Corporate Loans: Challenges in modeling heterogeneity

Brian Gordon
Federal Reserve Bank of Chicago
Stress Testing Modeling Symposium

What are corporate loans?

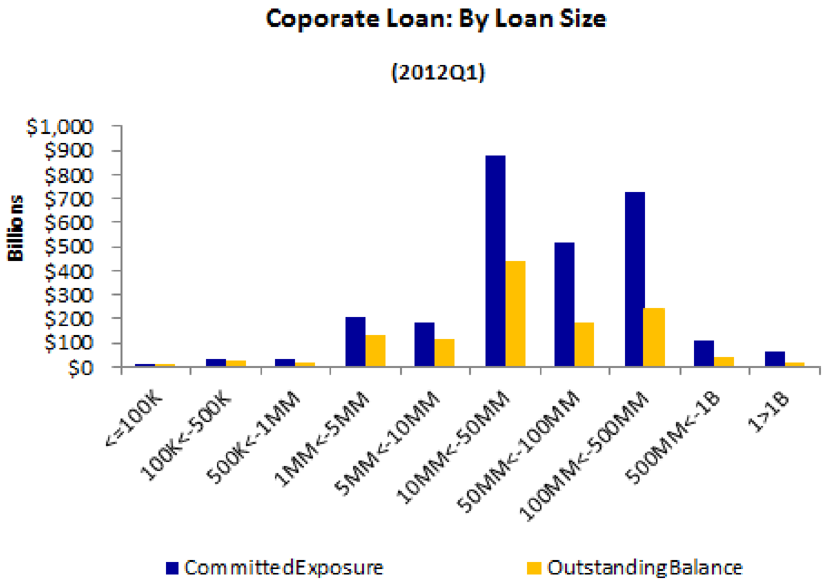
- Commercial and Industrial Loans
  - Only loans over $1 million are reported on the Y-14Q
  - Graded, using the bank's commercial rating system in its normal BAU
  - Excludes securities held for investment and trading assets
  - Excludes small business loans and some corporate cards
- Other Commercial Loans
  - Loans to US and foreign banks
  - Loans to finance agriculture and farmland
  - Commercial capital leases, but not operating leases
  - Loans to purchase securities that are not in the trading book
  - Loans to governments and official institutions
  - All Other Commercial Loans

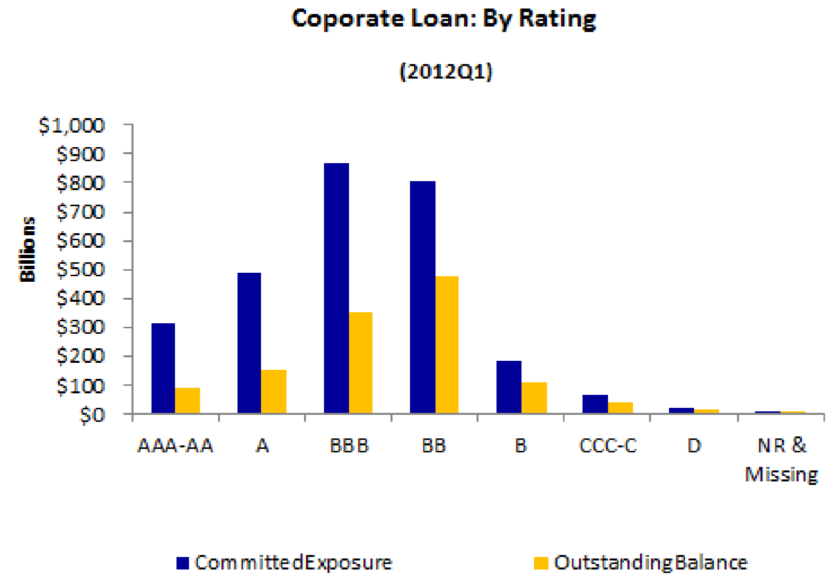
What are C&I loans?

- Large Corporate Loans
  - Includes syndicated credits, bought and sold
  - Includes loans valued using the Fair Value Option
  - Includes some investment banking / capital markets activities
- Middle Market Loans
  - The "meat and potatoes" of large bank C&I portfolios
  - Includes a wide range of lines of business
- International Loans
  - Large global customers
  - Trade finance
  - Foreign banks

Commercial & Industrial Loans			68%
	Large Corporate Loans	Domestic	45%
	Large Corporate Loans	International	16%
	Corporate Cards	Domestic	4%
	Corporate Cards	International	0%
	Small Business Loans	Domestic	3%
	Small Business Loans	International	1%
Other Loans			32%

Corporate Loan Facts





Note that the ratings groupings above do not represent actual ratings from any ratings agency and instead are groupings of loans by similar characteristics labeled using a commonly employed nomenclature.

- 44% are secured
- 75% have floating interest rates
- 2.92% average coupon as of 3/31/12
- Average utilization of domestic loans = 37%, international = 51%

What are Middle Market loans?

- The Fed has no standard definition of middle market loans. We use whatever the bank's BAU definition is.
- Includes: term loans, revolving loans, standby letters of credit, trade LCs, equipment leases, asset based loans, etc.
- Common lines of business include:
  - Asset based loans and cash flow based loans
  - Floorplan / dealer finance
  - Private wealth management
  - Owner occupied CRE
  - Regionally based lending
  - Treasury services / asset management
  - Other specialized "niche" lines of business

Regional Business Banking	24%
Asset Based Lending	5%
Equipment Leasing	2%
Floorplan lending	4%
Other Specialty Businesses	10%

Some Other loans look like C&I loans

- Most banks manage their customers by line of business and not by Y-9C category. Most bankers have only a vague notion of what Y-9C category a loan is in.
  - Since banks use LOBs for categorization, so do we from a risk perspective.
  - But we use Y-9C categories for balancing.
- Other loans that look like C&I loans
  - Loans to banks (US and foreign)
  - Equipment leases
  - Municipal loans
- Other loan categories that do not look like C&I loans
  - Loans to purchase securities
  - Farmland and agriculture
  - Unplanned overdrafts

International Loans

- Largest exposures concentrated in a relatively small number of banks.
  - A representative sample of large regional banks shows that international loans are only about 3.5% of their portfolio.
- Mostly global Fortune 1000-type companies
  - Major banks follow their relationships around the world.
- Lots of term exposures to foreign banks
- Lots of trade finance
- All other factors held equal, these loans have an additional element of risk because of currency issues and workout processes subject to foreign jurisdictions.

Loans to Financial Institutions

- Includes US and foreign banks and non-bank finance companies
- Many of these facilities are short term (i.e. 90 days), secured and fairly highly rated.
- Most banks, in their CCAR submissions treat these loans as a very low loss category.
  - Even after controlling for rating and security.
  - But few have a separate estimation methodology.
- Historically, these loss rates have been quite volatile, raising the question of whether they are capturing a downturn in their estimated losses.

What’s in the “all other” category?

- A grab bag of stuff that does not fit anywhere else.
  - Loans to special purposes entities
    - Warehouse lines
    - Liquidity facilities
    - ABCP seller specific financing vehicles
  - Some loans to municipalities
    - Includes credit enhancements for municipal issuers
  - Some of these loans look like they might meet the definition of another loan classification. Banks should check to see if these are being accurately categorized.