

A Review of the Use of Market Data in the Federal Reserve System

Supervisory Use of Market Data

Central Bank Institute

Jason Schmidt--FRB of Minneapolis

Note:

The views expressed herein are those of the presenter and not necessarily those of the Federal Reserve System or the Federal Reserve Bank of Minneapolis.

Overview

- ☛ Why review the current supervisory use?
- ☛ Findings from the document review
- ☛ Findings from the survey of front-line staff
- ☛ Response to findings

Why Study the Current Use of Market Indicators?

☛ Phase 1 has been largely accomplished

- Signals from market participants have useful info which can easily be extracted

☛ Over 5 years worth of activity on implementation”

- F6 task force on market discipline
- Policy proposals on subordinated debt
- Monthly market data reports
- System-wide conferences

Why Study the Current Use of Market Indicators?

- ☛ Phase 1 has been largely accomplished
- ☛ 5 years worth of activity on “implementation”
- ☛ Uncertainty surrounding current practices
 - No system in place to track usage
 - Help identify challenges to greater use

Supervisory Document Review

☛ Methodology

- 3 groups of banks--LCBOs, FBOs, regional
- Reviewed all available documents
- Focused on frequency and methods of incorporation

How Prevalent Were Market Data Signals in the Documents?

	LCBO	FBO	Regional	Total
Institutional overviews	64%	82%	76%	75%
Quarterly overviews	6	50	24	23
Risk assessments	53	40	29	38
Supervisory plans	33	20	19	23
Inspection reports	33	0	11	19
Miscellaneous reports	45	38	12	28
“Composite” document	88%	92%	86%	87%

What Types of Market Signals Did Supervisors Utilize?

	LCBO	FBO	Regional	Total
Debt ratings	79%	100%	56%	69%
Stock prices	71	36	81	70
Alt equity signals	43	9	64	49
EDFs	43	27	22	28
SND spreads	71	18	6	23
Analysts' reports	21	0	25	23

* Results based on the “composite” document

How Did Supervisors Use the Market Signals?

- ☛ Classified each reference to a market signal based on the “contextual” use
- ☛ 6 customary risk categories
 - Credit, Liquidity, Operational, Reputational, Legal, and Market
 - Also considered enterprise-wide or overall risk
- ☛ “General” context - outside of a specific risk

How Did Supervisors Use the Market Signals?

	LCBO	FBO	Regional	Total
General (monitoring)	4	1	33	38
Liquidity	2	5	1	8
General / liquidity	2	4	1	7
General / reputational	3	0	1	4
General / capital	1	0	0	1
General/liquidity/credit	2	0	0	2
Liquidity / reputational	0	1	0	1
Total institutions	14	11	36	61

* Results based on the “composite” document

Three Main Findings from the Document Review

- ☛ Market data references were common
- ☛ Most cited indicators were equity prices and debt ratings
 - Surprising given the attention placed on EDFs and spreads
- ☛ References typically occurred in an “isolated” monitoring context
 - Few examples of actual “incorporation”

Survey of Supervisory and Analytical Staff

☛ Reasons for the survey

- Ensure that the document review was not missing something
- Identify challenges or barriers to use

☛ Findings

- Substantial use of market data--“informally”
- Higher frequency of use with analytical units
- Numerous challenges identified

Challenges Posed by Market Data Signals

- ☛ Access, availability, and training
- ☛ Lack of support from managers
- ☛ Sufficiency of supervisory information
- ☛ Inability to interpret levels and changes
- ☛ Inability to explain levels and changes
- ☛ Produces too many false positives & negatives

Our Responses to the Challenges

- ☞ Inability to interpret levels and changes
 - “How high does an EDF need to rise?”
 - “How wide does a SND spread need to widen?”
- ☞ Addressed by existing processes and practices
 - Market data is no different from other metrics
 - Heuristics and historical comparisons

Our Responses to the Challenges

☞ Inability to explain levels and changes

- “Since I cannot determine what is causing the market data signal to change, how can I take specific supervisory action?”

☞ Also addressed by existing processes and practices

- Direct linkage is preferred, not required
- What are earnings linked to?
- Supervisory responses depend on two factors
- Greater response time, reduce uncertainty
- Absence of linkages could be a benefit

Our Responses to the Challenges

☛ Produces too many false positives & negatives

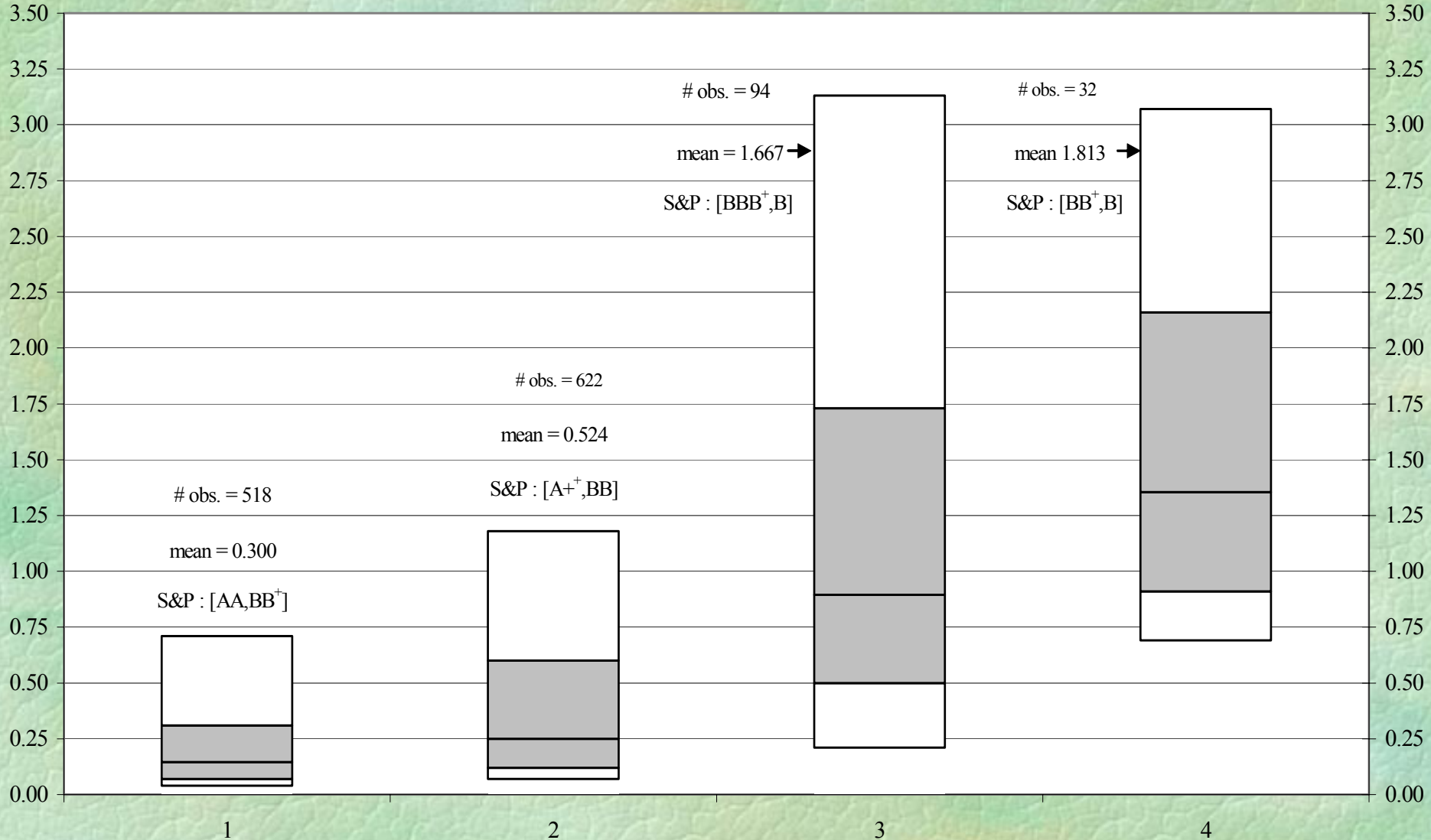
- How do we know which signal is correct?
- True risk is unknown, all metrics contain error
- Rate of false negatives is controllable

Another Survey

- ☛ Conference of Presidents wanted more data
- ☛ Senior mgmt in the supervision area
- ☛ Examiner and analytical staff
 - Contribution of market data
 - Specific stages in which market data is used
- ☛ Preparation of an examiner “toolkit”

Mapping EDFs to BOPEC ratings : 1990.Q3 - 2000.Q4 (Total 1269 obs.)

(Note : BOPECs are for full-scope, on-site inspections of public BHCs)



Note: The bottom line of each bar is the 10% quantile. The subsequent lines represent the 25%, 50%, 75%, & 90% quantiles.

