

The Truth About Satyam

Vasant Raval, DBA, CMA, CISA

*Vivek Raval, PhD**

Introduction

There is a preponderance of articles, cases, media coverage, and expert opinions on the Satyam scandal, otherwise known as “India’s Enron.” With the cleanup nearly completed,¹ the scandal belongs to the history books of corporate governance and financial fraud. With some exceptions, the literature on the Satyam Computer Services Ltd. (Satyam) fraud is comprised of essentially the scandal facts and often some broad inferences and opinions about the scandal, how it unfolded, and what can be done to mitigate risks of corporate meltdowns. In contrast, the purpose of this article is to distill the Satyam episode into a holistic understanding of the founder-led corporate financial fraud. The word “Satyam” in Sanskrit language means the truth; we intend to seek the truth about this scandal.

To achieve this purpose, the analysis presented here uses as a lens a fraud model called the Disposition-based Fraud Model (DFM). The framing of facts using a model would likely permit broader inferences beyond the specific fraud. In turn, this framing could help make governance measures more effective in mitigating fraud risk. In the process, this analysis helps assess whether the use of a fraud model could guide the implications of an actual financial fraud. Specifically, can the use of the DFM guide implications of the Satyam fraud? We believe the richness of the DFM could potentially help determine the true drivers of the Satyam fraud.

Fairly exhaustive data analyses of the Satyam scandal have been accomplished (Bhasin 2016; Brown et al. 2014; Gaur and Kohli 2011; Yadav and Baxi 2010). Regulatory agencies have actively intervened intending to return the company to a degree of stability (see, for example, *SEC v. Satyam Computer Services Ltd.* 2011), to provide a new identity (Mahindra Satyam), or to punish those who failed in the regulatory compliance process (*SEC v. Lovelock and Lewes, Price Waterhouse, and Price Waterhouse and Co.* 2011). The regulatory proceedings and their outcomes have been well documented. The how part of the Satyam scandal has been revealed adequately through these processes and related communication; however, why it happened remains somewhat subject to speculation. Our analysis suggests that those in charge of governance miss a holistic view of the scandal. This mistake is because the human side of the act is only tangentially considered in the analysis, giving way to hard facts that undeniably corroborate the illegal act, but may not reveal root causes of the compromise.

Our attempt here is to articulate the true nature of this scandal, particularly as it relates to the human side of financial fraud. For this, rising above the fraud facts, we dissect the incident using the DFM and develop arguments about the drivers of the scandal. To document our analysis, we first introduce the DFM. We then summarize selected facts from the Satyam fraud, particularly with a focus on finding the root causes of the wrongful act. For this, we rely on the DFM's potential to separate 'wheat from the chaff' using as our input published material, media coverage, and regulatory communications related to the fraud. We present our analysis in four major parts of the DFM (see Figure 1): disposition, judgment shift, obstacles and self-efficacy, and rationalizations. Finally, we discuss the implications of the results of our analysis.

DFM: An Overview

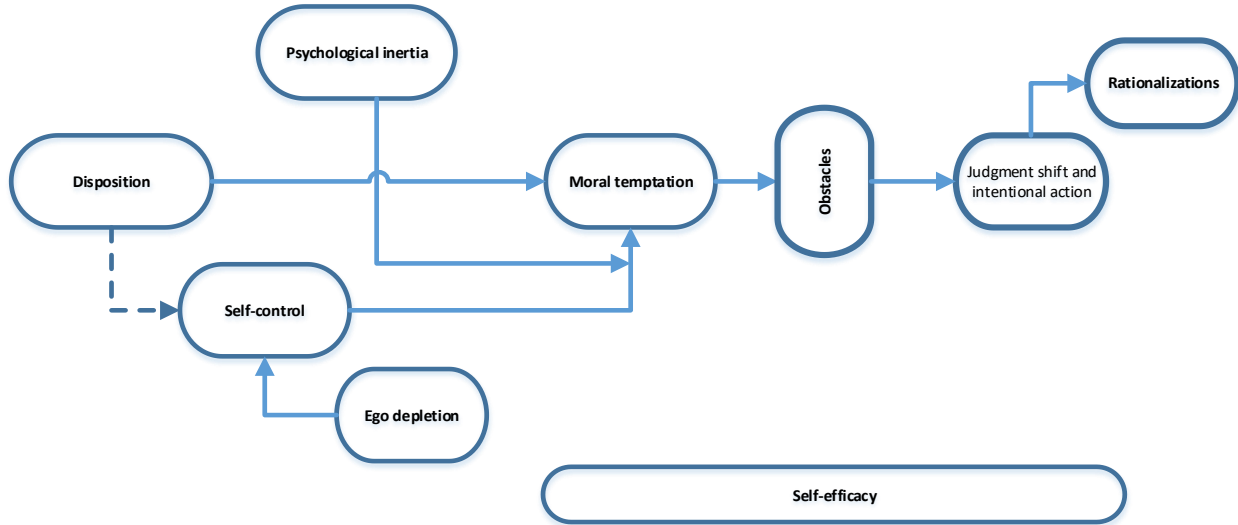
In the financial fraud arena, the fraud triangle (FT) is a model that evolved from Cressey’s (1953) pioneering study of white-collar criminals. Today, the triangle - rooted in the U.S. auditing standards – is presumably the lighthouse for fraud detection. Although the FT sets a baseline to investigate factors influencing fraud, there are many other variables that may influence an individual’s intention to commit fraud (Malimage 2019; Crumbley and Ariail 2020). The model has recently been

¹ There are some exceptions, however. For example, the Price Waterhouse (PW) dispute appealing to the judgments of the Securities and Exchange Board of India (SEBI) against PW is pending with The Securities Appellate Tribunal.

attacked for some of its failings, primarily in articulating the human side of fraud (see, for example, Dorminey *et al.* 2012). Using the FT, Lokanan (2015) analyzed three accounting frauds and concluded that the FT should not be seen as a sufficiently reliable model.

To explicate the human role in financial crimes, Raval (2018) developed a Disposition-based Fraud Model (DFM). Figure 1 presents the model which we discuss here briefly.

Figure 1: The Disposition-based Fraud Model



Adapted from Raval, V. 2018. A disposition-based fraud model: Theoretical integration and research agenda, *Journal of Business Ethics*, 150(3): 741–763. Reprinted with permission.

- **Disposition.** The fraudster's moral identity based on his virtues is captured as his disposition, the tendency, or proneness to act in a morally right (wrong) way. Although a continuum, a disposition is represented in a binary form where persons of low (high) moral development can be identified as self-regarding (other regarding). Arguably, self-regarding persons are more vulnerable to moral temptations than other-regarding persons, and this vulnerability (i.e., selfishness) may trigger moral compromise, moderated by other factors:
 - A person's self-control may accentuate or abate dispositionally-induced desires to indulge; however, over-exercised self-control may be depleted, rendering it temporarily ineffective.
 - Psychological inertia—inability to stop from approaching the indulgence—may progressively loosen the grip of self-control and increase intensity to yield to the temptation.
- **Judgment Shift.** An act in defiance of a moral resolve is the result of a judgment shift: the person, in evaluating whether to indulge, weighs more favorably the immediate gains of doing so than the long-term rewards of resisting the temptation. Thus, the judgment shift occurs—resulting in a compromise—when a person chooses short-term gains.
- **Obstacles.** Obstacles, such as a system of internal controls, can deter a person from indulging in a wrongdoing. Moreover, obstacles—such as a whistleblower system—could expose or limit the indulgence.
- **Self-efficacy.** The desire to indulge is moderated by the actor's assessment of the feasibility of "pulling off" the act and hiding it via self-efficacy measures: forces triggered by the actor to mute the anticipated effects of relevant obstacles. Thus, self-efficacy is a plan of action to disengage, render useless, or silence current or anticipated obstacles that can expose the compromise or its aftermath.
- **Rationalizations.** To avoid cognitive dissonance, fraudsters typically rationalize their actions as justifiable.

With substantial granularity in the human drivers of fraud, the DFM offers hope for deeper insights. The model can potentially help minimize corporate meltdowns, improve the effectiveness of regulation, and sharpen control frameworks.

The Satyam Scandal—A Brief History

Although beyond the scope of this research to comprehensively lay out the financial fraud at Satyam, a brief discussion of the scandal is included in this section.

Founded in 1987 as an information technology (IT) consulting company, Satyam was incorporated as a public company in 1991. In 2008, the year before the disclosure of the fraud, Satyam was the fourth-largest firm in the industry by revenue size. Throughout its existence, it remained an owner-driven entity. The principal creator of the company, B. Ramalinga Raju (Raju), won several distinguished leadership awards, while during the same period Satyam was showered with many recognitions for outstanding IT services and excellent governance practices.

The Satyam board in 2008 was comprised of five independent directors and four non-independent directors (Raju and his brother, an employee, and a consultant for Satyam). The audit committee of Satyam, comprised of four independent directors, met eight times in 2008, the year before the shocking revelations by Raju about the fraud. The committee's conduct appeared to suggest satisfactory compliance in form (if not substance) with rules and regulations.

With impressive financial growth since inception, expectations of continued growth among investors were high. However, worldwide recessionary trends in 2008 added to Raju's concerns about maintaining consistent growth at Satyam. Perhaps the sluggish growth surfaced sooner than the year 2008; according to Raju, the manipulation of financial results continued over a much longer period. The SEC in its complaint (2011) alleged the impropriety from at least 2003 through September 2008. The high-level misreporting became possible with Raju recruiting the company CFO for collaborating in the act. The primary means used to cook the books was the use of super-user privilege to record fictitious transactions in the accounting system.

For all practical purposes, most directors expected to be independent were probably independent only in the sense that they met the regulatory requirements of independence. But independence is not a qualification, it is a state of mind that is challenging to maintain over time as conditions change. On Dec. 26, 2008, M. Srinivasan, an independent director since 1991, resigned from the board, taking the moral responsibility for not opposing the Mytas acquisition decision (Gaur and Kohli, 2011) and thus presumably not exercising his independence in protecting shareholder interests. And Raju, as a non-independent director, certainly was conflicted, with the involvement of his family in the company management and with several significant related-party transactions. Also, under Raju's leadership of the board, the board approved outsize audit fees for the auditors, potentially rendering them myopic with their lax audit practices.

With what appears to be a self-regarding philanthropy, Raju projected himself as a strong steward of his stakeholders, especially in the local community. No one could challenge his good motives. With a high level of trust endowed due to his reputation, Raju could get his way within Satyam.

The 'straw that broke the camel's back' was the proposal to merge Satyam with Mytas properties and Mytas infrastructure, where Raju and his family members were a related party. Such a merger appeared to have the potential to wash out any gap in the numbers at Satyam with hard real estate assets from Mytas that the proposed merger would bring. But the Satyam shareholders did not agree with the proposal. The options left for Raju were to either continue with the numbers game until it is exposed or admit the wrongdoing.

Upon the release of his letter to the Satyam board, the share price tumbled 78 percent. On January 9, 2009, Raju was arrested. Soon after, his brother (B. Rama Raju) and the Satyam CFO (S. Vadlamani) were arrested. The Government of India replaced the entire board and the new board proceeded to find a "home" for Satyam.

Signals from the Fraud Facts

Single Point of Failure

The documented evidence in the Satyam scandals establishes that Raju fabricated and monitored the act of fraud. By his acts, sometimes subtle and often intentional, Raju created a single point of failure, himself. Here is how this happened.

Many large and successful businesses in India can be identified as an outgrowth of the efforts of entrepreneurial families. The significant ownership by founding families allows the family to wield considerable influence, and this influence may continue even after the business grows into a large public company (Adelphia). Such influence could lead to biased—and perhaps self-serving decisions, for example, on the appointment of independent directors, where even the directors who qualify as independent often have other, indirect relationships with the founding family. Similarly, the appointment of external auditors, where a collaborative engagement between a local auditor, possibly connected with the family, and a global auditing firm is permitted by regulations (Narayanaswamy *et al.*, 2012). As a result, the counterbalancing impact of independent checks on the governance of the company was likely muted and ineffective.

As a founder of Satyam, Raju maintained his inner circle of influence. Several signs point to this broad conclusion: (1) Raju was both chair of the board and the chief executive, garnering influence over company operations and, at the same time, keeping the board appeased. (2) He encouraged related-party transactions that appear to be benefitting the related parties, especially members of his family, more than Satyam. (3) The independent directors on the Satyam board did not appear to be truly independent, but rather were under an aura of influence of Raju. (4) Raju involved his family in the operations of Satyam, thus creating a concentration of influence over major decisions of the company. Collectively, these conditions weakened the governance of the company.

Efficacy Wins Over Obstacles

Both (1) controls internal to the firm and (2) regulatory compliance measures failed to prevent the fraud. To illustrate, internal controls in the accounting system allowed ‘super-user’ accounts. Such a privilege can empower the super-user to use the privilege for unauthorized purposes and thus help manipulate and hide, for example, revenue figures from others, especially operations managers. Although appropriate for certain purposes such as troubleshooting for system maintenance, super-user accounts can be used to override the system of internal controls, neutralizing what should otherwise yield effective control.

As Narayanaswamy and his colleagues (2012) assert, despite the implementation of recommendations from several Commissions since 1996, the Satyam scandal could not be prevented, for the overall governance emphasis is on form and not substance of the regulatory requirements. Thus, as an obstacle to a wrongdoing, the regulatory requirements fall short of expectations.

External auditors should usually function as a formidable obstacle to financial irregularities. However, it appears that in the Indian context, this obstacle failed to materialize. The family-founded Indian public companies may prefer a domestic auditor who can collaborate on the engagement with a globally recognized audit firm, such as the Big 4. The domestic auditors may be too close to the family and thus may be conflicted through other, indirect relationships with the founding family (Narayanaswamy *et al.*, 2012). As a result, the rigor and quality of audit may deteriorate to a point where external audit as the intended obstacle over financial fraud has little effect. At Satyam, independent audits by Price Waterhouse and affiliates suffered from the lack of exercise of sound audit procedures, especially for cash and cash equivalents, over-reliance on the client’s statements, and absence of professional skepticism. Additionally, the fees paid by Satyam to its external auditors were over twice as much as the average in the industry (Gaur and Kohli 2011), presumably eroding the independence of the auditors.

Both signals, a single point of failure and empowerment through self-efficacy, are related. The leader’s influence results in the breakdown of checks and balances, resulting from the mutation of independence across various role players. This influence is further aggravated by the impactful self-efficacy measures the leader could deploy to render ineffective the obstacles which may be otherwise effective.

Fraud Analysis using DFM

Human Disposition

Every human being is prone to behave according to his or her disposition. Books on metaphysics discuss various types of behavioral traits that originate from such disposition. The DFM essentially classifies the continuum of disposition into either self-regarding or other regarding. People of self-regarding disposition have a narrow view of the world; they tend to be self-centric, at times at the cost of others. In contrast, other-regarding individuals are duty-focused, interested in serving the stakeholders to whom they are accountable. The former is driven by symbolic moral identity while the latter, by internal moral identity.

At Satyam, the presence of related-party transactions, questions regarding the independence of independent directors, and significant involvement of the family in corporate governance (and in the management of Satyam) are all signs of self-regarding behavior on Raju's part. Self-centricity is often evident in intensely driven and extraordinarily successful executives, making them vulnerable to wrongdoing.

Judgment Shift

In his letter to the board of Satyam, Raju admitted to falsifying profit margins beginning with small amounts in the fiscal year 2004. He believed he was forced to overstate the profits to maintain the share price level, which he believed was important to ensure that Satyam was not subject to a hostile takeover. He probably judged that overstating the profit margins at the time would produce a better overall outcome for him in the long run (help keep the destiny of Satyam in his control) and this he thought was feasible if the reported profit margins continued to be perceived as healthy and growing. The action to cheat now (that is, in the fiscal year 2004) was more attractive than to allow faithful representation of economic reality, which could cause a precipitous erosion of his family's wealth.²

Once the judgment shift occurs, the compromise becomes real and the resolve to uphold one's fiduciary duty is weakened. After committing a compromise, one becomes mentally 'free' to continue the crime now that the resolution is broken. This compromise sets in the addiction-like temptation behavior (Holton 2009), where the actor persists in indulgence; not that he anymore likes to do so, but rather that he has no choice. In Raju's words, "it was like riding a tiger, not knowing how to get off without being eaten." Addiction-like temptations are hard for the actor to resist without significant sacrifices. Importantly, the judgment shift occurs only at the beginning of a series of addiction-like indulgences; subsequently, since the moral resolve has already been broken, there is no need for a judgment shift. The act of cooking the books, although perhaps disliked later, continues. If not willing, you still are wanting it (Holton 2009), wondering when, if at all, "to get off the tiger."

While a self-regarding person can be more vulnerable to moral temptations, for the incidence of compromise to actualize, a judgment shift on the part of the actor should occur as he values the immediate benefits of acting immorally to be greater than the long-term consequences of resisting the temptation to do so.

Obstacles and Self-efficacy

Raju deployed various measures to harness self-efficacy. The use of super-user privileges, recruitment of the CFO and key financial managers to collaborate in the scheme, careful management of the process of bringing on board outside directors perceived to be independent based on regulatory benchmarks, and control of the company with involvement of family members – these are how Raju charted Satyam's destiny under his nearly full control.

Raju and his CFO were aware of ways to get around obstacles presented by the system of internal controls. Using means such as the super-user account privileges, they systematically maneuvered the numbers to maintain perceived representational faithfulness in the crafted financial statements. To manage such a complex cooking of accounting and related operational data, Raju relied on a dedicated group of people, including the CFO, who loyally followed his instructions. Social engineering of those who trusted Raju allowed him to initiate and continue his play with people both within and outside the firm.

If the internal auditors reported directly to the audit committee, the internal audit function could have provided a formidable obstacle to an act of impropriety. However, in Satyam's situation, the internal auditors reported to the CFO and not the audit committee of the board, thus possibly rendering the control ineffective.

The external auditors should present a formidable obstacle to financial crime, for the auditors are presumably independent and competent in their work. However, Satyam's auditors did not deploy sound audit procedures, especially around auditing cash and cash equivalents, and thus bypassed rigorous, independent scrutiny of cash balances presented by Satyam, some of which were not even confirmed by banks. For example, the auditors signed the cash confirmation requests, gave the

² Raju asserted that, except for the sale of some shares for philanthropic purposes, no personally owned equity in Satyam was sold by him and the managing director (including their spouses) during the window of time where the compromise occurred. Nor did they benefit monetarily due to the inflated results. These statements seem to imply that in the process of judgment shift, a chance to do so may not have been considered in comparing the immediate gains over long-term rewards of committing the compromise.

requests to senior management, and relied on them to send the confirmation requests to the banks (Brown et al. 2014). This external force of independent audit likely ran out of professional skepticism and the *will* to do the right thing.

Another externally induced, and usually powerful obstacle, is the whistleblower behavior. In an anonymous message to one of Satyam’s independent directors, a former senior employee of Satyam alerted the director of the possibility of a financial fraud. The board discussed the communication but did not seem to have acted on it. A weak board under the influence of the founder CEO and chair of the board can let the matter pass, presumably as a trivial input. In the Satyam fraud, the weak board—a sign of ethical collapse according to Jennings (2006)—is evident in the absence of director independence and the lack of the board’s collective assertiveness in pursuing the whistleblower incident. For the whistleblower system to work, tipsters should be comfortable that they will remain anonymous and that there will be no retribution for their action. The behavioral requirements of the whistleblower system influence whether the system is functioning effectively. Sadly, “there has not yet been a single story in the Indian media about a whistleblower bringing to light material misdeeds by company management” (Narayanaswamy *et al.*, 2012, p. 595).

Independence of both auditors and (independent) directors may be affected by self-interest. Conflict of interest, the other side of independence, is ubiquitous (Ariely, 2012) and may always make it hard for one to exercise independence. Ariely (2012) argues that our inherent inclination is to return favors, for we prefer not to feel indebted. In a study quoted by Ariely (2012, p. 76), participants gave more favorable ratings to the paintings that came from the gallery that paid their participation fees. The payment established a sense of reciprocity, although payments were expected regardless of ranking of the paintings. Perhaps the recruitment of independent directors under the sweeping influence of Raju resulted in a board that felt obliged to return the favor, diluting the governance process. A similar effect presumably materialized when the auditors were paid excessive audit fees.

Culturally, what may make social engineering effective in India is the Power Distance Index (PDI). As a cultural dimension, Hofstede defined PDI as the degree to which less powerful members of institutions and organizations accept that power is distributed unequally. In high power distance cultures, the lower-level person will unflinchingly defer to the higher-level person and feel relatively okay with that as if it is the natural order (Sweetman 2012). India scores high on PDI, 77, indicating an appreciation for hierarchy and a top-down structure in society and organizations.³ In India, subordinates may believe in, and blindly obey, their leaders.

Rationalizations

The promoters’ stake in the company remarkably decreased from 25.6 percent in March 2001 to 2.18 percent in December 2008 (Bhasin 2016). “As the promoters held a small percentage of equity, the concern was that poor performance would result in a takeover, thereby exposing the gap,” explained Raju in his resignation letter. Perceived takeover threat caused the launch of the fraud, but the fear of exposing the gap induced continued indiscretion.

Finally, “every attempt to eliminate the gap failed,” declared Raju in his resignation letter. This does not spell a genuine desire to admit the problem; instead, Raju thought of masking the gap in a larger company envisioned through the proposed Mytas acquisition. This move, defeated by the shareholders, was a self-efficacy measure to diffuse the deficits created over the years.

A summary of interpretations of the fraud using the DFM is shown in Table 1.

Table 1: A Summary of Interpretations of the Satyam Scandal

DFM component	Case facts	Interpretation of fraud facts
Disposition	Recruiting independent directors	Raju influenced decisions on recruiting directors.
	Related-party transactions	Satyam had significant involvement in transactions beneficial to related parties.
Judgment shift	Keeping control over Satyam without enough ownership	To Raju, the long-term financial picture looked bleak, potentially resulting in loss of control over Satyam. Immediate gains by

³ www.hofstede-insights.com. Accessed March 4, 2020.

		keeping the control seem to far exceed the consequences of fraud disclosure.
Obstacles	Super-user account privilege	Presumably, the privilege was exercised by the CEO and CFO to commit and conceal manipulations.
	Whistleblower feedback	The whistleblower tip received by a director was forwarded to the entire board, including the CEO (Gaur and Kohli 2011). How the tip was addressed by the board is not known.
Self-efficacy	CFO as a co-conspirator	Social engineering by the CEO, using others' trust in him, may have caused the collaboration. The CFOs are normally instrumental rather than primary actors in a financial fraud (Feng et al. 2011). The high PDI in India could have influenced the CFO to not challenge the CEO's suggestion to collude with him.
	Social engineering	Attracting the followers—CFO and other key employees—to help pull off the scheme requires charisma and the perception of trust. Raju was effective in nurturing trust.
	Disproportionate audit fees	Presumably caused judgment shift in auditors, which could have resulted in practices favorable to ensure continued audit engagement for years.
Failure of self-efficacy	Proposed Mytas merger with Satyam	Merger would have caused the balance sheet of Satyam to look more 'real.' Hard assets would be introduced, and fake cash balances may diminish. This self-efficacy measure was defeated by the shareholders.
Rationalizations	"It was like riding a tiger, not knowing how to get off without being eaten." (Raju in his letter to the Satyam board.)	Borne out of the need to explain the dilemma of an immoral act.

Implications

Fraud analyses on the Satyam scandal have produced a large amount of evidence, and that helps 'connect the dots.' This study maps the facts onto a paradigm, which results in additional insights on the drivers of the fraud. Importantly, the use of a fraud model provides a greater degree of generalization beyond the specific episode, thus adding to our understanding of the failure of governance. As a conceptual framework, DFM allows one to draw conclusions systematically, not just look at the bare facts.

The implications presented here are in the form of preventive and detective measures. While each measure is important, collectively, the governance becomes impressively fortified with the combined effect of several measures. Imagine if the directors, auditors, and CFO were all independent in Satyam's fraud. Chances are, the meltdown would not have happened, or the bleeding could have been stopped much sooner. Broadly, the scandal points to the need for bold new measures of corporate governance, refining the fraud-risk mitigation on the human side of the wrongdoing.

Know Your Executives

In addressing financial fraud, we need to look at the human being behind the incident - his disposition and motivation. This process is even more critical in situations where family-founded businesses grow into large public companies. The reason is that the founder-leader of self-regarding disposition could effectively neutralize all impending obstacles and meet the law in form, but not in substance. Truly other-regarding leaders, even among family founders, are those who go beyond the scripts of the law to do the right thing.

Any investigation of just the situation surrounding the fraud without considering the actor's disposition does not fully reveal the true drivers of fraud. Voluntary human action emerges from the mind of the person, led by the person's constitutional

qualities. If prevention or early detection of financial fraud is the goal, it is extremely important to fully understand the human side of the act. Enforcement of regulations and punishment of the perpetrators can offer only limited help in motivating others to not do it (Raval and Adatia, 2016). The real solution lies in knowing the disposition of the leaders and understanding their vulnerabilities from such disposition.

Even among those who accept the argument to pay attention to executive disposition, hesitancy may persist in adopting procedures to assess executive disposition, for the task is new and the art of its successful execution is uncertain. In recent years, auditors have begun to use brainstorming as an exercise to identify fraud risks by evaluating tone *from the top*. Brainstorming should include a review of some of the 'soft' measures of human proneness to indulge (e.g., the executive's sense of entitlement or lifestyle).

It is important to recognize that a leader's self-regarding disposition is not a guarantee that the leader would commit fraud; it is only a risk factor. For the actual occurrence of compromise, the actor should avail of the moral temptation to indulge. While his disposition sets only the probability, the actual occurrence of the episode depends on judgment shift and perceived self-efficacy. Undoubtedly, the self-regarding disposition of influential leaders should leave those in charge of governance with a high degree of risk alert.

While it is important to understand each key executive's disposition, it is equally important to assess what these executives collectively are capable of. For example, what could happen if both the CEO and CFO are of self-regarding disposition? An independent CEO and CFO could help minimize compromises, but when both collaborate, governance through independent roles fails.

Maintain Independence

If there was a single thread missing in the moral fabric of Satyam, it is in maintaining independence beyond regulatory dictates. Besides, the significance of independence as related to director duties seems unclear. According to Cappelli and colleagues (2010), the primary focus of independent directors in Indian companies is not necessary to monitor shareholder interests, but rather to help management in strategic planning. A clear statement of director duties may help independent directors in their efforts to work effectively.

Like Satyam, a large portion of India's corporate community is born out of family businesses that grow into thriving public companies. The transition from a family business to a distinct corporate entity is not just a legal undertaking; the founder must change the mindset of treating it like his or her own 'baby.' Considering this process from the viewpoint of prevention of financial fraud in family-founded corporations, it would help if the two roles, board chair and the CEO, were separated.

Watch for Conflict of Interest

With the family involvement in Satyam, Raju had an ongoing conflict of interest; he appears to have leveraged the relationships to the advantage of the family. Once related parties get involved, transactions compromising the shareholder interest may occur. Raju thought of a major transaction with considerable self-interest: Satyam's acquisition of Mytas Infrastructure and Mytas Properties. While the acquisition did not happen, the situation points to the possible harm to public interests due to such conflicts of interest.

Watch What Incentives Might Do

At the center of moral wrongdoing is the temptation to indulge. The indulgence becomes reality when two conditions are satisfied: (1) the long-term incentives appear to the prospective actor less attractive than the immediate rewards, causing the judgment shift, and (2) self-efficacy measures chosen by the prospective actor at this point seem to the actor quite effective in neutralizing relevant obstacles, thus making it possible to commit and conceal the fraud.

One glaring example of the outsize incentives is the auditors' fees. Not only that the fees were extremely high and climbing year-over-year but were also disproportionately large compared to what Satyam's peers offered. While the auditors involved in this audit did not commit fraud, their behavior tended to ignore the possibility of exposing the crime.

The board's audit committee could benefit substantially by comprehending the rationale for and the scale of short- and long-term compensation of key executives of the company. The ratio of long-term executive compensation to short-term compensation could be a potential trigger for the likelihood of judgment shift; the smaller the ratio, the greater the chance that judgment shift would occur. In the past, the board's deliberations of executive compensation may not have surfaced as

relevant to financial fraud risk. Here lies an opportunity to thwart judgment shift by making immediate rewards less attractive compared to the long-term incentives.

Trust, but Verify

Independence is exerted in many ways. The classic message, trust but verify, resoundingly points to the fact that independent research and verification of data and statements of those who are governed must take place. One can argue that independence is lost, and governance fails, when one does not take steps to corroborate what is presented by the governed party. As an example, the fraud could have been detected at its launch if either the audit committee, internal audit function, or external auditors at Satyam independently verified changes in the granting of super-user account privileges in late 2004 or early 2005.

The auditors at times trusted but did not verify account balances. The result was that the most basic and otherwise highly effective audit procedures such as the verification of bank balances were rendered ineffective.

Summary and Concluding Remarks

An analysis of the facts is especially important in understanding what transpired in a particular incident. Without casting the details of the fraud in terms of a broader pattern, the benefits of the exercise would be limited. However, as illustrated, a holistic understanding of key lessons from the scandal analysis can be further extended by using a framework that would enable generalizations beyond the specific fraud. Gleaned from individual frauds, such a universal understanding of fraud could lead to transferable lessons across all kinds of apparently different compromises.

Can the use of the DFM guide implications of the Satyam fraud? The position presented here identifies several insights that otherwise might be missed without the presence of a framing model (the DFM). This analysis illustrates the value of the DFM in comprehending fraud cases at a semantic level, not just in terms of data and how the law applies to facts gleaned from such data. The insights behind the Satyam manipulations are revealed through the lens of the DFM. Without the use of the DFM, broader implications of the fraud cannot be obtained; consequently, the lessons learned from the incident cannot be extended to a larger body of fraud scenarios.

Whereas fraud facts are important in understanding what happened, the learning from just these facts is limited unless these facts are cast in the context of a model, such as the DFM. For example, Raval and Raval (2019) analyze Ponzi schemes using the DFM and conclude that Ponzi schemes are a quite different class of fraud and should be treated as such. An understanding of the anatomy of a compromise is a first step toward a diagnosis of the underlying problem. While this understanding is attempted here for the Satyam scandal, similar exercises with other fraud cases could serve to further solidify our understanding of drivers of financial fraud. Hopefully, this article will encourage similar exercises in analyzing fraud cases worldwide.

References

- Ariely, D. 2012. *The (Honest) Truth About Dishonesty*, New York, NY: HarperCollins.
- Bhasin, M. L. 2016. Creative accounting scam at Satyam Computer Limited: How the fraud story unfolded? *Open Journal of Accounting*, 5, 57–81.
- B. Raju Ramalingam's letter to the board. 2009. <https://economictimes.indiatimes.com/photo.cms?msid=3946287>, accessed March 20, 2019.
- Brown, V. L., B. E. Daugherty, and J. S. Persellin. 2014. Satyam fraud: A case study of India's Enron, *Issues in Accounting Education*. 29 (3), 419–442.
- Cappelli, P., H. Singh, J. Singh, and Useem, M. 2010. The India way: Lessons for the U.S., *Academy of Management Perspectives* 24(2), 6–24.
- Cressey, D. R. 1953. *Other People's Money*. New York, NY: Free Press.
- Crumbly, D. L. and Don Ariail. 2020. A Different Approach to Detecting Fraud and Corruption: A Venn Diagram Fraud Model. *J. of Forensic and Investigative Accounting*, July–December
- Dorminey, J. W., A. S. Fleming, M. Kranacher, and R. A. Riley, Jr. (2012). The evolution of fraud theory. *Issues in Accounting Education*, 27(2), 555–579.
- Feng, M., G. Weili, S. Luo, and T. Shevlin. 2011. Why do CFOs become involved in material accounting manipulations? *Journal of Accounting and Economics*, 51, 21–36.
- Gaur, A. S., and N. Kohli. 2011. *Governance failure at Satyam*. Richard Ivey School of Business, The University of Western Ontario, Canada.
- Holton, R. 2009. *Willing, wanting, waiting*. Oxford, England: Oxford University Press (eBook).
- Jennings, M. M. 2006. *The Seven Signs of Ethical Collapse*, New York, NY: St. Martin's Press.
- Lokanan, M. E. 2015. Challenges to the fraud triangle: Questions on its usefulness. *Accounting Forum* 39(3), 201–224.
- Malimage, K. 2019. Application of underutilized theories in fraud research: Suggestions for future research, *Journal of Forensic and Investigative Accounting*, 11(1): 33–49.
- Narayanaswamy, R., K. Raghunandan, and D. V. Rama. 2012. Corporate governance in the Indian context. *Accounting Horizons*, 26(3), 583–599.
- Raval, V. 2018. A disposition-based fraud model: Theoretical integration and research agenda. *Journal of Business Ethics*, 150 (3), 741–763.
- Raval, V., and A. Adatia. 2016. The Leaning Tower of Corporate Governance, *The Management Accountant (India)*, Sept., 66–71.
- Raval, V., and V. Raval. 2019. Differentiating Risk Factors of Ponzi from non-Ponzi frauds, *Journal of Financial Crime* 26(4): 993–1005.
- Sweetman, K. 2012. *In Asia, Power Gets in the Way*. Harvard Business Review Ideacast, <https://hbr.org/2012/04/in-asia-power-gets-in-the-way>. Accessed: April 4, 2019.
- U. S. Securities and Exchange Commission (SEC). 2011. *SEC v. Satyam Computer Services Limited d/b/a Mahindra Satyam*. Case 1:11-cv-00672, April 5.
- U. S. Securities and Exchange Commission (SEC). 2011. *SEC v. Lovelock and Lewes, Price Waterhouse and Price Waterhouse and Co.* (Bangalore and Calcutta), Accounting and Auditing Enforcement Release No. 3257, April 5.
- Yadav, V., and C. V. Baxi. 2010. *Corporate governance failure at Satyam*. Asia Case Research Centre, the University of Hong Kong and the Management Development Institute, Gurgaon, India. (Case 10/475C).