# Using & Interpreting Market Data


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Greg Feldberg
Supervisory Financial Analyst
Board of Governors

# Market Data

I. Why market data?

II. The monthly market report

III. Do-it-yourself

IV. Looking forward

# I. Why market data?

- Market discipline & public disclosure
- How Surveillance uses market data
- How examiners use market data
- Other FR products

# Market discipline

- Three complimentary aspects of markets' role in supporting safety & soundness: **disclosure, discipline,** & **data**
- The third pillar of Basel II states that better public **disclosure** by banking institutions will improve the ability of investors to monitor their financial condition and **discipline** their management

# Market discipline

- “[The company] has decided to build capital ratios during 2003. They were under pressure by Wall Street analysts for allowing their Tangible Shareholders Equity to Assets ratio to drop below the company’s target 5% level. During the first quarter, they built the ratio up from 4.87% to 5.37%.”

- from a 1Q03 IO by an FRB analyst

# Market discipline

- *Academic research* has been mixed, but there is evidence that market measures provide useful information about bank risk profiles
- *Institutions* track their own market measures for a variety of reasons, including cost of funds, comparisons to peers, option-based compensation schemes

# How Surveillance uses market data

1) As a ***third eye***, representing the collective views of large numbers of investors
2) As one of several ***warning systems*** during long periods between exams (particularly for smaller companies)
3) As comparative, ***peer group*** measures

# How Surveillance uses market data

| Market | Supervisors |
| --- | --- |
| Large numbers of investors | Inside information |
| Reacts instantaneously | On-site presence |
| Personal stake | Legal authority |
| | Possibly a longer-term view |

# How Surveillance uses market data

| | Supervisory tools | Market tools |
|---|---|---|
| Credit risk/Overall Risk | SEER; financial screens; ratings screens | Industry EDFs & stock & bonds prices; asset prices |
| Market risk | Investment activity, & capital market screens; IRR | VaR analysis |
| Liquidity risk | Trading activity screens & financial screens | Cost of funds; bond, ABS market liquidity; ratings |
| Operational risk | Market screens; asset growth; insider activity | Liquidity in derivatives and other markets |

# How Surveillance uses market data

- Valuation measures, both absolute and relative to peers
- Performance over time, both absolute and relative to peers

# How Surveillance uses market data

## Primary market data

Data that reflect the market's view on the **financial institution itself**, such as the institution's stock and bond prices.

## Secondary market data

Data that reflect the market's view on the **risk components of a financial institution,** such as market prices of specific borrowers.

# How examiners use market data

1) As a ***reality check***
2) As a ***bargaining chip*** when talking to management
3) As an ***analytical tool***, particularly for evaluating issues such as liquidity risk and market risk

# How examiners use market data

- Conclusions of **December 2002 survey of examiners,** conducted by Minneapolis FRB:
  - (1) Examiners refer to market data frequently
  - (2) Stocks, debt ratings, sub debt spreads, EDFs
  - (3) Most references are in a "monitoring" context
  - (4) Most references are under *liquidity risk*

# How examiners use market data

- “Investors have shown a strong appetite for [the company]’s debt issues, enabling [the company] to fund at all maturities… as evidenced by the dip in its subordinated debt spreads to below the average LCBO spread.”

- from a 1Q02 Risk Assessment by an FRB analyst

# Other FR products

- **Shared National Credit** report uses industry EDFs
- **COP Task Force on Market Data** is taking a look at models under development at Reserve Banks that will similarly look at market data for industries to which banks are exposed
- **CRE InfoWeb** looks at local and national real estate trends
- **Interest rate risk focus report** looks at interest rate exposures

# Caveats: All market signals

1) Only a ***small fraction*** of the nation's 8,000 financial institutions have listed securities of any kind

2) All market signals risk conveying to supervisors a high incidence of ***false positives*** – i.e., default warnings that are not justified by company fundamentals, due to…

* ***Liquidity or other technical factors***

* ***Company-specific risks other than default risk, most commonly interest rate risk***

* ***Short-term shifts in market sentiment***

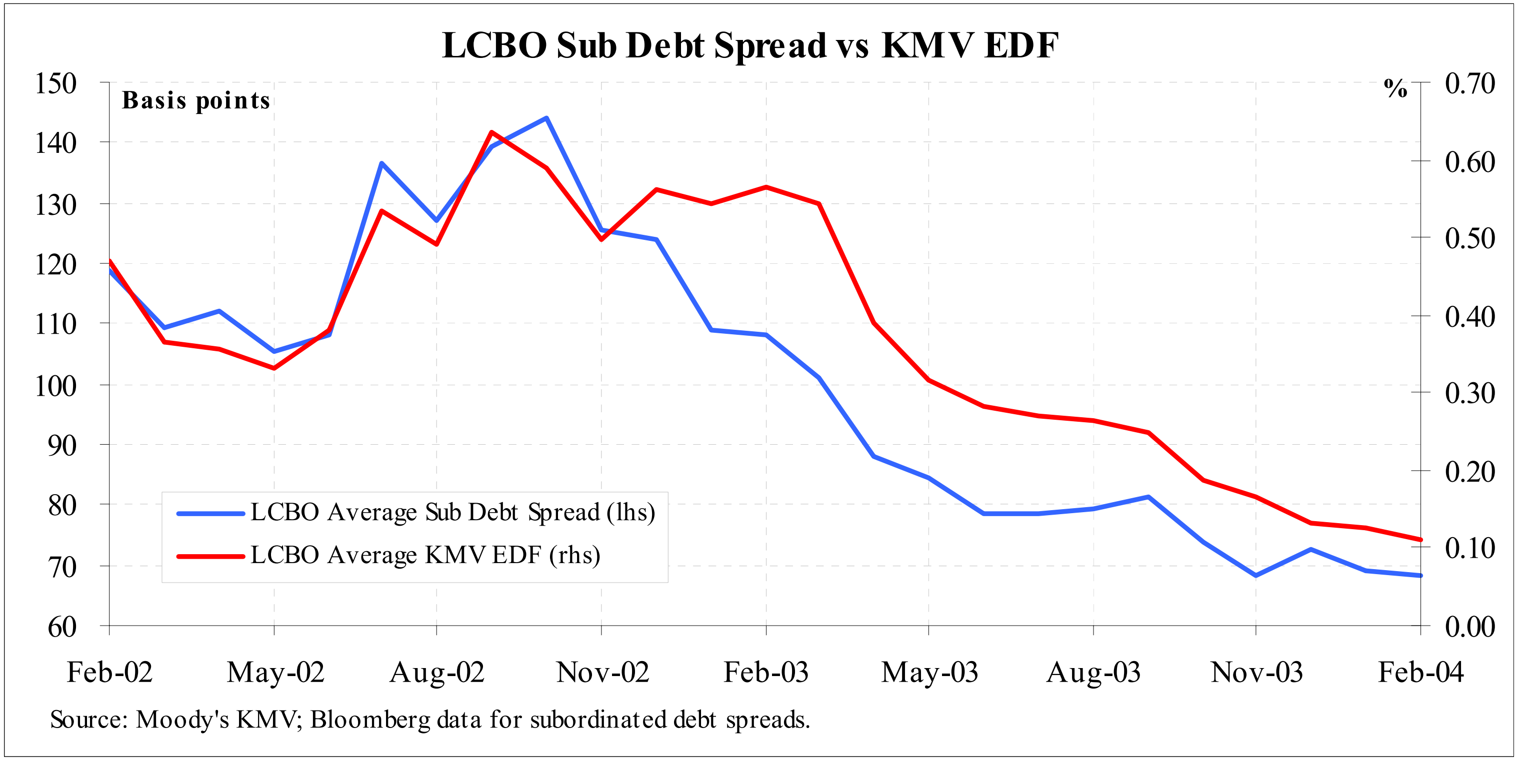
# II. The monthly market report

- Sub debt report
- EDF report

# The monthly market report

- ***Subordinated debt spreads*** are presented in basis points; they represent the difference between each company's yield and the comparable Treasury
- ***KMV EDFs*** are presented in terms of likelihood of default; they fall (become less risky) when market cap rises, when ST debt falls and when asset volatility falls

# The monthly market report




*The two risk measures have moved fairly closely over time*

# The sub debt report

- "Subordinated" claims, so investors are perceived as having similar risk profile to regulators
- Non-callable
- Fixed-rate
- 10-year initial maturity
- The most liquid bond for each institution
- Each bond is compared to the appropriate Treasury, to adjust for the level of rates and for maturity-related interest-rate risk

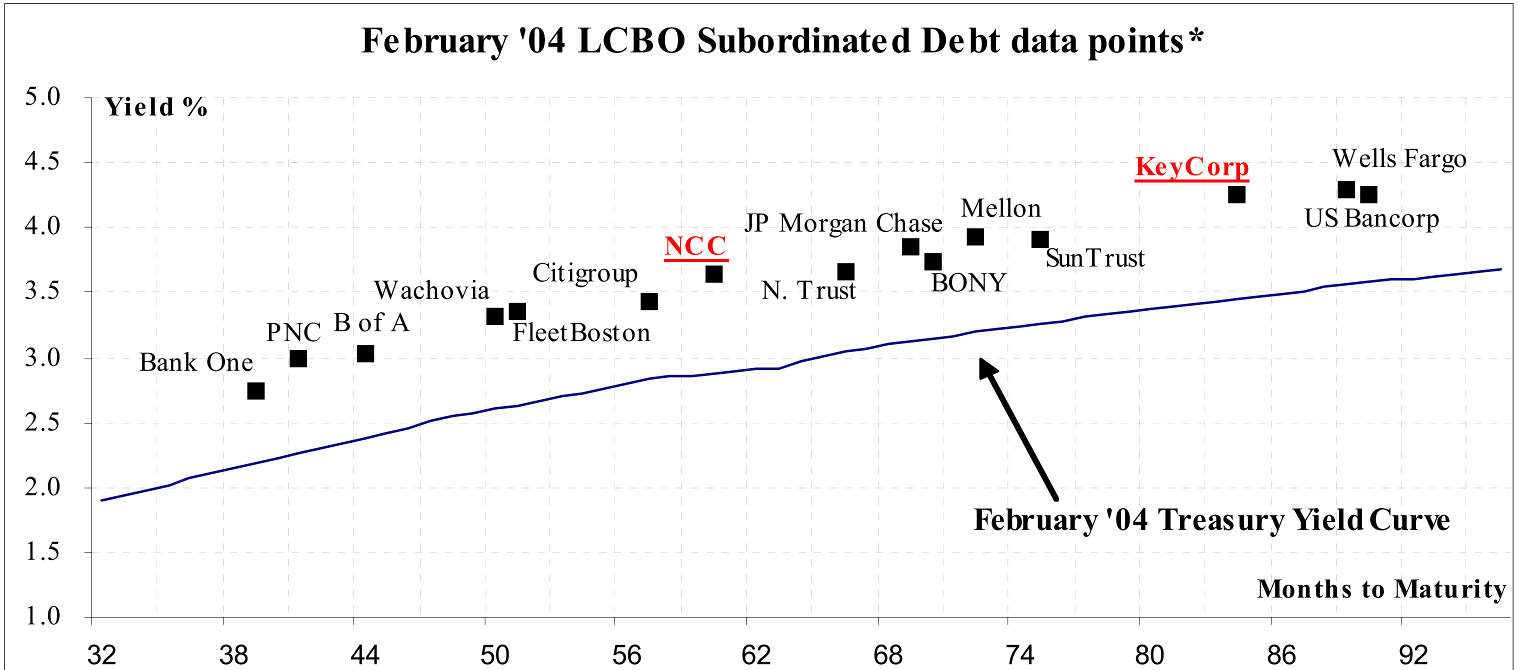
# Sub debt report summary

| LCBO | Ticker Symbol | CUSIP | Spread Feb-04 | | Spread Feb-03 | Change in Spread | Off LCBO Average | Face ($ Mills) | Issue Date | Maturity Date | Moody's Rating | S&P Rating |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bank of America Corporation | BAC | 066050CR4 | 66 | | 85 | (20) | (3) | 250 | Oct-97 | Oct-07 | Aa3 | A |
| Bank of New York Company, Inc. | BK | 064057AZ5 | 60 | | 112 | (52) | (8) | 300 | Dec-99 | Dec-09 | A1 | A |
| Bank One Corp. | ONE | 059438AJ0 | 55 | | 105 | (50) | (13) | 400 | Apr-97 | May-07 | A1 | A- /*+ |
| Citigroup Inc. | C | 17303MJC4 | 60 | | 102 | (42) | (8) | 750 | Nov-98 | Nov-08 | Aa2 | A+ |
| FleetBoston Financial Corporation | FBF | 338915AL5 | 73 | | 125 | (52) | 5 | 250 | May-98 | May-08 | A2 /*+ | A- /*+ |
| JP Morgan Chase & Co. | JPM | 16161ABX5*** | 72 | | 169 | (97) | 4 | 500 | Nov-99 | Nov-09 | A2 /*+ | A |
| KeyCorp | KEY | 49306CAD3***** | 80 | ** | 115 | (35) | 12 | 600 | Feb-01 | Feb-11 | A3 | BBB+ |
| Mellon Financial Corporation | MEL | 585510CG3 | 73 | | 112 | (39) | 5 | 350 | Feb-98 | Feb-10 | A2 | A |
| National City Corp. | NCC | 635405AL7 | 76 | ** | 99 | (23) | 8 | 300 | Feb-99 | Feb-09 | A2 | A- |
| Northern Trust Corporation | NTRS | 66586GBU0 | 62 | | 102 | (40) | (6) | 200 | Jul-99 | Aug-09 | A1 | A+ |
| PNC Bank Corp. | PNC | 693476AJ2 | 73 | | 130 | (57) | 5 | 350 | Jul-97 | Jul-07 | A3 | BBB+ |
| SunTrust Banks, Inc.* | STI | 867914AR4 | 64 | | 98 | (35) | (4) | 300 | Apr-00 | May-10 | A1 | A |
| US Bancorp* | USB | 90333WAA6***** | 67 | | 88 | (21) | (1) | 1500 | Jul-01 | Aug-11 | A1 | A |
| Wachovia Corp. | WB | 337358BK0**** | 71 | | 92 | (21) | 3 | 300 | Apr-98 | Apr-08 | A1 | A- |
| Wells Fargo & Co. | WFC | 949746CE9 | 71 | | 88 | (17) | 3 | 750 | Jul-01 | Aug-11 | Aa2 | A+ |
| **Average LCBO Spread** | | | 68 | | 108 | | | | | | | |
| **Standard Deviation** | | | 7 | | 21 | | | | | | | |
| **Baa Bond Spread** | | | 136 | | 225 | | | | | | | |

Source: Bloomberg

*The sub debt report picks outliers every month*

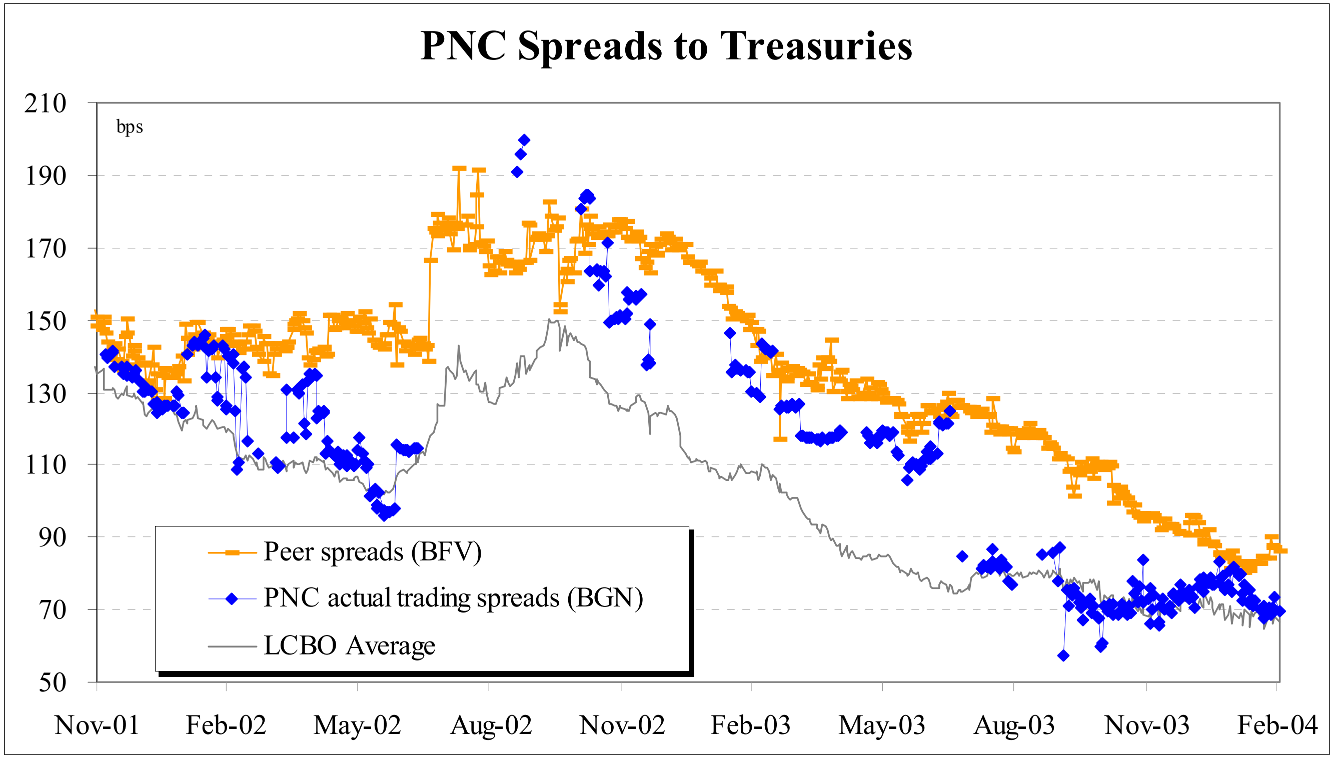
# Sub debt report



* The yield curve is based on linear interpolations from 14 Treasury bonds with maturities from 15 to 96 months. Spreads on underlined securities exceeded the group average by more than one standard deviation. Source: Bloomberg.

*Outliers are displayed by maturity*

# 2003 changes: Chart I



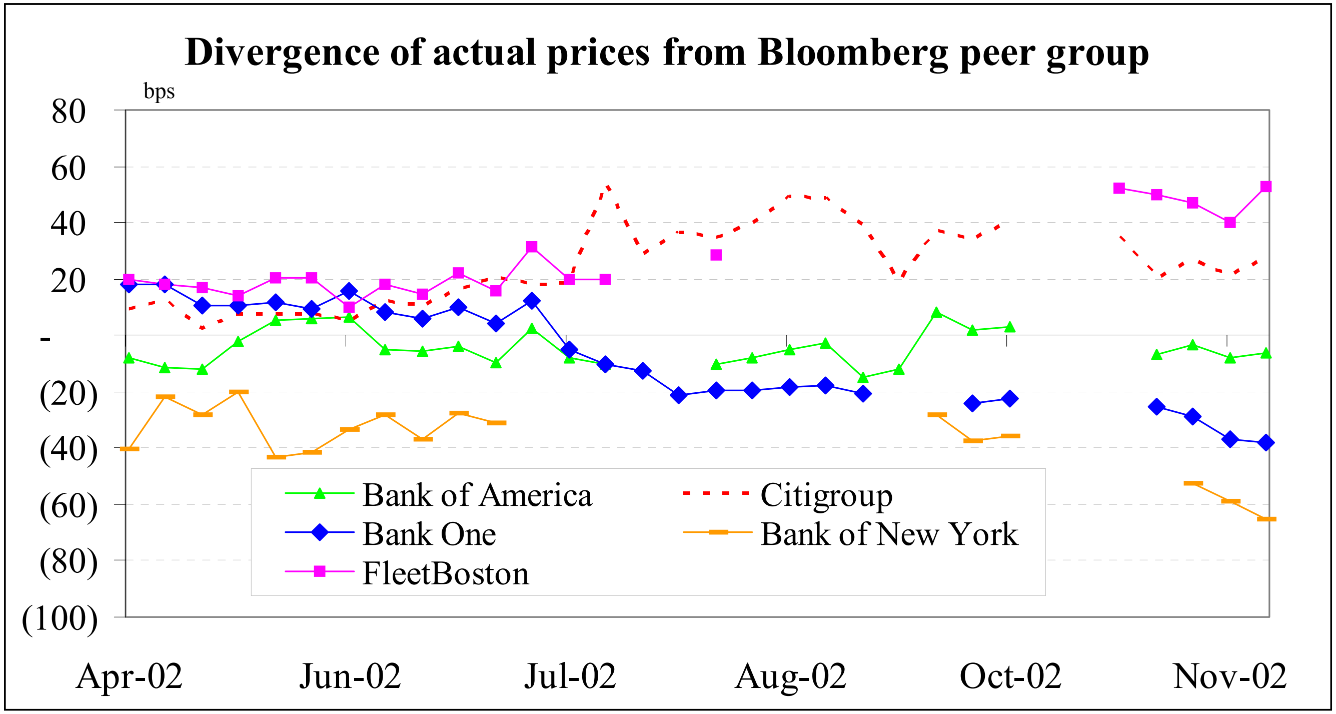

Source: Bloomberg

*Actual trading spreads are compared to peer spreads*

# Chart I advantages

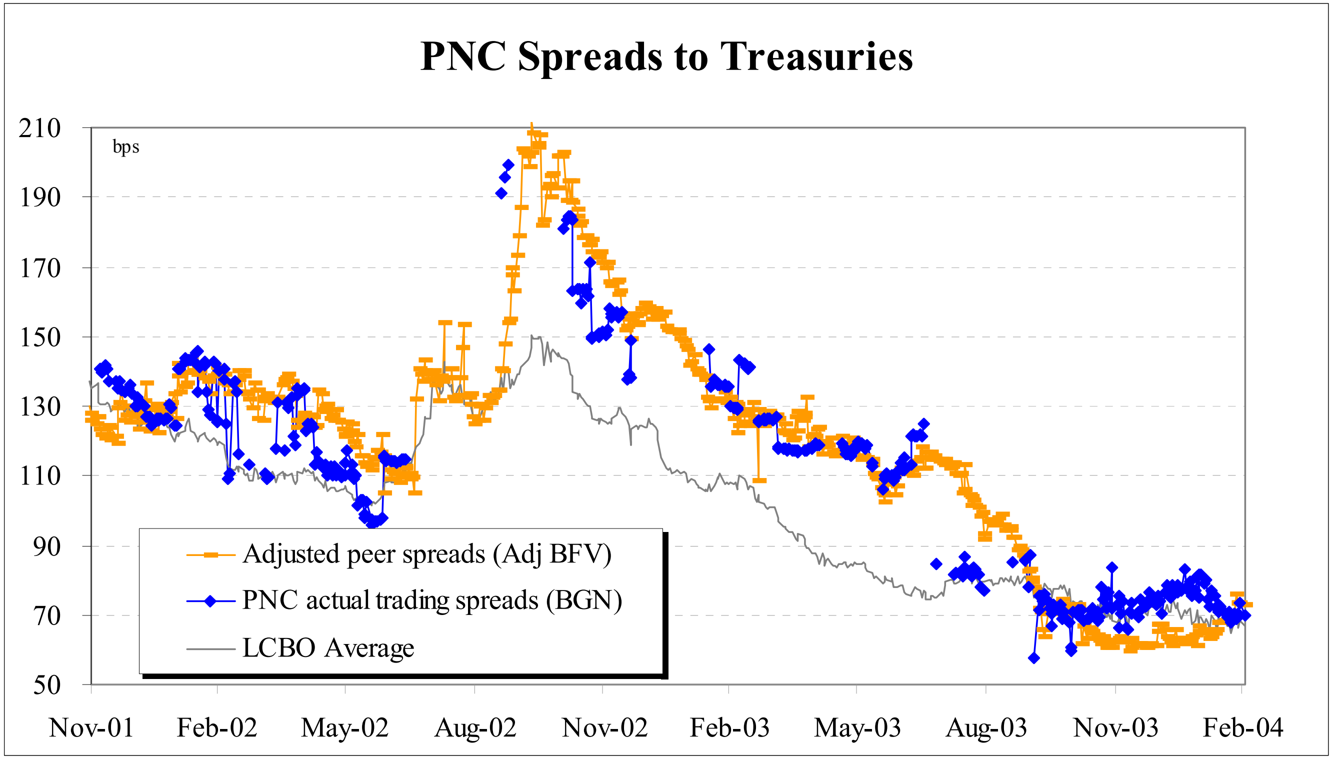
- *Daily data*
- *Liquidity* information from the gaps in company spread data
- *Spreads-to-peer* information from two sets of data

# New information in spread-to-peer




*In late 2002, FBF and C were looking risky, BK, ONE, & BAC were looking less so*

# 2003 changes: Chart II



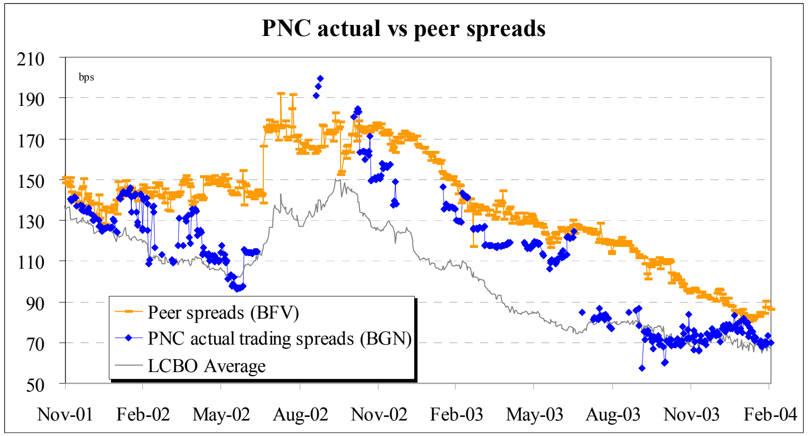

*Actual trading spreads are compared to **adjusted** peer spreads*

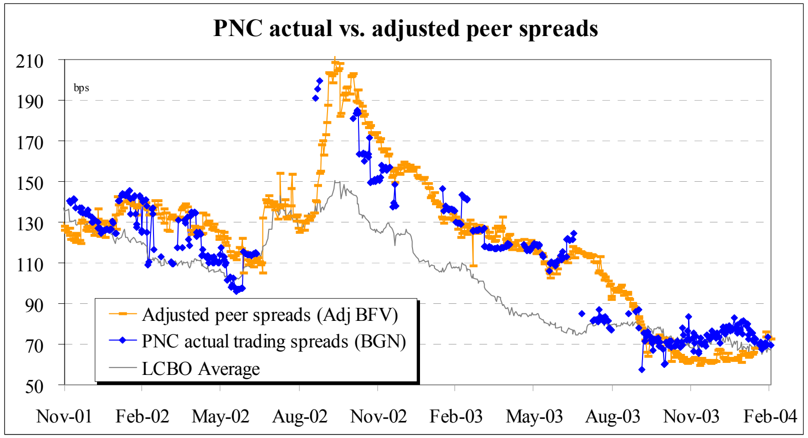
# Chart II advantages

- Actual market prices are unavailable ***25% of the time***
- The ***old method*** was to default to the peer group average
- The new ***adjusted peer group measure*** adds back the 60-day average of the spread-to-peer-group

# Better monthly estimates

- Over 2 years and for 15 companies, the ***average R-squared was 85%*** for the adjusted peer group measure, vs. 42% for the unadjusted
- That means that when actual prices are unavailable, we have a ***much better guess*** than we had before



# New format: Data Tables

| Subordinated Debt Spread Analysis | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| National City Corp. | | | | | | | | | | |
| | Data* | | | | | Best | Rel to Avg | | Rel to Baa Bond | |
| **Date** | **BGN** | **BFV** | **Adj BFV** | **Prem*** ** | **Treasury** | **Spread**** | **Avg** | **Diff** | **Baa** | **Diff** |
| Feb-04 | 3.634 | 3.592 | 3.600 | 1 | 2.877 | 76 | 68 | 7 | 136 | (61) |
| Jan-04 | 3.835 | 3.795 | 3.807 | 1 | 3.107 | 73 | 69 | 4 | 139 | (66) |
| Dec-03 | 3.963 | 3.978 | 3.987 | 1 | 3.179 | 78 | 73 | 6 | 155 | (76) |
| Nov-03 | 4.131 | 4.092 | 4.065 | (3) | 3.345 | 79 | 68 | 10 | 154 | (75) |
| Oct-03 | 4.087 | 4.039 | 3.958 | (8) | 3.299 | 79 | 74 | 5 | 156 | (77) |
| Sep-03 | 3.721 | 3.771 | 3.651 | (12) | 2.911 | 81 | 81 | (0) | 177 | (96) |
| Aug-03 | 4.365 | 4.466 | 4.306 | (16) | 3.574 | 79 | 79 | (0) | 169 | (89) |
| Jul-03 | 4.246 | 4.387 | 4.239 | (15) | 3.463 | 78 | 79 | (0) | 171 | (93) |
| Jun-03 | 3.463 | 3.748 | 3.547 | (20) | 2.617 | 85 | 79 | 6 | 179 | (95) |
| May-03 | 3.307 | 3.393 | 3.136 | (26) | 2.503 | 80 | 85 | (4) | 184 | (104) |
| Apr-03 | 3.746 | 4.149 | 3.802 | (35) | 3.049 | 70 | 88 | (18) | 189 | (119) |
| Mar-03 | 3.985 | 4.263 | 3.915 | (35) | 3.025 | 96 | 101 | (5) | 205 | (109) |
| Feb-03 | 3.939 | 4.251 | 3.897 | (35) | 2.951 | 99 | 108 | (9) | 225 | (126) |

*New historical data on actual pricing ("BGN"), peer group pricing ("BFV"), and our estimates ("Adj BFV")*

# What do spreads tell you?

- Differences in spreads may reveal differences in perceived risk ***between companies***
- Illustrates changes in perceived risk ***over time***

# Caveats: Bonds

(1) Sub debt issuance remains limited to small number of major BHCs

- Catch-22 situation: Bond pricing is available only for the same BHCs for which supervisory effort is already most intense

**Outstanding Sub Debt of BHCs***

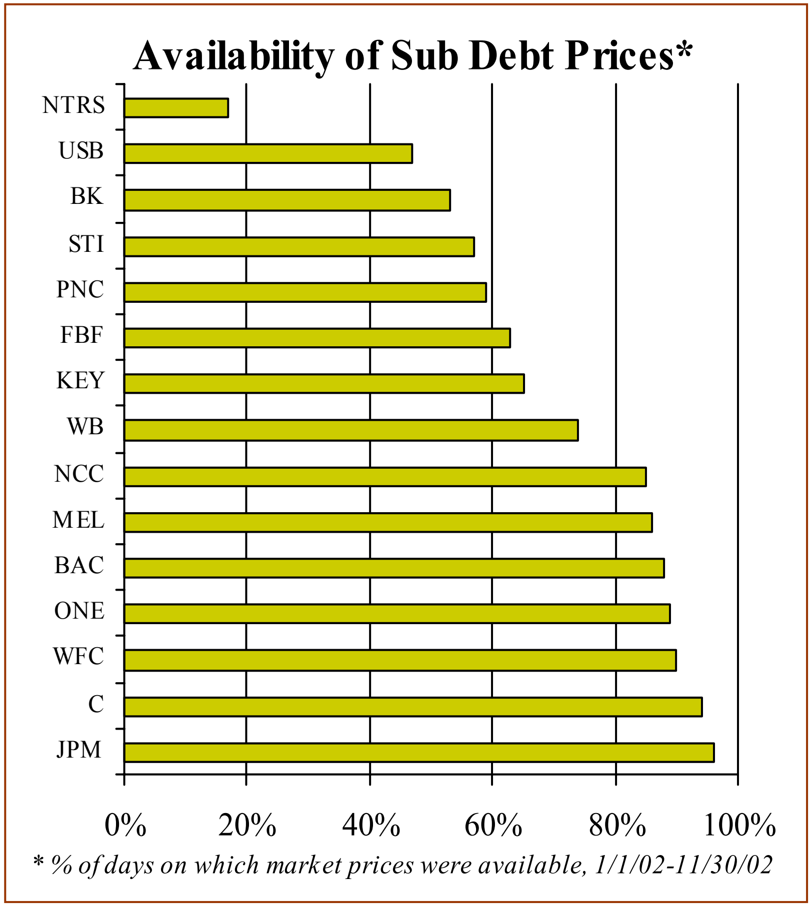
| | | | |
|---|---|---|---|
| J P Morgan Chase | 22,371,000 | Union Planters Corp | 1,985,140 |
| Bank Of Amer | 19,349,017 | Amsouth Bc | 1,355,197 |
| Citigroup | 16,135,000 | Regions Fc | 1,344,534 |
| Wells Fargo & Co | 9,318,000 | M&T Bk | 1,329,985 |
| Wachovia | 8,696,000 | Fifth Third Bc | 1,314,980 |
| Bank One | 7,733,000 | MBNA | 1,307,044 |
| U S Bc | 6,499,000 | Taunus | 1,197,000 |
| ABN Amro N Amer | 5,498,000 | Southtrust | 1,053,726 |
| Metlife | 5,472,879 | Huntington Bshrs | 990,470 |
| Fleetboston Fncl | 5,355,000 | Northern Tr Corp | 850,000 |
| Key | 4,618,078 | Countrywide Fc | 815,198 |
| HBSC North Amer | 4,490,613 | State Street | 744,953 |
| National City Corp | 4,049,264 | Citizens Fncl Group | 730,000 |
| Suntrust Bk | 3,061,246 | Zions Bc | 701,626 |
| BB&T | 3,051,906 | First Tennessee National | 660,101 |
| Mellon Fncl Corp | 2,727,197 | Marshall & Ilsley Corp | 621,622 |
| Bank Of NY Co | 2,690,317 | RBC Centura Banks | 621,264 |
| Pnc Fncl Svc Group | 2,545,659 | Unionbancal Corp | 605,923 |
| Comerica | 2,047,784 | | |

**US$000s for BHCs with >$500mn in sub debt at 12/31/03. Source: PRISM*

# Caveats: Bonds

(2) Bond markets are relatively illiquid, especially for sub debt

- There is no posted exchange-based price; different sources will give different prices
- Significant trading must take place to provide adequate "market discipline"
- Less than a dozen BHCs have sub debt with price availability >60%



# Caveats: Bonds

(3) Our method can not fully correct the problem of different maturities

# The EDF report

- Credit Monitor™ from Moody's KMV
- Based on (1) equity price movements
- Adjusted also for "asset volatility," which reflects (2) the stock's volatility as well as (3) the company's leverage

# The EDF report

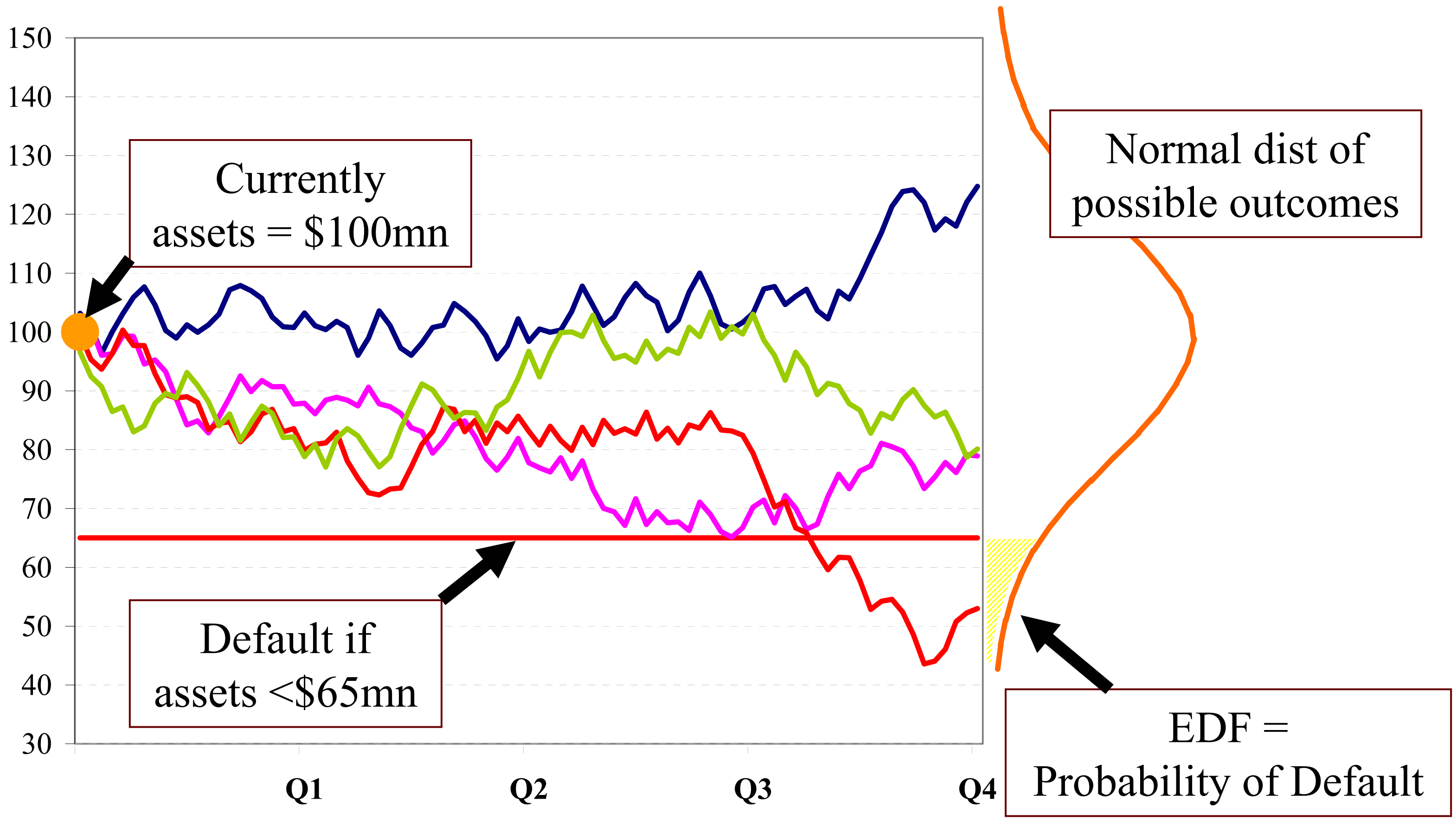
- The result is the EDF measure, for Expected Default Frequency
- Seeks to answer the question:

*"Of firms with similar leverage and volatility, what percentage defaulted within one year?"*

# The EDF report

- KMV uses a historical database of firms' asset & liability structures and asset volatilities, as well as histories of ***actual defaults***, to predict the probability of default, i.e., the EDF

# The EDF report



# What do EDFs tell you?

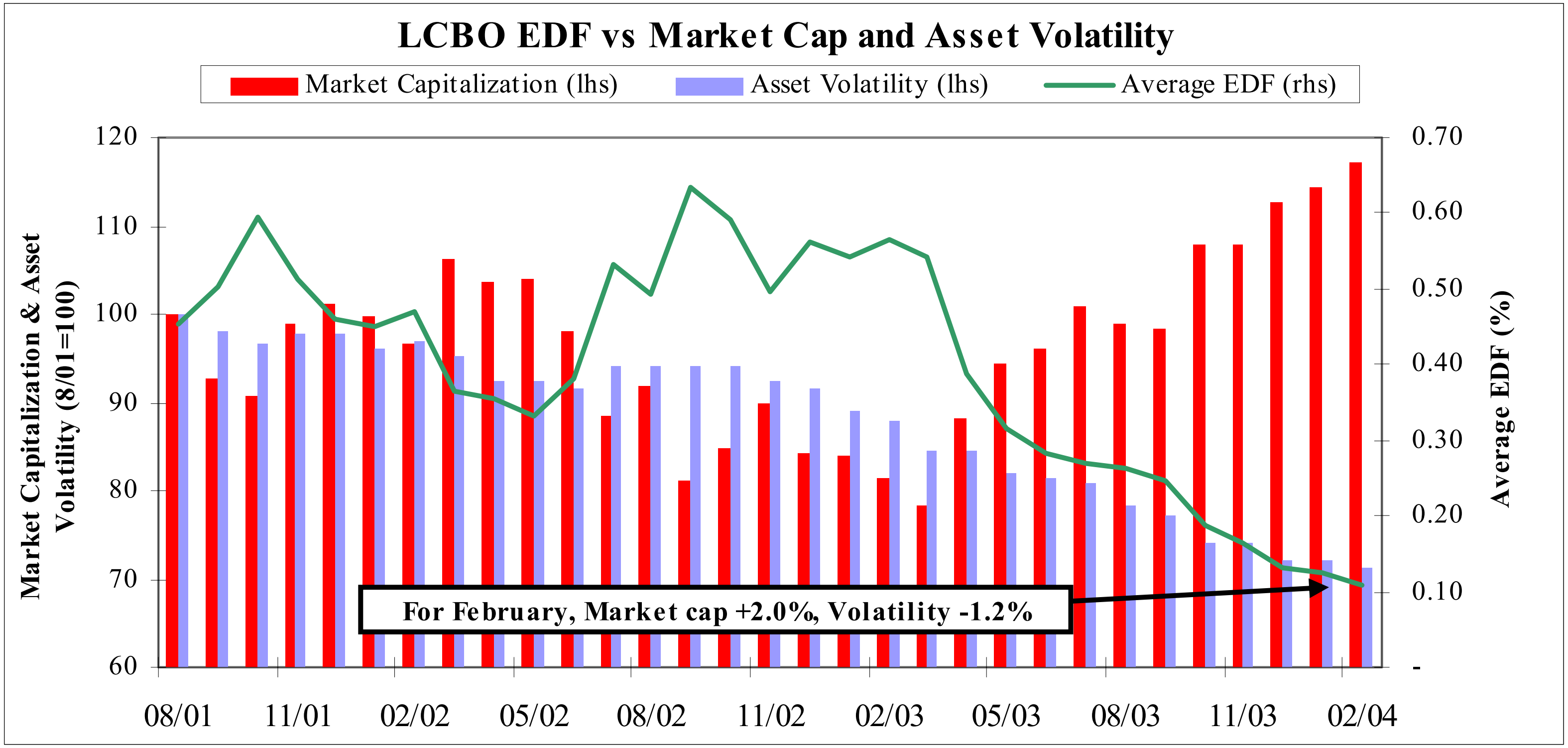
- Changes in EDFs from month to month are usually caused either by a ***change in the stock price*** or a ***change in the stock's volatility***
- ***Balance sheet changes*** are reflected quarterly, when company's reports come out

# EDF report summary

| COMPANY NAME /1 | EDF AT 2/29/2004 | DIFFERENCE FROM AVERAGE /1 | DIFF. FROM DJ BANKS AVG EDF | EDF AT 1/31/2004 | 1 MONTH CHANGE |
|---|---|---|---|---|---|
| MELLON FINANCIAL CORP | 0.26 | 0.15 | 0.14 | 0.26 | 0.00 |
| NORTHERN TRUST CORP | 0.25 | 0.14 | 0.13 | 0.28 | -0.03 |
| BANK OF NEW YORK CO INC | 0.21 | 0.10 | 0.09 | 0.25 | -0.04 |
| J P MORGAN CHASE & CO | 0.20 | 0.09 | 0.08 | 0.25 | -0.05 |
| CITIGROUP INC | 0.16 | 0.05 | 0.04 | 0.19 | -0.03 |
| STATE STREET CORP | 0.11 | 0.00 | -0.01 | 0.12 | -0.01 |
| BANK OF AMERICA CORP | 0.09 | -0.02 | -0.03 | 0.10 | -0.01 |
| U S BANCORP | 0.09 | -0.02 | -0.03 | 0.09 | 0.00 |
| PNC FINANCIAL SVCS GROUP INC | 0.07 | -0.04 | -0.05 | 0.07 | 0.00 |
| FLEETBOSTON FINANCIAL CORP | 0.06 | -0.05 | -0.06 | 0.07 | -0.01 |
| BANK ONE CORP | 0.06 | -0.05 | -0.06 | 0.08 | -0.02 |
| WACHOVIA CORP | 0.05 | -0.06 | -0.07 | 0.06 | -0.01 |
| KEYCORP | 0.04 | -0.07 | -0.08 | 0.04 | 0.00 |
| NATIONAL CITY CORP | 0.04 | -0.07 | -0.08 | 0.05 | -0.01 |
| SUNTRUST BANKS INC | 0.04 | -0.07 | -0.08 | 0.05 | -0.01 |
| WELLS FARGO & CO | 0.03 | -0.08 | -0.09 | 0.04 | -0.01 |
| AVERAGE | 0.11 | | | 0.13 | -0.02 |
| STANDARD DEVIATION | 0.08 | | | 0.09 | -0.01 |
| MEDIAN | 0.08 | | | 0.09 | 0.00 |
| AVERAGE EDF FOR DJ BANKS /2 | 0.12 | | | 0.13 | -0.01 |

*The EDF report also picks outliers every month*

# EDF report




*The report also breaks down the average group EDF into its main components, market capitalization and asset volatility*

# EDF report

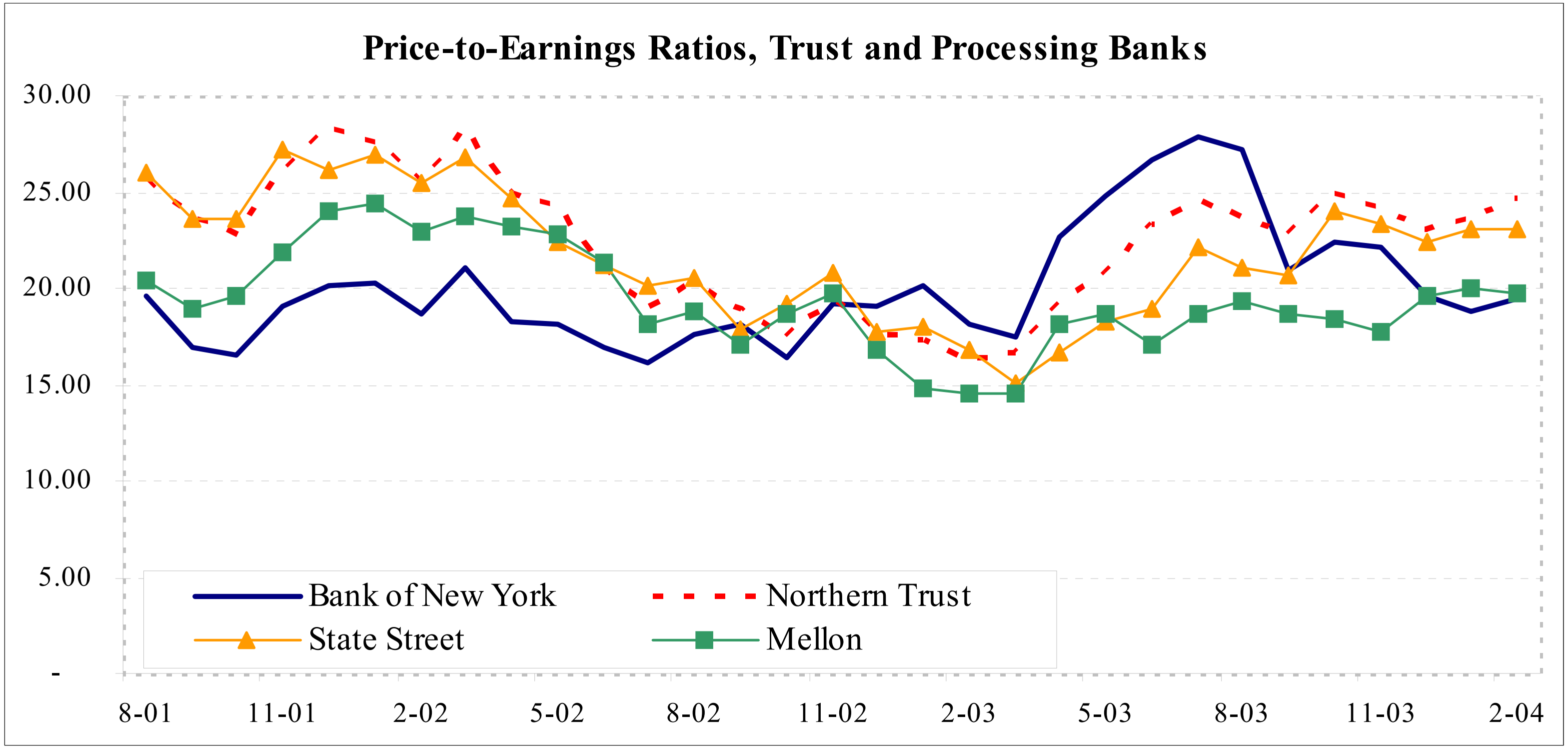
| Price-to-Earnings Ratios | |
|---|---|
| | 2/27/2004 |
| Northern Trust | 24.7 |
| State Street | 23.1 |
| Mellon | 19.7 |
| Bank of NY | 19.5 |
| FleetBoston | 18.4 |
| Bank One | 17.8 |
| **LCBO Group Avg** | **16.4** |
| Wells Fargo | 15.7 |
| KeyCorp | 15.3 |
| SunTrust | 15.3 |
| PNC | 15.1 |
| Citigroup | 14.7 |
| US Bancorp | 14.6 |
| Wachovia | 14.3 |
| JP Morgan | 12.5 |
| Bk of America | 11.5 |
| NCC | 10.4 |

| Price-to-Book Ratios | |
|---|---|
| | 2/27/2004 |
| Mellon | 3.7 |
| Northern Trust | 3.6 |
| State Street | 3.1 |
| Bank of NY | 3.0 |
| US Bancorp | 2.9 |
| Wells Fargo | 2.8 |
| Citigroup | 2.7 |
| FleetBoston | 2.7 |
| **LCBO Group Avg** | **2.6** |
| Bank One | 2.6 |
| Bk of America | 2.5 |
| PNC | 2.4 |
| NCC | 2.3 |
| SunTrust | 2.1 |
| KeyCorp | 1.9 |
| Wachovia | 1.9 |
| JP Morgan | 1.9 |

| Monthly Stock Price Changes | |
|---|---|
| | 2/27/2004 |
| Bank One | 6.7% |
| JP Morgan | 5.5% |
| Northern Trust | 4.6% |
| KeyCorp | 4.3% |
| Bank of NY | 3.9% |
| Wachovia | 3.7% |
| PNC | 3.7% |
| NCC | 3.4% |
| **LCBO Group Avg** | **2.4%** |
| Citigroup | 1.6% |
| FleetBoston | 1.0% |
| US Bancorp | 0.9% |
| Bk of America | 0.6% |
| SunTrust | -0.1% |
| Wells Fargo | -0.1% |
| State Street | -0.2% |
| Mellon | -1.0% |

*Stock prices and valuations are also compared*

# EDF report




*Price and valuation trends are noted*

# Caveats: Equities

(1) Moral hazard situation

- Rising price may mean ***more*** risk-taking, not less!

(2) Moral hazard II

- Banks' stock prices contain a difficult-to-value premium due to the government guarantee of deposit insurance

(2) High volatility

- Price movements may be difficult to explain

# Caveats: EDFs

EDF model was developed for non-financial firms, but…

(1) ***Financial assets*** are different from non-financial assets

(2) The bulk of banks' liabilities have ***no maturity date***, so the default point is hard to measure

(3) Banks ***default only rarely,*** making EDF probability difficult to calculate

# Caveats: EDFs

KMV provides ratings bands for each EDF level – it shows the median EDF for companies at each S&P rating – but these relationships should be treated carefully:

(1) Again, it is based primarily on ***non financial firms***

(2) The relationships between S&P ratings and median EDFs are subject to ***regime change***, i.e., they can change significantly over time

(3) A given absolute EDF level should ***not*** be interpreted to imply a given S&P rating; it can instead provide some guidance on a company's standing vs. its peers

# Bond vs equity data

## Stocks

**Positives**

- Greater liquidity, investor interest, analyst coverage, price transparency
- Hundreds of banks & BHCs have relatively liquid stocks
- Data is easy to understand

**Negatives**

- Moral hazard, i.e., equity investors encourage risk-taking
- Greater volatility

## Bonds

**Positives**

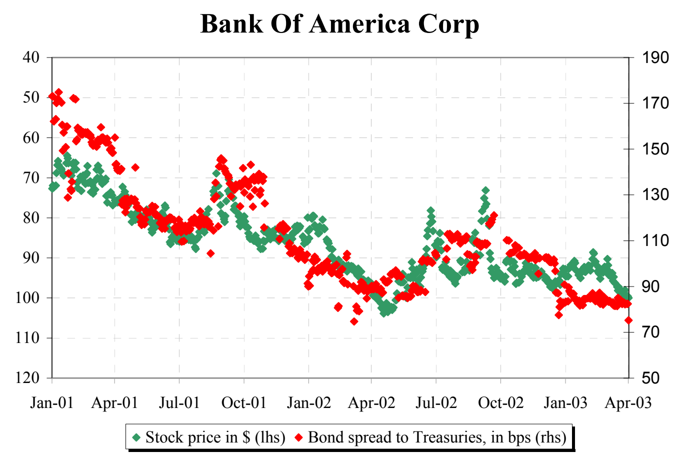
- Limited upside aligns investor interests with regulators

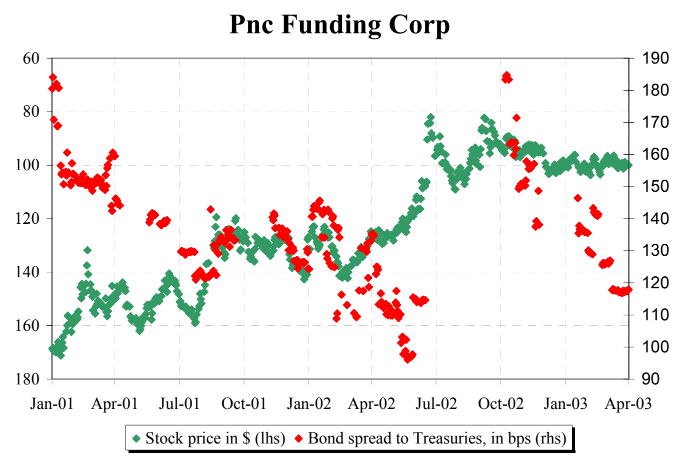
**Negatives**

- Lack of liquidity severely limits information content
- Only a handful of banks & BHCs have bonds of meaningful size
- Not exchange-traded, so there is no consensus price

# Bond vs equity data

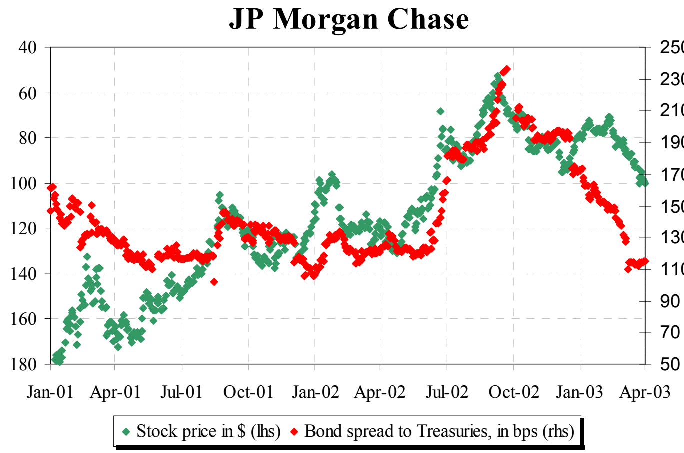
- For liquid bonds like those of Bank of America, Citigroup, or JP Morgan, spreads tend to rise broadly in sync with stock declines. (In these charts, stock prices are inverted).
- But less liquid bonds, like those of PNC, Bank of New York, or SunTrust, exhibit long periods when prices are unavailable; even when prices are available, these bonds are slower to react to changes in company condition.



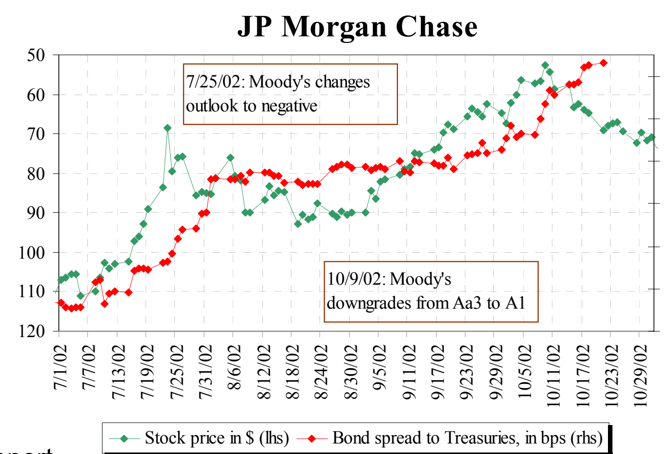



# Bond vs equity data

- JP Morgan Chase's stock & bonds exhibit very similar trends, with risks rising in mid-2002 & declining in 1Q03.




- In July 2002, the stock reacted faster than the bond to news about the company's exposure to Enron & other bad credits. The stock also fell sharply before Moody's negative 7/25 & 10/09 statements on JPM. Bond prices were unavailable in late October.



# District 4 comparisons

| Price-to-Earnings Ratios | 2/27/2004 |
|---|---|
| Provident Financial | 25.4 |
| First Financial BC | 20.3 |
| Mellon Financial | 19.7 |
| Fifth Third BC | 18.8 |
| Firstmerit Corp | 18.5 |
| Park National Corp | 18.0 |
| First Commonwealth | 17.1 |
| **Dist 4 Group Avg** | **17.0** |
| Wesbanco Inc | 16.7 |
| Keycorp | 15.3 |
| Sky Financial | 15.3 |
| Pnc Financial | 15.1 |
| Huntington BC | 14.4 |
| Charter One Financial | 13.2 |
| National City Corp | 10.4 |

| Price-to-Book Ratios | 2/27/2004 |
|---|---|
| Mellon Financial | 3.7 |
| Fifth Third BC | 3.7 |
| Park National Corp | 2.9 |
| Sky Financial | 2.5 |
| **Dist 4 Group Avg** | **2.5** |
| Charter One Financial | 2.5 |
| Pnc Financial | 2.4 |
| Huntington BC | 2.3 |
| National City Corp | 2.3 |
| Firstmerit Corp | 2.3 |
| Provident Financial | 2.2 |
| First Financial BC | 2.1 |
| First Commonwealth | 2.1 |
| Keycorp | 1.9 |
| Wesbanco Inc | 1.9 |

| Monthly Stock Price Changes | 2/27/2004 |
|---|---|
| Provident Financial | 17.5% |
| Wesbanco Inc | 8.0% |
| First Financial BC | 5.2% |
| Keycorp | 4.3% |
| Pnc Financial | 3.7% |
| Huntington BC | 3.6% |
| National City Corp | 3.4% |
| **Dist 4 Group Avg** | **3.3%** |
| First Commonwealth | 2.2% |
| Firstmerit Corp | 1.8% |
| Park National Corp | 1.3% |
| Charter One Financial | 0.0% |
| Sky Financial | -1.0% |
| Mellon Financial | -1.0% |
| Fifth Third BC | -3.0% |

*There's plenty of equity information out there*

# III. Do-it-yourself

- With Bloomberg, you can get practically any market data you'll ever need:
  - Bonds
  - Equities
  - Asset-backed securities
  - Economic indicators

# Bloomberg functions: Bonds

- Find a list of the company's bonds: **Ticker <Corp> <Go>**. If you don't know the ticker, type **<Corp> TK Company Name**. Pick the bond you want
- Info: **Ticker <Corp> DES, RATC**
- Historical charts: **Ticker <Corp> GP** or **GY**
- Historical tables: **Ticker <Corp> HP**, then pick which pricing source you want, BGN or BFV
- Peer group comparisons: **Ticker <Corp> BFV** or **RVF**
- Replicate the market report, one company:

  **Ticker <Corp> RVM**
- Replicate the market report, summary sheet: **NW6 <Go>**

# Bloomberg functions: Stocks

- Find a company's ticker: **<Equity> TK Company Name**
- Description function: **Ticker <Equity> DES**
- Historical price table: **Ticker <Equity> HP**
- Historical price chart: **Ticker <Equity> GP**
- Historical valuation: **Ticker <Equity> GE**
- Peer group comparisons: **Ticker <Equity> COMP** or **RV**

# Bloomberg functions summary

***Issuer information***

DES, ISSD, CH2, CF, CACS, ERN, EE, EEG, ACDR, ANR, SURP, DDIS, RATC

***Price information***

HP, HY, GP, GY, GPA, HCP

***Analyzing spreads***

BFV, RVF, RVFP, RVM, YAS, ASW, RVS, OAS1, HS, CIX, HMSM, MCA

***Analyzing stocks***

DES, COMP, RV, GE

***Finding securities***

IBQ, QSRC, SRCH, LSRC, NIM

***Analyzing yield curves***

FMC, CURV, FMCH, FMCS, FMCI, FMCV, IYC, IYCC

***Macro market rates & prices***

WB, WBF, WIR, EDSF, BBAM, IRSB, USSW, PXBR, BRDM, WEI, ECO, NI EII

# Using Bloomberg with Excel

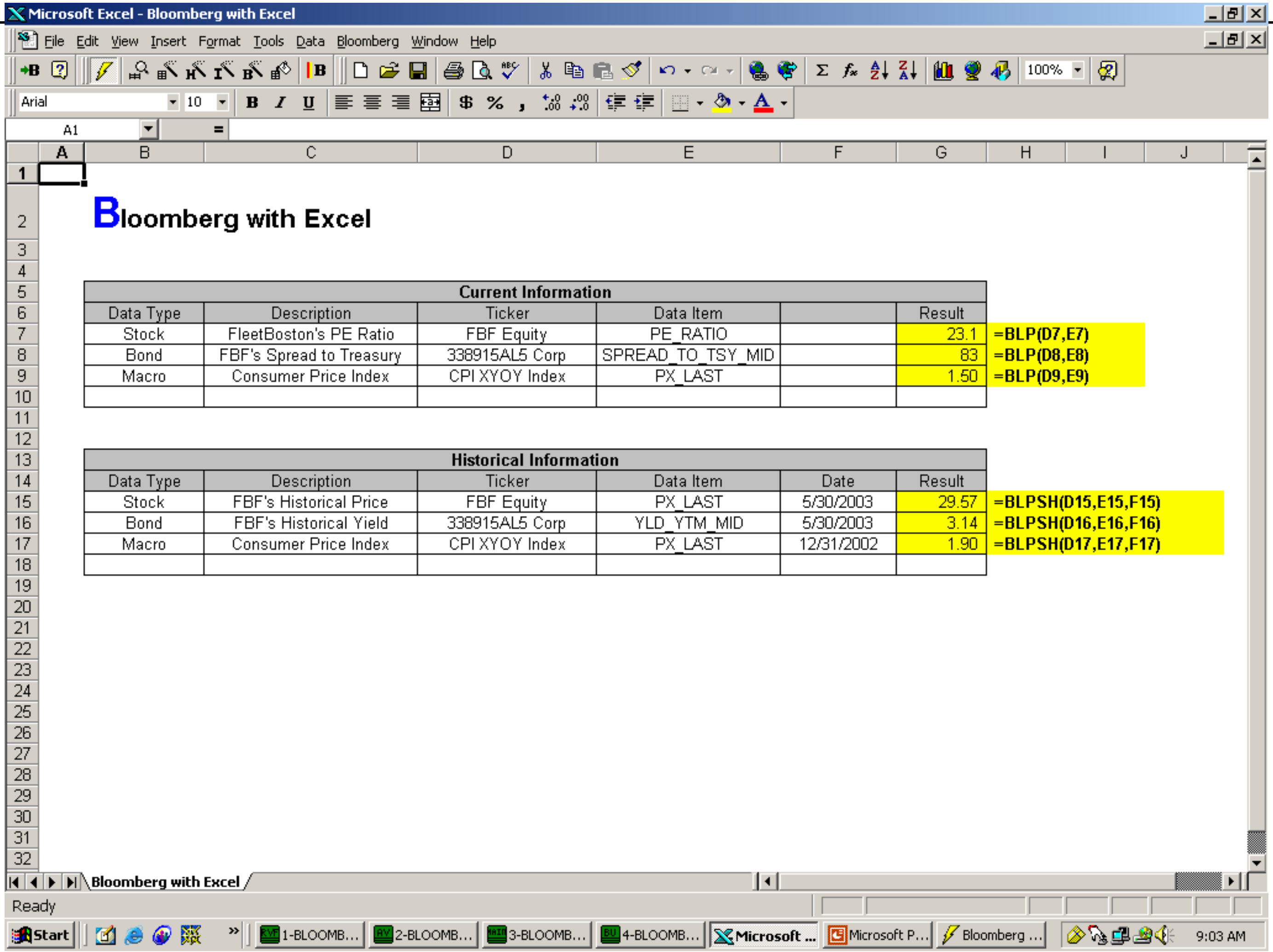
- Make sure you have Open Bloomberg capability
- For current data, enter:

  **=BLP(<ticker>,<data item>)**

- For historical data, enter:

  **=BLPSH(<ticker>,<data item>,<date>)**

# Using Bloomberg with Excel




**Current Information**

| Data Type | Description | Ticker | Data Item | | Result | |
|---|---|---|---|---|---|---|
| Stock | FleetBoston's PE Ratio | FBF Equity | PE_RATIO | | 23.1 | =BLP(D7,E7) |
| Bond | FBF's Spread to Treasury | 338915AL5 Corp | SPREAD_TO_TSY_MID | | 83 | =BLP(D8,E8) |
| Macro | Consumer Price Index | CPI XYOY Index | PX_LAST | | 1.50 | =BLP(D9,E9) |

**Historical Information**

| Data Type | Description | Ticker | Data Item | Date | Result | |
|---|---|---|---|---|---|---|
| Stock | FBF's Historical Price | FBF Equity | PX_LAST | 5/30/2003 | 29.57 | =BLPSH(D15,E15,F15) |
| Bond | FBF's Historical Yield | 338915AL5 Corp | YLD_YTM_MID | 5/30/2003 | 3.14 | =BLPSH(D16,E16,F16) |
| Macro | Consumer Price Index | CPI XYOY Index | PX_LAST | 12/31/2002 | 1.90 | =BLPSH(D17,E17,F17) |

# IV. Looking forward

- The goal: We hope examiners and analysts will learn to habitually check market data to answer both macro and micro questions.
- Before visiting a company, be aware of the company's recent price performance, and have a good idea what was driving it -- i.e., investor concerns about specific loan exposures, operational risk, etc. Check company announcements, rating agency changes, and news articles for clues as to what has changed investors' views on a company.
- When examining a company's borrowers, check the performance of their stocks and bonds on the market. If such information is not available, check the performance of similar companies, or of sector indices.
- Check sector-specific market prices -- for example, watch REITs, CMBS, and the CRE InfoWeb when monitoring real estate.
- Remember (from Fitch handout): ***"Such information should and will always be measured against fundamental credit analysis."***