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DISINTERMEDIATING AVARICE: A LEGAL FRAMEWORK FOR COMMERCIAL SUSTAINABLE MICROFINANCE†

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Although microfinance has emerged as a key tool to alleviate poverty, the need for microfinance lending vastly exceeds the amount of funds that can be raised from charitable donors. Commercial bank lending currently supplements donor money, but microfinance loans made by banks are expensive and sometimes even exploitive. This Article examines how innovative legal structures can enable microfinance loans to be funded directly from lower-cost, and virtually limitless, capital market sources by removing, or "disintermediating," the need for a bank intermediary. In that context, this Article identifies and attempts to resolve the resulting law and business issues of first impression and also examines, more normatively, the extent to which microfinance lending should rely on capital market funding sources.

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I. INTRODUCTION

Microfinance refers to providing small loans and other proportionally sized financial services to low-income individuals and the poor.1 The primary goal is to enfranchise these borrowers with capital, thereby enabling them to start or expand small businesses—essentially fostering entrepreneurship on a micro level. Microfinance loans are now being

1. These other financial services include deposit taking and loan insurance. See, e.g., JOANNA LEDGERWOOD, MICROFINANCE HANDBOOK: AN INSTITUTIONAL AND FINANCIAL PERSPECTIVE—SUSTAINABLE BANKING WITH THE POOR 1 (1999).
made domestically and around the world, with estimates of between $20 and $60 billion outstanding.\(^3\)

Economic research corroborates the importance of microfinance as a tool to alleviate poverty.\(^3\) One of the pioneers of microfinance, Muhammad Yunus, won the Nobel Peace Prize recently for his microfinance work with Grameen Bank in Bangladesh.\(^4\) The United Nations also declared 2005 the International Year of Microcredit.\(^5\)

Historically, the majority of microfinance activities had been confined to the on-lending of funds provided by charitable donors to eleemosynary or nonprofit banks, nongovernmental organizations, and other microfinance institutions (MFIs).\(^6\) The very success of microfinance as a tool, however, has made it apparent that the need for microfinance lending vastly exceeds the amount of funds that can be raised from charitable donors.\(^7\)

It is estimated, for example, that of the 1.5 billion people potentially eligible for microfinance loans, only 100 million people—less than

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2. Compare STANDARD & POOR’S, MICROFINANCE: TAKING ROOT IN THE GLOBAL CAPITAL MARKETS 9 (2007), http://www2.standardandpoors.com/spf/pdf/media/Microfinance_TakingRootinTheGlobalCapitalMarkets_6.07.pdf (“Although definitive data do not exist, it is estimated that the microfinance industry counts roughly $15 billion–17 billion in microfinance loans outstanding[]” with “the numbers . . . growing rapidly[,]” with Neil MacFarquhar, Many Borrowers of Microloans Now Find Price Is Too High, N.Y. TIMES, Apr. 14, 2010, at A1 (reporting that the “microfinance industry” has “over $60 billion in assets”). It is unclear, though, if the $60 billion estimate of “assets” represents only microfinance loans, or whether it might include, for example, other microfinance products such as deposits and loan insurance. See LEDGERWOOD, supra note 1, at 1. Furthermore, some loans included in that $60 billion estimate might not be true microfinance loans because “all kinds of institutions making loans plaster them with the ‘microfinance’ label because of its do-good reputation.” MacFarquhar, supra.


6. See LEDGERWOOD, supra note 1, at 2. Although increasing amounts of microfinance loans are also being funded from deposits made by earlier recipients of microfinance loans, deposits have “more gradual growth trajectories” than other funding sources. STANDARD & POOR’S, supra note 2, at 13. Deposits also do not appear to increase in proportion to increases in microfinance lending. See \(Id.\)

7. See, e.g., Deborah Burand, Deleveraging Microfinance: Principles for Managing Voluntary Debt Workouts of Microfinance Institutions, 27 J.L. & COM. 193, 194, 197 (2009) (observing that to meet global demand for microcredit “the microfinance sector needs to attract much more capital,” and explaining that “capital availability is becoming an issue of concern” because the global financial crisis has reduced donor funding); Harald Hüttenrauch & Claudia Schneider, Securitisation: A Funding Alternative for Microfinance Institutions, in NEW PARTNERSHIPS FOR INNOVATION IN MICROFINANCE 299, 299–300 (Ingrid Matthias-Maier & J.D. von Pischke eds., 2009) (“[T]here is still an enormous gap between potential demand for and actual supply of microfinance loans.”).
7%—receive them.8 To satisfy this demand, worldwide attention is turning to commercial funding sources.9 Commercial banks and finance companies (collectively, commercial banks) have thus become vital funding sources for microfinance loans in many countries.10 Microfinance proponents, however, are "now wringing their hands" because many of these banks are charging exorbitant rates of interest, with "some charging interest rates of 100 percent or more."11 Indeed, the global average effective interest rate on commercial microfinance loans is reported to be as high as 37%.12 It is not completely surprising that commercial banks are charging high interest rates. Many nations where microfinance loans are made lack adequate usury laws.13 Also, "poor borrowers are often too inexperienced and too harried to understand what they are being charged."14 Furthermore, there is little competition among banks to drive rates down.15 On the surface, therefore, solutions to exorbitant interest rates would seem to call for enactment of national usury laws, increasing the transparency of microfinance loan pricing and fostering greater bank competition in making these loans.16

8. STANDARD & POOR'S, supra note 2, at 9 (adding that "demand vastly outstrips supply"). Standard & Poor's characterizes persons potentially eligible for microfinance loans as the "working poor." Id.
9. Burand, supra note 7, at 195; Hüttenerauch & Schneider, supra note 7, at 300 ("To sustain future growth and to further expand its outreach to the under-banked and unbanked customer base, [heretofore donor-funded] MFIs have no choice other than to increasingly access more commercially priced private debt and equity funding.").
11. MacFarquhar, supra note 2.
12. Id. (reporting a "global average of about 37 percent in interest and fees").
15. Cf. id. (reporting that Mexican banks "charge such high rates simply because they can get away with it").
16. To some extent, of course, the interest rates charged by commercial banks must take into account microfinance borrowing risk and the relatively high transaction costs of making small loans. Cf. BRIGHT HELMS & XAVIER REILLE, CONSULTATIVE GRP. TO ASSIST THE POOR, INTEREST RATE CEILINGS & MICROFINANCE: THE STORY SO FAR 2 (2009), http://www.cgap.org/gov/document-1.9.2703/OP9.pdf ("[I]nterest rates on microfinance loans are high because of the greater delivery costs of tiny transactions that require face-to-face interaction ...."). This Article briefly addresses the transaction costs of microfinance lending. See infra notes 32–33 and accompanying text. The Article addresses in more detail a separate concept of transaction costs—the transaction costs of securitizing microfinance loans. See infra Part III.C.
Even if these kinds of solutions could be implemented, however, they would be inherently insufficient. Usury laws, which regulate the maximum interest rate on loans, are blunt instruments and have the potential to inadvertently cut off reasonably priced commercial funding sources. If a nation were to enact a usury-rate limitation of, say, 30%, that limitation could be too low if the transaction costs of booking the loan and the default risks are high, thereby discouraging even prudent lending; whereas that usury-rate limitation could be too high if those transaction costs and default risks are low. And transaction costs and risks can easily vary significantly from loan to loan. Likewise, increasing the transparency of microfinance loan pricing would not be an effective solution; poor borrowers, even if they understand the pricing, may have no other source of lending.

Most fundamentally, though, fostering greater bank competition would be unlikely to significantly reduce high interest rates because of the model of commercial bank lending. Banks are intermediaries of funds. They themselves borrow (from depositors and capital market investors) the funds that they subsequently lend out. As profit-making institutions, commercial banks must observe the fundamental maxim of “buy low, sell high”—the price of “buying” funds being the interest rates at which commercial banks borrow and the price of “selling” funds being the marked-up interest rates at which they make loans. Borrowing from a commercial bank is therefore similar to “buying retail.”

This Article proposes that this markup can be avoided by utilizing innovative legal structures to fund microfinance loans directly from capital market sources, thereby removing the need for a bank intermediary. The capital markets should be large enough not only to supplant the need for commercial bank intermediation but also to expand the amount of microfinance lending significantly beyond the levels achieved to date by commercial banks. And investors in these markets—even those who

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18. HELMS & REILLE, supra note 16, at 10 (“Interest rate ceilings do not necessarily protect poor customers and can, in fact, hurt them by reducing their access to financial services.”).

19. See, e.g., CHRISTOPHER VINEY, FINANCIAL INSTITUTIONS, INSTRUMENTS AND MARKETS 54–55 (5th ed. 2007). Although commercial banks borrow some of their funds from depositors, they also borrow a significant portion of their funding from the capital markets. Id. at 54 (noting that commercial banks “are no longer dependent on their deposit base for lending” because they can typically borrow sufficient funds from domestic and international capital markets to meet their forecast loan demands).


21. Although the recent global financial crisis has at least temporarily reduced the size of capital market funding, the capital markets are huge. As of September 30, 2006, for example, the worldwide size of capital markets has been estimated at approximately $55 trillion. BANK FOR INT’L SETTLEMENTS, INTERNATIONAL BANKING AND FINANCIAL MARKET DEVELOPMENTS, BIS Q. REV., Dec. 2006 at 1, 85–100. Cf. STANDARD & POOR’S, supra note 2, at 9 (“Without question, a significant global expan-
are profit motivated and socially neutral—should want to invest in microfinance lending as a means of diversifying their portfolios, thereby protecting themselves from market risk. Microfinance loans are insulated from general market risk for many reasons, including that businesses [run by microfinance borrowers] may actually benefit from economic downturns, as local consumers turn to [the] more affordable domestic products and services” offered by those businesses.

This Article’s analysis begins by examining, in Part II, approaches in which legal structures could enable the capital markets to fund microfinance lending sustainably and at low cost. Part III makes an inquiry into the mixed legal and business issues of first impression these approaches would raise. Finally, Part IV examines whether even low-cost capital market funding of microfinance lending could inadvertently create a Faustian bargain, in which an undermining of the altruism and grace of

22. The profit motivation of commercial bank intermediaries; because the latter borrow significant amounts of their funds from the capital markets, see supra text accompanying note 19, the profit motivation of capital-market investors is already part of their cost of funds. Commercial bank intermediaries then charge a markup on that cost when they make loans. See supra note 20 and accompanying text (likening borrowing from a commercial bank to buying retail).

23. Cf. Fitch RANKING, THE MICROFINANCE SECTOR: ITS SUCCESS COULD BE ITS BIGGEST RISK 3, 13-14 (2008) (observing that “[t]he microfinance model[s] in some instances have shown some resilience to external macroeconomic shock[,]” noting what characteristics insulate microfinance end-borrowers from external shocks, and cautioning that “[g]iven the fairly short history of microfinance globally, the notion that it is—and the extent to which it is—relatively insulated from macro-economic trends remains to be fully tested[.]”); Nicolas Krauss & Ingo Walter, Can Microfinance Reduce Portfolio Volatility?, 58 ECON. DEV. & CULTURAL CHANGE 85, 106-68 (2009) (observing that MFI performance is generally not correlated with global markets and thus offers a possible diversification tool for international investors). There is some correlation, though, for what I later call wholesale microfinance loans, i.e., those made to MFI borrowers as opposed to end-borrowers, see infra text accompanying note 100. See also Krauss & Walter, supra, at 102 (arguing that increasing reliance on international financial markets by MFIs increases risks to MFIs from international financial market fluctuations, though not necessarily to their borrowers); Sub-Par but Not Subprime: The Microfinance Firms Struggle to Raise Money, ECONOMIST, Mar. 21, 2009, at 80 [hereinafter Sub-Par but Not Subprime] (noting that microfinance borrowers are isolated from international markets whereas their MFIs, if internationally funded, are not).

24. Under modern finance theory, investors and other market participants can protect themselves from market risk by diversifying their investment portfolio with investments that are uncorrelated or negatively correlated with market risk. RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 446 (6th ed. 2003); cf. STANDARD & POOR’S, supra note 2, at 14 (“[M]ainstream capital markets investors . . . that do not necessarily have a social objective [will be] interested in [microfinance] as a way to diversify their investments.”).

25. Fitch RANKING, supra note 23, at 13 (discussing other reasons why microfinance loans are insulated from market risk risk). I do not claim that investments backed by microfinance loans would necessarily constitute the best hedge against market risk, merely that these investments would be inherently hedged to some degree against market risk. An investor could choose to hedge in additional or alternative ways, such as purchasing credit default swaps.

26. A Faustian bargain is one in which temporal gains, such as wealth or knowledge, are obtained via a pact with the devil in exchange for eternal damnation in hell. See generally CHRISTOPHER MARLOWE, THE TRAGICAL HISTORY OF DOCTOR FAUSTUS 55-175 (Frederick S. Boas ed., 1960) (telling the story in which Doctor Faustus sells his soul to the devil in exchange for power and knowledge).
donor-funded microfinance lending and less regard for the plight of the poor would add to the real cost of that funding.

II. CAPITAL MARKET APPROACHES

The capital markets are the ultimate commercial sources of funding.27 Commercial banks intermediate these funds, borrowing from capital market investors and subsequently on-lending the funds to third parties, at a profitable markup.28 Direct capital market funding of microfinance lending, however, could avoid this markup by removing the profit-making intermediary (or disintermediation).29

A. Achieving Disintermediation

The mechanism used globally to achieve disintermediation is broadly referred to as securitization.30 Securitization envisions the creation, through law, of special-purpose vehicles (SPV, sometimes called a special-purpose entity or SPE) that effectively replace commercial bank intermediaries.31 Unlike commercial banks, however, SPVs are not intended to be profit making.32 An SPV issues securities to capital market investors and uses the proceeds to acquire rights to payment from income-producing “financial” assets. Those assets, in turn, support repayment of the SPV’s securities.33 Securitization is economically efficient when the interest rate cost saving achieved through disintermediation more than offsets the transaction costs of the securitization.34

27. The capital markets are “markets where capital funds—debt and equity—are traded. Included are private placement sources of debt and equity as well as organized markets and exchanges.” JOHN DOWNES & JORDAN ELLIOT GOODMAN, DICTIONARY OF FINANCE AND INVESTMENT TERMS 59 (3d ed. 1991).
28. See supra notes 19–21 and accompanying text.
30. Id. This Article does not claim that securitization is the only way to achieve disintermediation, merely that it is a widely accepted way to achieve disintermediation on a large commercial scale. Although individual capital market investors could invest in microfinance loans through one-on-one lending programs like Kiva, see KIVA: LOANS THAT CHANGE LIVES, http://www.kiva.org (last visited May 20, 2011), for example, they would not achieve an economy of scale.
32. See, e.g., New Developments in Structured Finance, 56 BUS. LAW. 95, 132 (2000) (observing that SPVs are not intended to profit, so taxes should not be an issue); Gary B. Gorton & Nicholas S. Souleles, Special Purpose Vehicles and Securitization 1 (FRB Phila. Working Paper No. 05-21, 2005), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=713782 (observing that SPVs are not profit making because they “have no purpose other than the transaction(s) for which they were created”).
34. Schwarcz, The Alchemy of Asset Securitization, supra note 33, at 137–38 (observing that transaction costs, which include the cost of creating the SPV and sometimes also the cost of obtaining a rating on its securities, can vary over a wide range depending on the securitization structure).
This Article does not purport to calculate the extent to which interest rate cost savings achieved through disintermediating the funding of microfinance loans would more than offset the transaction costs of securitizing these types of loans. Nor does this Article purport to calculate the extent to which any such net savings in funding costs would be passed along to microfinance borrowers. Nonetheless, securitization of microfinance loans should be expected to be economically efficient for three reasons: first, securitization is widely viewed as reducing borrowing costs; second, by increasing the supply of funding available to make microfinance loans, securitization may even further lower the cost of microfinance borrowing; and third, any net cost savings should be expected to be passed along to microfinance borrowers because SPVs, which achieve the net savings, are not profit-making entities. This Article’s only em-

35. See, e.g., Xu Dong An et al., Value Creation Through Securitization: Evidence from the CMBS Market, 38 J. REAL EST. FIN. ECON. 302, 324–25 (2009) (finding a reduction of up to twenty basis points in commercial mortgage rates on mortgages that were to be subsequently securitized); James W. Kolari et al., The Effects of Securitization on Mortgage Market Yields: A Cointegration Analysis, 26 REAL EST. FIN. ECON. 677, 679 (1998) (finding that a 10% increase in the level of securitization reduces home mortgage rates by twenty basis points); James A. Rosenthal & Juan M. Ocampo, Analyzing the Economic Benefits of Securitized Credit, 1 J. APPLIED CORP. FIN. 32, 39–40 (1986) (finding that OMAC reduced its funding costs by 1.3% annually compared to traditional methods of funding after securitizing $4 billion in automobile loans). A precise calculation of the reduction in microfinance borrowing costs would be complicated by the fact that microfinance lending has characteristics of both corporate and consumer borrowing. Faten Sabry & Chudozie Okongwu, Study of the Impact of Securitization on Consumers, Investors, Financial Institutions and the Capital Markets: American Securitization Forum 119–20 (2009), http://www.americansecuritization.com/uploadedFiles/ASF_NERA_Report.pdf (finding that increased securitization on housing has reduced consumer interest rates for both auto loans and credit card debt). Cf..CtR. for the Study of Fin. Innovation, Microfinance Banana Skins 2009: Confronting Crisis and Change 25 (2009) [hereinafter MICROFINANCE BANANA SKINS 2009] ("Consumer lending consists of small loans to individuals to buy personal items. Microlending consists mostly of small loans to finance business. But the distinction is disappearing as banks and MFIs compete at the small end of the market."); Bart, supra note 21, at 280 (noting that microfinance is often to support "consumption smoothing"). Securitization reduces corporate borrowing costs directly by disintermediating profit-seeking bank lenders. Securitization cannot reduce consumer borrowing costs directly: individual consumers are likely to continue to have to borrow from profit-seeking intermediaries because individual consumers borrow insufficient amounts to act as originators, and there would be a collective action problem in aggregating their borrowing needs (although I later suggest transformative securitization as a solution, see infra note 52 and accompanying text). But those intermediaries can reduce their cost of funds by securitizing the consumer loans; and, given competition, that lower cost of funds will be passed through to consumers on future loans.

36. Cf. David Porteous, Consultative Grp. to Assist the Poor, Focus Note: Competition and Microcredit Interest Rates 2 (2006), http://www.cgapp.org/gm/document-19.2573/FN33.pdf (arguing that increasing competition and increasing MFIs access to funds would decrease interest rates). The Federal Reserve’s recent Term Asset-Backed Securities Loan Facility (TALF) program, for example, was designed to lower consumer borrowing rates by using securitization to increase the supply of money available to make consumer loans. Brian P. Sack, Fed. Reserve Bank of N.Y., Remarks at the New York Association for Business Economics: Reflections on the TALF and the Federal Reserve’s Role as Liquidity Provider (June 9, 2010), available at http://www.newyorkfed.org/newsevents/speeches2010/sac100609.html (observing that many consumer lenders supported by TALF report being able to offer more credit to consumers at lower rates).

pirical claim, however, is that disintermediation through securitization could be an economically viable alternative to commercial bank inter-
mediation if the latter overprices the cost of microfinance lending.

The discussion next examines how securitization could be used to
disintermediate microfinance lending costs.

B. Applying Securitization to Microfinance

There are two fundamental ways that securitization could be ap-
plicated to microfinance. In each case the income-producing "financial" as-
sets would be microfinance loans, which are ordinarily defined as loans
made to low-income individuals and the poor; they sometimes also in-
clude loans made to MFIs to enable them to on-lend to these "end-
borrowers." 38 One approach, hereinafter called "regenerative securitiza-
tion," would be to securitize an MFI's donor-funded microfinance loans
in order to regenerate funding for the MFI to make additional loans. 39
Regenerative securitization encompasses all of the (few) microfinance
capital-market transactions completed to date. 40 Another approach,
hereinafter called "transformative securitization," would be bolder: to
fund new microfinance lending through the capital markets, not merely
to regenerate donor funding. Whereas regenerative securitization can
effectively multiply donor funding, transformative securitization could
achieve true disintermediation, reducing the cost of even commercially
funded microfinance loans.

This Article makes a law and business inquiry into commercially
sustainable securitization of microfinance loans, starting with regenera-
tive securitization and then examining the potential for transformative
securitization. Although many issues will be common to both forms of
securitization, transformative securitization can raise additional issues
and can even exacerbate concerns over common issues. Furthermore,
because the global financial crisis had its origin in the securitization of

38. See generally STANDARD & POOR'S, METHODOLOGY AND ASSUMPTIONS: STANDARD &
POOR'S APPROACH TO RATING MICROFINANCE SECURITIZATIONS (2008), http://www2.standardand
poors.com/spf/pdf/media/Meth_and_Assumptions_SandP_Approach_To_RatingMicrofinance_Securit-
ization_11_6_08.pdf (broadly referring to microfinance lending). References in this Article to micro-
finance loans made by commercial banks encompass both loans made to end-borrowers and loans
made to MFIs. For loans made by commercial banks to end-borrowers, the end-borrowers would pay
the profit markup directly. For loans made by commercial banks to MFIs, end-borrowers would pay
that markup indirectly as reflected in the MFI's own cost of funds.

(symposium issue on the global financial crisis, going forward) ("[S]ecuritization helps to transform
the loans into cash from which banks and other lenders can make new loans.").

40. STANDARD & POOR'S, supra note 38 (discussing all existing transactions as regenerative).
But cf. infra notes 68-71 and accompanying text (discussing the BlueOrchard Finance S.A. transaction,
which, based on limited public information, might have had elements of transformative securitization).
"subprime" loans, which have certain similarities to microfinance loans; any approach to securitization of microfinance loans—whether regenerative or transformative—should be informed and improved by the lessons of that crisis.

To conform the discussion below to terminology normally used in the securitization literature, rights to payment on microfinance loans will sometimes be referred to as "receivables" or "financial assets," and an MFI (or lender to an MFI) selling its receivables will sometimes be referred to as an "originator."

1. Regenerative Securitization

In a regenerative securitization, the MFI originator would sell its microfinance loan receivables to an SPV, which in turn would (directly or through a second SPV) issue securities to capital market investors and use the proceeds of the issuance to pay the originator. The investors in the securities would be repaid from collections of the receivables.

Securitizing donor-funded microfinance loans, in order to regenerate funding to make new loans, is already beginning to occur. In 2006, for example, $15 million of funding was regenerated in the BRAC Micro Credit Securitization Series I transaction. The originator was BRAC, an international MFI founded in Bangladesh, which sold a diverse pool of its microfinance loans to BRAC Micro Credit Securitization Series I Trust, an SPV. The SPV, in turn, financed its purchase of these loans by issuing to capital market investors four classes, or "tranches," of securities rated "AAA" by the Credit Rating Agency of Bangladesh. Although these securities were repayable from collections on the microfinance loans acquired by the SPV, investors apparently took little risk. The amount of those loans exceeded the amount of the securities by 50%, or $7.5 million (such excess amount generally referred to as "over-collateralization"). Moreover, the SPV had the benefit of substitution and replacement provisions to protect against overdue or "delinquent" loans not yet in default, as well as 16.67% credit support in the form of a $2.5 million cash reserve.

There are several limitations on regenerative securitization. One is that regenerative securitization transactions are, by definition, structured
around existing microfinance loan portfolios. That limits flexibility to combine portfolios into pools of microfinance loans large enough for their securitization to achieve economies of scale.\(^{49}\) The few regenerative securitizations completed to date, for example, have each been done for relatively small microfinance loan portfolios, saddling each such transaction with the full burden of transaction costs, including legal fees and rating agency fees,\(^{50}\) with little economy of scale. Perhaps that is why so few have been done.\(^{51}\)

Another potential limitation of regenerative securitization transactions is that particular microfinance loan portfolios may not be as diversified geographically and across end-borrowers as capital market investors would want.

But the real limitation on regenerative securitization is that it is restricted by the amount of outstanding donor-funded microfinance loans. Transformative securitization, however, would not be subject to that restriction.

2. **Transformative Securitization**

In its most pristine form, transformative securitization envisions the creation of SPVs to issue commercially attractive securities to investors and then use the investor funds to make microfinance loans. Investors would be repaid, with interest, from collections on those loans.\(^{52}\) This approach would achieve true disintermediation, freeing origination of the loans from the need for funding from commercial banks and even from charitable donors.\(^{53}\)

I previously observed that securitization does not necessarily enable consumers to avoid having to continue borrowing from intermediaries.\(^{54}\) This is because individual consumers do not borrow sufficient amounts to economically securitize their loans; intermediaries instead securitize the pools of loans they make to consumers. Transformative securitization would achieve disintermediation by effectively replacing the intermediaries with SPVs. To accomplish this, the SPVs would have to be created and operated by sophisticated principals, who would ordinarily charge fees for their services. Transformative securitization would be economi-

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49. It nonetheless sometimes may be possible to combine portions of existing portfolios to achieve economies of scale. See, e.g., Press Release, IFMR Capital Structures the First Multi Originator Securitisation in Microfinance, supra note 37 (reporting that the microfinance loan portfolios of four MFI\$s in India were recently combined to achieve an economy of scale).

50. For a discussion of rating agencies, see infra notes 180–189 and accompanying text.


52. Compare transformative securitization to risk securitization generally, in which investors obtain exposure to specific levels of credit risk in respect to specific entities. SCHWARCZ, STRUCTURED FINANCE, supra note 33, § 12.2.3, at 12–7.

53. But cf. infra notes 147–151 and accompanying text (discussing warehouse funding).

54. See supra notes 37–39 and accompanying text.
cally more efficient than commercial bank funding if the interest rate cost savings achieved by disintermediating commercial banks more than offsets the transaction costs of the securitization, including the principals' fees.55

Transformative securitization would not be tied to the amount of microfinance loans originated by an existing MFI. Theoretically, therefore, transformative securitization transactions could also be done in amounts sufficiently large to achieve economies of scale, overcoming the burden of transaction costs.56

Perhaps the best model for transformative securitization is the so-called collateralized debt obligation (CDO) transaction. Although CDO transactions have sometimes been demonized in the popular media, that results from a conflation of the time-tested and proved basic CDO structure, which this Article discusses, with highly leveraged and esoteric structures whose assets are often difficult to value, such as ABS CDO transactions and CDOs "squared" and "cubed."57 Basic CDO transactions are fundamentally different from these more troublesome highly leveraged transactions. All further references in this Article to CDO transactions mean the basic CDO structure.

In CDO transactions, a newly created SPV issues securities to capital market investors and uses the proceeds to purchase or originate a diverse range of receivables.58 The CDO securities are secured or otherwise backed by—and thus their payment derives principally or entirely from—those receivables.59 Diversification of the receivables helps to statistically reduce risk. Most CDO transactions also maximize investor interest by offering a variety of risk-and-return profiles. To accomplish this, the SPV typically issues several tranches of securities, ranked by seniority of payment priority.60 The highest priority class is ordinarily called senior securities, with lower priority classes being called subordinated, junior, or sometimes mezzanine securities.61 The lowest priority class, which has a residual claim against the SPV once the senior and subordinated securities are paid in full, is called the equity.62

This priority hierarchy, sometimes called a "senior-subordinated" legal structure,63 enables the senior and sometimes even some subordi-

55. For calculating net savings, this Article treats principals' fees as transaction costs.
56. This assumes, of course, that such transactions would otherwise be economically (and legally) viable.
57. See, e.g., This American Life: Inside Job, Chicago Public Radio (Apr. 10, 2010) (downloadable using iTunes) (blaming CDO transactions for the global financial crisis). The media is also confused about the relative value of the most senior CDO investment tranches and the riskiest tranches.
59. Id. at 376.
60. Id. at 377.
61. Id.
62. Id.
63. See SCHWARZ, STRUCTURED FINANCE, supra note 33, § 2:4, at 2–17 to –18.
nated classes of CDO securities to be more highly rated\textsuperscript{64} than the quality of the underlying receivables.\textsuperscript{65} This is accomplished by allocating cash collections from the receivables first to pay the senior classes and thereafter to pay more junior classes (the “waterfall” of payment).\textsuperscript{66} In this way, the senior classes are highly overcollateralized to take into account the possibility, indeed likelihood, of delays and losses on collection.

Similarly, SPVs in transformative securitization transactions could utilize the flexibility provided by the CDO structure, diversifying their origination of microfinance loans to reduce risk (such as by making microfinance loans to a multitude of borrowers in different regions and circumstances) and diversifying their issuance of securities to maximize investor interest.\textsuperscript{67} This Article envisions that the SPVs would be administered and managed, though not necessarily funded, by MFIs.

At least one existing securitization of microfinance loans appears to rely on the CDO structure. According to Standard & Poor’s,\textsuperscript{68} in 2007 BlueOrchard S.A., a Swiss regulated investment management firm (the originator), sold to BlueOrchard Finance S.A., an SPV, all or a portion of the originator’s $325 million of microfinance loans made to MFIs.\textsuperscript{69} The SPV financed the purchase by issuing $108 million of securities to capital market investors.\textsuperscript{70} Although the form of this transaction is regenerative, it represents an attempt to decrease MFI “reliance on donor money and public subsidies.”\textsuperscript{71}

This Article next examines and analyzes the challenges of achieving commercially sustainable microfinance securitization, both regenerative and transformative.

III. CHALLENGES

Commercially sustainable securitization of microfinance loans, irrespective of the approach, raises a host of interdependent legal and business issues. Transformative securitization can also exacerbate concerns over issues that are common to all forms of securitization and can even raise novel issues.

\textsuperscript{64} For a discussion of ratings and rating agencies, see infra notes 181–183 and accompanying text.

\textsuperscript{65} Schwarz, supra note 58, at 378 (observing that senior securities issued in CDO transactions have been rated “AAA” even where the underlying receivables consisted of subprime mortgage loans).

\textsuperscript{66} Id.

\textsuperscript{67} Cf. STANDARD & POOR’S, GLOBAL CREDIT PORTAL, BLUEORCHARD FINANCE S.A.—MICROFINANCE LOANS 3 (2007) (“A CDO is an attractive product for linking microfinance institutions with commercial investors.”).

\textsuperscript{68} See id.

\textsuperscript{69} These were loans made by the originator to “microfinance institutions in 27 countries.” Id. at 2.

\textsuperscript{70} Id.

\textsuperscript{71} Cf. id. (“BlueOrchard seeks to develop financial products that link microfinance institutions with commercial investors.”); id. at 3 (observing that transactions of this kind would decrease MFI “reliance on donor money and public subsidies”).
This Part examines these issues and their possible resolution, informed in part by the lessons of the global financial crisis. Those lessons have particular application to microfinance securitization because “subprime” loans, whose securitization helped to trigger that crisis, have certain similarities to microfinance loans: both involve risky borrowers, and both to some extent are politically motivated.22

A. Moral Hazard, Agency Costs, and Conflicts

1. Moral Hazard

Securitization raises the potential for moral hazard—the greater tendency of people who are protected from the consequences of risky behavior to engage in such behavior—because it relies on an originate-to-distribute model in which financial assets are sold as or after they are originated. This potential is alleged to be central to the global financial crisis, in which commentators argue that securitization facilitated undisciplined origination of the underlying financial assets—in that case, the subprime loans.24 Because lenders to subprime borrowers did not have to live with the credit consequences of their loans, the argument goes, their loan underwriting standards fell.25

The merits of moral hazard argument are weakened by other explanations for why those loan underwriting standards may have fallen: lower standards may well reflect distortions caused by the liquidity glut of that time, in which lenders competed aggressively for business and allowed otherwise defaulting home borrowers to refinance; or they may reflect conflicts of interest between firms and their employees in charge of setting those standards, such as where employees were paid for booking loans regardless of the loans’ long-term performance.26 Blaming the originate-to-distribute model for lower loan underwriting standards also does not explain why standards were not similarly lowered for originating other types of financial assets used in securitization transactions. Nor does it explain why the ultimate owners of the subprime loans—investors in the securities backed by those loans—did not govern their investments

22. I am not suggesting that microfinance lending should be associated with the abuses of subprime mortgage lending. Merely that there are certain analogies between these types of lending.
23. See Charles G. Hallinan, The “Fresh Start” Policy in Consumer Bankruptcy: A Historical Inventory and an Interpretive Theory, 21 U. RICH. L. REV. 49, 84 (1986) (relying on the economic definition of moral hazard: debtors and creditors that are protected from the consequences of default “could be expected to increase both excessive borrowing and excessive resort to bankruptcy”). In the insurance context, in which the term “moral hazard” arose, it means “the deliberate efforts by the insured to bring about the insured event, as when the owner of life insurance commits suicide.” Richard A. Epstein, Products Liability As an Insurance Market, 14 J. LEGAL STUD. 645, 653 (1985).
25. Id.
26. Id. at 1319–20.
by the same strict lending standards that they would observe but for the
separation of origination and ownership.77

Nonetheless, to be politically viable, if not also commercially suc-
cessful, securitization of microfinance loans will have to counter the per-
ception of moral hazard.78 MFIs managing these securitization structures
will therefore have to demonstrate that they are deterring potential mor-
al hazard, such as by requiring originators of securitized microfinance
loans to retain some realistic risk of loss on the loans.79 Transformative
securitization can increase the potential for moral hazard because micro-
finance loans would be originated to be sold as part of the same overall
transaction in which the MFI manager might receive fees without neces-
sarily taking on risk.80 The extent to which existing MFIs are sufficiently
sophisticated and well staffed to demonstrate that they are deterring
moral hazard is unclear.81

2. Agency Costs and Conflicts

Securitization raises at least two concerns regarding agency costs
and conflicts. In the context of microfinance, one such concern is that of-
ficers or officials of MFIs who are compensated without regard to long-
term consequences of their actions may, in transformative securitization
transactions, originate substandard microfinance loans.82 This concern
could be mitigated by better aligning their compensation with long-term
consequences.83

The other concern relates to working out problems with financial
assets backing the securities issued by an SPV. Securitization can make
this difficult because the beneficial owner of the financial assets is no

77. See id.
78. Cf. id. at 1318 n.25.
79. Id. at 1320–21; see also Deborah Burand, What Subprime Mortgage Securitizations Can
Teach Us About Sales of Microcredit Portfolios, CGAP MICROFINANCE BLOG (July 27, 2009),
http://microfinance.cgap.org/2009/07/27/what-subprime-mortgage-securitizations-can-teach-us-about-
sales-of-microcredit-portfolios/ (concluding to that effect).
80. Cf. ADAM B. ASHCRAFT & TIL SCHUERMANN, FED. RESERVE BANK OF N.Y.,
newyorkfed.org/research/staff_reports/sr318.pdf (arguing that lenders that receive fees yet bear little
risk, knowing they will be selling the loans to third parties, are more likely to fraudulently collaborate
with borrowers); Benjamin Keys et al., Did Securitization Lead to Lox Screening? Evidence from Sub-
model of lending have little incentive to process “soft” information about borrowers that cannot be
easily summarized in a contract or documented but could be crucial to a lending decision); Kate
McKee, Meditations on the U.S. Sub-Prime Crisis, CGAP MICROFINANCE GATEWAY (Mar. 18, 2008)
http://www.microfinancegateway.org/p/site/m/template.re/1.26.9143/ (“The increasingly typical practice
of selling sub-prime loans shortly after they were originated meant that often, mortgage brokers and
even lenders did not have to live with the consequences if the loan went bad.”).
81. Cf. infra Part III.E (discussing MFI management and staffing limitations).
82. Cf. Steven L. Schwarcz, Conflicts and Financial Collapse: The Problem of Secondary-
Management Agency Costs, 26 YALE J. ON REG. 457, 460–61 (2009) (examining these types of conflicts
of investment analysts and other secondary managers of firms that invest in complex securities).
83. Cf. id. at 465–69 (examining ways to mitigate conflicts between firms that invest in complex
securities and secondary managers of those firms).
longer the originator but a changing group of investors in the securities. Although the SPV traditionally hires an agent (the "servicer") to try to bridge this gap by restructuring problematic financial assets "in the best interests" of the investors, servicers may be reluctant to engage in restructuring if there is uncertainty that doing so will generate sufficient excess cash flow to reimburse their costs.\textsuperscript{84} Servicers may also be reluctant to engage in restructuring if more ministerial actions, such as foreclosure, present lower litigation risk for them—as might occur if cash flows deriving from principal and interest on underlying financial assets are separately allocated to different investor tranches.\textsuperscript{85}

These servicing problems, however, can be contractually alleviated. For example, microfinance lending documentation could set clear yet flexible guidelines and reimbursement procedures for loan restructuring. And microfinance securitization deals should be structured to minimize allocating cash flows to investors in ways that create potential conflicts. The senior-subordinated legal structure of basic CDO transactions, in which cash flows are contractually allocated first to investors in senior securities in the event of a default,\textsuperscript{86} would not create such a conflict because allocation would be a function of default and not of particular cash flows.\textsuperscript{87}

\textbf{B. Information Failures and Over-reliance}

\textit{1. Information Failures}

Securitization of loans to risky borrowers entails inherently imperfect information about predictions of future payments. In the global financial crisis, for example, lenders expected repayment from refinancing of subprime loans, enabled by appreciating home values.\textsuperscript{88} This model worked well so long as home prices appreciated, as they had been doing for decades, and as many observers expected that it would continue. When home prices stopped appreciating and began collapsing, however, subprime borrowers were unable to refinance and many ultimately defaulted.\textsuperscript{89} Similarly, even though microfinance assumes that borrower repayment rates will be relatively stable,\textsuperscript{90} and even though diversification

\textsuperscript{84} Schwarz, supra note 39, at 1322.
\textsuperscript{85} Id. (illustrating how such a risk could arise in a securitization where a restructuring reduces the interest rate on loans, thereby adversely affecting investors in an interest-only tranche of securities).
\textsuperscript{86} See supra notes 60-66 and accompanying text.
\textsuperscript{87} Another contractual approach to reduce servicer litigation risk but still make servicers responsible would be to assess servicer liability under a business-judgment type rule. Cf. Steven L. Schwarz & Gregory M. Sergi, Bond Defaults and the Dilemma of the Indenture Trustee, 59 ALA. L. REV. 1097, 1054–64 (2008) (advocating that approach for bond trustees).
\textsuperscript{88} Schwarz, supra note 39, at 1317.
\textsuperscript{89} Id.
\textsuperscript{90} See Hoje Jo et al., Doing Well While Doing Good? Microfinancing and Social Responsibility. 9 INT’L B. RES. 112, 117–19 (2009) (comparing a stable default rate of 1.7% among microfinance loans to an increase in the default rate to an estimated 14.3% for U.S. corporate bonds in the recent
of lending can statistically minimize risk, one cannot always predict future events or their consequences. Since the start of the global financial crisis, for example, both default and delinquency rates have been rising on microfinance loans. Accordingly, the amounts of overcollateralization in securitizations of microfinance loans should be conservatively sized.

In the global financial crisis, politics was also a cause of information failure. Many subprime loans were made not for commercial reasons but because of political pressure in the United States to enfranchise the poor with homes. Microfinance lending can be subject to similar political pressure. Commercially viable microfinance securitization would require that the MFIs administering and managing the transactions be sophisticated and independent enough to resist political pressures that might compromise commercial standards.

2. Over-reliance

A lesson of the global financial crisis is that securitization transactions should not be structured by reliance on complex mathematical models without factoring in common sense. Models are essential to securitization because of the need to statistically predict what future cash flows will become available from the underlying financial assets to pay the securities issued by the SPV. Subprime loan securitization models, however, relied on assumptions and historical data which, in retrospect, turned out to be incorrect and therefore made the valuations incorrect. The models incorrectly assumed, for example, that housing would not depreciate in value to the levels seen during that crisis. Valuation errors were further compounded to the extent subprime loans were made with such highly complex and abstruse terms that some borrowers did not fully understand the risks they were incurring, as a result of which borrowers defaulted at a much higher rate than would have been pre-

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91. Lydia Polgreen & Vikas Bajaj, *India Microcredit Faces Collapse from Defaults*, N.Y. TIMES, Nov. 18, 2010, at A5 (reporting that almost all borrowers in one of India’s largest state have stopped repaying their microfinance loans, due at least in part to urging by politicians who argue that Indian banks—which provide about 80% of those loans—are charging exorbitant interest rates); Greg Chen et al., *Growth and Vulnerabilities in Microfinance*, CGAP FOCUS NOTE, no. 61, Feb. 2010, at 1, 4–5, http://www.cgap.org/gm/document-1.9.42393/FN61.pdf (observing that recent microfinance loan default rates are higher than 10% in Nicaragua, Morocco, and Pakistan, marking a “serious repayment crisis,” and also observing increased microfinance loan payment delinquencies worldwide); but see Chen, supra, at 14 (arguing that the primary cause for some of the recent microfinance repayment crises was fast growth and that the global financial crisis was only a minor factor).

92. Schwarzs, supra note 39, at 1317 & n.10.

93. Cf. id. at 1318 (cautioning against yielding to future political pressure to securitize microfinance loans in risky ways to facilitate financing for the poor).

94. Id. at 1323.

95. Id.
dicted by the historical loan default rates relied on by loan originators in extending credit.\textsuperscript{96}

It is unlikely that microfinance securitization will follow this same path. At least to date, most microfinance loans have been relatively straightforward in their terms.\textsuperscript{97} MFIs involved in microfinance securitization should nonetheless monitor to ensure that any new or complex lending terms be appropriate and that borrowers subject to any such terms understand the attendant risks. Similarly, because the global financial crisis has shaken faith in the market’s ability to analyze and measure risk solely through models, over-reliance on mathematical models should not be a current problem. Memories, nonetheless, are short. MFIs involved in microfinance securitization should remain aware that future risks cannot always be predicted through mathematical models, and that any reliance on models should also factor in common sense.

3. Mutual Misinformation

The information failures discussed above are generally subsets of the problem of asymmetric information. A more insidious problem is that things may become so complex that information breaks down on all sides. For example, prior to the global financial crisis, originators and underwriters of some of the most complex securitization products held unhedged exposure to subordinate positions in the securities being sold in order to signal their belief in the safety of the securities.\textsuperscript{98} This approach, however, backfired because at least some of these parties did not fully understand the risks associated with their retained positions. This created a “mutual misinformation” problem: by signaling their (unjustified) confidence in the securities being sold, these parties inadvertently mislead investors into buying those securities.

In the context of microfinance securitization, a mutual misinformation problem might arise, for example, if repayment models are unrealistic. Given the (at least near-term) aversion to over-rely on mathematical models, this is most likely to occur because of unforeseen correlations. In the global financial crisis, for example, rating agencies and other parties failed to see correlations between subprime mortgage loans and other types of securitized assets.\textsuperscript{99} Microfinance-securitization correlations may likewise not be obvious. For example, microfinance loans made to end-borrowers (hereinafter sometimes referred to as “retail” microfin-

\textsuperscript{96} Id. at 1323–24.

\textsuperscript{97} Cf. Pamela Des, Avoiding a Subprime-Like Crisis in Microfinance: Lessons from the Mexican and Bolivian Experience, 15 L. & BUS. REV. AMERICAS 819, 840 (2009) (arguing that microfinance instruments are currently relatively simple, but that increasing commercialization will lead to greater competition, encouraging a greater sophistication of financial instruments); McKee, supra note 80 (“Typical microfinance products are still fairly simple . . .”).


\textsuperscript{99} Schwarcz, supra note 41, at 223.
ance loans) and microfinance loans made to MFIs (hereinafter sometimes referred to as “wholesale” microfinance loans\(^{100}\)) are not always treated as correlated;\(^ {102}\) but they are indirectly correlated insofar as the latter depend on MFI-obligor creditworthiness, which ultimately depends on end-borrower creditworthiness.

C. Transaction Costs

Transaction costs have been a serious limitation to the success of regenerative securitization.\(^ {102}\) There are, however, several ways to overcome this limitation, all dependent on achieving economies of scale.

One approach would be to create one or more multiseller securitization conduits, that could offer “originators the opportunity to minimize their transaction costs by utilizing a common SPV.”\(^ {103}\) These types of conduits, typically administered by sophisticated financial institutions,\(^ {104}\) are “able to achieve a transaction cost economy of scale by allowing multiple originators to sell receivables to a single pre-existing SPV.”\(^ {105}\)

Transaction costs also could be addressed by a Fannie Mae and Freddie Mac approach.\(^ {106}\) The U.S. Government chartered these entities primarily to promote homeownership in the United States and to lower its associated costs.\(^ {107}\) As part of this mandate, Fannie and Freddie purchased large quantities of mortgage loans from banks and other loan originators, thereby funding those lenders to enable them to continue to make new loans.\(^ {108}\) Fannie and Freddie in turn funded themselves by securitizing the loans they purchased, facilitating the securitizations by guaranteeing the underlying mortgage loans.\(^ {109}\) Through their combined ac-

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100. Standard & Poor’s refers to securitizations of loans made to MFIs as “multiple-MFI transactions” and to securitizations of loans made by an MFI as “single-MFI transactions.” STANDARD & POOR’S, supra note 38, at 2. These definitions can be confusing because they do not focus on the loans themselves, which create the distinction. Cf. id. (indicating that Standard & Poor’s makes its distinction “based on the underlying pool of assets”). The Standard & Poor’s definitions also assume that securitizations of loans made to MFIs will involve multiple MFI borrowers, which may not necessarily be true in the future.

101. Cf. Sub-Par but Not Subprime, supra note 23 (indicating noncorrelation between MFIs and end-borrowers from the standpoint of international markets); STANDARD & POOR’S, supra note 38, at 5 (stating that, with certain exceptions, Standard & Poor’s “assume[s] no correlation”).

102. See supra note 51.

103. Schwarz, The Alchemy of Asset Securitization, supra note 33, at 140.

104. Id.

105. Id.; see also supra note 49 (referencing what may be the first use of a microfinance multiseller securitization conduit).

106. See, e.g., Sharon Stieber, Is Securitization Right for Microfinance?, INNOVATIONS, Winter & Spring 2007, at 202, 212 (advocating a “microfinance secondary market agency” to help lower transaction costs). Such an approach should, however, be carefully designed to avoid the many problems facing Fannie Mae and Freddie Mac. See infra note 111 and accompanying text.


108. Id.; see also Stieber, supra note 106, at 204.

tivities, Fannie and Freddie expanded the size and liquidity of the U.S. mortgage-securitization market by creating an active secondary trading market for mortgage-backed securities.110

A parallel approach might benefit microfinance, but it would face several hurdles. These include: (1) finding appropriate governmental or nongovernmental organization sponsorship; (2) determining whether the sponsor would need to guarantee the securitized microfinance loans in order to create a robust secondary trading market for microfinance loan-backed securities; (3) to the extent such a guarantee were needed, determining whether the sponsor’s creditworthiness would be sufficient (many investors viewed Fannie’s and Freddie’s guarantees as having at least implicit U.S. Government’s backing); and (4) learning how the problems that have been plaguing Fannie and Freddie in recent years can be avoided.111

Transformative securitization could also help to address transaction costs by enabling transactions to become so large as to achieve economies of scale, in which the transaction costs would be relatively de minimis compared to the amount of the financing.112 For example, servicing cost is somewhat independent of portfolio size, whereas most servicer fees tie to collections.113 In order to attract experienced servicers, therefore, the anticipated fees must exceed threshold levels.114

Regardless of economies of scale, the relatively short maturities of microfinance loans could increase transaction costs relative to securitization of long-term receivables. One commentator has questioned whether those short maturities would make microfinance loans difficult to suc-

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1509722 (discussing these two basic lines of business conducted by Fannie and Freddie and how they support the mortgage market).

110. Stiebes, supra note 106, at 204.

111. Fannie and Freddie have both been put into conservatorship and aided by $110.6 billion of taxpayer funds following their near collapse during the recent financial crisis. Kopecki & Vekshin, supra note 107. The problems that have lead to their collapse have not been limited to the financial crisis, however. See, e.g., Green & Schmalle, supra note 109, at 4–6 (arguing that Fannie and Freddie engaged in excessive risk taking, that their dominance made them systemically risky entities that were “too big to fail,” that their political influence generated weak regulatory oversight, and that there were other deficiencies in their “Government Sponsored Entity” model such as inadequate capital standards, lack of competition, and overconcentration of credit risk).

112. See supra note 61 and accompanying text (arguing that because transformative securitization would not be tied to the amount of microfinance loans originated by a donor-funded MFI, transformative securitization transactions theoretically could be done in amounts sufficiently large to achieve economies of scale).


114. Query, though, whether the much smaller average size of microfinance loan receivables, compared to ordinarily securitized receivables, might—at least for liquidating loan portfolios—make the need for an expensive servicer less important. This might especially be the case when concentration limits are tiny, so that individual loan losses would be relatively unimportant. This assumes of course, the absence of such a servicer would not create moral hazard encouraging borrowers to be late with payments or to fail to pay.
cessfully securitize. As that commentator himself has observed, however, short maturities have "been successfully addressed in the case of securitizations of trade receivables, which typically turn over every thirty to sixty days." Indeed, I have done numerous successful trade-receivables securitization transactions, in which the SPV purchases, on a "revolving" basis, newly arising trade receivables from the proceeds of collections of already-purchased trade receivables. Moreover, in recent years the maturities of microfinance loans appear to have lengthened. The relatively short maturities of microfinance loans should therefore not be an impediment to commercially sustainable securitization of those loans.

An additional cost arises from the fact that—because microfinance loans are mostly made in third-world countries whereas the securities backed by these loans will be issued to investors in major financial centers—most if not all microfinance loans are likely to be payable in currencies different from the currency in which the securities are issued. In the BRAC Micro Credit Securitization transaction, for example, all of the securities issued to investors were denominated in U.S. dollars, whereas the underlying loans were denominated in Bangladesh Taka (BDT). Investors therefore will need currency-exchange protection to avoid the risk that collections in the foreign currency will be insufficient, at the then-applicable exchange rates, to repay the securities when due. This is a commonplace risk, however, normally hedged by currency swaps and similar derivative contracts with counterparties who are rated at least equal to the rating on the securities. Again, therefore, the need for currency hedging should not be an impediment to commercially sustainable securitization of microfinance loans.

Finally, transaction costs will also include the cost of staffing MFIs to adequately administer and manage these transactions. As MFIs become more experienced in performing these tasks, however, these transaction costs should diminish, at least on a relative basis.

116. Id.
117. See Hüttenrauch & Schneider, supra note 7, at 299 ("Today, [2008] typical loan products in microfinance consist of short-term and medium-term loans, longer-term mortgages, leasing (hire purchase), and personal or consumer loans.").
118. CRAB, supra note 43, at 1–2.
119. Steven L. Schwarz, The Universal Language of International Securitization, 12 DUKE J. COMP. & INT'L L. 285, 299–301 (2002); see also HELMS, supra note 13, at 103 (discussing how to manage foreign exchange risk). Recently, government and private initiatives have been taken to address the foreign-exchange risk. See E-mail from Jeffrey Golden, Visiting Professor, London School Econ. Law Dep't, to Steven L. Schwarz (Nov. 18, 2010) (on file with author) (observing that MFX Solutions, Inc. (www.mfxsolutions.com), a private company, is "help[ing to] plug the gap with derivatives" and that the European Bank for Reconstruction and Development's Local Capital Market Development Legal and Regulatory Work Advisory Panel is supporting an ambitious new initiative to develop local currency and capital markets in the countries in which it invests).
D. Legal Regime Deficiencies

Countries in which microfinance loans are originated or MFIs are located may not always have legal systems that enable the commercially sustainable securitization of microfinance loans. This Section examines potential legal regime deficiencies and how they could be addressed. The possibility that a country's legal system might intentionally impede securitization, perhaps in order to protect local bank profitability (albeit at the cost of the poor) by discouraging disintermediation, is beyond this Section's scope.

1. Bankruptcy Remoteness of the Transfer of Receivables from the Originator to the SPV

Investors generally prefer that the transfer of receivables from the originator to the SPV be structured as a sale.\(^{120}\) This is especially true when the law governing the originator could protect the originator's assets against creditor enforcement, such as would occur in the United States if a company becomes subject to a bankruptcy proceeding.\(^{121}\)

In a microfinance context, the applicable law will likely depend on the originator's location.\(^{122}\) For originators consisting of MFIs located in the United States, U.S. law would apply. But for an originator that is an MFI located in Country X, the law of Country X would likely be applicable. In that case, investors would want to ensure that the transfer of receivables from the originator to the SPV be structured as a sale under that law. That, in turn, calls into question whether Country X's law is sufficiently developed to address the sale of intangible rights—in our case, the rights to payment under the microfinance loans. This is not a foregone conclusion; even the law in the United States is sometimes ambiguous as to whether such a sale would occur.\(^{123}\)

In some countries, however, secured lenders are able to enforce their rights against collateral even if the borrower becomes subject to the local law equivalent of a bankruptcy or insolvency proceeding.\(^{124}\) In those countries, because the need for a true sale is lessened, the transfer of receivables from the MFI originator to the SPV could, if less costly, be structured as a secured loan rather than a sale.\(^{125}\)

In either case—a sale or a secured loan—the SPV or the originator may be required to take steps to protect or "perfect" the transfer of receivables from being regarded as fraudulent vis-à-vis third parties, such

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120. Schwarz, supra note 119, at 291.
122. Schwarz, supra note 119, at 292.
123. SCHWARCZ, STRUCTURED FINANCE, supra note 33, § 4:1, at 4-5.
124. Schwarz, supra note 119, at 291 n.23.
125. Id. at 291.
as creditors of the originator. In the United States, this is normally accomplished by a filing with a public registry.

Because microfinance loan receivables are intangible, the law of the originator’s jurisdiction intuitively would be expected to, and usually does, govern perfection. In many countries, however, perfection procedures for transferring intangible rights are unclear or impractical—such as requiring the obligors on the intangible rights (in our case, the end-borrowers) to be notified of the transfer.

Moreover, where transfers are perfected without being publicly registered, transferees—in our case, the SPVs—cannot know that their interest in the receivables will be prior to that of third parties, creating a fraud risk. That, in turn, will discourage attempts to securitize the receivables.

It therefore may be useful for nations in which microfinance loans are originated to consider what changes to their law, if any, might be needed to achieve clear, effective, and low-cost perfection and priority of sales of those loans.

2. Bankruptcy Remoteness of the SPV

Just as the receivables must be sold to an SPV when the law governing the originator could, in a bankruptcy or insolvency proceeding or otherwise, protect the originator’s assets from creditor enforcement, the SPV itself must be structured in a manner that protects it from the originator’s bankruptcy (bankruptcy remoteness). There may well be questions whether the laws of these countries are sufficiently developed to ensure the ultimate investors of the SPV buyer’s bankruptcy remoteness.

SPV buyers that do not need to be organized as local entities would customarily be organized in the jurisdictions where they intend to issue their securities. These jurisdictions would normally be capital-market

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126. The rationale for taking these steps is that third parties cannot actually see the transfer of intangible rights, so such transfers can be used for fraudulent purposes, such as creating “secret liens.” See, e.g., Benedict v. Ratner, 268 U.S. 353, 360 (1925).
128. Schwarz, supra note 119, at 292.
129. Id. at 292–93.
130. Id. at 293.
132. Cf. Steven L. Schwarz, Helping Microfinance Become Commercially Sustainable, 46 GONZ. L. REV. (forthcoming 2011) (symposium issue on a ten-year retrospective on revised Article 9 of the Uniform Commercial Code) (examining how nations in which microfinance loans are originated could modernize their laws to facilitate securitization of those loans).
134. See generally SCHWARZ, STRUCTURED FINANCE, supra note 33, ch. 3 (“Making the SPV ‘Bankruptcy-Remote’”).
centers, such as New York or London, which have sophisticated legal systems (which address such issues as bankruptcy remoteness).  

3. **Enforceability by the SPV of the Receivables**

   It is, of course, critical that an SPV purchasing receivables should have the power to enforce payment thereunder, and that the enforcement mechanism should be cost effective. That an owner of a right to payment has the power to enforce payment might seem obvious; but microfinance loans are made to individuals, and some countries may have consumer protection laws that require licensing in order to enforce those loans—especially when the loans are originated for the intention of resale. In at least some jurisdictions, the SPV, or at least a servicer acting on behalf of the SPV, may need to be licensed.

   The existence of a cost-effective enforcement regime should also not be taken for granted, especially given the relatively small amount—and thus relatively high enforcement costs—of microfinance loans. For this reason, microfinance loan enforcement is often based on collective guaranties of community and group members, thereby buttressing the likelihood of payment through peer pressure and the possibility of cutting off further microcredit to all members of the group.

E. **Institutional Infrastructure Deficiencies**

   It has been observed that a general flaw in the microfinance literature is the assumption that “MFIs have the institutional maturity (i.e., financial strength, systems, human resources, etc.) to avail of [sophisticated] financing techniques, whereas it is arguable that . . . many ([the] majority?) are not there yet.” This raises concerns about the ability of

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136. SCHWARCZ. STRUCTURED FINANCE. supra note 33, ch. 3 & ch. 4.

137. Cf. Burand, supra note 7, at 193–95 (arguing that originating microfinance loans for distribution could engender consumer-protection laws). This Article does not address the manner in which loans should be made to end-borrowers. For a discussion of best practices for those loans, see Consultative Grp. to Assist the Poor, The Client Protection Principles in Microfinance, CGAP.ORG. http://www.cgap.org/p/site/c/template.re/1.26.4943/ (last visited May 20, 2011) (these principles being avoidance of overindebtedness, transparent pricing, appropriate collection practices, ethical staff behavior, mechanisms for redress of grievances, and maintaining the privacy of client data).


139. See infra notes 162–165 and accompanying text.

140. E-mail from Richard Marney, Senior Vice President of Corporate Dev., Prod. Mgmt. & Market Research. Opportunity International, to Kadita Tshibaka, President & CEO, Opportunity International (Jan. 25, 2010) (commenting on an early outline of this Article). Forwarded by Mr. Tshibaka to Steven L. Schwarzc on Feb. 2, 2010 (on file with author). Cf. MICROFINANCE BANANA SKINS 2009, supra note 35, at 22 (quoting an unidentified “analyst with one of the [microfinance] rating agencies” observing that MFIs “will need to keep board capacities ahead of the increasing complexities of the [microfinance] industry”). See also id. at 23 (reporting that respondents to a CSFI survey of the global microfinance industry identified problems that included “the low calibre of boards, conflicts of interest among directors and executives, and a lack of independence and accountability”).
MFIs to reliably and consistently originate and service microfinance loans to securitization standards.¹⁴¹

1. Origination

At least in theory, MFIs have the ability to originate microfinance loans to securitization standards. The “quality of MFI back offices remains a source of concern, but not a pressing one.”¹⁴² Due diligence on lending terms should be minimal because microfinance loans are generally standardized.¹⁴³ Due diligence on potential borrowers could be expensive unless performed by local MFIs with knowledge about the microfinance borrowing community, but international MFIs could engage local MFIs as needed to perform this diligence. The bottom line on origination quality is the relatively high repayment rates, which are typical of microfinance lending.¹⁴⁴

Origination for the purpose of securitization nonetheless will present challenges. As previously discussed, one such challenge will be securitization’s originate-to-distribute model, which is alleged to have facilitated undisciplined subprime mortgage loan origination.¹⁴⁵ Transformative securitization can increase this potential for moral hazard because microfinance loans would be originated to be sold as part of the same overall transaction in which the MFI manager might receive fees without necessarily taking on risk.¹⁴⁶

Transformative securitization would also pose an additional challenge for origination: how to fund microfinance loans in advance of the securitization in order to build a loan portfolio large enough to ensure an economically viable securitization. There is, however, a commonplace commercial answer to this question: the SPV could obtain a “warehouse” line of credit to make those loans, and the line of credit would be repaid with the proceeds of the securitization.¹⁴⁷

¹⁴¹. Cf. id. (reporting that survey respondents blamed weak MFI governance on “funding, including ‘soft’ money, [being] plentiful” and on microfinance’s “philanthropic status reduc[ing] the need for accountability”).
¹⁴². Id. at 35.
¹⁴³. See supra note 97 and accompanying text (observing that most microfinance loans have been relatively straightforward in their terms).
¹⁴⁴. Compare supra notes 90–91 and accompanying text, with infra note 166 and accompanying text (illustrating relatively high repayment rates—or, correspondingly, relatively low default rates, but attributing declining repayment rates in certain countries to either the global financial crisis or overly fast growth in microfinance lending).
¹⁴⁵. See supra note 73 and accompanying text.
¹⁴⁶. See supra note 80 and accompanying text (observing that the extent to which existing MFIs are sufficiently sophisticated and well staffed to demonstrate that they are deterring moral hazard is unclear).
¹⁴⁷. Alternatively, at least in theory, an SPV could engage in a transformative securitization and then use the proceeds to begin making microfinance loans. Investors in the SPV’s securities would initially look to the proceeds as the source of repayment. That could be successful only if (1) investors purchasing those securities have faith in the SPV’s ability to invest the proceeds, pending the making of the loans, to obtain sufficient yield to cover interest on the SPV’s securities, and the proceeds are in fact so invested, and (2) the investors also have faith in the SPV’s ability to ultimately originate micro-
A warehouse line of credit can be costly, however. Warehouse lenders (who are often commercial banks) not only charge a profit mark-up but also charge a high-risk premium because the loan-portfolio building period is risky and there is no assurance that a securitization, the anticipated source of repayment, will ultimately be viable. This cost could be reduced, however, if the line of credit were guaranteed by a creditworthy nonprofit entity.

That type of guarantee has an analogy in the financing of revenue-generating infrastructure projects in less-developed countries (project finance). In project finance, the equivalent of a warehouse line is the "construction loan" made to finance construction of the project. Construction lenders (who, as with warehouse lenders, are usually commercial banks) charge not only a profit markup but also a high-risk premium because there is no assurance that the revenue-generating project will ultimately be viable. Recognizing the importance of infrastructure construction in less-developed countries, a host of governmental entities, such as the Export-Import Bank of the United States (Eximbank), have been formed to guarantee repayment, and thereby reduce the cost, of construction loans for worthwhile projects. The success of transformative securitization would be greatly assisted if similar entities, or even creditworthy donor-funded entities, would guarantee warehousing lines of credit needed to build economically viable loan portfolios.

2. Servicing

MFIs presently service the microfinance loans that they make, but different MFIs have different levels of employee experience and sophistication. Commercially viable servicing would require a high level of professionalism and experience. This might provide an opportunity, though, for MFIs that are experienced and sophisticated in servicing to not only service their own microfinance loan portfolios but also to en-

\[148.\] See supra note 147 (discussing riskiness of the loan portfolio building process).

\[149.\] Hal S. Scott, International Finance: Transactions, Policy and Regulation 970 (17th ed. 2010). In the author’s experience, construction lenders often anticipate repayment, once the project is completed, from the proceeds of a low-cost, long-term takeout financing engaged in by the SPV that operates the project.


\[151.\] Cf. supra notes 173–175 and accompanying text (discussing similar guarantees of the second risk of loss in securitization structures).


gage (for fees) as commercial servicers in securitizations of unrelated portfolios.\textsuperscript{154}

The need for sophisticated servicing may be especially important in microfinance because the relatively short term of microfinance loans means that many securitizations of such loans may entail a revolving structure, in which newly originated loans are purchased with proceeds of collections of liquidating loans, thereby replenishing the pool of receivables outstanding.\textsuperscript{155} Revolving structures place greater demands on the servicer to ensure that the newly purchased receivables conform to the requirements of the securitization documentation.\textsuperscript{156}

In the few securitizations done to date, the MFI originators have acted as the servicers.\textsuperscript{157} An open question is whether sophisticated profit-making commercial parties, such as Citibank and Deutsche Bank, may sometimes be needed to service securitized loan portfolios.\textsuperscript{158} To that extent, they should be careful to preserve microfinance relationship-lending sensitivities because "[s]ometimes the relationship between [servicing] staff and borrowers is the only thing ensuring repayment of [microfinance] loans."\textsuperscript{159}

\subsection*{F. Risk of Loss}

Even if all of the foregoing challenges are addressed, rating agencies will not rate securities backed by microfinance loans as "investment grade" and investors will not buy the securities unless the risks inherent to those loans are managed. The risks are two-fold: delays in payment (delinquencies\textsuperscript{160}) and defaults in payment.\textsuperscript{161} This Section first examines management of these risks and then examines additional rating agency considerations relevant to such management.

\textsuperscript{154} This raises the question, which would have to be answered country by country, of whether an MFI (or other servicer) that engages in servicing in a new country would be required to be locally licensed or otherwise regulated. Cf. supra note 137 and accompanying text (discussing consumer lending restrictions). At the very least, compliance with such requirements would increase transaction costs.

\textsuperscript{155} Standard & Poor's, supra note 38, at 3 (observing that because the term of microfinance loans is "typically under one year," microfinance loan securitizations "tend to have revolving structures to accommodate the timing mismatches between individual loan maturities and the maturity of the structured finance transaction"). Cf. supra notes 115--117 and accompanying text (discussing the need for a revolving structure in microfinance loan securitization).

\textsuperscript{156} Cf. Standard & Poor's, supra note 38, at 7--8 (discussing risks of revolving structures).

\textsuperscript{157} See Stieber, supra note 106, at 208.

\textsuperscript{158} Stieber suggests this might be needed not only when MFI originators have insufficient servicing sophistication but also in conflict scenarios, such as when an MFI originator's need to respond to unexpected shocks by implementing new policies and procedures for borrowers is directly undermined by its obligations as a servicer. Id. at 208.

\textsuperscript{159} Chea, supra note 51, at 790 (citing Michael Woolcock, Learning from Failures in Microfinance: What Unsuccessful Cases Tell Us About How Group-Based Programs Work, 58 Am. J. Econ. & Soc. 17, 28 (1999)).

\textsuperscript{160} See supra note 47 and accompanying text.

\textsuperscript{161} Schwarkz, Structured Finance, supra note 33, § 2-1, at 2-1 to -2.
I. Managing Delinquency and Default Risk

MFIs have made great strides into reducing these risks, especially for retail microfinance loans. For example, microfinance loans are generally restricted to communal groups of women who cross-guarantee the loans, so there is significant peer pressure to repay the loans. The experience is that women are much more likely to repay these loans than men. An additional payment incentive is the threat that nonpayment will result in cutting off further microcredit to all members of the group. As a result, the default rate has tended to be very low. There are, however, unresolved questions. If future retail microfinance loans are similarly restricted to communal groups of women who cross-guarantee the loans, how many of the “1.5 billion ... people] potentially eligible” for microfinance loans could receive them? If future loans are not similarly restricted, what could that mean for the delinquency and default rate? At the very least, there are uncertainties about whether existing delinquency and default data will continue to hold. Moreover, the delinquency rate on microfinance loans tends to be relatively higher than the default rate because microfinance borrowers who realistically cannot make timely repayment are often granted flexible payment extensions, thereby preventing delinquencies from becoming defaults. This creates uncertainty as to the real default rate.

To some extent, these uncertainties can be managed through over-collateralization, in which excess collateral value of the loans—and thus excess collections—will help absorb delays and losses on collections. The first risk of loss would therefore be borne by the originator, who would be required to transfer to the SPV receivables having at least a theoretical value above the amount invested into the SPV. Requiring the originator to bear the first risk of loss is standard and customary. Recent

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162. See HELMS, supra note 13, at 4 (discussing the birth of microfinance and “solidarity group lending” to poorer women entrepreneurs). Tom Easton, The Hidden Wealth of the Poor, ECONOMIST, Nov. 5, 2005, at 34 (noting the social pressures for repayment that this model of lending engenders in group participants).


164. See Easton, supra note 162, at 5 (observing that one of the virtues of the group lending model in encouraging timely repayments is the avoidance of an adverse selection problem whereby non-paying members inflate the costs for everyone and, by extension, eventually limit the group’s access to further funding).

165. C.f. supra notes 90-91 and accompanying text (discussing default rates).

166. See STANDARD & POOR’S, supra note 2.

167. C.f. Schwartz, supra note 39, at 1323–24 (arguing that the assumption that the delinquency and default rates would continue to hold when mortgage loans become more complex contributed to the failure of subprime mortgage loan securitization).


regulatory proposals in the United States also require originators to bear first-loss positions on each tranche of securities issued (vertical slices), not merely on the most junior tranche, in order to more precisely align the interests of the originator and investors.\textsuperscript{170}

What might not be as standard and customary, however, is the amount of overcollateralization needed to address those uncertainties. That amount might have to be so large as to minimize securitization’s value to MFI originators by minimizing the capital-market financing that can be raised from a given quantity of microfinance loans. Although the ultimate overcollateralization required will be dependent on the particular facts of a transaction, this raises the issue of whether socially minded investors\textsuperscript{171} would be prepared to take a second risk of loss,\textsuperscript{172} such as by purchasing subordinated securities of the SPV at rates less than true market rates, or by providing other forms of credit enhancement such as guaranties or letters of credit.\textsuperscript{173} Alternatively, or in addition, governmental or private entities might be prepared to take this second risk of loss, not unlike the guaranteeing of warehouse lines of credit to assist the loan origination process.\textsuperscript{174} Indeed, one such governmental entity, the Overseas Private Investment Corporation (OPIC), is already beginning to support microfinance structures.\textsuperscript{175}

originating the deal to retain sufficient first-loss risk on the transferred assets, usually in the form of 'overcollateralization'.\textsuperscript{[\textsuperscript{170}]}


\textsuperscript{171.} See Paul Redmond, Transnational Enterprise and Human Rights: Options for Standard Setting and Compliance, 37 Int’l L. 69 (2003) (examining the leading mechanisms that have arisen to support corporate responsiveness to human rights issues and norms). Professor Redmond observes a . . . stimulus for corporate human rights sensitivity in an evident shift in community expectation with respect to corporate behaviour and its social impacts. This shift is partly expressed in the growth in socially responsive investment, that is, investment funds that screen out corporations from the pool of potential investments (or conversely, target them) on the basis of social criteria. The movement is complemented by the increasing use of the federal proxy machinery to place precatory resolutions raising social concerns on the agenda of corporate AGMs. Product market-based responses through the adoption of codes of conduct and social labels have proliferated, signalling voluntary compliance with social and human rights norms.

\textit{Id.} at 74–75 (citations omitted).

\textsuperscript{172.} Cf. Helms, \textit{supra} note 13, at 99 (referencing funds created by socially responsible investors).

\textsuperscript{173.} Other types of credit enhancement could be provided in myriad ways, including cash collateral accounts (perhaps like the CEICA in multiseller securitization conduits) or credit derivatives. In a credit default swap, for example, one party agrees, in exchange for the payment to it of a fee by a second party, to assume the credit risk of certain debt obligations of a specified borrower or other obligor. If a “credit event” (for example, default) occurs in respect to that obligor, the first party will either (1) pay the second party an amount calculated by reference to post-default value of the debt obligations or (2) buy the debt obligations or other eligible debt obligations of the obligor) for their full face value from the second party. \textsc{Gunter Meissner}, \textit{Credit Derivatives: Application, Pricing, and Risk Management} 25–27, 31–32, 34–36 (2005).

\textsuperscript{174.} \textit{See supra} notes 148–154 and accompanying text. \textsc{Connie Bruck}, \textit{Millions for Millions: This Year’s Nobel Prize Winner and Some High-tech Entrepreneurs Are Competing to Provide Credit to the World’s Poor.} \textit{New Yorker}, Oct. 30, 2006, at 62 (discussing an idea, discussed at the Grameen Foundation for some time, for a “guarantee fund” in which certain wealthy people would guarantee amounts supporting a letter of credit, itself backstopping bank microfinance lending).

With these risks sufficiently covered, arm’s length capital market investors should want to invest in securities backed by microfinance loans. Investor compensation would come from the spread between the interest rate on the loans and the interest rate on the SPV’s debt securities. And, as discussed, even investors who are socially neutral should want to invest in microfinance as a means of diversifying their portfolios, thereby protecting themselves from market risk.¹⁷⁶

2. Rating Agency Considerations

The discussion above generally addresses how delinquency and default risks on retail microfinance loans can be, and are being, managed. Next, this Subsection considers rating agency considerations relevant to such management.

Selling securities backed by microfinance loans to investors on a commercially sustainable basis requires that the securities be rated at least investment grade, if not higher,¹⁷⁷ by one or more rating agencies whose reputation the investors respect.¹⁷⁸ It is unlikely that securitizations of microfinance loans will receive those ratings until delinquency and default risks are managed and the other challenges discussed in this Article are fully addressed.¹⁷⁹

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¹⁷⁶ See supra note 24 and accompanying text.

¹⁷⁷ The term investment grade “was originally used by various regulatory bodies [in the United States] to connote obligations eligible for investment by institutions such as banks, insurance companies and savings and loan associations. Over time, this term gained widespread acceptance throughout the investment community.” Standard & Poor’s, Corporate Ratings Criteria 9 (2003), http://www2.standardandpoors.com/sp/pdf/fixedincome/CorpCrl03-8r-jun.pdf; see also Steven L. Schwarz, Private Ordering of Public Markets: The Rating Agency Paradox, 2002 U. ILL. L. REV. 1, 7 (“Ratings below BBB are deemed non-investment grade, and indicate that full and timely repayment on the securities may be speculative.”).

¹⁷⁸ See id. at 8 (“[T]he almost universal demand by investors for ratings makes rating agencies gatekeepers of the types of securities that investors will purchase.”). The significance of a rating depends on the reputation among investors of the particular rating agency. At present, the most respected and trusted globally prominent rating agencies are Standard & Poor’s Ratings Services (S&P), Moody’s Investors Service, Inc., and Fitch Investors Service, Inc. Id. at 6–7.

¹⁷⁹ The discussion above addresses ratings on securities. Sometimes MFIs themselves are rated, or at least evaluated, by companies such as MicroRate Inc. in Washington D.C., Planet Rating SAS in Paris, Microfinanza Rating Srl in Milan, and M-Crl in Gurgaon, in India. Hüttenrauch & Schneider, supra note 7, at 321; Daisuke Ueno, Invisible Helping Hands: How Can Capital Markets Access the Poor and Promote Entrepreneurial Spirits?—An Analysis of International Microfinance Investment Potential and a Proposal for Securitization in a Microfinance Global Pool 36, 41 (May 12, 2006) (unpublished thesis) (on file with MIT Sloan School of Management) (discussing how MFIs obtain ratings from microfinance-specialized rating agencies such as Micro Rate Inc. whereas only a few obtain ratings from S&P’s and Moody’s due to their cost and lack of experience in rating MFIs).
Rating agencies are private companies, but they are often regulated to a limited extent by the government. A rating is an assessment of the likelihood of timely payment on securities. The higher the rating, the lower the rating agency has assessed the credit risk associated with the securities in question.

Because a high rating signals low credit risk to investors, a company that issues AAA rated securities can, other things being equal, more easily attract investors for its securities than can a company that issues AA or BBB rated securities. Therefore, the company with AAA rated securities can pay a lower interest rate on those securities and still attract investors, than can the company with the lower rated securities. An investor may nonetheless prefer, if it finds the extra risk acceptable, to invest in a BBB rated security rather than a AAA rated security in order to benefit from the higher interest rate.

Although several securitizations of microfinance loans have been rated by rating agencies to date, only one appears to have been rated by a globally prominent rating agency. In the BlueOrchard Finance S.A. securitization, the SPV issued $108 million of securities—of which Standard & Poor’s appears to have rated the most senior $42 million securities as AA and the next-most-senior (i.e., “mezzanine”) $16 million securities as BBB.

In summary, if these challenges can be overcome, or at least adequately addressed, securitization could be used to make microfinance lending commercially sustainable.

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180. See generally Schwarz, supra note 177, at 6–8.
181. Long- and short-term debt have separate rating scales, reflecting the different risks associated with long- and short-term investing. Using S&P’s ratings as an example, the highest rating on long-term debt securities is AAA, with ratings descending to AA, then to A, and then to BBB and below. The highest rating on short-term debt securities—such as commercial paper—is A-1, with ratings descending to A-2, A-3 and below. Id. at 7.
182. Id. Thus, only the creditworthiness of an investment, not its economic desirability to investors, is rated. Pure equity securities are not rated because they have neither a specified maturity date nor a contractually fixed principal amount.
183. The existence and, at least before the global financial crisis, almost universal acceptance of ratings thus make it much easier for investors in the capital markets to assess the creditworthiness of a given issuance of securities. To this extent, ratings can be thought of as a public good. Id. at 8.
184. Id.
185. See, e.g., CREDIT RATING AGENCY OF BANGLADESH, supra note 43 (discussing the issuance by BRAC Micro Credit Securitization Series 1 Trust, an SPV, of $15 million of securities rated by the Credit Rating Agency of Bangladesh)
186. See STANDARD & POOR’S, supra note 67, at 5 (indicating these ratings were “preliminary as of May 3, 2007, and subject to change at any time”). The remaining $50 million of securities were unrated. Id. One also might consider whether there should be special microfinance ratings. Cf. STANDARD & POOR’S, supra note 2, at 22–23 (examining whether a “new specialized rating scale could more appropriately reflect the unique characteristics of microfinance”). For example, given the prevalence of microfinance loan delinquencies, perhaps microfinance ratings should not always include timeliness as well as ultimate repayment. Rating agencies are also examining whether microfinance ratings should always be subject to sovereign rating ceilings. STANDARD & POOR’S, supra note 38, at 4–5.
187. There could potentially be other challenges, such as whether an MFI could use securitization for off-balance sheet financing to address high capital adequacy requirements. Because MFIs, being
IV. POTENTIAL REPERCUSSIONS OF "SUCCESS"

This Article has examined whether securitization could make microfinance lending more commercially sustainable. This Part assumes it could, and asks: but at what cost? Would that shift, if feasible, constitute a Faustian bargain, adversely affecting microfinance borrowers and the development of microfinance?

A. Impact on Microfinance Borrowers

Funding microfinance loans through securitization will almost certainly impact end-borrowers. In order to generate commercially viable returns and pay transaction costs, the loans will probably require higher interest rates than donor-funded loans. Investors may also require tougher loan covenants or perhaps other lending restrictions that will make it harder for some end-borrowers to escape poverty. There may also be unintended consequences, such as donor-funded MFI's imposing lending standards and charging rates that more closely parallel commercial parameters.

Changes in servicing might also impact microfinance borrowers. Because securitization servicing would require a high level of professionalism and experience, this Article suggests that MFI's that are experienced and sophisticated in servicing consider acting, in return for fees, as commercial servicers in securitizations of unrelated portfolios. MFI servicers, even if servicing unrelated portfolios, would be likely to preserve some measure of microfinance sensitivity in the loan-collection process. This Article queries, however, whether sophisticated commercial servicers might also be needed to collect securitized microfinance loans. To that extent, their servicing fees would add to the overall cost of the loans. Moreover, commercial servicers may be unmotivated to develop the social relationships with borrowers that are said to be critical to the success of microfinance. Commercial servicers may also be more likely, as became evident in the mortgage securitization context, to choose to strictly enforce defaulting loans rather than attempt to work

mostly elemosnary or nonprofit organizations, are unlikely to need off-balance sheet treatment. This Article does not examine this challenge other than to note that there are increasing concerns about off-balance sheet financing, that the staff of the U.S. Securities and Exchange Commission issued a report in 2005 criticizing off-balance sheet financing, and that accounting regulatory bodies such as FASB in the United States have been considering changes to generally accepted accounting principles (GAAP) to restrict such financing.

188. Cf. Hütschrauch & Schneider supra note 7, at 299 ("Experience... suggests that microfinance is a risk-manageable business.").
189. See supra note 26 (explaining a Faustian bargain).
190. See supra notes 152-155 and accompanying text.
191. See supra note 159 and accompanying text.
192. Cf Chen. supra note 51, at 796; (describing this social relationship as a "critical, albeit less obvious, factor in microfinance success").
out alternative repayment terms if the latter is more costly or exposes the servicer to greater litigation risk. 193

These impacts, however, are already occurring, as commercial banks increase their market share of microfinance lending. Moreover, this Article does not necessarily advocate replacing donor funding with commercial funding. Rather, it argues that donor funding is insufficient to satisfy the worldwide demand for microfinance lending, that commercial bank funding is increasingly being used for that purpose, and that disintermediation of commercial banks through the use of securitization can potentially reduce the costs to end-borrowers and increase the amount of funding available. It will be an empirical question, however, whether securitization can reduce these costs to levels that realistically benefit end-borrowers. If it does not, the securitization “bargain” may indeed be Faustian.

B. Impact on Development of Local Microfinance

The International Bank for Reconstruction and Development (more commonly known as the World Bank) has stated that “[i]ntegrating microfinance seamlessly into domestic markets is the ultimate objective of building inclusive financial systems.” 194 Some may argue that the capital market approaches discussed in this Article might attract more international parties, thereby impeding the development of local microfinance investment institutions and markets. I do not believe that this Article’s approaches would impede that development, or at least impede it in a way that the World Bank should find troublesome.

Local sources of microfinance lending should be inherently competitive against capital market sources because end-borrowers would be more likely to repay local lenders and the asymmetric information would be less. 195 Moreover, this Article’s approaches do not undermine any of the World Bank’s articulated rationales for integrating microfinance with domestic markets. The first rationale is that funding microfinance lending from domestic deposits would reflect the development of deposit services which is “highly valued by poor and low-income people.” 196 But disintermediating commercial bank costs would have no direct impact on the development of deposit services. The second rationale is that domestic funding for microfinance lending would avoid foreign exchange risk. 197 As discussed, however, that risk is common and could be managed at minimal cost. 198 The third rationale is that domestic funding for micro-

193. See supra notes 84–86 and accompanying text.
194. HELMS, supra note 13, at 104.
195. For example, a local commercial bank may have more knowledge about potential microfinance borrowers than would parties outside the country.
196. HELMS, supra note 13, at 104.
197. Id.
198. See supra note 119 and accompanying text.
finance lending would be "more likely to come from commercially motivated sources," thereby freeing up international donor monies for other social or development purposes (like Haitian and Chilean earthquake relief). But a key goal of the capital market approaches discussed in this Article is to increase the overall level of commercial funding of microfinance.

One must also place matters into context. To the extent the capital market approaches discussed in this Article constitute an impediment to the ability of local commercial banks to grow by charging high rates on microfinance loans, end-borrowers would benefit.

There are, nonetheless, real risks, one being that capital market approaches could marginalize local microfinance lending sources but then, for whatever reason, disappear. This could leave potential borrowers without either source of microfinance lending. Other risks are more intangible, such as the possibility that the traditional close relationship between microfinance lenders and borrowers might diminish.

V. CONCLUSIONS

Microfinance is critical to enabling low-income individuals and the poor to start or expand small businesses. The need for microfinance lending, however, vastly exceeds the amount of funds that can be raised from charitable donors. Commercial banks have stepped in to fill this need but, as profit-making intermediaries of funds, they are charging exorbitant rates of interest on microfinance loans.

This Article argues that innovative legal structures can enable low-cost microfinance loans to be funded directly from the ultimate source of funds: the capital markets. These markets are large enough not only to supplant the need for commercial bank involvement but also to greatly expand the amount and availability of microfinance lending.

The Article first examines how microfinance lending can be funded through the capital markets. One approach, regenerative securitization, would regenerate funding for donor-funded microfinance institutions to make new loans. Although regenerative securitization is already beginning to occur, it has several limitations, including that it is restricted by the amount of outstanding donor-funded microfinance loans. Another

199. HELMS, supra note 13, at 104.
200. See supra note 21 and accompanying text.
201. Cf. CTR. FOR THE STUDY OF FIN. INNOVATION, A DIFFERENT WORLD: A FOLLOW-UP TO MICROFINANCE BANANA SKINS 2009: CONFRONTING CRISIS AND CHANGE 6 (Feb. 2010) ("[S]everal instances where aggressive newcomers outbid established MFIs for business, drove them out of the market, and then departed when times got tough, leaving communities without any [microfinance] service at all.").
202. Cf. MICROFINANCE BANANA SKINS 2009, supra note 35, at 24 (noting that as commercial banks are engaging in microfinance lending, microfinance "is losing its core value of closeness with the target group"); see also supra notes 159 & 192 and accompanying text (discussing the importance of relationship lending for microfinance).
approach, transformative securitization, would be bolder, freeing the origination of microfinance loans from the need for prior funding, whether from charitable donors or commercial banks.

The Article next examines and attempts to resolve legal and financial challenges of first impression to these forms of securitization. Among other things, the Article considers the lessons of subprime lending because subprime loans, whose securitization helped to trigger the global financial crisis, and microfinance loans both involve risky borrowers and both, to some extent, are politically motivated.

Notwithstanding securitization's potential beneficial impact on microfinance borrowers, the Article cautions that any commercial approach to microfinance, including securitization, should be managed to avoid creating a Faustian bargain—expanding the availability and amount of relatively low-cost microfinance loans, but inadvertently undermining the altruism and grace that donor-funded microfinance lending shows for the plight of the poor.