Cross Border Merger & Acquisition a wealth creating proposition: An exploratory case study of Tata Motors and Jaguar Land Rover

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ABSTRACT

Through the 1990s and up to 2007, the world witnessed a massive wave of cross borders mergers and acquisitions. The vast majority of these such M&A transactions are horizontal, involving the acquisition of another company in the same industry. Such acquisitions imply a desire to increase revenues by broadening the scope of the market and/or increasing market share, as well as adding new products to the portfolio. They also advocate for cost-cutting measures in various aspects of operations. Whether or not these benefits are realized is an empirical question that has sparked research in a variety of fields, including economics, finance, and accounting.

The aim of this dissertation was to investigate post-merger performance from an acquirer standpoint. This study took a case-based approach, consisting of an exploratory case study to identify the parameters of the research problem and to develop a set of hypotheses.

The exploratory case study was based on Tata Motors, an Indian company which acquired Jaguar and Land Rover from Ford Motors. This case investigation based on data collected through a wide spectrum of secondary sources, showed that the acquisition had a significantly positive impact on Tata Motors profitability performance, with revenue growing significantly in the post-acquisition years. However, these sales increases came at a high cost; the company invested a huge amount in new product development and marketing communications, with the result that profit performance was negatively affected in the initial couple of years post-merger. However, profit margins increased, suggesting that the reduction post-merger may have been a temporary effect.

Key Words: Merger & acquisition, cross border merger and acquisition, profitability, pre-and post-merger, correlation, case-study, financial performance

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List of Abbreviation

M&As	Merger and acquisitions
CBMAs	Cross-border merger and acquisitions
PAG	Premium Automotive Group
JLR	Jaguar and Land Rover
US	United States
UK	United Kingdom
FY	Financial year
CAGR	Compounded annual growth rate
EBITDA	Earnings before interest, tax, depreciation and amortisation
UNCTAD	United Nations Conference on Trade and Development

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Chapter 1 - Introduction

1.1 Background

Unquestionably today we live in a world where we witness momentous transformations in the economic structures of the country, consequently mergers and acquisition (M&A) has turn out to be a common business instrument which has been adopted and implemented by corporations worldwide. Driven by a philosophy of multiple forces such as shareholder's wealth, social and cultural environment, the synergies created through mergers and acquisition has given advantages to companies to grow faster than their peers or competitor. However, in the past some mergers and acquisitions have also failed primarily on the back of factors like financial, marketing and operational issues. Human resource problems in the merged companies also resulted in the failure of the mergers and acquisitions. Having said that, in the current globalised markets Mergers and acquisitions has become an indispensable component amongst the best business approach and plays a requisite role in re-establishing and re-organising a business.

1.2 General theories on Merger and Acquisition

In general terms, business combinations are primarily referred to as merger and acquisitions, and there are numerous factors that drives mergers and acquisitions such as shareholder gains, managerial gains, economies of scale, cost savings, taxes exemption, diversification, multimarket contact and to have better research and development. Earlier in the past merger and Acquisition (M&A) use to be a common strategy adopted by the firms primarily in the US and The Europe and according to scholars and the practice of M&A was initiated in the beginning of 19th century and was swiftly recognised as one of the key economic gears (Ananda, 2017).

In the early 19th century, US and the Europe were the major business hub and between (1896 – 1903) the US witnessed the first merger wave of horizontal mergers that consolidated the manufacturing industry and was later came to known as the "great merger movement" and was then followed by the second merger wave between (1916-1933) and was primarily comprised of oligopolistic mergers in the banking sector; the third wave was then continued between (1960-1975) which was every so often characterised as the wave of conglomerates; the fourth wave between (1980 – 1990) and was repeatedly characterised as "bust-up takeovers", or takeovers where large fractions of the target company's assets were sold post-acquisition, the forth wave was also called as the era of corporate raiders; the fifth wave was continued between

(1993 – 2000) was termed as the creator of “mega deal” such as Exxon and Mobil and Citibank and Travelers. However, with the dot com bubble burst the Stock markets witnessed a plunge of over 10% within weeks which marked the end of fifth wave (Katherine, 2019)

1.3 General theories on Cross-Broder Merger and Acquisition

Post the dot com bubble burst and the early 2000s marked the beginning of the sixth wave of mergers which was also marked as the starting point of the cross-border M&A. As it was witnessed that merger and acquisition (M&A) have over 100 years been vital and an important measure for strategic expansion hence the popularity of M&A have increased e3xponentially and with the advancement of technology and globalisation the cross-border merger and acquisition have also increased tremendously and its acceptance was also increased on a rapid rate (Shimizu,2004). Furthermore, there were different school of thoughts in respect of cross-border merger and acquisition, for instance, a study conducted by KMPG suggests that c.17% of the cross acquisition resulted in increasing the shareholder’s wealth whereas c.53% of resulted otherwise. However, given the growing importance of cross-border M&As in the global market, a greater knowledge of the potential and obstacles for companies pursuing this strategy is essential.

During the early 2000’s the cross-border merger and acquisitions by emerging countries (such as India, China, Brazil, Malaysia, and others) acquirers were largely highlighted by the financial media across globe. As a result, increasing trend of international acquisition by firms from emerging markets became a significant strategic corporate initiative the empowers firms to extend their current businesses, leverage their current capabilities, and/or diversify in to related market (Bhagat et al., 2011). Consequently, cross-border acquisitions from emerging markets witnessed a staggering rise of 392% between 2004 and 2008 and stood at m $37 billion in 2004 to $182 billion in 2008 which comprises of c.66% of the total FDI outflows from emerging markets in 2008 (UNCTAD, 2009).

1.4 Research objectives and problem statement

As discussed earlier that post the dot com bubble burst and before the financial crises of 2008 there was an increasing trend of overseas acquisitions by firms from emerging markets, however corporations from developed countries comprised of major share of the cross-border acquisition. However numerous studies have been conducted where the acquirers have largely been from developed countries while the targets from developing and emerging economies (Bhagat et al. 2011). This research will aim to examine or analyse the opposite orientation wherein the acquiring company or the acquirer are from an emerging market whereas the target company are around the world. This research then looks into whether these international mergers and acquisitions add value for the acquiring companies.

Bearing in mind that the horizon of the research is relatively wider hence this research is narrowed down to a specific case of a cross border merger and acquisition wherein the acquiring company i.e., Tata Motors from an emerging market i.e., India acquired an oversees company Jaguar and Land Rover a UK based automobile manufacture company.

Tata Motors belongs to India’s one of the largest conglomerate houses which have operations across sectors such as power, consumer durables, automobiles, electronics, infrastructure etc. so it is also important to understand the importance of the conglomerate merger and acquisition. In the past a lot of research and empirical studies have been conducted in regards to conglomerates merger and acquisition regarding their success ratio as compared to vertical and horizontal merger and acquisition and have been understood that conglomerate merger and acquisition are rather less successful compared to vertical and horizontal merger and acquisition. One of the other objectives of this research would be to examine where the acquisition of Jaguar and Land Rover by the Tata’s fail to create the wealth to the shareholders or this acquisition rejected the general perception of conglomerate merger and acquisition are not successful.

Research Question:

Cross Border Merger & Acquisition a wealth creating proposition: An exploratory case study Tata motors and Jaguar Land Rover

The research objectives of the study are as follows:

- To identify the value creation in cross border merger and acquisition
- To explore the case of cross border merger and acquisition of Tata and Jaguar and Land Rover

1.5 Research Methodology

The performance and return to acquirer as a result of merger and acquisition are measured in relation to the acquirer firm's pre-and post-acquisition behaviour (Ananda, 2017). The profitability and performance of mergers and acquisitions are measured in relation to the share prices of the buyer and target companies prior to and after the transaction. A comparison of the share price after the deal, as well as an examination of the acquirer's share price with deal compared to the normal returns, allows one to determine whether the M&A transaction was successful (Bruner, 2016).

On the basis of the above assumption, the methodology adopted in identifying the aim of the research is a two-way process, wherein this research will focus on computing, analysing and comparing pre and post profitability of the acquirer in our case is Tata Motors, in addition to that we will also try to establish an statistical relation between the profitability of the target company which is Jaguar and Land Rover and the share price of Tata Motors post acquisition

1.6 Structure of the research

The dissertation is divided into five chapters. Chapter two critically reviews existing research on mergers and acquisitions, cross border merger and Acquisition, classification of merger and acquisition, the main driver cross border mergers and acquisitions, the evidences of the cross-border merger and acquisition. Chapter three explains the methodology used to compare the value creation in cross border mergers and acquisitions. Chapter four is a very important chapter that involves the overview of the case study of Tata acquisition of Jaguar and Land Rover from Ford Motors which is used to establish the research. It also provides information pertaining to the reasons under what circumstances Ford sold Jaguar and Land Rover what was the price paid by Tata Motors and how did Tata Motors turnaround Jaguar and Land Rover in a successful and profitable business. Chapter Five involves the results which proof that cross-border merger and acquisition is a positive approach to increase the shareholder's wealth and this is done by the computing, analysis, and comparing the pre and post profitability of Tata Motor and also set hypothesis to demonstrate the aim of the research. The Final chapter of this dissertation is related to the conclusion of the research conducted and provide information pertaining to whether the cross-border merger and acquisition does provide benefits to the shareholders of the acquiring company though our case of Tata Motors acquiring Jaguar and Land Rover

Chapter 2 – Theoretical and Literature Review

This Chapter represents the theoretical and literature evidences pertaining to the merger and acquisition and eventually leads to cross border merger and acquisition. In addition, this section of the research will discuss what are the essential or the relevant factors that drives the success for any merger and acquisition and what are the challenges faced during a cross border merger and acquisition. Furthermore, this section also deals with the development of the research hypothesis and since one of the key areas of focus is the Tata Motors Acquisition of Jaguar and Land Rover this section will also through light on how Tata Motors believed to turn around Jaguar and Land Rover by acquiring from Ford Motors.

2.1 Introduction

By the beginning of the 21st century, it was evident that merger and acquisition is a recognized medium for enhancing firms' profit. In other words, corporations around the globe found an alternative or inorganic measure for enhancing firm profitability which is though combining or acquiring other companies. M&As are projected to help organizations achieve more value as a transformation agent. (DePamphilis, 2012) whereas, Andrade et al. (2001) explain why corporations choose to engage in M&As. The underlying premise is to develop economies of scale or other "synergies" that will result in market power via monopolies or oligopolies.

As into two categories: operating and financial synergy. The terms operating synergy and economies of scale and scope are synonymous. Economies of scale promote efficiency through improving production, but economies of scope use well-defined talents or assets to produce items effectively. The cost of capital of the acquirers or amalgamated enterprises is tied to financial strategy. M&As are intended to lower the cost of capital for acquirers or combined companies relative to pre-M&A activity. Financial synergy is beneficial in general for diversification, strategic realignment, mismanagement, managerialism, tax benefits, and market power. Furthermore, mergers and acquisitions are viewed as monopolistic actions, the result of market power and industrial concentration. In addition to the post-M&A phase, output, technology, and employment are being reduced. (Ananda, 2017).

Henceforth in this framework, it is unquestionably necessary to contrast cross-border merger and acquisition, which has been prominent in this century, with domestic merger and acquisition, which has been present since the beginning of the M&A wave.

2.2 Merger and Acquisition

A merger is a "combination of two or more companies in which the assets and liabilities of the selling firms are absorbed by the buying firm (Sherman, 2011, p.2)". Other than pursuing social or political goals, mergers and acquisitions are typically carried out on the anticipation of achieving an economic gain. Furthermore, the two corporations involved must be worth more combined than they were separately for such a transaction to be justified. Gaining economies of scale, merging complementing resources, obtaining tax benefits, and removing inefficiencies are some of the transactions' possible benefits. (Gaughan, 2010; Camargos & Coutinho, 2008). Other reasons to explore M&A expansion include acquiring intellectual rights to products or services, growing market dominance by acquiring competitors, shoring up weaknesses in critical business areas, expanding into new geographic regions, or giving managers with new chances for career growth and promotion. (James, 2005)

Principally, the decision to merger or to acquire another corporation is typically a capital budgeting decision in a way similar to a regular investment decision however, mergers and acquisitions can be differentiated at best in five ways : firstly, the value of a merger may depend on factors like strategic fits that are challenging to assess; secondly, the accounting, tax, and legal components of a merger can be complex; third, mergers frequently entail concerns of corporate control and are a way to replace existing management; mergers obviously affect the value of the firm, but they also affect the relative value of the stocks and bonds; and finally, mergers are often "unfriendly". (Camargos & Coutinho, 2008; Pautler, 2001; Sherman & Hart, 2006).

On the back of the nature of business, Camargos & Coutinho (2008); Sherman & Hart (2006) and Ijlal (2001), merger and acquisition can be classified into following categories such as horizontal merger, vertical merger, Conglomerate Merger

Since this research is primarily related to whether cross-border mergers and acquisition generate wealth for acquirer with focus on Tata's acquisition of Jaguar and Land Rover, hence this merger is an example of a horizontal merger, because both the target company and the acquirer company are engaged in the same activities of automobile manufacturing.

2.3 Classification of Merger and Acquisition

From the standpoint of the value chain, M&A transactions can be categorized as horizontal, vertical, or conglomerate (Gaughan, 2002, Chunlai Chencand Findlay, 2003). In a horizontal merger and acquisition, rival businesses from the same sector make up both parties. According to Chunlai Chen and Findlay (2003), the global restructuring of numerous industries in response to technological progress and deregulation has resulted in a sharp increase in horizontal M&A during the past few years. Pharmaceutical, automotive, and petroleum industries are just a few that have noticed this tendency. A excellent example of M&A in this category is the merging of the two enormous pharmaceutical corporations Glaxo and SmithKline Beecham, which had a transaction value of US$76 billion (Hoang, and Lapumnuaypon, 2008).

Furthermore, vertical mergers and acquisitions are combinations of businesses engaged in client-supplier or buyer-seller relations. By utilizing upstream and downstream links in the value chain, the participating businesses want to reduce uncertainty, lower transaction costs, and take advantage of economies of scope (Chunlai Chen and Findlay, 2003). Finally, a company may engage in conglomerate M&A deals where the involved companies operate in unrelated industries in an effort to diversify risks and achieve economies of scale. One instance of a conglomerate merger and acquisition is the 1985 purchase of General Foods by the cigarette corporation Philip Morris for US$5.6 billion (Gaughan, 2002).

Additionally, M&A could be categorized as "friendly" or "hostile." (Chunlai Chen and Findlay, 2003) The board of the target firm approves an M&A transaction when it is conducted amicably. A hostile deal, on the other hand, sets the offer against the target's desires since the target's board has rejected the offer. Last but not least, depending on where the companies involved have their headquarters and conduct business, M&A transactions may be domestic or international. Two businesses, perhaps operating in two different countries or in two distinct economies, are involved in a cross-border M&A transaction (Chunlai Chen and Findlay, 2003). As a result, in domestic M&A transactions, the companies involved are nationals of that country and conduct business there.

2.4 Cross Border Merger and Acquisition

Since the beginning of the first merger and acquisition wave in early 1900’s, various research has been conducted and have identified merger and acquisitions as a popular strategy particularly in the US. However, this technique became increasingly common in other parts of the world, such as Europe, Asia, and Latin America, during the fifth merger wave of the 20th century, which took place in the 1990s. Additionally, almost 40% of the mergers and acquisitions that were completed in 1999 and 2000 featured companies with headquarters in two separate nations, while the remaining 60% of the mergers and acquisitions involved two companies from the same country (Hitt, Harrison, & Ireland, 2001a). Hence the Cross-border acquisitions was considered as the quickest way to build an international presence in particular areas, and as a result, they have grown to be a popular strategy for businesses looking to expand globally. About 60,000 acquisitions at the start of the 21st century may be categorized as multinational (UNCTD, 2000)

The biggest advantage provided by cross-border merger and acquisition is that Cross-border mergers and acquisitions give a company the chance to join a new market and become a major competitor right away. By buying an established company in the market the firm wants to enter and can consequently gains access to the products, clients, and decisive regional stakeholders such as suppliers, distributors, and government officials (Hitt, Ireland, & Hoskisson, 2003). Furthermore, for a foreign company, having current clients and connections might be especially important because it is more challenging to join a market without these ties and the necessary market knowledge.

Also, with businesses becomes more globally integrated, there are more opportunities and demands for cross-border mergers and acquisitions (Hitt, 2000; Hitt, Keats, & DeMarie, 1998a). Businesses might benefit from expansion potential in global marketplaces by acquiring companies with headquarters abroad. As businesses meet restrictions to expansion in the existing markets in which they compete, these opportunities become increasingly crucial. To increase the company's market power in international marketplaces, horizontal acquisitions may be made across international borders. (Hitt and colleagues, 2001a) Cross-border purchases could also give the company a competitive advantage over rival companies that operate in a variety of different marketplaces. In reality, in recent years, multi-market competition has become more prevalent (Smith, Ferrier, & Ndofor, 2001).

Despite many literatures and research at the beginning of the 21st century which identified cross border merger and acquisition as a very important and a beneficial factor for the growth of any business, a study conducted by KPMG in 1999, found that only about 17% of cross-border acquisitions created shareholder value, while 53% destroyed it (Economist, 1999)

2.5 Drivers behind cross border merger and acquisition

Cross-border mergers and acquisitions give the acquiring firm with a number of potential prospects. Access to new and profitable markets, as well as the extension of a firm's current goods market, are examples of these opportunities. Acquiring firms may also gain access to valuable and complementary resources that they may not currently possess, but need in order to gain or maintain a competitive advantage (Hitt and Pisano, 2003).

2.5.1 Entry in the Foreign Market / Market Opportunities

Because of the numerous entrance obstacles, it is frequently challenging to access new markets in other nations. Countries frequently have legislation that prevent foreign companies from entering their markets, in addition to the entry barriers that are inherent to the specific industry and the competitive profile in the market. Foreign companies are unlikely to have connections with suppliers and distributors, making it challenging for them to successfully enter a new market. These entrance obstacles are, however, surmounted by purchasing a company that already operates in that market. As a result, the acquisition gives access to markets that may not otherwise be attainable (Hitt et al., 2003). Furthermore, as a result of geographic expansion into new foreign markets which leads to risk mitigation on the back of less dependency on any one market. Examples of such consolidation and the importance of market power can be seen in the global automobile industry with Daimler's acquisition of Chrysler and Renault's controlling ownership position in Nissan, Tata Motors acquisition of Jaguar and Land Rover (Hitt et al., 2001a)

2.5.2 Technology

The rapid advancement of technology is one of the main factors accelerating CBMAs. Many organizations feel forced to participate into CBMAs as a means of sharing the expenses of innovation and accessing new technology assets to strengthen their innovative capacities in an environment marked by rapid technological change and rising expenditures for risky R&D initiatives (UNCTAD, 2000). Furthermore, corporations can increase their size and take over greater market share through acquisitions outside of national borders, while keeping their management effective and flexible thanks to new information and communications technologies (Kang and Johansson, 2000). Additionally, in order to finance the costs of R&D for new products, corporations are now required to collaborate with others on international marketplaces. For instance, the recent wave of cross-border merger and acquisition activity in the automotive industry is said to be primarily motivated by the high R&D expenses necessary to produce new generations of technology.

2.5.3 Cross-border M&As as a value-creating strategy

The presumption that businesses join foreign markets to take advantage of their unique resources and market inefficiencies forms the theoretical basis for cross-border M&As that produce good returns. (Buckley and Casson, 1976; Morck and Yeung, 1992; Wilson, 1980). Furthermore, Research states that cross-border M&As provide integrating benefits of internalization, synergy, and risk diversification and thereby create wealth for both acquirer and target-firm shareholders (Kang, 1993; Markides and Ittner, 1994; Morck and Yeung, 1991, 1992) Market reactions to cross-border M&As are sharply different from those regarding domestic M&As, which often are reported to reduce the acquirer’s shareholder value while only improving the target’s shareholder value (Kaplan and Weisbach, 1992). In fact, wealth creation effects were observed in several cases of U.S. acquirers purchasing non-U.S. firms (Markides and Ittner, 1994; Morck and Yeung, 1992) and vice versa (Kang, 1993).

2.5.4 Opportunity for learning

According to Vermeulen and Barkema (2001), acquisitions can energize target companies and support their long-term survival. The chance to gain new skills and information leads in the potential for revival (Barkema & Vermeulen, 1998; Barkema, Bell, & Pennings, 1996). Cross-border acquisitions present a particularly good learning opportunity because social and corporate cultures in managerial practices frequently differ across national borders, allowing the acquiring firm to learn new managerial techniques and capabilities from the acquired company. New technology for products or processes, specialized and implicit managerial abilities, marketing, logistics, or other crucial departments within the acquired organization may all contribute to this new knowledge.

2.5.5 Access valuable and complementary resources

With the increase in globalisation the markets are becoming more competitive (Hitt et al., 1998a). Therefore, corporations require necessary and substantial resources such as employees, supplies, vendors, logistics partners, etc.to compete in the highly competitive market. Hence corporations must look for valuable and distinctive resources or valuable resources that, when combined with their own resource base, offer distinctive resource bundles that are challenging to duplicate. Particularly valued resources might be more successfully acquired outside of a company's native market. As a result, Cross-border acquisitions therefore offer a chance to acquire and absorb priceless and distinctive resources that complement a firm's own resource base (Hitt et al., 2001a).

2.6 Challenges in cross border merger and acquisition

Managers of M&As have often been intrigued by the “prospect” of creating synergies through relatedness (Davis and Thomas, 1993; Homburg and Bucerius, 2006), seeking to both acquire and exploit assets that create value through productivity and efficiency gains and market expansion, etc. (Bertrand and Capron, 2015; Shimizu et al., 2004). However, despite the prospect of creating value, CBMAs are challenging to execute and are subject to high failure rates (Bertrand and Capron, 2015; Shimizu et al., 2004), which draws a great deal of attention to post-merger survival and performance

2.6.1 Integration challenges

One in four American workers, has been impacted by mergers and acquisitions according to (Cartwright and Cooper, 1993). The impact that mergers or acquisitions have on organizational members is conspicuous. In interviews with over 100 employees in a merging company, (Sinetar 1981) confirmed that workers exhibit strong negative reactions upon the announcement of a merger (Gladys Millicent Najambi Muchae, 2010). Additionally, (Marks and Mirvis 1992) found that workers participating in the merger of two computer businesses feared dismissals, losing control, potential relocation, losing their identity or reputation at work, uncertainties related to their new responsibilities, and losing their colleagues.

2.6.2 Demographic challenges

Cross-border mergers and acquisitions are not without difficulty. Companies involved in international mergers and acquisitions face particular risks, including “liability of foreignness’’ Zaheer, (1995) and ‘‘double-layered acculturation’’ Barkema et al., (1996). Multiple factors such as differences in national culture, client preferences, business practices, and institutional constraints such as government regulation can all impact corporation’s ability to fully realize their strategic aims. Furthermore, firms find it challenging to adapt to and learn from both the local market and the target company due to uncertainty and information asymmetry in overseas markets Kogut and Singh, (1988); Zaheer, (1995)

2.6.3 Legal and regulatory clearance

While performing a cross border merger and acquisition it becomes mandatory to obtain necessary regulatory permissions in the target company's home country, the acquirer must do so as well, with every country have respective institution which perform these duties of providing approvals. For example, in India institutions like Reserve Bank of India (RBI), e Federation of Indian Chambers of Commerce and Industry (FICCI), etc. However, the biggest challenge which are usually faced is the delays in the regulatory approvals for the overseas acquisition.

2.7 Evidences for cross border merger and acquisition

This research revolves around the cross-border merger and acquisition and does this type of transaction create value to the acquiring companies. While a lot of research has been conducted on both domestic and cross border merger and acquisition, it was observed the cross-border merger and acquisition become prominent in the late 20th century and early 21st century hence we will be mentioning few cases of cross border merger and acquisition between 1998 and 2010 which showcases the challenges and the benefits being faced in cross border transaction with major emphasis on one case out of the four cases

2.7.1 Renault-Nissan Transaction

At the moment, the Renault and Nissan is amongst the leading automotive group globally, however when the transaction took place in 1999 between the second largest French and the second largest Japanese automaker it was assumed by the analyst that the association between these two giants was impractical on the grounds of the cultural difference and complexity between the stakeholders. (Rana, 2015)

Renault Perspective

In every market outside of Europe, Renault had a very limited presence. It had no presence in the United States and an extremely poor reputation in South America and Asia. It had two realistic options at the time: remain independent and use the money to finance fresh market entries, or find a partner. Consequently, the management top management assessed potential partners and admitted right away that Renault didn't have much to offer any of the larger businesses (General Motors, Toyota, Ford, Volkswagen, and DaimlerChrysler) (Rana, 2015)

Nissan Prospective

In 1999, Nissan was struggling with a significant debt load, a loss of market share in the US and Europe, and a bad reputation for making expensive and uninteresting vehicles. Nissan was also constrained by the Japanese company culture, which valued lifetime employment, was resistant to change, and generally protected the status quo. The top management, had very limited options when evaluating possible partners and realised that DaimlerChrysler was the only other possible partner outside Renault.

Outcome

From the above case study it can be analysed that both the corporation involved in the merger was facing problems at their end such as financial issues, limited market presence among other hence, cross border merger and acquisition did helped both the corporation through building synergies and collectively becoming a leading automotive group globally

2.7.2 Geely acquisition of Volvo

As the tenth-largest automaker in China, Geely was then a privately held business. Only 329,000 automobiles were sold in 2009, the year when the negotiations with Ford began, while typically present in the Chinese market. As a result, Geely was still a minor participant in the automotive industry even in China. On the other hand, Volvo is a Swedish premium automobile maker that Ford owns. It sold 335,000 automobiles in 2009 through 2,300 dealers in more than 100 nations, with the US, Sweden, and the UK being its three biggest markets. Furthermore, since the acquisition of Volve by Ford in 1999 for US$ 6.4 billion the company had rarely made a profit.

In 2008, due to Volvo's significant debt, Ford was forced to reorganize in order to avoid bankruptcy after reporting losses of US$12.6 billion in 2006 and US$2.7 billion in 2007, hence the management sought the distress financial position as an opportunity to move forward as a potential acquirer.

Outcome

As mentioned earlier that since the acquisition of Volvo in 1999 the company was seldomly making positive bottom-line, also Ford which was itself was into financial distress and was suffering from huge losses for two consecutive years. Other the other hand Geely who’s presence was only limited to Chinese Market; hence this cross-border transaction did act as a blessing for both the corporation in a way that Ford will not have to carry the burden of loss from Volvo while Geely will have the opportunity to move its presence overseas. However, this cross-border transaction was not as simple as it reads, there were lot of challenges occurred which could possibly have turned things other way around.

The deal has not been universally welcomed. Eight former Volvo directors recently wrote to Ford's chairman, Bill Ford, arguing that Geely is an unsuitable owner for Volvo because of its relatively small size and lack of "technical competence" (The Guardian, 2009)

Unions have raised concern, stating that Geely lacks transparency, has a tax haven-based ownership structure, and a history of intellectual property theft. Concerned about allegations that Geely may obtain funds from Chinese state banks to support the acquisition, certain Christian Democratic MPs in Sweden have described the transaction as a sale of Volvo to the Communist Party and the Chinese government. (The Guardian, 2009)

2.7.3 Tata Motor's Acquisition of Jaguar and Land Rover

On 2nd June 2008, tata motors an India based Automobile manufacture announced to acquirer UK based Jaguar and Land Rover a premium car manufacture for US$ 2.8 billion from Ford Motors in an all-cash transaction. Besides, Ford Motors will also contribute US$ 600 million to Jaguar Land Rover pension plan. In addition, the JLR's total acquisition Cost of US$ 2.3 billion is on a cash free and debt free basis.

Outcome

Since Ford was under heavy financial distress and had reported nearly US$15 billion of losses in FY'2006 and FY'2007 cumulatively, while on the other hand Tata Motors which was seeking to expand its footprints on global front. This cross-border transaction acted as a win-win for both the parties in a way that it was becoming difficult for Ford to maintain these two losses making brands and an opportunity for Tata motors to expand its product to premium car segment and expanding its global foot prints.

Furthermore, more detailed analysis of Tata Motor's acquisition of Jaguar and Land Rover Will be discussed in the next chapters

Chapter 3 - Research Methodology

3.1 Introduction

As discussed in the previous chapters a lot of research has been conducted on both domestic as well as cross-border merger and acquisition in the past starting from the beginning of the 20th century. The objective of a dissertation is to make a meaningful contribution to knowledge (Kek ä le, 2001). This objective may be achieved in several ways, namely, by exploring theories, refining existing theories, and/or developing new theories (Winter, Griffiths & Green, 2000; Mullins & Kiley, 2002; Park, 2005).

This chapter will give the detail information of the research design and the methodology adopted in conducting this research. In addition, these sections will also provide information regarding the data collection, source of data and other related information.

3.1.1 Research objectives

The objective of this dissertation was to gain an in-depth understanding of weather cross border merger and acquisition does create wealth for the acquiring firm and a case study method seemed appropriate to fulfil this objective

Aim of the research

- To identify the value creation in cross border merger and acquisition
- To explore the case of cross border merger and acquisition of Tata and Jaguar and Land Rover
- To understand, given the information at the time if acquisition, was the acquisition of Jaguar and Land Rover was overvalued or under valued
- To identify the relationship between the profitability of target firm with respect to acquirer's share price movement

3.2 Selection for the Exploratory Case Study: Why Tata Motors acquisition of Jaguar and Land Rover?

Research based on case studies endeavours to describe the features of the population from which the case studies are drawn (Rehman, 2015). Selection of a representative case is critical therefore because the selected case must stand for the population (Gerring, 2004; Seawright & Gerring, 2008)

Tata Motors acquisition of Jaguar and Land Rover was selected for the exploratory case study for a number of reasons. To begin, the automotive industry, like many other global industries, has undergone extensive transformation over the last few decades, primarily through mergers and acquisitions and other alliances. As a result, this industry provided an information-rich context for a research study on mergers and acquisitions.

Second, Jaguar and Land Rover have been bought and sold several times in their history, with widely disparate results. This variation in post-merger performance under various owners appeared to provide a promising setting in which to investigate post-merger performance under various scenarios.

Thirdly, Jaguar and Land Rover are two globally recognized iconic brands, whereas Tata Motors is a rising contender in the global automotive industry from an emerging country, India. This marriage of emerging-country and developed-country brands received extensive media coverage, with the focus on the potentially disastrous end result of this inter-racial marriage. As a result, this case provides a context that is both information-rich and multifaceted in nature. (Rahman ,2015)

Finally, as a critical or instrumental case, Tata Motors met the conditions posed by the proposed model and can thus demonstrate what the model envisions within the specific context (Roche, 1997)

3.3 Data collection and data sourcing

This dissertation revolves around cross border merger and acquisition with a case-based approach of Tata Motors acquisition of Jaguar Land Rover (JLR). It should be mentioned that most of the data collected in the exploratory case study was quantitative in nature as a result, this exploratory case study can be classified as a quantitative case study, in which longitudinal data on the performance of the case company were collected from archival sources and analysed with assistance from key informants in the companies and independent third parties such as investment analysts. Furthermore, for this exploratory case study, data on deal motive, deal mode, post-merger integration, and strategies were also collected and analysed.

Furthermore, Tata Motors being a publicly traded company in India, hence majority of the data collected was available in the public domain, however with support of my supervisor I was able to extract data from paid sources from databases like Bloomberg

The data was collected from the following sources:

- Annual Reports of Tata Motors and Ford Motors
- Form 20-F submitted to United States Securities and Exchange commission
- Company reports for shareholders
- Company press releases
- Interviews of top executives published in business press
- Company websites Company reports for shareholders
- Independent broker reports
- Media reports published in Economist, Financial Times, The Guardian, The Economic Times, Livemint, etc.
- National stock exchange (NSE)

In addition to the above sources, multiple books and research papers on the acquisition of Jaguar and Land Rover (JLR) were also analysed and consulted while performing the search. Also, data from multiple databases like Bloomberg, Statista was also collected to for industry data.

3.4 Research design / structure

As discussed previously, that the prime objective of this is to gain an in-depth knowledge weather the cross-border merger and acquisition does help the acquiring firm in increasing its shareholder wealth, and to understand this we have case-based approach.

3.4.1 Pre and Post merger financial analysis approach

Since our focus is on analysing a cross border merger and acquisition case of Tata Motors acquiring Jaguar and Land Rover. Therefore, as an outlay of the structure for this research case we will have a major focus on the financial analysis in other words profitability analysis of Tata Motors on pre- and post-merger. The time frame selected for the analysis of Tata Motors will be five years before merger and five years after the acquisition of Jaguar and Land Rover. Simultaneously, this research will also provide the quantifiable reasons which forced Ford Motors (target parent company) to put its luxurious brands Jaguar and Land Rover up for sale. To provide the quantifiable reasons financial analysis of Ford Motors will be conducted.

Period of study: The data for pre-merger analysis will be between 2005 and 2008, whereas the post-merger financial analysis will between 2009 and 2014. Primarily the focus will be on the profitability of the Tata Motors

3.4.2 Statistical approach

In addition to the above pre- and post-merger financial analysis approach, this research has also adopted a statistical approach to evaluate the research objective and will be compare both the outcome.

Subsequently, Tata Motors is a publicly trading company and is listed on National stock exchange, therefore this analysis also involves the use of statistical tool which will help in establishing the relationship between the JLR's performance with respect to Tata Motors share price performance post the acquisition.

Tools Used: To find whether there is a relationship between the EBITDA of JLR and share prices of Tata motors, a statistical tool correlation has been used. The type of correlation used in the study is Karl degree of closeness between the two variables.

As the sample size is more than 30, to test the significance of the hypothesis framed, Z- test has been used. A z-test is a statistical test used to determine whether two population means are different when the variances are known, and the sample size is large. The test statistic is assumed to have a normal distribution, and nuisance parameters such as standard deviation should be known for an accurate z-test to be performed. (Namita and Gupta, 2019)

Hypothesis Testing: The following hypothesis has been primed during this study

Null Hypothesis $H_{(0)}$: There is no significant upward correlation between the operating profit of JLR and share prices of Tata Motors.

Alternate Hypothesis $H_{(1)}$: There is a significant upward correlation between the operating profit of JLR and share prices of Tata Motors.

Chapter 4 –Tata’s acquisition of Jaguar and Land Rover: An exploratory case Study

Before deep diving the case study of the acquisition of Jaguar and Land Rover (JLR) by Tata Motors, let’s get in to a brief about how this story begins

4.1 Jaguar and Land Rover: The Ford Period

The story of began, when Ford Motors decided to expand its product portfolio in from a mass-manufacturer of car towards premium car manufacturer and created a new segment Premium Automotive Group (PAG) under which Ford acquired three luxurious brands namely Jaguar, Land Rover, Volvo and Aston Martin at relatively high premium which collectively called as the Premium Automotive Group (PAG). (Rehman, 2015).

When Ford acquired Jaguar and Land Rover, it had to compete fiercely with General Motors, and auto industry analysts believed Ford paid significantly more than the brands' worth. In 1989, Ford paid US$ 2.5 billion for Jaguar, and in 2000, it paid US$ 2.73 billion for Land Rover. Ford also purchased a 75% controlling stake in Aston Martin in 1987 for US$ 32 million, and Volvo Cars in 1999 for US$6.5 billion. (Ford Annual Report, 1999).

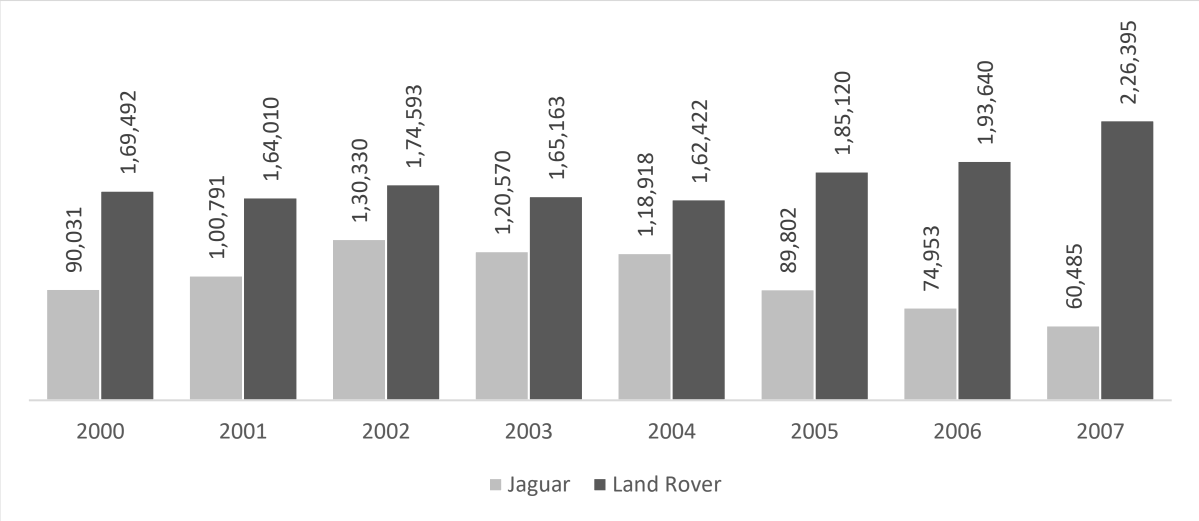
Ford's motivation for acquiring Jaguar was primarily driven by the fact that Jaguar was a premium brand, which would assist Ford in entering the luxury segment of the automotive market (Ford Annual Report, 1989). However, Ford already had a successful luxury brand in the form of "Lincoln," but it was primarily positioned at the lower end of the luxury car market. Rather than creating a new luxury brand, Ford desired a market-ready brand that could compete with Japanese and European firms.

4.2 Reasons why Ford sell Jaguar and Land Rover

According to some industry analysts, Ford paid a significant premium for the ailing Jaguar brand, which had a very low annual sales volume and was barely breaking even (Prokesch, 1989). According to Ford Motor Company's 1990 Annual Report, management admitted that Jaguar's $2.5 billion price tag was five times its actual net asset value. In other words, Ford paid US$ 2 billion for the brand "Jaguar" (goodwill), and the rest was paid for the brand's other tangible assets (Ford Annual Report, 1989). “Furthermore, Ford Motors spent over US$ 10 billion in total in next 15 years after acquiring Jaguar to rebuild Jaguar's factories, engineer new models, and marketing purposes” (Madslien, 2007)

4.2.1Declining sales Volumes of JLR

Figure 1 Sales volume by units of Jaguar and Land Rover under Ford Ownership



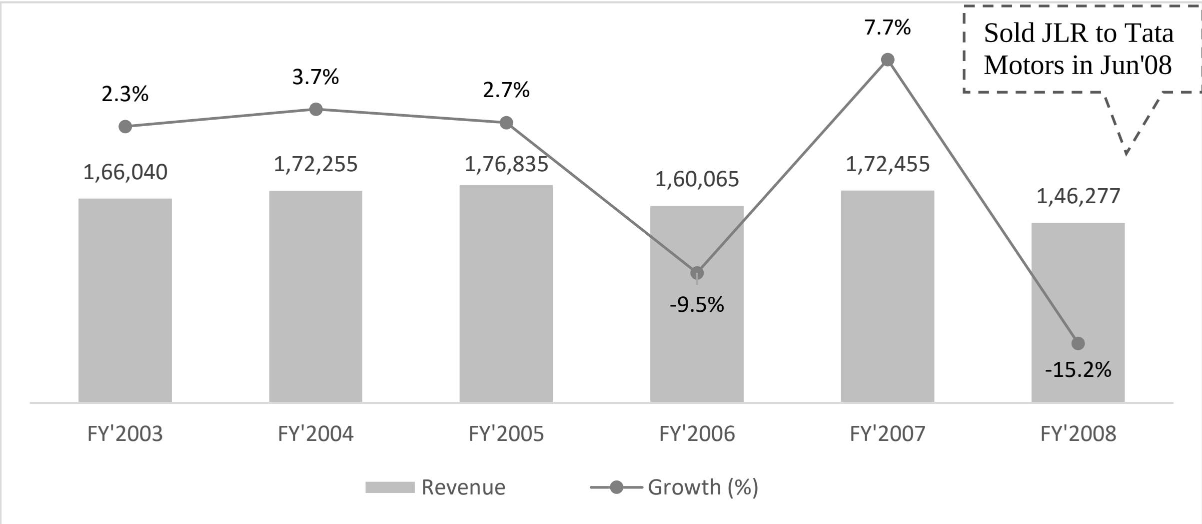
The above Figure 1 graph represents the sales volume of Jaguar and Land Rover under Ford ownership and it can be seen that Land Rover's sales volume was steadily increasing. Land Rover's sales volume in 2000 stood at 169,492 units, which fell slightly to 164,010 units in 2001 before rising to 174,593 units in 2002. In 2003, sales volume increased to 165,163 units, and this trend continued in 2004, with sales volume falling to 162,422 units. However, in the three years leading up to the sale of Land Rover to Tata Motors, sales volume increased significantly year on year. The number of units sold increased from 185,120 in 2005 to 193,640 in 2006 and 226,395 in 2007.

On Contrary, Jaguar's sales volume in 2000 was 90,031, increasing to 100,791 units in 2001 and 130,330 units in 2002. However, in the years leading up to the sale to Tata Motors, Jaguar's annual sales volume plummeted. Sales volume was 120,570 units in 2003, then fell to 118,918 units in 2004, 89,802 units in 2005, 74,953 units in 2006, and 60,485 units in 2007.

4.2.2 Deteriorating financial strength of Ford Motors

Previously in this chapter, we understood that between the period of 1990s and 2000s Ford Motors was on a buying spree under its new segment Premium Automotive Group (PAG) and acquired multiple brands like Jaguar, Aston Martin, Volvo and Land Rover on high premiums which certainly impacted the Company’s financial position.

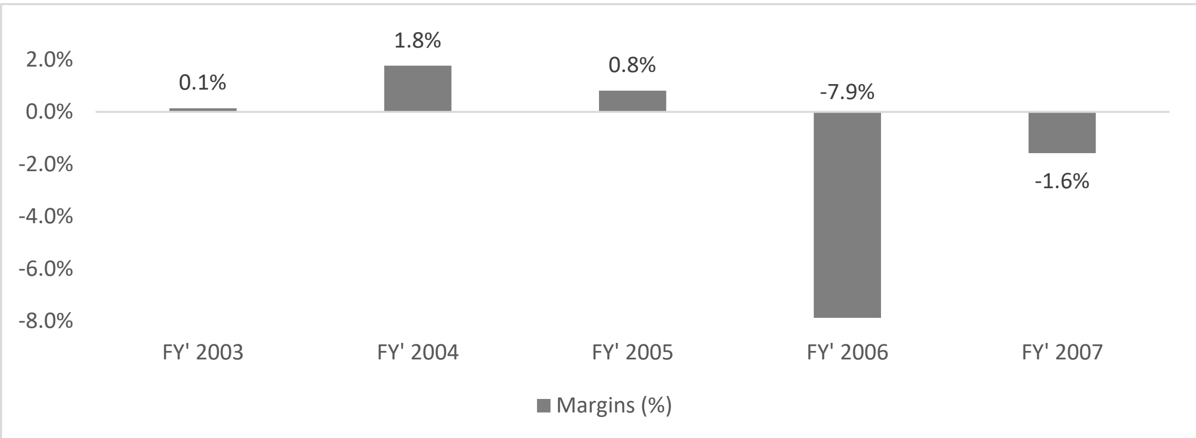
Figure 2 – Represents the annual revenue growth for Ford Motors



Source: Ford Motors 10K filings

The above figure 2 shows that between FY'2003 and FY'2005 the revenue grows steadily however in FY'2006 the sales declined significantly by c.9.5% this decline was on the back of lower wholesale unit volumes in Ford North America, adverse product mix, and unfavourable net pricing (Ford Motors 10K Dec 2006).

Figure 3 – Represents the net profit margins for Ford Motors



Source: Ford Motors 10K filings

The above shows that between FY'2003 and FY'2005 the profit margins of Ford Motors were not very attractive, in addition the Company suffered heavy losses in FY'2006 this was reflected due to losses at the effect of Jobs Bank Benefits charges and higher personnel-reduction program charges in Ford North America ($4.3 billion), less favourable volume and mix – mainly lower market share, adverse product mix in Ford North America, and lower dealer stock levels – ($3.2 billion), pension curtailment charges ($2.7 billion), impairment charges related to our long-lived assets in Ford North America and Jaguar and Land Rover operations ($2.5 billion), and lower net pricing ($2 billion). These adverse factors were offset partially by favourable cost changes ($1.5 billion). (Ford Motors 10K Dec 2006).

In addition to the declining financial condition of the firm, the financial crises also put pressure on the firm financials, due to decreasing sales volumes. Consequently, the management decided to sell of not just Jaguar and Land Rover but the other luxury brands such as Aston Martin, Volvo, with the objective to focus on its flagship brand Ford and to gain the financial stability. As a result, the management of the company put Jaguar and Land Rover to put in to assets held for sale category in 2007 (Ford Motors 10K Dec 2007)

4.2.3 Other Factors

Firstly, Ford overpaid for Jaguar. According to Ford's annual report, the acquisition price of US$ 2.5 billion was five times Jaguar's actual net asset value, which media reports described as a significant premium. Ford executives justified the high price by claiming that they were paying a premium for the Jaguar brand. Jaguar sold only 51,939 units the year before the acquisition, and the brand was barely breaking even. (Rehman, 2015)

Secondly, despite Ford's significant investment in upgrading the old Jaguar factories, there was a lack of new products. It is reasonable to assume that Ford's heavy investment in factory improvements limited its ability to invest more in new product development, which ultimately hurt sales. (Rehman, 2015)

Thirdly, there is no evidence that Ford was able to use its global market coverage to expand Jaguar distribution in order to increase sales. Even though Ford had 10,963 dealers in 2007 for Ford vehicles, Jaguar had only 859 dealers. As a result, it appears that Ford failed to properly leverage its extensive dealer network in order to expand Jaguar's dealer network. (Rehman, 2015)

4.3 Sale of Jaguar and Land Rover to Tata Motors

Ford sold Jaguar and Land Rover because they were a significant financial drain on the company. The company had to sell both brands together because they shared production facilities, making individual disposals would be difficult. The name of the project, code-named "Project Swift," demonstrates Ford's eagerness to sell off these two brands as soon as possible (Hotten, 2007)

4.3.1 Price Paid for Jaguar and Land Rover Acquisition:

Tata Motors paid US$ 2.3 billion in cash for these two iconic brands. This was higher than the market expected, but it was still less than half of what Ford originally paid. In 1989 and 2000, Ford paid US$ 2.5 billion for Jaguar and US$ 2.73 billion for Land Rover, respectively. Ford Motors also paid US$ 600 million for the pension plan, for a total acquisition cost of US$ 5.8 billion. (Tata Motors Press Release Dated 2 Jun 2008)

Industry analysts commented at the time that Tata got these two brands at a bargain price (Economist, 2008). Total assets of Jaguar and Land Rover stood at US$7.54b while total liabilities stood at US$5.08b at the time of acquisition (M. C. Ford, 2007). The book value of net assets (difference between assets and liabilities) stood at US$ 2.46b at the time of acquisition. Of the US$ 7.54b of total assets, Ford Motors estimated the value of the two brands (trade names) at US$1.09 billion (Rehman, 2015)

In addition, Tata paid a price (US$ 2.3 billion) that was less than the book value of these two brands' assets (US$ 2.46b). Whereas Ford paid US$ 2.5 billion for just the Jaguar brand, Tata paid only US$2.3 billion for both Jaguar and Land Rover. As a result, some industry experts referred to this transaction as a BOGO (buy one, get one free) transaction.

Table 1: Assets and liabilities of Jaguar and Land Rover at the time of acquisition

Assets	Assets Amount (US$ million)	Total (US$ million)
Receivables	758	
Inventories	1,530	
Net properties	2,246	
Goodwill and other net Intangibles	2,010	
Pension assets	696	
Other assets	297	
Total Assets	**7,537**	**7,537**
Assets	**Assets Amount (US$ million)**	**Total (US$ million)**
Payables	2,395	
Pension liabilities	19	
Warranty liabilities	645	
Other liabilities	2022	
Total liabilities	**5,081**	**5,081**
Net assets (Assets - liabilities)	**(7,537- 5,081)**	**2,456**

Source: Ford Motors 10K Dec 2007

4.4 How Tata breathed life into struggling Jaguar and Land Rover

The story of Tata Motors' success in reviving Jaguar Land Rover is noteworthy, given how quickly the two brands, particularly Jaguar, began to turn a profit under Tata Motors. Where previous owners (BMW and Ford Motors) failed, Tata Motors' success with these iconic brands is admirable. Furthermore, when Tata purchased Jaguar Land Rover in March 2008, just months before the global credit crunch, Jaguar's future appeared doomed, and the financial crisis made things even more difficult. Tata Motors spent US$ 1 billion in the first year after acquisition to keep the brands afloat. When cash was scarce, Tata Motors hired KPMG and Roland Berger Strategy Consultants, a German-based consultancy firm, to advise on cost-cutting, cash flow management, lowering breakeven volumes, and increasing the overall efficiency of Jaguar and Land Rover's operations. (Rehman, 2015)

4.4.1 Hard times

The product at JLR was stagnant, and Tata Motors was beginning to feel overburdened. With the UK government considering a bailout of JLR, Tata Motors' market value plummeted to INR 6,503.2 crores (US$ 1.28 billion), with the stock reaching a low of INR126.45 on 20 November 2008. Its market capitalization was less than what it paid for JLR from Ford. (Livemint, 2010). In addition, Tata Motors reported its first annual loss in at least seven years after luxury unit sales fell amid the global downturn. The consolidated net loss was INR 2,500 crore (c.US$ 480 million) in the fiscal year ended 31 March 2009, compared to a profit of INR 2,200 crore (c.US$ 551 million) the previous year.

Cash was still "priority No. 1." JLR was losing money, so the company sought outside assistance. Tata Motors turned to consultants KPMG because JLR did not have its own cash management system, according to Forster. For the next few months, “cash started to be managed on an hour-to-hour basis— what cheque was going out, what cheque was coming in". Furthermore, in the spring of 2009, Munich-based Roland Berger Strategy Consultants was brought in to keep costs under control. Roland Berger was given a simple task: make JLR profitable. (Livemint, 2010)

4.4.2 Cash Management

"A three-tier model was developed," said Wolfgang Bernhart, partner at Roland Berger's Automotive Competence Centre. First, a short-term goal of managing liquidity was established with the assistance of KPMG. Bernhart then mentioned a mid-term goal of cost containment at various levels, as well as the formation of 10-11 cross-functional teams. A number of management changes were implemented, including the appointment of new executives at JLR. Finally, a long-term goal was developed that will last until 2014, focusing on new models and refreshing existing ones. The main goals are cash management and cost control. (Sood, Seth, John, (2010).

Furthermore, for the product development huge cash was required and to aid that the management of Tata Motors embarks a plan to sell stakes in group companies to raise money: It sold a 1.3% stake in Tata Steel Ltd to holding company Tata Sons Ltd in September 2008 for a total of INR 485 crore (cUS$ 103 million). In addition, the board also approved rights offer for INR 4,147 crore (c.US$ 810 million) in November 2008.

With the prime objective to make JLR profitable, all proceeds were invested in Tata Motors. Importantly, Tata Motors was able to maintain product development plans, which has resulted in the global economy reviving and customers returning to JLR showrooms.

4.3.3 The turnaround

Sales are up due to the introduction of newer, more fuel-efficient, and contemporary models, as well as a revival of demand in the company's key markets such as the UK, the US, and Europe. JLR model deliveries to dealers worldwide increased to 115,508 units in the six months to September from 80,252 the previous year. The new Jaguar XJ has been especially popular, with 8,700 units sold since the model's release in mid-May. (Livemint, 2010)

With JLR accounting for more than half of Tata Motors' business, the company posted a 100-fold jump in profit in the three months to 30 September. The debt-to-equity ratio is down to 1.6 times at the consolidated level from 4.5 times at the end of 31 December 2009. That's high but comfortable given surging volumes. The share has risen to a respectable ₹ 1,302.15 at close on 10 November on the Bombay Stock Exchange, taking market capitalization to INR 79,573.08 crore (c.US$18 billion).

Finally, Tata Motors' decision was influenced by a number of factors. Despite Jaguar's mixed reputation, both were "great brands." Ford had spent a lot of money to improve quality, and it was only a matter of time before it showed. Second, JLR had excellent automobile plants. Third, despite losses over the previous four to five years, the dealers remained steadfast.

Chapter 5 – Data Analysis and Results

This chapter of the dissertation deals about the data analysis and as explained in the previous chapters that we will be using two approaches to explain weather the cross-border merger and acquisition helps in enhancing the acquirer wealth includes. The two-approach used in this research are financial approach which analysis and compare the pre and post financial aspects of the acquirer while the second approach is using the statistical approach which analysis and compare the target companies financial and the acquirer companies share price.

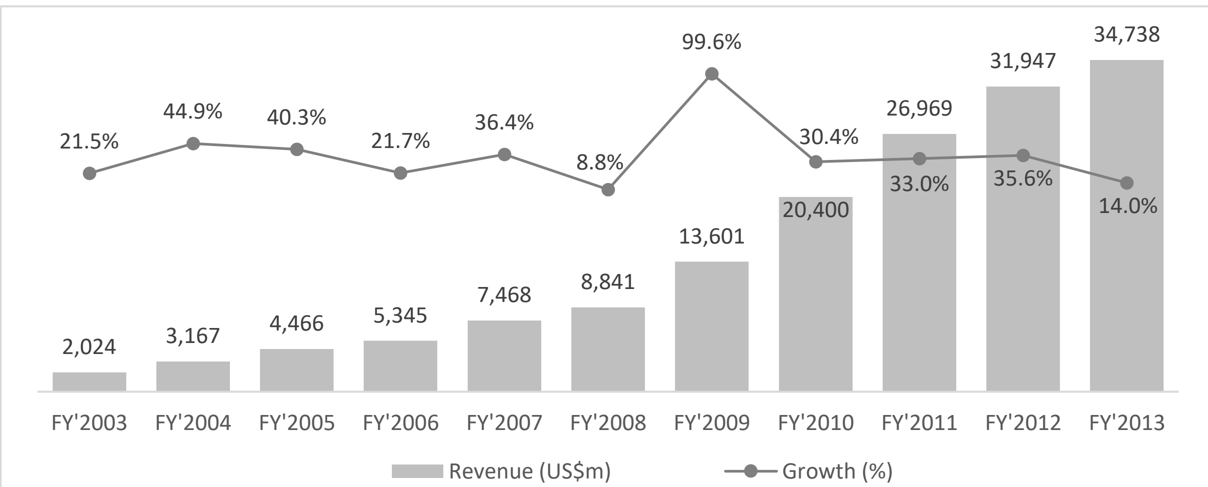
5.1 Pre-and post-merger financial analysis of Tata Motors

Under this section of the dissertation the main focus will be to analyse and compare the various financial aspects of the acquirer company namely Tata Motors such as revenue growth, profitability. Furthermore, on the profitability front, we have identified three major determinants of profitability which includes gross profit margin, operating profit margin, net profit margin with an objective to analyse the impact if the acquisition

5.1.1 Sales revenue

Sales revenue for Tata Motors in the pre-merger years stood at US$ 2,024m in 2005, increasing to US$ 7,468m in 2007, representing a CAGR of c.35.5% as illustrated in figure 4. This specifies that Tata was already on a rapid growth trajectory before it took over Jaguar/land Rover while the revenue growth rate also stood above 20% before the acquisition. Furthermore, after the acquisition of JLR the Tata Motors revenue continue to grow and witnessed a CAGR of c.39.5% between FY’2008 and FY’2013

Figure 4: Tata Motors consolidated revenue and growth (US$ million)



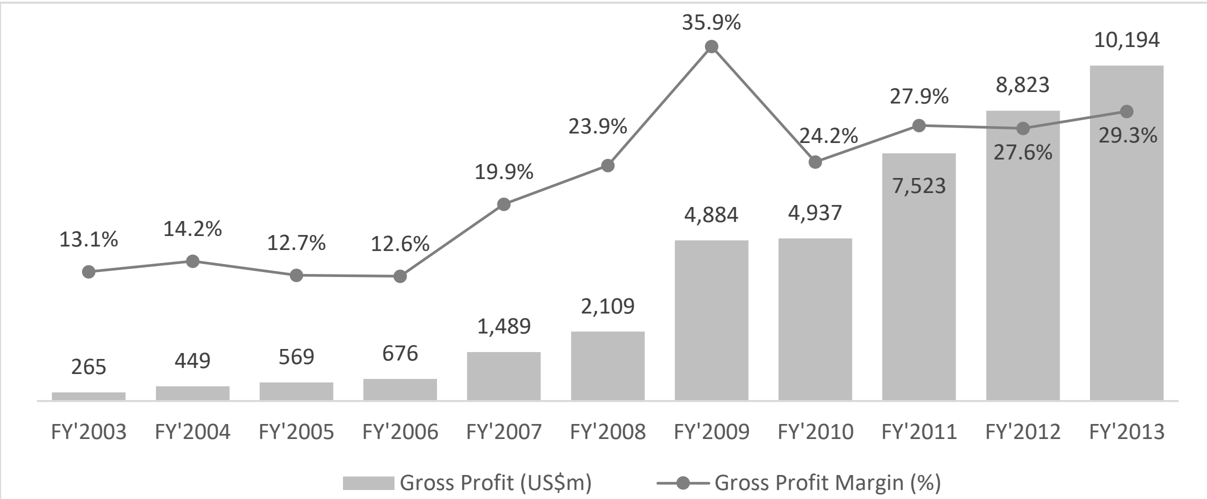
Source: Tata Motors Annual reports; Fx Rate from Oanda.com

5.1.1 Profitability of Tata Motors

In order to measure the impact of acquisition on the overall profitability of Tata Motors, we computed and compared three measures of profitability namely, gross profit margin, operating margin and net income margin.

Figure 5 below shows how Tata Motors' gross profit and gross profit margin evolved before and after the acquisition The chart shows that Tata Motors' gross profit margin, defined as gross profit (total revenue minus cost of goods sold) divided by total revenue; has been improved significantly after the acquisition. In the pre-acquisition years (2005-2008), the gross profit margin ranged from 13% to 19%, but increased significantly and remained above 25% in the post-acquisition years (2009-2013). The increase in gross profit margin is especially intriguing given Tata Motors' significant increase in cost of goods in the post-acquisition years. However, revenue increased at a much faster rate than cost of goods in the post-acquisition years, resulting in an increase in gross profit margin.

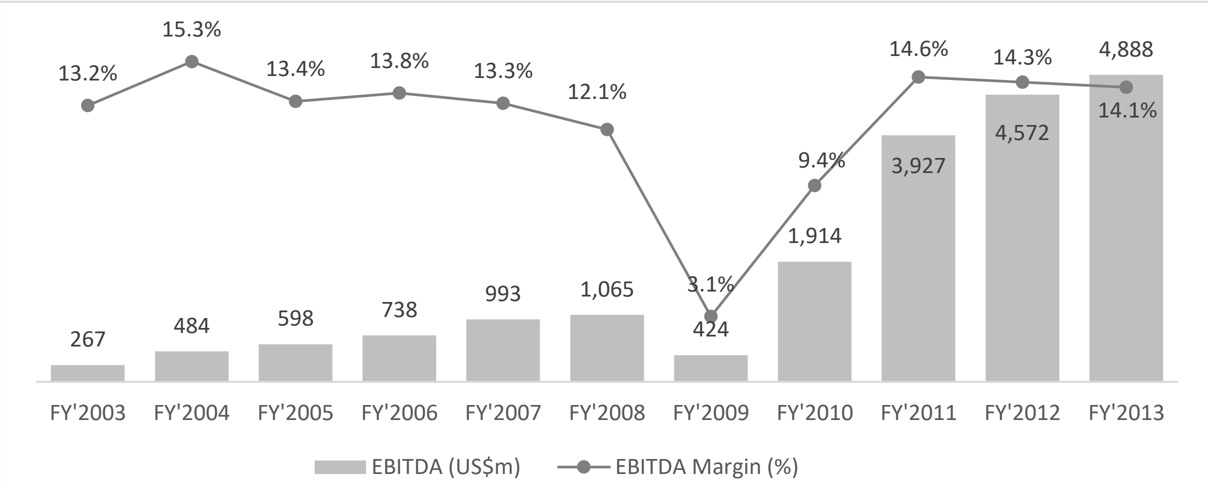
Figure 5: Tata Motors gross profit and gross profit margins



Source: Tata Motors Annual reports; Fx Rate from Oanda.com

Figure 6 below depicts Tata Motors' operating margin, defined as EBIDTA (earnings before interest, tax, depreciation, and amortization) divided by sales revenue. The chart shows that Tata Motors' yearly mean operating margin stood at c.13.80% in the pre-acquisition years (2003-2007), but dropped slightly to c.11.25% in the post-acquisition years (2008-2013). However, it is worth noting that the operating margin has recently increased and reached a high of c.14.1% in FY’2013. Furthermore, the decline in average operating margin in the post-acquisition years was primarily due to a sharp drop in 2009 as a result of the global recession and credit-crunch. The poor performance in 2009 reduced the average operating margin, which was otherwise increasing year after year.

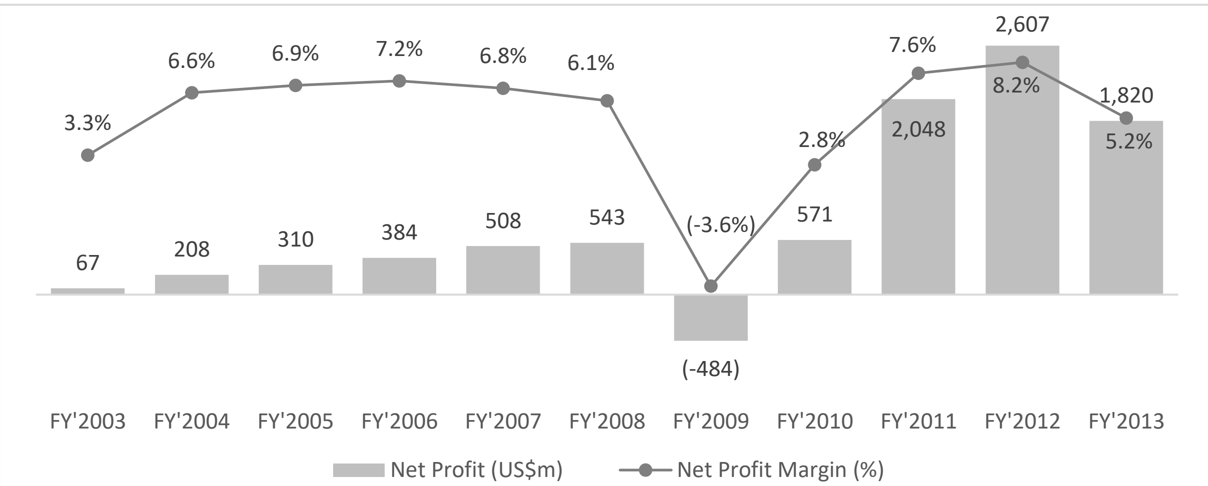
Figure 6: Tata Motors Operating profit (EBITDA) and margins



Source: Tata Motors Annual reports; Fx Rate from Oanda.com

Figure 7 below shows another measure of profitability -- net income margin-- defined as net income divided by sales revenue. This graph depicts the evolution of Tata Motors' net income margin before and after the merger. The graph explicitly shows that the net income margin was maintaining a steady position before the merger, however before the merger the margins were started to decline gradually and culminating in the worst performance in 2009 due to the global financial crisis. Between 2003 and 2008, the net income margin ranged between 7% and 6%. In 2009, the net income margin was at its lowest point, at -3.6%. Performance began to improve again in 2010. The net income margin increased to 7.6% and 8.2% in 2011 and 2012, respectively, before falling to 5.2% in 2013.

Figure 7: Tata Motors Net Profit and net profit margins



Source: Tata Motors Annual reports; Fx Rate from Oanda.com

5.2 Statistical analysis of Tata and JLR merger

The objective here is to establish the statistical relation to analysis what is the relation between the profitability of Jaguar and Land Rover and how is it related with the Tata Motors shares price. As mentioned in the previous chapters to establish the same we following hypothesis has been developed

Null Hypothesis $H_{(0)}$: There is no significant upward correlation between the operating profit of JLR and share prices of Tata Motors.

Alternate Hypothesis $H_{(1)}$: There is a significant upward correlation between the operating profit of JLR and share prices of Tata Motors.

5.2.1 Findings

As shown in Table 2, there is a positive correlation between EBIT of Jaguar and Land Rover and Market Share Price of Tata Motors, i.e., 0.77. This correlation was discovered using the MS Excel statistical tool. As a result, the hypothesis that we established is correct.

Table 2: Data Structure

Financial Year	Financial Quarters	JLR EBITDA (GBPm)	JLR EBITDA (INRm)	Tata Motors share price (INR)
FY'2010	Q1 Jun 2009	(-35)	(-2,321)	60
	Q2 Sep 2009	41	2,830	87
	Q3 Dec 2009	137	9,446	122
	Q4 Mar 2010	234	14,850	148
FY'2011	Q1 Jun 2010	330	19,153	155
	Q2 Sep 2010	361	21,646	186
	Q3 Dec 2010	453	27,850	240
	Q4 Mar 2011	375	22,714	228
FY'2012	Q1 Jun 2011	362	23,266	223
	Q2 Sep 2011	420	27,149	168
	Q3 Dec 2011	639	43,676	184
	Q4 Mar 2012	605	39,821	243
FY'2013	Q1 Jun 2012	527	36,495	269
	Q2 Sep 2012	486	33,515	238
	Q3 Dec 2012	533	37,443	273
	Q4 Mar 2013	856	61,195	298
FY'2014	Q1 Jun 2013	675	49,289	286
	Q2 Sep 2013	823	67,815	301
	Q3 Dec 2013	955	80,621	368
	Q4 Mar 2014	930	78,669	383
FY'2015	Q1 Jun 2014	1087	89,134	425

	Q2 Sep 2014	933	74,864	474
	Q3 Dec 2014	1096	84,743	506
	Q4 Mar 2015	1016	71,211	542
FY'2016	Q1 Jun 2015	821	57,601	484
	Q2 Sep 2015	589	42,591	362
	Q3 Dec 2015	834	60,181	386
	Q4 Mar 2016	1069	79,651	340
FY'2017	Q1 Jun 2016	672	50,756	419
	Q2 Sep 2016	615	45,744	517
	Q3 Dec 2016	611	44,322	489
	Q4 Mar 2017	1057	75,406	483
FY'2018	Q1 Jun 2017	442	31,355	446
	Q2 Sep 2017	746	56,368	409
	Q3 Dec 2017	685	52,211	421
	Q4 Mar 2018	924	73,125	382
Correlation			0.77	
Testing of significance of coefficient Correlation				
Degrees of freedom		35		
Test statistic		7.5322		
Critical t value (95% confidence)		1.6896		

After applying the testing of significance of coefficient correlation we found that statistic / computed value is greater than then critical value, hence the value falls in the Rejection region, therefore we reject the null hypothesis, and it may be concluded that there is a significant upward correlation between the EBITDA of JLR and share prices of Tata Motors

Table 3: Statistical computation

From Table 2 depicted below we have Mean, Standard Deviation, Median, Sample Variance, Skewness & Kurtosis of 36 sample observations which are calculated by using the solver tool of MS Excel

Table 3: Statistical Computation

JLR EBITDA (INRm)		*Tata Motors share price (INR)*	
Mean	46788.46009	Mean	320.7296194
Standard Error	4100.28622	Standard Error	22.19334092
Median	45032.82	Median	320.74435
Standard Deviation	24601.71732	Standard Deviation	133.1600455
Sample Variance	605244495.1	Sample Variance	17731.59772
Kurtosis	-0.889244564	Kurtosis	-1.035074572
Skewness	-0.085438248	Skewness	-0.150542102
Range	91454.85	Range	481.55

Minimum	-2320.85	Minimum	60.29
Maximum	89134	Maximum	**541.84**
Sum	1684384.563	Sum	11546.2663
Count	36	Count	36

From the Table 4, it can be seen that after applying Z-test for two samples mean we had found that the computed value of |z| is 11.33 which is greater than the critical value (t = 1.96) for two tail and (t = 1.64) for one tail at 5% level of significance. Since the statistic / computed value is greater than then critical value, hence the value falls in the Rejection region, therefore we reject the null hypothesis, and it may be concluded that there is a significant upward correlation between the EBITDA of JLR and share prices of Tata Motors.

Table 4: z-Test: Two Sample for Means

	Variable 1	*Variable 2*
Mean	46788.46009	320.729619
Known Variance	605244495.1	17731.6
Observations	36	36
Hypothesized Mean Difference	0	
z	11.33263566	
P(Z<=z) one-tail	0	
z Critical one-tail	1.644853627	
P(Z<=z) two-tail	0	
z Critical two-tail	1.959963985	

Chapter 6 – Summary, Conclusion and Limitations

6.1 Summary

This research was started with an objective to gain in-depth knowledge of cross border merger and acquisition and further understand does cross border merger and acquisition creates wealth for the acquirer. Therefore, this dissertation was started with the brief introduction about the theories of merger and acquisition and cross border merger and acquisition, and its worth noticing how and when both merger & acquisition and cross border merger and acquisition started and what factors drives the increasing trends of cross border and acquisition.

Furthermore, our extensive literature review, described in earlier chapters, provided numerous insights regarding M&As and CBMAs and various aspects related to them such as classification of merger and acquisitions, factors driving cross border merger and acquisition challenges faced in cross border merger and acquisitions. In addition to the extensive literature review this research also provided evidences of cross border merger and acquisition and briefly discussed the issue challenges and drivers had in those cross-border transaction.

Eventually, an exploratory case study appeared like a natural next step in helping to understand and analyse this complex phenomenon of cross border merger and acquisition, to help in identifying the relevant parameters involved in this type of transaction, and the possible cause and effect relationships for later empirical testing

Our case research is backed by the quantitative data analysis gathered from a wide variety of secondary sources, reports and opinion of the auto industry experts. These sources were both from the company and from independent analysts. The quantitative data were necessary to provide factual evidence of the company performance both before and after the acquisition of Jaguar/Land Rover,

In Addition, to the quantitative analysis of pre-and post-merger, this research was not just limited to the financial aspect. We also try to identified the relationship between profitability of JLR (target) after acquisition and the share price of the Tata Motors using different statistical tools in MS excel. As it is believed that the company’s share price movement directly related with the positive sentiments and performance of the company.

6.2 Conclusion

As mentioned in the earlier chapters that main objective of this research is to gain in-dept knowledge if cross border merger and acquisition and whether this inorganic method is does create wealth for the acquiring firm.

After computing and analysing the sales data of Tata Motors (acquirer) between 2003 and 2007, it was explicitly clear that prior to acquisition Tata was already on a positive growth trajectory, which continue to move forward after acquisition. As the CAGR before the acquisition stood at c.35.5% while the revenue CAGR between 2008 and 2013 stood at c.39.5%.

As discussed, Tata Motors revenue growth was increasing in both pre-and post-acquisition era, however this does not satisfy the aim of the research whether cross border merger and acquisition creates wealth for the acquiring firm, hence for the better explanation on these grounds, the profitability of Tata Motors was also analysed.

The pre-and-post merger profitability of Tata Motors was analysed through three financial ratios namely, gross profit margins, operating profit margins, and net profit margins and the results that came out established the research objective as on all the three aspects of profitability used was increased post the acquisition of the JLR. However, during 2009 the company did publish declined margins and reported losses and this fall was primarily on the back of the global financial crises

In addition to the pre-and post-merger financial aspect of Tata Motors we also try to identify the relationship between the JLR's profitability on quarterly basis and the Tata Motors share price and as mentioned in the previous chapters to establish the same we following hypothesis has been developed

Null Hypothesis $H_{(0)}$: There is no significant upward correlation between the operating profit of JLR and share prices of Tata Motors.

Alternate Hypothesis $H_{(1)}$: There is a significant upward correlation between the operating profit of JLR and share prices of Tata Motors

It was identified that there is a positive correlation of 0.77 between the quarterly EBITDA of JLR between 2009 and 2018 and the Tata Motors share price for the same period and that demonstrates hypothesis that we established is correct. In addition to the correlation, a Z-test for two sample mean was conducted because the sample size was more than 30.

we had found that the computed value of |z| is 11.33 which is greater than the critical value (t = 1.96) for two tail and (t = 1.64) for one tail at 5% level of significance. Since the Statistic / computed value is greater than then critical value, hence the value falls in the Rejection region, therefore we reject the null hypothesis, and it may be concluded that there is a significant upward correlation between the EBITDA of JLR and share prices of Tata Motors.

6.2 Limitations of the study

The only limitation that seems plausible while conducting this research is the biasedness towards the decision. This is because cross border merger and acquisition is a widely accepted approach and this research which recommend the cross-border merger and acquisition is based on one case study, Moreover, Tata purchased these brands cash-free and debt-free, avoiding the legacy debt burden and giving it significant leeway for future investment in these two brands.

Despite these concerns, we believe Tata Motors provided a good example of a major cross border merger and acquisition of important global consumer brands, and the fact that this acquisition was well documented allowed us to examine in depth how the acquisition was implemented and the performance that resulted.

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