CRAMDOWN INTEREST, CONTRACT DAMAGES, AND CLASSICAL ECONOMIC THEORY

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INTRODUCTION

This is a paper about reorganization plans in bankruptcy confirmed over the objection of a secured creditor class. When the other requirements of feasibility, the debtor's good faith, the best interest of creditors, proper claim classification, approval by at least one impaired class, and absolute priority are met, a court may confirm a chapter 11 reorganization over the objection of a secured creditor if the court finds the plan fair and equitable to the objecting secured creditor. ²

To find a plan fair and equitable to an objecting secured creditor, the court must find that one or another of three tests is fulfilled. The three alternate tests are in section 1129 of the Bankruptcy Code. The second test is what often is called the cramdown present value test.³ The test says a plan is fair to an objecting secured creditor if it provides a stream of cash payments to the creditor the present value of which is equal to or greater than the secured part of the creditor's claim.⁴ For an undersecured creditor, that means equal to the value of the collateral.⁵ To compute the present value of future payments, one must use exponential interest formulas or tables reflecting them. What interest rate to use in cramdown plans generates a great deal of litigation and implicates an endless argument about what is fair. This often is called the debate about cramdown interest.

Several methods for computing cramdown interest have emerged in the cases among the federal circuits. This paper's argument amounts to saying that the majority rule among the circuits for setting interest rates in cramdowns is the best rule to use. This is not because it happens to be the majority rule but because it honors the kinds of ordinary expectations of creditors the relevant statutory language reflects, balances the competing aspirations of objectivity and flexibility in adjudications on a case by case basis, and aligns bankruptcy doctrine with

¹ The Bankruptcy Code mandates that a plan be fair and equitable to a "class of creditors," and since a secured creditor is usually placed in a class by itself, this paper will refer throughout to confirmation over the objection of a "secured creditor."

² See 11 U.S.C. § 1129 (2000); see also Kenneth N. Klee, All You Ever Wanted to Know About Cram Down Under the New Bankruptcy Code, 53 AM. BANKR. L.J. 133, 136–38 (1979) (discussing confirmation standards that apply to secured creditors in reorganization cases). See generally Craig A. Sloane, The Sub Rosa Plan of Reorganization Side-Stepping Creditor Protections in Chapter 11, 16 BANKR. DEV. J. 37, 41–42 (1999) (noting requirements needed to be satisfied before cramdown plan can be confirmed).

³ See 11 U.S.C. § 1129(b). Subclauses (i) to (iii) in 11 U.S.C. § 1129 (b)(2)(A) contain the three tests. The cramdown interest alternative, a part of the first test, is in 11 U.S.C. § 1129 (b)(2)(A)(i)(II). 11 U.S.C. § 1325(a)(5)(B)(ii) is the parallel language for wage earner plans. See generally Charles D. Booth, The Cramdown on Secured Creditors: An Impetus Toward Settlement, 60 AM. BANKR. L.J. 69, 94 (1986) (stating present value analysis as method of valuation); Klee, supra note 2, at 155 (mentioning present value test as part of confirmation plan).

⁴ See 11 U.S.C. § 1129(b)(2)(A)(i)(II) (stating payments must equal at least amount of claim); see also Booth, supra note 3, at 87 (noting payments must equal at least value of collateral); Klee, supra note 2, at 155 (stating payments must have present value usually equal to value of collateral).

⁵ See 11 U.S.C. § 1129(b)(2)(B)(i). See generally Booth, supra note 3, at 101 (noting present value must be equal to collateral, not claim); David Gray Carlson, Bifurcation of Undersecured Claims in Bankruptcy, 70 AM. BANKR. L.J. 1, 14 (1996).

accepted principles of economic analysis used in systematic decision making outside bankruptcy.

Section I below introduces nomenclature used in the literature about cramdown interest and identifies the majority and other rules for setting such interest rates and some variations within two of the rules. Section II of the paper discusses court of appeals cases decided in the ten years from early 1992 to mid 2002 to illustrate the competing rules and arguments often made for and against them. Section III explores the idea of economic opportunity cost and outlines some principles that systematic investors and financial managers use and do not use to evaluate alternatives and make choices with the purpose of showing that the majority rule better captures those principles than do the competing approaches.

Section IV discusses the goals of objectivity and flexibility in adjudicating issues of financial evaluation and argues that the majority rule balances those goals well by implicitly conforming to evolved contract damages law principles. Section V then brings the discussion to the statutory language and to explicit valuation of plan payment streams as financial assets. The paper concludes with some thoughts about plain meaning interpretation.

I. NOMENCLATURE AND THE MAJOR COMPETING MODELS

Commentators call the majority method for computing cramdown interest the "coerced loan approach" and the leading alternatives the "formula," "cost of funds," and "contract rate" rules. No circuit has adopted either of the latter two, although the contract rate is used in some places as a rebuttable presumption to motivate parties to come forward with thorough evidence. The contract rate approach has no real defenders among the circuit court judges. To use the contract rate in its pure form in a cramdown would simply continue the rate found in the note or loan in default, despite passage of time and likely changes in prevailing rates and other circumstances. The circuit courts appreciate that cramdown interest setting is prospective and that past actions and sunk costs are irrelevant to prospective plans

⁶ See 7 COLLIER ON BANKRUPTCY ¶ 1129.06[1][c], at 147 (Alan N. Resnick & Henry J. Sommer eds., 15th ed. Rev. 2002) [hereinafter COLLIER] (stating courts have used interests rates based on creditor's cost, coerced loan theory and rates specifically for reorganized debtor). See generally David G. Epstein, Don't Go and Do Something Rash About Cram Down Interest Rates, 49 Ala. L. Rev. 435, 444 (1998) (emphasizing coerced loan approach and formula approach are used by courts to determine cramdown interest rate); Monica Hartman, Comment, Selecting the Correct Cramdown Interest Rate in Chapter 11 and Chapter 13 Bankruptcies, 47 UCLA L. Rev. 521, 532 (1999) (noting courts have adopted comparable loan, cost of funds, and treasury rate approaches to determine market rate). A brief note on the formula approach is appropriate. The formula approach looks to the sum of a base "risk-free" rate, such as the rate for treasury securities, for a duration comparable to the payout period under the plan plus an adjustment for risk. See Epstein, supra at 444.

⁷ See Green Tree Fin. Serv. Corp. v. Smithwick (*In re* Smithwick), 121 F.3d 211, 214 (5th Cir. 1997) (contending court approves rebuttable presumption of contract rate); G.M.A.C. v. Jones, 999 F.2d 63, 70–71 (3d Cir. 1993) (stating plan may use contract rate if no evidence shows current rate exceeds contract rate). *See generally* Heartland Fed. Savs. & Loan Assoc. v. Briscoe Enters., Ltd. (*In re* Briscoe), 994 F.2d 1160, 1169 (5th Cir. 1993) (asserting courts have chosen contract rate if it was good estimate of discount rate).

and plan confirmation. For the above reasons and because it is not approved at the reviewing court level as the real test or even as a serious competitor, the contract rate approach receives little attention in this discussion.

The cost of funds approach is one of the two poles between which the precedents and dicta are spread. Although it has not been adopted at the court of appeals level in any circuit, it has been used at lower levels, is much discussed, and has at least superficial appeal. Moreover, it may motivate some opinions giving a formula-type rule. For those reasons, it is one of the two approaches receiving major attention in this paper.

What is this cost of funds method? The cost of funds rule would frame the cramdown interest issue as the question "what does or would it cost the objecting secured creditor to borrow added funds in order to be able to make other new loans or investments it would have made with the proceeds of foreclosure sale of its collateral were it not prevented from foreclosing by the plan being crammed down?" It often amounts to an argument for using rates at or only a little above prime rate figures, but can mean use of a creditor's actual borrowing costs in a case where it is using borrowed money along with its own equity. In principle, the cost of funds methodology could be used even where a creditor borrows nothing if a court can get good evidence of the cost of equity finance. In writing this article and evaluating the rules used and suggested, the author assumes that cost of funds proponents sincerely wish to ascertain a creditor's true loss of opportunity and are not just using the cost of funds idea as a wooden horse to hide unreflective low rate, prime rate measures.

By contrast to the other rules, the dominant "coerced loan" rule focuses neither on irrelevant past contract rates nor on actual or hypothetical costs of a creditor's borrowing. Rather, it inquires into the objecting creditor's prospective alternatives or opportunities for new investments or new loans, such as loans or credit sales of the sort it once made to the debtor. ¹¹ That is to say, it measures cramdown interest by reference to lost opportunities for relevant investments the creditor could have made with an amount equal to the monetary value of the collateral. It does not ask how such amount might otherwise be obtained or "financed," and it often fails to

⁸ See generally In re Hudock, 124 B.R. 532, 534 (Bankr. N.D. Ill. 1991) (observing creditor's interest rate should equal cost of borrowing); In re Hardzog, 74 B.R. 701, 703 (Bankr. W.D. Okla. 1987) (approving use of cost of funds approach); In re Campbell, 16 B.R. 496, 497 (Bankr. N.D. Ill. 1982) (applying cost of funds approach using current cost of treasury bills).

⁹ See generally Jones, 999 F.2d at 67 (commenting cost of funds approach allows creditor to cover loss by borrowing equivalent to amount of repossession); Hartman, *supra* note 6, at 539 (stating cost of funds approach looks to put creditor in same position as if allowed to foreclose on collateral and re-loan).

¹⁰ See In re Hudock, 124 B.R. at 534 (selecting prime rate as appropriate using cost of funds approach); Hartman, supra note 6, at 540–41 (outlining under-compensation criticisms leveled against cost of funds methodology). See generally Jones, 999 F.2d at 67 (noting cost of funds does not fully compensate creditors).

¹¹ See COLLIER, supra note 6, ¶1129[1][c][ii], at 148 (stating coerced loan gives creditor payment with rate of return equal to rate creditor would charge if making loan to third person under similar circumstances); Hartman, supra note 6, at 533 (noting under coerced loan theory courts use interest rates of similar loans). See generally Epstein, supra note 6, at 444–47 (sketching history of coerced loan approach).

even ask whether or not the creditor would in fact invest alternatively or obtain funds to do so in place of the would-be proceeds of a foreclosure sale of the collateral.

This coerced loan method is definitely the majority rule, but how strong a majority is debated. Two commentators who recently sorted out the decisions at the circuit level agree that the Third, Fourth, Fifth, Sixth, Seventh, and Eleventh Circuits use a coerced comparable loan approach and that the Second Circuit uses what is called a federal formula approach.¹² As to the Ninth Circuit, one of the commentators is uncertain¹³ and the other does not classify that circuit's approach.¹⁴ The commentators differ on how to classify the Eighth, one calling it a federal formula court,¹⁵ the other author saying she is not sure.¹⁶ As to the Tenth Circuit, one author squarely calls it a coerced loan court;¹⁷ the other finds both coerced loan and formula opinions from different panels in that circuit.¹⁸

Variations occur within each of the two broad categories just defined: cost of funds and coerced loan. Either can be very creditor specific or not so specific. For coerced loan analysis, the lost investment alternative destroyed by the cramdown can be measured by rates prevailing in some specialized local or regional market for loans or investments like the coerced loan, i.e. investments or loans with terms like the plan's terms. ¹⁹ Alternatively, the lost opportunity can be measured by rates the creditor in question itself currently charges on similar loans or the rates it currently earns in similar investments when it actually lends or invests on terms like the cramdown plan's terms and is a regular, competitive participant in the relevant market. ²⁰ Thus, coerced loan assessments can be very creditor specific or only

¹² See Epstein, supra note 6, at 443 (noting seven circuits permit cramdown interests calculations relative to rate that could be obtained outside limits of bankruptcy plan); Hartman, supra note 6, at 529 n.48, 533 (finding eight circuits allow coerced loan approach for finding present value).

¹³ See Hartman, supra note 6, at 529 n.48, 533 (recognizing Ninth Circuit as using "riskless base rate plus risk factors as possible alternative to comparable loan approach.").

¹⁴ See Epstein, supra note 6, at 443–44 (omitting classification of Ninth Circuit).

¹⁵ See id. at 447 (citing Eighth Circuit as first to use formula approach to determine interest rate).

¹⁶ See Hartman, supra note 6, at 529 n.48 (stating Eight Circuit's use of riskless rate plus risk factors and comparable loan approach to determine interest rates).

⁷ See id. at 529 n.48, 533.

¹⁸ See Epstein, supra note 6, at 449 (discussing cases from Tenth Circuit using formula approach and coerced loan approach).

¹⁹ See NCNB Tex. Nat'l Bank v. Hulen Park Place Ltd. (*In re* Hulen Park Pl. Ltd.), 130 B.R. 39, 42 (N.D. Tex. 1991) (using open market rate regional lenders on similar loans charge similarly situated borrowers); *In re* Shannon, 100 B.R. 913, 939 (Bankr. S.D. Ohio 1989) (requiring use of market rate of interest charged by regional and local lenders for similar loans); *see also* Hartman, *supra* note 6, at 521, 534 (discussing Fourth Circuit's approach). But the reality of truly relevant markets is debated. *See In re* Jordan, 130 B.R. 185, 189 (Bankr. D. N.J. 1991) (noting difficulty of determining market rate for hypothetical new loan when no market for it is proposed); Epstein, *supra* note 6, at 464 (discussing accuracy and validity of coerced loan approach); Hon. John K. Pearson et al., *Ending the Judicial Snipe Hunt: The Search for the Cramdown Interest Rate*, 4 AM. BANKR. INST. L. REV. 35 (1996) (stating bankruptcy courts, unable to observe any market, must rely on expert testimony).

²⁰ See In re Till, 301 F.3d 583, 591 (7th Cir. 2002) (explaining how one way to determine rate is to use rate creditor could have obtained had it foreclosed and reinvested proceeds in loans with similar duration and risk); Epstein, *supra* note 6, at 464 (arguing for creditor-specific measures); Hartman, *supra* note 6, at 521,

creditor similar. Cost of funds measures, likewise, can be more or less creditor specific. A more specific cost of funds gauge would be using rates in loan contracts the objecting creditor recently has entered into as a borrower. Less specific would be using prevailing rates in loan markets offered to borrowers with credit standing like the creditor's and on terms and maturities like those of the cramdown plan.

Each of these two ends of the methodological spectrum has a vision of lost opportunity that tries to make economic sense of the Code's directive to consider the comparative positions of the objecting creditor, within and outside the plan.²¹ The coerced loan reasoning contemplates the opportunity lost as an investment opportunity or lending opportunity. Cost of funds reasoning by contrast somewhat considers the lost opportunity as an opportunity to finance operations internally instead of having to borrow. Each of these reflects an attempt to implement the idea of relative position. The fourth of the competing methods, the formula approach, does not have a unique vision or concept or interpretation of relative position or relative opportunities. When one reads formula-type precedents, one finds many references to judicial ease and economy but finds it hard to detect the opinions' ultimate interpretation of a creditor's "position" or a clear notion of what is lost when a creditor is forced from one position to another.²² Like contract rate approaches, the formula opinions sometimes appear like default rules or even rules of expediency.

Like presumptions, burdens of proof, and other rules in aid of judicial economy and decision making under uncertainty, default rules for reorganization litigations have their places. It is suggested, however, that formula methods and contract rate fall-back techniques may sacrifice too much truth-finding about the actual facts of particular cases in exchange for speed and finality. As will be pointed out later, formula and cost of funds methods may prove to be no more economical than the majority method.

The formula cases start with a federal rate like treasury security rates or prime rates, regional or national, determined by federal reserve fund rates and discount rates and then add risk premiums related to the debtor's plan, its circumstances, and its credit record or payment history.²³ This effort may reflect a judicial rate-maker's

^{534 (}stating rate should be "which would be charged or obtained by the creditor making loan to third-party with similar terms, duration, collateral, and risk.").

²¹ The objective of putting the objecting secured creditor in the same economic position it would have enjoyed had it been allowed to foreclose or to repossess is proclaimed alike by formula courts trying to approximate a cost funds approach and by courts using the coerced loan method. *Compare G.M.A.C. v. Valenti (In re Valenti)*, 105 F.3d 55, 63–64 (2d Cir. 1997) (using formula approach) *with G.M.A.C. v. Jones*, 999 F.2d 63, 66–67 (3d Cir. 1993) (using coerced loan approach).

²² See In re Hollinger, 245 B.R. 691, 697 (Bankr. N.D. Fla. 2000) (stating formula method uses less judicial resources than coerced loan method); In re Ehrhardt, 240 B.R. 1, 10 (Bankr. W.D. Mo. 1999) (explaining purpose of local rule is to limit use of limited resources); see also Hartman, supra note 6, at 543 (1999) (noting simplicity in using treasury rate).

²³ See In re Till, 301 F.3d at 589 (explaining Second Circuit's approach); In re Shannon, 100 B.R. 913, 930 (Bankr. S.D. Ohio 1989) (stating court must consider risk of default); see also Epstein, supra note 6, at 542–43 (calling this "treasury rate" approach); Hartman, supra note 6, at 543 (calling this "formula approach").

construction of a rate that mimics what the creditor could earn on another loan or investment it might make or "finance" with foreclosure sale proceeds. It may suppose that the creditor's best alternative investment opportunities are in deals with terms, risks, debtors, and subject matter like those of the plan to be confirmed. Such federal formula adjustments may also manifest a judge's guess at what a creditor would have to pay on loans it gets largely on the security of an assignment of the plan. This would include the stream of the future cash payments the creditor receives under the plan, or the discount rate it would have to use to quote a price on a non-recourse assignment of its rights under the plan or on sale of the plan in some secondary market. In other words, what formula users fundamentally have in mind is unclear. Their ultimate norms might be more like those of coerced loan proponents or more like those of cost of funds proponents.

Some formula cases might be subsumed under a coerced loan heading, some others under the cost of funds heading. One Second Circuit decision briefed later states outright that it is using a formula rule as a proxy for cost of funds.²⁴ The motives of some judges using formulas cannot be appropriated to either of the two main conceptual approaches.²⁵ Since the ultimate conceptual grounding of most formula opinions is either the coerced loan-lost investment opportunity idea or the cost of funds concept, little attention is given here to formula cases. Stated differently, a simplified two-party debate between coerced loan rationales and cost of funds rationales provides an adequate framework for reading and evaluating the formula opinions.

This paper takes the coerced loan side of that two-position debate, but before making arguments for the one and against the other, it will outline recent opinions from courts of appeal.²⁶ We will begin with recent Seventh Circuit rulings and end with one from the Third Circuit. Opinions from the Fourth, Fifth, and Second Circuits are briefed in the middle of the section.

²⁴ For example, the Second Circuit has said that it considers cost of funds measures preferable to coerced loan methods and generally "reflective" of the present value to be ascertained, but that it requires use of a federal formula because it is easy and uniform. *See In re Valenti*. 105 F.3d at 64.

²⁵ See Farm Credit Bank of Spokane v. Fowler (*In re* Fowler), 903 F.2d 694 (9th Cir. 1990) (adopting use of either prime rate or treasury rate); *In re* Westwood Plaza Apartments, 147 B.R. 692, 701 (Bankr. E.D. Tex. 1992) (adopting use of prime rate for several different reasons). There are many federal base rates used, as well as several types of and numerous adjustments made to them. *See* Hartman, *supra* note 6, at 531–32.

²⁶ With help on the telephone from a search advisor at one of the major legal database services, the author used a Boolean operator format to locate all the cramdown interest opinions published by courts of appeals from January of 1992 to July of 2002. Excluding a couple where cramdown interest was not a main point on appeal and was little discussed, section II briefs all the circuit opinions found. By altering the "sources" code from "courts of appeals" to "all federal courts" one can locate lower court cramdown interest rulings. Also, one may expand the date restrictions to get older rulings. Here is the Boolean logic search used, in case a reader would like to employ it to find more cases: (bankruptcy) and ("interest rate") and ("plan confirmation" or "cramdown" or "indubitable equivalent") and ("coerced loan" or "cost of funds" or "risk premium" or "junk bond" or treasury) and date (geq (01/01/92) and leq (07/01/02)). This paper does not address cramdown rates for objecting state real property *ad valorem* tax lien creditors. Those rates depend on state tax statutes and Code paragraph 1322 (b)(2). Interested readers should *see* Rankin v. DeSarno, 89 F.3d 1123 (3d Cir. 1996).

II. RECENT PRECEDENTS IN THE COURTS OF APPEALS

In a Seventh Circuit case, In re James Wilson Assocs., ²⁷ the lower courts had set interest at 2.5 percent above the then current rate for seven-year maturity U.S. Treasury Bonds.²⁸ The plan called for a stream of payments over seven years, partly amortizing unpaid principal, with a balloon payment of the balance after the seven years.²⁹ The creditor had a first mortgage lien on the debtor's office building.³⁰ The lien was for 3.2 million dollars.³¹ The building was worth six million dollars or 1.87 times the lien.³² The court of appeals approved the formula approach used below, calling it a factual determination to be reviewed deferentially.³³ The rationale was based on the creditor's "opportunity cost," or value of opportunities lost when it was forbidden to foreclose.³⁴ What were those opportunities? Among other things said while discussing that question, were remarks by the court that the lost opportunities are those of a firm "in the business of making loans." This suggests that other, actual investments or lending opportunities of the creditor might specially prove what rate is fair and equitable and that formulas plus expert testimony should be used as a way to evaluate those opportunities. The formulas, then, are a means to

Another Seventh Circuit ruling was Koopmans v. Farm Credit Services. 36 In that case, the bankruptcy judge had approved a plan over the objection of an oversecured lender in a chapter 12 farm reorganization.³⁷ Judge Easterbrook stated the cramdown interest issue as "at what rate of interest will the creditor be as well off in the reorganization as if it had been allowed to foreclose on and sell the farm" and then "reinvest" the sale proceeds in other loans like those in the plan. 38 This statement of the issue implies a coerced loan way of thinking about cramdown interest. The judge's answer to that question was the market rate for loans with duration and risk "equivalent" to the loan implicitly decreed by the confirmed plan.³⁹ The opinion noted the bankruptcy court had "approximated" that by finding rates prevalent for new, 20-year, well secured agricultural loans and then adding 1.5 percent to account for the debtor's poor credit and above average risk. 40 The opinion characterized that approach both as a "coerced loan" and a "prime plus" formula

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<sup>27</sup> 965 F.2d 160 (7th Cir. 1992).
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²⁸ *Id.* at 172. ²⁹ *Id.* at 165.

³⁰ *Id.* at 164.

³¹ *Id.* at 165. ³² *Id.*

³³ *Id*. at 172.

³⁴ *Id*.

³⁶ 102 F.3d 874 (7th Cir. 1996).

³⁷ *Id.* at 874.

³⁸ *Id*.

³⁹ *Id.* at 875.

method, but only in the course of saying that there are several "approaches" and views and de-emphasizing the importance of labels or "nomenclature."

The focus of the opinion was on rates in a market of a well-defined sort, but the court ruled that using a rate from a different market (prime loans) and then adjusting that to estimate the rate in the more relevant market is an acceptable technique. According to the opinion, there is no one exclusive method. Participants in the particular market themselves may use several methods to quote and negotiate rates. The opinion did not absolutely rule out even using the prior contract rate but criticized using it as a past measure in most instances irrelevant for current and prospective rate setting.

The opinion characterized a plan as a sort of refinancing with a new, longer payment schedule. As with other refinancings, in cramdowns, current rates are the correct measures. As Replacing current rates for contract rates can cut either way, the opinion indicated, favoring the debtor if rates have declined but favoring the creditor when they have risen. Consistent use of current rates is needed, the opinion urged, contract rates serving neither as floors nor as ceilings. The opinion also discussed different formulas starting from different federal rates and derived from federal sources but said the formulas should converge or "come to the same thing" if the adjustments to the starting point are well made. The opinion rejected a bold argument made on the debtor's behalf that unadjusted Treasury Bill rates be used, by enumerating the many "real risks" and costs an oversecured creditor confronts in private lending, which are not confronted by one lending to the treasury.

Another part of the opinion supports the interpretation as a coerced loanalternative investment ruling. In enumerating the many risks and costs confronting

⁴¹ Koopmans, 102 F.3d at 875.

⁴² *Id.* at 875–86.

⁴³ *Id.* at 875.

⁴⁴ *Id*.

⁴⁵ *Id*.

⁴⁶ Koopmans, 102 F.3d at 874–75 (stating in cramdowns, creditors must get market rate of interest); *In re* Benford, 14 B.R. 157, 159 (Bankr. W.D. Ky. 1981) ("The touchstone of providing present value of a claim to be paid in the future is responsiveness to current market conditions."); Pearson, *supra* note 19, at 40 (stating courts have generally concluded cramdown interest rate is to be measured by market rates).

⁴⁷ Koopmans, 102 F.3d at 875; see also G.M.A.C. v. Jones, 999 F.2d 63, 71 n.11 (3d Cir. 1993) (declining to impose cap giving debtors benefit of interest rates that fall after original contract, but denying creditors compensation where interest rates later climb).

⁴⁸ Koopmans, 102 F.3d at 875; see also Jones, 999 F.2d at 71 n.11 (declining to use contract rates as caps on interest rates).

⁴⁹ Koopmans, 102 F.3d at 875. *But see* Assocs. Commercial Corp. v. Rash (*In re* Rash), 520 U.S. 953, 962–63 (1997) (arguing adjustments in interest rate do not fully offset risks of nonpayment or rapid deterioration in value).

⁵⁰ Koopmans, 102 F.3d at 876; see also Onyx Acceptance Corp. v. Hartzol, 2002 U.S. Dist. LEXIS 8073, *6 (Bankr. N.D. Ill. 2002) (agreeing with Koopmans by adding risk factor interest premium for even most creditworthy customers and declining to do so for "risk free" lending such as U.S. treasury bills); *In re* Scott, 248 B.R. 786, 793 (Bankr. N.D. Ill. 2000) (indicating prime rate used for even most creditworthy customers includes some compensation for risk of non-payment).

even an oversecured creditor and offering a justification for the 1.5 percent risk premium adjudicated below and affirmed by the court of appeals, the opinion remarked that a debtor may use its equity margin to secure more loans, to borrow more from other creditors. The counterpart to that is, were it allowed to foreclose, the creditor could use the foreclosure sale proceeds to lend more to other borrowers. The lost opportunity to do so is a loss the plan should mitigate if it is to be adjudged fair and equitable. In any event, the opinion showed no inclination toward any simplistic formula or simplistic version of cost of funds techniques for setting cramdown interest rates. The *Koopmans* decision, then, is an example of a formula ruling with much non-formulaic thinking that rests on coerced loan principles. It can be allocated to the lost investment opportunity side of the debate over what is the opportunity cost of cramdown for a creditor. It is a precedent rightly grouped with the coerced loan majority.

The opinion also published some judicial dicta about the bugbear of "profits" of lenders and remarked that competition in extending credit drives returns down to costs including opportunity costs but leaves little or no room for pure profit in the economists' sense of the term as opposed to profit in the simple accounting sense of the word, which does not include lost opportunity as a cost.⁵² The opinion uses an analogy to show that the ordinary, non-economic profit of a financial "intermediary" is not problematic and should be non-invidious.⁵³ Such intermediaries are "suppliers" of capital not wholly unlike suppliers of seed or fertilizer, the judge suggested, and their profits are no more suspicious than competitive profits of other supplies.⁵⁴ Indeed, the opinion argued that the fungibility and mobility of capital make for keen competition and for more rather than less room for credit providers to earn pure profit, which is distinct from accounting profit.⁵⁵ The opinion writer did not take the analogy very far and did not have to. It was used only in rejecting an extravagant argument made by a trustee in a farm bankruptcy.⁵⁶

In the *Koopmans* view, the markets to be studied to find proper rates are particular, even local, markets, not large aggregate markets like those for prime commercial loans or for treasury securities.⁵⁷ The opinion at one place spoke of markets recorded in newspapers but must have been referring to more that just, say, the Wall Street Journal, because earlier it referred to "flourishing markets in second

⁵¹ Koopmans, 102 F.3d at 876. The opinion says there always is a risk a new or even a junior creditor might try to "jump the queue." *Id.* In accord with the view expressed here that *Koopmans* is best categorized as a coerced loan approach is a later decision also by the Seventh Circuit. *See In re* Till, 301 F.3d 583, 591 (7th 2002) (construing *Koopmans* as favorable to coerced loan methods and following it).

⁵² Koopmans, 102 F.3d at 876. Judge Easterbrook cites to Adam Smith and to his own former faculty colleague at the University of Chicago, George Stigler, a Nobel Prize winning economist. *Id*.

⁵³ See In re Till, 301F.3d at 591; see also Green Tree Fin. Servicing Co. v. Smithwick (In re Smithwick), 121 F.3d 211, 214 (5th Cir. 1997) (citing Judge Easterbrook's reasoning in *Koopmans* with approval).

⁵⁴ See Koopmans, 102 F.3d at 876.

⁵⁵ See id.

⁵⁶ See generally id.

⁵⁷ See id. at 876.

and third" agricultural loans, to "junk bond" markets, and to other "real markets." The opinion writer said he suspects arguments that "there is no market" for some loans and believes that close proxies exist for the few cases where none do. ⁵⁹ These contexts must be remembered lest the opinion's concluding remarks about cost of capital and newspaper tables be misunderstood. Far from favoring use of federal formulas and far from limiting creditors to rates close to or only modestly higher than such rates, the opinion instructs that more particular, focused inquiries must be made when possible, that special and local markets must be investigated, and that all opportunity costs of creditors must be considered, only some of which are reflected in low-risk investment returns. ⁶⁰

To think of *Koopmans* as support for a "cost of funds" approach, as the term has been employed elsewhere, would be to distort the precedent gravely because the concepts of opportunity cost that motivate the *Koopmans* court go far beyond the rates risk averse lenders like T-bond buyers charge borrowers like the U.S. Treasury. It would also neglect the opinion's statement of the cramdown interest issue as a question about creditors' expectations and about their lost opportunities for replacement "investments." Thus, while the reviewing judges in *Koopmans* are willing to let a bankruptcy judge use federal formulas and the costs of some types of funds when, despite inquiry, he or she does not have evidence of more particular costs, markets, and opportunities, the reviewing judges in *Koopmans* by no means favored judicial fabrication of rates from formula components. When holistic models from unique markets can be found, those are to be used.

The Fourth Circuit decided a chapter 13 case in *United Carolina Bank v. Hall.* ⁶² In that case the bankruptcy judge had approved a plan over the objection of a secured bank creditor. ⁶³ The debtor had purchased a mobile home on credit. ⁶⁴ The seller had assigned the contract and the purchase money lien to the bank. ⁶⁵ The bankruptcy judge had approved a plan with a cramdown rate constructed by adding

⁵⁸ See id. Also arising in a farm setting and in accord with Koopmans was U.S. v. Roso, where the court of appeals overruled two lower courts, taking a "coerced loan" approach, and found that subsidized FMHA rates for loans to new farmers are beside the points raised by cramdown interest and chapter 13 issues, and directed lower courts to gauge rates in actual markets for farm loans whenever possible. See U.S. v. Roso (In re Roso), 76 F.3d 179, 180–81 (8th Cir. 1996).

⁵⁹ See Koopmans, 102 F.3d at 876.

⁶⁰ See id. ("Market rates of interest measure real risks of non-payment and costs of collection (including costs of foreclosure and bankruptcy proceedings); it is to these market rates, rather than lawyers' speculations about business operations, that judges must turn."); see also Green Tree Fin. Servicing Co. v. Smithwick (In re Smithwick), 121 F.3d 211, 213 (5th Cir. 1997) (stating interest rates should be similar to rates creditors could obtain for loans with similar risk levels in region); United Carolina Bank v. Hall, 993 F.2d 1126, 1130 (4th Cir. 1993) (treating value of collateral retained by debtor under cramdown provision of chapter 13 as new loan and matching rate of return to creditor with what creditor would otherwise be able to obtain in lending market).

⁶¹ See Koopmans, 102 F.3d at 875.

⁶² 993 F.2d 1126 (4th Cir. 1993).

⁶³ *Id.* at 1128.

⁶⁴ *Id*.

⁶⁵ *Id*.

risk premiums to a prime rate.⁶⁶ The discussion by the court of appeals shows that the court construed the cramdown order to be one largely motivated by a cost of funds concept, though not written that way.

The district court had reversed the bankruptcy judge, and the court of appeals affirmed the district court. As the measure for cramdown interest, the Article III courts used the rate of interest a credit seller of mobile homes can earn on sales to other mobile home buyers, i.e., a rate determined by coerced loan-alternative investment norms. After discussion and rejection of a motion to dismiss the appeal as moot, the court of appeals went on to analyze cramdown interest. The opinion started the analysis by stating that the source of loss to an objecting secured creditor in cramdown is the prohibition on foreclosure and the resulting inability of the secured creditor to "recover" part of its capital in the form of "proceeds of a foreclosure sale." Consistently with that, the opinion said that the question to be answered is how to place a secured creditor in the same position it would have enjoyed had it been allowed to recover some of its capital in the form of foreclosure sale proceeds and said this is an "economic" question.

Writing for the panel, Judge Niemeyer rejected suggestions that a creditor's external financing can "replace" internal financing through foreclosure and receipt of foreclosure sale proceeds. What followed is the only explicit recognition, in published court of appeals precedents, of a false premise of cost of funds concepts. The opinion stated the "underlying assumption that the secured creditor has an unlimited supply of credit." The court then identified the falsity with the remark: "when it is recognized that every secured creditor has a limited amount of credit on which to draw, then it follows that utilizing some of that borrowing capacity without providing the secured creditor with the usual return on its capital produces a loss for the secure creditor." It went on to say that cost of funds measures leave uncompensated the difference between lost investment returns and the creditor's cost of funds, but it did not explore this further and did not elaborate on borrowing capacity or erosion thereof. The secure creditor is further and did not elaborate on borrowing capacity or erosion thereof.

The *United Carolina Bank* ruling has been cited often at all levels, with more favorable reactions than unfavorable, but the point for which the case usually is cited is how specific the evidence used to gauge the size of the lost opportunity for alternative investment may be to the objecting creditor itself.⁷⁶ At the level of the

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    66 Id. at 1128, 1131.
    67 United Carolina Bank, 993 F.2d at 1128.
    68 Id.
    69 Id. at 1128–29.
    70 Id.
    71 Id. at 1130.
    72 United Carolina Bank, 993 F.2d at 1130.
    73 Id.
    74 Id.
    75 Id.
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⁷⁶ See Green Tree Fin. Servicing Co. v. Smithwick (*In re* Smithwick), 121 F.3d 211, 214 (5th Cir. 1997) (noting how *United Carolina Bank* used rate creditor could get in lending market and matched to its rate as

courts of appeal, there has been no follow up whatever on the themes of borrowing capacity and the supply of capital and credit.

In Heartland Federal Savings & Loan Ass'n v. Briscoe Enterprises,⁷⁷ the court of appeals for the Fifth Circuit reviewed a record in which an undersecured first mortgagee had objected to a plan providing for fifteen years of cash payments computed using the contract rate and assuming a thirty year amortization and calling for a balloon payment of the unamortized principal after fifteen years. Reversing the district court, the court of appeals, like the bankruptcy judge, found the plan feasible.⁷⁸ The court of appeals basically said that, were it deciding the matter ab initio, it would find the plan not feasible and not likely to succeed, but it said it must affirm the bankruptcy judge and reverse the district judge because feasibility is a factual issue as to which the Article III reviewing courts should defer to the trier of fact absent clear error.⁷⁹

The opinion later cross-referred to the weak case for feasibility in discussing the risks for the objecting creditor in the extended loan the plan in effect mandated. The opinion said a plan must take account of the "specific" risks in a case but also said a bankruptcy court may use federal rates on low or no risk securities to start a computation so long as risk premiums in adequate amounts are added. The opinion noted that the plan's rate of 10.25 percent was the prior contract's rate and noted that was 1.6 times the 6.4 percent rate for fifteen-year treasury securities. It went on to say that the reviewing court judges believed those facts showed adequate deliberation by the bankruptcy judge and adequate consideration of the creditor's interests in the face of the "specific risks" the plan presented to the creditor.

While the court of appeals approved the bankruptcy judge's use of the contract rate, it did so only because it so happened that the contract rate adequately addressed the "specific" risks in the case. Likewise with federal formulas, the court of appeals considers them merely "instructive" on the ultimate inquiry about specific risks in a particular case. The court of appeals expressed no ultimate vision of what is at stake in a cramdown. It is suggested, however, that the appeals judges were thinking of lost investment opportunity as the harm in a cramdown suffered by the objecting secured creditor and that this would be mitigated by cramdown interest.

secured creditor); *In re* Marquez, 270 B.R. 761, 769 (Bankr. D. Ariz. 2001) (illustrating creditor specific approach of *United Carolina Bank*); *In re* Harris, 167 B.R. 813, 816 (Bankr. D. S.C. 1994) (discussing how courts need to take into account rates creditors get in similar loans and expenses related to those similar loans).

⁷⁷ Heartland Fed. Sav. & Loan Ass'n v. Briscoe Enters. (*In re* Briscoe Enters.), 994 F.2d 1160 (5th Cir. 1993).

⁷⁸ *Id.* at 1166.

⁷⁹ See FED. R. CIV. P. 52(a); see also Anderson v. City of Bessemer City, N.C., 470 U.S. 564, 573 (1985) (stating appellate court cannot reverse finding of fact just because it would have decided case differently).

⁸⁰ In re Briscoe Enterprises, 994 F.2d at 1169.

⁸¹ *Id*.

⁸² *Id*.

⁸³ *Id*.

⁸⁴ *Id*.

The Fifth Circuit reviewed another cramdown interest ruling in Financial Security Assurance Co. v. T-H New Orleans Ltd. 85 The objecting creditor there was a mortgagee undersecured by a small margin.86 The bankruptcy judge had confirmed a plan with 11.5 percent cramdown interest.⁸⁷ The district court had affirmed. 88 As did the court of appeals. 89 Citing its earlier decision in Briscoe, 90 the court of appeals deferred to the bankruptcy judge, used the clear error standard of review, and found no clear error in the bankruptcy judge's computation of the "specific risk level" confronting the creditor and of the cramdown rate appropriate for that level.⁹¹ The opinion outlined some of the competing expert opinions in the record, whose rates ranged from 8.45 percent to 14.6 percent, and said the bankruptcy judge must assess the credibility of the witnesses and the weightiness of their data and their reasoning. 92 The bankruptcy judge had settled on the contract rate of 11.5 percent, which just happened to be midway between the competing expert estimates. 93 The reviewing court affirmed the finding but only after assuring itself that the trier of fact had deliberated on the expert opinions and on the methods and data that were the bases of the opinions.94

The discussion in the opinion shows that the competing experts each had used federal formula type methods, and each had added risk premiums apparently to gauge what competitive lenders in distressed hotel mortgage markets would charge, but it did not try to name any lending firm making such loans at the rates opined. ⁹⁵ The creditor and its expert presented no evidence of any such loan the creditor had made or intended to make. ⁹⁶ In this opinion, the Fifth Circuit at first view might look like a court quite willing to use the contract rate as the cramdown rate, but the facts and the discussions in the case should make us doubt that. The court was open to a mix of "methodologies" but said it will require a factual trial and a thorough inquiry into the "specifics" of the parties and the circumstances. ⁹⁷ That suggests a willingness, or even a preference, to use the creditor's own rates on comparably long, comparably risky investments or loans if the creditor has those investments, is a competitive, regular participant in the credit industry, and presents good documentation of its actual rates and opportunities. Such a rate would be "specific" to the circumstances of a plan.

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85 In re T-H New Orleans LP, 116 F.3d 790 (5th Cir. 1997).
86 Id. at 795 (contesting valuations vigorously).
87 Id. at 796.
88 See Fin. Sec. Assurance Inc. v. T-H New Orleans Ltd. P'ship (In re T-H New Orleans LP), 188 B.R.
799, 810 (E.D. La. 1995), aff'd, 116 F.3d 790 (5th Cir. 1997).
89 See In re T-H New Orleans LP, 116 F.3d at 800.
90 994 F.2d 1160 (5th Cir. 1993).
91 See In re T-H New Orleans LP, 116 F.3d at 800.
92 Id.
93 Id.
94 Id.
95 Id. at 800 nn.11–12
96 In re T-H New Orleans LP, 116 F.3d at 800.
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In yet another Fifth Circuit opinion, Green Tree Financial Corp. v. Smithwick, 98 the court of appeals reversed the two lower courts and invalidated a local bankruptcy court rule in a chapter 13 matter which had established a rigid federal formula for cramdown interest. 99 Calling the needed determination factual and one requiring consideration of all actual circumstances, the court criticized the cost of funds approach and adopted a "coerced loan" approach or a forced "extension" of the "lending relationship." The opinion then gauged the "position" the creditor "would have" occupied, but for the cramdown, as the loan or investment the creditor would have made "in the regular course of its business" in the relevant locale for an amount and a duration like those in the plan and of a character like that of the plan. 101 This is a special damages type analysis and a clear focus on the creditor's prospective, actual opportunity lost as the measure for cramdown interest. To get litigants off the sidelines and to reduce litigation, however, the opinion provided a sort of default rule, namely, the contract rate. 102 The opinion said that bankruptcy courts must use the contract rate unless the creditor "comes forward" with evidence that its current rate on comparable loans is above the contract rate. 103

The opinion correctly interpreted the Koopmans ruling of the Seventh Circuit to favor a coerced refinancing or prospective lost "investment" opportunity approach to cramdown interest. 104 The opinion went on to address suspicions of undue profit by remarking that allowance for a creditor's ordinary profit is needed to place a regularly engaged for-profit creditor in the same position it would have outside bankruptcy. It hearkened to the dicta in Koopmans¹⁰⁵ that, for a regular, competitive participant in the relevant part of the credit industry, "profits" are likely to be no more than recovery of opportunity costs and compensation for risk and not "pure profit" in the economic sense. 106

Taken together, the three Fifth Circuit cases discussed above show a policy of requiring full trials and thorough deliberations by bankruptcy courts and a willingness to defer to their judgments so long as the findings below show a focus on the investment opportunities of the creditor. Ultimately, then, the Fifth Circuit precedents resolve into coerced loan rulings. But federal rates and formulas and, for what they accidentally may be worth, even contract rates may be considered in the Fifth Circuit along with rates in specialized markets and expert testimony.

 $^{^{98}}$ In re Smithwick, 121 F.3d 211 (5th Cir. 1997). 99 Id. at 213.

¹⁰⁰ Id.

¹⁰¹ *Id*. at 214.

¹⁰³ In re Smithwick, 121 F.3d at 214 (citing to Third Circuit and Sixth Circuit opinions and following them in creating sort of default rate). 104 Id. The opinion quotes language from Koopmans about the opportunity to invest the proceeds of a

foreclosure sale. See Koopmans v. Farm Credit Servs. of Mid-Am., 102 F.3d 874, 875 (7th Cir. 1996). The Seventh Circuit itself has interpreted Koopmans as congenial to coerced loan methods. See In re Till, 301 F.3d 583, 591 (7th Cir. 2002).

⁰⁵ See In re Smithwick, 121 F.3d at 214.

¹⁰⁶ See Koopmans, 102 F.3d at 876.

Opposed to the precedents briefed so far are two from the Second Circuit. The first is *GMAC v. Valenti* ¹⁰⁷ There the debtors kept their Pontiac automobile under a chapter 13 plan with cramdown interest set at the creditor's cost of funds at the time of confirmation. ¹⁰⁸ The bankruptcy judge had found that, at the time of confirmation, GMAC was able to borrow at about nine percent and that it was making car loans at 15.7 percent in the locale where the debtors lived. ¹⁰⁹ The bankruptcy court had set cramdown interest at nine percent. The district court had agreed that a cost of funds measure was the right one and deferred to the bankruptcy judge's finding of such costs. ¹¹⁰ The court of appeals characterized the district court's deferential order as a conclusion that the bankruptcy court's finding "did not appear . . . beyond the range of what it might cost GMAC to borrow funds at the time of the confirmation"

The court of appeals itself was not deferential, however, finding the issue of cramdown interest to be partly a question of statutory interpretation the reviewing court takes up *ab initio*. The opinion said the statutory goal is to place the secured creditor "in the same economic position that it would have been in" had it received the value of the secured portion of its claim on the confirmation date. The court contrasted the cost of funds approach with the coerced loan view and said it understood the latter to mean use of the actual rates the particular creditor charges other debtors for credit on terms and schedules like that of the plan. The court went on to reject that measure because it includes "profits" and because the court of appeals judges felt that, in some sense, the coerced loan method preserves the existing loan, which the court thought gives the creditor more than the equivalent of its collateral. The opinion thus explicitly interpreted the Code not to protect the creditor's expectation interest in a secured transaction and in its option to foreclose on default. It said that what a creditor had "hoped" to earn is not relevant.

The court mentions costs of funds without stating what GMAC was paying¹¹⁸ and declines to state whether actual costs¹¹⁹ paid would be a more precise measure than a formula approach. The court reasoned that a creditor's actual costs paid for funds it borrows is difficult for a court to determine and that using actual payments by particular creditors would result in different treatment of different debtors since

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107 In re Valenti, 105 F.3d 55 (2d Cir. 1997).
108 Id. at 58.
109 Id. at 59.
110 Id.
111 Id.
112 See In re Valenti, 105 F.3d at 59.
113 Id. at 63.
114 Id.
115 Id. at 64 (citing In re Dingley, 189 B.R. 264, 269 (Bankr. N.D.N.Y. 1995)).
116 Id. (citing In re Hudock, 124 B.R. 532, 534 (Bankr. N.D. Ill. 1991)).
117 See In re Valenti, 105 F.3d at 64.
118 Id.
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¹¹⁹ Id. The court does not express an opinion about which is more accurate, actual cost of funds or a formula, because it is determined to use a formula in either event.

different creditors will have different actual costs of funds.¹²⁰ The opinion then mandated a formula because "it is easy to apply, it is objective, and it will lead to uniform results." The mandated formula is the rate of a Treasury security of some appropriate maturity adjusted upward not less than one or more than three percent. ¹²²

This formula technique may be "easier" than some other methods, but are its rates true and is it fair? This opinion makes it sound as if judicial ease is more important to the Second Circuit than are the interests of the parties. Regardless, what is so hard about asking the creditor to document what it pays to borrow or what it charges when it lends to other debtors, or asking the parties to present published data of sorts other than just Treasury yields? It is hardly any more work at all. It might even be less if focused inquiry prevents intense litigation over the narrow range left open for case specific findings under the Second Circuit's rigid formula approach. As to uniformity, why must every plan use nearly the same rates? Different debtors, different creditors, different circumstances warrant different treatment. By aggregating large numbers of disparate cases and mandating a rule allowing only small variations, the Second Circuit is benefiting some at the expense of others when only a little extra or perhaps no extra effort by the courts will prevent the redistribution. As for the repudiation of a large part of the expectation interest of a secured creditor, there is nothing in the Code language in question that suggests confiscation like that. 123

The Second Circuit adhered to its federal formula in *Key Bank National Assoc.* v. *Milham.*¹²⁴ There, the court found no reason to depart from the formula rate in a cramdown for an oversecured creditor while assuming it is proper to use the contract rate to compute the interest during pendency of the case. ¹²⁵ The opinion is as blunt as *GMAC v. Valenti* and shows again that the Second Circuit's first

¹²⁰ *Id*.

¹²¹ Id.

¹²² See In re Valenti, 105 F.3d at 64.

¹²³ See 11 U.S.C. § 1325(a)(5)(B)(ii) (2000), providing:

⁽a) Except as provided in subsection (b), the court shall confirm a plan if—

⁽⁵⁾ with respect to each allowed secured claim provided for by the plan—

⁽B)(i) the plan provides that the holder of such claim retain the lien securing such claim; and

⁽ii) the value, as of the effective date of the plan, of property to be distributed under the plan on account of such claim is not less than the allowed amount of such claim.

Id. See generally In re Valenti, 105 F.3d at 63 (stating § 1325(a)(5)(B)(ii) does not specify which interest rate will provide creditor with "present value" of allowed claim); G.M.A.C. v. Jones, 999 F.2d 63, 66 (3d Cir. 1993) (noting § 1325(a)(5)(B)(ii) is silent on procedure to determine interest rate).

¹²⁴ In re Milham, 141 F.3d 420, 424 (2d Cir. 1998).

¹²⁵ See id. at 423.

¹²⁶ In re Valenti, 105 F.3d at 63–64 (rejecting "cost of funds" approach as being too inefficient and costly for courts to compute and espousing "coerced loan" approach as wrongfully including profit in calculation of interest rate).

priority is convenience, not truth. The decisions use federal formulas, but leave no doubt that the judges consider such formulas proxies for cost of funds of creditors. The Second Circuit precedents, therefore, may be assigned to the cost of funds viewpoint. That viewpoint fundamentally motivates the Second Circuit.

Having briefed two unfortunate Second Circuit decisions, let us end this section of the paper with an excellent opinion from just across the river in the Third Circuit. The Third Circuit decision was yet another chapter 13 matter, GMAC v. Jones. 127 There, the two lower courts had used the prime commercial loan rate as the cramdown rate. 128 The court of appeals reversed and remanded with explicit instructions to hear evidence and to ascertain and use the rate the secured creditor would charge, for a loan on terms like those of the plan, to a borrower comparable to the debtor. 129 The court consolidated two appeals by GMAC. In each, a truck owner-borrower got a plan confirmed requiring the debtor only partly to amortize the secured portion of his debt over the plan's time horizon and to pay periodic interest of ten percent on un-amortized balances. 130 The ten percent rate was a "prime rate" not described further. 131

The opinion framed the cramdown interest question as one of valuing a lost investment opportunity and showed a keen interest in creditor specific evidence of that loss. It remarked that "how much additional value can be generated" with funds "depends on who is investing the money" and said that the task of a trier of fact in cases like the two on appeal is to look and find returns "the secured creditor could be expected to generate in the regular course of its business" on the money it would obtain by recovery and sale of its collateral. 132 The opinion said it regards the prime rate ruling below as a cost of funds rationale, that is, a view that the loss of the creditor is a loss of internal financing that a creditor supposedly can cover by external borrowing at supposedly low rates because the creditor supposedly is a low risk borrower to whom sources of funds are ready to lend. 133 The opinion rejected that reasoning by pointing out¹³⁴ that the creditor's "lost opportunities" are several, only one being internal financing opportunities, the other being the lost opportunity to end an unfavorable "relationship" and to establish another instead, that is, one with a new customer. 135 Thus, the court concluded, the cost of funds approach at best only partly compensates the creditor, namely, for loss of only the "former" of the two lost opportunities outlined. 136

^{127 999} F.2d 63 (3d Cir. 1993).

¹²⁸ *Id.* at 66–67.

¹²⁹ *Id.* at 67–68, 71.

¹³⁰ Id. at 65-66.

¹³¹ Id. at 66. Little doubt it was a rate announced by major banks in the region for their most creditworthy

¹³² See Jones, 999 F.2d at 66-67.

¹³³ *Id.* at 67.

¹³⁴ *Id*.

¹³⁵ *Id.* 136 *Id.*

The opinion writer was not shy to say that compensation for the lost reinvestment loss will include some "profits." The opinion did not explicitly explore the meanings of the word profit. The judges were not worried about excess profits because they rightly supposed that "regular" participants in "competitive" markets will charge only what the opinion earlier had called the ordinary profit that "any creditor extending credit anticipates." The court saw little risk of sanctioning pure profit in the economic sense by its ruling. It simply listed ordinary profit as a cost. 139 The same consideration of competitive convergence led the reviewing court to allow lower courts to use creditor-specific rates as evidence of lost investment opportunity instead of requiring, in every case, a study of a specialized market and prevailing rates charged by other creditors in the specialized line. 140

The opinion also discussed in some detail incidental costs like loan documentation, monitoring, records keeping, and communications that make it hard to precisely calculate a creditor's alternative investment opportunities or positions within a plan and outside. 141 The court said it believes these net out, as it were, and leave rates in fact earned elsewhere by a creditor a good "approximation" of its lost opportunity.142

The court defended the fairness of its approach by noting that a cramdown plan extends what is a business relationship of the parties, that is, that the Code allows alteration of the parties' relationship but envisions it still will be a business relationship. 143 To the Third Circuit, this means that the terms, rates, and conditions the creditor bargains for in like business relationships with others are relevant and ought to be used as a measure of cramdown interest and that "profit" should not be surprising or considered unfair unless it is an extraordinary return beyond the sort of "profit component" that "anyone lending money in a commercial context expects." The usual expectation interest of a contracting party is to be protected by a plan, and ordinary profit is a part of that. 145 The opinion also reasoned that "regularly maintained" records of a creditor often would provide convenient and credible evidence of the lost opportunity that should ground a cramdown interest adjudication. 146 It even optimistically hoped for stipulations of parties in future cases. 147

¹³⁷ Jones, 999 F.2d at 67.

¹³⁹ *Id*.

¹⁴⁰ See id. at 71 (holding lower courts "erred in utilizing the prime rate to determine" interest rate under § 1325(a)(5)(b)(ii) and further, "The appropriate interest rate for this purpose is the rate of interest currently being charged by the creditor in the regular course of its business for loans similar in character, amount, and duration to the loan being coerced in the cramdown.").

¹⁴¹ See id. at 68–69.

See iii. at 66 65.

142 Jones, 999 F.2d at 68.

¹⁴³ *Id*. at 69.

¹⁴⁵ See supra notes 137–38 and accompanying text.

Jones, 999 F.2d at 70.

See id.

The court decided that absent stipulations or particular evidence, a "rule of practice" is to be imposed. 148 The rule really is a presumption rebuttable by creditor, debtor or any other party. ¹⁴⁹ The presumption is that the contract rate has remained a good "proxy" for loans similar to the plan's features to borrowers like the debtor and charged in the creditor's regular, competitive course of business. 150 Whether the "rebuttable presumption" creates a burden of persuasion or just an obligation to introduce evidence is unclear.¹⁵¹ So is the identity of the party who bears the burden, because the court spoke not only of a failure by the creditor to "come forward with persuasive evidence" but also of a need sometimes to "require the debtor to come forward with some evidence" about whether or not the contract rate is a good measure of the rate the creditor does or would charge currently for similar loans. 152 The court admitted it was inventing this by fiat as a rule of practice to aid and speed administration, and admitted that an old contract rate is a past matter, likely to be wrong often by a large amount. 153 With the provisos and understandings the Third Circuit provides, its rule of practice perhaps makes practical sense. The court acknowledges it is creating a rule that often will yield inaccurate rates but gives all parties easy escapes from the rule of practice. 154

The recent decisions at the circuit level that have addressed cramdown interest, adopted coerced loan views of the loss by the objecting creditor either explicitly or implicitly in all circuits, save the Second. Does the majority view comport with economic principles and with patterns of contract damages law found in economic and legal thinking outside bankruptcy and bankruptcy law? This paper argues that it does and that that fact lends strength to the majority rule. This brings us to classical economics.¹⁵⁵

III. ECONOMIC DISTINCTIONS

A. Components of Capital and Finance

1. Internal vs. External Finance

⁷ See id.

External finance is the process of getting capital from investors.¹⁵⁶ Internal finance is the process of generating capital through earnings and recovery of some of a firm's capital from prior projects.¹⁵⁷ Sale of capital assets is one example.

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148 Id.
149 See id. at 70–71.
150 See id. at 71.
151 See Jones, 999 F.2d at 71.
152 See id.
153 Id. at 70–71.
154 Id.
155 An academic economist would say "neo" classical economics.
156 See generally L.D. SCHALL AND C.W. HALEY, INTRODUCTION TO FINANCIAL MANAGEMENT 296 (McGraw Hill, Inc. 4th ed. 1986).
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Foreclosure on collateral and recovery of proceeds of foreclosure sale is another. Cost of funds arguments ask courts to identify an external financial source as a hypothetical replacement for internal finance but never put it that way. Once that is shown as the essence of the cost of funds effort, its difficulty should be apparent.

2. Cost of Borrowed Funds vs. Cost of Capital Overall

Firms typically are capitalized by a mix of methods: secured and unsecured borrowing, equity, trade credit, etc. A firm's cost of one sort of capital, say long term bonds or bank loans, should not be mistaken as its overall cost of capital. One district judge recognized the distinction in *Dominion Bank v. Cassell.*¹⁵⁹ The district court reversed a Treasury federal formula rate confirmation order and instructed the bankruptcy court either to use rates prevailing in the local market for loans of the type and duration the plan reflected or to use a formula designed to mimic such rates. ¹⁶⁰ It told the bankruptcy judge to develop any such formulas only with the aid of relevant testimony and to treat such formulas only as rebuttable presumptions. ¹⁶¹

The bankruptcy judge used a federal formula seeking to estimate a bank creditor's cost of funds, but the district court said the bankruptcy court's formula rested on erroneous notions of a creditor's cost of funds and on an unsubstantiated assumption that the cost of one source of funds is a fair measure of the cost of capital raised from a mix of sources. ¹⁶² The court went on to say that when equity finance is part of the mix, the overall cost of capital is likely to be higher than the cost of any borrowed component. ¹⁶³ Cost of funds advocates may unknowingly be confusing overall cost of capital with the cost of some one component of capital cost. When this equivocation is identified, the superficial simplicity of cost of funds methods dissolves.

3. Marginal Cost of Capital vs. Average Cost of Capital

The district court in *Cassell* noted the distinction between marginal and average cost. ¹⁶⁴ In speaking of incremental cost, the court referred to the marginal cost of one component of a firm's financing and said the weighted average cost of capital, considering all components of a firm's financial structure, is a better measure of its cost of capital. ¹⁶⁵ The weighted average cost of capital is a fair measure of a firm's

¹⁵⁸ See Dominion Bank v. Cassell (*In re* Cassell), 119 B.R. 89, 91 (W.D. Va. 1990) (explaining varying sources of finances); see also *In re* Snider Farms, Inc., 83 B.R. 977, 994 (Bankr. N.D. Ind. 1988) (exhibiting difficulty faced when trying to calculate true cost of funds); Hardzog v. Fed. Land Bank of Wichita (*In re* Hardzog), 901 F.2d 858, 860 (10th Cir. 1990) (stating difficulty of applying cost of funds approach).

^{159 119} B.R. 89 (W.D. Va. 1990).

¹⁶⁰ *Id.* at 93–94.

¹⁶¹ *Id.* at 94.

¹⁶² *Id.* at 91.

¹⁶³ *Id.* at 91 n.3.

¹⁶⁴ In re Cassell, 119 B.R. at 91.

¹⁶⁵ Id.

marginal cost of capital overall and not just of one component but is not free of problems. The weighted average cost of capital is a fair approximation to marginal capital cost only if the firm's newest investments are being financed by proportions of financing means and capital sources like the firm's existing mix of means and sources. Otherwise, implied effects on the equity must be added to the costs and will increase the size of the marginal cost of the mix newly used above the existing weighted average cost of capital. Cost of funds advocates never address this complication.

B. Investment Merits vs. Financing Feasibility

Also important to remember is the distinction between an investment's own merits, however the investment be financed, and the competing costs of different ways of financing any given investment. Not separating these can create financing illusions. When they can, economic analysts disentangle competing, alternative investments and their merits from the financing of the investments and the relative merits of different sources of finance. Rankruptcy lawyers and judges should do the same lest different things be confused.

A creditor's expectations are disappointed by cramdowns in two ways, and those two should be distinguished. One disappointment is a loss of what might be called a loss of a source of internal finance. Recovery and sale of collateral is an internal source of capital like earnings in the sense that, by obtaining the proceeds of sale at foreclosure of collateral supporting a loan or investment it already has made, a creditor recovers some of its capital and obtains funds for further investment without itself having to borrow or otherwise having to use external

¹⁶⁶ See EDWARD W. DAVIS & JOHN POINTON, FINANCE AND THE FIRM 131, 159 (Oxford Univ. Press 1984) (noting weighted average cost of capital provides criterion for investment decisions only if new project is financed in same proportions as existing assets).

¹⁶⁷ See id. at 131 (explaining impact of new finance upon existing average cost structure of firm's capital matters to marginal cost).

¹⁶⁸ See id. at 270 (discussing theoretical separability of investment and financing decisions).

¹⁶⁹ See generally James M. Buchanan, Public Finance In Democratic Process: Fiscal Institutions And Individual Choice 126–28 (Univ. of N.C. Press 1967). This famous work by a Nobel laureate concentrates on public financial illusions, but at the cited place it extends the discussion to private investment and finance, stressing that the desirability of an investment or real expenditure usually should be the first question by a decision maker, one asked, that is, before questions of financing methods. *Id.*

¹⁷⁰ See DAVIS, supra note 166, at 270; see also EUGENE L. GRANT ET AL., PRINCIPLES OF ENGINEERING ECONOMY 411–12, 418 (Ronald Press Co. 4th ed. 1960) (quoting A.M. WELLINGTON, THE ECONOMIC THEORY OF RAILWAY LOCATION 15 (John Wiley & Sons, Inc. 2d ed.1887),

The logical order of procedure in the case of any new enterprise—which is, first, to determine whether or not the project is a sound one, and to be carried out; and secondly, to make the necessary studies as to the manner of carrying it out . . . although subsequent events may cause a revision of such assumptions, the mere initiation of the study of details implies a pro-forma conclusion, that the project as a whole is a wise one if wisely carried out, and can only fail by bad judgment in details. . . .

See id.

¹⁷¹ See Pearson, supra note 19, at 49 (discussing creditor's interest in protecting value of debtor's collateral, or internal interest, upon debtor's successful reorganization or liquidation).

finance. We can call this the lost internal finance opportunity. The objecting secured creditor in a cramdown also loses the opportunity to reinvest the sale proceeds in alternative loans or projects different from the loan to the debtor being reorganized. This is the second lost opportunity, the lost investment opportunity.

Whatever its long run schedule of best, next investment opportunities, a firm will adopt long-run financing strategies and policies with the lowest long-run costs. The converse parallel statement runs as follows: whatever alternative long run financing strategies severally would cost a firm, and whatever financial structure it adopts, a firm will rank its investment opportunities on their relative merits. The converse parallel statement runs as follows: whatever alternative long run financing strategies severally would cost a firm, and whatever financial structure it adopts, a firm will rank its investment opportunities on their relative merits.

One might argue that a creditor's loss can be measured with either one of the variables, while holding the other constant. Cost of funds advocates might argue, for example, that if the creditor has planned any investments, it still may undertake them if a plan fully and accurately compensates it for the lost opportunity of internal financing with which it would make the next investments in its ranked plan of investment. That is, they would hold the investment schedule constant and compute the loss only by reference to the financing side of overall enterprise functioning. Alternatively, as in coerced loan thinking, one might say that the financing foregone in a cramdown is internal and is constant or unchanged, in that it is already in place and no added financing by the creditor is assumed to have been planned outside bankruptcy. Then, the variable determining the loss is the value of the lost opportunity to invest in or to loan to some new customer using the given amount of internal funds.

In principle, when a firm is already well established, is large enough to enjoy the benefits of a division of managerial labor, operates in well-functioning product markets and capital markets, and has low-cost access to reliable information about each, then its real asset investment decisions and its financing policy making safely can be made by different sets of managers working independently from each other. ¹⁷⁴ In fact, this often is the situation. ¹⁷⁵

The coerced loan precedents follow the above principles, making no assumptions about external finance or new financing at all. What factors are stabilized or given, and which are variable in cost of funds rationales is not as clear. It may be that some proponents of cost of funds techniques are equivocating without realizing it. They may be thinking that foregone alternative lending or

¹⁷² See ALEXANDER A. ROBICHEK & STEWART C. MYERS, OPTIMAL FINANCING DECISIONS 98 (Prentice–Hall, Inc. 1965) [hereinafter ROBICHEK] (noting costs of financing are same for all investment policies).

¹⁷³ See id.

¹⁷⁴ See EUGENE L. GRANT & W. GRANT IRESON, ENGINEERING ECONOMY 3–7 (5th ed., The Ronald Press Co. 1970) (noting importance of having competent and informed decision-makers able to evaluate alternatives based on economic study).

¹⁷⁵ See DAVIS, supra note 166, at 270; GRANT, supra note 170, at 418, 475–77 (describing condition of perfect financial environment and discussing desirability of separating decisions on physical plant from decisions on financing).

reinvesting is a major loss, while at the same time thinking this sort of loss can be rightly measured by considering only the secured creditor's financing alternatives.

That is to say, cost of funds approaches as well as formula approaches mimicking them may mistake the value or merits of a lost opportunity for lending or for investing, for the cost of financing a new investment or a new loan to another customer of the objecting creditor. If proponents of cost of funds methods believe their approach makes up for the creditor's lost investment opportunities or lost opportunities to lend or to sell on credit to other debtors, then they are innocently conflating different economic issues. To see this point, consider an investment in a public work or in a labor saving machine. The ultimate, long run merits of such investments usually do not depend on the method of financing the purchase or the construction of the capital asset. However, many managers and local government officials confuse the long-run investment merits with financing alternatives; this is what some economists call fiscal and financing illusions. ¹⁷⁶

These analytical errors are not unlike the mistake of thinking that the real enterprise value of a firm as a totality can be different from the total market capitalization of all its issued securities and other lawful claims on its income and assets or to think financial structure could alter overall real enterprise value.¹⁷⁷

It is true that overall cost of capital often is used as a discount rate for evaluating possible investments.¹⁷⁸ The objective remains, however, to rank alternative investments and to select the one with the highest rate of return or highest discounted value.¹⁷⁹ In other words, the cost of capital is a minimum return a firm requires from any proposed investment.¹⁸⁰ Calculations of the cost of capital are not ends in themselves in financial management. They are part of investment decision-making or what is called capital budgeting.¹⁸¹ Investments and their relative merits remain the ultimate issue. Moreover, cost of capital is not always used as the discount rate in capital budgeting. Its use is valid only when a relevant, available, attractive investment, either internal or external, with a known and favorable return rate is not available, and when critical assumptions are fulfilled.¹⁸²

One critical assumption made when the cost of capital is used as the capital budgeting discount rate is that projects being evaluated and their financing do not alter the financial policy and financial structure of the firm to any substantial

¹⁷⁶ See supra note 169 and accompanying text.

¹⁷⁷ See generally Franco Modigliani & Merton H. Miller, *The Cost of Capital, Corporation Finance, and the Theory of Investment*, 48 AM. ECON. REV. 261 (1958) (defining cost of capital and discussing rational decision-making in world of uncertainty). Each of these two collaborators later in their careers received the Nobel Prize.

¹⁷⁸ See DAVIS, supra note 166, at 130, 270 (discussing cost of capital as basis for selecting investments).

¹⁷⁹ See id.; see also GRANT, supra note 170, at 137–38, 140–41 (describing goal of attractive rate of return).

¹⁸⁰ See GRANT, supra note 170, at 149 (explaining cost of capital in public utilities and in competitive industries); SCHALL, supra note 156, at 182–83, 206, 279–80.

¹⁸¹ See GRANT, supra note 170, at 137–38 (providing examples of capital budgeting); SCHALL, supra note 156, at 181–85.

¹⁸² See GRANT, supra note 170, at 140–41, 149, 157; SCHALL, supra note 156, at 182–83, 206, 279–80.

degree. ¹⁸³ A second assumption or precondition to use of the cost of capital as the capital budgeting discount rate is that the possible investment projects under review are not radically different from those typical for the firm and are no more risky than typical investments of the firm or than the firm's overall line of business. ¹⁸⁴ Such assumptions, especially the latter one, direct our attention to investment once again.

Investment alternatives should be the primary focus in cramdown just as they are in management of firms. Coerced loan methods address the prime element directly. Even when done sincerely, cost of capital calculations mistake the means for the end. Moreover, as previously noted, cost of funds proposals do not even get as far as overall cost of capital, but rather just dwell on a lower priced component of a firm's capital structure. ¹⁸⁵

To be fair to cost of funds arguments, however, we must note that there are situations in which the financing and the end investment are not partitioned but are tied and evaluated together in comparison to other combined alternatives. ¹⁸⁶ Perhaps cramdown interest is one of those. If so, what then? It is suggested that cost of funds methods still neglect much of the creditor's lost opportunity. But we must defer analysis to show why until later because some of the later material bears on the question. ¹⁸⁷ After outlining some economic capital theory in Part III.C., the paper will develop and then evaluate versions of cost of funds reasoning which are more protective of all capital costs of a creditor than versions advanced in court. ¹⁸⁸

Lest we reject cost of funds ideas abruptly, we will suppose cost of funds reasoning which accepts the need to distinguish investment merits from financing. This honors a creditor's evaluations and rankings of its investment alternatives, and accepts that the opportunity to pursue other investments should be protected by affording the creditor means or funds alternative to and equal to foreclosure sale proceeds at no capital cost to the creditor, so it can pursue its investment plans about as easily as it could outside of bankruptcy.

Arguments made along those lines would take time to see all costs of replacing the internal source of finance by external finance, and would not hastily assume that external rates the creditor already pays on the strength of its own credit can serve in cramdown to provide a costless replacement for the lost internal finance that receipt of foreclosure sale proceeds would furnish. In other words, some improved versions of cost of funds methods might be committed to finding the full costs of external finance to replace internal finance (i.e. recovery of capital by foreclosure)

¹⁸³ See DAVIS, supra note 166, at 131, 158 (explaining cost of capital as investment tool requires that new projects are financed in same proportions as existing assets); SCHALL, supra note 156, at 181–85.

¹⁸⁴ See DAVIS, supra note 166, at 158 (noting projects with different levels of risk must require cost of capital be adjusted); GRANT, supra note 170, at 144; SCHALL, supra note 156, at 181–85 (describing conditions favoring use of cost of capital as discount rate in capital budgeting).

¹⁸⁵ See supra notes 158–65 and accompanying text.

¹⁸⁶ See GRANT, supra note 170, at 411–12 (noting acquisition of fixed assets with borrowed funds may unite evaluation of financing and investment decisions). For an extended discussion, see BUCHANAN, supra note 169, at chap. 6.

See discussion infra Part III.E.

¹⁸⁸ See infra notes 241–46 and accompanying text.

forbidden by the plan confirmation. But genuine efforts to find the cost of such external replacements will, as we shall see, bring the study to investment alternatives and coerced loan norms. In order to see all that, we first must think hard about that capital factor.

C. Capital vs. Non-Capital Factors

1. Borrowing Capacity and Capital

To be remembered are costs and disadvantages of leverage, or to use an older phrase, trading on the equity. The creditworthiness and the unused borrowing ability of a firm decline as it borrows more, for any given level of owners' equity invested. That is, other things held constant, as a firm borrows more, its future cost of borrowed funds grows or its access to borrowed funds recedes or some of each, because the security it offers lenders declines as its debt to equity ratio grows. To use borrowing capacity is to deplete a resource, albeit an intangible resource. An opportunity to use borrowing capacity elsewhere than to cover a loss of funds a creditor could have obtained by a foreclosure sale of collateral, is a lost opportunity neglected by cost of funds arguments.

To put it another way, cost of funds techniques and formula methods they mimic, tacitly assume any alternative investment that a creditor may have made by using the barricaded collateral's money value, still may be made and may be made entirely with borrowed resources. ¹⁹¹ This assumption is factually unwarranted in most cases. ¹⁹² And even when the tacit assumption is true, the use now of borrowed funds costs the creditor a loss of capacity to borrow funds to use on future investments down the line. When depletion of borrowing capacity is identified as a consequence and is considered fairly, it brings the inquiry to alternate investment opportunities. In any event, taken far enough to consider all results of cramdowns using cost of funds methods, that methodology tends to resolve into a coerced loan calculation.

Cost of funds supporters will perhaps defend their system against these attacks of causal logic by suggesting that, for some creditors at least, capital is relatively so abundant, so readily available, that an increase on account of a cramdown by the creditor in its demand for loans will increase the creditor's marginal cost of credit

¹⁸⁹ See Grant, supra note 170, at 407, 412–13 (analyzing business consequences of borrowing on company equity); TIBOR SCITOVSKY, WELFARE AND COMPETITION 193–200, 209 (R.D. Irwin Co. 1951) (detailing limitations on borrowing and willingness to lend); see also James M. Buchanan, Public Principles of Public Debt: A Defense and Restatement 92 (Irwin Co. 1958) (discussing effects of increase in supply of bonds on price).

¹⁹⁰ See GRANT, supra note 170, at 137–38 (noting limited supply of investment funds); SCHALL, supra note 156, at 181–85.

¹⁹¹ See Grant, supra note 170, at 412–13 (discussing unreality of either of these assumptions); SCHALL, supra note 156, at 615, 620–25 (discussing futility of assumptions); SCITOVSKY, supra note 189, at 194–97 (noting emptiness of assumptions).

¹⁹² See supra notes 72–73 and accompanying text.

very little or not at all over any time horizon. 193 That sort of defense to the causal challenge offered above would come close to assuming that, for some creditors at least, at the costs the creditor already pays for credit, capital is not significantly limited. This is like saying the capital supply curve facing a creditor has become highly elastic or nearly flat at the current rates it is paying, i.e., saying there is lots more available at prices not much higher. This is not likely to be true very often. For most firms in most settings, this is not a probable situation. 194

These challenges, defenses, and replies to cost of funds reasoning can be better illustrated by a discussion of the critical influence of capital on an enterprise's size or scale of operations. Discussion of capital will reveal the incompleteness of cost of funds' causal inferences and will put us in a good position to adjudge the soundness of some analogies cost of funds supporters use in their efforts to persuade us that their system is wise. The analogies cost of funds advocates employ are fashioned using non-capital factors. However, the point of cramdown conflict is capital or credit and the price thereof. We need to ask how similar or dissimilar capital and other factors are.

2. Capital as a Factor

With some working capital, skills, ideas, and favorable initial conditions, a firm will be able to buy labor and some materials on a pay-as-you-go basis, so as to increase its use of those factors gradually and to vary amounts of them used as business fluctuates. 195 Many capital assets [even some inventories like aging wine or timber being seasoned] are large, durable, expensive, and lumpy. Buying, selling, installing, and removing them are costly. For all those reasons, a firm needs credit or investment from owners or lenders in order to obtain capital assets, at least initially and during major expansions. The firm must persuade such sources of credit or funds (i.e. of capital) to wait for payment and returns over longer periods of time than workers and materials suppliers typically wait. 196

To obtain credit and capital often requires the new or growing firm to provide collateral security, which means that unencumbered assets already contributed or accumulated must be on hand. 197 The difficult and time consuming tasks of accumulating assets to support borrowing and of recruiting equity investors, limit

¹⁹³ See Hartman, supra note 6, at 540-41 (indicating some lenders have easier access to funds).

¹⁹⁴ See supra note 72 and accompanying text; SCITOVSKY, supra note 189, at 198–202, 216–26 (regarding scarcity of capital). If the reader has time to look at only one citation among the many furnished herein, then let that one be the ten pages last referenced. There the late Prof. Scitovsky integrates aspects of both micro and macroeconomics with social, economic, and intellectual history in an essay captioned "The Scarcity of Capital and Its Remuneration." See id. at 216-26.

See SCITOVSKY, supra note 189, at 193-94 (noting costs and receipts of firms rise and fall according to

output of firm).

196 See id. (noting necessity of firms having capital fund from which to draw upon as needed to pay current

See id. at 194 ("[T]o obtain the use of capital funds, the borrower must . . . offer security, because lending inevitably involves a risk.").

firm growth and the scale of operations at any given time. 198 Predictions in the theory of the firm about utilization of and mixes of labor and materials factors, about product mix, and about output levels in the short run, assume a maximum firm capacity. 199 The capital factor, however, is the one that determines capacity and the general scale of the firm. 200 For that reason, one should use care in drawing analogies from "cover" in supplies contracts and from sale of goods damages rules to use in debating what is proper interest in a cramdown. A secured creditor's cost of funds is the charge it pays for capital, just as the secured loan or credit it has provided the debtor often is capital of the debtor.

The author interprets the opinion in *Koopmans*²⁰¹ not to say that a sale of goods metaphor will ground a cost of funds approach to cramdown interest, because the court there disapproved of cost of funds reasoning in the case before it and encouraged lower courts to use coerced loan methods for setting cramdown interest. 202 There is no reason to interpret the Koopmans court to say that capital and non-capital factors are the same. The little irony is that in using a sale of goods or supplies contract image for a subordinate purpose (to deflate some polemical arguments about "profits" made by a trustee in a farm bankruptcy matter), 203 the Koopmans court, in dicta, seems to tolerate what the decision rejected in the particular case and even appears to suggest an argument by analogy that cost of funds defenders might want to try elsewhere.

Further discussion of the Koopmans' dicta will be in order later, after we look at some aspects of contract damages law. Before that, we will use capital and borrowing capacity to resume our inspection of what we called better versions of cost of funds reasoning, namely, those that strive to find external finance replacements for the lost opportunity for internal finance by way foreclosure and sale of collateral. These are the better versions of cost of funds we promised to explore at the end of III.B. First, though, we need to quickly address formula methods as replacements for internal finance.

Federal formula rates, even with risk premium, clearly do not reflect a costless replacement because they do not reflect the consumption of borrowing capacity new borrowing by the creditor entails. Now let us address cost of funds and internal finance.

¹⁹⁸ See id. at 193-94, 198-200 (explaining requirement of asset accumulation to provide security for investors, and discussing difficulty of recruiting outside lenders and investors, as limitation on scale of firm). The risk aversions of existing equity owners also limit growth and are a consideration in capital theory. See id. at 194–95 (treating equity owners' willingness to borrow as consideration in capital theory).

¹⁹⁹ See id. at 193 (finding, absent factor of capital "no budgetary limitation to the firm's expenditures . . . because the firm's receipt . . . rise automatically with and as a result of its increased cost expenditures.")

²⁰⁰ See SCITOVSKY, supra note 189, at 193–94 (discussing capital as factor limiting firm's size and scale of

operations).

201 Koopmans v. Farm Credit Servs., 102 F.3d 874 (7th Cir. 1996). Koopmans is briefed in detail supra notes 36-61 and accompanying text.

¹⁰² See id. at 875 ("... the creditor is entitled to the rate of interest it could have obtained had it foreclosed and reinvested the proceeds in loans of equivalent duration and risk."). But the court did not rule out any type of evidence and did not absolutely rule out methodologies other than the coerced loan concept. Id.

See id. at 875–76 (employing sale of goods metaphor in argument against trustee in farm bankruptcy).

For a cost of funds cramdown rate to be truly adequate as a substitute for internal finance by foreclosure and sale of the collateral in question, it should be a rate the creditor pays on (or would pay on) loans or financings which do not compromise or erode the creditor's borrowing capacity. What sort of financings or loans would those be? Two sorts come to mind: equity financing ²⁰⁵ and non-recourse financing collateralized by the plan's payments. Let us explore each, taking the latter first.

By what rate would a lender discount the plan's stream of payment in order to decide how much to lend, for the time horizon of the plan, to the objecting creditor on the strength only of the retained liens and receivables under the plan, without rights of recourse personally against the creditor, or against assets of the creditor other than the plan's payments and the collateral in question? Such a rate as cramdown interest arguably would compensate the creditor for lost internal financing opportunities, implicitly would honor the creditor's investment choices, would not confuse financing policies with merits of investments, and would not consume the creditor's borrowing capacity.

What would such a rate look like? It is likely to resemble and more or less exceed the rates the creditor and its regular competitors charge borrowers or credit customers like the debtor for loans of duration and with covenants and conditions like those of the plan. Such rates will be no less, and in competition, likely not much more. But the coerced loan measure is just such a rate. Follow through on the logic of cost of funds, and we reach coerced loan type rates anyway.

What about equity financing and its cost, then? As we shall see, it too ends at coerced loan considerations. The cost of equity capital is elusive. Rates of return on common stock are implicit, not explicit. What returns, when, how large, and of what sort attract common share purchasers is hard to observe. Instead, financial experts indirectly estimate the cost of equity capital by constructing rates they believe systematic, rational investors must be using to discount expected future financial flows when the investors offer, accept, and reject share prices. Rates of return on common stock are implicit, not explicit. What returns, when, how large, and of what sort attract common share purchasers is hard to observe. Instead, financial experts indirectly estimate the cost of equity capital by constructing rates they

²⁰⁴ That is, financings which do not create any general debt obligation of the firm and do not encumber any of its assets other than the receivables under the plan.

²⁰⁵ See JOSEPH F. BRADLEY, FUNDAMENTALS OF CORPORATION FINANCE 204–05 (Rinehart & Co. 1959) (1953) (noting while equity financing may not be convenient for firm, it requires no pledging of collateral and thus does not impair borrowing capacity of firm).

²⁰⁶ See generally Gregory M. Stein, *The Scope of the Borrower's Liability in a Nonrecourse Real Estate Loan*, 55 WASH. & LEE L. REV. 1207 (discussing nature of nonrecourse financing, and extent of borrower liability under non-recourse loan).

²⁰⁷ See In re Pub. Serv. Co. of N.H., 98 B.R. 120, 123 (Bankr. D. N.H. 1989) (describing process of establishing cost of equity capital as "difficult and complex"); STEPHEN A. ROSS, ET AL., CORPORATE FINANCE 340–41 (Irwin Co. 1993) (giving specific examples of how to calculate cost of equity capital); SCHALL, *supra* note 156, at 187–91 (noting general complexities of cost of equity capital).

²⁰⁸ See Eugene F. Brigham & Joel F. Houston, Fundamentals of Financial Management 344 (Dryden Press 2d ed.1999) (noting indirect method of equity capital calculation using bond yield plus risk premium of 3-5%); James D. Gwartney & Richard L. Stroup, Microeconomics: Public and Private Choice 190 (Harcourt College Pub. 1995) (treating cost of equity capital as rate of return investor

The future flows such experts suppose investors will discount are several: earnings, dividends, revenues, cash flows, and net amounts computed by deductions from or addition to some of those things.²⁰⁹ The deductions and additions can include things like interest obligations, taxes, critical tangible capital needs, depreciation, etc.²¹⁰

The discount rates investors are supposed to be using to discount such flows are built up from several components. Methods most in vogue in the last thirty years have used formulas with variables including rates on risk free investment, average returns on well diversified portfolios or index returns, and complex estimates of individual firms' comparative risk and share price volatility relative to indices and diversified large portfolios. Although widely accepted, the precise accuracy of such methods has been challenged. Do they fully and reliably explain or predict what rates of return or even what types of return investors demand or even consider? Bankruptcy courts should enter such debates no more often than they must. Without engaging in such disputes, we briefly note that such modern methods typically estimate cost of equity rates notably above bond rates of the sort federal formula and cost of funds proponents appear to have in mind. 213

Equity finance cost estimation techniques typically are used with provisos, which tend to redirect attention toward investment alternatives anyway. One critical assumption of such methods is that new equity capital can be invested or used by the firm in ways that earn a risk adjusted return at least as high as the risk

receives in order to provide money to firm). See generally Modigliani & Miller, supra note 177 (presenting theory of cost of capital).

²⁰⁹ See SIDNEY COTTLE, ET AL., GRAHAM AND DODD'S SECURITY ANALYSIS 240 (McGraw-Hill 5th ed. 1988) (observing higher correlation between dividends and cash flow than between dividends and earnings). See generally Charles J. Thayer, 'Fair Value' Fatal Flaw of Option Expensing Plan, THE AMERICAN BANKER, Feb. 28, 2003, at 6 (noting future estimates of cash flows may be affected by many contingencies).

²¹⁰ See COTTLE, supra note 209, at 256 (suggesting difficulty faced by analysts in cash flow discounting is determination of capital replacement from depreciation versus additions to capital base of firm); JOHN D. FINNERTY, CORPORATE FINANCIAL ANALYSIS: A COMPREHENSIVE GUIDE TO REAL-WORLD APPROACHES FOR FINANCIAL MANAGERS 97–110 (McGraw-Hill 1986) (describing depreciation considerations, economic life and capital rationing as factors to consider); CPA's Pressure FASB to include Goodwill in Effort S&L Impaired Assets, 1 THE THRIFT ACCOUNTANT 3 (Sept. 20, 1991) (noting observations of Deloitte & Touche finding net present value should not include interest deductions).

²¹¹ See WILLIAM F. ENG, THE TECHNICAL ANALYSIS OF STOCKS, OPTIONS & FUTURES: ADVANCED TRADING SYSTEMS AND TECHNIQUES 7 (McGraw-Hill 1988) (describing methods of trading based on investor perceptions of volatility rates); FINNERTY, *supra* note 210, at 74 (suggesting analyzing discounted flows using either single risk-adjusted discount or multiple outcome model in conjunction with standard deviation results). See generally BURTON MALKIEL, A RANDOM WALK DOWN WALL STREET 229–39 (W.W. Norton Co. Rev. ed. 1999) (giving description of methods in vogue in recent decades and for review of empirical studies of effectiveness or not in predicting investor behavior).

²¹² See MALKIEL, supra note 211, at 229–39 (challenging accuracy of methods of predicting rate of return); see also Hardzog v. Fed. Land Bank of Wichita (*In re* Hardzog), 901 F.2d 858, 859 (10th Cir. 1990) (noting court's daunting task to determine discount rate to be applied).

²¹³ See Dominion Bank v. Cassell (*In re* Cassell), 119 B.R. 89, 91 (W.D. Va. 1990) (analyzing methods of determining cramdown interest rates); LAWRENCE J. GITMAN, PRINCIPLES OF MANAGERIAL FINANCE 482 (Addison-Wesley 8th ed. 1997) (observing equity capital costs generally exceed other forms of financing); ROSS, *supra* note 207, at 340 (giving specific examples of calculating cost of equity capital).

adjusted returns it currently and typically earns.²¹⁴ When that assumption is tested, as in utility ratemaking, the cost of equity finance estimates start to resemble alternative investment return measurements.²¹⁵ Another assumption to the validity of current methods of gauging the cost of equity finance is that the stock issuance does not represent a change in the financial policies and structures of the firm.²¹⁶ Without those assumptions, expectations of existing shareholders are diluted, any such dilution being a cost of equity finance to the existing owners.

From these provisos of financial analysis, one can see that cost of equity capital estimation is an effort that ends in investment considerations. In the legal setting, where cost of equity financing is litigated most frequently, most intensely, and perhaps most expertly, the ultimate role of investment returns is plainly recognized. In public utility capital cost studies, the cost of equity often is stated as the rate of return on investment of the new equity capital that a firm must earn in order reasonably to support existing financial ratios and share values, if other causal factors do not intervene.²¹⁷

The point can be extended to say that ultimately the firm's cost of capital is the return on investment needed to support its credit and investment ratings and its payments to both shareholders and creditors of all sorts. It is the firm's investments, their risk relative to other investments investors can make, and their size and timings of returns which determine the firm's overall cost of capital and not, vice versa, cost of capital which determines how good are a firm's projects or how much

²¹⁴ See GITMAN, supra note 213, at 372 (explaining concept of Internal Rate of Return, or 'IRR,' used in calculating investment decisions). IRR is defined as the discount rate equating to present value the associated net cash flows from the investment being analyzed. A fundamental mathematical assumption of this process is that the return calculation is fixed during the life of the investment and that cash flows received during the life of the investment are reinvested at an identical rate. *Id*.

²¹⁵ Regulators often define the cost of equity capital as the rate of investment return employment of the proceeds from a new equity issue must earn in order that the value of their shares to existing equity owners not decline and their earnings per share not be diluted. *See* M.J. Gordon, THE COST OF CAPITAL TO A UTILITY 20–21 (Michigan State U. Press 1961); SCHALL, *supra* note 156, at 615, 620–25.

²¹⁶ See DAVIS, supra note 166, at 131, 158 (noting weighted average cost of capital method operates on assumption new project is financed in same proportions as existing assets). One commentator defines the value of the firm "V" as V= [EBIT*(1-T)]/K_a where EBIT is earnings before interest and tax, T is the tax rate associated with firm income and K_a is the firm's weighted average cost of capital. It can be seen that the value of the firm is maximized by reducing the weighted average cost of capital. Consequently, firms avoid undertakings which increase their cost of capital. See GITMAN, supra note 213, at 494–95. Gitman further observes that of all forms of financing, cost of equity capital is greatest due to the inherent risk of equity ownership and the risk premium demanded by investors. A firm can calculate an optimal capital structure allowing it to pursue opportunities which do not alter its overall financial policies. Id; see also Ross, supra note 207, at 340–41 (providing algebraic formula assuming same).

²¹⁷ See supra note 217; RICHARD A. BREALEY & STEWART C. MEYERS, PRINCIPLES OF CORPORATE FINANCE 393 (Mc-Graw Hill 3d ed. 1988) (introducing concept of weighted-average cost of capital and defining it as tool to use in investment analysis for determining whether project can be undertaken with no change to firm's financial ratios).

it will earn on its investment of the capital it raises.²¹⁸ Real investment returns determine costs of capital and not the other way around.

All this is to say a probing inquiry into cost of equity is likely to resolve into a weighing of investments and investment alternatives, which brings us again to coerced loan standards.

D. Economic Profits vs. Ordinary Profits (Herein of Arbitrage)

Ordinary markups or profits really are just a component of cost, namely, of the cost of capital. That is the teaching of the circuit court opinions in *Koopmans*, ²¹⁹ *Green Tree v. Smithwick*, ²²⁰ and *GMAC v. Jones*, ²²¹ and of the district court opinion in *In re Cassell*. ²²² As stated in *Koopmans* and the economics writings it cites, ordinary markups are not "profit" in the economic sense. ²²³ Profits in the economists' sense are extraordinary earnings or true rent obtained by monopoly power or by exploitation of temporary lags in information transmission or like imperfections exploited by arbitrage. ²²⁴

Monopoly rent arguments are not found among cost of funds cases, but there are references to arbitrage. One such is a bankruptcy court opinion, *In Re Cellular Info. Systems*. ²²⁵ There, a bankruptcy judge rejected a debtor's plan, adopted one proposed by the bank's secured lender, credited the bank's expert witnesses, and confirmed a cramdown rate that basically was a coerced loan type rate. ²²⁶ But the opinion said the judge had or would reduce a comparable coerced loan rate

²¹⁸ See DAVIS, supra note 156, at 131–32, 158, 270; see also GITMAN, supra note 213, at 495–96 (observing primary purpose of lower cost of capital is to increase range of feasible investments, but is not itself determinative of return on investment).

²¹⁹ Koopmans v. Farm Credit Servs. of Mid-Am., ACA, 102 F.3d 874, 876 (7th Cir. 1996). *Koopmans* is briefed in detail *supra*, notes 36–61 and accompanying text.

Green Tree Fin. Corp. v. Smithwick (*In re* Smithwick), 121 F.3d 211, 214, n.2 (5th Cir. 1997). *In re Smithwick* is briefed in detail *supra*, notes 98–106 and accompanying text.

²²¹ 999 F.2d 63, 67 (3d Cir. 1993). *Jones* is briefed in detail *supra*, notes 127–55 and accompanying text.

²²² Dominion Bank v. Cassell (*In re* Cassell), 119 B.R. 89, 91 (W.D. Va. 1990). *In re Cassell* is briefed in detail *supra*, notes 159–65 and accompanying text.

²²³ See Koopmans, 102 F.3d at 876 (citing Adam Smith, THE WEALTH OF NATIONS (Bantam Books 2003) and George J. Stigler, THE THEORY OF PRICE 178–92 (4th ed., Prentice Hall College Division 1987)); see also DOMINICK SALVATORE, MANAGERIAL ECONOMICS IN A GLOBAL ECONOMY 15 (McGraw-Hill 3d ed. 1996) (defining traditional business view of "profit" as revenues less explicit, or accounting, costs).

²²⁴ See SALVATORE, supra note 223, at 15 (explaining economic profit as revenues less both explicit and implicit costs). Implicit costs include the value of the production processes and assets. These costs also consider lost opportunities for choosing particular functions or lines of business where alternative uses are feasible. See id. at 385–88 (explaining profit function optimization under monopoly pricing). But see BREALEY, supra note 217, at 287–88 (describing alternative views of efficient markets hypothesis). Under the third level of market efficiency explained by Harry V. Roberts, a strong form efficiency in the market would lead to few opportunities for arbitrage. Prices under strong form efficiency reflect all current information and all information which can be acquired under economic analysis.

²²⁵ 171 B.R. 926 (Bankr. S.D.N.Y. 1994). Incidentally, the opinion outlines testimonies of witnesses who used "discounted cash flow" methods of capital asset pricing of the sorts taught in the financial management and engineering economic textbooks cited at many places in this Part III; but the discussion of those methods in the opinion primarily addressed points other than cramdown interest. *See id.* at 930–34.

²²⁶ See id. at 953 (denying confirmation of debtor's plan and confirming merits of creditor's plan).

somewhat in order to deduct "profit" and to avoid what he had called "arbitrage." This is hard to interpret because the judge said he had accepted the bank's experts' testimonies, and those had asserted as proper cramdown rates comparable loan rates with risk additions, which would allow or reflect ordinary profit. The bankruptcy judge probably intended to say that commercial bank lending typically is not an arbitrage and does not provide "profit" in the economic sense but that he will be alert in cramdown cases to see that no extraordinary profit is included in a confirmed plan.

A similar interpretation is in order for *In re Bloomingdale Partners*.²²⁹ There, a bankruptcy judge refused to confirm a plan over a secured creditor's objection because the debtor's cramdown interest proposal was a cost of funds approach focusing only on some components of the creditor's financing, which would deny ordinary profit and fail to even cover all costs of capital.²³⁰ The judge opined that some loan markets, especially for notes of distressed borrowers in reorganization, are inefficient and may present opportunities for "arbitrage" by a secured creditor. The judge qualified that by stating the court can use expert testimony about nearly comparable markets that function efficiently to fashion a rate that is a sort of model of what would be a loan comparable to the coerced loan of a cramdown and will be free of arbitrage gains.²³¹

The bankruptcy judges in *In re Cellular Info. Systems* and *In re Bloomingdale Partners* were not very concerned about arbitrage or pure profit. Both said they should be alert to those lest a creditor ask for too much.²³² But they both rejected the implication that such risks should move a judge to use cost of funds methods to set cramdown rates.²³³ As those judges reasoned, less drastic safeguards can be used within the scope of the coerced loan method to guard against risks of arbitrage type profit or pure profit beyond capital cost recovery associated with elevated risk.²³⁴

Let us explore further the concept of internal arbitrage, which may motivate cost of funds proponents, and ask how likely is such to materialize. The innuendo in some cost of funds arguments, especially ones including denunciations of profit, is that objecting secured creditors allowed their ordinary investment rates of return

²²⁷ See id. at 939 (explaining how using market rate of interest as cramdown rate would grant secured creditors payments exceeding face value of claim because market rate of interest is designed to produce profit).

²²⁸ See id. 941–42 (according banks' witnesses substantial weight).

²²⁹ 155 B.R. 961 (Bankr. N.D. Ill. 1993).

²³⁰ See id. at 978 (discussing debtor's cramdown interest proposal excluded "profit" and debtor submits appropriate standard is creditor's "cost of funds").

²³¹ See id. at 977 (explaining standard applied by court excludes "profit" in sense of arbitrage return which results solely from inefficiency of market).

²³² See id. at 979.

²³³ See id.

²³⁴ See In re Cellular, 171 B.R., 926, 939–40 (Bankr. S.D.N.Y. 1994) (citing Lawrence P. King, et al., 5 COLLIER ON BANKRUPTCY ¶ 1129.03 at 1129-99 (15th ed. 1989)) (suggesting proposed cramdown interest rate should be measured against hypothetical "coerced loan"); see also In re Bloomingdale, 155 B.R. at 977–78 (construing model for well-functioning market to exclude "profit" in sense it includes arbitrage return from inefficiency of market).

will receive an arbitrage opportunity, or, more than that, that they have been engaged in arbitrage and should not be permitted to continue. Such innuendo is untrue. Consider, e.g., a commercial bank secured lender. Would one say that the difference between its rate on say, a revolving inventory and receivable floating lien loan under article 9 of the UCC and an average of its rates paid to savings and checking account depositors is riskless arbitrage between rates on financial equivalents in different locales or markets? Nobody would say that, would they? Yet that seems to be the insinuation of some arguments for cost of funds and against coerced loan techniques.

Still, suppose a rare evidentiary record in which a debtor in possession alleges and proves the existence of a special source of a creditor's funds, risklessly²³⁶ tied to its investments or loans with or to entities like the debtor, having durations and other provisions like the plan's. That is, assume some special source of funds tied to loans and investments of the sort the creditor would use foreclosure sale proceeds to make. In such a rare instance, one might say that using the cost of those special, tied funds as the cramdown rate would give the creditor its due and even preserve to it a sort of quasi-arbitrage opportunity it has outside bankruptcy. But this is so unlikely as hardly to be worth entertaining. True arbitrage opportunities are few and momentary only.²³⁷

The bonds or notes or other instruments commercial credit companies and banks issue, on one hand, and on the other, the notes, mortgages, sales contracts, etc. they buy are different, not equivalent. The markets are different. The borrowing on one end combined with lending on the other is not riskless arbitrage. It is competitive and beset with risks. Innuendos of arbitrage or easy money suggested by critics of coerced loan measures or by champions of cost of funds

²³⁵ See In re Hudock, 124 B.R. 532, 534 (Bankr. N.D. III. 1991) ("The Bankruptcy Code protects the creditor's interest in the property, not the creditor's interest in the profit it had hoped to make on the loan."); In re Jordan, 130 B.R. 185, 190 (Bankr. D. N.J. 1991) ("If the finance company is authorized a rate greater than its borrowing costs, it is making a profit on the delay and will be receiving more than the present value of the collateral." (quoting *In re* Mitchell, 77 B.R. 524, 527–28 (Bankr. E.D. Pa. 1987))).

²³⁶ The classic concept of arbitrage is that of a riskless, simultaneous combination of a purchase and a sale of the same item or of close equivalents or a riskless movement of short term funds to exploit momentary rate differences in two locales in a financial instrument or product of a given sort or in closely resembling, equivalent instruments or products. *See* 15 ENCYCLOPEDIA OF THE SOCIAL SCIENCES 117 (Macmillan Co. 1968); 1 BRITTANICA MICROPAEDIA 521 (Encyclopedia Britannica 1998); D.A.L. Auld et al., THE AMERICAN DICTIONARY OF ECONOMICS 8 (Facts On File Books 1983).

²³⁷ See 15 ENCYCLOPEDIA OF THE SOCIAL SCIENCES 117 (Macmillan Co. 1968); 1 BRITANNICA MICROPAEDIA 521 (Encyclopedia Britannica, 1998); D.A.L. Auld et al., THE AMERICAN DICTIONARY OF ECONOMICS 8 (Facts On File Books 1983).

²³⁸ See 15 ENCYCLOPEDIA OF THE SOCIAL SCIENCES 117 (Macmillan Co. 1968); 1 BRITANNICA MICROPAEDIA 521 (Encyclopedia Britannica 1998); D.A.L. Auld et al., THE AMERICAN DICTIONARY OF ECONOMICS 8 (Facts On File Books 1983); see also G.M.A.C. v. Jones, 999 F.2d 63, 68 (3d Cir. 1993) (finding coerced loan has lower monitoring and relational costs and should be less costly overall than issuing new loan).

reasoning should be spotted and rejected as they were in *In re Bloomingdale Partners*. ²³⁹

E. Tied Investment and Financing

Earlier, we said we would revisit notions of tied investment and finance after exploring the critical factor of capital, to see if such tying concepts can be used to work up a version of cost of funds reasoning that does not fail to distinguish investment merits and financing merits, and does not fail to address all losses of the creditor, including losses implicit in attempts to replace internal financing opportunities with some sort of external finance.

A project in which the investment and its financing are legally and operationally tied provides an exception to use of comparative investment rates in opportunity cost analysis.²⁴⁰ When a project is specifically and legally financed by a separate method in which the expected life of the asset and the term of the loan are the same, then the bond or loan rate may be used to discount the revenues or the savings or the casualty loss preventions or the other quantified benefits to present value to see if that value equals, exceeds, or falls short of the borrowed amount. An example would be cost benefit analysis of a proposed public work to be financed solely by a revenue bond and not by a general obligation bond and where it is believed the revenues reflect the benefits. Such matching or tying is not the situation in typical cramdowns. But we nevertheless should explore such a scenario because such visions seem to lurk in cost of funds thinking.

If an explicitly tied investment-financing package is being evaluated by a would be entrepreneur, then rates on both sides are considered and the combined program is the "investment" that, in turn, is compared to alternative "investments." Financing costs and alternatives are not the only inquiry, as cost of funds might have it. In an improved version of cost of funds reasoning, both sides of the program must be studied. ²⁴²

²³⁹ See In re Bloomingdale Partners, 155 B.R. 961, 977 (Bankr. N.D. III. 1993). Indeed, concepts of arbitrage may cut the other way, i.e., against costs of fund reasoning. Consider, e.g., this question: would it be too broad a reading of In re Till, 301 F.3d. 583 (7th Cir. 2002), to say that the judges deciding that case consider the costs of funds methods to be a sort of court sanctioned arbitrage by a debtor when it receives what the court called a "windfall" in a plan using cost of funds techniques to compute cramdown interest?

See GRANT, supra note 170, at 411–12; see also supra, note 186 and accompanying text.

²⁴¹ See supra notes 186, 239 and accompanying text. For a felicitously written example integrating financing and investment in an illustrative special case, see SCITOVSKY, supra note 189 at 210–14. Those pages patiently explain why real investment returns and real factor price rates and ratios predominate after initial project screening and why costs of capital cease to be very important after initial screening and cardinal initial decisions like what industry or line of business to enter have been made. To some people, including perhaps cost of funds advocates, this is counter-intuitive. To others of us, it seems obvious.

²⁴² See supra notes 186, 241, 243 and accompanying text; see also ROBICHEK, supra note 172 (agreeing with theoretical primacy of investment returns analysis in rational decision making but noting practical, legal, or organizational factors may link financing decisions and investment decisions; but in no sense suggesting disregard of investment side or counseling any preoccupation with financing and cost of capital side).

Some cost of funds proponents perhaps conceive of creditors as 100% leveraged operators whose borrowed funds are strictly tied to some of its investments, namely, those (whatever they are) of the type the creditor would use foreclosure sale proceeds to make. Such a conception is unrealistic, but that is not its only problem. In evaluating a creditor's positions within and outside the bankruptcy plan, cost of funds techniques consider only one side of the hypothetical tied deal and, more than that, imply or assume the "cost of borrowed funds" side will not be influenced by the investment side.²⁴³

The cost of borrowed funds to one undertaking a package project of tied finance and investment cannot be lower that the investment returns supporting the borrowing unless the entrepreneur is giving its lender more security than just a non-recourse assignment of receipts from the other side of the deal and thus expending some of its creditworthiness and borrowing capacity. But that amounts to saying that the cost of funds will resemble the investment rate of return the objecting creditor can make. That, however, it just what coerced loan methods study.

Further discussion of these points is not apt because 100% leverage and legally tied investment and financing are not found in cramdowns anyway. But it is important to identify unstated assumptions or premises which might be motivating a method of valuing a stream of plan payments. The discussions of arbitrage and of tied investment with leveraged finance are ways of teasing out answers to the question: "what harms or losses does a secured creditor suffer by the loss of internal capital (i.e. the proceeds of sale of its collateral) which supposedly it can 'cover' by some sort of external finance?" To answer that fully, one must ask what the creditor would or at least could do with the internally generated funds. In other words, a thorough answer obliges one to look at the creditor's alternative investment opportunities, and that takes the measurement to coerced loan methods.

At best then, cost of funds arguments are incomplete uses of their models. They stop the cause and effect study too soon. Lost opportunities for alternative investments are end results of a cramdown. "Borrow yourself" is not an exhortation that can avoid that fact because it begs the question "borrow for what?"

F. Summary of Part III

To summarize our study to this point, cost of funds methods are either incomplete calculations or calculations somewhat confusing different issues or

²⁴³ See In re Till, 301 F.3d at 594 (dissenter arguing creditor's ability to extend another loan is not effected by debtor maintaining custody of collateral). But see In re Galvao, 183 B.R. 23, 26 (Bankr. D. Mass. 1995) (considering creditor's lost opportunity costs).

²⁴⁴ See supra Part III.C.1., concerning borrowing capacity as a limited resource and as part of the general idea that capital is limited. By non-recourse we mean an assignment or endorsement as sole consideration for the loan, more an outright sale than anything else. For an example of a record implicating non-recourse mortgages and discussing the implications of non-recourse financing for various prerequisites to valid cramdown (fair and equitable treatment of and non-discrimination among classes and the best interests of creditors test), see *In re LaSalle Street P'ship*, 126 F.3d 955, 968–69 (7th Cir. 1997), rev'd on other grounds, 526 U.S. 434 (1999).

different parts of overall economic opportunities of secured creditors. Such methods forget critical attributes of capital and do not appreciate the primacy of real investment returns as the foundation supporting financial returns and payments. Coerced loan methods do not share these foibles. Moreover, they are more compatible with contract damages law norms than are cost of funds rationales.

IV. CONTRACT DAMAGES AND CRAMDOWN

A. Expectation Interests

The broad measure of damages for breach of contract is an amount needed to compensate the plaintiff promissee for her frustrated expectations.²⁴⁵ Even unusual expectations often are protected by allowance of "special damages"²⁴⁶ or "consequential damages"²⁴⁷ if the party in breach should have known the plaintiff's circumstances. And the sorts of typical or "general" damages that a breach usually causes are awardable even if no actual harm occurred in the particular circumstances.²⁴⁸ Putting a secured creditor in as good a position as it would have had outside bankruptcy is the Code's instruction for cramdown interest. That reads like a requirement to protect expectation interests as in damages law.²⁴⁹

A lost chance by a lender or by a seller on credit to lend to others or to sell on credit to others is easy to understand. Business borrowers and most consumers can see that and should foresee it even under a strict notion of ready prediction. That is

²⁴⁵ See Bluebonnet Sav. Bank, F.S.B. v. U.S., 266 F.3d 1348, 1355 (Fed. Cir. 2001) (explaining non-breaching party's interest is being in as good position as such party would have been had contract been performed); RESTATEMENT (SECOND) OF CONTRACTS § 344(A) (1981) (defining expectation interest as "interest in having the benefit of his bargain by being put in as good a position as he would have been in had the contract been performed."); 22 AM. JUR. 2D, Damages § 47 (Lawyer's Co-op 1988) (reviewing elements considered when courts grant benefit of bargain damages).

²⁴⁶ See Contempo Metal Furniture Co. v. East Texas Motor Freight Lines, Inc., 661 F.2d 761, 765 (9th Cir. 1981) ("Special damages are those that the carrier did not have reason to foresee as ordinary, natural consequences of a breach when the contract was made."); 22 AM. JUR. 2D *Damages*, at §§ 15 & 59–62 (discussing measure of damages based on varying types of contractual breaches).

²⁴⁷ See Porous Media Corp. v. Midland Brake, Inc., 220 F.3d 954, 963 (8th Cir. 2000) (describing "consequential damages" as damages flowing "naturally and foreseeably from the breach and are within the contemplation of the parties at time of contracting."); 22 AM. JUR. 2D Damages, at § 83 (noting consequential damages are recoverable "only if they were reasonably foreseeable at the time the parties made the contract."); BLACK'S LAW DICTIONARY 390 (6th ed. 1990) (defining consequential damages as "[s]uch damage, loss or injury as does not flow directly and immediately from the act of the party, but only from some of the consequences or results of such act Damages which arise from intervention of special circumstances not ordinarily predictable.").

²⁴⁸ See 22 AM. JUR. 2D *Damages*, at § 15 (stating damages are recoverable when there is breach of legal duty or invasion of legal right, but no actual damage resulted).

²⁴⁹ Even a court suspicious of profit and not well-disposed toward secured creditors objecting to chapter 13 plans has said the objective of cramdown interest setting to value payment streams relative to collateral value is to place the objecting creditor "in the same economic position it would have been in" had it been allowed to repossess and sell or otherwise been able to obtain the value of its collateral without waiting. *See* G.M.A.C. v. Valenti (*In re* Valenti), 105 F.3d 55, 63 (2d Cir. 1997). *In re Valenti* is briefed in detail *supra* notes 107–122 and accompanying text.

to say, even if one were to stretch damages limiting rules²⁵⁰ to say that cramdown interest should use coerced loan-alternative investment methods only in instances where special damages would be apt, in nearly all instances coerced loan measures still would be correct.²⁵¹ More than that, coerced loan losses are not special or strange at all. They are typical disappointments and harms produced by default followed by cramdown. They are the usual or "general" harms that occur in cramdown and should be the general approach in setting cramdown interest.²⁵²

B. Loan Contract Analogies

To be fair to cost of funds sponsors, we must indicate how contract damages rules furnish an analogy tending at first view to bolster cost of funds models. The analogy is to loan contracts. To be thorough, let us investigate that conceit. One might think of the contractual right to foreclose, sell the collateral, and take the sale proceeds for use elsewhere as an option to borrow the collateral's value interest free forever. Then the cramdown is like repudiation of a loan commitment. The usual rule for a borrower's damages is to award her the difference between the discounted financing costs of a new loan she gets to "cover" her position and the discounted credit fees (interest) she would pay under the repudiated commitment. 253

An objecting secured creditor's cost of finance outside bankruptcy is zero. She gets to keep the foreclosure sale proceeds forever at a zero rate of interest.²⁵⁴ But what is the cost of alternative borrowing for a long term approaching infinity? That is, what is the cost of cover? To give cost of funds methods due consideration, let us try to answer that question. In other words, let us follow the loan contract analogy, see what evidence it requires, and ask if it seems like a good test of relative positions or opportunities of secured creditors in cramdowns. This comes down to asking: what could the creditor do to "cover" its position and thus establish its damages for breach of the hypothetical, zero interest, unlimited term "loan?"

²⁵⁰ See 22 AM. JUR. 2D Damages, at §§ 56–62 (discussing rules limiting damages in contract actions). Such rules have been considerably loosened in recent decades. See DAN B. DOBBS, HANDBOOK ON THE LAW OF REMEDIES § 12.3 (1973).

²⁵¹ The very fact that coerced loan methods are the majority rule and have been for several years is some evidence they are the "contemplated" measures in many quarters or, more than that, have become the "generally" supposed measures. That is to say, whether as readily adjudicated special damages or, going further, as supposed, presumed, general damages, lost investment opportunities should be used to fashion remedies and, in cramdowns, to adopt discount rates used to value streams of future payments.

²⁵² Cramdown precedents do not use loan contract common law damages terminology of this sort. This rather is an analogy I am suggesting that we use to see the deeper implications of cramdowns and of competing methods for computing cramdown interest.

²⁵³ See 22 AM. Jur. 2D *Damages*, at § 68 (noting damages are awardable to compensate for difference between what party actually received in performance and market value of performance due under contract but not rendered). Special damages are also available for breach of a contract to lend money. See 22 AM. Jur. 2D *Damages*, at § 69.

²⁵⁴ In other words, absent bankruptcy, the creditor would be able to sell the collateral and in that way recover its capital for reinvestment at a zero cost of capital acquisition. The analogy I am suggesting is a super long term, zero interest borrowing, which in a way is what internal finance capital recovery by foreclosure resembles.

Could it issue a perpetual bond like those the British government once sold? Then the "cover" cost of funds would be the rate it must pay holders of such a bond.²⁵⁵ Of course, this does not mean that the debtor is obligated any longer than the periods defined in the plan, but it would mean that the discount rate used in present value calculations would be a rate close to what is needed to attract buyers of perpetual bonds. An approximation to that rate might be some average of rates on the longest-term bonds issued by firms with credit ratings similar to the rating of the objecting creditor, perhaps with added points to compensate for the erosion of borrowing capacity produced by the bond obligations.

A court might also gather evidence about very long-term unsecured balloon loans, if any, recently made by banks to firms like the objecting creditor and with like credit ratings. Alternatively, a court might try to make sense of quotations by annuity companies with credit worthiness about equal to that of the objecting creditor. For example, one might ask: in exchange for an amount equal to the foreclosure sale proceeds, what annual payment would such an annuity company offer to a very young woman in excellent health with a life expectancy of, say, sixty years or more? One might say that the interest rate needed to reduce such a stream of quoted payments to a present value equal to the purchase price (the proceeds of foreclosure sale of the collateral) in effect is the "cover" rate to use in computing the damages for repudiation of the fictional loan.

With long duration, the distinction between debt and equity weakens.²⁵⁶ Thus, extending the analogy further yet, the cover damages might be the cost of equity financing. Along these lines, how about a study of dividend rates on non participating preferred shares or, pushing the search for "cover" damages yet further, non participating preferred shares with discretionary powers reserved in the issuer to redeem any time after the horizon of the cramdown plan?

What such measures would produce is difficult to predict. But the author dares to say that they would generate cramdown interest rates larger than what the proponents of cost of funds usually have in mind and would not be very different from coerced loan type rates. Whatever rates so measured are, trials to adjudicate them may be long. More importantly, they will not impress most persons as the lost opportunity (at least not as the immediate, easiest to appreciate opportunity lost) when a cramdown is ordered.

Besides having difficulties of measurement and a disconnection from much of the common sense of damage and loss, the loan contract analogy fails because it is not as close a comparison to cramdown as it first seems. In an actual, not hypothetical, case of a loan contract, the plaintiff-borrower-promissee replaces one would-be debt obligation with another and may not greatly if at all change its

²⁵⁵ I am not saying that there are perpetual duration bonds now on the market. Rather, I am drawing out the analogies in this part of the paper.

²⁵⁶ Especially if the issuer is heavily indebted or in distress. *See* MARILYN COHEN, THE BOND BIBLE 45 (N.Y. Fin. Inst. 2000); CHRISTINA I. RAY, THE BOND MARKET-TRADING AND RISK MANAGEMENT, 288-300 (Business One Irwin. 1993).

overall financial structure or level of use of its borrowing capacity.²⁵⁷ In the analogy, however, most of the fictional loan replacements (the "cover" vehicles) one can think of would create some obligation of the creditor not carried before and represent a net change unfavorable to the creditor.

For all its flaws, however, a comparison of cramdown to loan contract repudiations is more apt a damages law analogy for finance and credit businesses than is an analogy to non credit, cash contracts for purchase or sale of tangible supplies. That was the analogy expressed in the dicta in *Koopmans*. The analogy there said that a credit-worthy finance company, bank, etc. may borrow in large amounts (wholesale) in a few transactions and then lend smaller amounts to a large number of its perhaps less credit-worthy customers (retail). On that analogy, cost of funds is like a cost of goods sold.

Besides confusing capital with non capital factors and neglecting the distinction between internal and external finance, the analogy to tangible supply acquisition costs breaks down even as a damages law analogy because a plaintiff seller's acquisition costs have nothing to do with expectation damages. Its wholesale acquisition costs might enter some calculation of detrimental reliance if expectation damages cannot be computed. Usually, however, acquisition expenses are beside the point. The usual rule for the seller's damages is the difference between the price of resale to another buyer and what the repudiating buyer had promised to pay. Wholesale-retail trade analogies do nothing for cost of funds proposals for cramdown interest. Rather, they direct attention, when rightly used, to other investments in or other loans to customers of the objecting secured creditor, and that sort of attention is the gist of the coerced loan approach.

C. Summary of Part IV

The author has tried his best to complete the analogies that appear to motivate cost of funds thinking, to improve them, and to consider some other analogies that

²⁵⁷ We speak here of a simple case or paradigm. A borrower plaintiff of course may do all sorts of things that make damages harder to prove or measure. For example, it may not seek a replacement loan, but instead use its own savings or it might abandon the project it was borrowing money to finance. Here we are using simple, run of the mill damages scenarios as analogies to explore cramdown interest concepts and are not writing a damages law article.

²⁵⁸ See Koopmans v. Farm Credit Servs., 102 F.3d 874 (7th Cir. 1996).

²⁵⁹ See id. at 875. The analogy is further discussed in this article *supra* in the text accompanying notes 53, 201–04.

²⁶⁰ See 22 AM. JUR. 2d, Damages, §§ 46 & 157–61 (Lawyer's Co-op 1988); see also Mary E. Beeker, Promissory Estoppel Damages, 16 HOFSTRA L. REV. 131, 153 (1987) (explaining presence of close link between promissory estoppel and inability to calculate expectation damages under normal damages rules); L.L. Fuller & William R. Perdue, Jr., The Reliance Interest in Contract Damages: 2, 46 YALE L.J. 373, 374 (1937) (indicating remission of plaintiff to reliance interest seems to be dictated by feeling that value of expectancy is too uncertain to be safely measured in money).

²⁶¹ See U.C.C. § 2-706(1) (2001); see also Robert E. Scott, The Case for Market Damages: Revisiting the Lost Profits Puzzle, 57 U. CHI. L. REV. 1155, 1188 (1990) (indicating U.C.C. § 2-706 allows seller to resell goods and use resale price to establish price shift from time of contract).

might bolster cost of funds visions of what is lost and to be compensated or mitigated by cramdown interest. Some of the resulting discussion will seem far afield from ordinary litigation, and it is. But the discussions have been the author's honest attempts to identify the logical sequelae of cost of funds proposals, of their stress on financing instead of frustrated new investment, and of their quixotic quest for external replacements for internal finance.

The author assures the reader that these explorations are not intended as ridicule and are definitely not intended as proposals that bankruptcy courts delve into perpetual bonds, preferred shares, annuities, or regulated utility type studies of equity finance costs. Let's all agree: bankruptcy courts should not go to any of those places when they do not have to.

The main point of the discussions just referenced has been that the coerced loan methods are truer tests of opportunity costs imposed by cramdowns. Still, there is nothing wrong in saying that a side benefit of coerced loan tests is that they avoid the complex analogies that a cost of funds test would have to use and the contentious valuations it would require if it were sincerely and thoroughly to address all costs of external financings hypothesized as genuine replacements for internal finance by an objecting secured creditor.

Some may not accept these apologies for briefing materials other than bankruptcy case reports and will say we have become entangled in a swamp of economics, financial mathematics, and common law damages rules. The author would say that the discourses above are more like a pleasant paddle in a wetland in which the citations to hornbooks and textbooks are like views of marsh marigolds and touch-me-nots while the insights of the famous economists referenced are like the penetrating eyes of belted kingfishers perched in tamaracks on the boggy shore. Still, the patient reader fairly may say it is late and time to get downstream to our rendezvous. So let us dip our blades a little deeper, pull a little harder, and get back out to the main channel: future cash payments and their valuation.

V. CRAMDOWN PLANS AS FINANCIAL ASSETS (HEREIN OF RISK ADJUSTMENTS)

A stream of future cash payments in a cramdown is a financial asset like a note or bond or the like. The Code requires courts to "value" such assets but does not speak of interest. Financial assets can be valued or priced without explicit reference to rates of return, namely, by ascertaining prices of identical or of genuinely equivalent assets. Rates of return often are studied, however, and used to discount streams of payments promised by the issuer of the financial asset as a

²⁶² See Epstein, supra note 6, at 438–39 (stressing cramdown interest disputes are debates about valuation of stream of deferred payments and pointing out connections between that and valuation of tangible assets such as collateral of secured debtor).

²⁶³ See In re Cellular Systems, Inc., 171 B.R. 926, 935–36 (Bankr. S.D.N.Y. 1994) (discussing valuation of similar company to determine discount rate and terminal multiplier).

way to value the asset.²⁶⁴ In such instances, the rates used are rates of return provided by comparable assets.²⁶⁵ Pricing that way often is necessary because identical or equivalent assets can be hard to find. 266 When rates on comparable items are used, adjustments to the rates are considered in order to take account of differences between the risks and volatilities of the subject asset and of the compared assets.²⁶⁷

The key point for our purposes is that the rates used and adjusted are not rates associated somehow with some would-be purchaser of the asset being valued or priced. 268 The sources and costs of funds held by any purchaser are beside the point. Even reasonable purchasers themselves do not expect their particular costs of finance to affect the price of an asset, financial or non-financial, they may buy. Purchasers consider their costs to decide if a purchase is feasible, to decide how the asset ranks for their purposes against alternative assets available to them for purchase, and to decide whether to make any purchase at all, but not to decide if an offering price is too high or too low or out of line with other prices. When persons

²⁶⁴ See In re Cellular Systems, 174 B.R. at 940 (discussing rate of return on T-bill and application to

interest rate on stream of payment).

265 That was the long time prevailing technique in securities analysis and still has many advocates. See COTTLE, supra note 209, at 27 (suggesting asset selection under efficient markets hypothesis decreases probability of underperformance relative to asset class); id. at 497-509 (describing benefits and drawbacks of valuation methodology including industry selection, asset type and diversification); FINNERTY, supra note 210, at 57 (stating generally accepted calculation of present value of stream of payments as equal to sum of individual present values of payments received where each individual payment is discounted over time until receipt; model assuming all the while that discount rate does not change during lifespan of asset and that such rate is rate of return for comparable assets).

²⁶⁶ See, e.g., BREALY, supra note 217, at 187 (suggesting industry ratios are insufficient in establishing rates of return for asset valuation due to firm-specific factors affecting perceived risk); COTTLE, supra note 209, at 531-32 (noting diversification and firms in multiple industries increase difficulties in finding comparable assets); see also THOMAS E. COPELAND & J. FRED WESTON, FINANCIAL THEORY AND CORPORATE POLICY 198 (Addison-Wesley Pub. 3d ed. 1988) (explaining quantity of risk is covariance between return of asset examined and market portfolio). Under this model, non-identical assets may be effectively compared presuming efficient market. Id.

²⁶⁷ Contemporary methods counsel attention to all factors, but put special emphasis on empirical evidence of the sensitivity of a security's price movements to changes in prices of large, diversified indexes or portfolios and on evidence of related estimates of variation about mean or "expected" values of cash flows. See FINNERTY, supra note 210, at 74 (noting preference of measuring risk relative to market norms by using adjusted risk variable rather than absolute measures of risk such as standard deviation); GRANT, supra note 170, at 240 (discussing variables in context of break even points); SCHALL, supra note 156, at 156-60 and 167-77; Edward W. Vopat & Iftekhar Hasan, A Comparative Analysis of the Initial Public Offerings of U.S. and Foreign Firms 3 (presented to the Academy for International Business Northeast 1994 Regional Conference) (June 1-3, 1994) (available from The Academy of International Business) (noting firm's investment bank and asset size as factors to be considered in risk calculation in absence of liquid market, but showing political risk was not factor for multinational firms similarly situated).

Proving a negative is difficult. So the author invites the reader to do what the author did. Visit a large university library, find the shelf with the books titled "Security Analysis," pull out a number, look up "discount rates" and "capitalization rates" in the indices to find relevant pages, and see if any of the books says the price or fair value of a security changes from purchaser to purchaser by reference to purchasers' costs of funds. No book the author saw said anything like that. An investor of course will ask if a security fits in with his or her existing portfolio and if its price and risk fit his or her preferences, but that is not anything like cost of funds discounting or pricing.

buy houses or autos or major appliances, whether for cash or on credit, they look at prices of comparable houses or cars or appliances to formulate offers or to evaluate prices asked by sellers. They do not use their own financing costs to value an asset or to price it. Their finances may determine if they can "swing" a purchase but do not determine the price. Should the courts conceive of financial assets as much different? No, they should not.

When we remember that cramdown interest debates at bottom are arguments about valuation of an asset the creditor is obliged to acquire or "buy," the irrelevancy of a creditor's cost of funds becomes easy to see and so does the relevancy of rates of return available on alternative assets of like type and quality the creditor could buy instead with the proceeds of sale on foreclosure of the collateral. This brings us to the "adjustments" necessary to bridge the gap between a subject of valuation and a comparable but not identical asset.

Rational lenders and investors consider risks in making comparisons in order to price financial assets.²⁶⁹ Non-payment is one big risk.²⁷⁰ Because there is a risk promised payments will not be made, likely or expected payments rather than promised payments are the bases of comparisons.²⁷¹ More than that, very systematic investors also take account of the dispersion or volatility of possible deviations from the mean or expected level of actual payment and treat wide ranges of possible

²⁶⁹ See BRIGHAM, supra note 208, at 171 (stating relevant risk is that which affects overall portfolio risk); FINNERTY, supra note 268, at 67 (noting lack of certainty in investment decisions results in analysis of expected outcomes versus uncertainty associated with those potential results); GITMAN, supra note 213, at 302–03 (explaining use of capital asset pricing model, 'CAPM', as comparative valuation method for investments). Stated as $k_s = R_F + [b \times (k_m - R_F)]$ where required rate of return, k_s , is function of risk-free rate, R_F , plus sum of difference between risk-free rate and expected market return, k_m , multiplied by measure of risk, b, also referred to as beta. See id.; Vopat, supra note 267, at 2 (citing geographic basing of firms as factor in equilibrium pricing models).

²⁷⁰ See COPELAND, supra note 266, at 219–22 (observing risk analysis under arbitrage pricing theory, or 'APT', requires elimination of idiosyncratic, or diversible risk and focus instead on systematic, and therefore undiversible risk). Investors conducting analysis under APT are able to consider multivariate risk models, not single idiosyncratic factor. Noteworthy under APT is that, unlike the capital asset pricing model, there is no required presumption that markets are efficient. Inefficiencies in illiquid investments or markets can be more relevant to the analysis of cramdown plans, potentially making APT more valuable than capital asset pricing model in this context); GITMAN, supra note 213, at 247 (observing diversible risks include such items as lawsuits, regulatory changes and defaults. Systematic risks are those attributable to market factors affecting all firms, such as war, inflation and international incidents); HERBERT B. MAYO, INVESTMENTS – AN INTRODUCTION 191 (5th ed. Dryden Press 1997) (noting large number of potential sources of risk, but suggesting few have lasting or continuous impact on returns).

²⁷¹ Bankruptcy reorganization cases talk mostly of this adjustment for risk; but, in finance textbooks, default risk is the basis for only the first of several stages or rounds of risk adjustment. *See* BREALEY, *supra* note 217, at 561 (observing while non payment results in lower actual interest rate paid to lender, it does not follow that expected interest rates are higher, suggesting promised payments are somewhat discounted by investors); BRIGHAM, *supra* note 208, at 409–10 (outlining necessity of accuracy in estimation of cash flows to avoid forecasting errors and highlighting forecast error of over \$6 billion in construction cost of Alaska Pipeline versus original estimate of \$700 million); GRANT, *supra* note 170, at 143–44 (discussing element of risk in relation to minimum attractive rate of return); ROBERT S. PINDYCK AND DANIEL L. RUBENFELD, ECONOMETRIC MODELS AND ECONOMIC FORECASTS 439 (McGraw-Hill 4th ed. 1998) (suggesting stochastic simulation is useful to test forecast model and that dispersion of test results about their mean values can be used to set forecast confidence interval); SCHALL, *supra* note 156, at 142–45.

variance, dangers of extreme loss or disappointment, and long time horizons as added risks calling for further adjustment beyond just the reckoning of the expected, lower than promised payment amounts. 272

Valuation of an asset using comparable but not identical assets can take account of risk differences between a studied asset and a comparable one in two ways. The payment amounts can be reduced from promised amounts by calculating weighted expectations of payment and by reducing those supposed payments yet more when wide variations and extreme losses are among the possibilities and when payment streams will extend for several years or more. That is one approach. A second way to adjust valuations for risk is to increase discount rates used in a valuation study above the rates of return prevailing on the less risky but to some degree comparable assets. The increase is influenced by factors such as: the difference between promised and probabilistically expected amounts of payment, the level of variance about the expected value, the size of any extreme possible outcomes, and the length of time over which payments extend. Combinations of the two adjustment methods can be done so long as overlap or double counting is avoided.

²⁷² The text mentions volatility, the size of possible extreme failures or losses, and the length of time over which payments are expected because those are risk factors highlighted in textbooks as factors their authors believe do and should strongly motivate investors and influence rates and prices. *See* GRANT, *supra* note 170, at 267 (discussing decision making in face of uncertainty); PINDYCK, *supra* note 274, at 365 (observing estimation techniques for financial models are subject to inconsistency and bias as uncertainty increases and suggesting all systems of estimation involve trade-off between efficiency and error); SCHALL, *supra* note 156 at, 156–60, 167–77.

²⁷³ The two approaches are recognized in standard sources. *See* FINNERTY, *supra* note 210, at 74 (noting risk analysis method of creating multiple models reflecting diverse potential outcomes and calculating expected variance from mean); GITMAN, *supra* note 213, at 233 (illustrating probability density function as criterion for investment selection, suggesting risk-conscious investors prefer investments subject to less diverse outcomes to those where dispersion is greater, even where probabilities of individual outcomes are identical); GRANT, *supra* note 170, at 143–44 (discussing element of risk in relation to minimum attractive rate of return); SALVATORE, *supra* note 223, at 547 (explaining essential nature of probability distribution in calculating expected return from investment); SCHALL, *supra* note 156, at 146.

²⁷⁴ See FINNERTY, supra note 210, at 74 (explaining option under risk analysis of creating risk-adjusted discount rate and thereby determining risk-adjusted present value); GITMAN, supra note 213, at 248–50 (describing use of beta coefficient in capital asset pricing model).

²⁷⁵ The many risks that influence rates and prices can enter either into downward adjustment of expected future payments or into the selection of a discount rate. As the author reads them, the leading current texts, while not insisting on the allocation, seem to favor using bad debt-default risks and the size of extreme loss (total default) to reduce expected payment amounts below promised or scheduled amounts and to use the other critical risks they highlight to adjust discount rates. The correctness or not of this interpretation, however, does not affect the argument here or the purposes of this paper. *See* COTTLE, *supra* note 209, at 497–509 (highlighting different considerations in valuation approach such as future earnings, industry and diversification of investment).

²⁷⁶ See In re Cellular Information Systems, Inc., 171 B.R. 926, 935 (Bankr. S.D.N.Y. 1994) (noting accounting for risk in more than one element of model is not per se improper); see also United Carolina Bank v. Hall, 993 F.2d 1126, 1131 (4th Cir. 1993) (adopting rule that determines appropriate cramdown rate by observing secured creditor's market to determine appropriate present value taking costs into consideration). For some added insights into allocating risks to the payment estimation aspect and to the discount rate selection aspect, see EUGENE M. LERNER, MANAGERIAL FINANCE: A SYSTEMS APPROACH (Harcourt, Brace & Jovanovic 1971). Prof. Lerner's pages 219–21 and 315–16 address lowering future cash

How much of the financial asset valuation effort should be devoted to finding closely comparable assets to which only small risk adjustments will be needed, and how much should be devoted instead to making large adjustments to values of less comparable assets will be a legitimate debate in many cases. The author favors the former strategy, when it can be employed, as did the *Koopmans* opinion. This is because the strategy is rooted in a search for actual price and rate data in objective markets and, when such data can be found, presents less temptation to litigants, expert witnesses, and judges to speculate under the guise of making "adjustments." But the debate about such strategies of truth seeking in the face of uncertainty is not the main point here.

The point is that the adjustments for risks made in asset valuation are made to rates yielded by assets of some objectively identified level of comparability and not to what happen to be the individual costs of capital of any particular possible purchaser of the asset. Remembering again that questions about cramdown interest rates and risk adjustments thereto really are asset valuation questions should persuade us that knowing the cost of funds of a forced "buyer" of the asset is no help at all in adjudicating a true discount rate to use in the asset valuation.

CONCLUSION: FORENSIC JUDGMENT, FINANCIAL JUDGMENT, AND PHILOSOPHY

If this paper has shown nothing else, perhaps it has illustrated that seemingly pedestrian topics like cramdown interest nevertheless raise issues of intellectual subtlety that require both forensic and financial judgment. Any serious subject studied carefully and analytically is a study of philosophy and an exploration of the

payment amounts in risk adjusted present value calculations, while his pages 221–22 and 316–18 address raising discount rates above otherwise comparable rates to account for added risks when performing such calculations.

The older method tried harder to find comparable issuers or at least started with capitalization rates in a relevant industry, thus leaving a narrower range for fine tuning or adjustment to the specific issuer in order to price a security; but the newer approach is to start from large aggregates (indexed portfolios and risk free rates) and then to do at times massive individualized adjustments using large amounts of individual data to compute individual multipliers that reflect the risk of the individual issuer's security relative to the overall securities market. To see this, *compare* the citation in 171 above to a famous older book *with* chapter 5 (pages 102–28, titled "Security Prices") and chapter 6 (pages 141–77, titled "Risk and Return") in SCHALL, *supra* note 156. The main point to make for present purposes is that neither of those methods is subjective to a purchaser, but rather that each is market oriented. Indeed, one of the books we have been quoting tells us that the goal of the modern methods has been more fully to exploit objective data and computer processing thereof in order to make "market place" valuations of all factors including relative risks as the way to price a security or stream of payments or cash flows. *See* DAVIS, *supra* note 168, at 78; *see also* Epstein, *supra* note 6, at 443 (summing up cases to say, among all the variants, all courts interpret the Code to require adjudicators to adjudge cramdown rate that reflects some market).

²⁷⁸ See supra notes 58 & 59 and accompanying text (outlining insistence by Seventh Circuit in Koopmans case that bankruptcy courts try hard first to find market for instruments with risks, durations, and business characteristics like those of debtor and payments promised in plan before constructing rates judicially by making large adjustments to rates on instruments far removed in comparability from future cash payments in plan); see also Epstein, supra note 6, at 468 (arguing that, even when comparable instruments traded in markets cannot be found, "relatively comparable transactions" can be located "in most cases" and should be starting point of cramdown interest rate adjudication).

character of reality, that is, a study of metaphysics, not in the pejorative sense but in the Aristotelian sense. Such is true of the topics examined herein. The author dares to say that the late Tibor Scitovsky, on whose now classic book written in 1951 this paper has drawn, would not object to that statement. A book like that belongs not just on the shelves of business school libraries but *a fortiori* among the volumes of sciences, arts, and letters.

Besides encouraging good judgment in general, what practical prudential advice would the author offer to sum up? The author respectfully suggests that, without limiting the types of evidence parties may offer, reviewing courts should direct bankruptcy judges in cramdown litigations to focus trials and deliberations on an inquiry into what alternative loans or investments would yield to the objecting secured creditor if it were allowed to foreclose and use the proceeds of foreclosure sale to make relevant alternative investments or loans.

At the level of the courts of appeal, that already is the majority rule or majority model for reasoning about cramdown interest. It is a good model because it comports with accepted economic principles concerning capital as a factor and the need to distinguish investment merits from financing policies, with principles of financial analysis and finance costs, with well established expectation measures of damages used in contract law outside bankruptcy, and with ordinary and well accepted notions about asset valuation.

Those all are good reasons to praise the majority rule, but the best reason after all is that it compares relative positions, as the law requires, in a way most people would and in a true to life way most people can understand. The majority approach at the courts of appeals level is good policy and plain interpretation.