#ForensicPerspectives

Responding to allegations of model errors:

SEC enforcement trends

Businesses frequently rely upon models to support investment decisions, ensure accurate financial reporting, perform customer transaction monitoring, support CRM systems, engage in capital stress testing, and more. In 2011, the Office of the Comptroller of the Currency published Supervisory Guidance on Model Risk Management (MRM). Over time, the Securities and Exchange Commission (SEC) and other regulators have embraced its concepts, and regulatory enforcement has increased proportionally, both domestically and abroad.*

SEC enforcement actions

The SEC has engaged in enforcement actions against companies who have used and relied upon models, but which were later discovered to have had errors, inadequate controls, and poor governance. Recent cases (summarized on the reverse) have resulted in sanctions and penalties.







What should companies be thinking about when allegations of model errors arise?

Circumstances surrounding alleged error

- From an independent perspective, is the allegation of an error true?
- How and when was the error first introduced into the business environment?
- How and when was the error discovered?
 Was it corrected in a timely manner?
- Does the model contain other errors?
- Does the company use other models which may contain the same or similar errors?

Materiality and harm

 Was the error material, and did it impact any business decisions or disclosures, or cause any harm to customers or shareholders?

Controls

- Why was the error not prevented or detected sooner?
- What steps has the company taken to enhance controls to prevent, detect, and correct future model errors?
- What should the company be doing to demonstrate reasonable controls over its models? Reasonable effectiveness of its models?

Awareness and disclosure

- How and when should the board be briefed?
- Should the company pre-emptively self-disclose to its regulators, auditors, and/or other stakeholders?
- How should the harms, if any, be redressed?



Recent case summaries: SEC enforcement

A private investment firm and related entities were charged with
securities fraud for concealing an error that caused substantial
investor losses.

\$25 million in civil penalties paid by company **\$2.5 million** in civil penalties paid by CEO or investment manager **\$216.8 million** in payments to clients and investors ✓ Imposition of a monitor

The SEC alleged that a registered investment adviser replaced live traders with a model-based semi-systematic trading system, without disclosing this to the investors in its flagship client hedge fund; the model contained ongoing model and operational errors which caused losses to investors in this fund; and although internal management was aware of these issues, timely and effective remediation steps were not taken.

\$37.3 million in civil penalties paid by company **\$107.6 million** in payments to clients and investors **\$25.2 million** in interest paid

An analyst with no experience in portfolio management or financial modeling developed a quantitative model to manage investment strategies. Several errors were discovered that were not adequately corrected or disclosed.

\$36.3 million in civil penalties paid by company **\$53.3 million** in payments to clients and investors **\$8 million** in interest paid

Legal proceedings arose after a company violated the Investment Company Act's prohibition on cross trades between investment companies and first or second degree affiliated persons. Its compliance systems were inadequate and failed to identify the disallowed cross trades.

\$1 million in civil penalties paid by company **\$7.4 million** in payments to clients and investors ✓ Imposition of a monitor

A company's model for rating residential mortgage-backed securities lacked adequate controls and oversight, and it was unable to timely detect and prevent numerous model errors in a timely fashion.

\$16.25 million in civil penalties paid by company
✓ Imposition of a monitor

One of the nation's largest brokerage firms deployed an AML transaction monitoring system, which the SEC alleged was misconfigured and insufficiently tested, causing the firm to fail to timely file dozens of SARs related to wire transfers between higher risk countries.

\$7 million in civil monetary penalties

Assessing potential model risks and errors

Regulators expect organizations to employ sound processes for model validation and model risk management, including reasonable governance and control mechanisms. CRA has deep experience independently investigating situations where models may not have functioned as intended or were used for purposes that differed from those for which the models were originally designed. We invite you to contact us or other members of our team to continue the conversation.

Kristofer Swanson, CPA/CFF, CFE, CAMS Vice President and Practice Leader, Forensic Services +1-312-619-3313 | kswanson@crai.com Jordan Kraner, CPA/CFF, CFE
Principal, Forensic Services
+1-312-619-3319, +1-317-983-1999 | jkraner@crai.com

