# RSM490: Strategic Management

**Eli Lilly in India: Rethinking the Joint Venture Strategy**

**Pharmaceuticals | India**

**July 25, 2017**

**Key Characters:**

**Dr. Lorenzo Tallarigo**
President
Intercontinental Operations
Eli Lilly

**D. S. Brar**
Chief Executive Officer Ranbaxy
Laboratories Limited

## Situation Overview

**Determining a global pharmaceutical's next steps in an emerging market**

This case focuses on a joint venture between Eli Lilly (Lilly), a global pharmaceutical firm based in the United States, and Ranbaxy Laboratories Limited (Ranbaxy), a large Indian pharmaceutical firm.

Formed in 1992, the joint-venture used Ranbaxy's Indian industry knowledge and supply chain with Lilly's culture and products to create a new entrant into the Indian pharmaceutical market.

At the point of the case, the global pharmaceutical industry is in a shift towards consolidation and globalization while India is shifting towards privatization. Ranbaxy was seeking to divest from the joint venture to concentrate on core geographies and to develop market share in the United States and the United Kingdom and to mitigate some finance concerns, while Lilly was unsure whether they wanted to stay within the market, partner with a separate firm, or exit altogether.

The case focuses on the situation presented to Dr. Lorenzo Tallarigo, president of Intercontinental Operations, who was getting ready for a meeting with D. S. Brar, CEO of Ranbaxy Laboratories Limited (Ranbaxy). Tallarigo was re-evaluating the directions for the JV and Lilly's overall strategy in India.

There were two main decisions in play for Tallarigo:

1. Divest from India
2. Stay in India
    a. Purchase the subsidiary
    b. Find a new partner for the JV

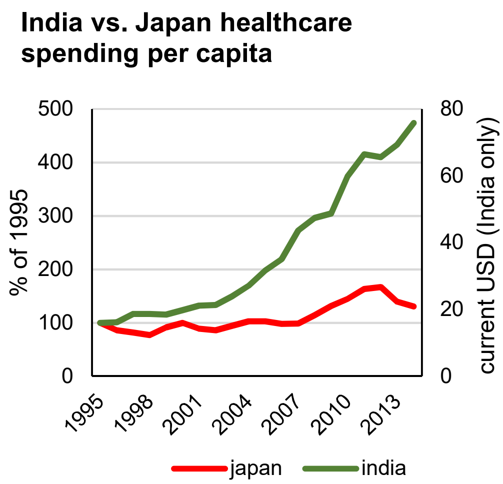


Figure 1 World Bank

| Comparison of key factors | | |
|---|---|---|
| | **1993** | **2003** |
| Health % GDP | 4.0 | 4.3 |
| GDP | 275.6 B | 599.6 B |
| Population | 924.1 M | 1.1 B |
| GDP/capita | 298.22 | 541.14 |
| Life expectancy | 59.45 | 63.78 |
| Child mortality | 115.4 | 81 |
| Prop rights | Weak | Medium |

Figure 2 World Bank

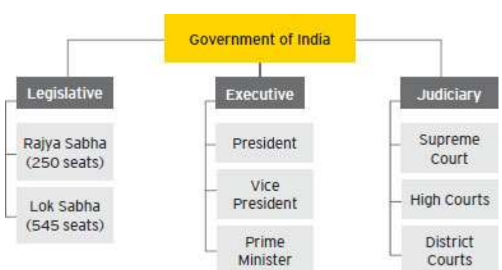


Figure 3 Government of India

# India Overview

**Growing country with a strong capability to be a world player**

At the time of the case, India is a developing country with a large population and a relatively low GDP/capita compared to traditional pharmaceutical focus countries such as the United States, Japan, and the United Kingdom. Healthcare is a small % of GDP. In 1990, the case reported that healthcare spending amounted to 3 USD/person and compared this to Japan where it was 400 USD/person. However, this amount grew at an annualized 8.7% per annum to 75 USD/person by 2013.

Similar metrics support that this increase it is not simply an increase in healthcare spending as a percentage of GDP, but a systematic increase in GDP/capita, overall life-expectancy, and support for innovation and intellectual property rights.

**Important Legislation Timeline**

1911 – Patents and Designs Act (follow international patenting)
1947 – Indian independence
1970 – Price controls and abolished product patents
1990 – FDI encouraged (40% ownership to 51% ownership)
1994 – General Agreement on Tariffs and Trade
1995 – WTO member, product patent recognition to NCEs
2001 - 100% FDI in drugs and pharmaceuticals allowed
2003 – Drug Controller General: “Good Manufacturing Practices”

It is important to note the 2001 legislation that allows 100% foreign ownership in the drugs and pharmaceuticals industry as it opened a new path of opportunity with the joint venture: buying out Ranbaxy and operating a foreign subsidiary of Lilly India.

Indian institutions were high context, and there were multiple branches of government for patent approval as well as deployment. The industry required a sales force to sell to doctors as well as consumers, and there were often kick-backs provided to doctors who purchased pharmaceuticals. However, Lilly, through their global policies, had managed to develop the JV into an ethical powerhouse not engaging in these unethical practices. The question remained as to whether they could manage this without Ranbaxy’s backing.

# India Analysis

**SWOT Analysis**

To analyze the case, it is important to understand the strengths, weaknesses, opportunities, and weaknesses of remaining in India, as well as the contextual institutions.

**Strengths**

- Large population (1.1B)
- Democratic institutions, movement towards good practices
- Large, cheap production capacity

**Weaknesses**

- Relatively weak intellectual rights
- Lack of government focus on research and development
- Deficiency of institutional ethics

**Opportunities**

- Robust growth in healthcare spending per capita
- Improving infrastructure commitments
- Access to a wider market in Asia

**Threats**

- Glaxo, other pharmaceuticals take market share in India
- Significantly lower prices vs. incumbent markets
- Technology transfer to lower priced manufacturers

Considering that Lilly already had a JV set up in India with government regulators, it would be difficult for the firm to exit and then re-enter. Indeed, this would be a major decision that could determine the company's movement for the next five to ten years.

## JV Analysis

**A history of ethical success**

After independence in India, the political situation of India was relatively high context. This meant that to purchase a property, do business, or finance a loan, there were procedures that were unorthodox. In the cost of doing business report in 2017, India was reported as 130th out of 190 countries to do business in. Previously, this ranking was lower.

The JV was formed in 1993, where it was first located in Ranbaxy's offices. At the end of the year, the JV moved to an independent location, launching products and employing over 200 people. They hired a regulatory group, doctors, and financial professionals from Lilly's Geneva office with the slogan, "Opportunity of a Lifetime". However, the industry had high turnover and unionized which provided difficulties which they tried to mitigate through internal promoting and career flexibility. Unlike incumbents, the JV earned the trust and respect of doctors due to strong values and ethical conduct by Lilly; there was respect and truth in place of bribes. One of the primary reasons for their early success was due to strong relationship of Mascarenhas and Gulati, and the differing goals of the two firms which formed the venture: Lilly was driven by innovation and discovery while Ranbaxy provided the generics, production, and logistics capabilities.

Their first products in market were Lilly's human insulin, and a few Ranbaxy products. Some early difficulties were experienced through government regulations, financing difficulties, and cash flow constraints. The weak IP and margins set on pricing meant that the JV could only support niche products. Unlike Pfizer, Glaxo, and some other firms, the JV did not pursue a localization strategy. Instead they focused on the fact that India is a high-volume, low price, and low profit market where generics sold at close to 1/60th of the price of global markets. It is important to note that by 2003, however, India's landscape had begun to change rapidly moving from 3 USD spending per capita to 30 USD per capita, and was set to grow to 70 USD per capita by 2013.

By 1996, the JV broke even and was becoming profitable. Mascarenhas was promoted to Italy and Chris Shaw was assigned to JV as the new MD. Gulati decided to join Eli Lilly and was assigned to their corporate office in Indianapolis in business development. In 1999, the JV experienced 8% growth with no new employees. Shaw hired 150 people and put systems & processes to prepare for going from 10 M in sales to 100M, and created a new medical and regulatory unit handling product approval process. By 2001, the JV surpassed average growth rates in the industry and become the 46th largest pharma company in India. Worldwide pharmaceutical retail sales at this point was experiencing 10% growth to 350 B USD and the US was the largest and fastest growth opportunity. Consolidation in the space shifted dynamics from the top 10 players capturing 28% to 45%.

Most firms were getting back to basics and focusing on high-margined preparations, divest non-core assets. Due to an increase in cost-containment pressures, partly due to the rise in managed care organizations, R&D costs, development and approval times, and competition increased significantly.

In 1993, Dr. Singh was appointed as the new CEO of Ranbaxy. He had a new mission: to turn Ranbaxy into a research based pharmaceutical firm with 1 B USD in sales by 2003, largely through creating new drugs through basic research. Ranbaxy had also pursued a JV with Genpharm and had acquired Ohm Labs & Rima Pharmaceuticals in the US. They were looking at the United States and United Kingdom as core international markets for the future to capitalize on the 350 B USD. In 1999, Dr. Singh handed the reigns of the company to Brar. At this point, Ranbaxy had significant cash flow due to international sales. Considering their role in the JV limited, Vinay Kaul asked whether to continue JV or not. The decision was made that they should not move through with the JV and so, Ranbaxy was imploring a sale of the JV in 2001.

At this point, Lilly was the 12$^{th}$ largest pharmaceutical in the world at this point, 6th in US, 17th in EU, and 77$^{th}$ in Japan due to Prozac.

# Option Analysis

**Multiple options with pros and cons**

## Stay in India and buyout Ranbaxy

Pros:

- Retain talent and trajectory of the JV
- Maintain relationship with Ranbaxy
- Have access to production in India

Cons:

- Deal NPV very costly
- Significant financial outlay
- Dependence on non-contracted partner, Ranbaxy

## Form a new joint venture with the same company

Pros:

- Access to manufacturing and distribution
- Shared risk and management
- Continues tradition of JV with Indian partner

Cons:

- Difficulty in finding viable partner
- Ex-ante and post-ante moral hazards
- Ranbaxy makes the decision; not Lilly

## Exit India

Pros:

- Significantly less risky
- Able to sell for high valuation

Cons:

- Loss of global, growing market
- Loss of access to cheap manufacturing

There is also the possibility of restructuring the JV to support both Eli Lilly and Ranbaxy, however, after analyzing the cash flow restraints and the globalization strategy of Ranbaxy management, this strategy did not seem likely enough to analyze.

A quantitative analysis of the JV follows. Due to lack of data, certain assumptions are made and a modified DCF is presented using net income valuation. The results should be accurate within a 30% up and down range.

# Quantitative Analysis

**Costly price for entry**

| ELI LILLY-RANBAXY INDIA FINANCIALS | Rs 000's | | | Index | | | Forecast | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 2000 | 2001 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
| Sales | 559,766 | 632,188 | 876,266 | 100 | 113 | 157 | 963,893 | 1,060,282 | 1,166,310 | 1,282,941 | 1,411,235 |
| Marketing Expenses | 37,302 | 61,366 | 96,854 | 100 | 165 | 260 | 115,667 | 127,234 | 139,957 | 153,953 | 169,348 |
| Other Expenses | 157,907 | 180,364 | 254,822 | 100 | 114 | 161 | 96,389 | 106,028 | 116,631 | 128,294 | 141,124 |
| COGS (est) | 335,860 | 379,313 | 525,760 | 100 | 113 | 157 | 578,336 | 636,169 | 699,786 | 769,765 | 846,741 |
| Profit after Tax (est) | 20,088.2 | 7,801.6 | -818.7 | 100 | 39 | -4 | 121,450.5 | 133,595.5 | 146,955.1 | 161,650.6 | 177,815.6 |
| Profit after Tax | 5,898 | 12,301 | 11,999 | 100 | 209 | 203 | | | | | |
| Current Assets | 272,635 | 353,077 | 466,738 | 100 | 130 | 171 | | | | | |
| Current Liabilities | 239,664 | 297,140 | 471,635 | 100 | 124 | 197 | | | | | |
| Total Assets | 303,254 | 386,832 | 516,241 | 100 | 128 | 170 | | | | | |
| No. of Employees | 358 | 419 | 460 | 100 | 117 | 128 | 561 | 617 | 648 | 765 | 864 |
| Exchange Rate (Rupees/US$) | 43 | 44 | 47 | 100 | 102 | 110 | 51 | 54 | 56 | 60 | 61 |
| Discounted Income | 18,262 | 7,802 | -901 | | | | 100,372 | 100,372 | 100,372 | 100,372 | 100,372 |

| | % of revenue | | |
|---|---|---|---|
| | 1999 | 2000 | 2001 |
| Sales | 100.00% | 100.00% | 100.00% |
| Marketing Expenses | 6.66% | 9.71% | 11.05% |
| Other Expenses | 28.21% | 28.53% | 29.08% |
| Profit after Tax | 1.05% | 1.95% | 1.37% |

| Drivers | |
|---|---|
| marketing % revenue | 12% |
| other % revenue | 10% |
| tax % revenue | 30% |
| cogs % revenue | 60% |
| growth | 10% |
| exit p/e | 25.00 |
| discount rate | 10% |

| Valuation | |
|---|---|
| cash flow | 501,861 |
| terminal value | 2,760,238 |
| net assets | 44,606 |
| percentage sale | 50% |
| **total value** | **35,328,048** |
| proposed sale | 40,000,000 |
| premium | 13% |

cautious about marketing expenses.
cautious about profit after tax going neg.
no exchange rate risk since investors diversify.

The price for buying out the JV with conservative assumptions runs between 30 million to 40 million USD. With a sale price of 40 million USD, even with fundamental shifts in assumptions, it is likely that the buyout presents a value proposition for Lilly as the premium is very low for such a fast growth country.

| Company | 1996 | 2000 | 1996-squared | 2000-squared |
|---|---|---|---|---|
| Glaxo-Wellcome | 4.97 | 4.80 | 24.70 | 23.04 |
| Cipla | 2.98 | 4.80 | 8.88 | 23.04 |
| Ranbaxy | 2.67 | 4.70 | 7.13 | 22.09 |
| Hoechts-Roussel | 2.60 | 4.80 | 6.76 | 23.04 |
| Knoll Pharmaceutical | 1.76 | 4.80 | 3.10 | 23.04 |
| Pfizer | 1.73 | 4.70 | 2.99 | 22.09 |
| Alembic | 1.68 | 0.00 | 2.82 | 0.00 |
| Torrent Pharma | 1.60 | 4.40 | 2.56 | 19.36 |
| Lupin Labs | 1.56 | 4.80 | 2.43 | 23.04 |
| Zydus-Cadila | 1.51 | 3.40 | 2.28 | 11.56 |
| Ambalal Sarabhai | 1.38 | 0.00 | 1.90 | 0.00 |
| Smithkline Beecham | 1.20 | 4.70 | 1.44 | 22.09 |
| Aristo Pharma | 1.17 | 0.00 | 1.37 | 0.00 |
| Parke Davis | 1.15 | 4.70 | 1.32 | 22.09 |
| Cadila Pharma | 1.12 | 0.00 | 1.25 | 0.00 |
| E. Merck | 1.11 | 4.80 | 1.23 | 23.04 |
| Wockhardt | 1.08 | 3.40 | 1.17 | 11.56 |
| John Wyeth | 1.04 | 4.80 | 1.08 | 23.04 |
| Alkem Laboratories | 1.04 | 0.00 | 1.08 | 0.00 |
| Hindustan Ciba Geigy | 1.03 | 4.80 | 1.06 | 23.04 |
| | | | 76.6 | 315.2 |

From 1996 to 2000, the top 20 pharmaceutical firms in India increased their HHI from 76.6 to 315.2, which is very significant. Considering that the industry is globalizing and consolidating, it is also prudent to consider the buy-out with a view of achieving international scale of economies and to maintain a post in case of further expansion in the future, especially when looking at Lilly's balance sheets which indicate that the net assets of the firm run to 3 billion USD.

| | Eli Lilly | | Ranbaxy | | Δ Eli Lilly | Δ Ranbaxy |
|---|---|---|---|---|---|---|
| | **1996** | **2000** | **1996** | **2000** | **1996 -> 2000** | **1996 -> 2000** |
| **ANTI INFECTIVE** | 35 | 8 | 49 | 56 | -27 | 7 |
| **NEUROSCIENCES** | 26 | 48 | 3 | 3 | 22 | 0 |
| **DIABETICS CARE** | 13 | 0 | 8 | 9 | -13 | 1 |
| **ANIMAL HEALTH** | 9 | 6 | 0 | 0 | -3 | 0 |
| **GI** | 6 | 3 | 10 | 9 | **-3** | **-1** |
| **OTHER PHARMA** | 11 | 1 | 22 | 5 | **-10** | **-17** |
| **ENDOCRINOLOGY** | 0 | 24 | 0 | 0 | 24 | 0 |
| **CARDIOVASCULAR** | 0 | 5 | 1 | 5 | **5** | **4** |
| **ONCOLOGY** | 0 | 5 | 0 | 0 | 5 | 0 |

**CORRELATION** **-0.01040374**

It is also important to look at the direction the Eli Lilly and Ranbaxy are taking to determine the optimal action for Eli Lilly. Since Ranbaxy does not seem to be running their development strategy in the same areas as Eli Lilly, there will not be correlation nor cannibalization between the two firms, allowing mutual support without the explicit definition of a JV.

## Recommendation

Considering the analyses, Lilly should buyout Ranbaxy's stake in the JV. During the buyout process, effort should be dedicated to maintain the support services that Ranbaxy provides the JV in order to ensure a smooth transaction. It would not be prudent for Lilly to exit the country, as the deal is value accretive and provides a real option for Lilly to partake in the Indian market long term.  Likewise, pursuing a partner in the JV would be a risk play and would involve significant non-monetary and monetary transaction costs such as culture clashes, ethics, and more, which Lilly highly values. Considering the partners available in India, it would be a significant added cost, growth and reputation hit to revert to a non-ethics based culture which doctors associated with the JV.

After the buyout, Lilly should tilt their short term focus to key target markets such as the United States with the fastest growth and profits, while allowing the JV in India to run independently as a subsidiary providing support as needed. There should be effort dedicated to ensure that the development paths of Ranbaxy and the JV don't mix to a reasonable extent – that is, the two companies should not directly compete unless necessary. This will ensure that the services will remain strong until there is an actual need to compete. The JV should also be prompted to establish relationships with other Indian partners to diversify the supplier base.

When U.S. reaches saturation and India reaches a sustainable scale for selling (indicated through a comparably western healthcare spend/head and increased margin requirements from the government), Lilly should shift their focus there, perhaps between the next 10 to 30 years, and begin to introduce some of their higher margin drugs. This will allow them to capitalize on India above and beyond the low margin that they currently have now.

There are certain risks and mitigations involved with this recommendation, including:

1. Lilly must manage the deal cost – the JV might become dilutive if too expensive
2. Macroeconomic factors that cannot be diversified away from India
3. Cultural considerations must be considered during the M&A process
4. Operationalization and splits must be clearly considered to prevent moral hazard