

Introduction

What do David Bowie, James Brown, the Isley Brothers, and Rod Stewart have in common? The obvious answer is that they are all recording artists. The financial professional would go beyond this obvious commonality by adding: All of them have used a financing technique known as *securitization* to obtain funding from their future music royalties. The first was David Bowie who in 1997 used securitization to raise \$55 million backed by the current and future revenues of his first 25 music albums (287 songs) recorded prior to 1990. These bonds, popularly referred to as “Bowie bonds” and purchased by Prudential Insurance Company, had a maturity of 10 years. When the bonds matured in 2007, the royalty rights reverted back to David Bowie. Despite the attention drawn to securitization by the popular press because of the deals done by these recording artists, the significance of this financial innovation is that it has been an important form of raising capital for corporations and government entities throughout the world, as well as a tool for risk management.

Prior to the 1980s, the meaning of securitization was used to describe the process of substituting the issuance of securities to obtain debt financing for bank borrowing. Economists referred to this process for fund raising as *disintermediation*. For example, the former chairman of Citicorp offered the following definition for securitization: “the substitution of more efficient public capital markets for less efficient, higher cost, financial intermediaries in the funding of debt instruments” (Kendall and Fishman, 1996). The development of the high-yield bond market in the late 1970s and early 1980s can be viewed as a securitization under this broad definition because bank loans to speculative-grade-rated corporations were replaced by the issuance of public bonds by these borrowers.

Today, however, the definition of securitization has taken on a more specific meaning. As stated by Lumpkin (1999, p. 1):

More recently, the term has been used to refer to so-called “structured finance,” the process by which (relatively) homogeneous, but illiquid, assets are pooled and repackaged, with security interests representing claims to the incoming cash flows and other economic benefits generated by the loan pool sold as securities to third-party investors.

Admittedly, defining securitization in terms of structured finance begs the question of what is meant by *structured finance*. There is no universal definition of structure finance. Fabozzi, Davis, and Choudhry (2006) note that the term covers a wide range of financial market activity. Based on a survey of capital market participants, they provide the following working definition for structured finance:

... techniques employed whenever the requirements of the originator or owner of an asset, be they concerned with funding, liquidity, risk transfer, or other need, cannot be met by an existing, off-the-shelf product or instrument. Hence, to meet this requirement, existing products and techniques must be engineered into a tailor-made product or process. Thus, structured finance is a flexible financial engineering tool.

Structured finance by this definition would include not just securitization but also structured credits, project finance, structured notes, and leasing (large ticket leasing, particularly leveraged leases). In a survey of capital market participants, some respondents equated structured finance as securitization as in the definition by Lumpkin. In fact, a 2005 report by the Bank for International Settlements (BIS) defines structured finance as follows:

Structured finance instruments can be defined through three key characteristics: (1) pooling of assets (either cash-based or synthetically created); (2) tranching of liabilities that are backed by the asset pool (this property differentiates structured finance from traditional “pass-through” securitiza-

tions); (3) de-linking of the credit risk of the collateral asset pool from the credit risk of the originator, usually through use of a finite-lived, standalone special purpose vehicle (SPV). (BIS, 2005, p. 5)

As we discuss securitization in this book, we see the importance of the three characteristics cited in the BIS definition. Moreover, while we refer to a securitization as a means of financing, as will become clear, the end result of a transaction is that a corporation can obtain proceeds by selling assets and not borrowing funds. The asset securitization process transforms a pool of assets into one or more securities that are referred to as asset-backed securities.

The purpose of this book is to explain the fundamentals of securitization. While the focus is on securitization from the perspective of the issuer, Appendix B explains the valuation and the analysis of the interest rate risk for the securities created from a securitization transaction from the investor's perspective.

WHAT IS A SECURITIZATION?

There are some similarities between securitization and secured lending. In *secured lending*, also called *asset-based lending*, the lender requires that the borrowing firm commit specific assets of the firm as security or collateral for a lending arrangement. The assets that are used as collateral may be short-term assets such as accounts receivable or long-term assets such as equipment. For example, in accounts receivable financing the lender looks first to the accounts receivable of the borrower to fulfill the financial obligations of the lending arrangement. The amount advanced by the lender to the client firm depends on (1) what the lender deems acceptable based on the quality and nature of the receivables; (2) the type of customer the client firm sells to and the terms of the sale; and (3) the historical performance of the client firm's accounts receivables. Moreover, certain types of receivables may not be appropriate for financing via secured lending. For longer-term assets such as equipment, secured lending can be in the form of a loan or a bond. The cost of borrowing depends on the credit quality of the borrower because lenders are looking to the

ability of the borrowing firm to satisfy the terms of the borrowing arrangement.

A securitization differs from these traditional forms of financing in several important ways. The key in a securitization is that the cash flow generated by the asset pool can be employed to support one or more securities that may be of higher credit quality than the company's secured debt. The higher credit quality of these securities is achieved by relying on the cash flow created by the pool of assets rather than on the payment promise of the borrowing firm, such cash flows having been isolated in a bankruptcy remote structure and "credit enhanced" using several credit enhancement techniques discussed in Chapter 5.¹ Compare this with secured lending. In the case of accounts receivable financing, while the lender looks first to the cash flow generated by the receivables, the borrowing firm is responsible for any shortfall. In the case of secured lending where the collateral is property, the lender relies primarily on the borrowing firm's ability to repay and only secondarily to the value at which the collateral can be liquidated in bankruptcy. Moreover, in relying on the liquidation value of the collateral, the lender assumes that in a bankruptcy proceeding the distribution of assets will be based on the principle of absolute priority (i.e., secured lenders are repaid before unsecured lenders and equity investors receive any proceeds). However, while this is the case in a liquidation of a corporation, the principle of absolute priority typically does not hold in a corporate reorganization.²

Because securitization involves the sale of assets, it is commonly compared to factoring.³ Unlike in a secured lending arrangement such as accounts receivable financing, the client firm has sold the accounts receivables to the factor. The factor's credit risk depends on the arrangement: recourse factoring, modified recourse factoring, and nonrecourse factoring. In recourse factoring, the factor does not

¹ As will be explained in Chapter 5, the credit quality of the securities can also be achieved by the use of a third-party guarantor.

² See, for example, Meckling (1977) and Miller (1977).

³ Another reason for the comparison is that the factor becomes the credit and collection department of the client firm; in the case of securitization, the collection and servicing function is typically either originator-retained, or transferred to independent servicers.

absorb the risk of loss for a customer account but instead obtains repayment from the client firm. In modified recourse factoring, insurance is obtained by the factor and offered to the client firm. The client firm is then not responsible for the risk of loss for a customer account.⁴ In nonrecourse factoring, all of the credit risk is transferred to the factor. In terms of cost, recourse factoring is the least expensive because the factor is not exposed to the credit risk of the customer accounts and nonrecourse factoring is the most expensive because the credit risk is transferred to the factor. Hence, unlike recourse financing, securitization slices the credit risk into several slices; the juniormost slice may be retained by the borrower, but the other slices are transferred to the “lenders.” That is to say, investors buying the securities. At the option of the client firm, the factor may provide a cash advance against a portion of the accounts receivable.

Just three of the advantages of securitization compared to non-recourse and modified recourse are that (1) there is typically lower funding cost when a securitization is used; (2) receivables that factors will not purchase may be acceptable for a securitization; and (3) proceeds from the sale in a securitization are received immediately while the firm may or may not obtain a cash advance from the factor.

As noted earlier, generally, securitization is a form of structured finance. Structured finance also encompasses project finance, the financing of some types of equipment, and some other kinds of secured financing. The common theme to all types of structured finance transactions is that the transaction is structured to modify or redistribute the risk of the collateral among different classes of investors by the use of a structure. The risks of the collateral are its credit risk, interest rate risk, prepayment risk, and liquidity risk. Securitization is primarily concerned with monetizing financial assets in such a way that the risk is tied primarily to their repayment rather than to the performance of a particular project or entity.

The assets that can be sold by an originator and then used as collateral in an asset securitization fall into two types: (1) existing assets/existing receivables and (2) assets/receivables to arise in the future. Some examples of assets that fall into the former category are

⁴ The client firm is still responsible for the customer account if the nonpayment is due to reasons such as disputes over product specifications or quality of the product.

residential mortgage loans, commercial mortgage loans, corporate loans, automobile car loans, and student loans. Transactions with this type of collateral are referred to as *existing asset securitizations*. Transactions of asset/receivables to arise in the future are referred to as *future flow securitizations*. Examples include airline ticket receivables, oil and gas royalties, and tax revenue receivables.

ILLUSTRATION OF A SECURITIZATION

We use a hypothetical securitization to illustrate the key elements of a securitization and the parties to a transaction. Our hypothetical firm is the Ace Corporation, a manufacturer of specialized equipment for the construction of commercial buildings. Some of its sales are for cash, but the bulk are from installment sales contracts. For simplicity, we assume that the installment period is typically seven years. The collateral for each installment sales contract (sometimes loosely referred to herein as a loan) is the construction equipment purchased by the borrower. The loan specifies the interest rate the customer pays.

The decision to extend a loan to a customer is made by the credit department of Ace Corporation based on criteria established by the firm, referred to as its *underwriting standards*. In this securitization, Ace Corporation is referred to as the *originator* because it has originated the loans to its customers. Moreover, Ace Corporation may have a department that is responsible for collecting payments from customers, notifying customers who may be delinquent, and, when necessary, recovering and disposing of the collateral (i.e., the construction equipment in our illustration) if the customer fails to make loan repayments by a specified time. These activities are referred to as *servicing* the loan. While the servicer of the loans need not be the originator of the loans, in our illustration we are assuming that Ace Corporation is the servicer.

Suppose that Ace Corporation currently has \$400 million in installment sales contracts (i.e., its accounts receivable). The *chief financial officer* (CFO) of Ace Corporation wants to use its installment sales contracts to raise \$320 million rather than issue a traditional corporate bond. To do so, the CFO will work with its legal staff to set up a legal entity referred to as a *special purpose vehicle* (SPV), also referred to as a *special purpose entity* (SPE). The SPV is critical

in a securitization transaction because it is this entity that delinks the credit of the entity seeking funding (Ace Corporation) from the creditworthiness of the securities that are created in a securitization. Assume that the SPV set up by Ace Corporate is called Financial Ace Trust (FACET). Ace Corporation sells \$320 million of the loans to FACET and receives from FACET \$320 million in cash, the amount the CFO wanted to raise. Since Ace Corporation is the originator of the loans and has sold these loans to FACET, Ace Corporation is referred to as the *originator/seller* in this transaction.

It is critical that the sale of the loans transferred be a *true sale* by Ace Corporation to FACET. By a true sale it is meant that the sale of the assets closely substantively resembles a commercial sale of such assets by Ace Corporation. If it is subsequently determined in a bankruptcy proceeding that the so-called sale by Ace Corporation was merely a nomenclature or a camouflage, then a bankruptcy judge can rule that the assets were never sold and were merely pledged as collateral for a financing. In that case, in the event of a bankruptcy filing by Ace Corporation, the bankruptcy judge can have the assets of FACET treated as part of the assets of Ace Corporation. This would defeat the purpose of setting up the SPV. Typically, a true sale opinion letter by a law firm is sought to provide additional comfort to the parties in the transaction.

Where does FACET obtain the \$320 million to buy the assets? It does so by issuing asset-backed securities, called *bond classes* or *tranches*. A simple transaction can involve the sale of just one bond class with a par value of \$320 million. The payments to the bond classes are obtained from the payments made by the obligors (i.e., the buyers of the construction equipment). The payments from the obligors include principal repayment and interest. However, most securitization transactions involve a more complex structure than simply one bond class. For example, there can be rules for distribution of principal and interest other than on a pro rata basis to different bond classes. The creation of different bond classes allows the distribution of the collateral's risk among different types of investors: investors with different appetites for interest rate risk (i.e., price sensitivity to changes in interest rates) and credit risk.

An example of a more complicated transaction is one in which two bond classes are created, bond class A1 and bond class A2. The

par value for bond class A1 is \$120 million and for bond class A2 is \$200 million. The priority rule set forth in the structure can simply specify that bond class A1 receives all the principal generated from the collateral until all the entire \$120 million of bond class A1 is paid off and then bond class A2 begins to receive principal. Bond class A1 is then a shorter-term bond than bond class A2. This type of tranching is used to create securities with different exposures to interest rate risk.

Also, as will be explained in later chapters, in most securitizations there is more than one bond class and the various bond classes differ as to how they share any losses resulting from the obligor defaults. For example, suppose FACET issued \$290 million par value of bond class A, the senior bond class, and \$30 million par value of bond class B, a subordinated bond class. As long as there are no defaults by obligors that exceed \$30 million, then bond class A receives full repayment of its \$290 million.

SECURITIES ISSUED IN A SECURITIZATION

The term used to describe the securities issued by the SPV in a securitization are referred to as *asset-backed notes*, *asset-backed bonds*, or *asset-backed obligations*. When the security is short-term commercial paper, it is referred to as *asset-backed commercial paper* (or ABCP). As will be explained when we discuss the different types of securitization structures in later chapters, asset-backed securities can have different credit exposure and based on the credit priority, securities are described as *senior notes* and *junior notes* (subordinated notes).

In the prospectus for a securitization, the securities are actually referred to as *certificates*: pass-through certificates or pay-through certificates. The distinction between these two types of certificates is the nature of the claim that the certificate holder has on the cash flow generated by the asset pool. If the investor has a direct claim on all of the cash flow and the certificate holder has a proportionate share of the collateral's cash flow, the term *pass-through certificate* (or *beneficial interest certificate*) is used. When there are rules that are used to allocate the collateral's cash flow among different bond classes, the asset-backed securities are referred to as *pay-through certificates*.

KEY POINTS OF THE CHAPTER

- *Securitization is a form of structured finance.*
- *The common theme to all types of structured finance transactions is that the transaction is structured to modify or redistribute the risk of the collateral among different classes of investors by the use of a structure.*
- *Securitization involves the pooling of assets/receivables and the issuance of securities by a special purpose vehicle.*
- *The end result of a securitization transaction is that a corporation can obtain proceeds by selling assets and not borrowing funds.*
- *The asset securitization process transforms a pool of assets into one or more securities referred to as asset-backed securities.*
- *A securitization differs from traditional forms of financing in that the cash flow generated by the asset pool can be employed to support one or more securities that may be of higher credit quality than the company's secured debt.*
- *Three advantages of securitization compared to nonrecourse and modified recourse factoring are that (1) there is a typically lower funding cost when a securitization is used; (2) receivables that factors will not purchase may be acceptable for a securitization; and (3) proceeds from the sale in a securitization are received immediately while the firm may or may not obtain a cash advance from the factor.*
- *Securitization is primarily concerned with monetizing financial assets in such a way that the risks of the collateral (credit risk, interest rate risk, prepayment risk, and liquidity risk) are tied primarily to their repayment rather than to the performance of a particular project or entity.*
- *The assets used in a securitization can be either existing assets/existing receivables in which case the transaction is referred to as an existing asset securitization or assets/receivables to arise in the future in which case the transaction is referred to as a future flow transaction.*

- *The parties to a securitization are the originator, the servicer, and the investors in the asset-backed securities.*
- *The originator (also referred to as the originator/seller) makes the loans based on its underwriting standards and sells a pool of loans it originates to an SPV, the sale being required to be a true sale for legal purposes.*
- *The SPV purchases the pool of loans from the proceeds obtained from the sale of the asset-backed securities.*
- *The capital structure of the SPV can involve just one bond class or several bond classes with different priorities on the cash flow from the collateral.*
- *While the securities issued in a securitization are commonly referred to as asset-backed securities, in the prospectus they are referred to by various names.*