# Discussion of “Bank ratings: What determines their quality”

**by**

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*These slides and associated remarks represent only the author’s current opinions, not those of the Board of Governors or the Federal Reserve System.

# Summary of the paper

- It is a very nice, well written, and thorough paper.
- The authors test the accuracy of bank (senior unsecured debt) ratings for banks in Europe and the United States over the last two decades.
- They compile ratings information from the three major rating agencies (Fitch, Moody’s, and S&P) and compare their ordinal assessment of creditworthiness to information embedded in stock prices and reflected in EDFs.

# Main findings

- Ordinal rating quality is countercyclical (better during crises).
- The banking model and bank size are related to the "accuracy" of the rating.
- A bank's securitization business with a rating agency is correlated with the measure of rating "accuracy".
- A bank with multiple bank ratings has less favorable ratings relative to their EDF ranking.

# Comments about the methodology

- Is it valid to compare ratings on senior unsecured debt to EDFs?
    - Ratings are through-the-cycle opinions on credit risk while EDFs are point-in-time signals of such risk.

# Are market signals better than credit ratings?

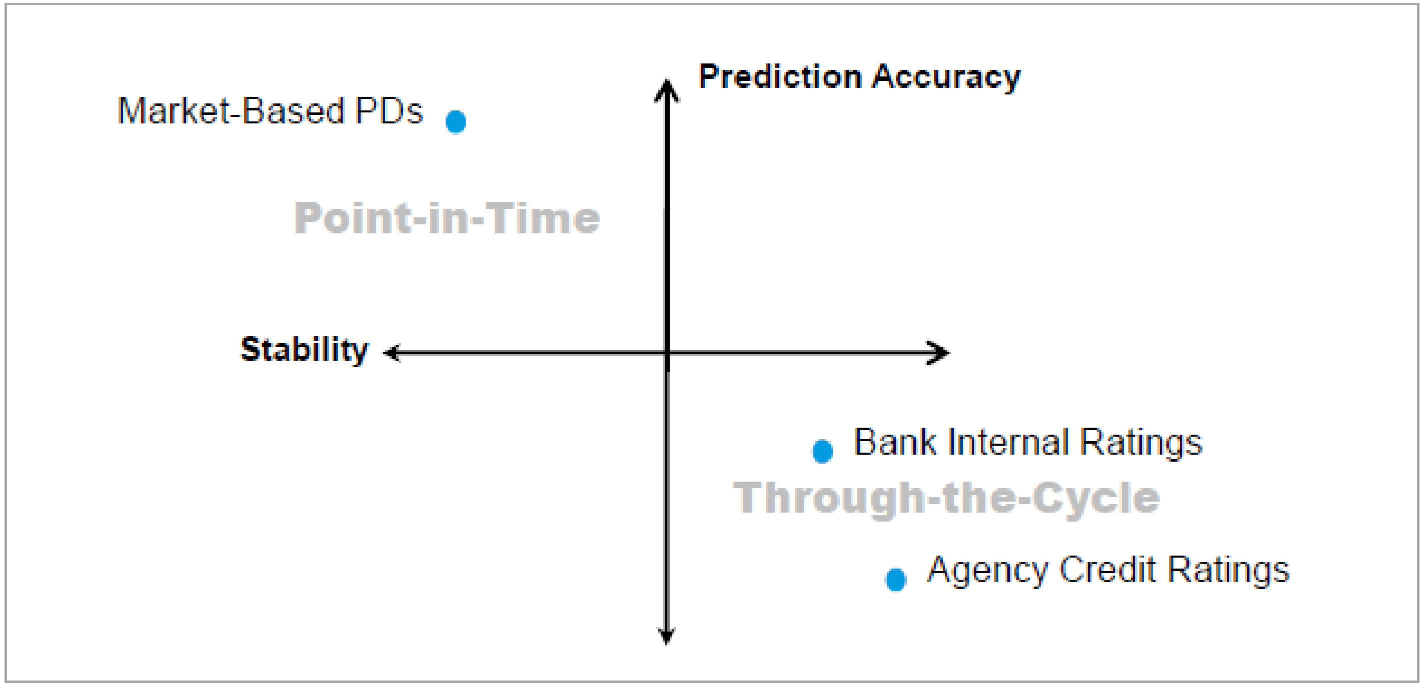
**CRAs: “Market signals provide information that is different from their credit opinions”**

13. **Does Moody's Analytics' publication of market implied ratings indicate an initiative to move Moody's ratings more in-line with market ratings over time?**

    The initiative is to provide a freer flow of information, transparency, and utility to the market, not to force consensus between Moody's rating opinions and market-based measures. Market-based measures are inherently volatile and produce many false positives and false negatives. Moody's remains committed to producing opinions that look beyond each day's news to provide much more stable, although equally predictive, measures of long-term credit risk.

Moody’s Analytics, Market Implied Ratings FAQ, June 2010.

# Are market signals better than credit ratings?



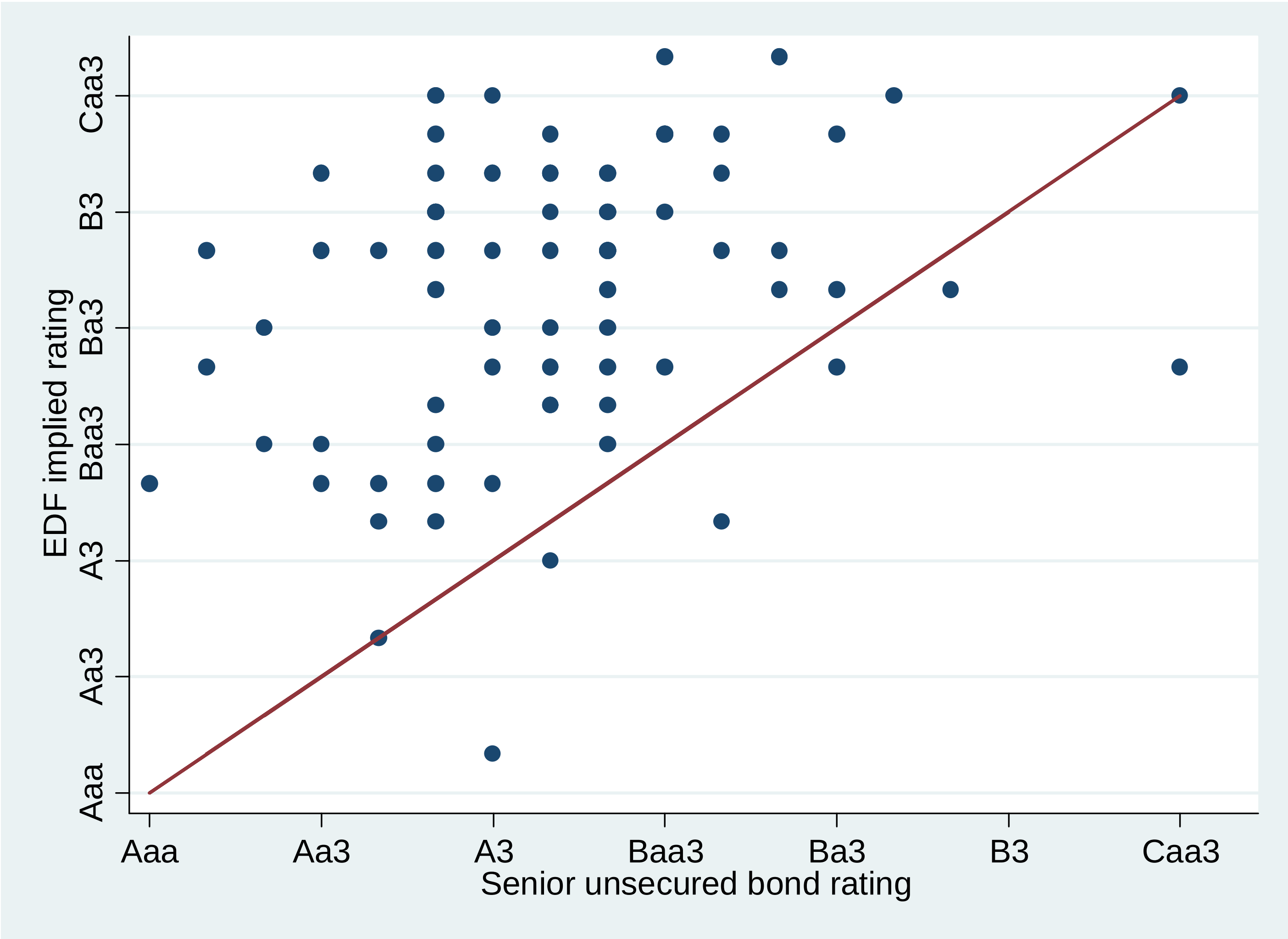

Moody's Analytics, An Introduction to Through-the-Cycle Public Firm EDF Credit Measures, September 2011.

Gropp, Vesala, and Vulpes (2006): Distance-to-default is a good predictor of bank fragility (its predictive power is lower when implicit government guarantees are more important).

# Comments about the methodology

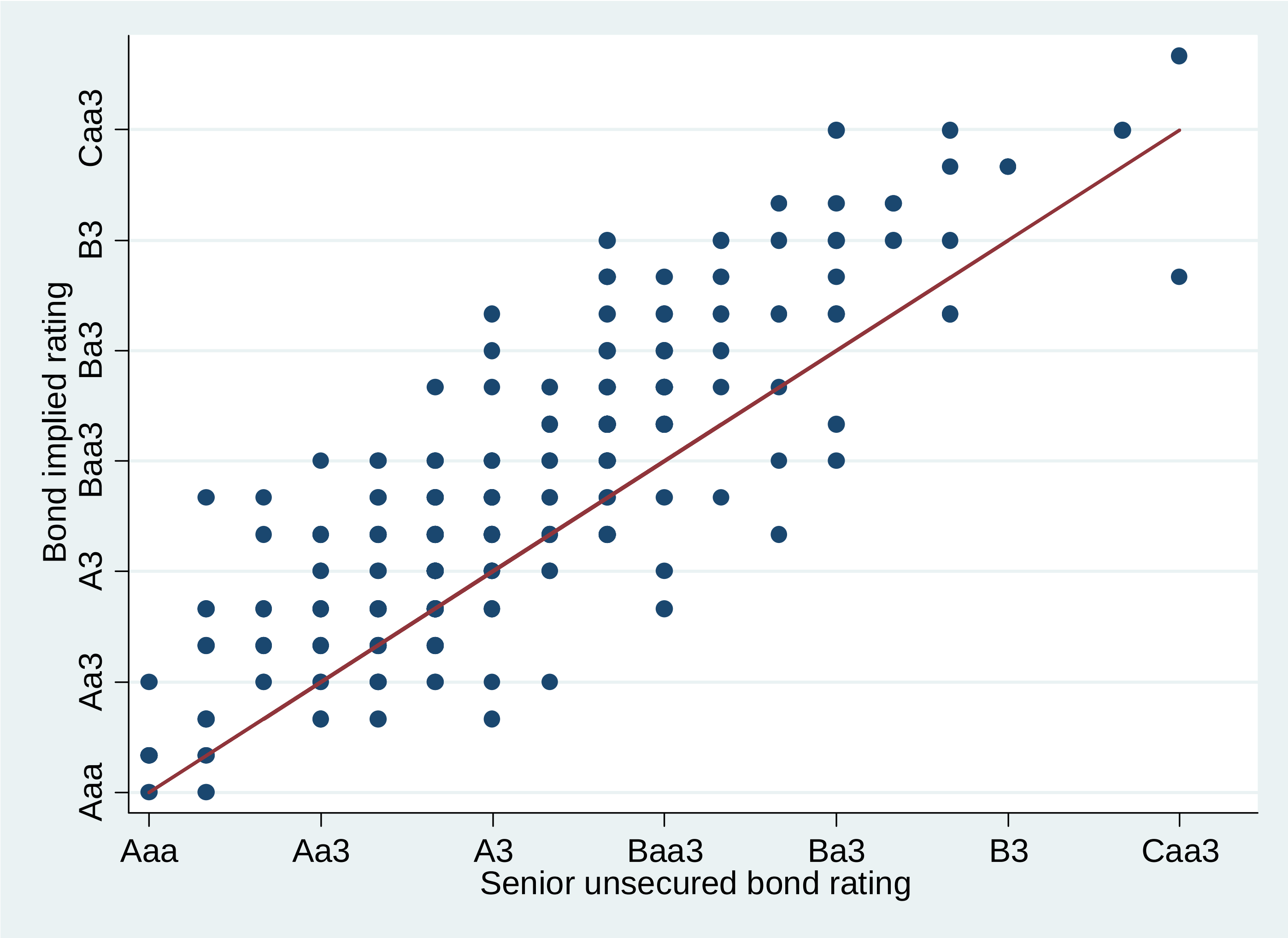
- Is it valid to compare ratings on senior unsecured debt to EDFs?
  - Ratings are through-the-cycle opinions on credit risk while EDFs are point-in-time signals of such risk.
  - Probabilities of default on senior unsecured debt behave differently from other components of banks' capital structure.

# Senior unsecured bond ratings vs. EDF implied ratings



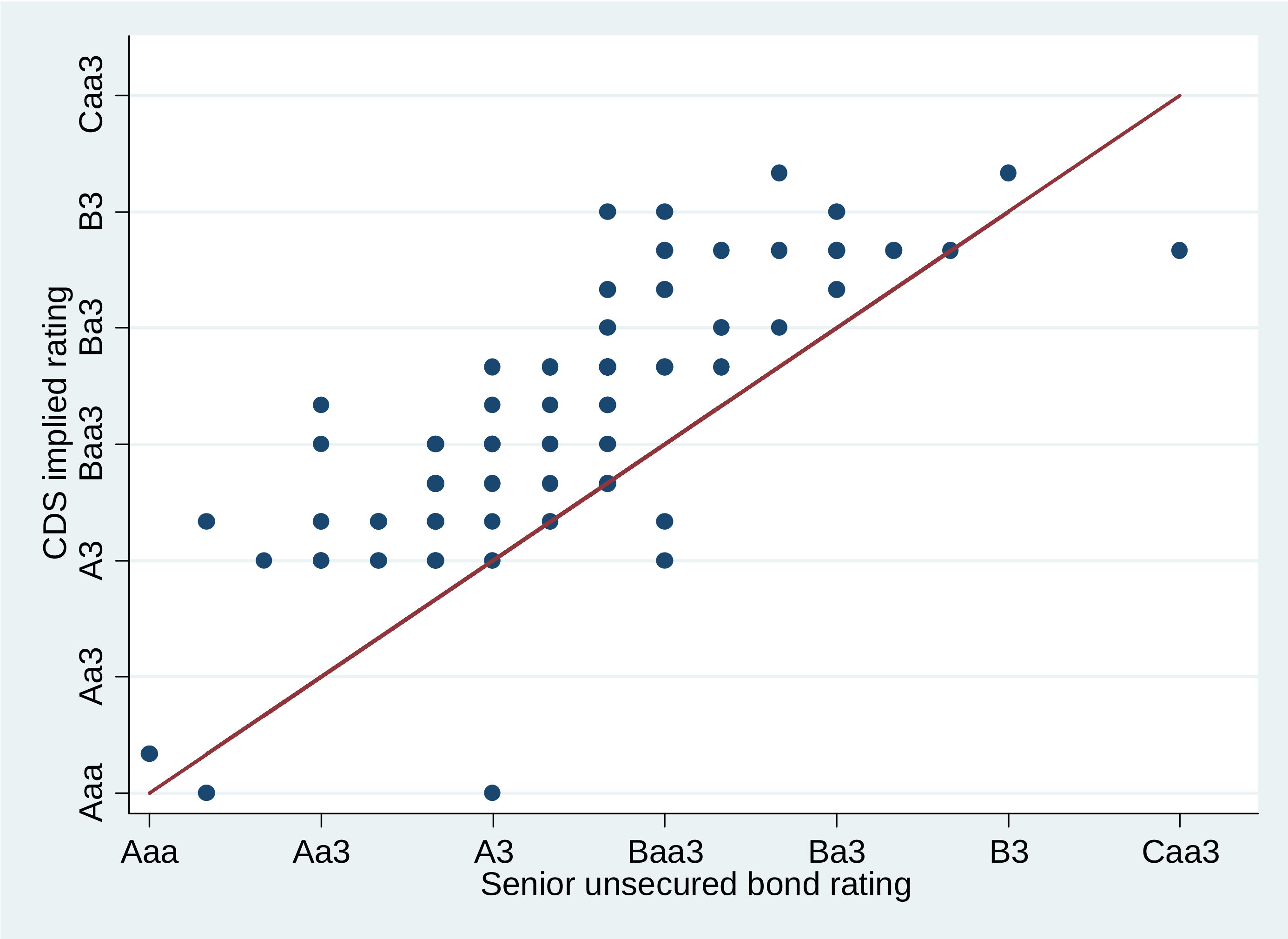

Note: Data from Moody's. Sample is composed of Canadian, European, and U.S. banks. Date of ratings: December 13, 2012.

# Senior unsecured bond ratings vs. bond implied ratings



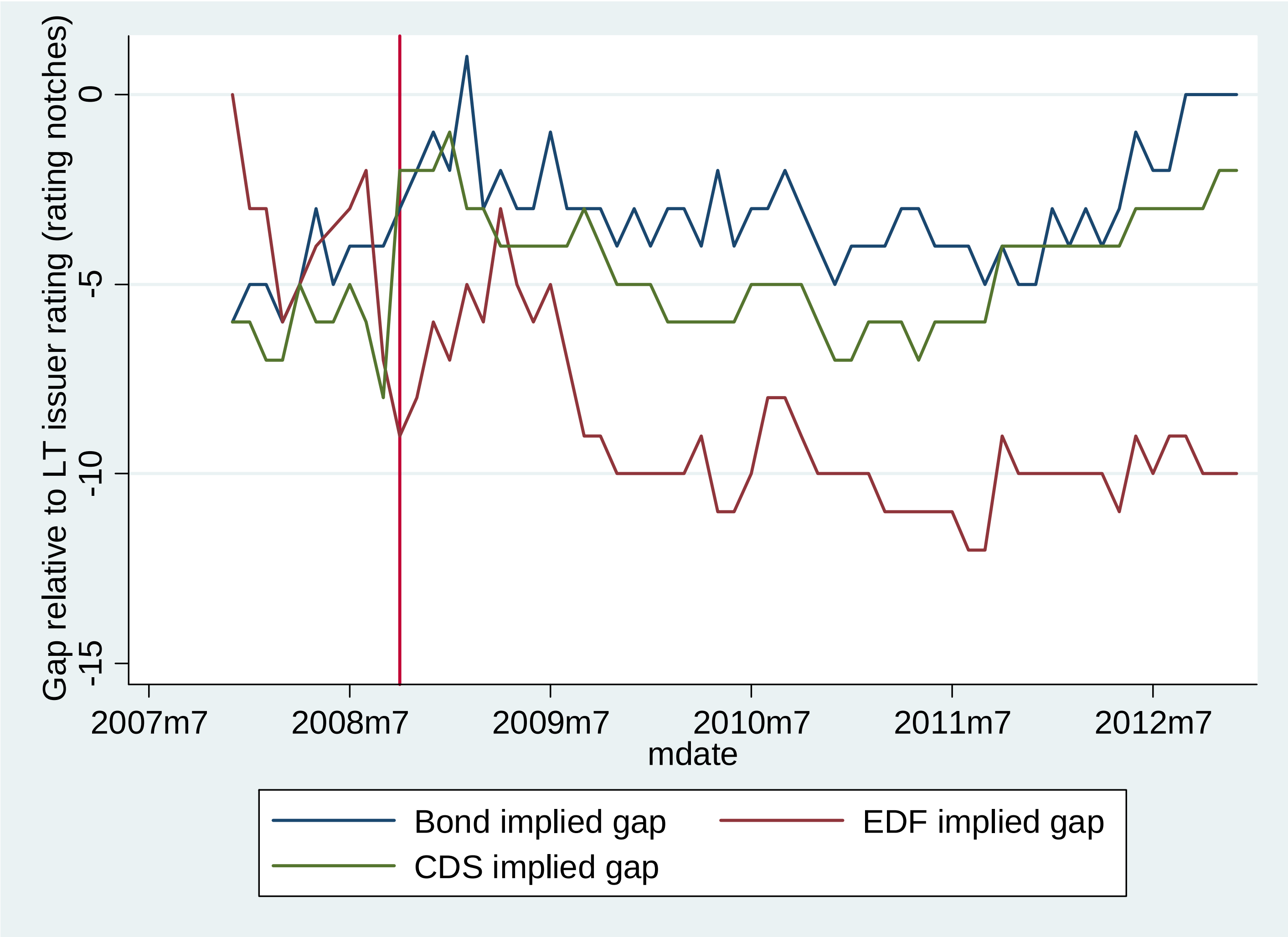

Note: Data from Moody's. Sample is composed of Canadian, European, and U.S. banks. Date of ratings: December 13, 2012.

## Senior unsecured bond ratings vs. CDS implied ratings




Note: Data from Moody's. Sample is composed of Canadian, European, and U.S. banks. Date of ratings: December 13, 2012.

# Ratings gap for Royal Bank of Scotland Group plc




Note: Data from Moody’s.

# Comments about the methodology

- Is it valid to compare ratings on senior unsecured debt to EDFs?
  - Ratings are through-the-cycle opinions on credit risk while EDFs are point-in-time signals of such risk.
  - Probabilities of default on senior unsecured debt behave differently from other components on banks' capital structure. **(Rank correlations are much larger for bond and CDS implied ratings).**
  - Nitpick: What are the years with available EDFs (didn't KMV change its model in the mid-2000s?)
- Do bank ratings suffer the same problems as ratings on structured financial products?

# Bank ratings, corporate ratings, ratings on structured financial products

Structured financial products ← **Banks ???** Corporate bonds

Worse ↔ Better

Opp, Opp, and Harris (2012) – Lower cost of information production → Increased rating accuracy

# Who has information about banks and structured financial products?

STRUCTURED FINANCIAL PRODUCTS

1. Issuers
2. Rating agencies
3. Investors

BANKS

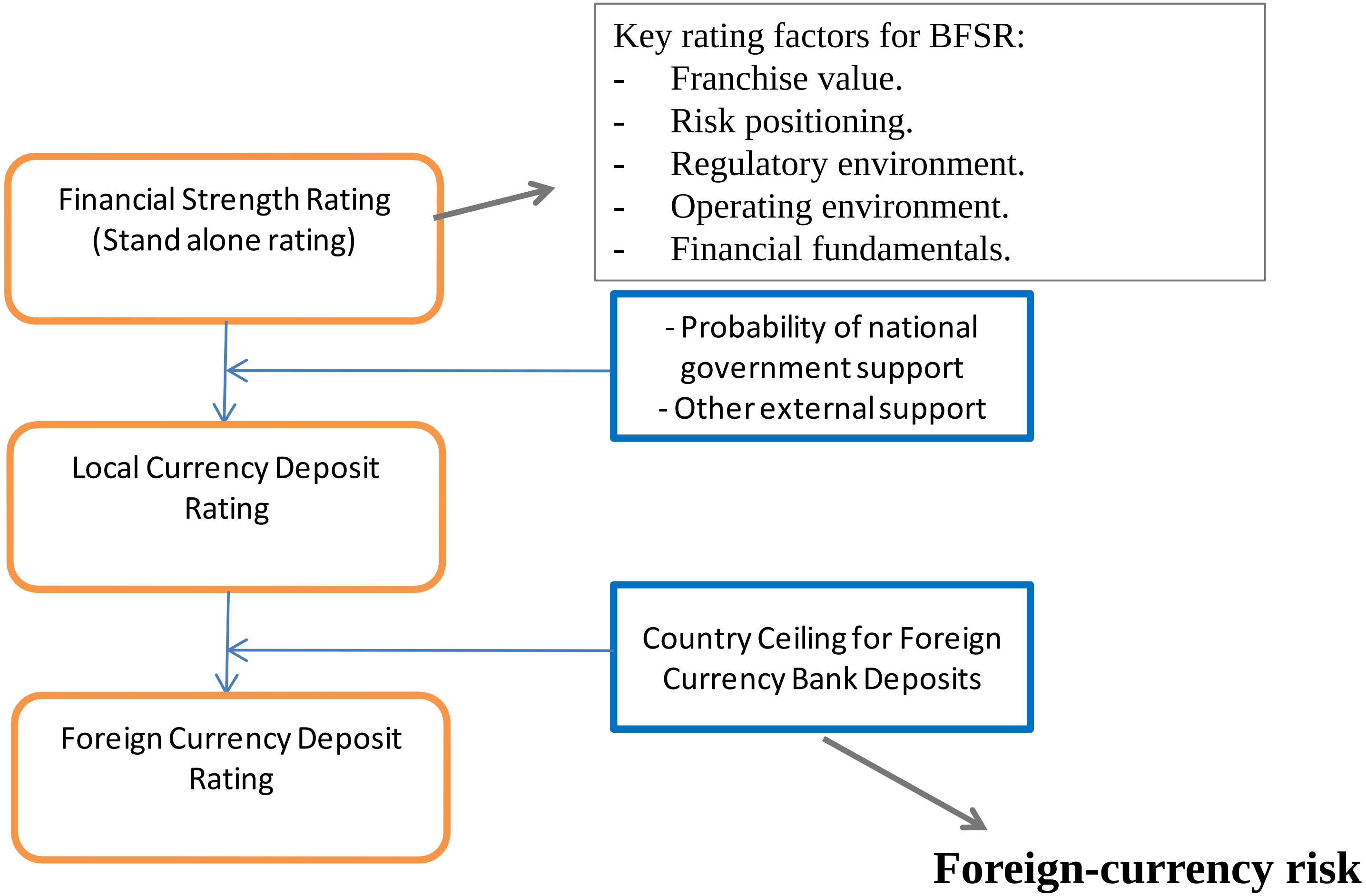
1. Insiders
2. Bank supervisors and rating agencies
3. Equity analysts, fixed income analysts, and other informed market participants
4. Other market participants

Efing (2012)
Harris, Opp, and Opp (2012)

# Comments about the results

- Bank size and “accuracy” of bank ratings.

# Moody’s bank rating methodology




Note: From Brandao-Marques, Correa, and Sapriza (2012)

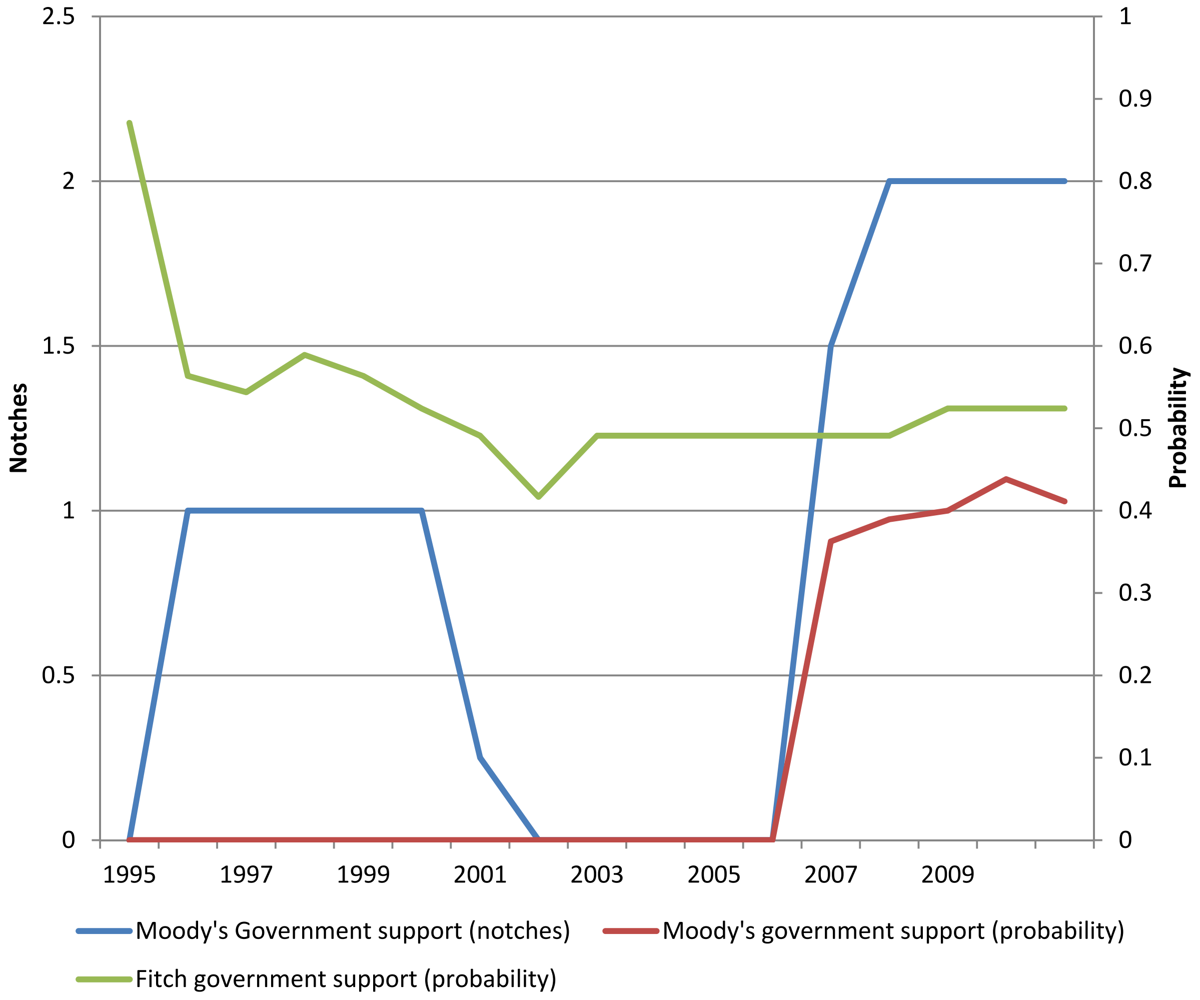
# Bank size and ratings (implicit government support)

| | Size | Liquidity | Moody's government support (notches) | Moody's government support (probability) | Fitch government support (probability) |
|---|---|---|---|---|---|
| **Panel A: 2003-2004** | | | | | |
| Size | 1.000 | | | | |
| Liquidity | -0.034 | 1.000 | | | |
| Moody's government support (notches) | 0.153*** | -0.003 | 1.000 | | |
| Moody's government support (probability) | 0.030 | 0.007 | 0.843*** | 1.000 | |
| Fitch government support (probability) | 0.289*** | 0.030 | 0.439*** | 0.270*** | 1.000 |
| **Panel B: 2009-2010** | | | | | |
| Size | 1.000 | | | | |
| Liquidity | -0.019 | 1.000 | | | |
| Moody's government support (notches) | 0.306*** | 0.023 | 1.000 | | |
| Moody's government support (probability) | 0.413*** | 0.097* | 0.714*** | 1.000 | |
| Fitch government support (probability) | 0.184** | 0.027 | 0.521*** | 0.371*** | 1.000 |

*** p<0.01, ** p<0.05, * p<0.1

Note: From Brandao-Marques, Correa, and Sapriza (2012)

# Bank size and ratings (implicit government support)

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# Comments about the results

- Bank size and "accuracy" of bank ratings: Implicit government support.
    - **Suggestion: Use standalone ratings to construct the rankings of banks.**

- Banks' securitization business and bank rating "inflation": could this be capturing some correlation between the business model and volatility of EDFs (and stock prices)?

# Policy implications

- Should regulators use more market-based measures of credit risk in for determining regulatory capital?
- What is the interplay between regulation and “rating inflation”?

# THANK YOU