Chapter 1

Introduction
Chapter 1

Introduction

Chapter Objective:
The purpose of this Chapter is to introduce the subject matter of this study. It starts with the background and history of Mergers & Acquisitions (M&As) and provides a glimpse of the recent global trends in M&As. It also provides an overview of the chosen industry for research i.e. the global electrical equipment industry. The chapter culminates with outlining the scope of this research study.

1.1 Background
In today’s extremely dynamic environment, Mergers and Acquisitions (M&As) are among the most important avenues of business restructuring that companies embark on to achieve their ultimate strategic objectives. Though it is well known that more than half the M&A deals fail to achieve value for the shareholders, the quantum of M&A deals worldwide has been increasing exponentially every year. Global M&A activity peaked in 2006 and 2007 with deal volumes of over US$ 4 Trillion in each of the years. Global M&A activity in 2008 reduced to US$ 2.9 Trillion in 2008, down 31% from 2007, and marking the lowest annual volume since 2005 and the end of five consecutive years of M&A growth. According to reputed M&A research firm Dealogic, Global completed M&A volumes reached US$ 482 billion in 2009 (till March), down 42 per cent from US$ 829.3 billion for the corresponding period of 2008.
1.2 Brief History of Mergers & Acquisitions

It would be pertinent at this stage to give a brief overview of the history of M&As in the global context. Merger and acquisition activity worldwide has occurred in "waves". The history of M&As can be divided into five different waves spanning across five time horizons till the turn of the 21st century (Mergers & Acquisitions- An Overview, ICFAI University), and the sixth merger wave from 2002 to 2007. Two major themes revolved around these merger waves are: first, each of the major merger episodes reflected some underlying economic or technological factors; and secondly, macroeconomic environment (viz., GDP growth, interest rate levels, interest rate risk premiums, and monetary stringency) is important.

The first merger wave, which began in 1893, was associated with the theme of "Merging for Monopoly." The characteristics of this phase were horizontal mergers in the basic manufacturing and transportation industries; dominated by large steel and railroad mergers. The first wave saw the landmark consolidation of 10 companies to form US Steel. The first wave came to an end in 1907 as a result of factors such as, the failure of majority of mergers as they couldn't achieve increase in efficiency, economic recession of 1903, stock market crash of 1904, and US Supreme court's ruling in 1904 that Sherman Act could be used to attack anti-competitive mergers.

The second merger wave, which existed between 1919-1929, was associated with the theme of "Merging for Oligopoly." Characteristics of the second wave were: fewer monopolies, more oligopolies, vertical mergers, and conglomerates. Primary metals, petroleum products, food products, chemicals,
and transportation equipment were the most active M&A industries. Vertical integration became common during this merger wave. The reasons for the end of this phase were: October 29, 1929 stock market crash, and the Great depression.

The third merger wave, which existed between 1945-1973, is known as "Conglomerate Merger." Characteristics of the third wave conglomerate mergers and equity-financed mergers were: investment banks not playing a central role, aerospace being the most active industry, while industrial machinery, auto parts, railway equipment, textiles, and tobacco being active. The reasons for the end of the third wave were cited to be: crack down on conglomerates in 1968, legislation (Williams Act, Tax Reform Act, poor performance by many conglomerates, sharp fall in DJIA, and the beginning of the energy crisis worldwide.

The fourth merger wave, which existed between 1981-1989, is known as "The Mega merger," or "Takeover" wave. Characteristics of fourth wave were - size and prominence of acquisition targets were much greater than before; oil and gas industries were dominant in early 1980s while pharmaceuticals became most common in late 1980s. Hostile mergers were dominant during this phase. The fourth wave came to an end as a result of the following factors - legislation (Financial Institutions Reform, Recover, and Enforcement Act (1989), and State anti-takeover legislation), and the Gulf war.

The fifth merger wave, which existed between 1992-2000, is known as "Strategic restructuring." Major characteristics of this wave were - emphasized longer-term strategy rather than immediate financial gains, more often financed with equity than debt, and consolidation in the telecommunications and banking industries. The reasons for the end of this wave can be cited to be:
bursting of stock market bubble, and economic slow-down. Cross-border transactions dominated this wave which was led by the path-breaking revolutions in the areas of technology and communications, aided by the advent of Internet.

The sixth merger wave, which existed between 2002 and 2007, began with a boom in global economies. Cross-border mega-mergers were the flavour of this merger wave, and consolidation was witnessed across industries such as steel, pharmaceuticals, banks and airlines. Indian and Chinese Companies joined the party during this time with some of the biggest cross-border deals like Tata Steel - Corus, Arcelor - Mittal and IBM – Lenovo. The wave ended towards the end of 2007 with the onset of sub-prime crisis leading to global recession.

1.3 Recent Trend in M&As
The pace of the mergers and acquisitions slowed down briefly in the post-2000 period due to global slowdown. However, it gained momentum again in 2003, as a raft of deals were sewn during the year. Some of the notable deals since the beginning of the 21st century include, Pfizer-Pharmacia Upjohn, Glaxo-SmithKline Beecham, JP Morgan-Bank One, and Bank of America-Fleet Boston Financial. Global M&A activity peaked in 2006 and 2007 with deal volumes of over US$ 4 Trillion in each of the years. According to research organization Thomson Reuters, global M&A volume totalled US$2.9 Trillion in 2008, down 30% from the record volume of 2007. The comparison would have been worse were it not for the high value rescue deals concluded in 2008. Deal making tapered off throughout 2008, with Q4 volume 36% down on Q3. Internationally, the gloom was intensified by the record 1,362 M&A deals that were withdrawn in 2008 amounting to US$923b, the second highest after
US$1.16 Trillion of deals were withdrawn in 2007, according to research organization Dealogic.

Yet despite the downturn, new trends also emerged during 2008. One trend noted by management consultancy McKinsey is that M&A is increasingly global rather than being concentrated in a few key countries. In 2000 and 2001, US, Europe, and Asia accounted for approximately 60%, 30% and 10% of deal volumes by target respectively. From 2005 to 2008, the distribution was far more balanced, at approximately 40%, 40% and 20%. Also despite the downturn, cross-border M&A activity has continued to increase as a proportion of total activity. It grew from 23% of the total in 2000 to 29% in 2006 and 41% in 2007, but falling back to 35% in 2008. Emerging markets, particularly in Asia, played an important role in this transformation; China and India together represented some 12% of all cross-border deals in 2008.

In the Indian scenario, the new economic environment of the 1990s saw a gradual rise in M&As. The total number of M&As sharply increased to 1034 during 1990-2000 from the level of 268 during 1980-1990. Mergers of firms belonging to the same business groups operating in similar product-lines appeared to dominate the Merger wave in India.

2006 saw some of the boldest moves by Indian Companies in this field. The $11 billion winning bid by Tata Steel for UK Steelmaker Corus is the Tata group's most audacious one yet- Corus is four times Tata Steel's size. It is India's largest cross-border transaction to date and the largest leveraged buyout attempted by an Indian company. Coming on the heals of a year of big-ticket Indian outbound deals- including Dr.Reddy's $570-million acquisition of Betapharm, Suzion's $565-million Hensen buy, and Tata Tea's $677-million
acquisition of 30 per cent in Glaceau - this has reinforced the arrival of India companies as global acquirers.

The total number of M&A Deals announced during the calendar year 2008 in India stood at 445 with a total announced value of US$30.72bn as against 676 in 2007. The year 2008 witnessed a global economic downturn due to the sub-prime credit crisis, fluctuating commodity and equity prices and the closure of a myriad of large investment banks and other financial institutions.

Despite recent events, M&A and Private Investment activity in India has seen some of the largest deals in sectors that were recently not very popular amongst Indian deal makers such as Microfinance, Oil & Gas and Automotive sectors. There have been some landmark deals announced during 2008 which displays India Inc’s resilience during turbulent times.

M&A and Private Equity investment in India has seen consistent growth despite the recent turn of events in the global financial markets. The total value of deals (M&A and PE) announced in the calendar year 2008 was US$41.13bn as against US$70.14bn and US$28.16bn in 2007 and 2006 respectively.

Out of the total cross border deals there were 193 outbound deals (Indian companies acquiring businesses outside India) with a value of US$13.15bn and 81 inbound deals (international companies or their subsidiaries acquiring Indian businesses) with an announced value of close to US$12.48bn. There were 171 domestic deals (both acquirer and target being Indian) with an announced value of US$ 5.09bn and 274 cross-border deals with an announced value of US$ 25.63bn.
Daiichi Sankyo’s step acquisition of Ranbaxy for US$ 4.5bn was the largest deal in India in 2008. Telecom and Pharma, Healthcare & Biotech sectors were the leaders as far as sectoral values were concerned. These sectors garnered US$5.8bn and US$5.5bn worth of deals respectively. Together, they accounted for as much as 37% of the total M&A deal value during 2008. The other sectors which have significantly contributed to M&A deal value in 2008 are Banking & Financial Services and Information Technology (IT) & IT enabled services accounting for 11% and 10% of deal values respectively.

IT & ITeS led the M&A volume proportion with 22% share of total number of M&A deals. Pharma, Healthcare & Biotech have the second highest share at 12%. Other significant contributors to deal volumes were the Media, Entertainment & Publishing and Banking & Financial Services sectors accounting for 8% and 6% of deal volumes respectively.

1.4 Importance of Electricity

One of the most powerful inventions of modern science is electricity. Electric power, often known as power or electricity, involves the production and delivery of electrical energy in sufficient quantities to areas that need electricity. Many households and businesses need access to electricity, especially in developed nations, the demand being scarcer in developing nations. Demand for electricity is derived from the requirement for electricity in order to operate domestic appliances, office equipment, industrial machinery and provide sufficient energy for both domestic and commercial lighting, heating, cooking and industrial processes.

The electrical power industry is commonly split up into four processes. These are electricity generation such as a power station, electric power transmission, electricity distribution and electricity retailing. In many countries, electric
power companies own the whole infrastructure from generating stations to transmission and distribution infrastructure. For this reason, electric power is viewed as a natural monopoly. The industry is generally heavily regulated, often with price controls and is frequently government-owned and operated. The nature and state of market reform of the electricity market often determines whether electric companies are able to be involved in just some of these processes without having to own the entire infrastructure, or citizens choose which components of infrastructure to patronize. In countries where electricity provision is deregulated, end-users of electricity may opt for more costly green electricity. While high-voltage direct current (HVDC) is increasingly being used to transmit large quantities of electricity over long distances or to connect adjacent asynchronous power systems, the bulk of electricity generation, transmission, distribution and retailing takes place using alternating current.

1.5 Demand for Electrical Equipment

An electrical circuit, or electrical network, consists of electrical elements or components connected by conductors. An electrical component is any component in the generation, transmission, distribution, or consumption of electric power. Some examples of these components are transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; contactors; timers; fuses; energy meters and industrial controls. Elements include devices (such as an inductor, resistor, capacitor, conductor, line, or cathode ray tube) with terminals at which it may be connected directly with other devices.
Figure 1: Energy Consumption per capita vs GDP per capita (2006 Key World Energy Statistics from the International Energy Agency)

The ever-growing demand for electrical equipment stems from the fact that the per-capita consumption of electricity is increasing day-by-day globally. Energy consumption broadly tracks with gross national product, although there is a significant difference between the consumption levels of the United States with 11.4 kW per person and Japan and Germany with 6 kW per person (see Figure 1). Canada has the highest energy consumption per person, whereas the lowest energy consumption takes place in the third world. In developing countries such as India the per person energy use is closer to 0.5 kW. The most significant growth of energy consumption is currently taking place in China, which has been growing at 5.5% per year over the last 25 years. Its population of 1.3 billion people is currently consuming energy at a rate of 2 kW per person.

1.6 Global Electrical Equipment Industry

Firms in the electrical equipment industry manufacture all or some of the equipment outlined in paragraph 1.4. The technology in this industry is
relatively stable and does not change as rapidly as in the electronics industry. There has been no evidence of a breakthrough technology in the past few decades which has shaken up the entire industry. However, the electrical equipment industry is steadily and gradually converging with the electronics industry, with a lot of intelligence being built in these devices making them more feature-friendly and compact.

The Global Electrical Equipment Industry has been characterized by numerous acquisitions over a period of time. The case of English Electric (EE) and General Electric Company (GEC) is a classic case. Formed in 1918, EE acquired a host of tram and traction companies in 1918 and 1919 to set up its business. It was a major contributor to the British war effort during the 2nd World War. After the war, it continued its acquisition spree taking over companies having railway engineering expertise. In 1960, EE even tried to unsuccessfully take over GEC, another major British electrical company. However, GEC was another aggressive acquirer in the same space in the 1960s. It acquired Associated Electrical Industries (AEI) in 1967, and followed it up by acquiring EE in 1968. In 1979, GEC acquired Avery.

The late 1980s witnessed some major mergers within the electrical industry, with the creation of GEC-Plessey Telecommunications (GPT) by GEC and Plessey in 1988. The following year GEC and Siemens AG formed a joint company, GEC Siemens plc, to takeover the Plessey Company. As part of the deal, GEC took control of Plessey's avionics and naval systems businesses. An equal investment by GEC and Compagnie Générale d'Electricité (CGE), formed the power generation and transport business, GEC-ALSTHOM in 1989. In June 1998, GEC completed the acquisition of major American defence contractor Tracor. GEC then demerged its businesses in 1999, and
these parts were acquired by British Aerospace and Philips Medical in 1999 and 2001 respectively.

Schneider Electric is another classic example. Formed in 1836 through an acquisition, the company was languishing in the 1970s. A new focused approach saw a financial turnaround and the 1980s marked a dawn of a new era in the history of not only Schneider, but the entire electrical equipment industry. Schneider’s strategic acquisitions of Telemecanique (1988), Square D (1991) and Merlin Gerin (1992) changed the complexion of the global electrical equipment industry, and it is these brands that are the core products of the company's offering even today.

In summary, the global electrical equipment industry underwent a phase of major consolidation in the 1990s in line with the Fifth Merger wave. Global players like Siemens, ABB, Schneider Electric and Legrand in Europe; Eaton Electrical and General Electric in the US acquired a number of local players to consolidate their position in the global market.

In India and China, these companies either entered on their own or through joint ventures with local companies, or acquired small local companies to gain an entry. Practically, all the MNCs are present in India competing with the likes of local players like L&T, BHEL, Crompton Greaves, Havell’s, Indo Asian, etc.

1.7 Dissertation Scope

The proposed Doctoral Research aims at studying the effect of M&As on the growth of the global electrical equipment industry. It involves a longitudinal study of the 5th and 6th M&A waves in the electrical equipment industry and their effect in shaping the industry.
The importance given to different merger motives by acquiring companies changes over a period of time depending on the state of the economy and industry, strategic positioning of the company vis-à-vis competitors, and a variety of other external and internal factors. Detailed search has not discovered any literature that contains a longitudinal study of merger waves in an industry and their impact on the state of the industry over a period of time. The electrical equipment industry has been chosen for researching due to the great importance of electricity and power in the development of any nation.

The research will study the evolution of the global electrical equipment industry. It will identify the main motives of M&As which took place during the 5th and 6th merger waves in the electrical equipment industry. It will then go on to study the effectiveness of various merger motives in shaping the growth of the industry. Further, the study will assess the effect of consolidation on the development of the industry.

The study will therefore add to the existing available literature on M&As by being a pioneering effort in the electrical equipment industry. It would serve as a platform for further research on this industry, and for similar studies for other industries.

**Going forward**

*The next chapter will review the existing literature in the field of study. It will identify the research gaps and opportunities for further research.*