

# Discussion: Disclosure, Volatility and Transparency

by

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The views expressed are the views of the author and do not necessarily reflect those of the Board of Governors of the Federal Reserve System or its staff.

# This Paper is on an Important and Timely Topic!

- Banks could potentially **benefit** from greater transparency, but little is understood about the relationship between disclosure, transparency, funding costs and equity returns.
- Disclosure is different from **transparency**.
  - Enron disclosed a lot, but investors were left in the dark.
  - Too many disclosures can potentially add noise to observed equity returns that makes it difficult to assess the true financial condition of the bank.
- **Policy Relevance:**
  - Development of accounting standards;
  - Market discipline (Pillar 3 of Basel II).

# Overview

## ➤ The Research Question:

- Does more disclosure reduce the volatility of bank stock prices?

## ➤ Empirical Design:

- Collected data on 600 banks in 31 countries over 1993-2000.
- Constructed a (long-run) disclosure index over entire sample period for each bank based on 17 categories of disclosure.
- Used OLS to regress standard deviation of bank weekly stock returns over sample period on long-run disclosure index, country indicator, and a vector of bank-specific control variables (e.g., bank size, dividend ratio, leverage, beta, loan growth, ROA).

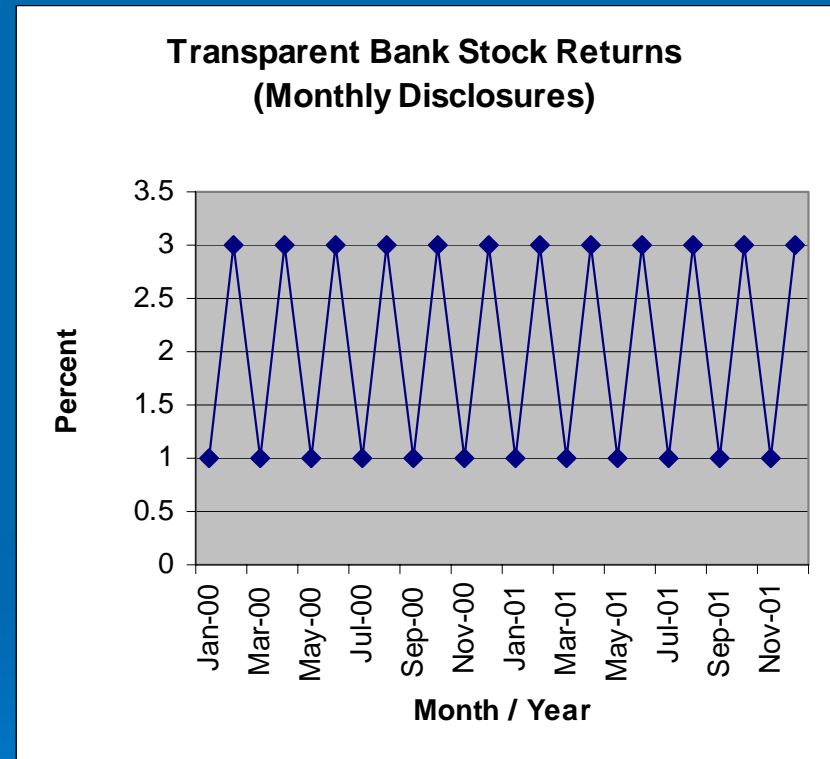
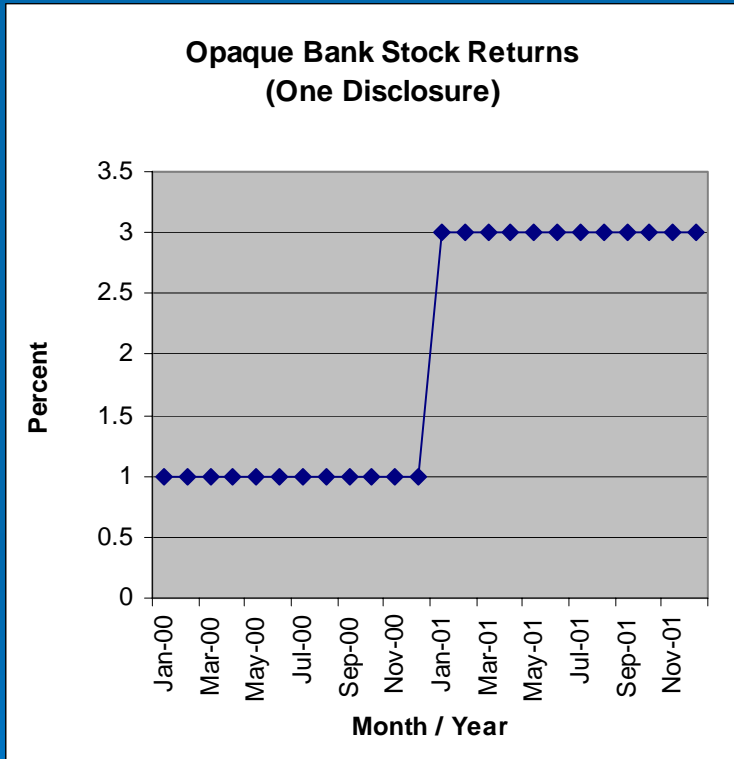
# Findings:

- Disclosure index has a statistically strong negative effect on stock volatility.
- Banks that disclose more information have lower volatility of stock returns than banks that disclose less information.

# Implications:

- Lower stock volatility may result in **lower cost of capital** and increase in the effectiveness of stock-based compensation.
- Lower stock volatility may **reduce noise** and thus the likelihood that the stock price gives the wrong signal on the relative performance of the bank. So, supervisory monitoring may potentially be enhanced.

# Does the standard deviation of stock market returns really capture the potential benefit from more disclosure or better transparency?



Note: Both of these banks have the same standard deviation of stock returns! A measure of the thickness of the tails for the distribution of a firm's stock returns would better capture the "newsworthy" effect of disclosures.

# Could the disclosure index better detect differences in **transparency** across banks or within countries?

- In the composite disclosure index, each of the 17 dimensions of accounting information were treated equally.
  - What do investors care about? Are bank stock returns more sensitive to some disclosures of accounting information (e.g., off-balance sheet items) than to others?
  - Are disclosures by product type more common than are disclosures by maturity? Should less common disclosures be more heavily weighted?
  - Are some disclosures complements? For example, is it frequently the case that banks that report loan loss reserves also report loan loss provisions? Should disclosures that are complements receive the same weight as other disclosures?
  - Do some disclosures add “noise,” rather than increase transparency?
- Should more frequently reported data receive higher weights?

# Why would there be variation in the disclosure index across banks and within countries?

## ➤ Why Would Banks Disclose More?

- To signal their (true) quality.
  - Grossman, Hart, and Milgrom
- To increase the accuracy of information that investors use to price the firm's securities. That is, to reduce investor uncertainty about the true condition of the firm.
  - Diamond

## ➤ Why would Banks Disclose Less?

- When proprietary information may be revealed to competitors.
- If penalties for misrepresentation are small, then high-quality firms will voluntarily disclose upwardly-biased information and low-quality firms will not disclose at all.
  - Korn and Schiller
- When there is a shortage of sophisticated investors
  - Fishman and Hagerty
- When there is too much discretion (i.e., a lack of standardization) over what is disclosed.
  - Fishman and Hagerty
- When firms have correlated returns, the benefits of disclosure for other firms (i.e., potential information externalities) may not be taken into account.
  - Admati and Pfleider

# Is the disclosure index really exogenous?

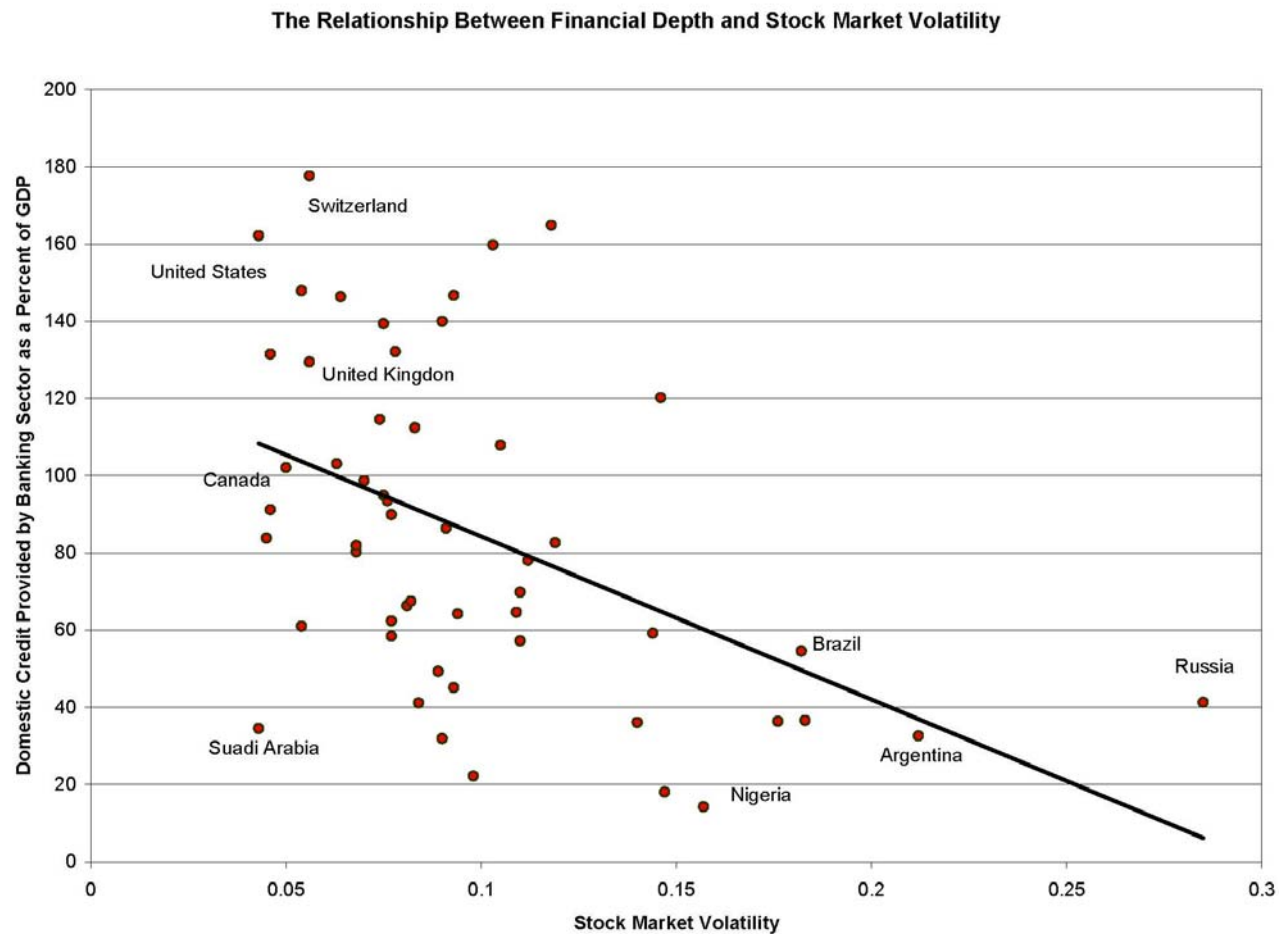
- Because there is variation in the disclosure index within each country (Table A3), this evidence suggests that there is typically a **voluntary** element to public disclosures.
  - If banks are choosing which disclosures to make, then disclosure would be **endogenous**.
    - Are such decisions correlated with bank opaqueness?
    - Are such decisions correlated with having an incentive to misrepresent the facts?



# Are bank disclosures more exogenous across countries?

- Some countries may require standardized disclosures on most of the items contained in the disclosure index.
  - For example, supervisory Call Reports are made publicly-available in the US. These standardized reports have balance sheet data on assets, liabilities, problem loans, and capital; income statement data; and, off-balance-sheet information. Call reports vary by bank size and by charter type.
- Other countries may focus only on providing disclosures that are based on generally accepted accounting principles that can be applied to both financial and non-financial firms.
- However, even if disclosure rules are more exogenous across countries, it would still be necessary to control for the factors that drive differences across countries.

Suppose, for example, that there is a significantly positive relationship between financial depth and stock market volatility:



Sources: (1) Du, J. and S. Wei, "Does Insider Trading Raise Market Volatility?", IMF Working Paper, March 2003, and (2) International Monetary Fund, "2000 World Development Indicators," International Financial Statistics.

# What could potentially happen if you do not control for differences in financial depth across countries?

- Suppose, for example, that countries with greater financial depth tended to require more disclosure (i.e., such countries have relatively high disclosure index values).
  - It would appear that more disclosure was correlated with less stock market volatility.
  - But, more disclosure did not increase transparency, nor did it **cause** a reduction stock volatility!

## The Econometric Problem:

Financial depth may be too highly correlated with disclosure.  
Thus, it may be difficult to control for such an effect.

# Extensions

- Examine different ways to measure disclosure / transparency.
  - Incorporate a measure of the frequency of disclosures into the index.
  - Try to weight different disclosure items by their expected importance in influencing stock prices.
- Measure potential effects of disclosure on stock returns in a different manner (e.g., investigate effect on the kurtosis of firm-specific stock returns).
- Investigate sources of within country variation in reporting to develop controls for differences in within country reporting.
- Consider what factors might influence differences across countries in disclosure policies.