Asset-Backed Securities (ABS)

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Oct 30, 2017

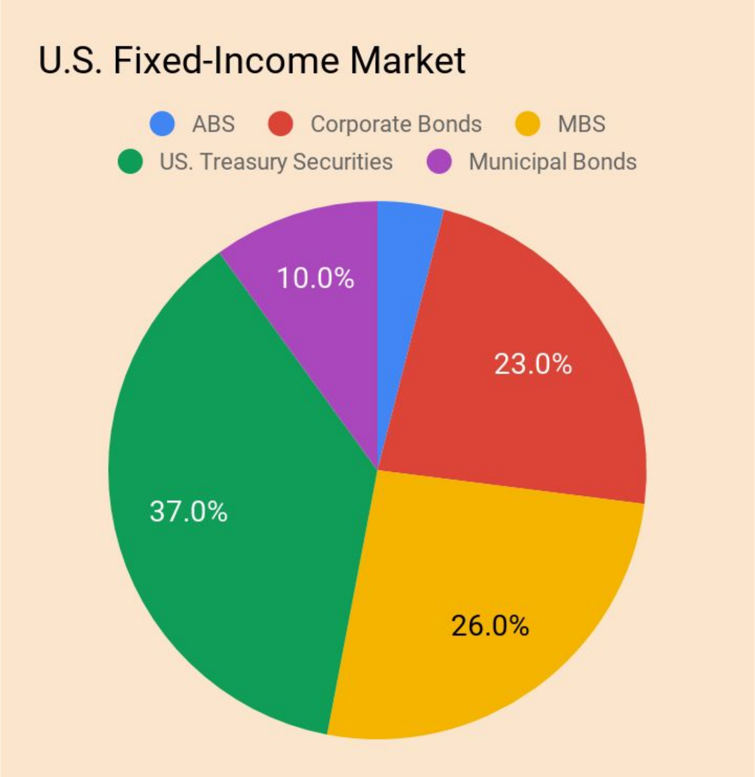
Agenda

- Structure of ABS
- Creation of ABS
- Investing in ABS
- Dynamic debt run

Structure of ABS

Securitization

- Structured finance is a technique whereby certain assets with predictable cash flows are isolated to mitigate risks and used to secure credit
- Securitization of assets is the process of turning economic assets into marketable securities
- Assets backing a securitization must include "contractual obligations to pay"
- The investors make their returns from the income derived directly or indirectly from the cash flows of the securitized underlying asset pool.
- "Off-balance sheet" source of funds



Asset-Backed Securities

- Asset-backed securities, called ABS, are bonds or notes backed by financial assets. Typically these assets consist of receivables other than mortgage loans
  - Exclude Mortgage-Backed Securities
- Began in the mid-1980s with securitizations of auto loans and credit card receivables
- More than 90% outstanding issues are triple-A rated
- Creditworthiness derives from sources other than the paying ability of the originator of the underlying assets
  - Originators are issuers of ABS, but in fact are sponsors
- Created by securitization, and underlying assets have predictable cash flows
  - Financial institutions originate loans and turn loans into marketable securities (securitization)
- Financial institutions sell pools of loans to a Special-Purpose Vehicle (SPV)
  - Sole function of SPV is to buy such asset in order to securitize them

Structure of ABS

- Fully amortizing
  - Securities that return principal to investors throughout the life of the security
  - Prepayment* risk
- Controlled amortization
  - Revolving debt
  - Early-amortization risk
- Soft/Hard bullet
  - Revolving debt, return principal in a single payment
- Floaters
  - Floating interest rate
- Sequential Pay

*Prepayment risk: investors in ABS are worried about receiving all or part of the principal of the underlying debt before it is due

Types of Assets That Back Securities

Vast majority of ABS are collateralized by loans. These four asset types account for over 80% of total public non-mortgage ABS issuance to date

- Home-equity loans: home-equity loans (HELs) and home-equity lines of credit (HELOCs). Both types of loans enable homeowners to borrow against the non-mortgaged value of their homes
- Auto loans: most auto ABS are supported by prime loans, those made to borrowers with very strong credit histories
- Credit cards: holders of credit cards may borrow funds, generally on an unsecured basis up to an assigned limit, and pay the principal and interest as they wish, as long as they make a small required minimum payment
- Student loans: student borrowers have relatively high default rate, but this is largely neutralized by government guarantee programs

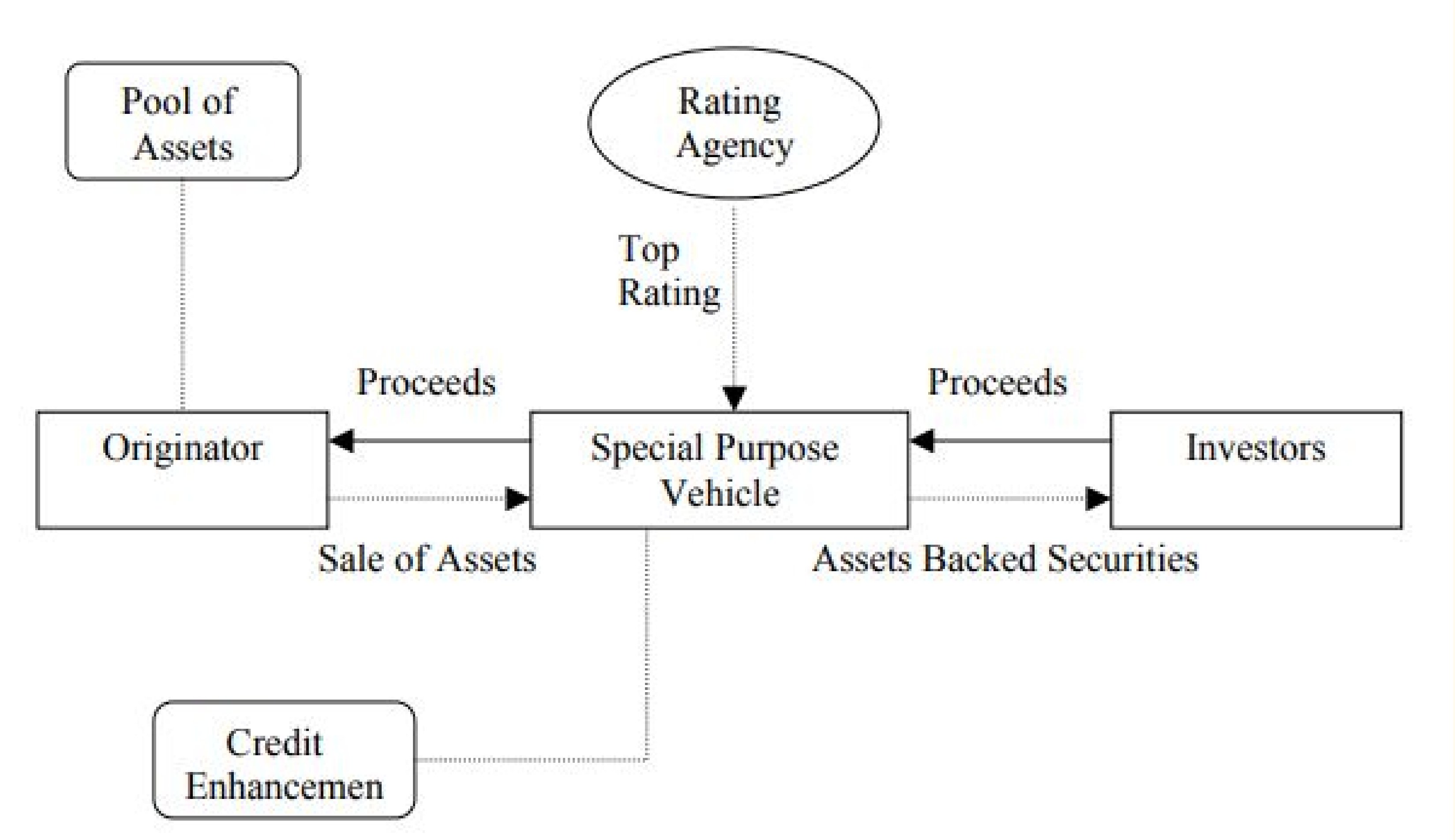
Creation of ABS

Special-Purpose Vehicle (SPV)

1	2	3
Companies* use securitization as a borrowing instrument by creating another corporation or legal entity known as Special Purpose Vehicle (SPV) that is a subsidiary to the originating company.	The SPV purchases a pool of diversified, cash flow generating assets, such as commercial mortgages, franchise royalties, or bank loans. The SPV finances this purchase by selling debt and equity interests in the pool, which are collateralized by the underlying assets. By transferring risk assets to the SPV in return for cash, this improves the credit profile of the originator.	The cash flows generated by the assets are used to service interest and repay principal to debt investors, with equity investors receiving any residual cash flows.

* The SPV can be a subsidiary of an investment bank that buys the asset.

SPV in Work


Pool of Assets
Rating Agency
Top Rating
Proceeds
Proceeds
Originator
Special Purpose Vehicle
Investors
Sale of Assets
Assets Backed Securities
Credit Enhancemen

Credit Quality and Credit Enhancement

<u>Credit Ratings</u>

- ABS are generally rated by one or more of the following three rating agencies
    - Agencies determine the amount of credit enhancement required for a credit quality comparable to that of a same-rated corporate bond
    - Based on collateral and stress testing
- Vast majority of ABS are rated triple-A or double-A

<u>SPV and the Rating</u>

- Bankruptcy remoteness: sponsor has no ownership rights to the loans when it sells the asset to the SPV
    - Enabled ABS to receive their own credit rating
- Credit enhancement occurs when a security's credit quality is raised above that of the sponsor's unsecured debt or that of the underlying asset pool
    - Internal/external credit support

Investing in ABS

Investing in ABS

Benefits	Risks
• Attractive yields • High credit quality • Diversity and investment diversification • Reduced event risk	• Interest rate risk • Early-amortization risk • Default risk

Interest Rates and Yields on ABS

- Yields on ABS depends on the purchase price in relation to the interest rate, and the length of time the principal is outstanding
    - Prepayment assumptions
- Investors demand a higher interest rate of ABS compared to U.S. Treasury securities in order to compensate for prepayment risk and uncertainty in average life of an ABS
    - Average life: time-weighted average maturity of a stream of principal cash flows, dependent on prepayment assumptions

2007 Asset-Backed Commercial Paper Crisis

- In a debt run, creditors refuse to roll over their debt if they fear that other creditors will not roll over
- In the case of ABCP, roughly 40% of conduits had stopped rolling over maturing debt by the end of 2007
- Outstanding ABCP fell by $400 billion (one-third of the existing amount) during the second half of 2007
- *Dynamic debt runs and financial fragility: Evidence from the 2007 ABCP crisis* (Schroth, Suarez, and Taylor)
- *Dynamic Debt Runs* (He and Xiong)

References

Guggenheim Partners. 2013. *The ABCs of ABS*: Identifying Opportunities in Asset-Backed Securities.

Guggenheim Partners. 2017. *The ABCs of ABS*.

Viva Africa Consulting LLP. November 29, 2016. *The Basics of Asset Backed Securities*.

What are Asset-Backed Securities? www.investinginbonds.com/learnmore

Schroth, E., Suarez, G. A., & Taylor, L. A. (2014). *Dynamic debt runs and financial fragility: Evidence from the 2007 ABCP crisis*. *Journal of Financial Economics*, 112(2), 164-189.

He, Z., & Xiong, W. (2009). *Dynamic Debt Runs*.

Securitization Case Study: Domino Pizza

Background

- Domino's Pizza accessed the securitization market to borrow over $3 billion. As part of the transaction, Domino's established a bankruptcy remote SPV into which it sold substantially all of its revenue generating assets. The SPV financed the acquisition of these assets by issuing ABS
- The SPV pledged the assets it acquired from Domino's as collateral to secure its repayment obligations to ABS noteholders
- The stability and predictability of the royalty payment streams, combined with the value of Domino's intellectual property, allowed Domino's to access the structured credit markets and issue investment-grade debt.

Five steps to achieve financing goals

Step 1	Step 2	Step 3	Step 4	Step 5
Domino's created an SPV, called Domino's Pizza Master Issuer LLC, into which it sold its revenue-generating assets.	The SPV issued ABS notes to finance the purchase of the acquired assets. The SPV pledges its assets as collateral for the benefits of noteholders to secure its repayment obligations.	Domino's entered into a management agreement with the SPV	Domino's retains a substantial equity interest in the SPV and is permitted to collect cash flows in excess of required ABS noteholder payments.	In the event Domino's were to default on a non-ABS obligation, any such creditor would be subordinate to all ABS investors in right, title, and claim to the SPV's assets.

ABS Structure

Information from primer by Guggenheim Partners