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Presentation to

August 14, 2006

www.auditintegrity.com

Agenda

- Accounting & Governance Risk
  - Why does it matter?
- Which Accounting & Governance Metrics are Most Highly Correlated to Fraud and Other Negative Events
  - The Accounting & Governance Risk rating – AGR®
    - Methodology
    - Validation
- Building a Taxonomy to Predict Fraudulent Behavior
- The Link Between Fraud Risk and Equity Returns
  - The AGR®- based Equity Model
    - Methodology
    - Validation
- Q&A

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Measuring the Risk of Fraud

- As noted on the QWAFAFEW site, August 11, 2006:

> ***Although this may seem a paradox, all exact science is dominated by the idea of approximation.***
> — Bertrand Russell (1872-1970)

- Audit Integrity attempts to predict fraud risk – and the associated events of equity loss, litigation and financial restatements – by identifying metrics most closely associated with fraud and the companies that are outliers for those metrics

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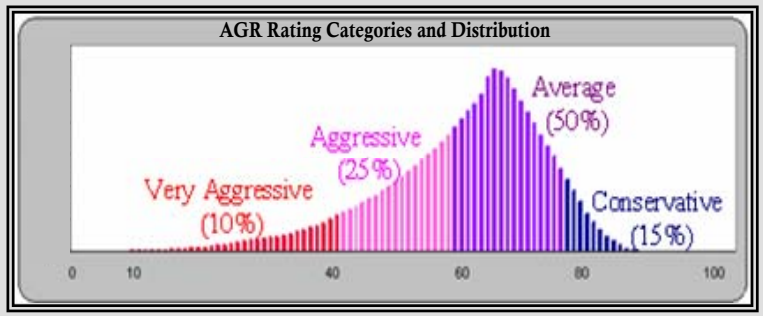
Audit Integrity Identifies Risk

- Audit Integrity research helps its clients better manage risk and improve investment performance
  - Investors, Insurers, Audit Firms, others
- Audit Integrity conducts **extensive risk analysis** to create a unique service for identifying accounting and governance risk – **the risk that the numbers are misleading or fraudulent**

The **Accounting & Governance Risk (AGR®)** rating is the overall assessment of the quality and transparency of corporate behavior

- Developed over 3 years based on extensive academic & business research
- Released to the market in July, 2003
- Available via the Web or data feeds
  - 9,000 companies covered, updated quarterly



Where will the next Enron come from – and how can you avoid the risk?

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Accounting Fraud and Investors

- Transparency is a critical measure of fraud risk
  - Financial Performance – fundamental and forensic accounting
  - Non-financial performance – governance and high-risk events
- Investors are looking for forward-looking, predictive measures of risk
  - Anticipate potentially devastating outcomes such as litigation, SEC investigations, severe loss of equity
  - Establish the link between transparency and excess returns
- Detecting and avoiding fraud requires, ultimately, measuring "trust" in the CEO and CFO
  - can you trust the numbers?
  - can you trust the management?

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Why Transparency (Fraud Risk) Matters

The impact of transparent behavior is proving to be of great significance to corporations, in areas such as:

- ***Stock Price***
  - "Companies reporting no problems showed an average share-price gain of 27.7%. Companies that reported internal-control deficiencies saw an average share-price decline of 5.7% " ("Checks on Internal Controls Pay Off," The Wall St. Journal Online, 5/8/2006, David Reilly)
- ***Cost of Capital***
  - "… firms that have strong internal controls … are rewarded with significantly lower cost of capital" (The Effect of Internal Control Deficiencies on Firm Risk and Cost of Equity Capital, April, 2006, Ashbaugh-Skaife)
  - "A growing body of research suggests that (good) governance are associated with better corporate performance and a lower cost of capital" ("More Rules, Higher Profits?", CFO Magazine, 8/1/2006)

Good governance begins with trustworthy financials

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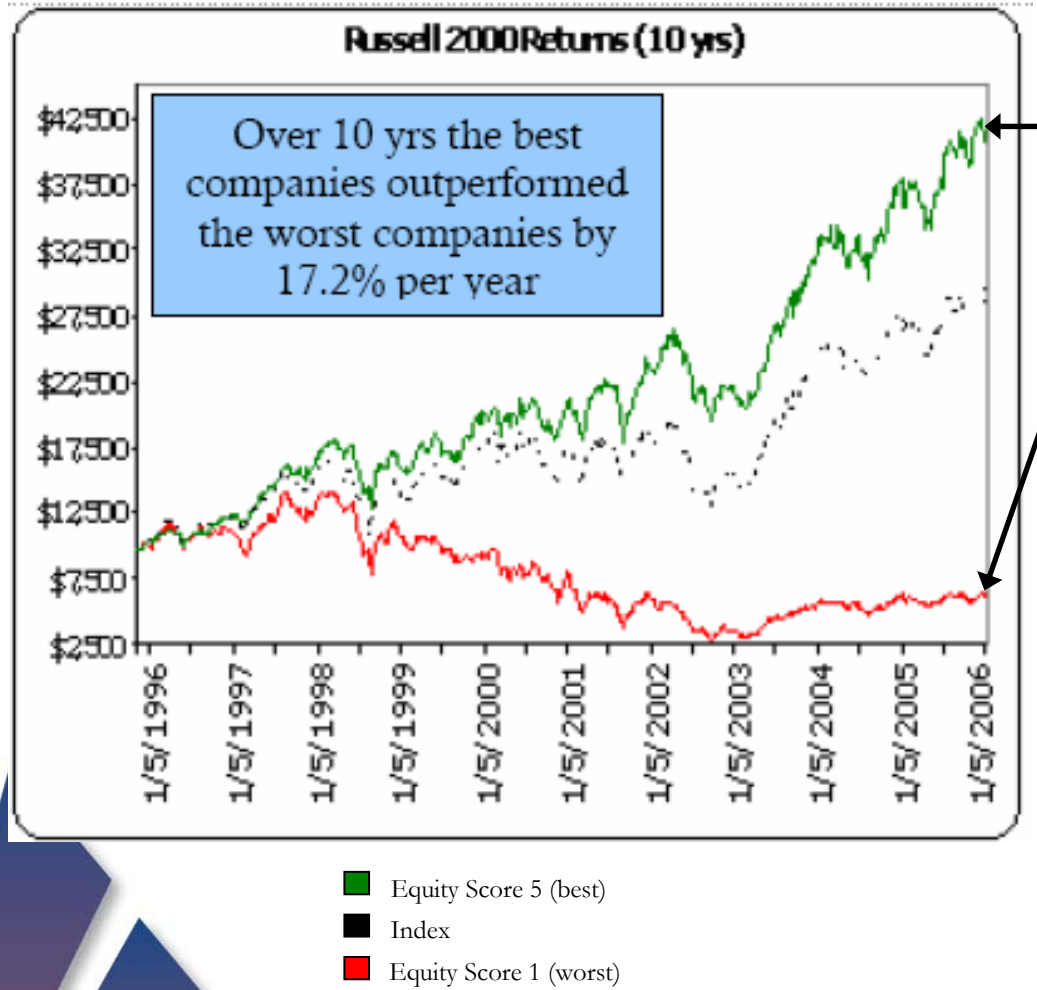
The AGR® Rating and Equity Returns



Heightened Equity Risk

Audit Integrity's best companies (based on AGR®) consistently outperform the market and vastly outperform the worst companies.

The Results were consistent across market cap ranges, and especially pronounced for small caps.

The results were consistent across growth and value stocks.

A Simple index-enhanced strategy of avoiding the lowest-rated companies (1's & 2's) resulted in a *2.1% annual improvement* in returns.

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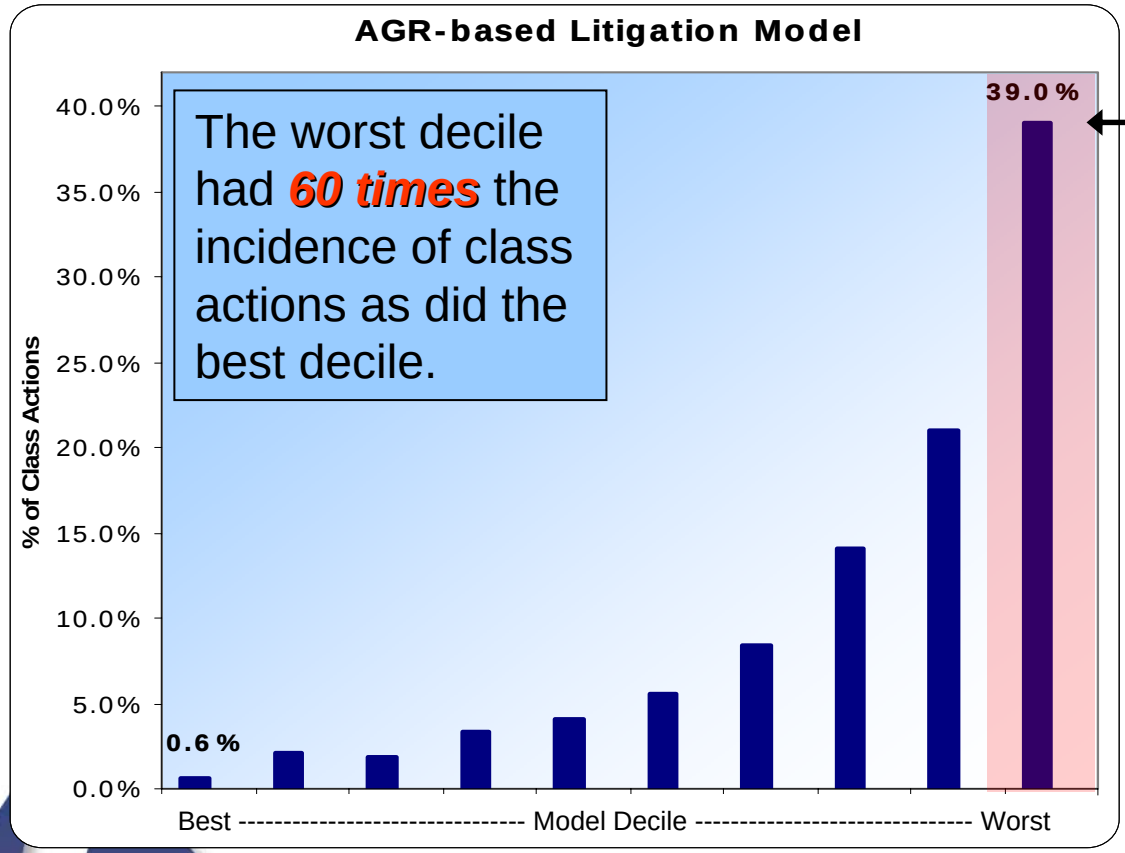
The AGR® Rating and Litigation Risk



Greater Litigation Risk

The worst decile accounts for almost 40% of class action litigation, while the best decile has had less than 1% of the litigation.

The Audit Integrity Litigation Model is predictive across multiple time horizons. Tested from three months through two years, the Litigation Model has proven to be a superior predictor of litigation risk.

While the AGR® is the primary risk factor, additional predictive factors include market capitalization, industry and recent equity performance.

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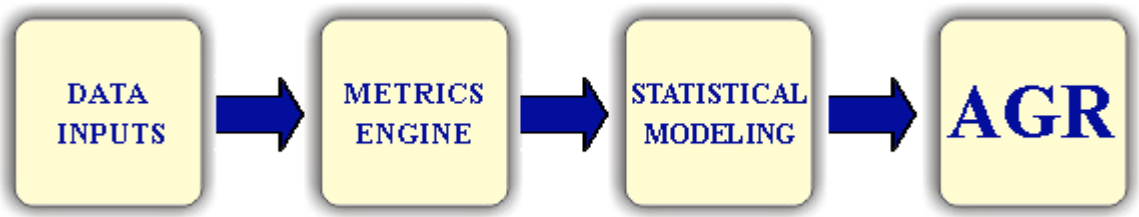
Audit Integrity Methodology

- Audit Integrity conducts extensive accounting and governance tests to identify high-risk companies:
  - **Accounting Risks** – the AGR® model conducts a forensic assessment of the risk that financial results are misrepresented in public disclosures
  - **Governance (and other) Risks** – quantifiable metrics measuring several key aspects of corporate governance and behavior that further contribute to AGR® effectiveness
- The basic steps for computing company AGR® rankings are:



AGR® Methodology – DATA INPUTS

- The AGR® Model is based on a robust, comprehensive set of data:
  - Over 17,500 companies during the sample period 1993 to 2005
  - Over 425,000 AGR® Scores were assigned to these companies
  - Over 800 SEC Accounting and Auditing Enforcement Releases, involving 7,000 quarterly observations of accounting problems
- Data is sourced from over 25 high-quality data feeds
- Proprietary data collection efforts provide critical information on SEC Enforcement Actions, Class Action Litigation and Restatements
- Metrics are calculated for accounting and governance data
- Continuous data validation drives quality assurance

AGR® Methodology – METRICS ENGINE

- The Audit Integrity Metrics Engine generates the measures which are ultimately the building blocks in identifying potentially fraudulent behavior
- Each metric is evaluated for unusual values ("outliers") along three well-established analytic dimensions:
  - **1-year Change** – percentage change from prior year
  - **Time Volatility** – volatility over 8-quarters
  - **Industry Comparison** – # of standard deviations from industry average
- Metrics are organized within the Audit Integrity Taxonomy

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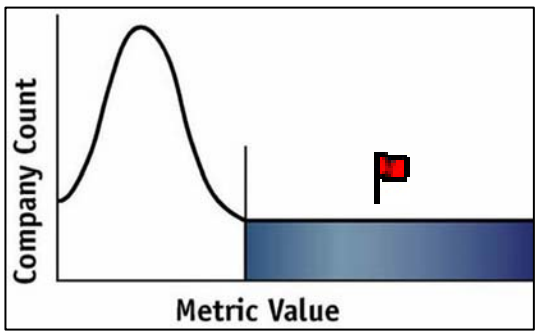
AGR® Methodology – STATISTICAL MODELING

- Audit Integrity measures hundreds of variables without any preconceived bias or applied theories
  - Out of 200+ Metrics, about 70 were found to be significant in identifying aggressive accounting and governance behavior
- Metric are flagged as outliers if two conditions apply:
  - The metric is unusual in value (the worst 20%) and;
  - The unusual value is shown to have been associated with high-risk behavior among fraudulent companies



Outlier metric values which have been associated with fraud are flagged as concerns

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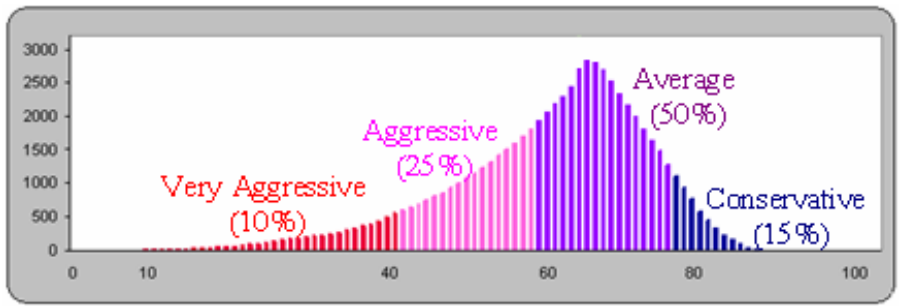
AGR® Methodology – AGR

- Each metric used in Audit Integrity's AGR® calculation is assigned a weight, or coefficient, by the statistical model
  - These coefficients indicate the relative predictive power in identifying a fraudulent accounting condition in a company
- The weights are assigned to red-flagged metrics of companies evaluated by benchmarking the company to its own history and to its peers
  - The sum of the flagged metric weights comprises the AGR® score
- The lowest 10% are categorized as Very Aggressive



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AGR® Model Validation

- To validate the AGR® Model, the following five industry-accepted tests were used:
  1. Distinguishing Low- from High-Risk Firms
  2. Overall Accuracy
  3. Timely Provision of Results
  4. Predictions in Correct Magnitude
  5. Independence from Data Sample

The results: the AGR® Model passed all five tests

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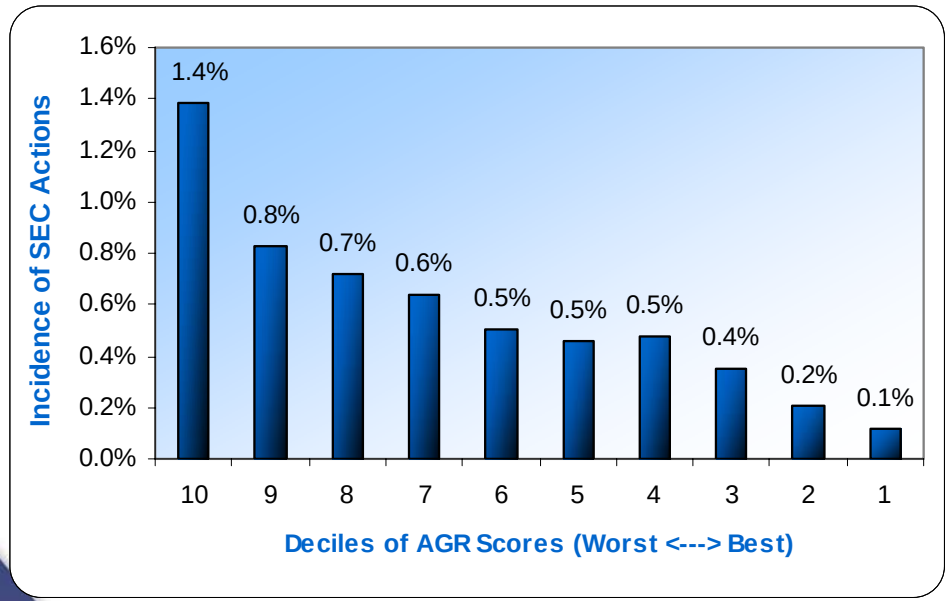
1. Distinguishing Low- from High-Risk Firms

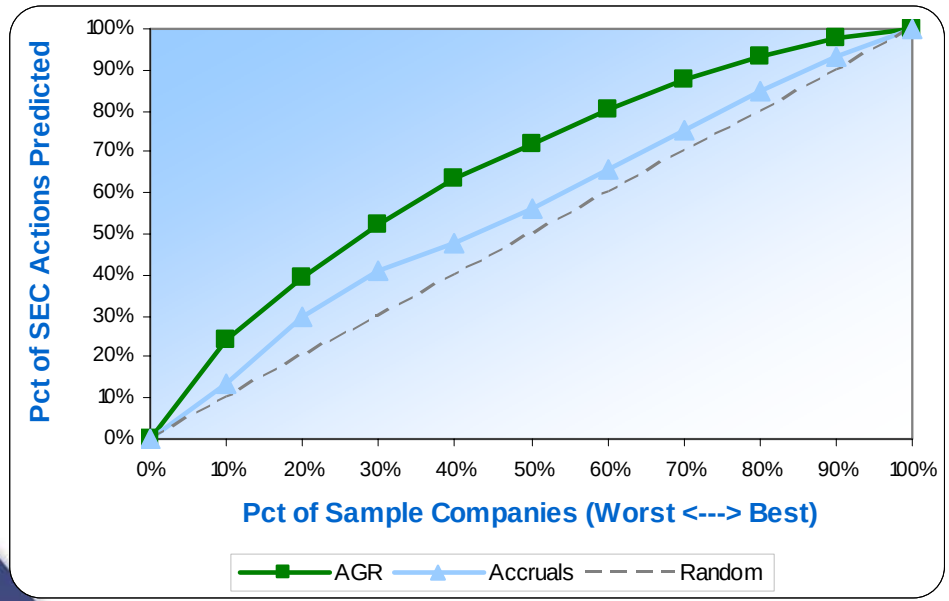
- An ability to separate low-risk from high-risk firms is generally viewed as a basic prerequisite of model performance



The AGR® model accurately separates low from high-risk firms for every range of risk

2. Overall Accuracy

- Two forms of model errors exist: False Negatives and False Positives
  - A Cumulative Accuracy Profile (CAP), below, shows the incidence of False Negatives/Positives of companies identified as high risk; the greater the area under the curve, the more effective the model*



The model was effective at each level of risk, and more than twice as accurate as an accruals model

* Since the AGR® Model based on SEC Actions, only those companies with Actions are denoted as True Positives – a high standard. The AGR® model has proven to be even more effective in predicting class action litigation.

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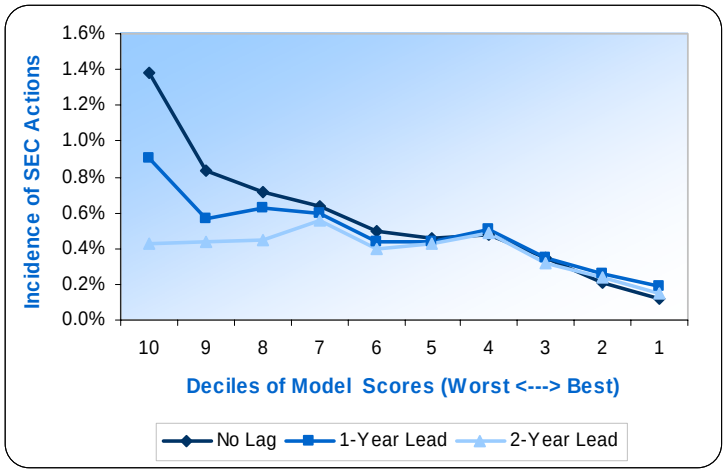
3. Timely Provision of Results

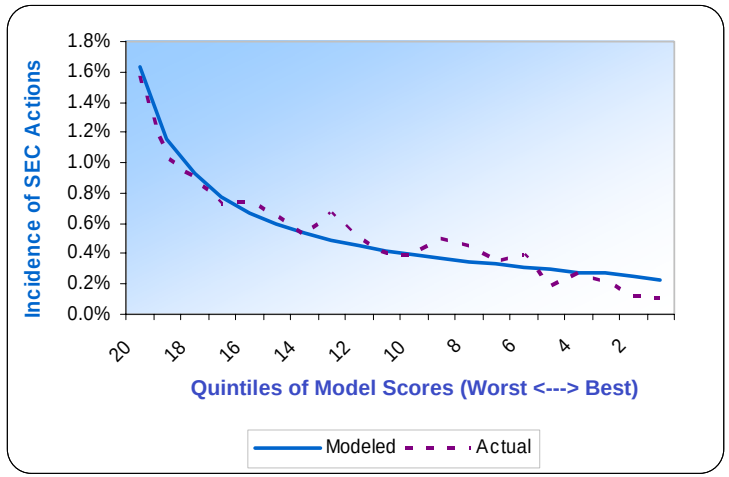
- Provide a timely signal of high-risk accounting behavior
  - the incidence of SEC Actions with various AGR® lead times



The model was predictive across 1-2 year time horizons, being most effective in the year leading up to the negative event

4. Predictions in Correct Magnitude

- It is important that the AGR® Model not over or under-state the level of risk associated with a company or set of companies



The model neither understated nor overstated the relative risk levels – the magnitude was appropriate for each level of risk

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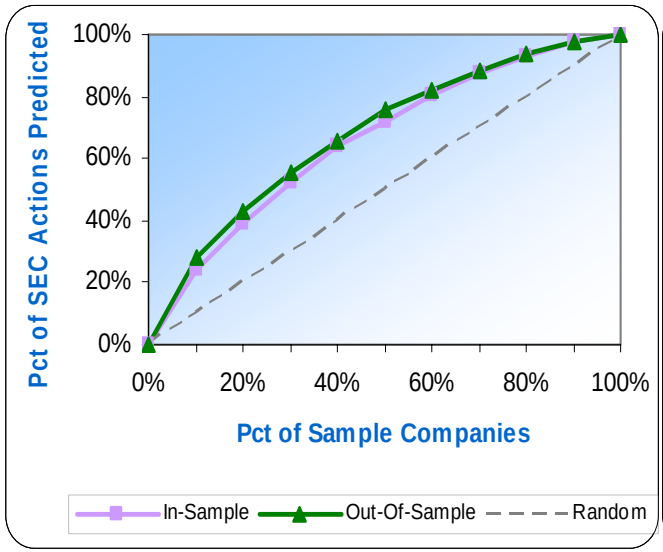
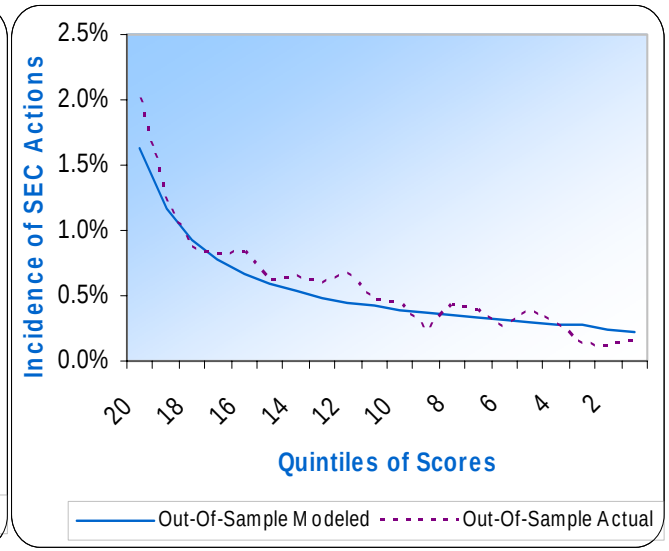
5. Independence from Data Sample

- Validation must ensure that the Model's predictions are not dependent on being calibrated from a particular data sample
  - In-Sample (50% of SEC Actions) and Out-of-Sample (50%) was used





Out-of-sample testing indicates that the AGR® Model is not over fitted and that model predictiveness can reasonably be expected to be repeatable on future samples of companies

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Building a Taxonomy to Predict Fraudulent Behavior

- There are literally dozens of "games" that can be played
  - A taxonomy must include measures of many types of risks
- A broad classification of key fraud issues would include:

Revenue Recognition
Overstated Income
Non-Operating Income
Receivables Accounting
Inventory Accounting
Income Classification

High-Risk Events
Organizational Structure
Capital Structure
One Time Expenses
Discontinued Operations
Accounting Changes

Expense Recognition
Current Expenses
Payables Policies
Amortization Policies
Depreciation Policies
Deferral Policies
Expense Classification

Corporate Governance
Management Issues
Director Issues
Insider Trading
Financial Disclosure
Oversight & Litigation

Asset-Liability Valuation
Asset Impairment
Asset Valuation
Liability Valuation
Pension Accounting
Asset & Liability Classification

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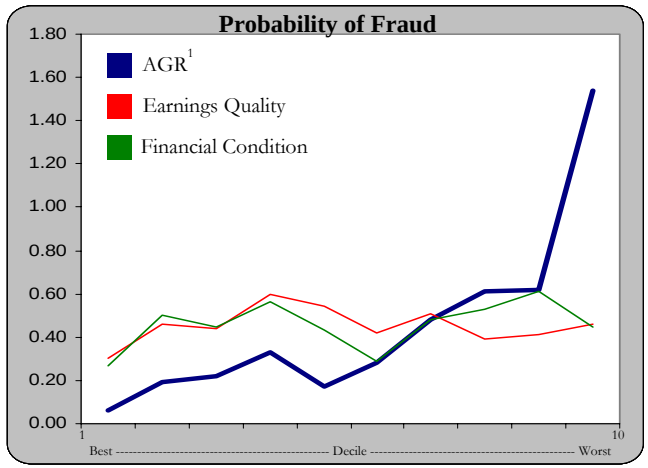
How to Detect Potential Fraud

- Traditional measures of financial strength do not measure the likelihood of fraud
  - analysis assumes that the reported financials are accurate and reliable
- Shareholders and other corporate stakeholders (auditors, insurers, ratings agencies, etc.) remain vulnerable to the potential of fraud at the highest management levels



[1] the Accounting and Governance Risk rating (AGR) is a measure of fraud potential

Companies commit fraud to make financial statements look strong from a fundamental analysis standpoint

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Fraud Detection Metrics

- No simple measure of fraud risk exists – an ***extract*** of the Audit Integrity Taxonomy is below. It combines measures of **Earnings Quality, Forensic Accounting** and **Corporate Governance**

Risk	Issue	Metric
REVENUE RECOGNITION	OPERATING INCOME	OPERATING REVENUES OVER OPERATING EXPENSES UNREALIZED OPERATING GAINS OVER REVENUES
	RECEIVABLES ACCOUNTING	ACCOUNTS RECEIVABLE OVER SALES DOUBTFUL ACCOUNTS ALLOWANCE OVER GROSS RECEIVABLES
	INVENTORY ACCOUNTING	INVENTORY OVER OPERATING REVENUES INVENTORY WRITEDOWNS OVER OPERATING EXPENSES
EXPENSE RECOGNITION	CURRENT EXPENSES	COMPENSATION AND BENEFIT EXPENSE OVER OPERATING REVENUES COST OF GOODS SOLD OVER OPERATING REVENUES
	PAYABLE POLICIES	ACCOUNTS PAYABLE OVER CURRENT LIABILITIES ACCRUED EXPENSES PAYABLE OVER OPERATING EXPENSES
	DEPRECIATION POLICIES	ACCUMULATED DEPRECIATION CAPITAL LEASES OVER GROSS CAPITAL LEASES DEPRECIATION EXPENSE OVER PROPERTY PLANT AND EQUIPMENT
	DEFERRAL POLICIES	DEFERRED COMPENSATION OVER OPERATING EXPENSES PREPAID EXPENSES OVER OPERATING EXPENSES
ASSET-LIABILITY VALUATION	ASSET IMPAIRMENT	ASSET WRITEDOWNS OVER OPERATING EXPENSES IN PROCESS R AND D OVER OPERATING EXPENSES
	ASSET VALUATION	GOODWILL OVER ASSETS PROPERTY PLANT AND EQUIPMENT OVER ASSETS
	PENSION ACCOUNTING	PENSION ASSETS EXPECTED RETURN DOMESTIC PENSION PROJECTED BENEFIT OBLIGATION PENSION OVER LIABILITIES
HIGH RISK EVENTS	ORGANIZATIONAL STRUCTURE	MERGERS NUMBER TTM RESTRUCTURING COSTS OVER OPERATING EXPENSES
	CAPITAL STRUCTURE	BANKRUPTCY FLAG OCCURRED TTM REPURCHASES NUMBER TTM
	ACCOUNTING CHANGES	ACCOUNTING CHANGE EXPENSE CUMULATIVE OVER OPERATING EXPENSES ACCOUNTING CHANGE INCOME CUMULATIVE OVER REVENUES
GOVERNANCE	MANAGEMENT ISSUES	OFFICERS AVERAGE NUMBER YEARS IN POSITIONS COMPENSATION AVERAGE SHORT TERM COMPENSATION OVER TOTAL COMPENSATION
	FINANCIAL DISCLOSURE	REPORTING NUMBER TIMES AMENDED FILING TTM REPORTING NUMBER TIMES RESTATED FILING TTM
	OVERSIGHT LITIGATION	AUDIT FLAG QUALIFIED OPINION LAST YEAR DELISTING FLAG OCCURRED TTM

The AGR – Fraud-related Risk

Inputs

200 Metrics tested

Risk	Issue	Metric
REVENUE RECOGNITION	OPERATING INCOME	OPERATING REVENUES OVER OPERATING EXPENSES UNREALIZED OPERATING GAINS OVER REVENUES
	RECEIVABLES ACCOUNTING	ACCOUNTS RECEIVABLE OVER SALES DOUBTFUL ACCOUNTS ALLOWANCE OVER GROSS RECEIVABLES
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1. Look at all relevant measures of risk

Identification

~70 Predictive of Fraud

Fraud Database

Enron
WorldCom
Tyco
HealthSouth
Adelphia
Qwest
Computer Assoc.
Rite Aide
Global Crossing
Sunbeam
etc., etc.

2. Determine patterns of fraud behavior
- back-tested over 10 years

Metrics

AGR® = Flagged Metrics

Revenue Recognition
- e.g., Receivables

Expense Recognition
- e.g., Depreciation

Asset-Liability Valuation
- e.g., Pensions

High risk Events
- e.g., Litigation

Governance
- e.g., Officer Changes

3. Identify the outliers and flag key risks

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The Link Between Fraud Risk and Equity Returns

- The AGR® on a stand-alone basis has been found in numerous back tests to produce excess returns
- The AGR® Equity Model utilizes four AGR®-based factors to produce the greatest equity returns
  1. Current Quarter AGR®
  2. Variance in AGR® (8 quarters)
  3. Bottom 5% Flag
  4. Persistently Poor AGR® (excluding current quarter)
- The final Model output is a scoring system of 1 to 5:

Equity Model Scoring System

Model Score	Proportion of Population
1	5%
2	25%
3	15%
4	40%
5	15%

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AGR® Equity Model

- Study parameters
  - Size-adjusted excess returns were determined for forward looking periods of one quarter (65 trading days)
  - Period began one day after AGR® publication
  - Returns calculated based on difference between the annualized compound return for the company vs. the same size portfolio
    - CRSP data
- Validation
  - Independence of data sample: 336,000 observations, randomly divided in two. Built the model on ½, tested on the other
    - Each factor passed the t-test at the 1% level
  - Collinearity: tested for simple- and multi-
  - No heteroskedasticity
  - No evidence of auto-correlation bias (Durbin Watson statistic was 2.002)
  - Out-of-Time Test
  - Showed consistency across Time, across market cap

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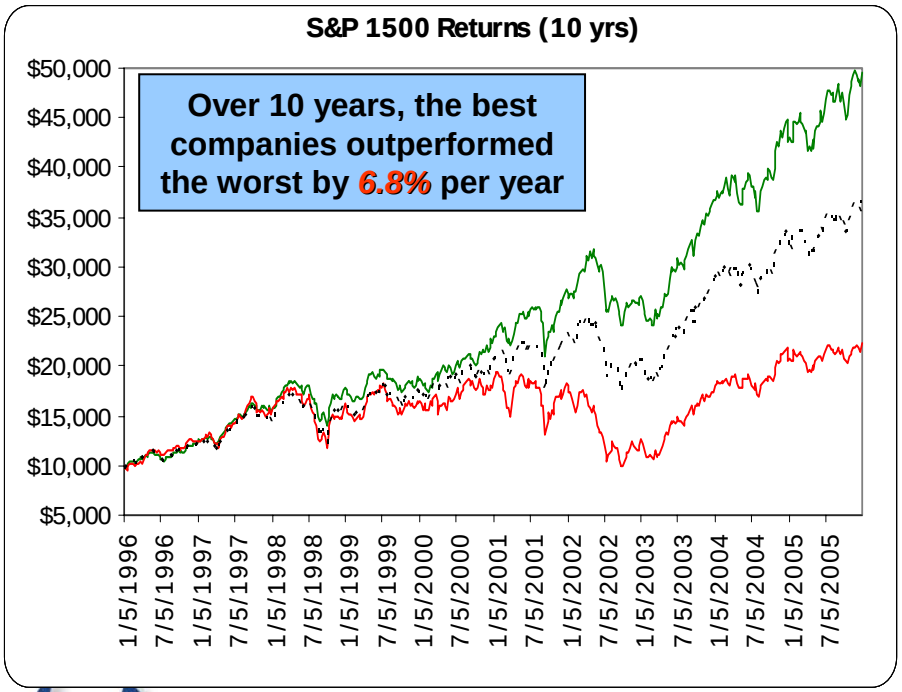
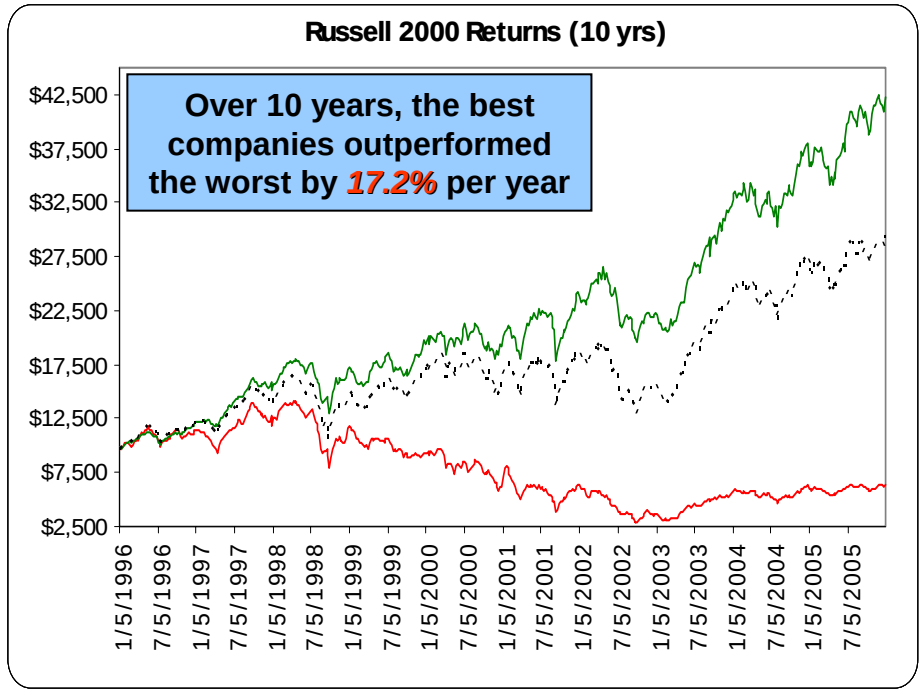
AGR® Equity Model Results

- The AGR® Equity Model showed significant excess returns over the 10-year period





YTD results through June show a spread of 6.12%

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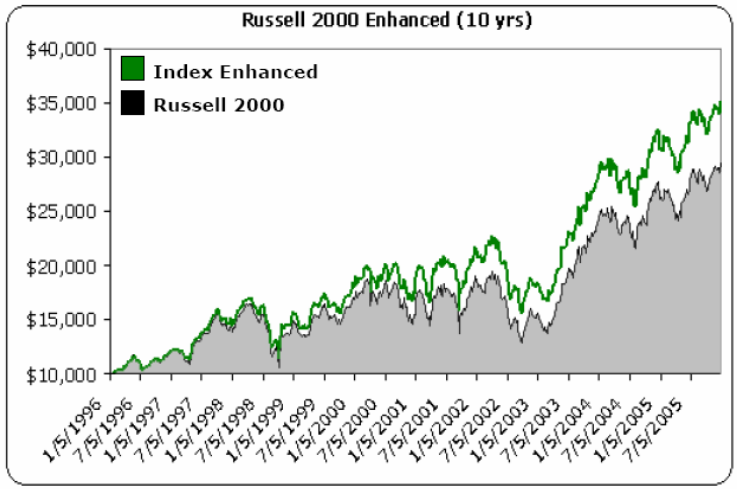
AGR® Equity Model Results

- Results were significant for all cap sizes, and particularly strong for mid- and small-caps
- Results were consistent for both growth and value stocks
- AGR® can be an effective enhanced index strategy:

Model Score	Avg. Annual Return
R 2000[1]	12.0%
R 2000 Enhanced[1]	14.2%
Annual Spread	**2.1%**



No evidence that these results are not repeatable in future years

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A Different Approach to Better Find Risk

- Audit Integrity conducts extensive accounting and governance tests to identify high-risk patterns of behavior
  - the metrics most closely linked to fraud have the greatest AGR® impact
- Key Strengths:
  - **Objectivity**: determine which metrics best predict fraud
  - **Coverage**: over 9,000 U.S. companies, including 400+ ADRs
  - **Updating**: quarterly updates based on the latest financials; weekly Alerts
  - **Depth**: over 200 metrics measured – ***fraud takes many forms***

The result?

- Better identify high-impact risk factors – including ***all*** "games"
- Uncover high-risk companies not found in ***any*** other research

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