

HIV treatment at the Bottom of the Pyramid: Case of Cipla in South Africa

Mostafa R.A. Mohamad
Manchester Business School
mostafa.mohamad@mbs.ac.uk

Abstract:

Cipla is a giant Indian pharmaceutical company that reshaped the foundations of the pharmaceutical industry. Despite the parenting practices, low R&D spending and hard competitive games, Cipla won the debate with the Big Pharma (largest 30 Pharmaceutical companies in the world). With its wise leadership the company shifted from price-cutting orientation to the opportunity management orientation. Then to the development orientation that overwhelmed the traditional strategies and helped the company to gain citizens' loyalty, governments trust, and the cooperation of nongovernmental organizations. By following Prahalad's value creation (VC) and Bottom of the pyramid models (BOP), this paper analysis Cipla's business model to deeply understand its core competencies, problems, and initiatives.

Introduction:

Cipla is an Indian company established in 1935 by Khwaja Abdul Hamied. This company mapped out a smart business model with intelligent direction and skilful offers that was enough to build a worldwide reputation. Cipla has a leading role in supporting the Indian governments and society. Starting in 1940, Cipla supported Britain (the India's governor) in the war effort. Then in the fifties Gandhi said that Cipla has another role in the leverage for India's independence (Deshpande, 2006). The company mission is to help the poor by providing medication with high quality and lower prices. In the mid-eighteens, Cipla dominated the Indian market by using the natural organics to reverse-engineer the patented medications that are invented by the Big Pharma. In so doing, economies of scale was reached by utilizing the maximum capacity of the company to operate with the lowest unit cost (Smith, 2003). Since the mid-nineties and until year 2006, Cipla suffered from a big decline in its revenues of the core products e.g. (anti-HIV medicine). This was due to the Related Aspects of Intellectual Property Rights (TRIPS) agreement that obligates India as a member of the World Trade Organization (WTO) to apply 20-year patent for any new medication. However, the application of TRIPS can be violated in special cases (Deshpande, 2006).

Big Pharma claimed their intellectual property right. This claim resulted in a war between Cipla and Big Pharma, which reframed the pharmaceutical industry with new factors such as; perfect competition, social responsibility, fair R&D and advertising and marketing margins. In June 2006, Cipla created new competitive spaces not only in its core products, but also in its finished goods. This paper presents a detailed analysis of Cipla's business model using narratives and financial ratios. This paper includes three parts: the first involves the theoretical background (Prahalad's Value creation and Bottom of the pyramid strategies); the second includes a discussion and application of the suggested strategies in Cipla's businesses;

the third part involves a comparative financial analysis to deep in Cipla's capacity; and the last part concludes Cipla's performance from 1985 and until 2009.

1. Theoretical Background:

Translating an observed phenomenon may need a theoretical concept to identify its dimensions. Accordingly, two complementary models of corporate strategies are presented and discussed. Both of those two models are authored by Prahalad who is a strategy professor at the University of Michigan. The first model focuses on how the giant companies design a strategy to improve their core competencies for the west wealthy markets. However, the second model tailors a specific strategy to the poor in the developing countries such as; sub-Saharan countries, South Africa, and India.

1.1. Value creation:

Prahalad's value creation (VC) model in 1993 is an extension to his resources based approach for Prahalad and Hamel (1990). In this model he argued that the corporate strategy is a tool to not only bridges the companies' performance gap but also to create new market opportunities that depends on the uninterrupted relationships between those companies and their customers (Prahalad, 1993). Then those companies should dedicate all their resources to lead the customers and continuously satisfy their expected needs. Figure 1 shows two sides.

The left hand side shows how giant companies in the fields of electronic products, chemical and pharmaceutical industries should focus on cost cutting orientation by quality price trade-off, extending their logistics networks and other administrative and financial tactics. In doing so, companies utilize the existing opportunities in the existing market with more efficiency than other competitors.

In the right hand side, Prahalad calls for three stages to lead the customer and to manage and raise new handmade opportunities either by product or market innovations. The first step is building *Strategic intent* via creating a shared competitive agenda among all of the organizational levels to sustain a long term global leadership (Prahalad and Hamel, 1990). This competitive agenda provides barrier-breaking initiatives to collect all the necessary resources to do the expected goals e.g. (new pipelines initiatives in GlaxoSmithKline and social responsibility for Cipla).

The second step is building *strategic architecture* in which an evolution of the industry is expected by following the strategic intent. At this stage the company's managers should do the following steps:

- *Exploring the industry environment to know how customers interface may be changed, how other competitors position themselves in the market and if there is any prospected acquisition or alliance that may improve the dedicated resources.*
- *Reusing all of the invisible assets (e.g. inventories, equipments, logistics networks).*
- *Designing a framework that leverages all the available resources to improve core competencies and manage an overall innovation process (e.g. technologies, collective learning facilities, and packaging user-friendly design).*

- Use the core competencies to compete in the core end products.

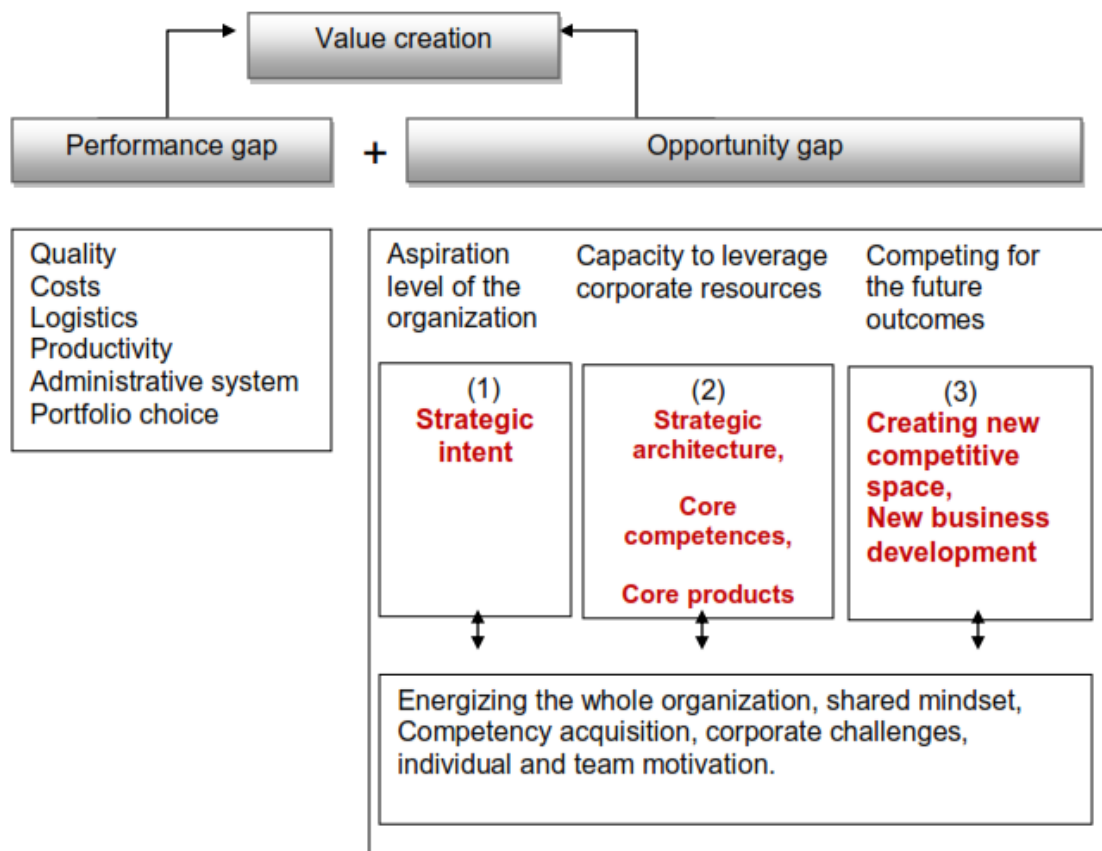


Figure 1: Prahalad's value creation model for giant corporations
 Adopted from (Prahalad, 1993: 42)

The third step is *creating new competitive spaces* by focusing more on new functionalities of the company's core competencies, challenging the existing price performance, understand the meaning of customer leadership, and escaping the current management paradigm. Finally, gradual progress in the above steps after achieving full *governance* of all levels and functions in the company. This governance can't be only achieved by using a new technology but also collective learning among all organizational functions levels is needed (Prahalad, 1993).

Despite the success of Prahalad's theory explaining the growth of some giant multinationals more than others in the same industry, I criticize it by disregarding the low-income market the represents 40% of the world that need for essential products and services.

1.2. Fortune at the bottom of the pyramid

In an open world, the problems of the poor will soon-via migration, terrorism, and epidemics move to those at the top classes (Heeks, 2006). Accordingly, Prahalad (2004) called for a new orientation of corporate strategy tailored for the poor namely Bottom of the pyramid strategy.

This model adopts a win-win strategy that increases the company's profit and reputation by accessing a forgotten market (BOP)¹. In the other side it improves the society's wellbeing by expecting their essential needs. Increasing the company's profit and reputation can be achieved via large scale of operations and market size in addition to other rules in Table 1. However, improving societies can be achieved by supplying them with high quality affordable outputs that not only satisfy their starvation but also save their limited budget to spend on education and health care.

Table 1: Twelve rule of BOP strategy

No	Principle
1	Price Performance
2	Innovation products/services
3	Large scale of operations
4	Eco-Friendly products/services
5	Tailored functionality of the products/services
6	centralized Process Innovation
7	Deskilling of work
8	User's Education
9	Hostile Infrastructure
10	Friendly interface
11	Decentralized distribution channels
12	conventional wisdom in delivery of Product/services

Adopted from Prahalad (2006)

Another recipe of BOP strategy is to access new lines of product and services in the BOP than following the social responsibility principle. The feasibility of this model comes from many successful business cases in India, Bangladesh, and South Africa (Prahalad, 2006). Despite that this strategy involves some elements of the (VC) model; it doesn't explain how the MNCs can leverage their resources and build core competencies.

2. Discussion

Applying the above mentioned theories, this section presents Cipla's business model transformation from the value creation strategy to BOP strategy. Both of Cipla's narratives and financial ratios are interfered to explain three points: Cipla's dominance, bottle neck, and new windows.

2.1.Cipla's dominance

In order to understand Cipla's business model and based on Prahalad's value creation model, I should start with explaining the main issues that engaging the pharmaceutical industry as a whole. The next step is to explain how Cipla with its leadership built a strategic intent, strategic architecture, and new market spaces.

2.1.1. Pharmaceutical industry:

¹ Bottom of the pyramid market presents the number of poor people in the developing countries that are calculated by the United Nations as 40% of the world's society.

In the period between 1985 and 1995, the *competitive structure* of the pharmaceutical industry changed from monopoly position (by the Big Pharma) to be monopolistic competition among Big Pharma and other generic pharmaceuticals. In 1983 Big Pharma built a new market for HIV. However, like any profitable market large and reputable companies always come to take a bit from the whole meal that the dominant company used to eat alone. To do so those new comers should own core competencies to be enable to remove the entry barriers. Cipla is one of those companies that entered the HIV's market - with cheap medicines - by utilizing its self-sufficiency and huge supply chains.

The new competitive structure built an interdependence relationship between the two parties, in which they played a business game that is full of collusions, cartels, price leaderships. The competition in the HIV medication was the main issue, but not all things. The competition on the off patented products and other western origin medications faced a big debate between the two parties. Despite this competition Cipla succeeded to achieve high market over its competitors (see Appendix 1) that shows Cipla's market share in front of other competitors. The direct financial result of this market share is average 45.07% profit margin in between 1985 until 1995.

The second issue in the pharmaceutical industry is *R&D costs*. During the early nineties Cipla directed its product lines to reengineering the western drugs without spending a lot of money on research laboratories. Only 1.8% of Cipla's sales were spent in R&D, which is very low in comparison to 16% spent by big Pharma. (See Appendix 2 for comparative financials). In comparison to Cipla Big Pharma spent \$71 million on R&D in year 1992. Despite that this high cost can be considered as an advantage, it limited the supply of HIV drugs and was an entry barrier to other generic pharmaceutical or even any new company.

Another notice that I discovered is that, the majority of Big Pharma R&D laboratories are funded by the USA government, which releases the burden of R&D costs out of big Pharma's shoulders. At the end of this point I think that the United States made a big mistake by granting money to Big Pharma without putting legal controls to stop any abuse of this money against the poor patients. Furthermore, these aids negatively affect the equality in allocating the financial resources inside the pharmaceutical industry.

The third issue is the overspending on the *advertising and marketing* activities than on research and development. Hamid said; 40 % of Big Pharma prices are to cover their pull marketing not to invent new pipelines (Cipla, 1991; "Rx R&D Myths, 1992).

The final issue in the Pharmaceutical industry is *social responsibility* that forced Cipla to violate the Patent right in order to help the poor patients in the developing countries. However, the question here is —Is it the real intent of Hamied? Is there any other purpose than serving the poor? Hamid said; political and financial benefits can be achieved without hurting the poor (Cipla, 1995). Here I ask another question “what will happen if Cipla reduced its prices and increased its supply?” The answer is —it can dominate and monopolize.

2.1.2. Strategic intent:

Cipla's wise *leadership* started in 1972, when Dr. Yusuf Hamid -the son of the company's founder-got the control of the company. His essential qualifications are a Cambridge graduation, open minded thinking, and free-rein leadership. Dr. Hamid's relationship with many political leaders e.g. (India's prime minister, South Africa's president) succeeded to break many barriers in front of Cipla's growth. An example of his talented personality y; was in 1993 when he convinced India's prime minister to disregard the patent right for the propranolol, a heart-disease drug, and to grant Cipla the permission to produce it. Another example; when he asked President Nelson Mandela to import the Highly Active Antiretroviral Therapy (HAART) from Cipla with cheaper prices than Big Pharma's prices.

Along Cipla's internal environment, Dr. Hamid was careful to keep periodical meetings with all levels of Cipla's organization to improve their collective learning and to get the optimal level of consensus. Moreover, he set rules to keep the fair performance evaluation not only to increase the employees' loyalty, but also to assure equal employment opportunities.

2.1.3. Strategic architectures:

In 1989, Hamid announced that Cipla is going to achieve the following goals during the period from 1990 to 1995 in order to enhance the company's strategic intent:

- *Incremental investment in working capital*
- *Incremental investment in fixed capital*
- *Replacing fixed capital in the unsuccessful business units.*
- *Reducing cost of financing by finding alternative sources of fund.*
- *High sale growth rate*
- *Higher operating Profit Margin (PM).*
- *Higher income tax rate.*
- *Differentiated marketing mix.*
- *Lower cost operating model.*
- *Rational recruiting programs, green products,*
- *Maximizing stockholders' wealth*

(Reuters, 1989; Cipla, 1990)

Cipla reported the following financial results during the period from 1985 to 1990:

A. Increase the liquidity ratios by more than 120% over the previous years and by 10 % over the industry average due to;

- *Incremental investment in the company's working capital that improved the company's efficiency in managing its inventory and in using different collection policy.*
- *Increasing the solvency ratio by 184 % accompanied with maintaining a new financing network with lower interest rate.*

B. Increasing the company's efficiency by 210% over the previous years and by 15% over the industry average as a result of;

- *Decreasing the fixed assets turnover proceeded by increasing the investment on fixed capital that in turn increased the amount of automation and the degree of downsizing to 13%.*
- *Increasing the company's outlets either in India or in other markets via licensing or FDI.*

C. Increasing the (PM) and gross margin (GM) ratios by 191% over the period of (1995-1990) and by 25% over the industry average especially after 1989 due to:

- *Sales increase by 250% through targeting star market segments in South Africa and sub-Saharan countries and adopting corporate social responsibility; making forward vertical integration with five Indian pharmaceutical merchandising companies; using the trade and quantity discounts; and increasing the number of factories.*
- *Decreasing the cost of raw materials through three backward vertical integrations 'with three Indian agriculture's suppliers.*
- *Decreasing taxes by 75% through changing the way of disposing the fixed assets and the method of calculating the depreciation.*
- *Decreasing cost of finance by 7% after maintaining fixed financing network with some of the American and European banks.*

D. Growing gearing and investment ratios was a reasonable result of adopting stockholders wealth maximization.

2.1.3.1. Cipla's core competencies:

Low labour costs, cheap organic raw materials, and mass-scale of operations were the core weapons that enabled Cipla to grow and dominate other competitors. Additional core competency comes from the company's broad market extension (21 worldwide sales offices and five Indian factories). The real advantage of those factories is the approval that they got by the US food and drug administration as well as the World health Organization (Deshpande, 2006).

Using those core competencies the company extended its product lines to more than 400 drugs, in year 1995. The main categories of these products are anti-asthmatic, anti-cancer, anti-inflammatory, antidepressant and anti-AIDS medications. Above all of these categories, the tablets and capsules accounted for 53% of gross sales in year 1995. Another product that tagged year 1995 is bulk drug that represents 24% of Cipla's annual sales other products were also introduced during the late eighties such as aerosols and inhalation devices, injections and sterile solutions (Deshpande, 2006). See *Appendix 1 & 3* that shows Cipla's classes of finished goods and their market shares in the mid nineties.

Cipla's tote bag wasn't empty of Generic versions of the western products such as Viagra, Diflucan, and Norvasc (inside the industry, 1994). By the beginning of year 1996, Cipla succeeded to export those Generic versions to US and some other European countries (Deshpande, 2006).

A famous example to those products that were reverse-engineered and re-exported to the western markets is AZT –An anti-HIV, which was produced by \$12 for 4 daily tablets. In the same time Big Pharma was producing it with \$200, too much money to afford. Despite Cipla's cheap offer of AZT it wasn't also affordable by the poor patients. Accordingly, Hamid decided to set a specific price-performance to AZT. Hamid's price performance includes three annual levels: \$1200 to wholesalers, \$600 to governments, and \$350 to the France-based international aid organization, Medicins Sans Frontieres (Deshpande, 2006).

After discussing Cipla's business model between 1985 and 1995, I can say that Cipla is a socially oriented company that won the debate with Big Pharma via its leadership and other core competencies. However, it is still facing a huge threat that is presented in the next section.

2.2.Cipla's Bottle neck:

According to Gerhardsen, (2006), Big Pharma claimed the Patent right in the major generics producing countries, including India. Cipla serves in countries that supply affordable generics medicines to 50% of the world's HIV patients. In South Africa, in a legal sue, Big Pharma justified its economic behaviour by saying "*if there were no patents, there would be little incentive to develop new drugs and we will not be able to cover our investment in the R&D*" (Gellman, 2000, pA1). In the other side Hamied said that the medicines are like the air that should be released to let the others breathe it. By doing so, the air will be automatically refreshed (Cipla, 1995).

In August 1996 the World Trade Organization (WTO) issued the first compulsory license that called TRIPS (Trade Related Intellectual Property Rights). This agreement grant the producers a 20-years intellectual right. However, this agreement can be violated in case of crises or if the patents' holders couldn't supply affordable accessible drugs to the country's citizens. UINDU, Feb 27, 2004. The growing number of WHO members negatively affected Cipla's revenues in turn affected the stockholders. According to Daniel and Freedman (2003), Cipla's business model was carefully analyzed by the investors in the coming months. Nobody was more invested in Cipla's future than Hamied himself; though public, the company was closely held, with Hamid's family and friends controlling 40% of Cipla's shares, valued at a total of \$530 million. (Deshpande, 2006: 4).

2.3.New windows:

Dr. Hamid designed a new market strategy that depends on *the poor*, their needs, and their diseases. In 2006, Cipla supported North Africa, sub-Saharan countries, and South Africa with new types of medications that treat the poor fatal diseases such as anti-malaria, anti-flue, and anti-swine. Moreover, in 2007, Dr. Hamid narrowed the reverse-engineered market to the developing countries in which he can violate the TRIPS, subject to the affordability.

By the end of 2006, Cipla had *strategic alliances* with global generic companies such as Ivax and Teva (Cipla, 2006). This alliance attracted the governments in the developing countries

and the non-governmental organization to invest at the poor market. Yes, Cipla's revenues tripled. Why? 40% of the developing countries' citizens became loyal to Cipla. A big market is granted. In 2009, Cipla's board decided to acquire "i-pill", one of the top-300 pharmaceutical products.

This *acquisition* increased Cipla's sales by Rs. 31 core for 2009. Moreover, it strengthens the company's over the counter (OTC) portfolio. This portfolio include strong consumer brands such as Lacto Calamine skin care range, Supractiv Complete, Saridon and Polycrol antacid (Cipla news, 2009).

Here I would like to quote Barack Obama speech about the Anti-HIV for the poor in the developing countries:

"We are all sick because of AIDS - and we are all tested by this crisis. It is a test not only of our willingness to respond, but of our ability to look past the artificial divisions and debates that have often shaped that response. When you go to places like Africa and you see this problem up close, you realize that it's not a question of either treatment or prevention - or even what kind of prevention - it is all of the above. It is not an issue of either science or values - it is both. Yes, there must be more money spent on this disease. But there must also be a change in hearts and minds, in cultures and attitudes. Neither philanthropist nor scientist, neither government nor church, can solve this problem on their own - AIDS must be an all-hands-on-deck effort.

[Barack Obama, 12/1/06]

The results of all of the above tactics forced the Indian Pharma sector in 2006 to recommend Cipla as a *good stock investment*. This is because of its increasing exports of the off-patent products to US. This in addition to its widely versified product lines such as animal medications or even anti-malaria. Cipla (2006) declared increasing profits from its foreign direct investment in the European market by building a new factory for producing asthma medication (See appendix 7&8 that shows Cipla's competitive position in 2009 and it newly diversified product lines.

Regarding to Cipla's financials after 2006, the last two columns of appendix 6 show the following:

- *Decreasing the current ratios and increasing the quick ratios, present the company's high ability to manage its inventory.*
- *Decreasing the return on assets after re-evaluation shows how Dr. Hamid and his board are wise by keeping high amount of fixed costs in the current financial crises.*
- *Doubling the profitability ratios supports the company's narratives about the new strategic alliances and acquisitions.*
- *Increasing the number of issues and outstanding shares that shows Cipla's new equity structure and additional sources of funds.*

3. Deep financial analysis:

Appendix 4&5 presents Cipla's financial statements based on which appendix 6 is calculated to summarize Cipla's financial ratios by the time series techniques. Via the following steps the research investigates Cipla's financials to know if they support Cipla's narratives or not².

3.1.Liquidity:

From 1985 to 1995:

The increase in the company's current ratios is higher than the increase in its quick ratios. Moreover the company's quick ratios are less than the industry average. *What does it mean?* It means that Cipla tried to increase its working capital in the form of stock more than in cash form.

Then at this point, if we related the above fact with increasing the inventory turnover we find a clear evidence for the company's high ability to manage its inventory of the finished goods that should result in shorter lead time, higher customer satisfaction, and higher profitability. After that, we can discover that company is still following a bad collection and credit management. Another notice from analyzing the financial ratios in this period is increasing the solvency ratios that support Cipla's high ability to pay back its long-term liabilities than to the current ones.

From 1996 to 2006:

Too much increase in the company's current ratio that indicates to a problem of unsalable inventory that resulted from the patent restrictions. Furthermore, the sharp decreases in the quick and solvency ratios show a big problem in collecting the receivables to cover the due debts.

3.2.Efficiency:

From 1985 to 1995:

Increasing the return on assets (ROA) to 17.71 was a direct result to closing the unprofitable product lines and gives a clear evidence for the changes in dealing with the disposal and the depreciation methods³. They ranked the first in profit per employee after downsizing 13% of their employees to decrease the labour costs.

From 1996 to 2006:

The sharp decreases in the company's ROA after re-evaluation, inventory turnover, and other efficiency ratios shows how the company's assets can be a burden in case of stopping the wheel of the products' pipelines. Moreover, it explains how it was difficult for Cipla to replace all this amount of fixed costs. And finally, presents the company's bad assets management.

² This investigation covers the period from 1985 to 2009 during which Cipla went through growth, declining, and innovation stages.

³ This ratio is the highest in the market in the nineties in comparison to 16.01 industry average.

3.3.Profitability:

From 1985 to 1995:

Increasing the (PM) and (GM) ratios in addition to high efficiency ratios give the clue for:

- *A decrease in the operating costs, and using the ABC costing system to allocate costs over the different product lines.*
- *Adopting the social responsibility culture by producing green products, and building*
- *separate e.g. (small R&D labs in the company enabled it to become the a benchmark in the pharmaceutical industry by 45.07 (PM)- 27.70 ROSF - 26.37 ROCE*

From 1996 to 2006:

The decrease in the company's ROSF and ROCE presents low competitiveness and disability to manage profitable investments using the available sources of fund.

3.4.Gearing ratios:

From 1985 to 1995:

The 26.37% gearing ratio put Cipla in the third rank among the world pharmaceutical company. This high ratio presents how Dr. Hamid was able to get high amount of external finance with low interest then pay it back by 57.07 solvency ratios.

From 1996 to 2006:

The growing decrease of Cipla's gearing ratios emphasizes the difficulty that it faced to payback the due liabilities as a result of sales decrease.

3.5.Investment:

From 1985 to 1995:

Increasing the dividends accompanied with high liquidity, efficiency, profitability, and gearing ratios increased the stockholders satisfaction and the market share price by 12% and also in doubling the earning per share (EPS). In addition, I discovered that increasing the gearing ratios paralleled to growing (EPS) means that there were no share dividends at the end of 1995.

From 1996 to 2006:

Decreasing the (EPS) is both a reason and a result for the low profit and sources of finance

Conclusion:

Unlike other giant pharmaceutical companies such as GlaxoSmithKline, Jonson & Jonson, and Pfizer, Cipla's narratives are true mirrors to its internal capacity that was discovered via the financial analysis. Additionally, Cipla's strategic intents, marketing position, and historical records are homogeneous in a way that reacting high market performance. With Dr. Hamid's leadership Cipla's transformed its strategy from opportunity orientation (nationally and globally) that keeps the company's competitiveness to a development orientation that enlarges the company's role in providing the poor people with their vital treatments in order to develop their wellbeing. This new orientation enabled Cipla to grasp enormous profit (more than the competitive orientation) and worldwide reputation. With these results I think that Cipla's shares and bonds are good investments during the next ten years. Not only 365\$ it deserve more than \$400 per share.

References

- Ali, M.R. (2008). A special case of HIV high prices. *Unpublished report*. University of Liverpool.
- Chataway, J. Tait, J. & Wield, D. (2007). Frameworks for Pharmaceutical Innovation in Developing Countries: The Case of Indian Pharma. *Technology Analysis & Strategic Management*, 19 (5), 697–708.
- Cipla: AGM Points to Good Times Ahead," Salomon Smith Barney, Dec 5, 2006. Available at Thomson Research, <http://research.thomsonib.com> [Accessed in March 17, 2013].
- Cipla. Company's history available at: <http://www.cipla.com/corporateprofile/financialprofilearchive.htm> [Accessed in March 15, 2013].
- Cipla. (1995). Chairman's Speech. Available at: <http://www.cipla.com/corporateprofile/milestones.htm> [Accessed in March 18, 2013].
- Cipla. (2006). Unaudited corporate report 2006-2007. Available at: <http://www.cipla.com/whatsnew/newsarchive2007.htm> [Accessed in March 22, 2013].
- Cipla. (2009). Company's news. Available at: <http://www.cipla.com/whatsnew/news.htm>
- David Smith. (2003), *Free Lunch*, Profile Books Ltd.
- Deshpande, R. (2006). Cipla. *Harvard university press*.
- Froud, J., Johal, S., Leaver, A and Williams, K. (2006). *Financialization and Strategy: Narrative and Numbers*. Routledge.
- Indian Pharma Sector*. Dresdner Kleinwort Benson Research, Oct 10, 2006.

- Inside the Industry*. (December 1, 1994). PhRMA: Complains of 'Knockoff' Drugs Produced in India," American Health Line. Available at: <http://www.factiva.com> [Accessed in 2nd April, 2013].
- Gellman, B. (2000), A turning point that left Millions Behind; Drug Discounts Benefits Few While Protecting Pharmaceutical Companies' Profits, *The Washington Post*, December 28, 1995, pA1.
- Gerhardsen, T, (19 October 2006), Novartis persists with challenge to Indian Patent Law despite adversity. *IP Watch*.
- Heeks, R.(2008). ICT4D 2.0: The Next Phase of Applying ICT for International Development. *IEEE Computer Society*. IEEE.
- Kevin Kelly. (2000). New Rules for the New Economy: 12 rules for E-Commerce, The Guide. Available at: http://guide2net.net/articles/topics/ecom/new_rules/index.html [Accessed in 10th April 2013].
- Obama, B. World AIDS Day Speech, Lake Forest, CA, 12/1/06. Available at: <http://www.barakobama.com/AIDS>[Accessed in 11 March 2013].
- Daniel, P and Freedman, A. (March 12, 2003), "The Catalyst: Behind Cipla's Offer of Cheap AIDS Drugs: Potent Mix of Motives-Altruism, Local Politics, and the Bottom Line Intersect at Indian Generics Firm-Waiting for Government to Call," *The Wall Street Journal*, p. A1.
- Prahalad, C. H. (1990). The core competencies of the corporation. *Harvard Business review* , 7992.
- Prahalad, C and Hamel, K. (1993). The role of core competencies in The corporation. *Research Technology Management*, 40-47.
- Prahalad, C.K. (2004). *"The Fortune at the Bottom of the Pyramid: Eradicating Poverty Through Profit"*. Upper Saddle River, N.J. Wharton School Publishing/Pearson Education Inc.
- Prahalad, C. K. (2005). *The Fortune at the Bottom of the Pyramid: A Mirage*. London: Pearson Education.
- Prahalad, C. K. (2006). *The Fortune at the Bottom of the Pyramid: eradicating poverty through profits*. Wharton school publishing.
- Prahalad, C.K. (2010). *The Fortune at the Bottom of the Pyramid: eradicating poverty Through profits*. Wharton school publishing.
- Reuters News*. (13 March 1989), India's Cipla Dismisses Glaxo Piracy Allegation. Available At: <http://www.factiva.com> [Accessed 1st April 2013].
- "Rx R&D Myths. (July 2001) .The Case against the Drug Industry's R&D 'Scare Card'," Public Citizen Congress Watch, p. ii.

UNAIDS, 2004, Report on the global AIDS epidemic.

WHO, (2008), Towards Universal Access: Scaling up priority HIV/AIDS interventions in the health sector.

Appendices

Appendix1: Cipla's market share, 2000-2002

Class of Goods	Unit	2001-2002		2000-2001	
		Qty.	Value (in US\$ millions) ^a	Qty.	Value (in US\$ millions)
Bulk drugs (APIs)	ton	644.5	70.60	598.9	38.76
Tablets and capsules	million	6159.1	155.29	5309.3	128.35
Liquids	kiloliter	4831.7	14.97	4416.4	12.61
Creams	ton	364.6	5.37	319.6	5.05
Aerosols/Inhalation devices	thousand	19599.2	27.91	15793.1	21.30
Injections/sterile solutions	kiloliter	647.7	15.63	411.3	12.13
Others			0.90		1.50

Source: Cipla annual report, 2001-2002. Available at:

<http://www.cipla.com/corporateprofile/financialprofilearchive.htm>

Appendix2: Selected Financials for Top Multinational Pharmaceutical Corporations and Cipla, 2001

Company	Corporate Headquarters	Net Sales (in US\$ millions)	Selling, General and Administrative	R&D	Material and Production Costs	Pre-tax Profit
GlaxoSmithKline	UK	29,504	36%	12%	22%	30%
Boehringer Ingelheim	Germany	7,360	na	15%	18%	13%
Bristol-Myers Squibb Company	US	19,423	27%	12%	29%	27%
Merck and Co., Inc.	US	21,199	27%	12%	17%	47%
Cipla	India	221	8%	0.2%	48%	22%

Source: Cipla's annual reports, 2003-2002 Available at:

<http://www.cipla.com/corporateprofile/financialprofilearchive.htm>

Appendix 3: Cipla Sales by Region, in the mid nineties (in US\$ millions)

Country	Sales
India	191.9
Asia, other	5.2
Africa	12.6
Middle East	12.6
Europe	25.2
The Americas	43.0
Australia	6.3

Source: Cipla unaudited report, 2002 Available at:
<http://www.cipla.com/corporateprofile/financialprofilearchive.htm>

Appendix 4: Cipla's financial statements	Mar '05	Mar '06	Mar '07	Mar '08	Mar '09
	12 mths	12 mths	12 mths	12 mths	12 mths
Sources Of Funds					
Total Share Capital	59.97	59.97	155.46	155.46	155.46
<u>Equity Share Capital</u>	59.97	59.97	155.46	155.46	155.46
Share Application Money	0.00	0.00	0.00	0.00	0.00
Preference Share Capital	0.00	0.00	0.00	0.00	0.00
Reserves	1,483.60	1,913.98	3,071.84	3,591.39	4,186.32
Revaluation Reserves	10.06	9.32	8.97	8.97	8.97
Networth	1,553.63	1,983.27	3,236.27	3,755.82	4,350.75
<u>Secured Loans</u>	40.37	51.27	7.25	16.98	2.79
Unsecured Loans	154.67	417.64	116.31	563.55	937.45
<u>Total Debt</u>	195.04	468.91	123.56	580.53	940.24
Total Liabilities	1,748.67	2,452.18	3,359.83	4,336.35	5,290.99
Application Of Funds					
Gross Block	986.67	1,366.67	1,799.71	2,201.79	2,693.29
Less: Accum. Depreciation	247.76	310.06	411.64	540.43	700.80
Net Block	738.91	1,056.61	1,388.07	1,661.36	1,992.49
Capital Work in Progress	105.96	87.01	73.19	233.12	366.32
<u>Investments</u>	18.30	22.43	117.80	94.75	81.32
Inventories	745.68	957.00	978.60	1,120.49	1,398.32
Sundry Debtors	587.32	875.96	1,028.78	1,393.91	1,837.15
Cash and Bank Balance	15.37	44.45	56.33	79.12	52.84
Total Current Assets	1,348.37	1,877.41	2,063.71	2,593.52	3,288.31
Loans and Advances	404.51	414.84	695.81	1,150.30	1,131.10
Fixed Deposits	0.01	0.03	75.16	0.16	0.16
Total CA, Loans & Advances	1,752.89	2,292.28	2,834.68	3,743.98	4,419.57
Deferred Credit	0.00	0.00	0.00	0.00	0.00
Current Liabilities	583.40	733.84	643.78	980.05	1,177.00
Provisions	283.99	272.31	410.13	416.81	391.71
Total CL & Provisions	867.39	1,006.15	1,053.91	1,396.86	1,568.71
Net Current Assets	885.50	1,286.13	1,780.77	2,347.12	2,850.86
Miscellaneous <u>Expenses</u>	0.00	0.00	0.00	0.00	0.00
Total Assets	1,748.67	2,452.18	3,359.83	4,336.35	5,290.99
Contingent Liabilities	503.88	1,600.75	1,586.64	1,664.58	730.75
Book Value (Rs)	51.47	65.83	41.52	48.20	55.86

Source: Cipla's financial profile 2005-09 available at:
<http://www.cipla.com/corporateprofile/financialprofile.htm>

Appendix5: Cipla's income statements

Item/Rs in Crore per yer	Mar 05	Mar 06	Mar 07	Mar 08	Mar 2008
	12 mths	12 mths	12 mths	12 mths	12 mths
Income					
Sales Turnover	2,400.89	3,103.62	3,656.92	4,293.95	5,295.33
Excise Duty	146.37	122.27	94.93	90.66	61.04
<u>Net Sales</u>	2,254.52	2,981.35	3,561.99	4,203.29	5,234.29
Other <u>Income</u>	76.03	112.20	100.68	134.92	-139.51
<u>Stock</u> Adjustments	66.87	94.35	-30.73	41.37	113.55
Total Income	2,397.42	3,187.90	3,631.94	4,379.58	5,208.33
Expenditure					
Raw Materials	1,199.76	1,564.11	1,754.89	2,162.48	2,513.11
Power & Fuel Cost	37.29	63.08	86.71	96.90	91.71
<u>Employee Cost</u>	116.58	150.76	184.59	255.45	271.33
<u>Other Manufacturing</u> Expenses	138.72	170.63	186.47	233.90	262.65
Selling and Admin Expenses	277.98	354.33	418.34	547.10	887.28
Miscellaneous Expenses	45.77	78.90	78.43	96.66	76.92
Preoperative Exp Capitalised	0.00	0.00	0.00	0.00	0.00
Total Expenses	1,816.10	2,381.81	2,709.43	3,392.49	4,103.00
Total Expenses	1,816.10	2,381.81	2,709.43	3,392.49	4,103.00
	Mar '05	Mar '06	Mar '07	Mar '08	Mar '09
	12 mths	12 mths	12 mths	12 mths	12 mths
Operating Profit	505.29	693.89	821.83	852.17	1,244.84
PBDIT	581.32	806.09	922.51	987.09	1,105.33
Interest	11.67	16.07	11.16	18.05	52.23
PBDT	569.65	790.02	911.35	969.04	1,053.10
Depreciation	55.05	80.18	103.37	130.68	151.79
Other Written Off	0.00	0.00	0.00	0.00	0.00
Profit Before Tax	514.60	709.84	807.98	838.36	901.31
Extra-ordinary items	0.00	0.00	0.00	0.00	0.00
PBT (Post Extra-ord Items)	514.60	709.84	807.98	838.36	901.31
Tax	105.00	102.20	139.95	136.93	124.50
Reported Net Profit	409.61	607.64	668.03	701.43	776.81
Total Value Addition	616.33	817.70	954.54	1,230.01	1,589.89
Preference Dividend	0.00	0.00	0.00	0.00	0.00
Equity Dividend	104.96	155.46	155.46	155.46	155.46
Corporate Dividend Tax	14.95	21.80	26.42	26.42	26.42
Per share data (annualised)					
Shares in issue (lakhs)	2,998.70	2,998.70	7,772.91	7,772.91	7,772.91
Earning Per Share (Rs)	13.66	20.26	8.59	9.02	9.99
Equity Dividend (%)	175.00	100.00	100.00	100.00	100.00
Book Value (Rs)	51.47	65.83	41.52	48.20	55.86

Source: Cipla's financial profile 2005-09 available at:

<http://www.cipla.com/corporateprofile/financialprofile.htm>

Appendix 6: Cipla's financial ratios from 1985-2009

	<u>1985</u>	<u>1990</u>	<u>1995</u>	<u>2003</u>	<u>2006</u>	<u>2009</u>
Liquidity:						
Current Ratio	1.85	2.07	2.65	5.01	2.62	1.81
Quick Ratio	1.16	1.21	1.33	1.13	1.88	1.93
solvency ratio	61.35	112.84	57.07	28.27	35.92	50.03
Efficiency:						
Inventory Turnover Ratio	3.05	3.16	3.71	2.08	3.83	3.79
Debtors Turnover Ratio	4.15	4.15	6.11	3.07	3.47	3.24
Fixed Assets Turnover Ratio	3.16	3.03	2.75	1.91	1.80	1.94
Total Assets Turnover Ratio	1.30	1.22	1.06	0.97	0.93	1.70
Return on Assets Excluding Revaluations	15.66	17.57	17.71	15.14	12.23	18.00
Return on Assets Including Revaluations	15.40	17.51	17.78	15.07	10.6	9.00
Profitability						
Operating Profit Margin	22.41	43.27	45.07	20.27	21.066	23.78
Gross Profit Margin	22.69	43.19	46.02	21.22	24.05	23.60
Return On Capital Employed (ROCE)	26.93	27.67	26.37	23.40	28.39	30.00
Return of stockholders fund (ROSF)	26.54	26.78	27.70	13.17	18.72	30.89
Gearing ratio						
Debt Equity Ratio	0.13	0.24	0.29	0.04	0.15	0.22
Long Term Debt equity Ratio	0.10	0.21	0.27	0.04	0.15	0.02
Investment:						
Earnings per share (EPS)	22.19	29.86	41.31	30.29	50.19	67.34
Dividend Per Share	3.50	2.00	-	2.00	2.00	2.00

Sources:

Cipla's financial reports from 1980 to 2009. Available at:
<http://www.cipla.com/corporateprofile/financialprofilearchive.htm>

Religare Technova. Available at: <http://www.moneycontrol.com/financials/cipla/ratios/C>

Appendix 7: Cipla's competition 2009

	Last Price	Market Cap. (Rs. cr.)	Sales Turnover	Net Profit	Total Assets
Sun Pharma	1,818.50	37,664.12	3,861.55	1,265.29	5,175.02
Cipla	341.30	27,403.71	5,270.54	767.83	5,290.99
Dr Reddys Labs	1,282.00	21,643.37	4,197.53	560.89	5,899.40
Ranbaxy Labs	478.40	20,117.83	4,782.76	571.98	7,442.15
GlaxoSmithKline	1,768.00	14,975.49	1,892.96	512.29	1,764.57
Lupin	1,613.80	14,353.76	2,967.13	416.97	2,320.21
Cadila Health	555.95	11,382.99	1,945.72	265.91	2,052.70
Piramal Health	446.00	9,321.99	2,333.46	275.32	2,165.88
Divis Labs	685.45	9,057.82	1,203.49	421.26	1,314.44
Glenmark	270.70	7,300.83	856.11	217.93	2,291.33

Source: Religare Technova (2009) available at:
<http://www.moneycontrol.com/competition/cipla/comparison/C>

Appendix 8: Cipla's finished goods at BOP

Finished Products				in Rs. Cr.	
<u>Product Name</u>	Unit	Installed Capacity	Production Quantity	Sales Quantity	Sales Value
Tablets & Capsules	Millions Numbers	16,662	16,119.20	17,938.40	2,879.78
Bulk Drugs	Metric Tonnes	1,866	960.10	1,869.00	597.21
Aerosols	Thousands Numbers	96,030	61,195.80	68,073.40	503.83
Injections/Sterile Solution	Kilolitres	1,168	2,222.50	2,616.00	436.76
Liquids	Kilolitres	1,346	8,432.00	13,808.60	300.54
Other <u>Operating Income</u>	-	NA	NA	NA	217.75
Others	-	NA	480.30	NA	213.97
Creams	Metric Tonnes	861	851.90	1,226.40	89.55
Other Fiscal Benefits	-	NA	NA	NA	55.94
Agrochemicals (Formulations)	-	NA	NA	NA	0.00
Total					5,295.33

Source: Religare Technova (2009) available at:
<http://www.moneycontrol.com/competition/cipla/comparison/C>