

Implementing an AMA for Operational Risk

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AMA Implementation: Where We Are and Outstanding Questions

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A Consistent, Focused Strategy

Personal Financial Services

Corporate & Institutional Services

Two Client Distribution Channels



Asset Administration

Asset Servicing

Asset Management

Information Services

One Core Business

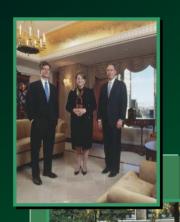


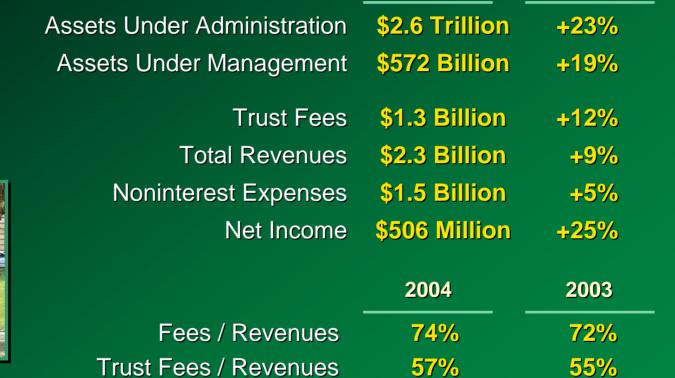
Worldwide Operations & Technology

Single Global Securities
Processing & Information
Platform



Financial Performance Reflects Excellent Growth Trends





Full Year

2004



% Change

vs. Prior Year

Industry Leader in Serving the Affluent Market

#1 Personal Trust Bank in U.S.

Source: SNL Financial.

The Wealth **Management** Group

The recognized leader in providing sophisticated financial solutions to high net worth families.

TARGET MARKET: Individuals or Families with \$75+ million in investable assets

Wealth **Advisory Services**

Delivering comprehensive, investment solutions through a multi-manager investment program.

TARGET MARKET: Individuals or Families with \$25 to \$75 million in investable assets

Private Client **Services** Delivering high-touch trust, investment management and banking solutions to individuals through 83 offices in 17 states.

TARGET MARKET: Affluent Individuals with at least \$1 million in investable assets

\$1 Million

\$25 Million \$75 Million

INVESTABLE ASSETS



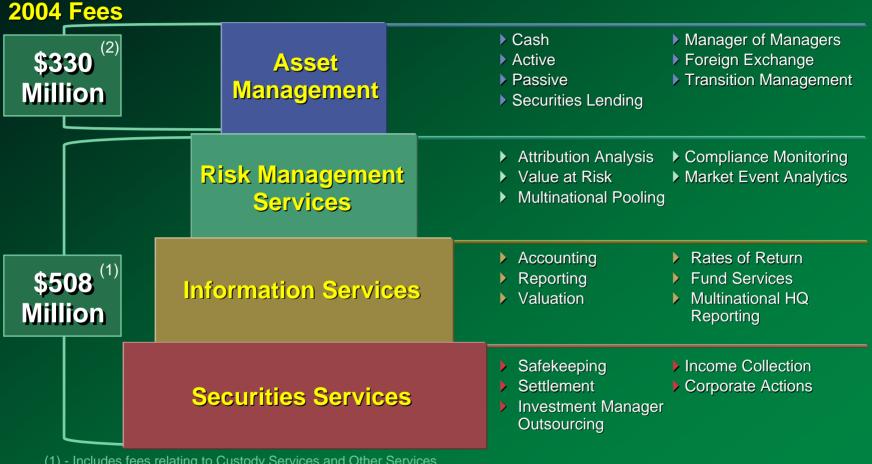
Basel II - Operational Risk

Heritage and Commitment



We have a 116-year heritage - we have been Northern Trust since 1889 and are undiluted by mergers and acquisitions. The growth that we have achieved through the years has been overwhelmingly sourced from organic growth.

Positioned for Success and Profitability



- (1) Includes fees relating to Custody Services and Other Services
- (2) Includes fees relating to Investment Management, Securities Lending and Foreign Exchange Trading



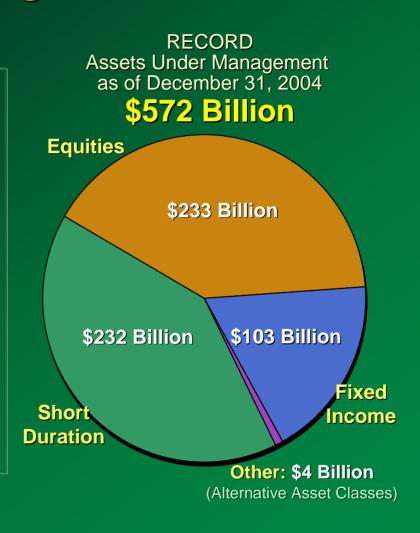
Spotlight: Recent Acquisition Announcement

Acquisition: Baring Asset Management's Financial Services Group

- ◆ \$63 billion in fund administration assets, \$28 billion in custody assets, \$32 billion in trust assets
- ◆ 170 clients, 770 employees in 5 locations
- Enhanced product capability and expertise

A Leading Investment Manager

- #9 Assets Under Management (1)
- **# 8** Worldwide Institutional Assets Under Management (2)
- # 4 U.S. Tax-Exempt Assets (2)
- # 3 Institutional Index Manager
- #6 Bank Run Mutual Fund Family (3)
 - (1) Global Investor Magazine GI 100
 - (2) Pensions & Investments
 - (3) FRC, March 31, 2004, based on long-term funds





Five Key Projects

- Qualification for the Advanced Measurement Approach (AMA) requires implementation of leading practices:
 - 1. Operational Risk Management Policy
 - 2. Loss Event Data Collection
 - 3. Risk and Control Self-Assessment
 - 4. Structured Scenario Analysis
 - 5. Key Risk Indicator Identification & Collection

Operational Risk Management Policy

- Define New Roles & Responsibilities
 - Senior Risk Management Officer (SRMO)
 - Corporate Operational Risk Group (CORG)
- Define New Governance Model
 - Corporate Operational Risk Council (CORC)
- Develop Common Language

Policy Issues

Appropriate Level of Detail

- Shooting at a moving target
 - Do we describe future state or current state?

Consensus vs. Completion

Loss Event Data (LED) Collection

- ♦ 6 years of LED in Focus Database
 - Coded to Basel Risk Codes Level 1 & 2
 - Bedrock for QIS 4 Capital Modeling
- ◆ Transition to new Integrated Operational Risk Database
 - Many more fields to better use data
 - More natural interface for capital modeling
- Excellent starting point, basis for EVT modeling

LED Issues

◆Legal

Near Miss Events

◆Integration of acquisitions

Risk and Control Self-Assessment

- Customize for each area:
 - Processes, Activities, Risks and Controls (PARC)
 - Quantify through scoring risks and controls (Frequency and Severity)
- Multi-tasking for the next several months
 - Software customization being done by vendor
 - Installation and testing to be done by Northern
 - Builds for each high priority area are underway
 - We will populate the system with RCSAs upon production status
- ◆ Institutionalizing the process is a 2nd half 2005 goal

RCSA Issues

- ◆Legal
- Public Relations
- Capital Allocation
- ◆QA Consistency & Completeness

Structured Scenario Analysis

- Required in Basel and Supervisory Standards
 - Benefit from experiences you haven't yet had
 - Better model capital with better estimate of tail events
- Pilot almost finished to develop approach
 - Facilitated sessions with 5 key areas
 - Learning curve to estimate possible frequencies and severities
 - Very positive feedback about value of the exercise
- Ongoing effort yet to be defined, depends on
 - Value to the business & to capital modeling exercise
 - Current thinking: Use scenario analysis output to construct an alternate tail
 - Direction from the Regulators



Structured Scenario Analysis Issues

- Clear Definition and Goals
- Comfort level estimating frequency and severity
- Potential Gaming
- Comfort with multiple modeling exercises involving alternate tail distributions

Key Risk Indicators (KRIs)

- Measures of important changes to the risk profile
 - Useful if they have predictive value
 - Unclear as to best practices in the industry
- Pilot is beginning to identify an approach
 - Facilitated introductory sessions
 - Trying to tie to ongoing metric work (Dashboard project)
 - Very open to industry and regulatory directions
- Unclear as to eventual role in effort

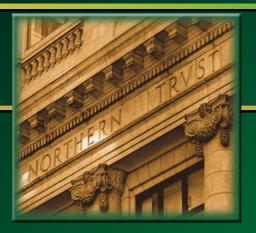
KRI Issues

◆Thresholds — when does a KRI become really important?

◆KRI Correlations — What are the compounding effects when several KRIs crest at the same time

Five Key Projects Issues

- How do we tie the projects together?
- Where is it okay for them to be independent?
 - 1. Operational Risk Management Policy
 - 2. Loss Event Data Collection
 - 3. Risk and Control Self-Assessment
 - 4. Structured Scenario Analysis
 - 5. Key Risk Indicator Identification & Collection



Summary & Questions

Thank You