RESEARCH

includes research articles that focus on the analysis and resolution of managerial and academic issues based on analytical and empirical or case research

Tunneling vs Agency Effect: A Case Study of Enron and Satyam

Srinivas Shirur

Executive Summary

This is a comparative study of Enron and Satyam corporate frauds. An attempt has been made to arrive at some generalizations about the key reasons for the differences between agency and tunneling problems. Agency effect and tunneling phenomena focus on the divergence in the interests of managers, promoters, and minority shareholders, which are the key reasons for corporate fraud. There is a clear difference between the fraud committed due to tunneling and agency effect. The article highlights this feature through the case study of Enron and Satyam. The difference between tunneling and agency effect has important implications for corporate finance. Corporate finance is based on the assumptions of separation of ownership and management and also perpectual continuity of corporation. If these two assumptions are dropped, then many of the widely accepted theories may not hold.

The article concludes that the legal framework, nature of financial system, and level of economic development are the key factors which determine the level of agency effect and tunneling problem. Solutions to corporate governance problems are quite different in India as compared to the US or Europe. Hence, it would be inappropriate to copy American legislations like Sarbanes Oxley Act in India. Effective prevention of destructive self-dealing activities is necessary for development of vibrant capital market, whereby small investors will be confident to invest in the Indian market, since they will perceive risk premium to be low.

The key policy prescriptions are as follows:

- Effective delivery of justice is as important as enacting investor-friendly laws.
- Creation of subsidiary companies by the parent company and large financial transactions with banks should be viewed with suspicion. On the part of the shareholders, they should be suspicious of any self-dealing transactions. Since the time of Harshad Mehta, when stock brokers, promoters of the company, and bankers connived to cheat small investors, enforcement agencies view even large banking transactions with suspicion.
- Small investors and institutional investors should play a proactive role to seek information and reject any decisions which reduce their value of shares. Proactive participation of outside shareholders in the corporate affairs of the company, especially in the selection of board of directors and approval of resolutions, are the key remedies to prevent such cases.
- There should be an effective control of black money.
- Certain clues like promoters setting up too many subsidiaries, frequent changes and resignations in board of directors, consistent decrease in promoter stake or increasing liquidation of equity options, are clear signs of fraud taking place. Regulatory authorities should work on such clues and operate in such a way that there is least chance of regulatory arbitrage.

KEY WORDS

Self-dealing Problem

Enron

Satyam

Bankruptcy

Unsystematic Risk

Common Law Countries

There is an urgent need to distinguish between companies controlled by managers and those controlled by promoters. Many academicians consider agency cost and tunneling as two sides of the same coin with the same impact on shareholders. The present study tries to clarify this misconception. Agency cost is prevalent in companies controlled by managers. In contrast, tunneling is a problem faced by promoter-driven companies. Understanding the key difference between the two concepts is central to the future analysis of various topics in corporate finance. This analysis is done with the help of a comparative case study of Enron and Satyam. Both the financial scams took place in the first decade of the 21st century and will have wider implications than has been understood till now.

According to La Porta, *et al* (1998), India and the US belong to the common law countries which have fairly good disclosure norms and investor protection laws. Still, companies are widely held in the US while they are concentrated in India. Ignoring the division between civil law countries and common law countries for a moment, one can find a better distinction in shareholding pattern between developed and developing countries. The question is not only about the shareholder rights but also the quality of enforcement of these rights. Investor protection has a wider scope than shareholder rights. To what extent the shareholder rights are converted into investor protection also depends on the quality of law enforcement agencies.

In the present article, tunneling and agency cost are defined in the following manner:

Tunneling is defined as the transfer of assets and profits out of firms for the benefit of their controlling shareholders.

Agency costs are defined as the loss of controlling agency behaviour for shareholders through measures taken by the shareholders themselves and the managers as well as the costs from any agency behaviour that has not been controlled. There are three components of agency costs, viz., monitoring expenditures, bonding expenditures, and residual loss (Jensen and Meckling, 1976). The present article will deal with the cost from any agency behaviour that has not been controlled, i.e., residual loss.

No two tunneling cases are the same. Each has a unique background. In India, there have been many tunneling cases in the past, such as the CRB case, involving Bhansali, MS Shoes, Mescos, Golden Forests, and Home Trade; Harshad Mehta case in 1998, which involved promoters of several old economy companies like Apollo Tyres, BPL, Videocon, Sterlite, etc; and Ketan Parekh case in 2002 mainly involving new economy stocks and service sector companies like Aftek, Infosys, HFCL, Global Trust Bank, DSQ Software, etc. Similarly, no two agency cost problems are the same. In the US, many companies, like Enron, Arthur Anderson, World com, Tyco, Adelphia, Global Crossing, etc., have faced crisis in the past due to agency problem, while others like Lehman Brothers, Merrill Lynch, American Express, Citibank, Morgan Stanley, AIG and Goldman Sachs, etc., have suffered corporate failure due to the recent sub-prime crisis.

An attempt will be made to compare the Enron and Satyam cases and arrive at some generalization about the key reasons for the differences between them.

ENRON

In 1999, Enron was rated as the most innovative large company in the US in *Fortune* magazine's survey of the Most Admired Companies. Yet within a year, Enron's image was in tatters and its stock price had plummeted nearly to zero. Table 1 lists some of the critical events for Enron between August 1985 and December 2001 — a saga of document shredding, restatements of earnings, regulatory investigations, a failed merger, and the company filing for bankruptcy.

Reasons for the Failure of Enron

Unsystematic Risk

In the early 1980s, most contracts between natural gas producers and pipelines were "take-or-pay" contracts, where pipelines agreed either to purchase a predetermined quantity at a given price or be liable to pay the equivalent amount in case of failure to honour that contract. In these contracts, prices were typically fixed over the contract life or increased with inflation. Pipelines, in turn, had similar long-term contracts with local gas distribution companies or electric utilities to purchase gas from them. These contracts assured long-term stability in supply and prices of natural gas.

However, changes in the regulation of the natural gas market during the mid-1980s, which deregulated prices and permitted more flexible arrangements between pro-

Table 1: Enron Timeline

1985: Houston Natural Gas merges with Omaha, to create the company that would eventually be named Enron Corp. The deal integrated several pipeline systems to create the first nationwide natural gas pipeline system.

1987: Enron discovers that oil traders in New York have over extended the company's accounts by almost $1 billion. The company ultimately works this loss down to $142 million. This leads to Enron developing a myriad of services to help reduce the risk of price swings for everything from gas to advertising space.

1988: Enron opens its first overseas office in England to take advantage of the country's privatization of its power industry. The company's major strategy shift – to pursue unregulated markets in addition to its regulated pipeline business – is revealed to executives in a gathering that became known as the "Come to Jesus" meeting.

1989: Jeffrey Skilling joins the company and Enron launches its Gas Bank, a programme under which buyers of natural gas can lock in long-term supplies at fixed prices. The company also begins to offer financing for oil and gas producers.

1992: Enron acquires Transportadora de Gas del Sur, Enron's first pipeline presence in South America and the start of a push to expand on the continent.

1993: Enron's Teesside power plant in England begins operation, one of the first big successes for the company's international strategy.

1994: Enron makes its first electricity trade, beginning what will turn out to be one of the company's biggest profit centres in the next few years.

1995: Enron Europe establishes a trading centre in London, marking the company's entry into European wholesale markets. Europe is now considered one of the company's prime growth markets.

1996: Construction begins on the first phase of the Dabhol power plant in India. The $2 billion project would be plagued with political problems throughout its construction. Enron puts its stake in the project up for sale in 2001.

1997: To expand its electricity business, Enron buys Portland General Electric Corp., the utility serving the Portland, Ore., area. In 2001, Enron agrees to sell Portland General Electric to Northwest Natural Gas Co. for about $1.9 billion. Enron Energy Services is formed to provide energy management services to commercial and industrial customers.

1998: Enron acquires Wessex Water in the United Kingdom, which forms the basis for its water subsidiary Azurix.

1999: Enron forms its broadband services unit. The first phase of the Dabhol project begins operations. One-third of Azurix is sold to the public in an initial public offering. After an early rise, shares fall sharply as the year goes on and the problems facing the company become apparent. Enron Online, the company's commodity trading Internet site, is formed. It quickly becomes the largest e-business site in the world. Enron Energy Services turns its first profit in the fourth quarter.

2000: Rebecca Mark resigns from her position as Azurix Chairperson.

Annual revenues reach $100 billion, more than double the year before, reflecting the growing importance of trading.

Enron Field is opened in downtown Houston. In addition to buying the naming rights, Enron Chairman Ken Lay helped raise financial support for the construction project.

The Energy Financial Group ranks Enron the sixth-largest energy company in the world, based on market capitalization.

Enron and strategic investors, IBM and America Online, launch The New Power Co. to provide electric service in a deregulated market.

2001

August 14, 2001 – Jeffrey Skilling resigned as CEO, citing personal reasons. He was replaced by Kenneth Lay.

Mid- to late August – Sherron Watkins, an Enron Vice President, wrote an anonymous letter to Kenneth Lay expressing concerns about the firm's accounting. She subsequently discussed her concerns with James Hecker, a former colleague and audit partner at Andersen, who contacted the Enron audit team.

October 12, 2001 – An Arthur Andersen lawyer contacted a senior partner in Houston to remind him that the company policy was not to retain documents that were no longer needed, prompting the shredding of documents.

October 16, 2001 – Enron announces quarterly earnings of $393 million and nonrecurring charges of $1.01 billion after tax to reflect asset write-downs primarily for water and broadband businesses.

October 22, 2001 – The Securities and Exchange Commission opened inquiries into a potential conflict of interest between Enron, its directors and its special partnerships.

November 8, 2001 – Enron restated its financials for the prior four years to consolidate partnership arrangements retroactively. Earnings from 1997 to 2000 declined by $591 million, and debt for 2000 increased by $658 million.

November 9, 2001 – Enron entered merger agreement with Dynegy.

November 28, 2001 – Major credit rating agencies downgraded Enron's debt to junk bond status, making the firm liable to retire $4 billion of its $13 billion debt. Dynegy pulled out of the proposed merger.

December 2, 2001 – Enron led for bankruptcy in New York and simultaneously sued Dynegy for breach of contract.

ducers and pipelines, led to an increased use of spot market transactions.

In an attempt to achieve further growth, Enron pursued a diversification strategy. It began by reaching beyond its pipeline business to become involved in natural gas trading. It extended the natural gas model to become a financial trader and market maker in electric power, coal, steel, paper and pulp, water, and broadband fibre optic cable capacity. It undertook international projects involving construction and management of energy facilities. By 2001, Enron had become a conglomerate that owned and operated gas pipelines, electricity plants, pulp and paper plants, broadband assets and water plants internationally and traded extensively in financial markets for the same products and services.

Enron entered into long-term fixed price arrangements with producers and used financial derivatives, including swaps, forward and future contracts. It also began using off-balance sheet financing vehicles, known as Special Purpose Entities, to finance many of these transactions.

The creation of the on-line trading model, EnronOnline, in November 1999 enabled the company to develop further and extend its abilities to negotiate and manage these financial contracts. By the fourth quarter of 2000, EnronOnline accounted for almost half of Enron's transactions for all of its business units.

In the late 1990s, Skilling refined the trading model further. He noted that 'heavy' assets, such as pipelines, were not a source of competitive advantage that would enable Enron to earn economic rents. Skilling argued that the key to dominating the trading market was information; Enron should, therefore, only hold 'heavy' assets if they were useful for generating information.

This strategy back-fired because Enron bet on complicated swaps of 20 years contract based on the presumption that the petrol price will fall in the long run. This exposed the company to unsystematic risk.

Economic Risk

As Enron expanded beyond the natural gas pipeline business, it also reached beyond the US borders. Enron International, a wholly-owned subsidiary of Enron, was created to construct and manage energy assets outside the United States, particularly in markets where energy was being deregulated. This exposed the company to economic risk.

Political Risk

International diversification, particularly in developing economies such as India and China, exposed Enron to political risks. For example, the Dabhol power project in India represented the single largest foreign direct investment project until that time in India, and it attracted considerable political opposition and controversy. Given its limited business experience in developing economies, Enron did not have expertise in managing the political risk of expropriation of its assets after the construction of the plant.

SATYAM

Satyam won the Golden Peacock Award for the best governed company in 2007 and in 2009, the government had to appoint nominated directors to bring the company on the right track. Table 2 lists some of the critical events for Satyam between 1987 and 2009. The case of Satyam's accounting fraud has been dubbed as "India's Enron".

From being India's IT crown jewel and the country's fourth largest company with high-profile customers, the outsourcing firm, Satyam Computers Series, has become embroiled in the nation's biggest corporate scam in living memory.

Ramalinga Raju, the Chairman and Founder of Satyam, who has been arrested and has confessed to a £1 billion fraud, admitted that he had made up profits for years. According to reports, Raju and his brother, B Rama Raju, who was the Managing Director, hid the deception from the company's board, senior managers, and auditors.

Reasons for the Failure of Satyam

There are two hypotheses regarding the Satyam scam:

Reaction to Window Dressing Hypothesis **–** The first hypothesis, as claimed by Ramalinga Raju himself, is that he faked figures to the extent of Rs. 5,040 crore of non-existent cash and bank balances as against Rs. 5,361 crore in the books, accrued interest of Rs. 376 crore (non-existent), understated liability of Rs. 1,230 crore on account of funds raised by Raju, and an overstated debtor's position of Rs. 490 crore. He accepted that Satyam had reported a revenue of Rs 2,700 crore and an operating margin of Rs. 649 crore while the actual revenue was Rs. 2,112 crore

Table 2: Satyam Timeline

June 24, 1987: Satyam Computers is launched in Hyderabad

1991: Debuts in Bombay Stock Exchange with an IPO oversubscribed 17 times.

2001: Gets listed on NYSE: Revenue crosses $1 billion.

2008: Revenue crosses $2 billion.

December 16, 2008: Satyam Computers announces buying of a 100 per cent stake in two companies owned by the Chairman Ramalinga Raju's sons – Maytas Properties and Maytas Infra. The proposed $1.6 billion deal is aborted seven hours later due to a revolt by investors who oppose the takeover. But Satyam shares plunge 55 per cent in trading on the New York Stock Exchange.

December 23: The World Bank bars Satyam from doing business with the bank's direct contracts for a period of eight years in one of the most severe penalties by a client against an Indian outsourcing company. In a statement, the bank says: "Satyam was declared ineligible for contracts for providing improper benefits to Bank staff and for failing to maintain documentation to support fees charged for its subcontractors." On the day the stock drops a further 13.6 per cent, it is lowest in more than four-and-a-half years.

December 25: Satyam demands an apology and a full explanation from the World Bank for the statements, which damaged investor confidence, according to the outsourcer. Interestingly, Satyam does not question the company being barred from contracts, or ask for the revocation of the bar, but instead objects to statements made by bank representatives. It also does not address the charges under which the World Bank said it was making Satyam ineligible for future contracts.

December 26: Mangalam Srinivasan, an independent director at Satyam, resigns following the World Bank's critical statements.

December 28: Three more directors quit. Satyam postpones a board meeting, where it is expected to announce a management shake up, from December 29 to January 10. The move aims to give the group more time to mull options beyond just a possible share buyback. Satyam also appoints Merrill Lynch to review 'strategic options to enhance shareholder value.'

January 2, 2009: Promoters' stake falls from 8.64 per cent to 5.13 per cent as institutions with whom the stake was pledged, dump the shares.

January 6, 2009: Promoters' stake falls to 3.6 per cent.

January 7, 2009: Ramalinga Raju resigns, admitting that the company inflated its financial results. He says the company's cash and bank balance sheet have been inflated and fudged to the tune of INR 50,400 million . Other Indian outsourcers rush to assure credibility to clients and investors. The Indian IT industry body, NASSCOM (National Association of Software and Service Companies), jumps to defend the reputation of the Indian IT industry as a whole.

January 8: Satyam attempts to placate customers and investors that it can keep the company afloat, after its former CEO admitted to India's biggest ever financial scam. But law firms Izard Nobel and Vianale & Vianale file class action suits on behalf of US shareholders, in the first legal actions taken against the management of Satyam in the wake of the fraud.

January 11: The Indian government steps into the Satyam outsourcing scandal and installs three people to a new board in a bid to salvage the firm. The board is comprised of Deepak S Parekh, the Executive Chairman of home loan lender Housing Development Finance Corporation (HDFC), C Achuthan, Director at the country's National Stock Exchange, and former member of the Securities and Exchange Board of India, and Kiran Karnik, Former President of NASSCOM.

January 12: The new board at Satyam holds a press conference, where it discloses that it is looking at ways to raise funds for the company and keep it afloat during the crisis. One such method to raise cash could be to ask many of its Triple A-rated clients to make advance payments for services.

and the margin was Rs. 61 crore.

The reason why Ramalinga Raju claims that he did it was because every year he was fudging revenue figures and since expenditure figures could not be fudged so easily, the gap between actual profit and book profit got widened every year. In order to close this gap, he had to buy Maytas Infrastructure and Maytas Properties. In this way, fictitious profits could be absorbed through a self-dealing process.

***Tunneling Hypothesis* —** The second hypothesis, which the author of this article believes in, is that Ramalinga Raju understated profit to tunnel money to his subsidies. He claimed that the profit margin was only 3 per cent whereas industry norm is 25 per cent. It is very well known that Satyam understated the price to gain business. That is how it acquired 1,180 clients including 185 Fortune 500 companies. Hence, at the most, experts estimated its profit margin to be around 20 per cent. The difference of 17 per cent was being tunneled by him. He created more than 13,000 fictitious salary accounts and siphoned money worth Rs, 1,300 crore (assuming that he paid an annual salary of Rs 10 lakh to each employee) every year. Since he had only 7 per cent stake in Satyam and a major stake in Maytas Infrastructure and Maytas Properties, he would have pocketed Rs. 7,800 crore of Satyam shareholders' money in the past six years. Raju set up many bank accounts and each of these accounts was broken up into a full account and a sub-account. Only Raju and his brother, Rama Raju, had access to the full account, while all other authorized persons were given access only to the sub-accounts. Hence, no one except the family members and the confidants of the family had access to complete information.

DIFFERENCES BETWEEN ENRON AND SATYAM CASES

Success or Failure – The Enron debacle was a consequence of the failure of its business model whereas Satyam was a consequence of the success of its business model. Hence the endeavour of the Enron managers was to hide losses while the promoters of Satyam were busy siphoning off the profit.

Agency cost vs Tunelling – Enron is a classic case of agency cost – managers took undue risk with the hope that if the outcome is in company's favour, they will benefit because of ESOP and if they fail, then the losses will be borne by small investors and employees. In contrast, Satyam was a case of tunneling – promoters siphoned off money through self-dealing. Thus, promoters were involved in the Satyam case while managers were involved in the Enron case.

Role of ESOP – As in most other US companies, Enron's management was heavily compensated using stock options. Heavy use of stock option awards linked to short-term stock price may explain the focus of Enron's management on creating expectations of rapid growth and its efforts to puff up reported earnings to meet Wall Street's expectations.

On December 31, 2000, Enron had 96 million shares outstanding under stock option plans, almost 13 per cent of common shares outstanding.

The stated intent of stock options is to align the interests of management with shareholders. But most programmes award sizeable option grants based on short-term accounting performance, and there are typically few requirements for managers to hold the stock purchased through option programmes for the long term.

The experience of Enron raises the possibility that stock compensation programmes as currently designed can motivate managers to make decisions that pump up short-term stock performance, but fail to create medium- or long-term value. Before the fraud became public, most of the options had already been utilized.

The problem with issuing too many stock options is that managers have windfall gain if company performs well with no risk if company fails. This prompts managers to take much more risk than what shareholders have initially authorized.

Stock options in case of Satyam were very low whereas it was fairly high in case of Enron. The major beneficiaries of the fraud in case of Enron were top managers while losers were rest of the employees. In contrast, in case of Satyam, major beneficiaries were supposed to be promoters and major losers were small investors. The average Enron worker had 62 per cent of his/her 401(k) savings in Enron stock. When the stock price fell from a high of $90 to less than $1 a share, most Enron workers found their retirement funds just about wiped out. Further, while Enron's stock plummeted, the 401(k) plan was "locked down" during an administrative "blackout period," prohibiting those over 50 years from selling their shares. This prohibition, however, did not apply to the executives, who owned shares or controlled stock options.

Hardware vs Software – Enron started successfully in hardware and ultimately failed because of the top managers' focus on software where it took unreasonable risk (Healy and Palepu, 2003). In contrast, Satyam started successfully in software and ultimately failed because of the promoters' unending thirst for real estate. Hence, it was the hardware part of the business which led to the downfall of Satyam.

Chances of Bankruptcy – In case of agency effect, if managers have their own way and investors are careless, the end result will be bankruptcy. This is because, the managers will try to hide the losses till all the net worth gets eroded. In case of tunneling, profit is siphoned, and as and when this fraud comes into public knowledge, this self-dealing could be stopped and company could be again brought back on track. That is the reason why Enron had to file for bankruptcy while Satyam shares re-bounced from Rs. 6 to Rs. 55 within a month of the government appointing nominee directors.

Outward Strategy – Enron invested heavily in Dabhol and lost badly due to the change in the government in Maharashtra (a state in India), which became the starting point of fall of Enron. In contrast, Satyam got listed in NASDAQ, where investors are lot more aware about their rights. It was at NASDAQ that investors started reacting negatively to the buyout of Maytas, which led to battering of the Saytam shares at the bourses. Hence America became the cause of fall of an India company and India became the cause of fall of an American company.

Application of Special Purpose Vehicles (SPVs) — In the case of Enron, SPVs were created to carve out a division or business unit which is incurring heavy losses so that the balance sheet of the parent company could be cleaned up of those losses. In Enron's case, assets that were losing money were sold to SPVs and got it entered in the book of accounts as earnings. However, to be legitimate, accounting rules require that an SPV be legally isolated from the company that created it. In Enron's case, this was not true. The external auditing firm, Arthur Andersen, failed to act in part because it made more money providing consulting services for Enron than it did providing auditing services. This delayed the share price from taking a biting till the time when managers became eligible to liquidate their options. Around 4,000 SPVs were created to hide losses.

Satyam also created SPVs but the *modus operandi* and objectives were quite different. SPVs were created to integrate a subsidiary through merger so that profit could be siphoned out. Maximum siphoning can be done if the promoter has low stake in the acquiring company and high stake in the acquired company. A tactful handling of the process is required. Slowly, the stake of the promoter in the acquiring company is reduced through pyramid structure without outside investors coming to know about it so that the price of share do not fall rapidly. In case the public gets the negative news that promoters are reducing their stake, it will reduce the share price and antagonistic shareholders may look at all the acquisitions with suspicion. In order to secretly reduce the stake, promoters divest through pyramid structure. This allows the promoters to control maximum number of companies with minimum of their own resources. The pyramid structure could be implemented through SPVs. Hence, the key difference is that in case of Enron, it was assets which were transferred from parent company to SPVs in lieu of shares of SPVs or fictitious debtors were created through false invoice while in the case of Satyam, assets of SPVs were transferred to the parent company and in return, payment was made in cash. Who owns the stake in the SPVs was immaterial in case of Enron but was very important in case of Satyam because higher the stake of promoters, higher will be the money they can earn through tunneling.

ANALYSIS OF SELF-DEALING PROBLEM

It is unanimously believed by the experts that self-dealing (which included both agency cost and tunneling) could not be merely controlled by market forces, and legal regulation should be enacted to deal with the problem. Total ban on self-dealing is not a viable alternative because there may be many situations when self-dealing may be beneficial for the shareholders. Hence most of the countries use two legal rules to regulate the self-dealing problem.

Property Rule – Majority-of-the-minority vote by uninterested shareholders, which prevents any transactions from proceeding without the minority group's consent. The disadvantage of this rule is that this may lead to either strategic voting (promoters or managers may bribe some of the uninterested shareholders to vote in favour of the deal even though it may not be beneficial for the company) or holding out (even though the deal may be beneficial for the company but still minority shareholders may not vote because they expect bribe in order to vote).

Liability Rule – Minority shareholders may go to the court and demand compensation in case they suffer a loss.

There are mainly three factors which determine the way self-dealing practices affect the corporate sector.

Legal Framework

Common Law Countries vs Civil Law Countries

Conflict of interest between corporate insiders, such as managers and controlling shareholders, on the one hand, and outside investors, such as minority shareholders, on the other hand, are central to the analysis of the modern corporation (Berle and Means, 1932). The insiders who control corporate assets can use these assets for a range of purposes that are detrimental to the interests of the outside investors. Most simply, they can divert corporate assets to themselves, through outright theft, dilution of outside investors through share issues to the insiders, excessive salaries, asset sales to themselves or other corporations they control at favourable prices, or transfer pricing with other entities they control (Shleifer and Vishny, 1997). Alternatively, insiders can use corporate assets to pursue investment strategies that yield them personal benefits of control, such as growth or diversification, without benefiting outside investors (Baumol, 1959).

What is meant by *insiders* varies from country to country. In the US, the UK, Canada, and Australia, where ownership in large corporations is relatively dispersed, most large corporations are to a significant extent controlled by their managers. In most other countries, large firms typically have shareholders that own a significant fraction of equity, such as the founding families (La Porta, Lopez-de-Silanes, and Shleifer, 1999). The controlling shareholders can effectively determine the decisions of the managers (indeed, managers typically come from the controlling family), and hence the problem of managerial control *per se* is not as severe as it is in the rich common law countries. On the other hand, the controlling shareholders can implement policies that benefit themselves at the expense of minority shareholders. Regardless of the identity of the insiders, the victims of insider control are minority shareholders. It is these minority shareholders who would typically prefer dividends instead of reinvestment of profit for expansion.

Common law countries (US, UK, Canada, Australia, etc.) depend on liability rule; property rule is optional. In the case of civil law countries (France, Germany, Japan, etc.), property rule is predominant. The advantage of depending heavily on liability rule is that the company has powers to implement decisions for its overall benefit without having to take prior approval of disinterested directors and shareholders. In case managers siphon off money, the court will penalize them heavily.

In the case of common law countries, minority shareholder interest is given more importance than civil law countries. Disinterested shareholders must approve the transaction in 48 per cent of the common law countries but only 16 per cent of the civil law countries. In contrast, the CEO may single-handedly approve the transaction in 20 per cent of the civil law countries but never in the common law countries. UK is an enigma in the classification between common law countries and civil law countries. The strength of the regulation of self-dealing in the UK lies in the heightened scrutiny of transactions involving related parties before they may be approved rather than in favouring litigation by minority shareholders. This has led legal scholars to remark that "Judicial assessment of the fairness of self-dealing transactions has not been a significant part of the British law." In fact, minority shareholders face a high burden of proof in challenging the transaction because it was approved by disinterested shareholders with both the advice of independent financial experts and full disclosure of all material information (La Porta, Lopez-de-Silanes and Shleifer, 1999). What this means is that in case of common law countries, managers usually have the discretion to engage in a self-deal without the approval of shareholders but in that case, it is the management who has to prove in the court that they have not benefited by such self-deal. In case managers take the approval of shareholders, the onus of proof shifts to the petitioner to prove that management has siphoned off money.

The US does not require shareholder approval for related-party transactions and instead emphasizes litigation to protect minority shareholders against self-dealing. France allows related party transactions to be carried out without shareholder approval if they take place on "normal" terms. However, it is easy to challenge related-party transactions that take place without shareholder approval.

The buyer is required to make full disclosure in 57 per cent of the common law countries, but in only 25 per cent of the civil law countries. Consistent with this pattern, an independent review of the transaction is required in 48 per cent of the common law countries but only 24 per cent of the civil law ones (La Porta, Lopez-de-Silanes and Shleifer, 1999).

Common law countries typically require both extensive disclosure and the approval of the transaction by disinterested shareholders. In contrast, civil law countries typically have fewer disclosure requirements and entrust the approval of self-dealing transactions to the CEO or the board of directors

Ease with which Minority Shareholders may Prove Wrongdoing

Rescinding the transaction is impossible in 66 per cent of the civil law countries and requires proving fraud in the remaining 28 per cent. Shareholders controlling 10 per cent of the stock can sue promoters and the other directors in 90 per cent of the common law countries and in roughly 80 per cent of the Scandinavian and German legal origin countries. In contrast, shareholders have a standing to sue in only 56 per cent of the French civil law countries. (La Porta, Lopez-de-Silanes and Shleifer, 1999).

The index of *ex-post private control of self-dealing* encapsulates the disclosure requirements after the transaction is approved and the *ease of proving wrongdoing*. It shows that the disclosure requirements are more stringent and it is easier for plaintiffs to prove wrongdoing in court in the common law countries than in the civil legal origin ones. To be more specific, under the Delaware Law, the transaction may be approved by the board of directors. In fact, the Promoter may even participate in the decision. However, challenging the transaction in court is very easy if, as we assume, interested directors participate in the decision.

Fair dealing covers such questions as to when the transaction was timed, how it was initiated, structured, negotiated, disclosed to the directors, and how the approval of the directors was obtained. Fair price relates to the economic and financial considerations of the proposed transaction, including all relevant factors. Directors must then show the 'entire fairness,' where all aspects of the issue are examined. In France, self-dealing agreements must first be approved by the Board of Directors and then by disinterested shareholders. The requirement to obtain shareholder approval for related party transactions is easy to avoid in France. However, related party transactions are easy to challenge if they are not approved by the shareholders. In practice, shareholder approval is almost always sought.

Impact of Legal Framework on Self-Dealing

Judiciary is called the soft infrastructure of a nation. The way laws are codified by the legislature may be fairly different from the way the court interprets them. In normal situations, the US favours minority shareholders but in times of corporate action, be it, ESOP, management compensation, Mergers & Acquisitions or bankruptcy proceedings, the court is known to apply 'Business Judgment Rule' and give wide discretion to the managers (Delaware courts are well known for this bias). In contrast, the UK courts are known to favour employees and minority shareholders. That is the reason why the incidence of agency problem is more prevalent in the US than in the UK.

In case of India, although law is quite favourable to minority shareholders, its tardy execution in the court takes away that advantage. Long legal battle, inadequate protection of witness by police which force them to turn hostile, and ineffective whistle blowing policies give promoters undue advantage.

India has adopted the UK model mainly relating to self-dealing problem with some flavour of American legislation. In the case of the US, it is not mandatory to take the approval of minority shareholders before the self-dealing transaction takes place. Minority shareholders can go to the court where the fairness test will be applied and the managers will have to prove that the deal is fair. In case the managers take the approval of minority shareholders before approving the self-dealing transaction, the onus of proof shifts to the plaintiff. If the interested party is a director or manager without a controlling interest in the corporation, then business judgment rule is applied. In case of India, it is mandatory for the management to follow property rule. Minority shareholders above a given per cent can move court if they feel aggrieved by the deal. In the case of merger, it is necessary to go to the court to get the final approval.

Arm's Length Relationship-based Capital Market *vs* Relationship-based Banking System

The distinction between arm's length relationship-based capital market and relationship-based banking system is very important for analysing the corporate structure of an economy ((Rajan and Zingales, 1995). Chandler (1972) had distinguished between European family capitalism, American managerial capitalism, and Japanese group capitalism. Mostly, but not completely, American managerial capitalism is based on arm's length relationship where the financer is protected by explicit contracts and transparency. In case of group capitalism and family capitalism, relationship-based banking system is the predominant method of financing debt. Institutional relationship matters more and the market becomes a less important medium for finalizing the terms of transaction. Agency effect is more predominant in case of arm's length relationship-based system and tunneling problem is more frequent in case of relationship-based banking system. Firms in France, Germany, and Japan are more highly levered than firms in the US and the UK.

Most of the tunneling takes place through SPVs that are financed by the banks. Banks' top management has a good relation with the promoters and hence finance such SPVs. Sometimes, as in the case of Harshad Mehta, Ketan Parekh and others, brokers, bankers, and promoters form a nexus and the booty is shared amongst them. Enron did not require the help of the banks as it was only transferring the assets in lieu of shares of SPVs. In the case of Satyam, since SPVs needed to be first stuffed with tangible assets, it required bank finance and later on, bought it at higher than market value and siphoned off the money.

Tunneling is implemented through the mechanism of SPVs. In order to finance the SPVs, debt is required. Equity is introduced through the pledging of shares of promoters of the parent company to the banks and generating funds to finance SPV equity base. The SPV corpus is expanded through acquiring debt finance through banks. India does not have a well-developed retail debt market like the US. In the case of countries strong in arm's length relationship-based financial system, possibility of tunneling is less compared to countries with relationship-based banking system.

Developed Countries *vs* Developing Countries

As the country develops, shareholding gets diversified; risk premium in investing in capital market tends to decline; and power shifts from promoters to managers and technocrats. Hence, developing countries are more susceptible to tunneling.

In LDCs, law enforcement is always a problem because enactment of law by the Parliament is fairly easy but its implementation by corrupt judiciary, police, and politicians is tardy. Ramalinga Raju bribed them and had close nexus which made enforcement of corporate governance norms very difficult. When the minority shareholders are not sure whether the benefits of the company's success will be fairly distributed, they put high risk premium in buying the shares. Also, their expectations of increase in the price of shares is very high because they know very well that all the retained earning will be siphoned off by the controlling shareholders. This is the reason why only 2 per cent of the shareholders invest in India compared to 37 per cent in the US. Volatility of Indian stock exchange is more than in case of developed countries because expectations of price rise is more in underdeveloped market as that is the only source of profit for the investors. Most of the developed countries depend heavily on the liability rule because they have efficient legal enforcement system in place. Most of the underdeveloped countries depend on property rule because this reduces the pressure on the limited legal system with large pending cases.

Black money is the main source of tunneling surplus from which promoters tend to finance their new ventures in underdeveloped countries. Many experts are of the view that in the absence of efficient capital market, this acts as internal capital market for business houses to allocate resources. A major share of the black money belongs to minority shareholders which are expropriated by the promoters.

Since a company is brought into existence by the promoter, he has certain inherent rights over the company. Law cannot infringe on those rights. Regulators micro-managing the company is also not usually effective. It is not mere legal provisions, but efficient judiciary, vibrant capital markets, effective surveillance by regulators, and proactive participation of outside shareholders in the corporate affairs of the company, especially in the selection of board of directors and approval of resolutions, which are the key remedies to prevent such cases. Certain clues like promoters setting up too many subsidiaries, frequent changes and resignations in board of directors, consistent decrease in promoter stake or increasing liquidation of equity options, are clear signs of these problems cropping up. On the part of the shareholders, they should be suspicious of any self-dealing transactions. Since the time of Harshad Mehta, when stock brokers, promoters of the company, and bankers connived to fool small investors, enforcement agencies view even large banking transactions with suspicion. Regulatory institutions should have clearly defined roles so that promoters do not resort to regulatory arbitrage to serve their interests at the cost of other shareholders.

CONCLUSION

Unlike Enron, which sank due to agency problem, Satyam was brought to its knee due to tunneling. The company with a huge cash pile, with promoters still controlling it with a small per cent of shares (3%), and trying to absorb a real estate company in which they have a majority stake is a deadly combination pointing *prima facie* to tunneling. Promoters have consistently pledged their shares to financial institutes to raise finance to buy land for Maytas Infrastructure and Maytas Properties. Higher the value of land bank of Maytas Infrastructure and Maytas Properties, higher will be the deal with Satyam, and greater will be the proportion of funds that could be siphoned off. Time was ticking for Rajus because they were facing threat of takeover due to the decreasing stake of the promoters. Starting point of any tunneling process is the regular decline in the stake of promoters in the acquiring company and increase in stake in the target company. High stake of promoters at the time of tunneling may lead to significant loss to promoters since investors will decrease the value of the company if they come to know about it.

Origin of the legal system, framework of the financial system, and level of development are the key factors which determine the level of agency effect and tunneling problem. Agency effect and tunneling phenomena focus on the divergence in the interest of managers, promoters, and shareholders. Corporate finance is based on the assumptions of separation of ownership and management and perpetual continuity of corporation. If these two assumptions are dropped, then many of the widely accepted theories may not hold; for example, the capital structure decisions and the way risk and cost of capital is calculated. Suppose the promoter himself is in charge of the company, then the cost of equity may not be relevant for decision-making because increase in dividend and capital gain may be a benefit and not a cost for him. In fact, in case of vanishing companies, not only returns, but also the principal amount of other shareholders is expropriated by the promoters. The concept of cost of capital and the valuation of the company based on free cash flow discounting method becomes invalid in such situations. Regarding capital structure decisions, in case of promoter-driven companies, reverse pecking order theory works better according to various studies in the Western countries.

Many econometric models have been developed to calculate agency effect like Morck, Shleifer and Vishny (MSV) Model, McConnell and Servaes (MS) Model, Short and Keasey (SK) Model, etc., but they are not applicable to calculate tunneling effect because promoters' stake tends to affect different set of variables more compared to managerial stake. Hence there is a need to develop distinct econometric models to calculate the tunneling effect.

Usually, tunneling may not lead to sickness of the company (unless it is a case of vanishing company) because the promoter is more interested in milking the cow rather than killing it. He would like the original companies to finance new companies set up by him. In case of agency cost, many remedial measures have been suggested to align the interest of managers with that of the shareholders. In addition to the normal text book remedies to deal with the agency cost, Jensen (1989) has gone to the extent of recommending increase in debt, leverage buyout, and privatization of companies (which he calls as eclipse of public corporation) as solutions to deal with the agency cost.

If these destructive self-dealing activities are detected at an early stage, then the company could be revived by a change in the Board of Directors, and in the extreme case, the government has to take control of the company and appoint its own nominees. In case such activities could not be detected at an early stage, liquidation is the only solution. It is also important to expedite the proceedings of criminal prosecution of promoters, who indulge in destructive self-dealing activities, to discourage other people to resort to such practices. Only then the capital market can be vibrant and small investors will be confident to invest in the Indian market, since they will perceive risk premium to be low.

REFERENCES

Baumol, William (1959). *Business Behavior, Value and Growth*, New York: Macmillan.

Berle, Adolf and Means, Gardiner (1932). *The Modern Corporation and Private Property*, New York: Macmillan

Chandler, Alfred (1972). *Strategy and Structure*, MIT Press

Healy, Paul M and Palepu, Krishna G (2003). "The Fall of Enron," *Journal of Economic Perspectives*, 17(2), 3-26.

Jensen, Michael C (1989). "Eclipse of the Public Corporation," *Harvard Business Review*, September-October, 61-74.

Jensen, Michael and Meckling, William (1976). "Theory of the Firm: Managerial Behavior, Agency Costs, and Capital Structure," *Journal of Financial Economics*, 3(4), 305-360.

La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei; and Vishny, Robert, (1998). "Law and Finance," *Journal of Political Economy*, 106(6), 1113-1155.

La Porta, Rafael; Lopez-de-Silanes, Florencio and Shleifer, Andrei (1999). "Corporate Ownership Around the World," *Journal of Finance*, 54(2), 471-517.

Rajan, Raghuram and Zingales, Luigi (1995). "What do we Know about Capital Structure? Some Evidence from the International Data," *Journal of Finance* 50(5), 1421-1460.

Shleifer, Andrei and Vishny, Robert W (1997). "A Survey of Corporate Governance," *Journal of Finance,* 52(2), 737-783.

Srinivas Shirur is the Director and a Senior Professor of Finance and Economics at the Galgotias Institute of Management Technology, Greater Noida. A Graduate in Economics (Hons) from Delhi University, he is also an M.A in Economics from Osmania University and an MBA in Finance from Punjab University. He has earned his Ph.D. in Finance from the Department of Business Studies, Jamia Millia Islamia (Central University), New Delhi. He was awarded JRF by the UGC to pursue his doctorate. He has written four books on topics relating to Finance and Economics. Around 50 of his articles have been published in reputed journals. He has been involved with various consultancy projects.

e-mail: shirur@gmail.com

Business social responsibility should not be coerced; it is a voluntary decision that the entrepreneurial leadership of every company must make on its own.

— John Mackey