

# The Conundrum of Covered Bonds

Steven L. Schwarcz\*

*Covered bonds, which have been part of European finance since the time of Frederick the Great, are now being widely touted as the answer to securitization’s imperfections. There is great confusion, though, about the nature of covered bonds and their relationship to secured bond financing and securitization. This article attempts to demystify covered bonds, examining how they fit within a larger financing framework, analyzing their legal rights and obligations, and comparing their costs and benefits. The benefits of covered bonds are similar to those of securitization; both can access low-cost capital market funding with low risk to their investors, and both can be used to regenerate lending markets. The costs of covered bonds may be higher, though, because the “dynamic” collateral pools and “dual” recourse to the issuer that protect covered bonds shift virtually all risk to unsecured creditors. Whether that risk should be allowed to be shifted so asymmetrically is a policy question for any nascent covered bond regime.*

## Table of Contents

I. Introduction.....	562
A. History of Covered Bonds.....	563
B. Today’s Covered Bond Market.....	564
II. Deconstructing Covered Bonds.....	566
A. The Characteristics of Covered Bonds.....	566
Covered Bonds Distinguished from Ordinary Secured Bonds.....	568
Legislative Versus Structured Covered Bond Regimes.....	569
B. The Relationship Between Covered Bonds and Securitization.....	571
III. Analysis.....	573
Moral Hazard.....	574
Adverse Selection.....	577
Servicing Costs.....	578
Overreliance on Complex Mathematical Models.....	580
Impacts on Non-Adjusting Creditors.....	582
IV. Conclusions.....	585

---

\* Stanley A. Star Professor of Law & Business, Duke University School of Law; Founding/Co-Academic Director, Duke Global Capital Markets Center; Leverhulme Visiting Professor, University of Oxford Faculty of Law; Business Law Advisor to the ABA Section of Business Law. E-mail: schwarcz@law.duke.edu. The author thanks Petrina Dawson, Anna Pinedo, and Thomas Plank for valuable comments and Shaun Barnes, Duke Law '12, for superb and truly invaluable research and writing assistance.

## I. INTRODUCTION

Market observers have noted that although some securitization products, such as structured investment vehicles (“SIVs”) and highly leveraged “ABS CDO” securities,<sup>1</sup> may be gone forever from the capital markets, they will be replaced. The most likely candidate to replace these products is covered bonds, which have a long history in European securities markets and are being touted by governments and market observers alike.<sup>2</sup> Investment bankers and law firms are investing in getting up to speed in this area to develop and market their expertise before this becomes the next “next thing.”<sup>3</sup>

Covered bonds are long-term debt securities that are secured by specific assets of the issuer of the bonds.<sup>4</sup> The collateral assets are called “cover-pool” assets.<sup>5</sup> To the extent the cover-pool assets are insufficient to repay principal and interest on the covered bonds, investors in the bonds (covered “bondholders”) have an unsecured claim against the issuer for the insufficiency.<sup>6</sup> As with any granting of collateral, the cover-pool assets are deemed to remain on the issuer’s balance sheet (i.e., they remain owned by the issuer) for accounting purposes.<sup>7</sup> Unlike normal collateral, however, these assets are “ring-fenced” to give covered bondholders greater protection in the event of the issuer’s bankruptcy.<sup>8</sup> Additionally, weak cover-pool

1. For an introduction to these securities, see *infra* notes 143–50 and accompanying text.

2. See, e.g., Press Release, U.S. Dep’t of the Treasury, Secretary Henry M. Paulson, Jr., Statement on Covered Bond Best Practices (July 28, 2009) (HP-1101), available at <http://www.treasury.gov/press-center/press-releases/Pages/hp1101.aspx> [hereinafter Treasury Press Release] (“I believe covered bonds have the potential to increase mortgage financing, improve underwriting standards, and strengthen U.S. financial institutions by providing a new funding source that will diversify their overall portfolio.”); Brian J.M. Quinn, *The Failure of Private Ordering and the Financial Crisis of 2008*, 5 N.Y.U. J. L. & Bus. 549, 604–05 (2009) (arguing that the recent financial crisis “offers an opportunity to rethink the securitization model, and perhaps, structure a new approach that is both efficiency-enhancing, as well as sustainable over time” and suggesting covered bonds as one alternative); Press Release, CRE Fin. Council, CRE Finance Council Urges Support for U.S. Covered Bond Market (July 27, 2010), available at [http://www.crefc.org/About\\_CMSA/Press\\_Releases/2010/CRE\\_Finance\\_Council\\_Urges\\_Support\\_for\\_U\\_S\\_Covered\\_Bond\\_Market/](http://www.crefc.org/About_CMSA/Press_Releases/2010/CRE_Finance_Council_Urges_Support_for_U_S_Covered_Bond_Market/) (supporting legislation to create a U.S. legislative covered bond regime as an additional financing tool for commercial real estate markets, though not suggesting a complete supplanting of commercial mortgage securitization); MOODY’S INVESTORS SERVICE, STRUCTURED FINANCE IN FOCUS: A SHORT GUIDE TO COVERED BONDS 1 (2010) [hereinafter A SHORT GUIDE TO COVERED BONDS] (observing that “interest is beginning to converge on covered bonds” as a “complementary financing technique[.]”); *Commercial Real Estate: A Chicago Perspective on Current Market Challenges and Possible Responses: Hearing Before the H. Fin. Servs. Subcomm. on Oversight and Investigations*, 111th Cong. 12–14 (2010) (statement of Ken Born, Senior Managing Dir., PPM America, for the Commercial Real Estate Finance Council).

3. E-mail from Martin Fingerhut, Partner, Blake, Cassels & Graydon LLP, and Co-Chair, Committee on Securitization and Structured Finance of the ABA Section of Business Law, to author (Apr. 6, 2010, 23:10 EST) (on file with *The Business Lawyer*); see also Sam Jones, *The Long Arm of the Law: Covered Bonds Are Breaking Free of the Legislation that Made Them*, 26 INT’L FIN. L. REV. 21, 23 (2007).

4. See A SHORT GUIDE TO COVERED BONDS, *supra* note 2, at 2.

5. *Id.*

6. The actual order of payment may vary. See, e.g., *id.* at 3 (indicating that, absent default, the issuer typically pays covered bonds from its cash flow, with the cover-pool assets serving as collateral; if the issuer defaults in payment, the investors receive payment from the cover-pool assets and also have an unsecured claim against the issuer if such assets are insufficient to pay the investors in full).

7. See *id.* at 2.

8. For a discussion of ring-fencing, see *infra* notes 39–43 and accompanying text.

assets are required to be replaced by good-quality assets throughout the life of the covered bonds, thereby maintaining a requisite level of “overcollateralization”—a surplus of collateral value over indebtedness.<sup>9</sup> To ensure this is all enforceable by covered bondholders against other creditors of the issuer, some countries have promulgated specific covered bond legislation (a “legislative” covered bond regime).<sup>10</sup> Absent such legislation, covered bondholders must rely on contractual protections and related commercial law (a “structured” covered bond regime).<sup>11</sup>

This article, which is both descriptive and normative, proceeds as follows. It first examines the history of covered bonds and reviews the covered bond market that exists today. It then deconstructs and demystifies covered bonds as a financing tool, arguing that covered bonds should be viewed conceptually as belonging to the broader category of structured finance, a category that includes securitization.<sup>12</sup> In that context, the article analyzes how covered bonds relate to both securitization and bond finance generally, demonstrating that covered bonds incorporate fundamental financial and legal elements of both.<sup>13</sup> Finally, the article examines how normative critiques of securitization might apply to covered bonds, asking whether the long history in Europe of covered bonds, as well as an obscuring of substance behind the innocuous name, give covered bonds an aura of innocence that may not be wholly deserved.

## A. HISTORY OF COVERED BONDS

Covered bonds emerged in eighteenth century Prussia with the inception of the Pfandbrief.<sup>14</sup> In the wake of the Seven Years War, King Frederick the Great introduced a new mortgage finance mechanism to restore liquidity for Prussia’s landed gentry whose lands and financial position had been battered by the conflict.<sup>15</sup> In 1769 he issued a decree mandating the establishment of public law associations

9. See A SHORT GUIDE TO COVERED BONDS, *supra* note 2, at 3.

10. See *infra* note 28 and accompanying text.

11. Structured covered bond regimes are contractual. See, e.g., Frank Packer et al., *The Covered Bond Market*, BIS Q. REV., Sept. 2007, at 43, 44. For an analysis of the differences between legislative and structured covered bond regimes, see *infra* notes 53–64 and accompanying text.

12. See, e.g., Steven L. Schwarcz, *Securitization Post-Enron*, 25 CARDOZO L. REV. 1539, 1562 (2004) [hereinafter Schwarcz, *Securitization Post-Enron*]; Steven L. Schwarcz, *The Alchemy of Asset Securitization*, 1 STAN. J.L. BUS. & FIN. 133, 148 n.52 (1994) [hereinafter Schwarcz, *Alchemy*] (explaining that because securitization is specific asset recourse only whereas regular debt is full recourse, securitization increases or leaves static the expected value of unsecured creditors’ claims on issuer/borrower while secured debt has an ambiguous impact on the expected value of such claims).

13. For example, securitization can be treated, for accounting purposes, as either an off-balance-sheet sale of receivables or an on-balance-sheet transfer while still performing its key fundraising and risk transfer functions. It is possible to structure a securitization as a true sale for bankruptcy purposes, but not necessarily for accounting purposes, allowing the originator to raise funds and transfer credit risk while retaining the securitized assets on its balance sheet. Compare STEVEN L. SCHWARCZ, STRUCTURED FINANCE: A GUIDE TO THE PRINCIPLES OF ASSET SECURITIZATION § 4:2-6, at 4-6 to 4-7 (3d ed. 2010) [hereinafter SCHWARCZ STRUCTURED FINANCE], with *infra* note 73 (explaining the factors considered in determining true sale status for bankruptcy and accounting purposes, respectively).

14. *History of the Mortgage Bank Act*, VERBAND DEUTSCHER PFANDBRIEFBANKEN [ASS’N OF GERMAN PFANDBRIEF BANKS], [http://www.pfandbrief.de/cms/\\_internet.nsf/tindex/en\\_116.htm](http://www.pfandbrief.de/cms/_internet.nsf/tindex/en_116.htm) (last visited Apr. 15, 2011).

15. *Id.*

of landed nobles (“Landschaften”) that could access agricultural credit by issuing full recourse bonds using the nobles’ estates as collateral.<sup>16</sup> Landschaft members had a right to credit from the association, which was delivered in the form of a security (the Pfandbriefe) that a member could sell to investors to raise cash.<sup>17</sup> In 1900, the German Mortgage Bank Act established a formal framework in law for the Pfandbrief system and codified features such as the ring-fencing of cover-pool assets on an issuer’s balance sheet and investors’ recourse to both the asset pool and the issuer in the event of default.<sup>18</sup>

During the nineteenth century, the Pfandbrief system proliferated throughout Europe and, as the century drew to a close, became a popular method of refinancing public sector debt.<sup>19</sup> Covered bonds waned in influence after the mid-twentieth century and were largely displaced by retail deposits as a source of mortgage financing.<sup>20</sup> Then, in the 1990s, the market for covered bonds was revitalized by introduction of the German benchmark Pfandbrief in 1995 and also by investor demand for securities diversification in response to the introduction of the Euro, which hampered the ability to use currencies to diversify investments.<sup>21</sup>

## B. TODAY’S COVERED BOND MARKET

Although covered bonds historically have been primarily a European phenomenon, they are beginning to extend their reach to North America and Asia. U.S. issuers entered the covered bond market with Washington Mutual’s inaugural structured covered bond issue in September 2006.<sup>22</sup> Bank of America subsequently made its first covered bonds issuance, in March 2007.<sup>23</sup> The U.S. Congress is currently considering a legislative covered bond regime to supplement and perhaps replace structured covered bond offerings.<sup>24</sup>

The Royal Bank of Canada became the first Canadian issuer of covered bonds, in November 2007, followed up by a second issue in March 2010.<sup>25</sup> Kookmin Bank became the first non-Japanese Asian issuer of covered bonds when it sold

---

16. *Id.*

17. *Id.*

18. *Id.*; BARCLAYS CAPITAL & MORRISON & FOERSTER, LLP, COVERED BONDS 3 (May 2010) [hereinafter COVERED BONDS] (on file with *The Business Lawyer*).

19. Ralf Burmeister et al., *Overview of Covered Bonds*, in ECBC EUROPEAN COVERED BOND FACTBOOK 85, 86 (Wolfgang Kälberer et al. ed., 2009).

20. *Id.* at 86.

21. *Id.*

22. *Washington Mutual: \$5.1 Billion in Covered Bonds Sold in Europe*, CHI. TRIB., Sept. 21, 2006, at C2.

23. *Fitch Assigns BA Covered Bond Issuer US Covered Bonds Final ‘AAA’ Rating*, BUS. WIRE, July 3, 2007.

24. On March 18, 2010, Representative Scott Garrett (R-NJ) and co-sponsors Rep. Paul E. Kanjorski (D-PA) and Rep. Spencer Bachus (R-AL) introduced the United States Covered Bond Act of 2010, H.R. 4884, 111th Cong. (2010) (later renumbered as H.R. 5823). This bill has been recommended by the House Committee on Financial Services for consideration by the full U.S. House of Representatives.

25. Andrew Fitzpatrick et al., *Room to Grow in the Canadian Covered Bond Market*, CAN. STRUCTURED FIN. NEWSL. (Apr. 30, 2010), <http://www.dbrs.com/research/232521>.

\$1 billion of bonds in May 2009.<sup>26</sup> And New Zealand entered the covered bond market with the recent announcement of a NZ\$425 million covered bond issue by the Bank of New Zealand.<sup>27</sup>

Worldwide, by 2009 twenty-nine countries had either enacted specific covered bond legislation or allowed structured covered bonds based on extant contract and commercial law.<sup>28</sup> Volume is also growing. By the end of 2008, the amount of covered bonds outstanding in Europe alone was approximately €2.38 trillion, up from €1.5 trillion in 2003.<sup>29</sup>

The recent global financial crisis only temporarily halted this growth. Although the market for covered bonds, like all financial securities markets, was affected,<sup>30</sup> the European Central Bank (“ECB”) responded with a €60 billion program to purchase covered bonds, an action that “revived” the market and caused interest-rate “spreads” to narrow.<sup>31</sup> More recently, the ECB has taken steps to increase further the liquidity of the covered bonds market.<sup>32</sup> Market observers indeed see covered bonds as an antidote for some of the problems that led to the financial crisis.<sup>33</sup>

26. Rafael Nam & Carolyn Cohn, *Kookmin Sells \$1 Bln Worth of Covered Bonds*, REUTERS (May 6, 2009), <http://www.reuters.com/article/2009/05/06/kookmin-bonds-idUSHKG23656320090506>.

27. Lucy Craymer, *UPDATE: BNZ Set to Be 1st Australasian Bank to Sell Covered Bonds*, DOW JONES INT’L NEWS SERV., June 14, 2010.

28. Burmeister et al., *supra* note 19, at 90. Europe has both legislative and structured covered bond regimes. Germany, France, Spain, and some other EU countries have legislative regimes. E-mail from Rick Watson, Managing Dir., European Securitisation Forum, to author (Apr. 11, 2010, 15:18 EST) (on file with *The Business Lawyer*). The Netherlands and France are effectively structured regimes. Packer et al., *supra* note 11, at 44. The United States, presently a structured regime, is considering adding a legislative regime. *See supra* note 24 and accompanying text. In some countries, such as the United Kingdom, covered bonds are issued under both legislative and structured regimes. E-mail from Rick Watson, *supra*. Sometimes also, legislative and structured regimes overlap, illustrated by “enhanced covered bonds” that rely on contract to add investor protections to legislative covered bonds. Jonathan Golin, *Uncovering Covered Bonds*, in COVERED BONDS: BEYOND PFANDBRIEF: INNOVATIONS, INVESTMENT AND STRUCTURED ALTERNATIVES 11, 15 (Jonathan Golin ed., 2006).

29. Burmeister et al., *supra* note 19, at 88 (relying on data provided by the European Covered Bond Council). So-called “benchmark” covered bonds—Euro-denominated, bullet maturity, fixed annual coupon bonds with a defined minimum outstanding volume—are, after government-issued securities, the largest European bond market with an outstanding volume of about €840 billion. *Id.* at 93. The largest issuers of covered bonds in the first quarter of 2010 were, respectively, France, Spain, Germany, Sweden, and the United Kingdom. COVERED BONDS, *supra* note 18, at 21. However, in recent years, the leading issuers have usually been, in order, Germany, Denmark, the United Kingdom, France, and Spain. Burmeister et al., *supra* note 19, at 92. In 2008, these latter five states had a cumulative volume of outstanding covered bonds in excess of €1.9 trillion or more than 80 percent of all outstanding European covered bonds. *Id.* at 92–93.

30. Ralf Burmeister, *Introduction*, in ECBC EUROPEAN COVERED BOND FACTBOOK 25, 25 (Wolfgang Kälberer et al. ed., 2009) (reporting that interest-rate spreads on covered bonds widened as capital markets froze).

31. Frank Will & Sophia Kwon, *Was the ECB Covered Bond Purchase Programme a Success?*, in ECBC EUROPEAN COVERED BOND FACTBOOK 27, 27 (Wolfgang Kälberer et al. ed., 2009). An interest-rate “spread” on securities is the differential between the interest rate on those securities and the interest rate on risk-free securities (such as U.S. Government treasury securities) of similar maturities. The smaller the spread, the safer the market regards the securities. Thus, narrowing spreads signals reduced risk, whereas widening spreads signals increased risk.

32. Jennifer Hughes, *Outlook for Covered Bonds Brightens*, FIN. TIMES (LONDON), Mar. 5, 2010, at 25.

33. *See supra* notes 2–3 and accompanying text. *But cf.* Jay Surti, *Can Covered Bonds Resuscitate Residential Mortgage Finance in the United States?* 6–7, 21 (IMF Working Paper No. WP/10/277, Dec.

## II. DECONSTRUCTING COVERED BONDS

### A. THE CHARACTERISTICS OF COVERED BONDS

There is no formal international convention or treaty<sup>34</sup> defining covered bonds.<sup>35</sup> They are instead defined, de facto, by their characteristics, of which the discussion below highlights the most typical. Terminology is loose, however. Characteristics evolve over time, and sometimes market participants refer to secured bonds lacking one or more of the typical characteristics or having additional characteristics as “covered” bonds.

Two typical characteristics of covered bonds appear to be critical: they are secured by collateral (often required by legislation to be high-quality assets such as mortgage loans or government debt<sup>36</sup>), and they have unsecured recourse against the issuer in the event of a collateral deficiency (often referred to as “dual

---

2010) (questioning whether an important reason for the better performance, in the financial crisis, of European covered bonds than U.S. residential mortgage-backed securities was that “[g]reater lender recourse [i.e., mortgage lenders in Europe have recourse claims against defaulting mortgagors whose collateral is insufficient] and slower debt extinction in European countries [due to less ability of defaulting mortgagors to avoid their debt obligations in bankruptcy] weakens borrowers’ incentive to default relative to the U.S. when the mortgage goes under water”).

34. The European Union’s directive on the coordination of laws, regulations, and administrative provisions relating to undertakings for collective investment in transferable securities (“UCITS”) includes a provision applicable to covered bonds that

are issued by a credit institution which has its registered office in a Member State and is subject by law to special public supervision designed to protect bond-holders. In particular, sums deriving from the issue of those bonds shall be invested in accordance with the law in assets which, during the whole period of validity of the bonds, are capable of covering claims attaching to the bonds and which, in the event of failure of the issuer, would be used on a priority basis for the reimbursement of the principal and payment of the accrued interest.

2009 O.J. (L 302) 63. The EU’s Capital Requirements Directive (“CRD”) incorporates this definition by reference and adds restrictions on the nature of cover-pool assets permitted in covered bonds. 2006 O.J. (L 177) 89. Neither is an exhaustive definition, leaving space for EU Member State legislation to define covered bonds fully. Definitions included in the EU regulations also appear in the special context of capital requirements and are not general, statutory definitions of covered bonds; indeed some structured covered bonds operate outside their purview. Nor do they apply to the increasingly numerous covered bond issues in non-EU jurisdictions.

35. The European Covered Bond Council offers the following as “essential characteristics” of covered bonds from either legislative or structured regimes:

1. The bond is issued by—or bondholders otherwise have full recourse to—a credit institution which is subject to public supervision and regulation;
2. Bondholders have a claim against a cover pool of financial assets in priority to the unsecured creditors of the credit institution;
3. The credit institution has the ongoing obligation to maintain sufficient assets in the cover pool to satisfy the claims of covered bondholders at all times;
4. The obligations of the credit institution in respect of the cover pool are supervised by public or other independent bodies.

*Essential Features of Covered Bonds*, EUR. COVERED BOND COUNCIL, <http://ecbc.hypo.org/Content/default.asp?PageID=503> (last visited Apr. 15, 2011). The ECBC stresses that these are “minimum standards” used by the Council to define covered bonds and are not an official definition. *Id.* Subject to that minimum, each EU jurisdiction that has covered bond legislation therefore can set its own prescriptive standards for cover-pool assets.

36. Burmeister et al., *supra* note 19, at 87, 90–91.

recourse”).<sup>37</sup> In covered bond transactions, it is also standard for the cover-pool assets to remain on the issuer’s balance sheet for accounting purposes.<sup>38</sup> Nonetheless, these assets are usually “ring-fenced” to protect covered bond investors in the event of the issuer’s bankruptcy. Although the term is not well-defined,<sup>39</sup> ring-fencing in a covered bond context entails segregating the cover-pool assets to protect them from claims of the issuer’s creditors, other than the covered bondholders, in the event of the issuer’s bankruptcy.<sup>40</sup> In legislative regimes, ring-fencing is usually accomplished by statutory fiat separating the cover-pool assets from the issuer’s insolvency estate or creating a priority claim against those assets.<sup>41</sup> In structured regimes, ring-fencing often involves selling the cover-pool assets to a wholly owned, bankruptcy-remote SPV subsidiary.<sup>42</sup> The goal is to ensure that other creditors have access to cover-pool assets only if and when the covered bonds have been paid in full.<sup>43</sup>

Another defining characteristic of covered bonds is that weak cover-pool assets are typically replaced by good-quality assets throughout the life of the bonds (cover pools so replenished are sometimes called “dynamic” cover pools), thereby maintaining the requisite overcollateralization. In a legislative regime, the statute sets the minimum level of overcollateralization and dictates that a monitor be ap-

---

37. Dual recourse is the characteristic that most distinguishes covered bonds from securitization and other forms of “non-recourse” financing, in which investors have recourse solely to the collateral. See *infra* note 68 and accompanying text; see also A SHORT GUIDE TO COVERED BONDS, *supra* note 2, at 2 (“The distinguishing characteristic of covered bonds is that they are ‘dual recourse’ debt instruments.”).

38. Bernard Volk, *RMBS vs. Covered Bonds*, in ECBC EUROPEAN COVERED BOND FACTBOOK 100, 103 (Wolfgang Kälberer et al. ed., 2009).

39. “Ring-fencing” can have many meanings. In addition to the meaning used in this article—the protection of collateral assets from claims by most creditors for the benefit of a particular class of creditors—the term may also refer, *inter alia*, to “the practice of filing a bankruptcy petition on behalf of a subsidiary of a corporate parent company, while preserving the integrity of the parent and siblings of the debtor, as well as any distributions that may have been made to those affiliates,” Marcus Cole, *Limiting Liability Through Bankruptcy*, 70 U. CIN. L. REV. 1245, 1274–75 (2002), and the inaccessibility of some assets of a transnational debtor when the jurisdiction in which those assets are held does not recognize the extraterritorial validity of the laws of the jurisdiction in which creditors have brought their claims, Ian F. Fletcher, *International Insolvency: A Case for Study and Treatment*, 27 INT’L LAW. 429, 431 (1993).

40. Burmeister et al., *supra* note 19, at 97–98. Implicit in the concept of ring-fencing is that payment on covered bonds is not interrupted, thereby enabling covered bondholders to receive their contractually bargained rate of return. If payment were interrupted and the bonds were accelerated, covered bondholders would be exposed (even if paid in full) to reinvestment risk—that the rate of return on redeployed funds would be less than that on the covered bonds.

41. *Id.*

42. *Id.* Sometimes the SPV enters into a guaranteed investment contract (“GIC”) or other derivatives contract to invest cover-pool proceeds, especially during a default, to ensure that the return thereon is sufficient to cover interest on the covered bonds. Huxley Somerville, *The ABCs of U.S. Covered Bonds*, COM. MORTGAGE SEC. ASS’N, Winter 2009, at 36, 36.

43. Although confusing, some refer to the protection offered by ring-fencing for cover-pool assets as bankruptcy-segregation rather than bankruptcy remoteness. Golin, *supra* note 28, at 33–34 (distinguishing bankruptcy remoteness—the legal independence of one corporate entity from another for bankruptcy purposes—from bankruptcy segregation—the sheltering of certain assets from claims by ordinary creditors). Note that in some structured covered bonds, the cover-pool assets are held by a bankruptcy-remote SPV. See *supra* note 42 and accompanying text.



pointed by the issuer, subject to regulatory approval, to oversee and periodically test the cover pool to ensure it meets the statutory standards.<sup>44</sup> Issuers are thus legally obligated to maintain cover-pool levels, usually by adding new assets to the pool.<sup>45</sup> In a structured regime, the process is essentially the same but is mandated by contract and usually enforced by an independent auditor and a cover-pool trustee.<sup>46</sup> Rating agencies may also influence the level of overcollateralization and the composition of cover-pool assets.

Finally, especially in legislative regimes, it is typical for issuers of covered bonds to be banks or other government-regulated financial institutions.<sup>47</sup>

### Covered Bonds Distinguished from Ordinary Secured Bonds

The literature discussing covered bonds does not adequately differentiate them from ordinary secured bonds, which are long-term debt securities secured by assets of the issuer with full unsecured recourse to the issuer in the event of a collateral deficiency. Thus, as with covered bonds,<sup>48</sup> secured bonds entitle their holders to an unsecured claim for the insufficiency if the issuer defaults and the collateral turns out to be insufficient.<sup>49</sup> Moreover, in both covered bond and secured bond transactions, it is typical for the cover-pool assets/collateral to be deemed to remain on the issuer's balance sheet for accounting purposes.<sup>50</sup>

Covered bonds can nonetheless be distinguished from ordinary secured bonds in at least one and arguably two ways.<sup>51</sup> Most significantly, the cover-pool assets in covered bond transactions are usually ring-fenced, whereas ring-fencing of collateral is not typical of secured bond transactions.<sup>52</sup> The second, arguable distinction is that covered bond transactions often require the issuer to replace weak assets in the collateral pool by good-quality assets throughout the life of the covered

---

44. Golin, *supra* note 28, at 31. Alternatively, public regulatory institutions may monitor licensed covered bond issuers to ensure the adequacy of their cover pools. Burmeister et al., *supra* note 19, at 99.

45. Burmeister et al., *supra* note 19, at 98. Temporary substitute assets may be included in the pool until permanent replacements are originated, but these, too, are regulated for quantity (as a portion of the pool) and quality. Golin, *supra* note 28, at 31.

46. Burmeister et al., *supra* note 19, at 99.

47. Telephone Interview with Folake Shasanya, Dir., Credit Div. of the Ass'n for Fin. Mkts. in Europe (Aug. 16, 2010).

48. Burmeister et al., *supra* note 19, at 96–97.

49. 11 U.S.C. § 506(a)(1) (2006).

50. See 1 COVERED BONDS HANDBOOK § 7:3.3, at 7-42 to 7-43 (Anna T. Pinedo & James R. Tanenbaum eds., 2010).

51. A third possible distinction is more technical: that in legislative covered bond transactions, bankruptcy of the issuer does not necessarily accelerate maturity of the bonds. E-mail from Anna T. Pinedo, Partner, Morrison & Foerster, LLP, to author (Oct. 20, 2010, 16:42 EST) (on file with *The Business Lawyer*). Investors therefore can receive their contractual interest-rate bargain even if, at the time of bankruptcy, interest rates are lower than the contractual rate. That is one reason why an issuer would enter into a GIC or other derivatives contract to invest cover-pool proceeds during a default. *Cf. supra* note 42 (explaining that the purpose is to ensure that the return is sufficient to cover interest on the covered bonds).

52. Compare COVERED BONDS HANDBOOK, *supra* note 50, § 3:2.2, at 3-6 (discussing “ring-fencing” of assets in a case study of German covered bonds), with 11 U.S.C. § 541 (2006) (defining the scope of property included in estate under U.S. federal bankruptcy law).



bonds to maintain the desired level of overcollateralization. That protection is often achieved in secured bond transactions, however, by contractual covenants that require the issuer to maintain a minimum level of overcollateralization (or that give the issuer the right to augment the collateral to avoid an event of default tied to insufficient collateral coverage).<sup>53</sup>

### Legislative Versus Structured Covered Bond Regimes

Legislative covered bond regimes offer two primary benefits to investors and issuers: a high degree of certainty regarding the investors' legal rights and responsibilities in the event of issuer insolvency, and lower transaction costs in structuring a covered bond transaction. Certainty results from the statutory framework.<sup>54</sup> Transaction costs are low for the same reason—the statutory framework dictates by fiat the protection without the need to engage in complex contractual structuring.<sup>55</sup>

But legislative covered bond regimes, being confined to their statutory frameworks, are rigid. For example, they often limit the types of collateral that may serve as cover-pool assets to such high-quality assets as mortgage loans,<sup>56</sup> public sector debt, ship loans, and senior mortgage-backed securities.<sup>57</sup> Furthermore, legislative covered bond regimes may be only as protective as the statutory framework provides.<sup>58</sup> For example, Moody's downgraded the credit ratings of two Allgemeine Hypotheken Bank Rheinboden covered bonds in January 2007 because the bank "could give no legally binding guarantee that it would not reduce overcollateralization to the minimum amount required by German law."<sup>59</sup>

Structured covered bonds regimes have less legal certainty and higher transaction costs than legislative regimes. Their enforceability (and corresponding investor protection) will be reliant on the contract, commercial, and insolvency/bankruptcy law of the relevant jurisdiction, provisions of which may not always be tested in court in the ring-fencing context.<sup>60</sup> As a result, structured covered

53. Telephone Interview with Folake Shasanya, *supra* note 47.

54. See, e.g., Pfandbriefgesetz [PfandBVG] [Pfandbrief Act], May 22, 2005, BGBl. I at 1373, last amended by Gesetz [G], Mar. 20, 2009, BGBl. I at 607, § 30 (Ger.), translated in *The Pfandbrief Act, VERBAND DEUTSCHER PFANDBRIEFBANKEN* [ASS'N OF GERMAN PFANDBRIEF BANKS] (updated through 2010 amendment), [http://www.pfandbrief.de/cms/\\_internet.nsf/tindex/en\\_11.htm](http://www.pfandbrief.de/cms/_internet.nsf/tindex/en_11.htm) (last visited Apr. 15, 2011) (establishing the legal provisions for insolvency of covered bond issuers in the Federal Republic of Germany).

55. Burmeister et al., *supra* note 19, at 91.

56. Most legislative covered bond regimes also restrict eligible mortgage loans based on such criteria as loan-to-value ("LTV") ratios. *Id.* The European Union's CRD, for example, limits residential mortgage loans eligible for the collateralization of covered bonds to those with an LTV of 80 percent or less. 2006 O.J. (L 177) 89.

57. Burmeister et al., *supra* note 19, at 90.

58. See JANE SOLDERA & JÖRG HOMEY, MOODY'S INVESTORS SERVICE, ANALYSIS OF LEGAL FRAMEWORK FOR GERMAN PFANDBRIEF I (July 1, 2010).

59. Jones, *supra* note 3, at 22–23. Query whether enhanced covered bonds, discussed in *supra* note 28, might have satisfied Moody's concern.

60. Jones, *supra* note 3, at 22–23; see also Golin, *supra* note 28, at 33 (noting the lack of covered bond defaults and explaining "there is essentially no practical experience with actual covered bond

bonds trade with spreads considerably wider than in those countries with national legislation.<sup>61</sup> Transaction costs are high because ring-fencing usually requires issuers to form complex structures, not dissimilar to those used in securitization transactions. In Britain, Canada, and the United States,<sup>62</sup> for example, issuers must create a bankruptcy-remote, wholly owned SPV to purchase the cover-pool assets for the benefit of the covered bond.<sup>63</sup>

The benefit of a structured covered bond regime is flexibility. Because the parties are not bound by statute, they can adjust the terms of their covered bond program to suit market conditions, available cover assets, and other particular requirements. Thus, structured covered bonds can be tailored, for example, to meet higher levels of overcollateralization, asset quality, or substitutability if investors so demand. Structured covered bonds could also be issued by companies that are not banks or financial institutions.<sup>64</sup>

---

defaults"). Thus, Deutsche Bank reports that although "Moody's argues that it is not the existence of [overcollateralization] but the legal enforceability of [overcollateralization] after the insolvency of the issuer, which is the key for the rating," the amount of overcollateralization "is not protected under most legal frameworks," making it "doubtful that it will be available to covered bond creditors beyond insolvency of the issuer." DEUTSCHE BANK AG/LONDON, OVERVIEW COVERED BONDS 18 (Feb. 4, 2009).

61. E-mail from Rick Watson, *supra* note 28.

62. The U.S. Congress is currently considering enacting a legislative covered bond regime to supplement structured covered bond offerings. *See supra* note 24 (discussing the proposed United States Covered Bond Act of 2010). If enacted, banks and other financial institutions would be able to issue covered bonds whose cover-pool assets include not only mortgage and public-sector loans but also credit card receivables, automobile loans, student loans, and small business loans, as well as other types of assets approved by a covered bond regulator (appointed by the U.S. Secretary of the Treasury). CLIFFORD CHANCE, US COVERED BONDS—PROPOSED LEGISLATION INTRODUCED TO ENCOURAGE MARKET DEVELOPMENT 1 (Apr. 2010), available at [http://www.cliffordchance.com/publicationviews/publications/2010/04/us\\_covered\\_bondsproposedlegislatio.html](http://www.cliffordchance.com/publicationviews/publications/2010/04/us_covered_bondsproposedlegislatio.html) [hereinafter CLIFFORD CHANCE CLIENT MEMORANDUM]. Under the existing proposed legislation, however, each cover pool must be limited to only a single type of cover-pool asset, in order to "allow[] for a simpler credit analysis by investors." *Id.* at 4. The proposed legislation also encompasses that legislative covered bonds would be exempt from many federal securities law restrictions. *See id.* at 7. Otherwise, the proposed U.S. legislative covered bond regime would appear to mirror a generic legislative covered bond regime. One reason advanced for the creation of a legislative covered bond regime in the United States is that U.S. federal and state laws effectively limit the usefulness of a structured regime. *Id.* at 2–3. The primary limitation is said to be that, "under the Uniform Commercial Code, if the issuer defaulted on the [covered] bonds or became insolvent, the trustee [for the covered bondholders] would have no option but to sell the cover pool assets." *Id.* at 3. But query whether that limitation is always applicable under the U.C.C. A party secured by "[c]ollateral consisting of rights to payment" can choose to be repaid from collections of the collateral, under U.C.C. § 9-607, and need not dispose of the assets under U.C.C. § 9-610. *See* U.C.C. § 9-607 cmt. 2 (2008). *But cf.* E-mail from Anna T. Pinedo, *supra* note 51 (observing that when the Federal Deposit Insurance Corporation acts as receiver for the issuer, its practice has been to sell the cover-pool assets).

63. COVERED BONDS, *supra* note 18, at 31–33; Somerville, *supra* note 42, at 41. Covered bonds issued under either framework may require swap agreements to hedge against currency or interest rate risk. Burmeister et al., *supra* note 19, at 91. Because structured covered bonds are subject to greater uncertainty in the event of issuer default, the costs of these swaps are often higher. COVERED BONDS, *supra* note 18, at 31–34; Somerville, *supra* note 42, at 42.

64. *Cf. supra* note 47 and accompanying text (observing that issuers of legislative covered bonds are typically banks and other government-regulated financial institutions).

## B. THE RELATIONSHIP BETWEEN COVERED BONDS AND SECURITIZATION

Covered bond and securitization transactions have significant similarities. The most important is that both strive for bankruptcy remoteness—the goal of protecting covered bond investors in the event of the issuer’s bankruptcy. Covered bond transactions strive to achieve bankruptcy remoteness through ring-fencing or by legislative fiat, as discussed in Part II.A. Securitization transactions achieve bankruptcy remoteness by having the company originating the receivables (the “originator”) transfer those receivables, in a “true sale” under bankruptcy law, to a bankruptcy-remote SPV<sup>65</sup>—steps that can parallel ring-fencing.<sup>66</sup>

Another important similarity is that after covered bondholders are paid in full, and also after securitization investors are paid in full, any residual value from the transferred assets is returned for the benefit of other creditors.<sup>67</sup>

There are, however, several differences between covered bonds and securitization. A primary distinction—and one that has important normative implications—is that covered bonds have full recourse to the issuer in the event of a collateral deficiency whereas securitization constitutes non-recourse financing.<sup>68</sup> Another distinction is that, in covered bond transactions, the cover-pool assets typically remain on the issuer’s balance sheet for accounting purposes whereas, in securitization transactions, it has been more typical for the transfer of assets from the originator to the SPV to be accounted for as a sale.<sup>69</sup> Such “off-balance-sheet” accounting allows the originator to transfer the credit risk of securitized assets to investors and raise capital without increasing its balance-sheet leverage.<sup>70</sup>

This accounting distinction is somewhat artificial, however. Securitization transactions can be—and after a 2005 U.S. Securities and Exchange Commission staff report on off-balance-sheet transactions, increasingly are<sup>71</sup>—structured as on-balance-sheet

65. See generally SCHWARCZ, *STRUCTURED FINANCE*, *supra* note 13, §§ 3:1–4:12.3, at 3-1 to 4-51.

66. See *supra* notes 41–43 and accompanying text. Securitization transactions could also achieve bankruptcy remoteness by legislative fiat. In the United States, for example, Congress had proposed such legislation in section 912 of the Bankruptcy Reform Act of 2001. See SCHWARCZ, *STRUCTURED FINANCE*, *supra* note 13, § 4:11, at 4-34 to 4-36. In jurisdictions that enact such enabling legislation, securitization would obtain the benefits of legislative covered bond regimes: a high degree of certainty regarding the investors’ legal rights and responsibilities in the event of issuer insolvency, and lower transaction costs. See *supra* notes 54–55 and accompanying text.

67. Cf. U.S. DEP’T OF THE TREASURY, *BEST PRACTICES FOR RESIDENTIAL COVERED BONDS 16* (July 2008), available at [http://www.treasury.gov/about/organizational-structure/offices/General-Counsel/Documents/US\\_CoveredBondBestPractices.pdf](http://www.treasury.gov/about/organizational-structure/offices/General-Counsel/Documents/US_CoveredBondBestPractices.pdf) (“If the value of the pledged collateral exceeded the total amount of all valid claims held by the secured parties, this excess value or overcollateralization would be returned to the FDIC, as conservator or receiver, for distribution as mandated by the Federal Deposit Insurance Act.”).

68. See *supra* note 37.

69. Schwarcz, *Alchemy*, *supra* note 12, at 142–43.

70. *Id.*

71. On June 15, 2005, the SEC staff released its report on off-balance-sheet transactions. See U.S. SEC. & EXCH. COMM’N, *REPORT AND RECOMMENDATIONS PURSUANT TO SECTION 401(C) OF THE SARBANES-OXLEY ACT OF 2002 ON ARRANGEMENTS WITH OFF-BALANCE-SHEET IMPLICATIONS, SPECIAL PURPOSE ENTITIES, AND TRANSPARENCY OF FILINGS BY ISSUERS* (2005). The report focused, among other things, on whether financial

transactions.<sup>72</sup> The absence of an accounting benefit does not undermine securitization's key fundraising and risk-transfer functions.<sup>73</sup> Because bankruptcy remoteness is maintained, the originator can still raise capital at significantly lower rates that reflect the creditworthiness of the receivables untainted by the originator's risks.<sup>74</sup>

Several characteristics of covered bonds could be either similarities or distinctions, depending on the particular transaction. For example, covered bonds typically do not bear prepayment risk.<sup>75</sup> But only certain securitization transactions bear prepayment risk,<sup>76</sup> and that risk can be contractually limited.<sup>77</sup> Another

---

statements of issuers of securities transparently reflect the economics of off-balance-sheet arrangements. *Id.* The report recommended that "transactions and transaction structures primarily motivated by accounting and reporting concerns, rather than economics" be discouraged through a combination of changes to accounting standards by the Financial Accounting Standards Board ("FASB") and greater awareness by participants in the financial reporting process. *Id.* at 3. The report suggested that "improvement in transparency and comparability across issuers can perhaps most directly and quickly be accomplished by eliminating the use of . . . structured transactions" whose sole (or perhaps even primary) purpose is motivated by accounting treatment. *Id.* at 46.

72. Cf. Antony Curie et al., *Securitization Adds Up: The Cost of Accounting Reform*, AM. SECURITIZATION, Winter/Spring 2010, at 34, 35 (noting that, at least for non-bank originators, securitization's funding and risk-transfer functions continue to make an attractive financing instrument, even if it must be carried on-balance-sheet).

73. Because the factors considered in determining whether a transfer is a true sale for bankruptcy purposes and a sale for accounting purposes are different, it is easy to structure a securitization transaction as a bankruptcy sale but an accounting loan. Bankruptcy law criteria govern a true-sale determination. See *infra* notes 97–98 and accompanying text. Accounting criteria, which tend to be highly technical, govern an accounting-sale determination. SCHWARCZ STRUCTURED FINANCE, *supra* note 14, § 7:4, at 7-10 to 7-11. For example, until recently, Financial Accounting Standard ("FAS") 140 allowed an originator who sold assets to a "qualifying SPE" to "[d]erecognize all assets sold" on its balance sheet while recording the proceeds of the sale. Fin. Accounting Standards Bd., Statement of Financial Accounting Standards No. 140: Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities ¶¶ (9)(b), (11)(a)–(b) (Sept. 2007) [hereinafter FAS 140]. FAS 140 now has been superseded by the Financial Accounting Standards Board's FAS 166 and 167, which eliminate the notion of a qualifying SPE, and instead emphasize qualitative analyses to determine whether a special purpose vehicle must be consolidated with an originator for accounting purposes. See Fin. Accounting Standards Bd., Statement of Financial Accounting Standards No. 166: Accounting for Transfers of Financial Assets—an amendment of FASB Statement No. 140 ¶ (2)(a) (June 2009) [hereinafter FAS 166]; Fin. Accounting Standards Bd., Statement of Financial Accounting Standards No. 167: Amendments to FASB Interpretation No. 46(R) (June 2009) [hereinafter FAS 167]. Sale accounting is dependent on the outcome of an expanded bankruptcy-remoteness analysis, the freedom of third-party interest holders to exchange assets, and the originator's surrender of control of the financial assets. FAS 166, *supra*, ¶ (9)(a)–(c). Consolidation of variable interest entities is determined by an extensive analysis to determine the primary beneficiary of such entities. FAS 167, *supra*, ¶ 14(A)–(G). The changes made in FAS 166 and 167 will themselves be incorporated in the FASB's codification of financial accounting standards. Press Release, Fin. Accounting Standards Bd., FASB Accounting Standards Codification™ Launches Today (July 1, 2009), available at [http://www.fasb.org/jsp/FASB/Page/SearchNews?filter\\_year=2009](http://www.fasb.org/jsp/FASB/Page/SearchNews?filter_year=2009) (follow "July 1, 2009" hyperlink).

74. Schwarcz, *Alchemy*, *supra* note 12, at 137 & n.17.

75. E-mail from Anna T. Pinedo, Partner, Morrison & Foerster, LLP, to author (Aug. 23, 2010, 13:58 EST) (on file with *The Business Lawyer*) (explaining that a "covered bondholder will buy a bullet instrument, with no prepayment risk. In fact, some of the complexity regarding the swaps and the [guaranteed investment contracts] or deposit agreements are required to avoid payment acceleration.").

76. Mortgage-loan securitizations, for example, often bear prepayment risk. Steven L. Schwarcz, *Regulating Complexity in Financial Markets*, 87 WASH. U. L. REV. 211, 216 (2009) [hereinafter Schwarcz, *Regulating Complexity*].

77. Prepayment risk, where it exists, can be limited in various ways in the author's experience, such as by pooling mortgage loans and issuing multiple tranches of securities, as well as by utilizing the types of swaps, guaranteed investment contracts, and deposit agreements referenced in *supra* note 75.

example is that weak cover-pool assets are typically replaced by good-quality assets throughout the life of the covered bonds. In many securitization transactions, however, investors take at least some risk that asset quality may deteriorate after purchase.<sup>78</sup> Nonetheless, at least some commentators argue that collateral substitution clauses, requiring originators to replace non-performing assets, and recourse clauses, requiring originators to retake possession of non-performing assets during a certain period after a securitization, could be included in securitization agreements to produce requirements not dissimilar to those of covered bonds.<sup>79</sup>

Another characteristic of covered bonds that could be either a similarity or a distinction is the nature of the cover-pool assets. At least historically for legislative covered bonds, cover-pool assets had been primarily high-quality mortgage loans,<sup>80</sup> whereas securitization involves virtually any type of financial asset.<sup>81</sup> But this distinction will depend on the transaction. For example, cover-pool assets securing legislative covered bonds can now sometimes also include public sector debt, ship loans, and senior mortgage-backed securities.<sup>82</sup> Structured covered bond regimes, on the other hand, have complete flexibility to select cover-pool assets and, as in securitization, are chiefly concerned with choosing assets that will withstand scrutiny by rating agencies.<sup>83</sup>

### III. ANALYSIS

This article next engages in a more normative analysis of covered bonds, comparing how critiques of securitization would apply to covered bonds and examining if covered bonds could raise concerns that go beyond the concerns associated with securitization. Covered bonds and securitization each present certain costs and promise certain benefits. In large part, the benefits are similar. Both provide funds to an issuer or originator at interest rates significantly lower than those paid

---

78. SCHWARZ STRUCTURED FINANCE, *supra* note 14, § 4:2, at 4-7 to 4-8.

79. Kathleen C. Engel & Patricia A. McCoy, *Turning a Blind Eye: Wall Street Finance of Predatory Lending*, 75 *FORDHAM L. REV.* 2039, 2062–63 (2007). Engel and McCoy argue that other securitization provisions that accomplish the equivalent of a dynamic cover pool include the provision of a liquidity facility in the event of non-performing assets (SCHWARZ STRUCTURED FINANCE, *supra* note 14, § 2:1.1, at 2-2) and third-party credit enhancement in the form of surety bonds or bank letters of credit (SCHWARZ STRUCTURED FINANCE, *supra* note 14, § 2:3, at 2-16). Any attempt to use collateral substitution and recourse clauses in securitization transactions to emulate covered bonds would be subject, of course, to any applicable statutory restrictions, such as limitations on substituting collateral for securitizations in the United States that rely on REMIC structures.

80. Burmeister et al., *supra* note 19, at 87.

81. SCHWARZ STRUCTURED FINANCE, *supra* note 14, §§ 2:1, 2:2, at 2-1, 2-7 to 2-10.

82. See *supra* notes 56–57 and accompanying text.

83. See ANNICK POULAIN, MOODY'S INVESTORS SERVICE, EUROPEAN STRUCTURED COVERED BONDS: MOODY'S RATING APPROACH (Apr. 10, 2003), available at [http://australiansecuritisation.com.au/docs/moodys\\_rating\\_approach.pdf](http://australiansecuritisation.com.au/docs/moodys_rating_approach.pdf) (discussing asset quality as a component of Moody's rating methodology for covered bonds).

on senior unsecured corporate bonds.<sup>84</sup> From an investor perspective, both present relatively low-risk investments with liquid secondary markets.<sup>85</sup> Furthermore, both can be used to regenerate lending markets by using collections on existing loans to repay securities issued to capital market investors and then using the proceeds of those securities to make new loans.<sup>86</sup>

Commentators have alleged, however, that the costs of securitization are materially higher than the costs of covered bonds.<sup>87</sup> The analysis below focuses on whether those allegations can be supported.

## MORAL HAZARD

Securitization, particularly in residential mortgage markets, faced a considerable normative critique in the aftermath of the recent financial crisis. Observers argued, for example, that securitization (at least as practiced in the run-up to the crisis) created unwarranted moral hazard<sup>88</sup> through the use of an originate-to-distribute model of mortgage lending.<sup>89</sup> The moral hazard critique is that the

---

84. Senior unsecured bank debt often trades at significantly higher rates than either covered bonds or ABS, with average spreads in July 2009 well in excess of 250 basis points. Volk, *supra* note 38, at 100–01. During that same period, ABS spreads widened far beyond their historical average due to the crisis and traded at similar spreads, while covered bond spreads ranged from about sixty basis points for German Public Pfandbriefe to over 300 basis points for Irish covered bonds. *Id.*

85. *But cf.* A SHORT GUIDE TO COVERED BONDS, *supra* note 2, at 3 (stating that “covered bonds are typically more liquid than senior unsecured debt or securitized products”). It is unclear if there is a real liquidity differential or whether any differences in liquidity represent apple-and-orange comparisons since securitization securities can vary significantly in credit ratings if they represent different tranches of a senior-subordinate structure (see *infra* notes 146–47 and accompanying text), whereas covered bonds are not presently issued in senior-subordinate structures. *Cf.* Packer et al., *supra* note 11, at 50 tbl. 3 (observing that one sample of more than 10,000 European covered bonds showed that 95 percent had at least one triple-A rating).

86. Compare CLIFFORD CHANCE CLIENT MEMORANDUM, *supra* note 62, at 8 (observing that a U.S. covered bond market would create “an alternative, private-sector source of funding for residential mortgage loans, in competition to Fannie Mae and Freddie Mac”), with SCHWARCZ STRUCTURED FINANCE, *supra* note 14, § 1:2, at 1-7 to 1-9 (observing a similar use for securitization).

87. See, e.g., Quinn, *supra* note 2, at 604.

88. Indirectly related to moral hazard, the originate-to-distribute model is also said to have fostered unscrupulous lending practices. During the housing boom years, thinly capitalized mortgage originators used securitization to tap into capital markets for funding, allowing them to originate far more loans than they would otherwise have been able to. Kurt Eggert, *The Great Collapse: How Securitization Caused the Subprime Meltdown*, 41 CONN. L. REV. 1257, 1262–63 (2009) [hereinafter Eggert, *Great Collapse*]. Some unscrupulous lenders used this model to originate loans to unqualified borrowers, quickly selling the loans to mortgage bundlers. *Id.* at 1285–91 (discussing the increased use of low or no documentation underwriting; pressures on appraisers to inflate the reported values of properties to justify higher loan amounts (and higher commissions); occupancy fraud to disguise properties owned by real estate speculators as opposed to residents; excessive reliance on quantitative metrics like credit scores that are inaccurate indices of mortgage borrower risk; and underwriting only for low, introductory “teaser rates” when originating adjustable rate mortgages). When the costs from claims against a lender by aggrieved consumers exceeded the returns from continued operation, the lender exited the market by declaring bankruptcy or reaching a settlement with claimants. Christopher L. Peterson, *Predatory Structured Finance*, 28 CARDOZO L. REV. 2185, 2275 (2007).

89. Steven L. Schwarcz, *Protecting Financial Markets: Lessons from the Subprime Mortgage Meltdown*, 93 MINN. L. REV. 373, 387–88 (2008) [hereinafter Schwarcz, *Protecting Financial Markets*]. However,

originate-to-distribute model disincentivized conservative mortgage underwriting because the lender-originator did not retain its riskiest loans, instead selling them off.<sup>90</sup> Lender-originators not subject to those risky loans lacked incentives, for example, to screen borrowers and collateral carefully, instead having incentives to produce as many saleable loans as possible.<sup>91</sup> Because secondary market purchasers generally needed to examine large numbers of mortgages for securitizations, quantitative data from so-called “hard” underwriting was valued above individualized “soft” information, and the latter form of underwriting often fell out of favor.<sup>92</sup> Moreover, a number of mortgage-backed securities (“MBS”) offerings were conducted on a “to-be-announced” basis where investors purchased securities prior to the pooling of mortgages.<sup>93</sup> Under such circumstances, purchasers of MBS would be unable to conduct any due diligence until after the lender-originator had already selected the loans for the transaction.<sup>94</sup>

Covered bonds, by contrast, are considered by some in the financial industry as avoiding moral hazard because issuers of covered bonds often retain ownership of the cover-pool assets, maintaining these assets for accounting purposes on their balance sheet.<sup>95</sup> This view, however, is only partly correct. As mentioned, securitization transactions themselves can be, and increasingly are, on balance sheet. Recent legislative changes in the United States and Europe are also requiring originators to retain a minimum amount of recourse, thereby keeping “skin in the game” to minimize moral hazard.<sup>96</sup> Furthermore, in structured covered bond deals, originators often sell their assets to a wholly owned, bankruptcy-remote SPV, which itself issues the bonds.<sup>97</sup> Such a sale would be intended to constitute a “true sale” for bankruptcy purposes, exactly as in a securitization transaction.<sup>98</sup>

---

in the context of the recent financial crisis in particular, it is important to recognize the limits of what flaws can be ascribed to securitization in general as a financing model. The risks associated with the securitization of subprime loans were very nearly unique and their acceptance by investors was largely fueled by the seemingly boundless appreciation of housing prices, suggesting the circumstances of the crisis carry greater weight than securitization as a causal element. See Steven L. Schwarcz, *The Future of Securitization*, 41 CONN. L. REV. 1313, 1317–18 (2009) [hereinafter Schwarcz, *Future of Securitization*].

90. FIN. CRISIS INQUIRY COMM’N, PRELIMINARY STAFF REPORT: SECURITIZATION AND THE MORTGAGE CRISIS 19 (2010) [hereinafter PRELIMINARY STAFF REPORT]; Peterson, *supra* note 88, at 2209. For a contrary view on moral hazard and securitization, see Schwarcz, *Future of Securitization*, *supra* note 89, at 1319–20 (arguing that other factors contributed to atrophied underwriting standards such as excess liquidity and conflicts of interest within firms responsible for underwriting).

91. Eggert, *Great Collapse*, *supra* note 88, at 1277; PRELIMINARY STAFF REPORT, *supra* note 90, at 5.

92. Eggert, *Great Collapse*, *supra* note 88, at 1278.

93. Engel & McCoy, *supra* note 79, at 2071.

94. *Id.*

95. Golin, *supra* note 28, at 18; Surti, *supra* note 33, at 8.

96. See, e.g., Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 941(b), 124 Stat. 1376, 1891–96 (2010) (to be codified at 15 U.S.C. § 780-11). Cf. *infra* note 134 (referencing “skin in the game”).

97. See COVERED BONDS, *supra* note 18, at 31; Burmeister et al., *supra* note 19, at 97.

98. See *supra* note 97.



Moreover, contractual provisions offer another possible protection against moral hazard in securitization transactions.<sup>99</sup> Investors can require originators to warrant that the assets sold in a securitization are compliant with applicable lending laws or that borrowers meet certain income criteria.<sup>100</sup> Recourse clauses can stipulate that if certain trigger events (such as borrower default) occur within a specified time after the securitization, the originator must buy back the weak asset.<sup>101</sup> It might also be possible to require originators to retain servicing obligations for securitized assets, thereby exposing them to the increased collection costs associated with defaults.<sup>102</sup>

However, contractual protections for investors, at least currently, are of limited effect because of their limited use and infrequent enforcement. In many securitization transactions, few covenants are included, and representations and warranties of asset quality are typically extremely limited.<sup>103</sup> Investors do not regularly enforce recourse provisions,<sup>104</sup> and, when they do, they must decide whether litigation to compel performance would be cost prohibitive and if the originator is even capable of buying back troubled assets.<sup>105</sup> Finally, retention of servicing rights by originators is atypical with a well-developed third-party servicer industry at hand to take on such responsibilities for a fee.<sup>106</sup>

Some have suggested<sup>107</sup> that the incentives to underwrite cover-pool assets better, the retention of credit risk by issuers, and the dual recourse available to investors make covered bonds a safer investment than securitization (particularly of MBS) that uses an originate-to-distribute model where credit risk is shifted from the originator to the investor and the latter has no recourse to the issuer in the event of asset default. For the issuer, the downside risk of covered bonds includes, at least, the transaction costs of replacing non-performing or prepaying assets in the cover pool and, at worst, claims by covered bondholders against the issuer proper if the cover pool is insufficient to repay the bonds. The retention of this credit risk creates a powerful added incentive to select high-quality assets to serve as collateral in a covered bond transaction.

In securitization, however, the originator is not without incentives to select high-quality assets when structuring a deal. This is because in both covered bond *and* securitization transactions, the upside reward of residual value<sup>108</sup> from the underlying assets is retained by the originator/issuer. Once principal and interest

---

99. Engel & McCoy, *supra* note 79, at 2061–62.

100. *Id.* at 2062.

101. *Id.* (claiming that related clauses sometimes call for originators to substitute performing assets for those that default).

102. *Id.* at 2063 (but query whether preventing an originator-servicer from resigning might be inconsistent with bankruptcy true-sale criteria, which generally contemplate that the originator be engaged as servicer on an arm's-length basis).

103. *Id.* at 2073.

104. *Id.* at 2073 n.166.

105. *Id.* at 2073–74.

106. *Id.* at 2075.

107. See Treasury Press Release, *supra* note 2.

108. Schwarcz, *Alchemy*, *supra* note 12, at 141.

on the bonds or securitized assets are paid in full, any surplus value redounds to the originator/issuer. Covered bonds in which the originator is the issuer achieve this by not selling the cover-pool assets. The same result is achieved both for covered bonds in which the originator is not the issuer and for securitization because, in both cases, the originator sells the financial assets to a wholly owned SPV. Once the SPV repays its investors, any surplus value redounds to the SPV's benefit, and that surplus value is then captured by the originator by dividend from, or merger with, the SPV.<sup>109</sup> Consequently, originators and issuers of both ABS and covered bonds want the financial assets to perform well.

### ADVERSE SELECTION

A related problem with mortgage securitization, some argue, is adverse selection.<sup>110</sup> Mortgage originators have incentives to exploit information asymmetries between themselves and secondary market participants in order to sell their worst mortgages while retaining less risky loans on their balance sheet, a variant of the "lemons" problem.<sup>111</sup> Securitization, so this argument goes, facilitates adverse selection through the senior-subordinate structure, in which originators create senior-priority and junior-priority classes of securities. The junior securities, which bear a higher interest rate than the senior securities, are sold to investors with a significant appetite for risk, thereby effectively increasing the overcollateralization of the senior securities and making them less risky.<sup>112</sup>

One might question that adverse selection criticism. Even though investors in junior securities have a significant appetite for risk, they are, or at least should be, sophisticated enough to ensure that the risk they are taking is properly compensated by the interest rate. If only the worst mortgages support repayment of the junior securities, that interest, much less the principal, on the junior securities would unlikely be paid. Furthermore, to the extent securitization's use of senior-subordinate structures *could* facilitate adverse selection, covered bonds would not be immune. Although most covered bonds are not currently issued in senior-subordinate structures,<sup>113</sup> some are<sup>114</sup>—and nothing prevents the more widespread use of senior-subordinate structures in non-legislative covered bonds transactions.<sup>115</sup>

109. *Id.* at 142.

110. PRELIMINARY STAFF REPORT, *supra* note 90, at 19.

111. Engel & McCoy, *supra* note 79, at 2048–49 (citing George Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488 (1970)).

112. Engel & McCoy, *supra* note 79, at 2054. Cf. SCHWARZ STRUCTURED FINANCE, *supra* note 14, § 2:4, at 2-17 to 2-18 (describing the senior-subordinate structure).

113. Volk, *supra* note 38, at 103–04.

114. See, e.g., Hans-Joachim Dubel, Covered Bonds: US Proposal and Lessons Learned from European Crisis 5 (presentation at PRMIA Issues in Securitization Symposium, Washington, D.C., May 3, 2010) (on file with *The Business Lawyer*) (observing the issuance by DK MCI of "junior covered bonds" to protect more senior covered bonds "in case of collateral shortfall").

115. Indeed, nothing prevents the less widespread use of senior-subordinate structures in securitization transactions. See SCHWARZ STRUCTURED FINANCE, *supra* note 14, §§ 2:3–2:4, at 2-15 to 2-18 (discussing other means of providing credit enhancement).

The problem of adverse selection can arise, however, even absent a senior-subordinate structure, and covered bonds are clearly susceptible.<sup>116</sup> Nonetheless, they should be somewhat less susceptible to adverse selection than securitization because dual recourse gives holders of covered bonds a claim against the issuer if adversely selected cover-pool assets are insufficient.<sup>117</sup>

### SERVICING COSTS

An additional criticism leveled against securitization in the wake of the financial crisis is that it inhibits modification of the underlying mortgage loans for troubled borrowers because of restrictions contained in agreements with third-party loan servicers or because alterations require consent from diffuse MBS holders.<sup>118</sup> Servicing agreements typically oblige servicers to manage loans in the “best interests” of MBS holders, a somewhat ambiguous standard that might expose servicers to liability for even good-faith decisions if, in retrospect, investors suffer harm.<sup>119</sup> Servicing agreements also often include absolute restrictions on changing the terms of loans, limits on the number of modifications for a given asset pool or for a given loan over its lifetime, maximization of the net present value of cash flows (even at the cost of foreclosure on a potentially salvageable loan), and the requirement of consent from outside parties such as bond insurers, rating agencies, and credit enhancement providers before altering more than 5 percent of the loans in a mortgage pool.<sup>120</sup>

Structural credit enhancements may also inhibit modifications to securitized mortgage loans when the interests of different tiers of investors are pitted against each other, in a phenomenon dubbed “tranche warfare.”<sup>121</sup> Asset-backed securities with different tranches corresponding to different investor classes are sometimes subject to “performance clauses” establishing conditions precedent to changing the overcollateralization of the asset pool or releasing principal to investors in lower tiers.<sup>122</sup> The treatment of modified loans for such “trigger tests” determines how the reduced value of the mortgage pool will be distributed among investors;

---

116. Dubel, *supra* note 114, at 4 (observing that European Union covered bonds are “plagued by adverse selection . . . risk”).

117. Legislative covered bond regimes can of course mitigate adverse selection by mandating minimum quality cover-pool assets; especially where there is a dynamic pool, there should be relatively few “lemons.” See *supra* note 111 and accompanying text. But investors in securitization transactions can likewise (and often do) contractually mandate minimum collateral standards.

118. Kurt Eggert, *Comment on Michael A. Stegman et al.’s “Preventive Servicing Is Good for Business and Affordable Homeownership Policy”: What Prevents Loan Modifications?*, 18 HOUSING POL’Y DEBATE 279, 287–88 (2007) [hereinafter Eggert, *Comment*]; Schwarcz, *Future of Securitization*, *supra* note 89, at 1322.

119. Eggert, *Comment*, *supra* note 118, at 287–88.

120. *Id.*

121. *Id.* at 290.

122. *Id.*

if modified loans are treated as current, subordinate investor classes benefit, while senior classes are protected if modified loans are treated as delinquent.<sup>123</sup> Eggert concludes that “[t]he complex webs that securitization weaves can be a trap and leave no one, not even those who own the loans, able to effectively save borrowers from foreclosure.”<sup>124</sup>

Empirical studies reveal that, even in the face of enormous government pressure to adjust mortgage terms for the benefit of homeowners,<sup>125</sup> actual mortgage restructuring lags behind expectations, in part due to the structural complications of securitization.<sup>126</sup> In his most comprehensive study of mortgage modifications, Alan White examined data on 3.5 million securitized subprime and alt-A loans for the month of November 2008.<sup>127</sup> In the November data, White found 233,000 mortgages in foreclosure and 69,000 in bankruptcy while lenders made only 21,219 modifications that month.<sup>128</sup> Of these modifications, only 10 percent included some reduction in interest or principal or a forgiveness of fees.<sup>129</sup> The most recent available data show just over 4.3 million total completed mortgage modifications between the last half of 2007 and February 2011 while, between August 2010 and February 2011, the number of loans more than sixty days delinquent declined gradually, from about 3.2 million to about 2.8 million.<sup>130</sup> White points to securitization<sup>131</sup> and the strictures of third-party servicing agreements<sup>132</sup> as part of the reason for the low level of modification and the inability of troubled borrowers to obtain debt relief.<sup>133</sup>

Covered bond proponents claim that covered bonds have more flexibility to accommodate troubled borrowers because loans in the cover pool remain with the originator/issuer, which could service these loans and modify them as appropri-

---

123. *Id.*

124. *Id.* at 292.

125. See *Agency Wants to Help 1.5 Million Households Avoid Foreclosure, but Finds Dispute*, N.Y. TIMES, Nov. 15, 2008, at B3; Ruth Simon, *Treasury Makes New Push on Mortgage Relief*, WALL ST. J., Nov. 30, 1975, at A3.

126. See, e.g., Alan M. White, *Deleveraging the American Homeowner: The Failure of 2008 Voluntary Mortgage Contract Modifications*, 41 CONN. L. REV. 1107 (2009) [hereinafter White, *Deleveraging*]; Alan M. White, *Rewriting Contracts, Wholesale: Data on Voluntary Mortgage Modifications from 2007 and 2008 Remittance Reports*, 36 FORDHAM URB. L.J. 509 (2009) [hereinafter White, *Rewriting Contracts*].

127. White, *Deleveraging*, *supra* note 126, at 1112–13.

128. *Id.* at 1113.

129. *Id.* at 1116.

130. *Data Report*, HOPE NOW (Feb. 2011), available at <http://www.hopenow.com/industry-data.php>.

131. White, *Rewriting Contracts*, *supra* note 126, at 514–15.

132. White, *Deleveraging*, *supra* note 126, at 1128–29.

133. Interestingly, one of White’s key findings is that servicers’ fiduciary obligation to MBS investors is actually not well served by foreclosures since losses incurred are actually six times larger than the average principal or interest write-off in a modification. This suggests the chief impediment to modification may not be securitization per se, but rather inadequately drafted servicing contracts that do not allow servicers the flexibility necessary to protect investors’ interests. See *id.* at 1119; see also Eggert, *Comment*, *supra* note 118, at 288.

ate.<sup>134</sup> There are, however, at least two factors that restrict such flexibility: (a) modifications resulting in reduced collections from the cover-pool assets may expose the originator/issuer to recourse for a deficiency; and (b) non-performing or adjusted assets that decrease the value of the cover pool below the agreed level of over-collateralization may require asset replacement, creating additional costs for the originator/issuer. Even in a covered bond context, therefore, the originator/issuer will have to balance the costs of modification against those of foreclosure and non-action in determining whether and how to accommodate troubled borrowers.

Additionally, the servicing of underlying financial assets in covered bond and securitization transactions often converge. In securitization transactions, for example, the originator often acts as the servicer.<sup>135</sup> And in covered bond transactions, originators/issuers could contract with third-party loan servicers despite on-balance-sheet accounting.<sup>136</sup> Moreover, with both covered bond and securitization transactions, investors themselves can contractually restrict the originator/issuer's right to modify the underlying financial assets,<sup>137</sup> a type of restriction that is not atypical of covenants in an ordinary secured loan agreement.<sup>138</sup> The extent to which covered bond transactions have more flexibility than securitization transactions to accommodate troubled borrowers is thus highly context dependent.

### OVERRELIANCE ON COMPLEX MATHEMATICAL MODELS

Complex asset-backed securities of the type commonly issued prior to the recent financial crisis defied easy analysis and led both investors and ratings agencies to rely on mathematical models to assess the risks of such securities.<sup>139</sup> Securities ratings became an attractive heuristic device for investors with neither the time nor inclination to comprehend fully the risks entailed in securitization transactions.<sup>140</sup> The models from which these ratings derived were themselves

---

134. *Covered Bonds: Prospects for a U.S. Market Going Forward: Hearing Before the H. Comm. on Fin. Servs.*, 111th Cong. 3 (2009) (statement of Scott A. Stengel, Partner, Orrick, Herrington & Sutcliffe LLP for the U.S. Covered Bond Council) (arguing that on-balance-sheet accounting “creates a 100% ‘skin in the game’ and, as a result, incentives relating to underwriting, asset performance, and loan modifications are strongly aligned”); *id.* at 4 (statement of Bert Ely, Ely & Co., Inc.) (“If a lender retains 100% of the credit risk of the loans it makes—the case with loans funded with covered bonds—the lender can more easily modify a loan should the borrower experience financial difficulty.”).

135. SCHWARZ STRUCTURED FINANCE, *supra* note 14, § 4:5, at 4-10.

136. *Cf.* COVERED BONDS HANDBOOK, *supra* note 50, § 4:3.7, at 4-17 (discussing how loan servicers are appointed).

137. *See* Eggert, *Comment*, *supra* note 118, at 87–88. *Cf.* Golin, *supra* note 28, at 31 (discussing the restrictions placed on substitutions for cover-pool assets in most covered bond regimes).

138. *See, e.g.*, 19A AM. JUR. LEGAL FORMS 2D *Secured Transactions* § 253:1949 (2005) (providing a standard term for secured loans with intangible collateral specifying the permissible procedures for the debtor’s “collection, compromising, or enforcing of any account, chattel paper, or general intangible” and providing for default if the debtor deviates from such procedures).

139. Schwarz, *Future of Securitization*, *supra* note 89, at 1323; Schwarz, *Regulating Complexity*, *supra* note 76, at 216–17.

140. Schwarz, *Regulating Complexity*, *supra* note 76, at 222; *see also* Eggert, *Great Collapse*, *supra* note 88, at 1277 (explaining how investors in mortgage-backed securities moved away from individualized risk assessments to data-driven “hard underwriting” practices).

flawed due to their reliance on misleading historical data<sup>141</sup> or pure assumption when historical data did not exist.<sup>142</sup>

Moreover, certain highly leveraged asset-backed securities, especially asset-backed securities of collateralized debt obligations (“ABS CDO”), turned out to be difficult to value and extremely sensitive to errors in initial credit-risk estimates.<sup>143</sup> Collateralized debt obligation, or “CDO,” securities are issued with the backing of a pool of various mortgage loans or other financial assets held by an SPV, the proceeds of which supply the funds for repayment of the securities.<sup>144</sup> The securities may be issued in senior-subordinate tranches to enhance structurally the credit rating of the upper tranches.<sup>145</sup> The tiers allocate the default risk of the cover-pool assets, with senior tranches being paid before mezzanine tranches, which, in turn, are paid before junior tranches.<sup>146</sup> Any shortfall in returns from the pooled assets is thus absorbed by the lower tranches first, shielding senior tranches and allowing those securities to receive a higher credit rating than the average rating of the underlying assets.<sup>147</sup> ABS CDO securities operate in a similar fashion but are backed by mixed pools of ABS and/or MBS securities in a process sometimes called “re-securitization.”<sup>148</sup> Here, repayment derives from the returns on the assets underlying the pooled ABS and MBS securities.<sup>149</sup> Relatively small variances in assumptions about the default probability of assets underlying tranches of CDO or ABS CDO securities as well as the level of correlation between the default rates of different securitized assets can be magnified by the ABS CDO structure, resulting in very different outcomes than investors bargained for when they purchased the securities.<sup>150</sup>

Covered bonds, at least those issued in legislative regimes that have strict cover-pool regulations and no tranching ability, are inherently less risky than subprime mortgage-backed securities. Nevertheless, they may be susceptible to at least some of the pressures that led to an overreliance on modeling in securitization markets. Investors in covered bonds must determine the risks associated with large pools of mortgage loans or other assets, often valued in billions of dollars.<sup>151</sup>

141. Schwarcz, *Future of Securitization*, *supra* note 89, at 1323–24 (noting that the mortgage market’s risk assessment models failed to anticipate both the striking decline in housing prices and the high default rate seen in the recent crisis).

142. *Id.* at 1324 (explaining that valuation models for some complex securities were based entirely on models when there were no active trading markets to provide historical data).

143. Joshua D. Coval, Jakub Jurek & Erik Stafford, *The Economics of Structured Finance* 10 (Harv. Bus. Sch., Working Paper No. 09-060, 2008), available at <http://www.hbs.edu/research/pdf/09-060.pdf>; Schwarcz, *Future of Securitization*, *supra* note 89, at 1323–24.

144. Schwarcz, *Protecting Financial Markets*, *supra* note 89, at 104.

145. Coval, Jurek & Stafford, *supra* note 143, at 5–6. The process can be compounded where tranches from different CDOs are themselves pooled to create a new CDO, often called “CDO-squared.” *Id.* at 8.

146. *Id.* at 6.

147. *Id.*

148. Schwarcz, *Protecting Financial Markets*, *supra* note 89, at 104–05.

149. *Id.*

150. Coval, Jurek & Stafford, *supra* note 143, at 10.

151. Note that where covered bonds are backed only by public sector securities issued by a single government entity, the risk assessment is greatly simplified as it can focus on the single source of the assets.

Additionally, covered bond investors must account for the default risk of the issuing entity and the extent to which this may impact the solvency of the cover pool.<sup>152</sup> High quality-control standards for cover-pool assets, overcollateralization, and thorough hedging against asset-liability mismatch may reduce the risks faced by covered bond investors,<sup>153</sup> but they do not make those risks any easier to calculate accurately.

The analysis so far has shown that most costs of securitization are not necessarily materially different than the costs of covered bonds. The view that securitization fosters, whereas covered bonds avoid, moral hazard is only partly correct. It has no application to the increasing number of securitization transactions that do not depend on off-balance-sheet accounting, and moral hazard should be mitigated if not eliminated by increasing government (and investor) requirements that securitization originators retain a minimum amount of recourse. The extent to which covered bond transactions have more flexibility than securitization transactions to accommodate troubled borrowers is highly context dependent. And covered bonds, like securitization, may be susceptible to the same types of pressures that led to an overreliance on modeling in securitization markets. Although dual recourse makes covered bonds somewhat less susceptible than securitization to adverse selection, the discussion below shows that dual recourse can make covered bonds more costly than securitization from the standpoint of non-adjusting creditors.<sup>154</sup>

### IMPACTS ON NON-ADJUSTING CREDITORS

Secured debt instruments and securitization often prompt concerns surrounding their efficiency and potential negative impact on the unsecured creditors of a borrower or originator.<sup>155</sup> These concerns are rooted in the Modigliani-Miller hypothesis that when a firm realizes savings through a change in one part of its capital structure it will, *ceteris paribus*, see offsetting costs to other parts of its capital structure.<sup>156</sup> This theory led to two subsidiary claims: first, that unsecured creditors of firms benefiting from interest rate savings (through a secured debt issue or through a securitization) will raise their interest rates by an amount equivalent to the firm's savings to compensate for their increased risk in the event of insolvency,<sup>157</sup> and, second, that unsecured creditors who cannot adjust their

---

152. Fitch Ratings calls this "the discontinuity factor" and defines it as "the likelihood of an interruption . . . of payment on the covered bonds in case of a default of the issuing institution." STEFAN POTOCKI ET AL., FITCH RATINGS, COMPARATIVE STUDY OF COVERED BONDS 2008/09, at 3 (May 6, 2009).

153. POULAIN, *supra* note 83, at 4–7.

154. The term "non-adjusting creditors" is defined in the text accompanying *infra* notes 158–59.

155. See Schwarcz, *Securitization Post-Enron*, *supra* note 12, at 1568 n.148 (referencing scholarship critical of securitization's impact on unsecured creditors); Steven L. Schwarcz, *The Easy Case for the Priority of Secured Claims in Bankruptcy*, 47 DUKE L.J. 425, 426 n.1 (1997) [hereinafter Schwarcz, *Easy Case*] (summarizing scholarship on secured debt's impact on unsecured creditors).

156. See generally Franco Modigliani & Merton H. Miller, *The Costs of Capital, Corporation Finance and the Theory of Investment*, 48 AM. ECON. REV. 261, 268 (1958).

157. See generally Alan Schwartz, *The Continuing Puzzle of Secured Debt*, 37 VAND. L. REV. 1051, 1054 (1984).



interest rates (“non-adjusting creditors”) are subject to an uncompensated transfer of risk from new secured creditors.<sup>158</sup> Observers have argued at length that both of these claims are exaggerated and that, in almost all cases, non-adjusting creditors actually benefit from the liquidity provided by securitization and secured debt.<sup>159</sup> However, because covered bonds are to a certain extent a hybrid, combining aspects of both securitization and secured debt, it is worth recapitulating some of these discussions and analyzing covered bonds from the standpoint of non-adjusting creditors of their issuer.

Generally, a new-money secured debt issue does not harm non-adjusting creditors and may actually benefit them.<sup>160</sup> The net impact on the assets available to non-adjusting creditors of a lien securing a new-money loan is, at least at the outset, zero; the proceeds from the loan are available to repay the newly incurred secured debt.<sup>161</sup> Non-adjusting creditors would only be prejudiced to the extent that either the company’s risk of insolvency increases or the company “overinvests” the proceeds, reducing their value.<sup>162</sup> Because overinvestment is a generic risk for any company,<sup>163</sup> the analysis below treats it as a neutral factor.

It is highly unlikely that new-money secured debt will increase a company’s risk of insolvency. To the contrary, access to credit and the resulting liquidity generally forestalls bankruptcy<sup>164</sup> and increases the expected value of non-adjusting creditor claims, even with conservative assumptions.<sup>165</sup> If a company’s financial situation is so precarious that it appears to have a realistic chance of going bankrupt even after borrowing new money, lenders would be reluctant to make the loan, even with collateral, because of the inherent imperfections in the bankruptcy system.<sup>166</sup> Thus, the extension of new-money secured credit to a firm usually *reduces*

158. See Lucian Arye Bebchuk & Jesse M. Fried, *The Uneasy Case for the Priority of Secured Claims in Bankruptcy*, 105 *YALE L.J.* 857, 864, 882–91 (1996).

159. For a complete discussion of these arguments, see Schwarcz, *Securitization Post-Enron*, *supra* note 12, at 1553–69, and Schwarcz, *Easy Case*, *supra* note 155.

160. It is important to distinguish between the effects of new-money secured debt and the provision of collateral pre-existing obligations. This analysis applies to the former; the effects on unsecured creditors of liens securing antecedent debt are more ambiguous and somewhat dependent on statutory protections for such creditors. Schwarcz, *Easy Case*, *supra* note 155, at 433–34 & n.35; Schwarcz, *Alchemy*, *supra* note 12, at 148 n.52.

161. Schwarcz, *Easy Case*, *supra* note 155, at 435.

162. See, e.g., Schwarcz, *Securitization Post-Enron*, *supra* note 12, at 1554 n.80 (defining overinvestment as “the taking of a negative net present value project” (quoting Alan Schwartz, *Priority Contracts and Priority in Bankruptcy*, 82 *CORNELL L. REV.* 1396, 1410 (1997))). Note, however, that overinvestment itself harms unsecured creditors only if it makes the company more likely to become insolvent. This is an unlikely eventuality given the reluctance of lenders to extend credit to an institution at risk of insolvency. *Id.* at 1558.

163. *Id.* at 1557 (explaining that, even absent borrowing, a company can overinvest assets, and that borrowing does not per se increase the risk of overinvestment).

164. Peter V. Pantaleo et al., *Rethinking the Role of Recourse in the Sale of Financial Assets*, 52 *BUS. LAW.* 159, 187 (1996).

165. Schwarcz, *Easy Case*, *supra* note 155, at 441–43.

166. *Id.* at 455–56 (arguing that creditors will be reticent to lend on a secured basis to an at-risk firm because of (i) the automatic stay against enforcement of remedies; (ii) a possible substitution of the creditor’s collateral; and (iii) fraudulent conveyance law’s restriction on securing a debt with excessive collateral and the inability to guarantee full recovery for an overcollateralized lender).

its chances of becoming bankrupt, thereby having a neutral or positive impact on the firm's non-adjusting creditors.<sup>167</sup>

Securitization, much like a new-money loan, would not have a net adverse impact on non-adjusting creditors of a company to the extent it entails the exchange of one type of asset (e.g., mortgage loans, automotive loans, or other financial assets) for another asset, cash.<sup>168</sup> Once again, only if securitization increases the company's risk of insolvency or the company "overinvests" the proceeds of the securitization will it harm non-adjusting creditors.<sup>169</sup> And, once again, because increased liquidity generally reduces the risk of insolvency and lenders avoid financing truly risky firms, securitization is likely to benefit non-adjusting creditors by increasing the likelihood they will be repaid in full in the long-term.<sup>170</sup>

How do non-adjusting creditors fare when a company issues covered bonds? Similar to a securitization, covered bonds would always result in a new money infusion for the company by leveraging assets for cash.<sup>171</sup> Like a securitization, covered bonds require some level of overcollateralization to account for the underlying risk of the asset pool (such level of overcollateralization being dictated by law in legislative regimes<sup>172</sup>). Therefore, covered bonds are roughly equivalent to a securitization in their neutral immediate impact on non-adjusting creditors. As before, non-adjusting creditors are only harmed to the extent a covered bond issue increases the issuer's chance of bankruptcy or there is overinvestment of the proceeds of the bond issue. And, once again, it is likely that a company with a substantial default risk would not be able to issue covered bonds because of the wariness of investors.

Covered bonds, however, go beyond securitization in two ways that can harm non-adjusting creditors. In a securitization, if the overcollateralization is insufficient to repay investors, the investors take a loss because they only have recourse to assets that the SPV has already purchased.<sup>173</sup> The pool of assets available for repayment is, in other words, effectively fixed or static.<sup>174</sup> In contrast, in covered bond transactions, the cover pools are usually dynamic,<sup>175</sup> requiring the covered

---

167. *Id.* at 466–71. This proposition is supported by empirical observations correlating receipt of secured credit by troubled companies and increases in those companies' share prices as well as relaxation of their unsecured trade credit terms. *Id.*

168. Schwarcz, *Securitization Post-Enron*, *supra* note 12, at 1562; Schwarcz, *Alchemy*, *supra* note 12, at 146. Because of the necessity for overcollateralization, the actual amount of cash proceeds will be somewhat less than the assets sold in the securitization, but this merely reflects the real value of those assets discounted for the time value of money and risk of default. Schwarcz, *Securitization Post-Enron*, *supra* note 12, at 1555–56.

169. Schwarcz, *Securitization Post-Enron*, *supra* note 12, at 1562 & 1555–57.

170. *Id.* at 1560. The fact that protective covenants in unsecured loan agreements usually do not restrict securitization as well as empirical evidence showing a correlation between securitization and increased bond prices support the conclusion that unsecured creditors generally view securitization as beneficial. *Id.* at 1563–65.

171. *Id.* at 1555.

172. Burmeister et al., *supra* note 19, at 91.

173. SCHWARZ STRUCTURED FINANCE, *supra* note 14, § 2:1.1, at 2-2 to 2-4.

174. *Id.*

175. See *supra* notes 44–46 and accompanying text.

bond issuer continually to segregate new assets as needed to maintain overcollateralization—thereby enabling the covered bonds to continue to be paid in priority to unsecured claims.<sup>176</sup>

Covered bonds also go beyond securitization in their recourse. Whereas securitization transactions are non-recourse,<sup>177</sup> covered bonds have dual recourse.<sup>178</sup> If, therefore, the cover-pool assets are insufficient, covered bondholders have a recourse claim against the issuer.<sup>179</sup> That claim, being *pari passu* with unsecured creditor claims,<sup>180</sup> would further dilute non-adjusting creditor recovery.<sup>181</sup>

As a result of the dynamic cover pool and dual recourse, covered bond transactions thus shift virtually all risk to non-adjusting creditors.

#### IV. CONCLUSIONS

Covered bonds have a long and distinguished pedigree, originating under the rule of King Frederick the Great in order to generate mortgage financing for Prussia's landed gentry, who had been battered by the Seven Years War. Although historically limited to European finance, covered bonds are now becoming an important part of North American and Asian finance. There is great confusion, though, about the nature of covered bonds and their similarities to, and differences from, secured bond financing and securitization.

This article attempts to demystify covered bonds, examining their utility as a financing tool and analyzing their legal rights and obligations. In these contexts, the article compares covered bonds with bond financing and securitization and also compares the costs and benefits of covered bonds and securitization, seeking to give covered bonds perspective within a financing hierarchy.

The benefits of covered bonds and securitization are similar. Both provide an issuer with low-cost capital market funding while offering investors relatively low-risk and liquid investments, and both can be used to regenerate lending markets.

---

176. See *id.* Another potential difference is the amount of overcollateralization. Whereas securitization transactions usually involve overcollateralization not exceeding 10 percent, some legislative covered bond regimes require higher overcollateralization, sometimes exceeding even 20 percent. See Jackie Ineke et al., *Basel II and Covered Bonds*, in *COVERED BONDS: BEYOND PFANDBRIEFE: INNOVATIONS, INVESTMENT AND STRUCTURED ALTERNATIVES* 42, 50 (Jonathan Golin ed., 2006) (comparing overcollateralization typical for U.K. covered bonds with that for Spanish covered bonds). The higher the overcollateralization, the more the risk is transferred to unsecured creditors.

177. See *supra* note 37 and accompanying text.

178. See *supra* note 37 and accompanying text.

179. See *supra* note 37 and accompanying text.

180. See Golin, *supra* note 28, at 18. In France and Hungary, the recourse claim of covered bondholders against the issuer is not merely *pari passu* with, but senior to, other unsecured claims (DEUTSCHE BANK AG/LONDON, *supra* note 60, at 17), thereby further harming non-adjusting creditors.

181. An interesting sidelight on legislative covered bonds is that they may not always be accelerated in bankruptcy. Burmeister et al., *supra* note 19, at 91. Sometimes, as long as the cover-pool assets are sufficient, the cover-pool trustee will continue to make normal interest and principal payments on the bonds. Golin, *supra* note 28, at 34. The impact this will have on unsecured creditors will depend, in part, on the interest rate on the covered bonds compared to the market rate of interest at the time.

Covered bonds are more likely than securitization, however, to harm non-adjusting creditors. Both forms of financing pay their investors from segregated asset pools; but whereas securitization effectively fixes the segregated asset pool, thereby allocating risk to all parties, the asset pool for covered bonds is usually “dynamic,” requiring the covered bond issuer to continue to segregate assets as needed to repay the covered bonds, in priority to paying unsecured claims. Furthermore, if those assets are ultimately insufficient to repay the covered bonds, covered bondholders have a legal claim against the issuer that is equal and ratable with claims of unsecured creditors, thereby further diluting repayment of the latter’s claims. The extent to which risk should be allocated so asymmetrically to unsecured creditors is a policy question that any nascent covered bond regime should address.<sup>182</sup>

---

182. One commentator asks how this asymmetric allocation of risk is different from that created by ordinary secured claims. E-mail from Anna T. Pinedo, *supra* note 51. There are at least two important differences: ordinary secured claims do not have dynamic collateral pools and their collateral is not protected from bankruptcy risks.