash flows are improved because of the discipline securitization imposes.

146. Shenker & Colletta, *supra* note 1, at 1392 nn.109-10.

147. Borod, *Securitization*, *supra* note 1, 2.03.

Banks are specialized in originating mortgages; finance subsidiaries of car companies are specialized in originating car loans; and credit card companies are specialized in originating credit card receivables. However, someone other than the selling firm may be better situated to bear the ongoing risks associated with the receivables.¹⁴⁸ As discussed in Part IV.B.1.b above, in a securitization transaction those risks can be transferred to the better-situated risk bearer. And some firms, such as those whose business is originating receivables (like banks and credit card companies) may be inspired (and, under applicable regulations, permitted)¹⁴⁹ to originate more receivables. While factoring also enables transfers of ongoing risks associated with receivables, the greater volume of receivables involved in securitization transactions should enable more of such transfers. Thus, securitization may make receivables origination more lucrative. A firm need not engage in an activity it finds less lucrative, receivables retention, in order to engage in an activity it finds more lucrative, receivables origination.¹⁵⁰ Securitization also permits more specialization in servicing loans.¹⁵¹ Servicing, too, may be an activity in which specialization promotes efficiencies.¹⁵²

Securitization also might inspire the creation of better origination and collection techniques for receivables, and improve the existing techniques.¹⁵³ The effect of better origination and collection on the firm's cash flows is

148. Some reasons why one person might be better situated to bear particular risks than another are discussed in Part IV.B.1.b, *supra*. Other reasons might relate to, for instance, the two parties' respective activities and investment portfolios. Of course, specialization in risk bearing is a factor in many financing activities, not just securitization.

149. See *infra* Appendix D, 1.

150. See Shenker & Colletta, *supra* note 1, at 1392 & nn.109-10.

151. *Id.*

152. Indeed, the activities of one bank which securitizes commercial mortgages provides some evidence as to the efficiency of separating these tasks.

Securitization of commercial real estate has pushed the Bank of Boston's commercial operation towards the residential mortgage-backed model, [Denise] Delaney [division executive, Real Estate Capital Markets] acknowledges. "We've functionalized our people into originators, underwriters, and servicers," she explains. Whereas before, "typically, you'd be a relationship manager doing all three things."

Steve Cocheo, *Sea Change for Real Estate Finance?*, ABA Banking J., Apr. 1995, at 48, 50. Securitization also may help exploit economies from separating the servicing task by encouraging the development of specialist servicers available to service other firms' transactions. See James H. Saft, *Chase Manhattan in Talks to Buy Goldman Sachs' Servicing Unit: Main Street Mortgage Co.*, Am. Banker, Feb. 1, 1995, at 10.

153. See Christine B. O'Malley, *Small Business Still Awaits Loan Dollar Flood*, Bus. First Columbus, Mar. 6, 1995, at 33. Greater ease in appraisal and better origination are difficult to distinguish because both involve processes by which obtaining and providing information about receivables is done more efficiently.

somewhat indirect: the firm has sold the receivables and therefore will not receive the increased funds. But, the firm does capture the benefit of the increased cash flows in the sales price it receives for the receivables and the value of any residual interest in the pool it retains (and the receivables it does not securitize or otherwise sell).

Securitization may improve origination in several respects.¹⁵⁴ First, the techniques developed to make receivables cheaper to appraise¹⁵⁵ likely make them somewhat cheaper to originate. Second, securitization makes the origination process more visible. This may reduce adverse selection problems.¹⁵⁶ A firm originating receivables for sale might seem to have less incentive to exercise care than a firm originating receivables it intends to keep.¹⁵⁷ But, the actual originators are agents of the firm whose interests may not be perfectly aligned with those of the firm. Indeed, many individuals charged with receivables origination decisions may be long gone once, many years later, a receivable they approved proves uncollectible. By contrast, the many appraisers involved in a securitization transaction examine the receivable when it is originated, at a time when the responsible individual is likely to be occupying the same job. Thus, the individual originating the receivable may have more to fear from a bad receivable sold in a

154. One third-party benefit of securitization involves loans to high-quality, smaller businesses. Banks making such loans had apparently shunned risk-based pricing; rather, they had simply made, or declined to make, a loan. Thus, loans to more and less creditworthy borrowers had been made at the same rates. Securitization has inspired such banks to institute risk-based pricing for two reasons. First, the smaller businesses are increasingly obtaining access to the capital markets, including access gained through their use of securitization. Thus, to hold onto the more creditworthy borrowers, banks are being forced to offer lower, more risk-based rates. Second, investors in the banks' securitizations of these loans are increasingly demanding such risk-based pricing. The gains to efficiency and higher-quality smaller businesses may, however, be at the expense of banks making loans to smaller borrowers. Such banks presumably did not adopt risk-based pricing before because they did not compete with capital markets for the business of smaller borrowers. Thus, there must have been more high quality borrowers paying too much for loans than low quality borrowers paying too little. Banks fare poorly in a world where smaller, higher quality borrowers have access to cheaper capital markets financing. *The Case for Risk-Based Pricing: Speech by Alan Greenspan, ABA Banking J.*, Jan. 1995, at 58, 60; Mark Anderson, *Money Store Explores Secondary Market for Business Loans*; Money Store Investment Corp., *Bus. J.-Sacramento*, Feb. 6, 1995, at 9, available in *1995 WL 8236396*.

155. See *supra* Part IV.B.1.a.

156. "Adverse selection" is defined as "the problem encountered in the insurance industry that the sub-population taking out insurance is likely to have less favourable characteristics than the population in general." *The MIT Dictionary of Modern Economics* 8 (David W. Pearce ed., 4th ed. 1992). The term has come to mean, more broadly, the proclivity of any sub-population which can beneficially misrepresent itself to do so.

157. Part IV.B.1.a, *supra*, discusses the means by which the firm may obtain, and disseminate, information as to the receivables' quality.

securitization transaction than a bad receivable that the selling firm retains.

Securitization also may improve the collection of receivables.¹⁵⁸ The increased visibility of the collections process may reduce moral hazard problems.¹⁵⁹ Monitors include many of the transaction parties, such as, perhaps most importantly, the rating agency and insurer.¹⁶⁰ Indeed, rating agencies have developed monitoring guidelines and standards; these guidelines and standards likely exploit economies of scale, the large volume of securitization transactions, and the small size of the securitization community.¹⁶¹

Moreover, the small size of the securitization community itself might prompt a firm to use greater care in origination and collection. The size of the securitization community virtually ensures that a selling firm will suffer for its involvement in a problematic securitization transaction. And for some firms, such as banks, mortgage, credit card, and car loan receivable originators, which anticipate fairly regular use of securitization, the cost of careless origination or servicing should be particularly high.

Securitization also may improve the process by which payments are made to securities holders. Amounts collected on account of the receivables must be

158. Changing Market, *supra* note 32, at 5-6. Typically, collection services are contracted for with the selling firm or its affiliate - that is, the firm which would have performed those services had the receivables not been securitized. See Frankel, *supra* note 1, at 14.9. Thus, there should be no specialization benefit involved. In transactions where there are multiple sellers, there may be a new collection agent appointed. This appointment might yield specialization benefits.

159. Webster's defines moral hazard as "an insurance company's risk as to the insured's trustworthiness and honesty." Webster's Encyclopedic Unabridged Dictionary of the English Language 930 (1989). The term is used more broadly to refer to a person's proclivity to incur greater costs if some or all of those costs are someone else's responsibility.

160. Schwarcz notes that one efficiency benefit of securitization may be that rating agencies and insurers are specialists in monitoring. Schwarcz, *Alchemy*, *supra* note 1, at 151.

161. In more traditional financing arrangements without such mechanisms, collection tasks would likely be done by the firm under a less formal arrangement. The firm's employees, in furtherance of their own advantage or leisure, might be tempted to collect the receivables in a less than diligent manner, or be lax in paying (or not paying) over the collection proceeds. Securitization can bring needed discipline to the process.

Finally, receivables sellers [in the health care industry] are required to track payments, and abnormally high delinquency rates trigger a wind-down of the financing. This requirement encourages borrowers to effectively monitor their receivables, to monitor reimbursement by individual payers, and to ensure that the collection process is efficiently designed and executed. Receivables days outstanding, a measure of efficiency, is invariably improved after securitization.

See Sen & Lawler, *supra* note 123, at 32. By comparison, in a factoring transaction, factors might take over collections themselves. The factoring transaction structure might not, however, be of a scale and nature as to profitably employ the collection techniques developed for use in securitization transactions. Schwarcz, *Alchemy*, *supra* note 1, at 145-46.

held and disbursed to pool securities holders. Custodial and disbursement services are contracted for with a third party, often a trustee.¹⁶² The trustee is a specialist in holding and disbursing money. More importantly, perhaps, a trustee is a specialist in being honest. The trustee's honesty is available at low cost: trustees are not (and are not paid to be) in the business of being smart. The "product" of trustees apparently was crafted to be a very low-cost product, and employees who can exercise judgment are of course a much more expensive commodity than those who can follow orders.¹⁶³

162. This assumes the pool will be formed as a trust. Many, if not most, pools are formed as trusts. If there is no trustee, the trustee-specific issues, costs, and benefits I cite are not available; however, transactions not involving trustees have their own mechanisms to assure honesty and care, which should yield most of the same benefits as are available with trustees. For ease of analysis, I do not separately analyze transactions not involving a trustee.

163. The contracts with trustees, indentures and trust agreements, provide support for this characterization. Both types of agreements read like "how-to" manuals, specifying in extraordinary detail how a trustee is to perform its duties. And a trustee who, notwithstanding the level of detail, is faced with a decision requiring discretion, and makes the wrong decision, is protected by numerous disclaimers of liability. In most matters, the trustee is only liable for gross negligence or wilful misconduct. The trustee is not liable for honest errors of judgment. And the trustee is permitted to seek the advice of experts in questionable cases, and is not liable for action taken in reliance on that advice. Consider the following provisions:

(a) The Indenture Trustee is authorized to take such actions as are expressly set forth in the Surety Bond. In the event that on the second Business Day before a Payment Date, and again on the Business Day before a Payment Date, the Indenture Trustee has not received sufficient moneys to pay all principal of and interest on the Notes due on such Payment Date, the Indenture Trustee shall immediately notify the Insurer or its designee on the same Business Day by telephone or teletype, confirmed in writing by registered or certified mail, of the amount of the deficiency.

(b) If the deficiency is made up in whole or in part prior to or on the relevant Payment Date, the Indenture Trustee shall so notify the Insurer or its designee.

Indenture, *supra* note 48, 7.2.

(c) The Issuer [the pool] shall punctually perform and observe all of its obligations and agreements contained in this Indenture, the Basic Documents and in the instruments and agreements included in the Trust Estate, including but not limited to filing or causing to be filed all UCC financing statements required to be filed by the terms of this Indenture in accordance with and within the time period provided for herein and therein.

Id. 3.6.

(a) The Trustee shall not be required to take any action hereunder or under any Basic Document if the Trustee shall have reasonably determined, or shall have been advised by counsel, that such action is likely to result in liability on the part of the Trustee or is contrary to the terms hereof or of any Basic Document or is otherwise contrary to law.

(b) In the event that the Trustee is unable to decide between alternative courses of action permitted or required by, or is unsure as to the application of, any provision of this Agreement or any Basic Document, or any such provision is ambiguous as to its application, or is, or appears to be, in conflict with any other applicable provision, or in the event that this Agreement permits any determination by the Trustee or is silent or is incomplete as to the course of action that the Trustee is required to take with respect to a particular set of facts, the Trustee may give notice (in such form as shall be appropriate under the circumstances) to the Owner requesting instruction and, to the extent that the Trustee acts or refrains from acting in good faith in accordance with any such instruction received, the Trustee shall not be liable, on account of such action or inaction, to any Person. If the Trustee shall not have received appropriate instruction within 10 days of such notice (or within such shorter period of time as reasonably may be specified in such notice or may be necessary under the circumstances) it may, but shall be under no duty to, take or refrain from taking such action not inconsistent with this Agreement or the Basic Documents as it shall deem to be in the best interests of the Owner, and shall have no liability to any Person for such action or inaction.

Trustees also are in the business of not becoming subject to Chapter 11 of the Bankruptcy Code.¹⁶⁴ The trustee is exceedingly unlikely to go bankrupt. There is a legal distinction between the entity (typically, a trust company but sometimes some other financial institution) which serves as trustee and the trustee. The trust company's creditors are not creditors of the trustee, nor are they creditors of the pool for which the trustee serves as trustee. Moreover, the entities which act as trustees typically are not subject to the federal bankruptcy code;¹⁶⁵ the regime which governs their bankruptcy apparently respects far more the agreed-upon rights and duties of the trustee.¹⁶⁶

The extra layer described above is needed to preserve securitization's insulation of the pool securities holders from the selling firm. The receivables are sold to a pool which issues the pool securities. The pool must make payments on the pool securities from the receivables payments. Thus, the pool needs to arrange for collection of the receivables, custody of the funds collected, and disbursement of the funds to pool securities holders. I argued above that from this necessity may come certain benefits. These benefits may not be sufficient to justify the use of the extra layer, but may make the extra layer pay for itself. More generally, competition among some of the extra parties involved in a securitization transaction also may add value. For example, insurers are designing creative securitization transaction structures which involve risks they have particular expertise in appraising and bearing.¹⁶⁷

Firms, such as banks, finance, mortgage, and leasing companies, and

164. Amended and Restated Declaration and Agreement of Trust Relating to [Trust] by and Between Wilmington Trust Co., as Trustee, and [Seller of the Receivables or its Successor in Interest] 4.05 (June 1, 1994) (on file with author). *11 U.S.C. 101-1330* (1994).

165. Certain entities are ineligible to be debtors under Chapters 7 or 11 of the Bankruptcy Code. See, e.g., *11 U.S.C. 109(b), (d)* (1994). These entities include the types of financial institutions that typically serve as trustees. Instead, these entities are subject to various state or federal insolvency or liquidation proceedings. See Shenker & Colletta, *supra* note 1, 1377-78 & nn.32-36.

166. See generally Schwarcz, Alchemy, *supra* note 1, at 135-36.

167. See *supra* note 130.

credit card issuers, whose main business involves receivables (I will call them financing firms) should benefit most from the ability to specialize in origination and perhaps servicing. However, they should benefit least from securitization's effect of inspiring more efficient origination and servicing. Financing firms already have sufficient incentive to efficiently originate and service their receivables absent securitization. Firms whose main business does not involve receivables (I will call them nonfinancing firms) should benefit more from more efficient origination and servicing. They should scarcely benefit, however, from the ability to specialize in origination. Lemons firms, whether they are financing firms or not, should benefit most from more efficient monitoring of their origination and servicing. For such firms, investor discounts for moral hazard problems associated with receivables would be particularly large, but should be amenable to reduction with monitoring.

b. Regulatory Costs and Subsidies:¹⁶⁸ Taxes

Some firms are subject to regulatory costs that securitization can help reduce. An account of how securitization can reduce regulatory costs involves exploration of various regulatory schemes applicable to different types of firms; I discuss some of the more important such schemes in Appendix D.¹⁶⁹ For many types of transactions, the regulatory cost reductions that securitization permits may be significant; however, in some transactions, securitization's contribution may be smaller than first appears. Securitization helps some firms meet regulatory mandates, such as those requiring them to maintain "adequate" levels of capital.¹⁷⁰ However, the regulatory mandates may not differ significantly from implicit market mandates. For instance, financial firms not subject to the regulatory scheme mandating capital adequacy are held to somewhat similar capital adequacy standards by rating agencies.¹⁷¹ Securitization's contribution, thus, may be less to reduce costs of complying with regulations, and more to achieve cost-effectively what the

168. I use the term "subsidies" broadly to include relief from generally applicable laws and regulations, and provision of services (such as credit enhancement services) by a governmental body for a less-than-market price.

169. There are many regulatory regimes that influence some firms in favor of, or against, securitization. Examples include the regimes governing insurers and health care providers. A full consideration of such regimes and their effects is beyond the scope of this Article.

170. See *infra* Appendix D, 2.

171. See *supra* note 86.

regulators require and the markets reward.

Securitization also may reduce other types of regulatory costs, such as bankruptcy costs. Securitization moves some of a firm's assets (receivables) further away from bankruptcy's ambit.¹⁷² Indeed, the transaction is carefully structured to have this effect. If, as has been argued, the process of bankruptcy is inefficient,¹⁷³ this feature of securitization could yield cost savings. But the closer a firm is to bankruptcy, the more difficult and uncertain it is to effectively remove some of the firm's assets. Either the securitization transaction will not be done, or it will be done in a particularly costly manner.¹⁷⁴ The firms closest to bankruptcy probably will not experience much benefit; however, the firms further away from bankruptcy might experience more of a benefit. But bankruptcy costs presumably have the least effect on the value of firms further away from bankruptcy. Thus, the magnitude of any bankruptcy-cost reduction benefit that securitizations might offer should be small.

Securitization can exploit the existence of regulatory costs and benefits in other ways. Applicable laws and regulations have sometimes prevented or discouraged some investors from investing in lower rated securities.¹⁷⁵ The price of higher rated securities may have risen to reflect this regulatorily inspired demand, thus making the spread between lower rated and higher rated securities too large, given underlying cash flows.¹⁷⁶ Indeed, such an

172. Schwarcz, *Alchemy*, supra note 1, at 135-36.

173. See, e.g., F.H. Buckley, *The American Stay*, 3 S. Cal. Interdisciplinary L.J. 733, 744-61 (1994).

174. See Schwarcz, *Alchemy*, supra note 1, at 142.

175. See supra notes 37-44 and accompanying text (discussing the rating standards).

176. Shupack cites this regulatorily inspired "preference" by affected investors as an example of investor differences (clienteles effects) that could account for securitization's positive-sum effects. See Paul M. Shupack, *The Politics of Article 9: On Boundaries and Definitions: A Commentary on Dean Baird*, 80 *Va. L. Rev.* 2273, 2296 (1994); Shupack, supra note 9, at 809 & n.72; supra note 14. In a Modigliani and Miller world, the prices of all securities would, of course, be dictated by the net present value of their underlying cash flows. And the price of a device, such as insurance, which increases net present value, would be the same as the value of the increase. Thus, if a clientele effect favoring higher rated securities is an impetus for securitization, the higher rated securities must enjoy a demand premium. If securitization is simply a cheaper way of achieving higher quality (and thus higher ratings), a clientele effect is not needed to account for its benefits. However, as I argue in the text and in note 14, supra, an explanation of securitization based on clientele effects manifested in a demand premium for higher-rated securities is incomplete. Lower quality firms have a variety of ways of issuing higher rated securities. Shupack's account does not address why securitization might have been selected rather than one of those other ways. The task of demonstrating why securitization might have been selected involves showing why securitization is a better way to achieve higher quality - a showing that does not require clientele effects. Moreover, clientele effects favoring higher rated securities cannot explain the securitization transactions that are unrated or done by higher quality firms who are readily able to issue highly rated securities in more traditional financing transactions.

effect is not implausible: the laws and regulations favoring high quality securities apply to many of the largest investors, such as many insurance companies, mutual funds, and pension plans.¹⁷⁷ By helping lower quality firms issue higher rated securities, securitization could help such firms capture part of any such demand premium. But lower quality firms would presumably benefit at the expense of higher quality firms who did not need securitization to help them issue highly rated securities.

The effect of the regulatorily inspired demand for higher quality securities is difficult to gauge. Compounding the difficulties, applicable regulations define the requisite level of quality differently,¹⁷⁸ while most include the top four rating agency categories, some include only the top two or three.¹⁷⁹ And, given the large volume of securitization transactions, it seems plausible that securitization should eventually cause any demand premium to shrink, or even disappear. Thus, securitization's ability to exploit a high-rating demand premium may not be long-lived.

Moreover, a lower quality firm has alternative means of issuing highly rated securities. A firm could increase the level of its capital. A firm's level of capital is an important factor in its credit rating; indeed, rating agencies specify capital levels for each rating. Or, a firm can obtain insurance for the securities, just as it often does for securitization securities. A higher quality firm does not need securitization to issue highly rated securities. Thus, as with the other benefits claimed for securitization, the appropriate measure is the increment of cost-savings over the alternative means of achieving the same end.¹⁸⁰

177. See *supra* notes 37-44 and accompanying text.

178. See *supra* notes 39, 43.

179. *Id.*

180. And securitization can reduce other regulatory costs. In 1994, New York City securitized \$ 208 million of notes backed by delinquent tax receivables. Had it borrowed the funds, it would likely have had to cede control of its finances to a control board. Ann Monroe, *A Taste for the Different and Difficult*, Institutional Investor, Jan. 1995, at 77, 78; see also Borod, *Securitization*, *supra* note 1, 1.06.B.5.g; Andrew Bary, *Trading Points: Thank You, Deadbeats*, Barron's, June 27, 1994, at MW10.

There are still other benefits which are not strictly regulatory, but are akin to regulatory cost reductions. For instance, firms subject to covenants in their loan agreements precluding or making more costly additional debt also might obtain financing in securitization transactions. *Financing Techniques*, *supra* note 1, at 531. To the extent the transactions implicate the same sorts of concerns as do additional borrowings, lenders should increasingly use the same safeguards against securitizations as they do against borrowing. Thus, this form of "lender arbitrage" should no longer be possible as securitizations become more common and lenders become more savvy. But the substantive differences between secured borrowing and securitization may very well be sufficient to justify lenders in continuing the different treatment.

Tax considerations may be relevant in a firm's decision to use securitization. Securitization can be structured either as a borrowing or as a sale of the receivables. The firm can structure the transaction to obtain the tax treatment it finds most advantageous. For instance, if the transaction is treated as a borrowing, the firm can deduct the interest payments made to pool securities holders.¹⁸¹ If the transaction is treated as a sale of assets (the receivables), the firm cannot deduct interest payments, and may have to take any gain or loss on the sale into its income.¹⁸² Moreover, the firm can obtain tax "borrowing" treatment for some purposes but "sales" treatment for others.¹⁸³ Securitization does not, however, enable a firm to obtain tax treatment it otherwise could not obtain. In any event, tax structuring to achieve the desired treatment may be costly.¹⁸⁴ Thus, the magnitude of any tax benefit securitization might offer should be quite small.¹⁸⁵

3. Securitization May Reduce Transaction Costs

The foregoing discussed the process of crafting securities of both higher quality and greater liquidity. Some of securitization's benefits relate only to increases in liquidity. One such benefit involves reduction of transaction costs.

Each investor wants an investment portfolio that meets its needs. Every new type of security created can reduce an investor's transaction costs in assembling its desired portfolio. A new security can have a risk and reward configuration the investor otherwise could have obtained only by acquiring, at higher cost, several securities. Securitization securities are new types of securities, sometimes offering novel risk and reward configurations. For instance, some pool securities represent senior interests in diversified receivables; others represent more exotic and riskier residual interests, payable only if the senior interests are repaid in full.¹⁸⁶ Indeed, before

181. I.R.C. 163 (1994).

182. I.R.C. 61(a)(3), 1001 (1994).

183. See *supra* notes 84-85, 98-100 and accompanying text.

184. For a general discussion of tax considerations involved in structuring securitization transactions, see Frankel, *supra* note 1, at 8.10-15.11.

185. Indeed, very few securitization transactions are done for tax reasons; some, however, are.

186. Moreover, as discussed in Appendix D 2, *infra*, a securitization security may be valued because firms required to maintain a certain level of capital against each asset need retain less capital against securitization securities than the loans underlying such securities. More generally, there are many reasons why an investor might value a security representing a particular risk and return configuration. One story told on Wall Street is that securities representing rights to receive principal payments from other financial instruments were originally developed for sale to investors whose religion forbade them from receiving "interest."

securitization, some portfolios might have been impossible to assemble. Whether or not a portfolio having risk and return characteristics identical to a portfolio including pool securities could have been constructed pre-securitization, securitization likely makes construction of such a portfolio easier and cheaper. And the benefits go beyond the role securitization securities can play in helping investors construct their desired portfolios. Each new type of financial instrument assists investors seeking to craft ever more precise portfolios. Thus, each instrument's existence makes the others more valuable.

This benefit seems quite small in most cases.¹⁸⁷ And there does not seem to be much difference in its magnitude for different types of firms. However, the cost to obtain the benefit is also likely quite small. The additional increment of effort needed is minimal, once the transaction's other structuring objectives have been met.

4. Summary

I have identified several benefits securitization may offer. One is to reduce information costs. Securitization may inspire the development and use of lower cost appraisal techniques for some of a firm's receivables. Securitization also may inspire a firm to create a capital structure consisting of securities that lend themselves to lower cost appraisal. Lower cost appraisal could lead to more efficient risk bearing; someone better situated to appraise a risk may be better at bearing it. Indeed, securitization may reduce

187. This benefit does exploit investor differences, but not systematic ones. The economies of scope from crafting tailored cash flows are likely present, but are unlikely to be large. Indeed, the greatest benefit appears to be in the ability to offer a large selection of securities - to "customize" securities for some particular set of investor needs at slightly lower cost than the investor would incur purchasing comparable securities itself. An illustration by Lyn Perlmuth of securitization's ability to help customize securities for investors follows:

Chrysler has concocted a total rate of return bond, since used by GMAC [General Motors Acceptance Corporation] as well, that guarantees investors no principal prepayment for a specified period, often a year. In what might be called a something-for-everyone bond, GMAC earlier this year issued a \$ 3 billion eight-tranche auto-loan-backed deal containing money market, total-rate-of-return, floating rate, and fixed rate pieces.

Lyn Perlmuth, *An Asset-Backed Upsurge*, Institutional Investor, Nov. 1993, at 167.

aggregate information costs for all of a firm's financiers in a variety of ways. Securitization helps to extract, from a mass of hard-to-quantify risks, some particular risks that can be more easily quantified. And a firm's selection of securitization may be a low-cost signal of its quality.

Securitization also may increase a firm's cash inflows in several ways. Securitization permits specialization in receivables origination and servicing. It also may inspire more efficient receivables origination and management, and lead to reductions in agency costs. Securitization also may increase a firm's cash inflows by reducing regulatory costs. It may reduce costs of complying with applicable regulatory regimes, or help make available certain regulatory subsidies. Moreover, it may reduce bankruptcy costs by moving some assets (receivables) from the firm to a more bankruptcy-remote location. Securitization also may permit a firm to select differently labelled treatments for tax and other purposes, and select either a debt or an equity tax regime for the transaction, whichever is more favorable. Finally, securitization also may reduce transaction costs associated with the assembly of a particular portfolio or make possible the assembly of a theretofore impossible portfolio.

Of these benefits, two seem largest: information cost reductions and regulatory cost reductions. Securitization may offer significant reductions in information costs. However, this benefit seems larger for some firms, particularly lemons firms, than for others.

The magnitude of securitization's regulatory cost reduction benefit also varies markedly among transactions. For some transactions, the benefit is extremely large; for others, it may be quite small. The largest regulatory cost reduction benefits occur only under regimes applicable to particular firms or transactions. The benefits of more generally applicable regulatory cost reductions are likely to be smaller. Bankruptcy cost reductions, for instance, should be of some benefit, but mostly to firms whose financial condition is middling - sufficiently good that the transaction structure is viable without costly safeguards, but not so good that the prospect of bankruptcy is exceedingly remote. Tax savings, too, should be fairly small. Generally, all securitization does is make less costly a firm's choice of financing structures by allowing it to choose among the previously available tax treatments.

Securitization's other benefits seem smaller. Nonfinancing firms should benefit more from better origination and servicing of their receivables. They may not have had sufficient resources or incentive to put into place the mechanisms the securitization transaction structure requires. By contrast, financing firms likely will have had both the resources and incentive to

originate and service their receivables efficiently, even absent securitization. Some financing firms may benefit from being able to specialize in receivables origination - if others really are much better risk bearers, then this benefit might be fairly sizeable. And specialization in receivables servicing may enable more efficient, and cheaper, servicing. Another benefit securitization may offer also follows from carving up tasks and assigning them to specialists: those specialists may compete with each other to help structure transactions that use their expertise yet more efficiently.¹⁸⁸ All firms may benefit from securitization's ability to assist investors in assembling investment portfolios. However, securitization's contribution is simply to offer a new type of security, somewhat different from the securities previously available. The increment of additional value added should not be significant.

Some of the foregoing benefits rely on differences between investors. For instance, the regulatory constraints on purchases of lower quality securities, and the regulatory subsidies for purchases of securitization securities, apply only to certain subsets of investors.¹⁸⁹ Similarly, some specialization benefits rely on the existence of investors with different skills and expertise. However, many other benefits do not rely on investor differences. For instance, specialization of third parties likely benefits all investors: if receivables can be appraised and monitored more cheaply by a rating agency and insurer, investor differences should not appreciably affect the availability of this benefit. Most importantly, however, the information cost reducing effect responsible for sweetening lemons firms does not rely on investor differences. While some investors may be better situated than others to appraise lemons firms, securitization's solution to the lemons problem is to extract from such firms the risks more readily appraised by nonspecialists (or, more precisely, specialists in appraising nonfirm-specific assets).

This Part has considered how securitization might benefit different types of firms. The next Part considers how these benefits might account for the securitization transactions being done today.

C. Who Does Securitization Transactions, and How Might They Benefit?

The three government-sponsored entities ("GSEs"), Fannie Mae, Freddie

188. See *supra* note 130.

189. See *supra* Part IV.B.2.b; *infra* Appendix D.

Mac, and Ginnie Mae, are responsible for the vast bulk of securitizations now outstanding.¹⁹⁰ The GSEs securitize residential mortgages: Fannie Mae and Freddie Mac securitize mortgages to high-quality ("A") borrowers, and Ginnie Mae securitizes mortgages guaranteed by the Federal Housing Administration or the Veterans Administration.¹⁹¹

Other firms engaging in securitization transactions are quite varied. They include firms in various lines of business, large and small firms, and higher rated and lower rated firms.¹⁹² Firms commencing securitization transactions in 1995¹⁹³ include: (i) Chase Manhattan Bank, whose parent's debt S&P rated A/A-; (ii) Ford Motor Credit Company, whose debt S&P rated A+; (iii) Neiman Marcus Group, Inc., whose debt was unrated by S&P, but whose main stockholder, Harcourt General, Inc., had debt S&P rated BBB/BBB+; (iv) Bally Health & Tennis Corp., whose debt was unrated by S&P and which was being spun off from Bally Entertainment Corp., whose debt S&P rated B+/BB; (v) the Money Store, Inc., whose debt was unrated by S&P; and (vi) Olympic Financial, Ltd., whose debt was also unrated by S&P. General Electric Capital Company ("GECC"), a subsidiary of General Electric Company, has also done securitization transactions; S&P rated GECC's debt AAA. Using ratings as a rough indicator of the severity of a firm's lemons

190. Because of recent movements of interest rates, mortgage originations and hence mortgage securitization transactions have declined precipitously. Mortgage securitization transactions thus represent a much smaller proportion of securitization securities issued in 1994 than securitization securities outstanding as of December 31, 1994. See *supra* note 4; *infra* Appendix A; see also Anita Raghavan, *Collapse Among Mortgage-Backed Securities Leaves New Issues Down 57% for the Year*, *Wall St. J.*, Jan. 3, 1995, at 38. The GSE share is also declining as a percentage of total mortgage securitizations. This likely reflects an increase in "nonstandard" mortgage originations, which represent the bulk of non-GSE securitizations, as a percentage of total mortgage originations.

191. See *infra* Appendix D, 1.

192. Rating agencies do not rate firms; rather, they rate firms' debt. See *supra* note 39. Many firms, and most large firms, obtain ratings for some of their debt. Investors in public transactions, and many investors in private transactions, require debt they purchase to be rated. See *supra* notes 37-44 and accompanying text.

The ratings in the text are Standard & Poor's ratings of the firms' long-term nonconvertible bonds, obtained from Standard & Poor's Corporate Descriptions plus News of the firms, available on LEXIS, Compny Library, Spdesc File. The Corporate Descriptions I use have a load date of October 19, 1995. Firms' debt ratings change over time; a systematic exploration of the calibre of firms using securitization would have to take into account the firm's debt rating at the time it does each securitization transaction.

193. All these firms, other than Bally, filed registration statements with the Securities Exchange Commission for public offerings of securitization securities in 1995. Bally's offering of securitization securities was described in Jeffrey Keegan & Ronan Donohue, *Bally's Plays Musical Agents On Its Troubled 144A Deal*, *Investment Dealers' Dig.*, Feb. 6, 1995, at 15; and Bally's Health & Tennis \$ 200 Million Notes Rated "B" By Fitch, *PR Newswire*, July 12, 1995.

problems, the foregoing suggests that both lemons and nonlemons firms use securitization. Among the lemons firms, too, may be those whose debt is unrated, especially if the debt bears high interest rates.¹⁹⁴

The types of receivables securitized include: (i) mortgages of types not securitized by the GSEs, such as "jumbo" mortgages,¹⁹⁵ mortgages to "B" and "C" borrowers,¹⁹⁶ and commercial mortgages; (ii) credit card receivables; and (iii) auto loans. Increasingly, business loans, auto equipment leases, and trade receivables are being securitized.¹⁹⁷ Other receivables sometimes securitized include health care, airline ticket, and lease receivables.¹⁹⁸ These receivables represent a small, but increasing, portion of the aggregate securitizations.¹⁹⁹

For some firms, regulatory benefits - that is, regulatory subsidies and/or cost reductions - are clearly a large impetus for using securitization.²⁰⁰ A notable example is government-related, mortgage-backed securities transactions. The GSEs were statutorily directed to do these transactions; the transactions receive significant government subsidies. Financing firms receive regulatory benefits for selling their conforming loans to the GSEs. And, as discussed in Appendix D, some firms, such as banks, are subject to regulatory regimes that may favor securitization. In Modigliani and Miller terms, a very simple account can be given: there are regulatory benefits which these users of securitization can obtain.²⁰¹

For other firms, regulatory benefits are less important, and other benefits

194. Olympic Financial's debt bore interest at rates between 9.875% to 13%; by contrast, GECC's debt bore interest at rates between 5.25% to 9.95%. See Standard & Poor's Corporate Descriptions plus News, available in LEXIS, Compny Library, Spdesc File. Of course, many factors affect the interest rates on a firm's debt, including the terms of the debt and the prevailing interest rates at the time the debt is issued.

195. Jumbo mortgages are mortgages for amounts exceeding \$ 207,000. They generally have higher fees, and higher interest rates, than traditional loans. Jonathan Auerbach, Buyers of Pricey Properties Save with Piggyback Deals, Wall St. J., June 7, 1996, at B10; see also *infra* note 236.

196. One third-party benefit of securitization transactions is that more mortgage loans to lower rated borrowers are likely being made, and at lower rates, as the secondary market for such loans expands. See Phil Britt, B&C Lending Growth Predicted; Nonconforming Bank Loans, Savings & Community Banker, Mar. 1995, at 43.

197. See Essenburg, *supra* note 60; see also *supra* note 69 and accompanying text.

198. See generally *supra* notes 68-69 and accompanying text.

199. See *infra* Appendix A.

200. See *supra* Part IV.B.2.b; see also *infra* Appendix D. Indeed, one commentator's account of securitization by banks attributes the use largely to regulatory benefits, and somewhat to the benefits of specialization. See Borod, Securitization, *supra* note 1, 1.02.A, 2.01-.03.

201. The regulators, however, may have encouraged (and subsidized) securitization, rather than other means of achieving their end of promoting housing, partly in recognition of the efficiencies the transaction structure offers.

are more important. I have argued that lemons firms should enjoy the greatest nonregulatory benefits. What lemons firms need, far more than nonlemons firms, is "sweetening" - a means to convince investors that the firm is not as "sour" as they fear. I argued in Part IV.B that securitization can sweeten a lemons firm at lower cost by reducing investors' information costs about the firm.²⁰² But, as discussed above, many securitization transactions are done by fairly highly rated firms.²⁰³ Highly rated - that is, nonlemons - firms may benefit mostly from small cost savings which, in the aggregate, make securitization no more costly, and perhaps somewhat less costly, than such firms' financing alternatives. Such firms may use securitization principally to arbitrage small mispricings among financial markets.²⁰⁴ At any particular time, one market may offer better rates than another. A firm poised to select among markets can take advantage of the better rates. The cost savings I have identified should make securitization sufficiently low-cost, compared to the alternatives, that it can be used for this purpose. This model has a place in a Modigliani and Miller world: securitization is assisting the arbitrage on which their theorem relies to correct market mispricings.²⁰⁵ Indeed, Modigliani and

202. I have argued that lemons firms' residual risks are harder to appraise than those of nonlemons firms, but that their receivables are not appreciably harder to appraise. The same argument should favor lemons' firms use of factoring over the other means of financing available to them. Empirical work would be needed to determine the extent of lemons firms' pre-securitization and, for that matter, present-day use of reliance on factoring.

203. See *supra* notes 191-93 and accompanying text.

204. Indeed, even without differences in rates among markets, securitization might present a close, but worthwhile, call, for reasons other than "financing cost savings," narrowly defined. A healthcare industry publication, *Healthcare Financial Management*, states that only firms whose senior unsecured debt is rated A or lower will save on financing costs; the implication necessarily is that firms with debt rated above A will not save on financing costs. Sen & Lawler, *supra* note 123, at 32. The reasons they give for A+ or better firms to use securitization include better matching of inflows and outflows, and fewer restrictive covenants - reasons that a broader definition of financing costs would encompass.

205. The process by which market differentials are set is dynamic. It depends on arbitragers continuously looking for, and trading away, small mispricings. There must be occasional mispricings, or the arbitragers who correct them could not be compensated for their efforts. Ronald J. Gilson & Reinier H. Kraakman, *The Mechanisms of Market Efficiency*, 70 *Va. L. Rev.* 549, 623 (1984); see also Buckley, *supra* note 10, at 1422, 1424. Indeed, rating agencies have told me that they look favorably upon companies that have the securitization arrow in their quiver for precisely this reason. Moreover, securitization may help the market set appropriate prices for securities generally. The process by which prices in financial markets are set is necessarily noisy and fluid. It virtually requires different (plausible) estimates of expected future cash flows; many, if not most, transactions occur because the buyer's estimate is higher than the seller's. Securitization may assist in choosing among estimates by providing some additional information, namely the appropriate relationship between particular higher and lower valued uses. Securitization also may help markets correct prices by eliminating any demand premium high quality securities might otherwise have on account of regulatorily inspired excess demand. See *supra* Part IV.B.2.

Miller's theorem can even accommodate black-box reasons for such mispricings, so long as the mispricings are short-lived.

Empirical work would be needed to determine how particular firms benefit from using securitization. However, practitioner accounts of securitization's benefits, as well as various accounts in industry publications²⁰⁶ of why firms use securitization, support the two characterizations of securitization's nonregulatory benefits described in the preceding paragraph. First, securitization offers larger, lemons-sweetening benefits for firms with more severe lemons problems. Second, securitization offers small arbitrage-style benefits for firms with many other financing possibilities. As discussed in the Introduction and Part IV.A, securitization's benefits, according to practitioners, are mainly to increase a firm's access to capital markets, and permit the issuance of higher quality, higher rated securities. Lemons firms' access to capital markets, and ability to issue higher quality securities, are generally far more limited than that of nonlemons firms;

206. In a poll conducted by the Institutional Investor, chief financial officers of various firms were asked a number of questions about securitization. The respondents represented a wide range of firms, including manufacturing (49%), financial (14.1%), and service firms (18.1%). *Securitization Hesitation*, supra note 59, at 241. The poll was sent to 1000 CFOs; 100 responded. The respondents' firms varied widely in size:

- 3.4% had gross revenues less than \$ 100 million,
- 20.1% had gross revenues between \$ 100 million and \$ 499 million,
- 20.8% had gross revenues between \$ 500 million and \$ 999 million,
- 28.9% had gross revenues between \$ 1 billion and \$ 2.9 billion,
- 10.1% had gross revenues between \$ 3 billion and \$ 4.9 billion, and
- 16.8% had gross revenues of \$ 5 billion or more.

Telephone interview with Michael Pelz, Staff Writer, Institutional Investor (Nov. 8, 1995).

The CFOs were asked why their firms might find securitization attractive. The most common answer was "to diversify funding sources" (49%). The next most common answers were: "investor interest is strong" (32.7%); "company is highly leveraged or transitional and is facing steep borrowing costs" (30.6%); and "securitization is more efficient and profitable than selling loans in the secondary market" (26.5%). *Id.*

Other accounts are similar; diversification of financing sources and lower financing costs are often cited. And the benefits to lower quality issuers of increased access to financing are sometimes noted. See Chisholm, supra note 67, at 1; Kenneth Cline, *Banks Steered Clear of Securitizing Car Loans* in "94, *Am. Banker*, Jan. 20, 1995, at 6; Essenburg, supra note 60; Sen & Lawler, supra note 123; *Finances: After a Record Year, Card-Bond Sales Could Hit New Highs in 1995*, *Credit Card News*, Jan. 15, 1995. Diversification of financing sources and exploitation of "strong investor interest" sound like arbitrage-style reasons. Financing costs savings, including efficiencies over selling loans in the secondary markets, could be part of an arbitrage story or a lemons-sweetening story. The use of securitization by a highly leveraged or transitional company, or one that needs increased access to capital markets, is part of a lemons-sweetening story.

thus, these benefits should be of more value for lemons firms. This Article has attempted to show how securitization could offer these benefits.²⁰⁷

V. CONCLUSION

Securitization is a method for crafting higher valued securities from receivables streams. Violations of various Modigliani and Miller assumptions explain why securitization might be able to achieve net increases in value. One such violation is the existence of regulatory costs and benefits. Indeed, securitization seems very much a creation of the regulatory regime. Without the regulatory regime, the securitization transaction structure itself might not have developed. The initial structuring expenditure was, to a not-insignificant extent, borne by the U.S. government.²⁰⁸ Moreover, a governmental body, the Resolution Trust Corporation ("RTC"), structured the first commercial mortgage securitization transactions, thereby solving problems the private markets had not.

The private markets were able to solve the problems involved in securitizing credit card receivables.²⁰⁹ Credit cards are, however, the best case for a private market solution, requiring only sophisticated financial modelling that investment bankers could develop from the comfort of their own offices. Private (nongovernment) users might - or might not - have been sufficiently motivated to create the securitization transaction structure. Indeed, the private users who would seem to benefit most, firms with the most severe lemons problems, likely have the fewest resources with which to have created the structure. Securitization may have met the strong test of survival; however, but for U.S. government involvement in the genesis of the transaction structure, it might not have met the weak test of birth.²¹⁰ Certainly, if there were no regulatory benefits available, the securitization "world" would be

207. This Article deals with the reasons why a firm would securitize receivables it originated in the course of its business. There are some firms whose sole business is buying and securitizing receivables they consider underpriced. For example, a practitioner told me about one transaction in which a firm bought and securitized receivables subject to a liability it believed the market overweighted. After a large volume of these transactions had been done, demand and experience with the receivables eliminated the difference between the market's appraisal of the liability and that of the firm, and the transaction ceased to be profitable.

208. See *infra* Appendix D for a history of securitization transactions.

209. See *supra* note 122.

210. Victor P. Goldberg & John Erickson, Quantity and Price Adjustment in Long-Term Contracts: A Case Study of Petroleum Coke, *30 J.L. Econ.* 369, 371 (1987) (coining the terms "weak test of birth" and "strong test of survival").

quite different.

But, I argue, securitization offers far more than regulatory benefits. Securitization seems to reduce a variety of real-world costs, such as information, agency, and transaction costs. For some firms, securitization's nonregulatory benefits may be fairly small. Firms with many financing alternatives (and, most likely, the mildest lemons problems) may use securitization mostly to arbitrage small price differences in financial markets. For other firms, the benefits may be larger. Firms with fewer financing alternatives (and, most likely, the most severe lemons problems) may use securitization because it offers far lower financing costs. Investors can limit costly appraisals of residual risks, and confine their inquiries to assets far more cheaply appraised: rights to receive money. At low cost, securitization has sweetened the lemon.

APPENDIX D: THE RECENT REGULATORY HISTORY OF SECURITIZATION

The recent regulatory history of securitization has been discussed by a variety of commentators; but for differences in emphasis, their stories are consistent.²¹⁷ This discussion briefly summarizes the literature in this area.²¹⁸ For purposes of recounting this history, it is helpful to distinguish between the securitization of mortgages and the securitization of receivables, including mortgages, by banks and other financial institutions (referred to collectively as "banks").

*1. Securitization of Mortgages*²¹⁹

The modern era of securitization began in 1970 when the United States government created the Federal Home Loan Mortgage Corporation ("Freddie Mac").²²⁰ Freddie Mac joined its siblings, Government National Mortgage Association ("Ginnie Mae") and Federal National Mortgage Administration ("Fannie Mae"; all three collectively, "GSEs" or "government sponsored entities") in making a secondary market in mortgages - that is, buying and selling mortgages. Fannie Mae and Ginnie Mae had bought and sold mortgages and mortgage-backed securities guaranteed by the Veterans Administration ("VA") and the Federal Housing Administration ("FHA").²²¹ By contrast, Freddie Mac's secondary market activities involved "conventional" mortgages (that is, mortgages that are FHA or VA insured); conventional mortgages constitute the vast bulk of all mortgages.²²²

Freddie Mac was authorized, like its siblings, to issue "mortgage-backed securities."²²³ Mortgage-backed securities are securities whose repayment is backed by a pool of mortgages. The pool issues securities; payments on the securities are made from payments received on the mortgages.²²⁴ The original

217. See generally, Frankel, *supra* note 1, 2.4.2-.3, .6, 6.2; Litan, *supra* note 4, at 13-14; Puchala, *supra* note 69, at 153-58; Shenker & Colletta, *supra* note 1, at 1383-93, 1395-96, 1403-06.

218. For more discussion on the history of the modern era of securitization, see Frankel, *supra* note 1, 6.2; James Grant, *Money of the Mind: Borrowing and Lending in America from the Civil War to Michael Milken 350-54* (1992); Litan, *supra* note 4, at 13-14; Shenker & Colletta, *supra* note 1, at 1383-88.

219. See Kohn, *supra* note 13, at 616-27.

220. Federal Home Loan Mortgage Corporation Act, Title III of the Emergency Home Finance Act of 1970, Pub. L. No. 91-531, 303(a), 84 Stat. 450, 452 (codified as amended at *12 U.S.C. 1452(a)* (1994)).

221. *Financing Techniques*, *supra* note 1, at 537.

222. Frankel, *supra* note 1, 6.2.

223. *12 U.S.C. 1455(a)*, 1719(d) (1994).

224. Schwarcz, *Alchemy*, *supra* note 1, at 135.

mortgage-backed securities were very simple. More complex types of mortgage-backed securities have since been developed.²²⁵

The creation of the GSEs was part of the U.S. government's initiative to promote and encourage housing, begun in the 1930s as part of New Deal legislation.²²⁶ The creation of a secondary market in mortgages enables banks with greater ability to attract deposits and less demand for mortgages to buy mortgages as investments. It also enables banks with less access to deposits and more demand for mortgages to resell their mortgages, acquiring more funds to make more mortgages.²²⁷ Thus, more funds become available to make mortgages, and mortgage rates are equalized throughout the country.

Securities issued by any of the three GSEs are backed, explicitly in the case of Ginnie Mae and implicitly in the case of Fannie Mae and Freddie Mac, by the full faith and credit of the United States Treasury.²²⁸ Thus, investors can be assured of full and timely repayment on the securities issued by any of the three; the securities will be paid even if the underlying mortgages are not. Therefore, GSEs do not need to pay for credit enhancement on their securities. They also are exempt from some federal, state, and local taxes,²²⁹ and federal (and consequently, often, state) securities laws, including the Securities Act of 1933²³⁰ regarding offerings of securities and the 1940 Act.²³¹ And, unlike banks, GSEs are not subject to capital adequacy ratios or reserve requirements, and do not need to pay deposit insurance premiums.²³² Thus, they have significant cost advantages over other issuers of mortgage-backed securities.²³³ Nevertheless, starting in the late

225. See Kohn, *supra* note 13, at 619; Carroll & Lappen, *supra* note 133, at 81.

226. See Federal Home Loan Mortgage Corporation Act, Title III of the Emergency Home Finance Act of 1970, Pub. L. No. 91-351, 303(a), 84 Stat. 450, 452 (codified as amended at *12 U.S.C. 1452(a)* (1994)); Federal National Mortgage Association Act, ch. 784, 62 Stat. 1206 (1948) (codified as amended at *12 U.S.C. 1716-1723h* (1994)); Housing and Urban Development Act of 1968, Pub. L. No. 90-448, sec. 802(c), 302(a)(2), 82 Stat. 476, 536-37 (codified as amended at *12 U.S.C. 1717(a)(2)* (1994)). For more discussion on the history of these entities, see Frankel, *supra* note 1, 6.2 and Charles R. Geisst, *Visionary Capitalism* 88-95 (1990).

227. See generally Frankel, *supra* note 1, 2.4.6.

228. *Id.* 6.2, at 182 & n.25; Benston, *supra* note 1, at 72 n.6; Shenker & Colletta, *supra* note 1, at 1387 n.85. See generally Carroll, *supra* note 13.

229. David A. Vise, *The Financial Giant That's in our Midst*, *Wash. Post*, Jan. 15, 1995, at A1 (discussing the District of Columbia's frustration over Fannie Mae's exemption from local income taxes).

230. *15 U.S.C. 77a-77bbb* (1994); see *supra* note 93 and accompanying text.

231. *15 U.S.C. 80a-1 to -64* (1994); see *supra* notes 94-97 and accompanying text.

232. The premiums and reserve requirements are unnecessary because the GSEs are backed by the Treasury. See *supra* note 228 and accompanying text.

233. "Fannie [Mae] pursues a public mission to support the residential housing market, abetted by distinctly nonprivate benefits that give it, and Freddie, a massive and virtually unassailable competitive advantage. Without this government backing - exemptions from Securities registration and from state and local taxes as well as the implicit federal backing that allows it to borrow at below-market rates - Fannie would be a radically different company, surely less profitable, less important." Carroll, *supra* note 13, at 60.

1970s, private parties began issuing mortgage-backed securities.²³⁴ They were able to exploit several niches unavailable to government issuers such as adjustable rate mortgages ("ARMs"), "jumbo" (large dollar amount) mortgages, lower quality mortgages ("B", "C", and "D" quality borrowers), and home equity loans.²³⁵

In 1986, legislation simplifying tax structuring of some complex mortgage-backed securitization transactions was adopted. Issuers (pools) meeting certain requirements (called REMICs) were expressly exempted from federal entity-level tax.²³⁶ Moreover, conveyances of mortgages to REMICs would not involve "sales" for federal income tax purposes.²³⁷

More recently, the U.S. government has, through the Resolution Trust Company ("RTC"),²³⁸ become involved in securitization of commercial real estate.²³⁹ Until the RTC was formed, securitization of commercial real estate mortgages had been quite uncommon.²⁴⁰ The large size of the RTC's portfolio prompted the development of creative solutions to the technical problems in securitizing commercial real estate mortgages.²⁴¹ These solutions have served as a template that the private market is increasingly adopting.²⁴²

2. *Securitized by Financial Institutions*

In the late 1970s, receivables other than mortgages began to be

234. The Handbook of Mortgage-Backed Securities 2 (Frank J. Fabozzi ed., 3d ed. 1992); S&P's Criteria, supra note 1, at 79; Financing Techniques, supra note 1, at 537.

235. Kohn, supra note 13, at 623-24. Indeed, nongovernmental issuers of residential mortgage-backed securities concentrate on "jumbo" loans, and unsecuritized ARMs find a ready market among banks. See Brendan J. Keane, A Greater Element of Risk; Mortgage Products, Mortgage Banking, May 1995, at 26.

236. See I.R.C. 860A-860G (1980).

237. See supra note 100 and accompanying text.

238. The RTC was established by Congress in 1989 to liquidate the assets of insolvent savings and loan associations. Kohn, supra note 13, at 311; Shenker & Colletta, supra note 1, at 1404; see also Financial Institutions Reform, Recovery, and Enforcement Act of 1989, Pub. L. No. 101-73, 501, 103 Stat. 183, 184 (codified as amended at scattered sections of 12 U.S.C.).

239. Shenker & Colletta, supra note 1, at 1404.

240. Id. at 1397-99.

241. Borod, Securitization, supra note 1, 1.04.D; Shenker & Colletta, supra note 1, at 1404.

242. See Bourrie, supra note 122; see also M. Cathy Anderson Coleman, Back from the Brink, Institutional Investor, Jan. 1995, at 87; Tim Gray, Centura Takes Loans to Wall Street, News & Observer, Mar. 12, 1995, at F1.

securitized.²⁴³ Banks were responsible for much of the securitization transaction volume:²⁴⁴ the largest dollar volume of receivables securitized involves mortgages,²⁴⁵ credit cards, and automobile loans, and many such receivables are held by banks.²⁴⁶ Banks, like other businesses, need funds to finance their operations, and historical, regulatory, and market forces combined to make securitization very attractive.²⁴⁷

Starting in the late 1970s, banks seeking financing had to confront increased competition for deposits.²⁴⁸ Money market funds, mutual funds, and life insurance companies, among others, also were seeking depositors' dollars. Banks therefore had to compete by offering depositors higher rates,²⁴⁹ and strong banks had to match the rates offered by capital-hungry weaker banks. Because deposits were backed by Federal Deposit Insurance Corporation insurance (and, formerly, Federal Savings and Loan Insurance Corporation insurance), depositors were assured of repayment, regardless of the financial health of the bank. Hence, depositors considered only the promised return, not the possibility that the bank would lack funds to pay it.²⁵⁰ These factors made raising money by means of deposits comparatively expensive.

Similarly, raising financing through stock or debt offerings also was expensive. Especially during the early 1980s, the financial condition of many

243. Financing Techniques, *supra* note 1, at 538; S&P's Criteria, *supra* note 1, at 61.

244. Borod, Securitization, *supra* note 1, 1.02; see also *supra* Appendix A.

245. Banks do securitize mortgages, but the vast bulk of mortgage securitizations are done by Fannie Mae, Freddie Mac, and Ginnie Mae. See *supra* Appendix A. Fannie, Freddie, and Ginnie, however, acquire their mortgages largely from banks. Mortgage Backed Securities Come of Age, Institutional Investor, Jan. 1992, at S2. Moreover, banks themselves also purchase mortgage-backed securities.

246. See *supra* notes 65-70 and accompanying text; *infra* Appendix A.

247. See generally Macey & Miller, *supra* note 120 (discussing contemporary developments, including securitization, that have made the "traditional" banking business obsolete).

248. See generally Litan, *supra* note 4, at 9-12.

249. Two pieces of legislation were enacted in the early 1980s to stem the outflow of funds from banks to money market and mutual funds: the Depository Institutions Deregulation and Monetary Control Act of 1980, Pub. L. No. 96-221, 94 Stat. 132 (codified as amended in scattered sections of 12 U.S.C.), and the Garn-St. Germain Depository Institutions Act of 1982, Pub. L. No. 97-320, 96 Stat. 1469 (codified as amended in scattered sections of 12 U.S.C.). Together, these statutes effectively ended Regulation Q, which had limited the amount of interest a bank could offer on its deposits. 12 C.F.R. 217.3 (1980) (Regulation Q); see Litan, *supra* note 4, at 9; Shenker & Colletta, *supra* note 1, at 1390-91.

250. The FDIC insures deposits of up to \$ 100,000 in federally and state chartered banks and saving and loans. See generally 12 U.S.C. 1811-1832 (1994). The FDIC's insurance is backed by the full faith and credit of the United States Treasury. Kohn, *supra* note 13, at 760.

banks was quite weak.²⁵¹ Bank stock and debt offerings were accordingly not popular in the markets, except at very high prices.²⁵² Many factors contributed to the financial weakness of banks. These included the mismatch between banks' costs of funds and the return on their assets (loans), particularly mortgages;²⁵³ significant amounts of underperforming assets (loans) because of lending to less developed countries;²⁵⁴ and highly leveraged transactions (leveraged buyouts).²⁵⁵

Markets, and regulators, began calling on banks to improve their financial condition. Regulators needed to specify a measure of financial condition. The measure they selected was the "capital adequacy ratio."²⁵⁶ The capital adequacy ratio attempts to measure whether a bank has sufficient capital given the riskiness of its loans and other assets. A bank's capital adequacy ratio is the ratio of its "capital" to its "risk-weighted assets."²⁵⁷ A bank's capital consists principally of its stockholders' equity and long-term debt. At least one half of a bank's required capital must consist of stockholders' equity.²⁵⁸ A bank's "risk-weighted assets" consist of its assets,²⁵⁹ such as loans, multiplied by the applicable risk-weighting.²⁶⁰

Capital adequacy ratios require a bank to maintain a certain amount of capital for each "risk-weighted" dollar of its assets.²⁶¹ Obligations of the United States Treasury, for instance, typically have a zero risk weighting, whereas corporate loans have a 100% risk weighting.²⁶² Thus, for every treasury bond a bank holds, it does not need to hold any capital. By contrast,

251. See Litan, *supra* note 4, at 1-2, 9-11, 36.

252. See generally Kohn, *supra* note 13, at 787; Litan, *supra* note 4, at 10-11.

253. See Kohn, *supra* note 13, at 787; Litan, *supra* note 4, at 27; Borod, *Securitization*, *supra* note 1, 1.02.A.3.

254. Litan, *supra* note 4, at 17.

255. *Id.* at 28-29.

256. 12 C.F.R. pt. 208, app. A (1996). Insurance companies, too, are typically subject to requirements comparable to banks' capital adequacy requirements. See, e.g., N.Y. Ins. Law 1402 (McKinney 1985).

257. 12 C.F.R. pt. 208, app. A (1996).

258. Borod, *Securitization*, *supra* note 1, 2.02, at 2-13 to 2-14.

259. Defining "assets" can be difficult. Because of the rapid pace of financial innovation, the definition must frequently be revised to reflect new types of financial instruments, some of which were created largely to fall outside of the then-existing definition. See generally David Cates, *Wanted: A Way to Show Off-Balance-Sheet Strengths*, Institutional Investor, Oct. 5, 1993, at 18, available in LEXIS, News Library, Asapii File; Financial Exotics - A Threat, U.S. Banker, Dec. 1991, at 53, available in LEXIS, Banking Library, Usbank File.

260. See Shenker & Colletta, *supra* note 1, at 1414.

261. *Id.*

262. 12 C.F.R. pt. 208, app. A, attachment III (1996).

for every corporate loan a bank holds, it needs to hold capital equal to the capital adequacy ratio percentage. If the percentage is 8%, a \$ 100 million corporate loan requires \$ 8 million of capital. Mortgages, and mortgage-backed securities issued by private parties, have 50% risk weightings; by contrast, mortgage-backed securities issued by Fannie Mae, Freddie Mac, or Ginnie Mae have a 20% risk weighting. Thus, a \$ 100 GSE mortgage-backed security requires only two-fifths the capital of a \$ 100 mortgage or a \$ 100 private mortgage-backed security.²⁶³

In 1989, the Basle Accords, which are applicable to banks undertaking international business, were adopted.²⁶⁴ They provide for a capital adequacy ratio of 8%.²⁶⁵ Banks were required to meet this ratio by the end of 1992.²⁶⁶ Depository institutions not undertaking international business are not subject to the Basle Accords, but they are subject to comparable regimes with, perhaps, somewhat lower capital adequacy ratios.²⁶⁷ Compliance, even in excess of the specified percentages, is considered to favorably impress regulators.²⁶⁸ The market, while not as easily impressed as the regulators,²⁶⁹ regards the improved financial condition of banks with favor.²⁷⁰

After the adoption of the Basle Accords, many banks sought to improve

263. Borod, *Securitization*, supra note 1, 1.02.A.1, 2.02.A.1; Shenker & Colletta, supra note 1, at 1415-16. Insurers' capital adequacy requirements also favor securitization securities over the underlying receivables. See Jinny St. Goar, *Commercial MBSs?*, *Institutional Investor*, Oct. 1994, at 225.

264. 12 C.F.R. pts. 3, 208, 225, 325 (1996) (codifying the Basle Accords); Shenker & Colletta, supra note 1, at 1414-16. See generally Committee on Banking Regulations and Supervisory Practices, *Final International Risk-Based Capital Standards Adopted by the Basle Committee on Banking* (1988), reprinted in 51 *BNA's Banking Rep.* 143 (1988).

265. Borod, *Securitization*, supra note 1, 2.02.A.1.

266. *Id.* 1.02.A.1, at 1-6.

267. Shenker & Colletta, supra note 1, at 1414, 1415 n.242.

268. *Id.* at 1395-96.

269. For a general, and critical, discussion of the capital adequacy ratio as a measure of bank soundness, see David Fairlamb, *Beyond Capital*, *Institutional Investor*, Aug. 1994, at 40, available in LEXIS, Busfin Library, Bis File; see also Shenker & Colletta, supra note 1, at 1415 n.242. Some commentators have suggested that the regulators overemphasized capital adequacy because it is easy to measure (as opposed to, for instance, quality of management). Fairlamb, supra. This overemphasis may have contributed to a distortion in bank practices, as banks sought to improve their capital adequacy ratios at the expense of other ratios which might better have reflected the risks they faced. See Fairlamb, supra; see also Stuart D. Root, *Three Cs of Bank Capital: Convergence, Conundrums, and Contrariness*, 1994 *Col. Bus. L. Rev.* 135, 155-56 & n.64. Banks attempting to meet capital adequacy ratios have an incentive to substitute interest rate risk for credit risk on their balance sheets. *Id.* at 156. Recognizing this, regulators have attempted to establish standards that would cover interest rate risk as well. *Id.*

270. Fairlamb, supra note 269, at 40; Steve Klinkerman, *Top Banks Pouring Excess Capital into Buybacks Series*, *Am. Banker*, Mar. 13, 1995, at 22.

their capital adequacy ratios. The banks had two choices. One choice was to increase their capital. For reasons discussed above, many banks, especially ones with particularly unfavorable ratios, found this an expensive option. The other choice was to decrease the riskiness of their assets by selling loans with high risk weightings (and perhaps replacing them with assets with lower risk weightings). In many cases, selling loans with high risk weightings seemed the better choice. Loan sales helped banks meet various ratios,²⁷¹ and such sales also helped banks raise financing to make more loans.²⁷² Some banks needed more to conform to the ratios than to raise financing. There had been less demand for bank loans since changes in the federal securities laws made access to the capital markets²⁷³ easier for many borrowers.²⁷⁴ These borrowers, too, often had better credit ratings than their banks, increasing the advantage of capital markets financing.²⁷⁵

Selling high risk weighted loans decreases the amount of capital a bank needs.²⁷⁶ This remains true even if the bank invests the proceeds in other loans (or securities backed by loans), so long as those other loans (or securities) have a lower risk weighting. Fannie Mae and Freddie Mac permit banks to swap mortgages (with 50% risk weightings) for mortgage-backed securities (with 20% risk weightings).²⁷⁷

Selling loans also enables banks to reduce certain "regulatory taxes." "Regulatory taxes" consist of deposit insurance premiums and reserve requirements under the Federal Reserve Board's Regulation D.²⁷⁸ Both are pegged to deposits. The larger a bank's deposits, the higher the "taxes." If a bank is holding fewer loans, it needs fewer deposits. Thus, its insurance premiums and reserve requirements are lower.²⁷⁹

The foregoing benefits relate to loan sales, whether or not in the form of

271. One such ratio is "return on assets." Selling loans can help improve this ratio by decreasing the amount of assets. This, of course, assumes that the return does not decrease commensurately.

272. Litan, *supra* note 4, at 36.

273. See *supra* notes 54-59 and accompanying text for a discussion on the difference between capital markets and other financial markets where firms can raise financing.

274. Rule 415 permits "shelf" registration by a firm of its debt securities. A firm can file one registration statement for a certain amount of debt, issue only a lesser amount at the time, and as market "windows" open, issue more debt at very short notice up to the amount included in the "shelf" registration. 17 C.F.R. 230.415 (1990); see also Litan, *supra* note 4, at 12-17.

275. Litan, *supra* note 4, at 17.

276. See Shenker & Colletta, *supra* note 1, at 1415.

277. See Borod, *Securitization*, *supra* note 1, 1.02.A.1, 1.04.A.2-3.

278. Shenker & Colletta, *supra* note 1, at 1391 n.105.

279. See *id.* at 1391-92, 1406; Borod, *Securitization*, *supra* note 1, 1.02.A.1; Shenker & Colletta, *supra* note 1, at 1391-92, 1406.

securitization transactions. Securitization offers a better way to sell loans. Many loans can be sold at once, at a comparatively small discount from their face value. And, because many securitizations are structured as sales for accounting purposes, but borrowings for tax purposes, the benefits of accounting "sales" treatment can be obtained without forsaking the benefits of tax "borrowing" treatment.²⁸⁰ The seller does not recognize current tax gain or loss on the "sale" and may deduct the interest paid by the pool to holders of the pool's debt securities, who are the ultimate purchasers of the receivables.²⁸¹

Securitization worked very well to remove lower-quality loans from banks' balance sheets. Banks were able to remove many problem loans from their balance sheets in a comparatively short time.²⁸² Indeed, banks' capital adequacy ratios are now well in excess of the regulatory requirements.²⁸³ Since the initial flurry of securitization activity, subsequent uses of securitization by banks have been less to achieve desirable ratios and more for other reasons. Many banks now pursue fee income from activities such as originating and servicing loans more ardently than "spread" income from traditional lending activities.²⁸⁴ Securitization helps in this endeavor by allowing banks to originate and service a greater volume of loans.

280. *Supra* notes 86, 98 and accompanying text.

281. See *supra* note 98 and accompanying text.

282. Michael Hirsh, *Why Japan Won't Change*, *Institutional Investor*, Sept. 1994, at 37, 48 ("US banks ... sloughed off 1980's bad-debt problems through securitization and other means in just two years."); see also Borod, *Securitization*, *supra* note 1, 2.01.B.

283. As of August 1994, the average bank's capital adequacy ratio exceeded 13%. Fairlamb, *supra* note 269, at 16; see also Dean Tomasula, *Banks, Well Capitalized But Conservative, Play It Cautious in Asset-Backed Securities*, *Am. Banker*, Jan. 20, 1995, at 20.

284. See Shenker & Colletta, *supra* note 1, at 1392 & nn.109-10.