Securitization

Fall 2013

Stephen Sapp

What is Securitization?

- Grouping together a set of assets which generate cashflows, selling this portfolio to another entity to manage (i.e., collect the cashflows), this entity repackages the group of assets into a single asset and sells portions of this new asset to investors.

- Cashflows:

Asset(s) → Servicer → SPV → Investors

  - What happened to the originator?

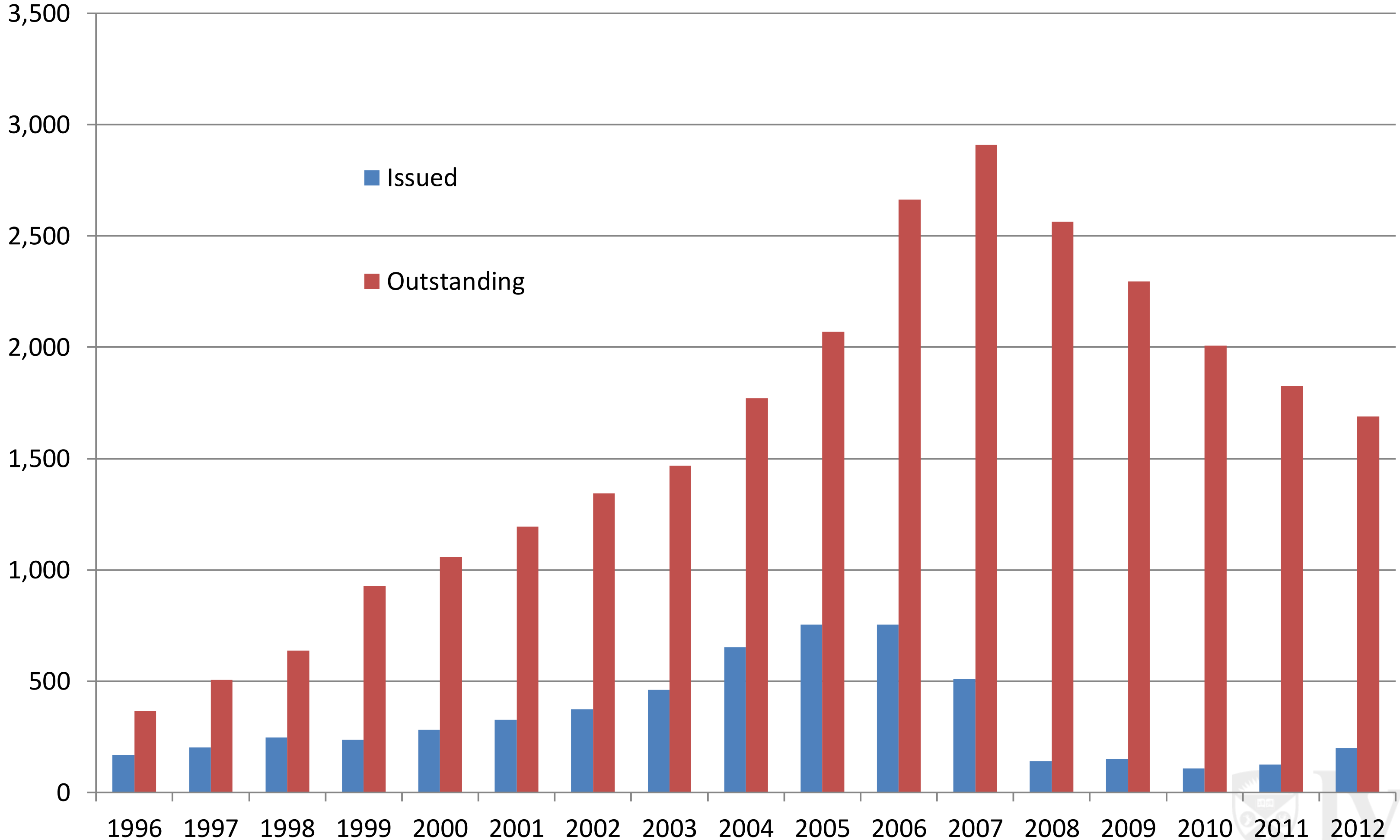
Process for Securitization

- A financial institution originates a series of mortgages, for example, with various customers. These mortgages have different risk characteristics: locations, sizes, maturities, face values, etc.
- The mortgages are bundled together and held in a trust outside of the financial institution (a "bankruptcy remote" Special Purpose Vehicle). The trust hires a Servicer to manage the payments on the mortgages and any other required payments.
- The cashflows from the bundle of mortgages net of service costs are sold to investors as a new financial instrument (i.e., a type of bond). This risk of the package is less than that of the individual mortgages (Why? This is a crucial question!)

History of Securitized Assets

- At the end of World War II banks in the US were struggling to find enough money for mortgages based solely on deposits.
- In 1938 the U.S. federal government created Fannie Mae to sell repackaged mortgages.
  - Banks could sell Fannie Mae their mortgages to obtain funds to lend again and Fannie Mae would repackage and sell the mortgages to investors. In 1968 it was split into Fannie Mae and Ginnie Mae (the government formally guaranteed Ginnie Mae's MBSs). At about the same time Freddie Mac was founded to complement Fannie Mae.
- In the 1980s private institutions were able to repackage mortgages (Bank of America in 1985 was the first).
- In the late 1980s, private institutions started to repackage car loans, credit card payments and other types of consumer loans.
- In the 1990s, private institutions started to repackage insurance payments and by the 2000s it was one of the largest debt markets in the U.S.

How Popular is Securitization? (Billions of USD)



Source: SIFMA

What can be Securitized?

- Any asset with an associated cashflow.

- The assets must be able to be sold by the originator to a SPV or conduit which is “bankruptcy remote” so that the originator and the end investor do not face liability from the assets.

- The value of the asset backed security (ABS) depends on the risk characteristics of the expected cashflows.
  - Government bond cashflows are very reliable.
  - Mortgage-backed cashflows are subject to prepayment and default risk, so they are riskier (i.e., higher interest payments).

Why Securitize?

- For the institution originating the asset:
  - A way to raise capital to continue operations by selling assets. In some cases, the assets being sold have less risk than the firm itself (i.e., leases to IBM from Mom and Pop Inc.)
  - Removes assets from your balance sheet and replaces them with cash.
  - Origination fees and the spread between the rate on the original loan (e.g., mortgage rate) and the rate on the issued bond (e.g., coupon rate).

Why Would Investors Buy ABS?

- Higher yields for the same or lower risk
  - Diversification of risks by grouping mortgages together decreases the risk of pre-payment and repayment. This decreases the risk while allowing higher cashflows as mortgages charge higher interest rates than corporate bonds.

- Liquidity
  - As the market was growing, the assets were very liquid allowing investors to obtain higher returns for a desired maturity.

What Are The Risks?

- Interest payment, pre-payment and default risk
- These depend on the “tranches”
  - More senior tranches get repaid first (cashflow “waterfall”) after they are paid lowest tranches called “equity” or sometimes had been referred to as “toxic waste”.
  - ➢ Need to understand the risks of the tranche you are buying.
- Since the bundles generally contain assets with different maturities and risks, there are concerns about their correlations and thus diversification value.
  - Quantified using mathematical models, but …
  - Credit enhancement. The use of derivatives, over-collateralization and letters of credit from originators.