CHAPTER II

CONCEPTUAL FRAMEWORK

2.1 Introduction

Corporate governance has become a global issue over the last two decades in the wake of increasing integration of world economies and growth of large organisations. Corporate governance reforms have emerged as a well-debated issue among scholars as well as managers throughout the world. Countries around the world are developing new codes of best practices and amending them in the light of successive developments in the financial markets as well as on their economic front. There have been continuous amendments in various laws and listing requirements of the stock exchanges of various countries in a quest to reform corporate governance. However, this issue of corporate governance is not so nascent; its roots can be traced centuries back when Adam Smith documented the principal-agent conflict.

With the expansion of economic activities, size of business started increasing making it beyond the scope of a single owner to manage it, the advent of partnership infused the concept of mutual dependence and binding among owners. This seems like the first playground for good governance whereby each supplier of funds was not involved in each decision of firm and agency relationships started. With the expansion of capitalism in late 1800’s and early 1900’s and introduction of the concept of joint stock company, came the widespread separation of ownership and control functions of firm and hence greater manifestations of agency theory. The firms that succeeded and survived the test of time were the ones that had strong governance imbedded in their functioning.

The basic purpose of this chapter is to provide the conceptual framework of corporate governance. The framework is likely to facilitate an examination of the phenomenon which has engaged a lot of attention of popular and academic media. In an endeavour to describe the conceptual framework, underlying paradigms or theories, structure, processes/behaviour as well as the potential outcomes and beneficiaries of corporate governance reforms would be examined.
2.2 Conceptual Framework of Corporate Governance

In this section, an effort has been made to explain the conceptual framework of corporate governance. This may include definitions, theories behind the codes and best practices, the role of key players in corporate governance and various initiatives in India. Corporate governance can mean many things to those concerned. Various definitions of corporate governance given by different scholars are given below.

2.2.1 Definitions of Corporate Governance

The concept of corporate governance is diversely defined because it, potentially covers a large number of distinct economic phenomenon. As a result different people have come up with different definitions ranging from a narrow view on one end, restricted to the relationship between the company and its shareholders and a more inclusive broad view on the other end. Difference in definitions basically reflect the proponent’s special interest in the field, so the best way to define the concept is perhaps to list a few of the different definitions rather than just mentioning one definition. Some of the definitions are given below:

Sir Adrian Cadbury has, in Global Corporate Governance Forum (2000), defined corporate governance as “Corporate Governance is concerned with holding the balance between economic and social goals and between individual and community goals. The corporate governance framework is there to encourage the efficient use of resources and equally to require accountability for the stewardship of those resources. The aim is to align as nearly as possible the interests of individuals, corporations and society.”

In the words of James McRitchie “Corporate governance is most often viewed as both the structure and the relationships which determine corporate direction and performance. The board of directors is typically central to corporate governance. Its relationship to the other primary participants, typically shareholders and management, is critical. Additional participants include employees, customers, suppliers, and creditors. The corporate governance framework also depends on the legal, regulatory, institutional and ethical environment of the community. Whereas the 20th century might be viewed as the
age of management, the early 21st century is predicted to be more focused on governance. Both terms address control of corporations but governance has always required an examination of underlying purpose and legitimacy.”

Corporate governance is about the whole set of legal, cultural, and institutional arrangements that determine what public corporations can do, who controls them, how that control is exercised, and how the risks and return from the activities they undertake are allocated. (Margaret Blair, 1995).³

Cannon (1994) put forward that “Governance of an enterprise is the sum of those activities that make up the internal regulation of the business in compliance with the obligations placed on the firm by legislation, ownership and control. It incorporates trusteeship of assets, their management and deployment.”⁴

Solomon and Solomon (2004) defined Corporate Governance as a system of checks and balances, both internal and external to companies, which ensure that companies discharge their responsibility to all their stakeholders and act in a socially responsible way in all areas of their business activities.”⁵

CII has defined “Corporate governance deals with laws, procedures, practices and implicit rules that determine a company’s ability to take managerial decisions vis-à-vis its claimants—in particular, its shareholders, creditors, customers, the State and employees. There is a global consensus about the objective of ‘good’ corporate governance: maximising long term shareholder value.”⁶

According to Shleifer and Vishny (1997) “Corporate governance deals with the ways in which the suppliers of finance to corporations assure themselves of getting a return on their investment.”⁷

La porta et.al (2000) defined corporate governance as “A set of mechanisms through which outside investors protect themselves against expropriation by the insiders.”⁸

Ira M. Millstein “Corporate Governance refers to that blend of law,
regulation, and appropriate voluntary private-sector practices which enables the corporation to attract financial and human capital, perform efficiently, and thereby perpetuate itself by generating long-term economic value for its shareholders, while respecting the interests of stakeholders and society as a whole. The principal characteristics of effective corporate governance are: transparency (disclosure of relevant financial and operational information and internal processes of management oversight and control); protection and enforceability of the rights and prerogatives of all shareholders; and, directors capable of independently approving the corporation’s strategy and major business plans and decisions, and of independently hiring management, monitoring management’s performance and integrity, and replacing management when necessary.”

John and Senbet (1998), “mechanisms by which stakeholders of an organisation exercise control over insiders and management such that their interest is protected.”

Park (2003) “Corporate governance is the system by which organisations are directed and managed. It specifies the relationship and distribution of rights and responsibilities among the producers of capital, the board, managers and other stakeholders (employees, consumer, the community and the state) of the corporation.”

Prowse (1998) “Corporate governance is defined as rules, standards and organisations in an economy that govern the corporate owners, directors and managers”

Therefore, the concept is concerned about efficient, fair, conscientious use of resources and decision making power so as to benefit the organisation and its various stakeholders. For implementation of this, a proper institutional framework in terms of various compliance codes and legal amendments has been developed in many countries especially where market for corporate control is less effective. The codes themselves are based on certain basic assumptions and have been drawn from theories about the same. In the next section, these theories
which laid down the foundation of various codes have been discussed along with their contribution to various practices and codes of corporate governance.

2.2.2 Theories behind the codes

The inception and development of the concept of corporate governance has been affected by theories from a number of disciplines including economics, finance, law, organisational theory and behaviour, accounting, management and sociology. Among the new economic theories of the firm, agency theory, which propounds protecting the interest of shareholders from self-serving managers, became the dominant force in the theoretical understanding of corporate governance. However, the role of stakeholder theory is increasing as companies cannot operate only for shareholders, in isolation from other stakeholders and therefore, they need to identify and protect the interests of and provide some benefits to wider stakeholder groups. Stewardship theory on the other hand is a stark contrast of agency theory stressing on involvement rather than control of management. Another theory contributing in the area is resource dependence theory, which talks about establishing certain links among organisations to make efficient use of resources.

The contribution of various theories to the development of various mechanisms of corporate governance could be explained as follows:

2.2.2.1 Agency theory

Agency theory models the relationship between principal and agent. Jensen and Meckling defined an agency relationship as “a contract under which one or more persons (the principal) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent.”\(^\text{13}\)

In the context of a firm, it is the manager (who is the agent), who acts on behalf of the shareholders (principal) and the relationship is contractual in nature, governed by the terms and conditions of contract between both the parties. Agency theory is concerned with resolving two problems that occur in
agency relationships. First, the agent might not be behaving appropriately (in the best interest of the principal) because his desires and goals may not align with those of the principal and it is difficult or expensive for principal, because of time and cost constraints to verify what the agent is actually doing. Second, problem of risk sharing arises because risk attitude of principal and agent may not align and both may prefer different actions to given risk assumptions. Therefore, agency theory seeks to align the interest of owners and managers presuming an inherent conflict of interest between the owners of the firm and its managers. Another form of agency problem that has become prevalent is oppression of minority rights whereby majority share holders are in a position to take any decision irrespective of the views of minority shareholders. This is known as principal- principal conflict.

The basic problems inherent in agency relationships are:

- Information Asymmetry
- Risk Asymmetry
- Goal Asymmetry

**Information Asymmetry**

“The problem long accepted as fundamental to finance and corporate governance is information asymmetry. In finance it is between receivers and providers of finance and in corporate governance it is between agent and principal.”¹⁴ The problem is that principal and agent have access to different levels of information. Managers (agents), who are running the firm are assumed to know much more about the firm than the owners (principal) and can use this advantage of having better access to information to serve their self-interest, which may be pecuniary, or any other advantage. “According to agency theory rooted in economics and finance, agents are opportunistic and are strongly motivated to profit from information asymmetry between them and their principals.”¹⁵ Moreover, it is difficult or costly for owners to observe or infer the amount of effort exerted by managers to fulfil their responsibility and therefore, managers have an inevitable temptation to shirk work and take advantage of the unobservability of their actions to enhance their personal goals as owners can’t
assess the true picture. Managers can also conceal true picture by misrepresenting actual outcome to owners.\^{16} Hence owners can’t actually evaluate and determine the value of decisions made.

Risk asymmetry

Another problem is that there may be non-alignment in the attitude towards risk between manager and principal; manager might not be taking appropriate risk in pursuance of maximisation of the benefit of the principal because he might think that those risks are not appropriate. The asymmetry is because, for a shareholder, the stake in the firm is an investment and he can diversify his risk by making an appropriate portfolio of such investments and dilute it; but managers don’t have any such portfolio and hence cannot diversify risk that easily. Therefore, they try to mitigate risk even at the cost of maximising shareholders wealth.

Goal asymmetry

Both information and risk asymmetry become even more harmful if there is goal asymmetry between the owners and managers whereby managers are tempted to take actions to increase their own utility and not necessarily to maximise the returns on capital invested by financers. They could be interested in consumption of perquisites, diversion of resources for their own consumption, empire building etc. Moreover, there may be a differential time horizon between the managers and owners, which may lead to managers resorting to short-termism rather than long term wealth maximization. Managers might also pursue growth over wealth maximisation.

This non-alignment between the interests can only be curbed by vigilant monitoring and incentive schemes, based around money, promotions and sanctions which themselves involve costs. These costs of separation of ownership and management, which are not present if owner and manager is the same person, are namely, Monitoring costs- Expenses incurred by the principal to limit the aberrant activities of the agent. Bonding Costs- Expenses incurred to ensure that the agent does not undertake actions that are not in principal’s interest. Residual loss- Loss due to sub-optimisation of the welfare maximisation objective by the agent.\^{17}
From agency perspective, it is assumed that the main purpose of corporate governance mechanisms is to provide shareholders with some reassurance that managers will try to achieve outcomes that are in shareholders’ interest. Corporate governance mechanisms try to limit agency costs by checking managerial discretion and aligning manager and owner interest. Since, the relation between the principal and agent is contractual in nature, therefore the focus should be on determining most efficient contract governing the principal-agent relationship given assumption about people (i.e. self-interest, bounded rationality, risk aversion), organisations (e.g. goal conflict among members) and information (it’s a commodity which can be purchased). The contract should seek to align the interest of managers (agents) with those of owners (principal) and minimise agency costs.

Two propositions that capture the governance mechanisms have been identified as:- Firstly, outcome based contracts with management aligning preferences of agent with those of principal reduce conflict in self interest between them. Secondly, clear and complete disclosure through well devised information systems also curb agent opportunism as deceiving the principal becomes impossible.

Various corporate governance mechanisms that find their roots in agency theory are:

**Effectively structured boards with greater proportions of independent directors**-

Agency scholars conceive board of directors as groups of independent people that have the duty to actively control top management behaviours and decisions by performing various monitoring activities like controlling firm performance, assessment of CEO behaviour, overlooking managerial activities etc. in order to secure the shareholders value maximisation. As to the mechanism by which a board is expected to impact on corporate performance, agency theory suggests that a greater proportion of outside/ independent directors (two terms not being identical) will be able to monitor any self- interested actions by
managers. The widespread adoption of normative corporate governance guidelines emphasising on the need of independent directors on the boards by the business communities around the world clearly indicate the acceptance of this model.

**Separation of the role of CEO and Chairman**

According to agency theory, the combined functions (unitary leadership structure) can significantly impair the boards’ most important function of monitoring, disciplining, and compensating senior managers.\(^{19}\) Therefore, the roles of CEO and chairman of the board should be separated as non-duality would permit the board to effectively scrutinise and monitor the behaviour of the executives and thus leads to better performance. The argument for splitting the two roles arises from the fact that in case where the person who chairs the board meetings and controls the information given to the board also manages the firm, the boards’ capabilities of seriously evaluating and challenging such a CEO are rather questionable. Therefore, separation makes the CEO less powerful and hence a greater scrutiny of executives by the board.

**Compensation contracts that encourage share holding orientation**

Agent opportunism can be effectively curbed by outcome-based contracts with the executives, whereby, rewards for both the principal and agent depend upon the same actions hence reducing conflicting interests between the two parties. Providing equity incentive schemes, commissions to managers, golden parachutes, making share based payments like restricted stocks with lock in periods provisions can align the interest of the managers with those of shareholders and provide incentive to managers to maximise shareholders wealth.

**Concentrated shareholdings leading to active monitoring of the executives**

Large outside investors are in a position to protect their interest in a much better way than a large number of small disbursed investors by investing in information required to vote more consistently in accordance to stockholder’s economic interest, as they can efficiently organize themselves to influence management. Dispersed shareholders, given their low stakes in the company,
generally do not have the incentive and at times even the resources to gather sufficient information to monitor management or use their voting power collectively to influence management. That is why the role of institutional investors as a check on management is gaining importance.

**Market for corporate control can work as an external mechanism**

In the agency context, external market for corporate control is an important device, which is activated when internal mechanisms for controlling managerial opportunism or failure have not worked. Corporate performance of a firm is adversely affected if its management pursues inefficient and ineffective strategies for a prolonged period, making it a soft target for takeover bids. Takeover results in management changes and hence, is a threat for self-indulgent managers; therefore, it acts as a monitoring device and reduces agency problems.

**Greater disclosures and transparency in operations**

As a means to keep a check on the agents, agency theory favours greater disclosures and high level of transparency in operations by the management. Given that the management has an informational edge over the shareholders and it is practically not possible for investors to gather all information about functioning of organisation on their own account, hence there is a need for an information system enabling the owners to verify managers’ behaviour, at least covering important areas of concern. This takes care of information asymmetry to some extent and acts as a barrier towards indulging in self-serving behaviour by managers. There is a widespread acceptance of this mechanism and all the norms of governance world over prescribe the minimal level of mandatory disclosures by the management in the annual report. Voluntary disclosures are a step ahead in this direction whereby managers provide credible and reliable information to market to enhance the value of the firm; this involves monitoring cost while providing information about investment opportunities, financing policies and other general information about the firm but such monitoring costs do help in reducing agency cost.
Thus, agency theory argues that managers merely act as custodians of the organisation and its operational activities and places upon them the burden of managing in the best interest of the owners of that business. According to agency theory, all other stakeholders of business are largely irrelevant and if they benefit from business than that is coincidental to the activities of management in running the business to serve shareholders. This focus on shareholders alone as the intended beneficiaries of a business has been questioned considerably from many perspectives, which argue that it is either not the way in which a business is actually run that it is a view, which does not meet the needs of the society in general. This limitation of agency theory has lead to the evolution of stakeholder theory, which argues that there is a whole variety of stakeholders involved in an organisation and each deserves some return for their involvement.

2.2.2.2 Stakeholder theory

Stakeholder theory defines organisations as multilateral agreements between the enterprise and its multiple stakeholders. These stakeholders may be internal viz. Employees, managers, owners or external viz. Customers, suppliers, competitors, government, special interest groups and society at large. The company, in order to succeed must try to maintain cohesiveness in relationship with all these groups. According to stakeholder theory, in any business, benefit is maximised if, it is operated by its management, on the behalf of all the stakeholders and returns are divided appropriately among those stakeholders, in some way that is acceptable to all. This theory emphasizes on the need to define the purpose of the organization beyond the maximization of shareholders’ welfare to include the interest of the other stakeholders namely, the creditors, the customers, the employees etc. Again, in order to maximize shareholders’ welfare, there should be a sense of fairness in the way the firms interact and conduct exchange with other stakeholders. Such fairness is necessary for social efficiency.

Various corporate governance mechanisms that find their roots in this theory are:

Stakeholder representative on board

Corporate governance codes in the line of participation and representation of different stakeholders in the board of directors can be viewed as a natural
derivation from this theory. Their presence on the board is one way of protecting the interest of the concerned group. That is why it is advocated to have employee nominee on the board, there may be nominees of other stakeholder groups like government, financial institutions etc also. In the current scenario, even the small shareholders might be considered as an independent stakeholder group different from the majority group, having their representative on board, as there may be chances of opportunism by majority shareholders.

**Employee stock options**

Issuing shares to stakeholders like employees can act as a double-edged sword. Firstly, it increases the alignment of their interest with the performance of company and employees gain with improvement in performance and hence share price of the company and secondly, it can serve as a means to act as a deterrent to any bid for hostile takeover. (LVMH vs. Gucci)

**Concept of corporate social responsibility**

Corporate social responsibility, according to Epstein, “relates primarily to achieving outcomes from organizational decisions concerning specific issues or problems which (by some normative standard) have beneficial rather than adverse effects upon pertinent corporate stakeholders” This concept itself has evolved from stakeholder theory whereby each company seeks to contribute something towards society as a stakeholder group. Various endeavours in the field of education, environment protection, and health facilities etc. by companies is a bid to satisfy or rather contribute to the welfare of these stakeholder groups. The growing importance of CSR initiatives taken by companies’ world over shows the wider acceptance of stakeholder theory.

**Whistleblower policy**

In the wake of varied corporate scandals, the concept of whistle blower is also gaining attention where the companies are required to outline the methods and processes for stakeholders to voice genuine concerns about unethical conduct that may be in breach of the Code of Conduct for employees or management. Such policy aims to ensure that genuine complainants can raise their concerns in
full confidence without any fear of retaliation or victimisation. The companies may appoint an Ombudsperson to administer a formal process to review and investigate any concerns raised and undertake all appropriate actions required to resolve the reported matter. Instances of serious misconduct dealt with by the Ombudsperson can be reported to the Audit Committee.

Unfortunately, a mechanism for allocating returns amongst all stakeholders, which has widespread (unanimous) acceptance, has yet not been devised, and stakeholder theory is conspicuously lacking in suggestions in this respect. However, the theory has universal acceptance and is based on the premise that maximisation of interest of all stakeholders automatically maximises the return of shareholders. Therefore, role of management is to optimise the long run performance of business in order to achieve this end and thereby reward all stakeholders, including themselves as one stakeholder community, appropriately. Therefore, sound corporate governance practices helps companies in taking informed business decisions together with earning trust of all stakeholders.

2.2.2.3 Stewardship theory

Stewardship theory acknowledges that there are large numbers of goals for managers, which may not be limited to monetary benefits that may be directed towards accomplishment, altruism, growth and commitment to meaningful work. It maintains that there is no inherent conflict of interest between managers and owners, which is stark contrast to agency theory. Stewardship theory put forward that managers are inherently trustworthy people, who work for the betterment of the organisation and so, are good stewards of the resources allocated to them. According to this theory, the role played by the board of directors should be confined to reviewing the plan of action of the management to achieve the overall goals and cultivate a framework of synchronization with managerial cadres. The theory puts greater stress on reliance on inside directors because of the technical expertise, involvement with the affairs and informational edge they have over the outsiders. The theory snubs any non-alignment of interest of owners and managers and encompasses a long-
term horizon, putting a greater reliance on involvement rather than control of insiders on the board. In terms of the renowned motivational theory by McGregor (1960), stewardship theory undertakes a “Theory Y” stance of managers contravening the “Theory X” perspective taken by agency theory and undermines the prominence of monitoring the board to improve performance as suggested by the agency theory.

*The practices that find their roots in this theory are:*

**Minimum number of board meetings**

Some codes specify a minimum number of board meetings that must be conducted within a certain period whereby plans may be reviewed by directors and inside directors may brief the outsiders with regard to conduct of business and performance against various parameters set. However, the theory *does not propound too many meetings* of the board as it may hamper the speed of decisions and over involvement of outsiders in conduct of business.

**Attendance of directors in meetings:**

Board meetings serve as an interface between the insiders and outsiders on the board and hence some minimum prescribed attendance is necessary to ensure participation. Outside directors can be acquainted to the functioning of the organisation through these meetings at the same time insiders can gain from the expertise of outsiders through the interaction while deciding on strategic matters.

However, many of the propositions of stewardship have not percolated into codes, which can be attributed to absence of strong empirical evidence as in the case of agency theory, to support any argument that predominance of inside directors enhances corporate performance. Some of such views promulgated by the theory are:

**Greater proportion of inside directors on board:**

The theory contends that majority inside directors’ results in better performance as these directors expend their working life in the company they manage and are close to actual performance of the company. Thus, they have a
better understanding of its functioning, greater access to both formal and informal channels of information, can look at the organisation from an overall perspective including the operational aspects and hence, are in a position to take more informed decisions. Whereas, an outside-dominated board is more reliant on the information provided by the management and at times may not be well equipped in terms of knowledge, time and resources to take timely and better decisions.

**One-man leadership:**

The theory favours the argument that company can achieve higher performance if it operates under the leadership of a single individual serving as both chairman of the board and the CEO of the company. A dependable steadfast leadership can avoid a deadlock in boardroom, which may arise in case of diluted leadership where board chair and CEO is different people. As per the theory, fear of jeopardising their own reputation, makes it improbable for senior executives and CEO to act against the interest of shareholders. Hence dual leadership is not required which can in fact slowdown decision-making process.

Stewardship theory assumes that inside directors naturally work for long-term profit maximisation of the firm and are reliable individuals. Trust and performance gets priority over monitoring and cost control.

**2.2.2.4 Resource dependence theory**

Organisations have continuous interface with the environment and are affected by the same in various ways. The basic premise of Resource Dependence Theory is that organisations try to exert control over the environment by co-opting the resources required to deal with the same. In order to gain such control, organisations try to cultivate links amongst themselves through the channel of board members from other organisations and institutions. Co-opting boards from other companies, social & legal bodies, educational institutions etc. open channels of information and expertise beyond the core competencies of the organisation. Such interlinked boards make the organisation better equipped to manage environmental uncertainty, help in better access to
finance and capital and link with suppliers, customers and other stakeholders.

**Corporate governance practices that have a footing in this theory are:**

**Appointment of directors from other organisations:**

The codes for best practices encourage corporations to appoint outside specialist on their board. Business experts can add to performance by providing their expert suggestions on competition, problem solving, strategic decision making etc. Specialists on board can give expert advice on law, banking, taxation, insurance and public relations whereas educationists can provide non-business perspectives on issues, problems and ideas.

**Allowing directors to hold certain number of directorships in other companies**

Directors with multiple appointments can generate benefits given that they have many networks which can be used to increase firm value. Most of the codes allow directors to hold directorships in other companies and also committee memberships as it is recognised that inter-firm directorships add to the pool of resources of a corporation. A caveat in this regard is that too many directorships may hinder the efficiency of the concerned director.

**Intensity of board activity**

Board activity is measured by number of board and other committee meetings. It is generally believed that boards respond to poor results with greater level of activity, which in turn is associated with improved operating performance in later years. Resource dependence theorists believe that increased activity levels of boards lead to greater interaction between board members and free flow of ideas enhancing the effectiveness of the board. At the same time the quality of these meetings in terms of time spent on routine tasks etc. should also be point of consideration.

The processes predicted by various theories of corporate governance can be shown diagrammatically as follows:
Figure 2.1 *Processes predicted by the Theories of Corporate Governance:*

**Agency Theory:**
- **Pattern**
  1. High → High → Low → High
  2. Low → Low → High → Low

**Stakeholder Theory**
- **Pattern**
  1. High → High → High
  2. Low → Low → Low

**Stewardship Theory**
- **Pattern**
  1. High → High → High → High
  2. Low → Low → Low

**Resource Dependence Theory**
- **Pattern**
  3. High → High → High
  4. Low → Low → Low

Adapted from Nicholson and Keil26
After discussing the contribution of various theories it is clear that corporate governance has evolved over a period from what was seen as protection of shareholders from managers to a more wholesome system with delicate balances between insiders and outsiders, with a broader perspective than that limited to shareholders only. But this does not diminish the contribution of agency theory which is still the cornerstone of all the codes and practices. The theories that have influenced the evolution of corporate governance should also be observed in the light of other environmental systems that affect the functioning of the corporations like the legal system wherein countries with common law system have better framework for shareholder protection and might need less stringent codes than countries with civil law system leading to weaker protection of shareholders and hence stringent codes of compliance to protect them and other stakeholders. Capital market development has its own role in this area therefore corporations operating in a developed and efficient market may need lesser spoon feeding on governance as the external market for corporate control is an important means to restrain self indulgent behaviour of managers. Long term inefficient behaviour is penalised by undervaluation of the firm in capital market, making it a soft takeover target and this behaviour acts as a deterrent for managers to be overtly self centred. On the other hand, countries with weaker market mechanisms need stronger governance codes and practices. Ownership pattern is also an important influence as same rules of governance may not be suitable for all. Managerial behaviour differs from a family owned firm to a large disbursed ownership to a public sector enterprise. Hence the degrees of applicability of various theories depend upon the ownership concentration and pattern. However, there seems to be a common understanding on core aspects of corporate governance where all theories convey the same message such as role played by independent and non-executive directors and importance of transparency and disclosures.

The above theories contributed to development of various codes and practices in the field of corporate governance. Corporate governance is not a one size fits all solution to various problems in governance nor is it a onetime
phenomenon, it is rather a continuous endeavour to improve fairness, transparency and responsibility in corporate actions. There are various players in this effort to maximise the interest of all the stakeholders. The following section discusses the role played by these key participants in enhancing corporate governance standards of a firm.

2.2.3 Role of Key Players Instrumental in pursuing Corporate Governance

In this section an effort is made to put forth the role and contribution of major players in pursuing corporate governance. These players may be intrinsic to the firm as well as extrinsic.

2.2.3.1 Board of Directors

Separation of ownership and control is inevitable in a company form of an organisation. Executives run the business of the company and shareholders elect their representatives in the form of board of directors to manage and control these executives and business. The directors responsibilities are broadly classified into three roles, namely control, service and resource dependence.27 Control role requires directors to monitor managers as fiduciaries of stockholders. In this role the directors are responsible for hiring and firing the CEO and other top managers, determining executive compensation and monitoring managers to ensure that they do not expropriate stockholders interest. The directors are expected to mitigate agency problems and protect the interest of shareholders. In the service role, board members are expected to guide the firm in its vision and mission development as well as strategy formulation. The directors’ advice the CEO and top management on administrative and managerial issues and are more actively involved in initiating and formulating strategies. Resource dependence role views the board as a means to facilitate the acquisition of resources critical to the firm’s success. The directors use their environmental linkages to access such resources.
Role of board composition and size

Independent directorship has now become a paradigm institution of corporate governance and corporate governance codes all over the world require that public companies should appoint some independent directors on their boards. Independent directors are considered important to control agency problems by monitoring executives. Independent directors are considered to be in a better position to determine whether a transaction entered into by the management with the company is a good deal for the company or not. This is because they do not participate in the day to day functioning of the organisation and usually have no personal interest in the company apart from their directorship, enabling them to exercise an impartial judgement over the fairness of executives’ self-dealings. Therefore, it has been a norm of corporate law that transactions involving conflict of interests should be decided by disinterested directors and interested directors should abstain from participating in decision making.

However, this argument holds only if the independent directors are effective, ethical and truly independent. The directors may not be truly independent if they are selected by the CEO or are ‘gray’ or are ‘interlocked’. In a country like India firms often view independence as a mere statutory requirement and attempt to fulfil it by appointing people who consider the role as ceremonial. Therefore, board independence is generally followed only in letter and not in spirit. The problem is more severe in family owned and business group firms. Moreover, there is a dearth of qualified independent directors limiting their ability for such roles. Generally personal relationships, family relationships, prior employment, friendships, desire for continued board tenure, and/or being a member of a professional service firm all work against real independence in decision making. A director maybe conflicted yet independent and not conflicted and not independent within the board room.

Apart from independence the effectiveness of independent directors may also be reduced in their advisory role as they are less aware of the internal functioning of the company. An over-zealous search for independence to appease
regulators, appointments may be made to the board of directors so distant and uninformed about the business of the corporation and the industry sector of which it is a part that they are unable to provide concrete, meaningful strategic input to management, or to hold management accountable for achieving the goals of the organization.

In addition to composition, the size of the board also plays a relevant role in corporate governance. It is suggested that that board’s effectiveness increases with size as more directors bring in a greater pool of knowledge, skill set and resources. However, very large size can hinder effective and efficient decision making due to greater confusion and problem of free riding being common in very large boards.

Therefore, it is not only the right composition but also the optimum size of the board that is necessary for enhancing corporate governance of a firm. The optimum mix of the two depends upon peculiar characteristics of a company, the industry in which it operates and the institutional market conditions of the country in which it operates.

### 2.2.3.2 Shareholders

Shareholding pattern of a company is also an important contributor to the governance mechanism. The major shareholder groups include promoters, institutional shareholders and minority interest. Promoters are the shareholding group that conceive the business idea, set business objectives, bring in the initial capital and furnish the articles and memorandum of association. They are normally involved in the day to day management of business especially in countries like India where the promoter’s shareholding is considerably high giving them greater representation on boards and management. The role of promoters becomes even more prominent in family controlled firms or firms promoted by business groups. Very high stakes by promoters actually reduce agency problems as the interest of promoters is aligned with that of the firm. In the Indian context a foreign promoter plays an important role as along with introducing capital, such promoters also bring in technical and managerial know-how to the company.
Another important class of shareholders is the institutional investors. Large outside investors are in a better position to protect their interest than large number of dispersed small investors by investing in information, monitoring and disciplining managers of corporations. They can efficiently organise and use their clout to influence management actions. They have a stronger impact on provisions requiring stockholder approval because they can use their vote on such provisions. They can aggregate their votes against anti-takeover provisions.

Public financial institutions are generally established in developing economies to correct market failures and channelize capital for industrialisation and development. However, the management of these institutions may itself be inefficient or disinterested to serve the purpose of their investment which in turn can result in inefficient utilization of accumulated capital.

The shareholding group which is most effected by poor governance is the minority shareholders. They are generally unorganised and lack resources and opportunity to monitor management. In case of poor governance practices it is the share of minority that is expropriated by the majority stakeholders acting through the management. Having a nominee of the minority on the board can protect their interest but such a situation is generally not encouraged especially in family owned firms whereby minority director can reduce the control enjoyed by management through family appointed boards.

2.2.3.3 Other stakeholders

*Employees*: Employees are also one of the stakeholders of the organisation. An organisation needs capital and labour to create wealth. Earlier, the most important need for an organisation to be a success was capital. But today, there is growing recognition that human capital is a source of competitive advantage. So, it is necessary on the part of the company to take into consideration the interests of its employees. Among other things, whether the company is well governed depends on the extent to which it considers the interests of its employees.
**Customers:** In modern marketing concept, customers occupy pivotal position. It is the customers who determine the destiny of modern corporate world. Customers prefer, among other things, the products of those companies who are better governed and provide value products and services. Infosys software is the example in the Indian context.

**Creditors:** Lenders have an important influence on the functioning of the company. Lenders rely, for their survival, on debt repayment by their borrowers. Lenders can monitor and exercise control over companies through adequate information, market oriented incentives and an appropriate legal framework for debt collection. Sometimes, it is very difficult for the shareholders to exert influence on the functioning of the company. In those situations, lenders prove to be a better mechanism to put their influence on the companies to achieve better governance.

**Government:** The government plays a key role in corporate governance in two ways. At one extreme, the government owns the firm and is charged with the responsibility of monitoring managerial decisions and limiting the ability of managers to maximise private benefits at the cost of society. On the other hand, it defines the legal environment to exert its control for better governance of companies. It outlines and enforces various laws governing a corporation.

**Community at Large:** Corporations are part of the society and they cannot afford to avoid their influence on the society. Companies are dependent on the society for inputs and it is the society which absorbs their output. The fundamental basis of corporate governance lies in the value system of corporation. Value system includes, among other things, its human resource principles, its dedication to fair and transparent accounting and financial reporting, its concern for the environment and its passion to serve customers and to guarantee its safe products and services at reasonable prices. Some companies do try and contribute to the society at large by undertaking philanthropic activities public health, education, sanitation etc.
2.2.3.4 Regulatory Bodies and legal framework

Wherever the market for corporate control is not very strong the role of regulatory bodies becomes even more important. Markets and market related institutions are not able to discourage one-of managerial misappropriation because they do not possess the ability to take away illegitimate benefits from corrupt managers. This is because such institutions may not be backed by machinery of state.

Where managerial misappropriation can generate benefits for managers larger than those that markets can reward them with, the only feasible way to discourage such misbehaviour is to take away the benefit it brings. Only legal sanction is endowed with the ability to do this. These maybe imposed separately as well as collectively.31

In India this regulatory mechanism consists of various provisions of Companies Act amended from time to time, SEBI guidelines and stipulations, Listing Agreement especially clause 49 of the same, Securities Contracts (Regulation) Act, Depositories Act. Moreover there are a number of regulatory bodies which set down various practices and procedures specifically for certain sectors like banking, telecom, insurance, public sector, co-operatives etc. The companies are bound to follow the stipulations laid down by these mechanisms; any non-compliance attracts legal action against the company and its management. Legal sanctions take the form of civil remedies, administrative penalties and criminal punishment.

2.2.3.5 Market for corporate control

Dispersed shareholders and sophisticated institutional investors, who look at fundamentals rather than treating the market and its stocks as a way to make short term profits, create quite a different shareholder environment. In such a situation minority shareholders can expect to have some form of protection. Such an environment has a bearing on board composition and behaviour where they have more independent and non-executive directors on the board. The incentives of board members may not be aligned with the interest of dominant or
controlling shareholders; they may be rather aligned with the minority owners holding non-preferential shares. A poor performance in such environment makes the company a soft target for a takeover bid making it imperative for management to enhance firm performance and restrain from any agency issues.

2.2.4 Codes And Committees on Corporate Governance in India

In India the first major steps of reforms were initiated in 1991 when it was forced to do so due to severe balance of payment crisis. However, even before the economic reforms started, India had a flourishing stock market, and large private participation in business activities. There were also explicit rules governing firm behaviour but those rules were probably not adequate and markets witnessed scandals soon after the liberalisation process was initiated in 1991. These scandals instigated the need to strengthen the corporate governance standards in the country. As a result SEBI was constituted as a regulator of capital markets. SEBI constituted various committees over the years, headed by prominent industrialists to suggest corporate governance reforms for Indian firms. These committees have given recommendations on issues such as the composition of the board of directors, audit committee, shareholder rights and board procedures.

While following the American model of corporate governance SEBI has made sure that reforms taken into account the contingencies of the local environment. Several scholars suggest that the corporate governance standards in India are as good as in many other developed countries even though the enforcement may be relatively weaker.32

Corporate governance in any country is guided by a code consisting of important principles of governance, such code is evolved over a period of time owning to number of committee’s or commission’s recommendations as well as parallel development in international arena. In India also Clause 49 of the Listing Agreement stipulates the corporate governance requirements to be fulfilled by the listed companies. The development of the codes can be attributed to a number of committees giving recommendations on various areas of corporate governance. Some of them are discussed below:33
CII’s “Desirable code in corporate governance” (1998) gave recommendations over board composition, role of non-executive directors and audit committee as well as executive remuneration.

SEBI’s Kumar Mangalam Birla Committee (2000) gave both mandatory and non-mandatory recommendations on corporate governance. The recommendations included strengthening the responsibilities of audit committees, enhancing disclosure norms on a number of areas and implementing whistle blower policy and evaluation of non-executive directors’ performance. The recommendations of the committee were implemented by insertion of Clause 49 in the Listing agreement.

Justice V Balakrishna Eradi Committee (2000) recommended setting up of National Company Law Tribunal to be conferred with the powers of Company Law Board, Board of Industrial and Financial Reconstruction and High Court in order to streamline the regulatory and dispute settlement mechanism.

RBI- Report of the advisory group on corporate governance attempted to compare the status of corporate governance in India vis-à-vis the internationally recognized best standards and suggested to improve corporate governance standards in India.

SEBI’s Y.H. Malegam Committee (2001) recommended furnishing of segment-wise revenue results and disclosures as per AS 21 and AS 22 in relation to financial Statements.

RBI Report of the Consultative Group of directors of Banks & Financial institutions (2002) reviewed the supervisory role of Boards of banks and financial institutions and obtained feedback on compliance, transparency, disclosures, audit committee etc. and recommended a review of existing framework governing the constitution of the boards of banks and financial institutions.

requirements in offer documents for public listing and rights issues leading to amendment in SEBI(disclosure and investor protection) guidelines, 2002.

*Naresh Chandra Committee on Corporate Audit and Governance* 2002 undertook a wide ranging examination of corporate auditing and independent directors and made recommendations on their composition and certain restrictions on the auditor’s professional assignments.

*SEBI’s Narayanmurthy Committee (2003)* reviewed the role of companies in responding to price sensitive information circulating in the market, in order to enhance the transparency and integrity of the market. The issues covered related to audit committees, audit reports, independent directors, related parties, risk management, directorships, director compensation, codes of conduct and financial disclosures.

*J.J. Irani Committee (2005)* made recommendations on issues concerning classification and registration of companies, management and board governance, minority interest, investor’s education and protection, accounts and audit, mergers and amalgamation, offences and penalties, restructuring and liquidation.

*ICSI Recommendations to Strengthen Corporate Governance Framework (2010)* suggested certain amendments in clause 49 regarding independent directors, nominee director, role of chairman and CEO, directors performance evaluation, board committees, secretarial audit, whistle blower policy, audit partners, disclosures etc.

### 2.3 Telecom Sector of India

The word “telecommunication” is a compound of the Greek prefix “tele” meaning 'far off', and the Latin “communicare”, meaning 'to share'. In its current usage, it refers to transmission of signals over a distance for the purpose of communication. In early days, communication between persons took place by means of drums, smoke signals, flags, etc. Emerging from such humble beginnings, the means now involve sophisticated high-speed, submarine optical cables laid on ocean floors and artificial satellites circling the Earth in space.
The introduction and history of telecom in India is discussed in the following section.

2.3.1 Historical Background

Telecommunications in India can be traced back to the 19th century when the British East India Company introduced telegraph services in India. The past two decades have been considered as the golden period for the telecommunications industry in India with exponential growth and development in terms of technology, penetration, as well as policy. All this has paralleled with the liberalization in this sector and huge investment by both domestic and foreign investors.

The modern system of communications in India started with the establishment of telegraph network. In order to ensure telegraph network’s exclusivity and establish government control over electronic communications, various telegraph statutes were enacted by the Government of India which laid the foundation of the present regulatory framework governing telecommunications (both wired and wireless). In early days, India witnessed increasing number of wired telephone connections. Even when wireless communication was introduced in the form of cellular phones, it was not immediately accepted by the Indian masses, mainly on account of high price of cellular phones as well as high tariff structure prevalent at that point in time. Gradually, with the price of cellular handset as well as mobile (wireless) tariff reducing, there was increasing adoption of wireless communications. Today the Indian telecom industry is already witnessing the lowest telecom tariff globally.

Like elsewhere, telecommunications in India started as a state monopoly. In the 1980s, telephone services and postal services came under the Department of Posts and Telegraphs. In 1985, the government separated the Department of Post and created the Department of Telecommunications (“DoT”). As part of early reforms, the government set up two new public sector undertakings: Mahanagar Telephone Nigam Limited (“MTNL”) and Videsh Sanchar Nigam Limited (“VSNL”). MTNL looked after telecommunications operations in two
megacities, Delhi and Mumbai. VSNL provided international telecom services in India. DoT continued to provide telecommunications operations in all regions other than Delhi and Mumbai. It is important to note that under this regime, telecommunication services were not treated to be a necessity that should be made available to all people but rather a luxury possible for select few.\(^{34}\)

In the early 1990s the Indian telecom sector, which was owned and controlled by the Indian government, was liberalized and private sector participation was permitted through a gradual process. First, telecom equipment manufacturing sector was completely deregulated. The government then allowed private players to provide value added services (“VAS”) such as paging services. In 1994, the government unveiled the National Telecom Policy 1994 (“NTP 1994”). NTP 1994 recognized that existing government resources would not be sufficient to achieve telecom growth and hence private investment should be allowed to bridge the resource gap especially in areas such as basic services. As markets and telecom technologies started converging and the differences between voice (both fixed and wireless) and data networks started blurring, the need for developing the modern telecom network became an immediate necessity. Accordingly, private sector participation was allowed in basic services.

The most important milestone and instrument of telecom reforms in India is NTP 1999. This Policy laid down a clear roadmap for future reforms and contemplated opening up of all segments of telecom sector for private sector participation. It clearly recognised the need for strengthening the regulatory regime as well as restructuring the departmental telecom services into a public sector corporation so as to separate the licensing and policy functions of the government from that of being an operator. Main features of NTP 1999 were:

- Strengthening of the Regulator.
- Opening of NLD and ILD services to private sectors.
- License to private telecom operators on a revenue sharing basis, plus a one-time entry fee. Resolution of problems of existing operators envisaged.
• Direct interconnectivity and sharing of network with other telecom operators within the service area

NTP 1999 was amended in November 2003 which permitted a licensee to make available wireline and wireless services using any technology in a pre-determined license area after conversion of the license to a Universal Access Service License (UASL).

2.3.2 Role of Telecom Sector

Telecommunication has been recognized the world-over as a powerful tool of development and poverty reduction through empowerment of masses. It is one of the key enabler for 'inclusive and sustainable' growth and in areas of poverty reduction, employment generation, gender equity, balanced regional development and special protection for vulnerable sections of the society. Indian telecommunication sector has emerged as a strong growth engine for the Indian economy in the last decade with the country witnessing tremendous growth in wireless sector. The penetration of internet and broadband has also improved. Indian telecom network has 926.55 million connections at the end of December'11 with 893.86 million wireless connections and is the second largest network in the world after China. The penetration of internet and broadband has also improved with 20.99 million internet subscribers and 13.30 million broadband subscribers across the country.

The telecommunications sector plays an increasingly important role in the Indian economy. It contributes to economic growth and the GDP and generates revenue for the government and creates jobs. In short, telecom sector has a multiplier effect on the economy. The importance of telecommunications sector for the Indian economy can be judged by its contribution to GDP, tax revenue, and jobs. Studies have suggested that mobile phones have a positive impact on GDP. The potential impact of wireless broadband is also estimated to be highly positive. The 3G spectrum auction combined with the bid values for broadband wireless access licenses yielded more than Rs 100,000 crore in 2010 to the Government of India, amounting to approximately 1 per cent of the GDP. Employment data shows that the share of employment in the transport, storage and communication sectors
went up from 3.7 per cent in 1999–2000 to 3.8 per cent in 2004–05. The mobile telephone industry generated 3.6 million jobs both directly and indirectly.\textsuperscript{38}

The interplay of three factors—regulation, liberalisation, and technology—makes this sector an interesting study. There are continuous technological changes and evolving regulatory climate. While Indian telecommunication companies, increasingly buoyant and confident, have started venturing outside the country and investing abroad, the telecom manufacturing in India is still to attract investment on a sustained basis.

**2.3.3. Growth of Telecom Sector**

The telecom sector can be broadly divided into two sub-sectors namely, services sector and manufacturing sector. The growth of the two sectors has been discussed in the following paragraphs.

The pace of growth of the telecom sector, particularly the telecom services has increased its significance to the overall economy in the past two decades. The share of telecommunication services (excluding postal and miscellaneous services), as per cent of the total GDP, has increased from 0.96 in 2000–01 to 3.78 in 2009–10 in Figure 2.2

*Figure 2.2 Share of Telecommunications as per cent of GDP, 2000–01 to 2009–10*

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure2.png}
\caption{Share of Telecommunications as per cent of GDP, 2000–01 to 2009–10}
\end{figure}
The last decade, especially since 2003, has seen tremendous growth and dynamism in the Indian telecommunications sector. A phone has been transformed from a “luxury” good to a “necessity” connecting millions of people. Earlier India was primarily concerned with increasing teledensity, i.e. telephones. Now, the idea of phones has itself changed from fixed line/wireline phones to mobile/wireless phones connecting people everywhere and anywhere (except perhaps the rural areas where unfortunately majority of Indians reside). The concept of connectivity itself has changed. The term telecommunications now includes many other services namely Internet services, radio paging services, Very Small Aperture Terminals (VSATs), Public Mobile Radio Trunk Service (PMRTS) and global mobile personal communication by satellite (GMPCS).

Services sector

Of all the above mentioned segments, wireless and Internet have registered the highest growth in the last few years. The number of total telephone subscribers in India increased from 28.53 million in March 2000 to 943.49 million in February 2012. Wireless subscriptions increased from 1.88 million in March 2000 to 911.57 million in February 2012 and wireline subscriptions increased from 26.65 million in March 2000 to 32.33 million in February 2012. As a result, India has the second largest mobile market in the world after China. India reached its Eleventh Five Year Plan (EFYP) target of 600 million subscribers in 2010 itself. The number of total Broadband subscribers in India is 13.54 million in February 2012.

It can be seen in Figure 2.3, the total subscriptions of telephones witnessed a sluggish growth (CAGR of 10 per cent) in the state owned era corresponding to the period 1981–90. The foundation of growth of this sector was laid with the introduction of reforms in 1992 mainly in the form of increased competition due to opening up of the sector to private players. This facilitated easy market access for telecom equipment and a fair regulatory framework for offering telecom services to the Indian consumers at affordable prices.
As a result, telephone subscriptions grew at a CAGR of 20 per cent during 1991–2000. The introduction of wireless phone in mid-1990s coupled with increased competition has completely changed the picture. The number of mobile phone connections crossed fixed line connections in September 2004. As a result the number of telephone subscriptions grew at a CAGR of 35.3 per cent during the period 2001–11. Total telephone subscribers in India increased from 28.53 million in March 2000 to 943.49 million in February 2012. Wireless subscriptions increased from 1.88 million in March 2000 to 911.17 million in February 2012 and wireline subscriptions increased from 26.65 million in March 2000 to 32.33 million in February 2012.

With the increase in the number of telecom subscriptions, the total teledensity has increased from 2.81 in 2000 to 78.10 on February 2012, a CAGR of 31.9 per cent. This is mainly driven by the increase in wireless density as shown in Figure 2. 4. Wireline density was higher than wireless till 2004 and then declined after peaking in 2005. During the period March 2000–February 2012, wireline density increased at the CAGR of 0.19 per cent.
The exponential growth witnessed by the telecom sector in the past decade has led to the development of the telecom equipment manufacturing and other supporting industries. With the advent of next-generation technologies and operators looking to roll out 3G and broadband wireless access services, the demand for telecom equipment has increased rapidly. In an attempt to capitalize on this opportunity, the government is focusing on developing the domestic manufacturing industry. The Indian equipment manufacturing sector has come a long way in the past few years. From being an import-centric industry, it is slowly but steadily moving towards becoming a global telecom equipment manufacturing hub. In 2002-03, India produced telecom equipment worth Rs. 144000 million, which increased to Rs. 520000 million in 2010-11, registering a growth of 265 per cent. The country is not only emerging as a manufacturing hub but is also planning to increase its telecom exports. In the year 2006-07, India exported equipment worth Rs. 18980 million, which increased by over 730 per cent to Rs. 158380 million in 2010-11.
Table 2.1 Telecom Equipment Manufacturing in India (Rs crore)

<table>
<thead>
<tr>
<th>Year</th>
<th>Telecom revenue</th>
<th>Total equipment requirement</th>
<th>Total imports</th>
<th>Equipment production</th>
<th>Total exports</th>
<th>Exports as per cent of domestic production</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002–03</td>
<td>45,672</td>
<td></td>
<td></td>
<td>14,400</td>
<td>402</td>
<td>2.79</td>
</tr>
<tr>
<td>2003–04</td>
<td></td>
<td></td>
<td>14,000</td>
<td></td>
<td>250</td>
<td>1.79</td>
</tr>
<tr>
<td>2004–05</td>
<td>71,674</td>
<td>30,359</td>
<td>14,269</td>
<td>16,090</td>
<td>400</td>
<td>2.49</td>
</tr>
<tr>
<td>2005–06</td>
<td>86,720</td>
<td>44,843</td>
<td>27,010</td>
<td>17,833</td>
<td>1,500</td>
<td>10.44</td>
</tr>
<tr>
<td>2006–07</td>
<td>1,05,319</td>
<td>57,698</td>
<td>34,042</td>
<td>23,656</td>
<td>1,898</td>
<td>8.61</td>
</tr>
<tr>
<td>2007–08</td>
<td>1,29,083</td>
<td>82,870</td>
<td>41,600</td>
<td>41,270</td>
<td>8,131</td>
<td>19.7</td>
</tr>
<tr>
<td>2008–09</td>
<td>1,52,360</td>
<td>93,600</td>
<td>44,800</td>
<td>48,800</td>
<td>11,000</td>
<td>22.54</td>
</tr>
<tr>
<td>2009–10</td>
<td>1,57,985</td>
<td>1,24,800</td>
<td>67,216*</td>
<td>57,384</td>
<td>19,500</td>
<td>23.44</td>
</tr>
</tbody>
</table>

Source: www.trai.gov.in

The booming mobile telecom sector has increased demand for telecom equipment. Service providers need fixed and mobile switches, transmission equipment, fibre and copper cables, IN platforms, test equipment, etc. Infrastructure providers need fibre, duct and tower. There were 400,000 towers as of April 2011 with a sharing (tenancy) ratio of 1:5 and growth of about 20 per cent per annum. There are 15 major players in this segment. Further, application developers need backend and platform systems. Last, network equipment and handset manufacturers need equipment for this dynamic sector. This has provided excellent opportunities to domestic and foreign investors in the manufacturing sector. On the supply side, the telecom equipment manufacturing sector was de-licensed in 1991. As a result, manufacturing sector has witnessed a steady growth in the last few years. A large telecom manufacturing base has now been established in the country. India ranked fourth in telecom equipment manufacturing in the Asia–Pacific region in 2009 and is expected to move to the third spot by 2014. India had a 5.7 per cent share of the region’s total telecom equipment production revenue of $180 billion in 2009. The Indian telecom industry manufactures a vast range of telecom equipment using state-of-the-art technology. Table 2.1 shows the status of the Indian telecom manufacturing sector for the period 2002–03 to 2009–10. Notably, the telecom revenue of the manufacturing sector is much smaller than the services sector and has actually declined in 2009–10 on a year-on-year basis. Exports have shown steady increase
between 2002–03 and 2009–10. Also, imports are more than exports signalling that India is importing a majority of its equipment.

2.3.4. International comparisons

This section compares India’s position to that of the world in telephones and Internet availability and usage. India has risen through the ranks to be amongst the top telephone and Internet users in the world in absolute numbers but on a relative scale (to population) it still ranks low.

Figure 2. 5 India’s Position in Telephone Subscriptions

![Graph showing India's position in telephone subscriptions compared to other countries.]

Source: International Telecommunications Union, available at www.itu.int

Available international comparisons till 2010 show that India has the second largest number of telephone subscribers in the world (222 countries), accounting for 12 per cent of the world’s total telephone subscribers as shown in Figure 2. 5. It is also one of the fastest growing in terms of telecom subscribers. Total telephone subscribers in India have increased at a CAGR of 32 per cent in 2000–10 against the world average growth rate of 17.34 per cent. However, India’s teledensity, 64, is still lower compared to the world average of 108 (Teledensity as on February 2012 is 78.1). This indicates low penetration of telephones in the rural areas.
India is ranked fourth amongst Internet users in the world, accounting for 4.56 per cent of the world’s total Internet users in 2010. Internet users in India expanded at a significantly high CAGR of 32.27 per cent during the period 2000–10 while those in the world expanded at an average rate of 17.46 per cent. However, India ranks low in terms of Internet users per 100 people in the world (143 out of 186) with only 7.5 per 100 people using Internet, compared to the world average of 30.48.43

2.3.5 Regulatory Framework

Telecom is a highly regulated sector of the economy, the policy and regulatory framework for telecommunications in India consists of, among others, the following key bodies as shown in Figure 2.6. The role of each regulatory body has been discussed in this section.

Figure 2.6 Key Regulatory Bodies of Telecom Sector in India

Telecom Commission:

Telecom Commission was established in 1989 as an executive body under the Department of Communications to formulate a policy for approval of the government and to implement the Government’s policy in matters concerning telecommunications. The Telecom Commission is an inter-ministerial high level government body. The Commission consists of a Chairman, four full time members, who are ex-officio, Secretary to the Government of India in the Department of Telecommunications and four part time members who are the
Secretaries to the Government of India of the concerned Departments. The essential functions of the Telecom Commission are as under:

- Policy formulation, licensing and coordination matters relating to telegraphs, telephones, wireless, data, facsimile services and other similar forms of communications;
- International cooperation in matters connected with telecommunications;
- Promotion of standardization, research and development in telecommunications;
- Promotion of private investment in telecommunications;
- Preparing the DoT budget and supervising its operations

**Department of Telecommunications ("DoT"):**

Department of Telecommunications (DoT), under the Government of India, is responsible for the telecommunication industry. It is entrusted with the task of formulating policies for the development of the sector and awarding telecom licenses. The department is accountable for spectrum management. It also allocates frequency and manages radio communications in close coordination with international bodies. It is also responsible for enforcing wireless regulatory measures and monitoring the wireless transmission of all users in the country. Telecom Commission, an exclusive policy-making body, works under the department. As per the Indian Telegraph Act, 1885 and the Indian Wireless Telegraphy Act, 1933 the Central Government has the exclusive privilege of establishing, maintaining and working telegraph and wireless telegraphy equipment and is the authority to grant licenses for such activities. The Central Government acts through the DoT. Some of the important functions of the DoT are as follows:

- Licensing and regulation
- International cooperation in matters connected with telecommunications (such as International Telecommunication Union (ITU), International Telecommunication Satellite Organization (INTELSAT), etc;)
- Promotion of private investment in the Indian telecommunications sector;
- Promotion of standardization, research and development in telecommunications.
Conceptual Framework

Telecom Regulatory Authority of India ("TRAI"):

TRAI is an autonomous statutory body established under Telecom Regulatory Authority of India Act, 1997 ("TRAI Act"). Liberalization made it necessary for the Government to ensure that there is an independent communications regulator. TRAI acts as an independent regulator of the telecommunications industry in the country. One of the main objectives of TRAI is to provide a fair and transparent policy environment which promotes a level playing field and facilitates fair competition amongst various telecom players. TRAI’s powers are recommendatory, mandatory, regulatory and judicial.

The important recommendatory powers of TRAI are as follows:

- Recommendations regarding the need and timing for introduction of new service providers
- Recommendations pertaining to the grant of telecom licenses including their terms and conditions
- Recommend revocation of license for non-compliance of terms and conditions of license.

TRAI is the sole authority empowered to take binding decisions on fixation of tariffs for provision of telecommunication services. Emphasis needs to be placed on the interplay between the recommendatory powers of TRAI and the policy making powers of DoT. While the DoT is the sole authority for licensing of all telecommunications services in India, it is mandatory for the DoT to have before it TRAI’s recommendations with regard to matters over which TRAI has recommendatory powers (mentioned above). Having done so, the DoT has the discretion to either accept or reject the recommendations of TRAI.

Telecom Disputes Settlement and Appellate Tribunal ("TDSAT"):  

Telecom Disputes Settlement and Appellate Tribunal (TDSAT) was set up in May 2000 under an amendment to the Telecom Regulatory Authority of India Act, 1997 to resolve disputes between a licensor and a licensee, two or more
service providers, and between a service provider and a group of consumers. TDSAT also hears and disposes off appeals against any direction, decision or order of TRAI. Any appeal from the decision of the TDSAT can be filed only with the Supreme Court of India which is the apex court of the country.

**Wireless Planning and Co-ordination Wing (“WPC”):**

The WPC was created in 1952 and is a wing of the DoT which is responsible for Frequency Spectrum Management, including licensing of wireless stations and caters to the needs of all wireless users (Government and Private) in India. It exercises the statutory functions of the Central Government and issues licenses to establish, maintain and operate wireless stations. WPC is divided into (i) Licensing and Regulation (LR), (ii) New Technology Group (NTG) and (iii) Standing Advisory Committee on Radio Frequency Allocation (SACFA). The WPC is also the central agency for the purpose of representing India and to adhere to India’s commitments at the International Telecommunication Union (“ITU”)\(^{44}\), Asia-Pacific Telecommunity (“APT”)\(^{45}\) and other organizations that India is a member or signatory of. The WPC is headed by the Wireless Advisor to the Government of India.

**Telecommunication Engineering Centre (TEC)**

TEC is a technical body of DoT committed to develop standards for the telecommunication sector in India, to ensure development of world class telecom network and smooth interconnection of individual networks. It discharges its functions as a testing & certification body. It performs the following functions.

- Specification of common standards with regard to Telecom network equipment, services and interoperability.
- Generic Requirements (GRs), Interface Requirements (IRs).
- Issuing Interface Approvals, Certificate of Approvals, Service Approvals & Type Approvals.
- Formulation of Standards and Fundamental Technical Plans.
- Interact with multilateral agencies like APT, ETSI and ITU etc. for standardisation.
- Develop expertise to imbibe the latest technologies and results of R&D.
- Provide technical support to DOT and technical advice to TRAI & TDSAT.
- Coordinate with C-DOT on the technological developments in the Telecom Sector for policy planning by DOT.

All the bodies mentioned above work hand in hand to enable the country to develop and sustain a world-class telecom network. The growth in the sector has been a main attraction for foreign players to invest in the same. The inflow of FDI in the sector is discussed in the following section.

2.3.6 FDI in Telecom Sector

This section examines the current policy and decadal trends in FDI. Initially domestic companies were encouraged to tie up with foreign ones so as to bring in more capital and improved technology. However, with disastrous financial results, foreign firms wanted to exit by late 1990s. The policymaker changed the rules and most of the foreign companies were bought out by domestic companies. FDI was limited to 74 per cent. Telecom is the third major sector attracting FDI inflows after services and computer software sector. At present 74% to 100% FDI is permitted for various telecom services. This has helped the telecom sector to grow. Actual Inflow of FDI in Telecom Sector from April 2000 to September 2011 is US $12456 million.

FDI in the telecom sector has grown at a Compound Annual Growth Rate (CAGR) of 24.8 per cent between 2000–01 and 2011–12 (April–February, 2011–12). However, this hides significant variations over the decade as shown in Figure 2.7. Growth rate peaked in 2001–02, 2005–06 and 2007-08. The 2008–10 numbers signal that the worldwide slowdown probably resulted in increased FDI inflow to India and the telecommunications sector benefited from that. However, the continued uncertainty in worldwide economic conditions coupled with domestic factors such as inflation, and infrastructure implementation bottlenecks have probably contributed to reducing FDI in 2010–11. In 2011–12, there has been a resurgence of FDI.
Table 2.2 shows the prevalent FDI policy in India. FDI is fully open for manufacturing and infrastructure sectors. For services, FDI is limited to 74 per cent, with automatic approval up to 49 per cent. Beyond that, it would require the approval of Foreign Investment Promotion Board (FIPB).

**Table 2.2  FDI Policy in Indian Telecom Sector**

<table>
<thead>
<tr>
<th>Services</th>
<th>FDI Limit</th>
<th>Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic, Cellular, Unified Access Services, National/International Long Distance, V-Sat, Public Mobile Radio Trunked Services (PMRTS), Global Mobile Personal Communications Services (GMPCS) and other value added services</td>
<td>up to 74%</td>
<td>Automatic up to 49% and FIPB approval required beyond 49%</td>
</tr>
<tr>
<td>ISP with &amp; without gateways, radio paging, end-to-end bandwidth</td>
<td>up to 74%</td>
<td>Automatic up to 49% and FIPB approval required beyond 49%</td>
</tr>
</tbody>
</table>
Conceptual Framework

<table>
<thead>
<tr>
<th>Infrastructure Provider providing dark fibre, right of way, duct space, tower (Category I); electronic mail and voice mail</th>
<th>100%</th>
<th>Automatic up to 49% and FIPB approval required beyond 49%</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOTE: Investment in all the aforesaid activities is subject to the conditions that such companies will divest 26% of their equity in favour if Indian public in 5 years, if these companies are listed in other parts of the world.</td>
<td>100%</td>
<td>Automatic</td>
</tr>
<tr>
<td>Manufacture of telecom equipments</td>
<td>100%</td>
<td>Automatic</td>
</tr>
</tbody>
</table>

Source: www.trai.gov.in

Therefore, the sector has been an important area of interest for foreign investors and has been able to attract a huge amount of FDI to its advantage. However, a closer look into the flows of capital showed that majority of FDI has gone into the cellular services industry. The telecom manufacturing industry continues to lag. Therefore, there is not much relationship between FDI and exports and imports in India. 47

2.3.7 Issues and challenges faced by the industry

The rapid growth of the industry has not been without various hurdles which need to be addressed in order to reach new heights of growth. This section addresses various challenges faced by the industry on its way to growth.

Rapidly Falling ARPU

The competitive intensity in the telecom industry in India is one of the highest in the world and has lead to sustained fall in realisation for the service providers. Intense competitive pressure and cut throat pricing has resulted in declining ARPUs. With increasing number of new entrants in the telecom space the competitive intensity is likely to continue, putting further downward pressures on the telecom tariffs. Thus, the telecom companies might have to grapple with further decline in ARPUs, going forward. Further, with the telecom companies moving their focus to the rural areas for driving the future subscriber growth they might not witness a commensurate increase in revenues.
Lack of Telecom Infrastructure

Lack of telecom infrastructure in semi-rural and rural areas could be one of the major hindrances in tapping the huge rural potential market, going forward. The service providers have to incur a huge initial fixed cost to enter rural service areas. Further, as many rural areas in India lack basic infrastructure such as road and power, developing telecom infrastructure in these areas involve greater logistical risks and also extend the time taken to roll out telecom services.

Rural Areas Continue to Remain Under Penetrated

A low rural teledensity points towards the fact that a majority of Indian population still do not have access to telecom services. The rural India seems to have remained untouched by the telecom revolution witnessed in the last few years. A huge 'digital divide', which is reflected by the enormous difference of 74% between the urban and rural teledensity, reiterates this fact. However, with the urban markets reaching a saturation point, the telecom service providers are penetrating rural areas for driving future growth.

Excessive Competition

Another major concern that has come to the forefront in the recent past has been heightened competitive intensity in the industry that has correspondingly fuelled the price war between industry players. The Indian wireless market is one of the world’s most competitive markets, with 12 operators across 23 wireless ‘circles’ and 6 to 8 competing operators in each circle. The auction of new 3G licences and the introduction of mobile number portability (MNP) likely to heat up competition in the industry, going forward. Evidently, the competition in the industry is expected to intensify further with the entry of new players, both domestic as well as foreign players. With the competitive intensity of the industry already at such high levels new operators might find it difficult to gather significant share in Indian telecom market. While the new players may benefit from a faster network rollout through tower sharing, they will face challenges in terms of high subscriber acquisition costs and lower ARPU customers.

Spectrum Utilisation

Spectrum is the most important resource that is required for providing mobile services. Given that spectrum is a finite resource, the availability of the same would be
inversely proportional to the number of operators. Thus, larger the number of service providers smaller will be the amount of spectrum available to each of them.

**Price War between the Service Providers Putting Pressure on Margins**

The ever-increasing competitive intensity in the sector, with licenses and spectrum in several circles allotted to newer operators, is also a concern and could lead to unrealistic pricing levels to grab subscribers. The pricing strategy of per second billing already has taken the price war between telecom operators to the next level. The intensifying price war could put significant downward pressure on the industry revenue growth. Further, the ongoing price war and the concomitant decline in telecom traffic could raise the entry barrier for new companies.

**Lower Broadband Penetration**

The Indian economy remains highly underpenetrated in terms of broadband connections. High cost of devices (PC and laptop), high internet charges and lower wireline connections have been some of the major factors inhibiting broadband penetration. Broadband is one of the key catalysts for economic development and major initiatives by both the government and service providers are needed to increase its penetration.

Another area which needs immediate attention is the need for flexibility in the regulatory mechanism. The telecom legislation at present seems to be archaic laws and the need of the industry right now is a mechanism that can continuously adapt itself to the changing needs of the industry.

Therefore, the operators as well as regulatory bodies need to address these issues in order to take the industry to newer heights.

**2.3.8 Conclusion**

The growth of India as a knowledge based economy will not be possible without the growth and expansion of the Indian telecommunications and IT sectors. This symbiotic relationship is not lost on the government which has attempted to back the telecommunications sector by fostering an encouraging regulatory scenario. This has not only helped the telecommunications sector to evolve in a dynamic manner but has enabled it to attract foreign investments.
However, it cannot be denied that India still has a lot of ground to cover to achieve a growth rate equal to that of other developed and developing economies. India is among the last countries to access 3G technology at a time many countries have already deployed 4G technologies. As such, the government still has to go a long way to introduce policies, regulations, guidelines, etc in the interest of not only the government or the telecom operators but also in the interest of the end consumers and that too without any delay.

Endnotes:

1 Conceptual framework is concerned with Definitions, Objectives, Concerned users (Stakeholders) and Principles, of the subject matter under consideration.


Ibid.


Gucci issued stock option to dilute the voting rights and hence avoid hostile takeoverby LVMH.


28 A director is gray if he or his employer received payment from the company in excess of his board pay as disclosed by the company.

29 A director is interlocked if an inside director of the firm serves on the board of that outside director’s firm.


32 Varma J.R. 1997, “Corporate Governance in India : Disciplining the dominant shareholder”; IIM-B management review vol. 9 pp 5-18


34 DOT Annual Report 2011-12

35 Analysys Mason, 2010, Assessment of Economic Impact of Wireless Broadband in India, Report for GSMA.


39 TRAI website, www.trai.gov.in

40 Planning Commission, Government of India, 2010, Mid-Term Appraisal of Eleventh Five Year Plan. Available online at www.planningcommission.nic.in


42 All Indian subscriber numbers in this paragraph are taken from Telecom Regulatory Authority of India.

43 TRAI study paper “Telecom Sector in India: A Decadal Profile” 2012

44 ITU is the leading UN agency for information and communication technology issues, and the global focal point for governments and the private sector in developing networks and services.
APT is an Intergovernmental Organization operating in conjunction with telecom service providers, manufacturers of communications equipment, and research and development organizations active in the field of ICT in the Asia-Pacific region.


TRAI study paper “Telecom Sector in India: A Decadal Profile” 2012 downloaded from www.trai.gov.in