

The Indian
Pharmaceutical Industry
Poised For A Leap



Cube **X**
—Division of Sorento—

The Indian Pharmaceutical Market Poised For A Leap



Flow of Contents:

- **Executive Summary**
- **Industry Overview**
Pharma and Related Industries :
Sector-Wise Growth
- **Growth Drivers of the
Pharmaceutical Sector**



Executive Summary

- The Indian pharmaceutical market has been estimated to grow to US\$ 55 bn by 2020 from a market size of US\$ 12.6 bn in 2009 (CAGR ~14.5%)
 - Pharmaceutical product **exports** rose from US\$ 6.2 bn in 2006-2007 to US\$ 8.7 bn in 2008-2009 at a CAGR of 21%. Thus, exports have emerged as important growth drivers along with domestic business.
- The biosimilars market is likely to grow by around US\$ 2 bn by 2014, to reach a value of **US\$ 19 bn**, following patent expiry of key molecules.
- While the government spending on healthcare is currently low at 1% of GDP, it has been growing annually at 18% from 2005 -2009 and the aim is to increase public expenditure on healthcare services to 2-3% of GDP
 - Government purchase of pharmaceutical products likely to increase to US\$4.5 bn by 2020
 - Low profitability is a deterrent for manufacturers and thus, attractive segments and innovative business models would have to be looked at
- Increased healthcare insurance to 650 mn people by 2020 would be another major growth driver
- The demand for hospital beds will increase to over 6 lakhs in next 10 years
 - High investment coupled with high gestation periods will pose as entry barriers

Executive Summary

- Therapies in the chronic segment will account for more than 60% of the domestic formulations market by 2012, as a result of increasing lifestyle related ailments
- Launch of patented products with India-pricing strategy could be conducive to the growth of pharmaceutical companies as seen with Januvia
- Indian companies have already established themselves as strong competitors in the generics space in regulated global markets.
 - Indian formulation exports are expected to reach US\$ 12-13 bn by 2015 (global market estimated to reach US\$ 140-150 bn)
 - The key concern being margins, as cost benefits are expected to be shifted to consumers from producers. Strategic alliances in this space seem to be lucrative opportunities.
- In terms of products, promotional switches from prescription to OTC domain are likely to rule the roost. Rx-to-OTC switches are expected to reach US\$ 8-10 bn by 2020 while condition-specific supplements would be a nascent segment with high potential for growth.
 - Brand extensions in alternative therapy areas would aid in higher penetration through non-chemist channels
 - Chemists can play a strong advisory role, creating point of sale activation



Executive Summary

- Metro and tier-I cities will remain as the mainstay in terms of geographical expansion during the next decade, contributing up to 60% of the incremental growth. Share of rural markets is also likely to increase to 25% by 2020, however at the expense of tier-II markets, which are access points to rural areas.
 - Share of urban areas in the national GDP will rise from the current 58% to 70% by 2020
 - Rural population is also likely to move to urban hubs for more secondary and tertiary treatments
 - More than 28 million households, nearly 20% of all households in rural areas, will move out of the deprived income class in rural areas during the next decade
- As healthcare spend increases, the market for diagnostic services is also likely to increase.
 - In the medical equipments and supplies segment, the Indian market touched US\$ 1.7 bn in the year 2010 with an annual growth rate of 23%
- As Indian players establish their footprint in the global market, consolidation in the industry and dominance by MNCs seems to be the lurking fear as accessibility to drugs may be affected

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Industry Overview

- **Pharmaceutical Industry**
- **Related Industries**
 - **Health Insurance**
 - **Hospitals**
 - **Vaccines**
- **Role of Private Sector**



Pharmaceutical Industry >> Overview



- India stands at the **third** position in the **world** in terms of **production volume**, **fourteenth** in terms of **value** and is responsible for **8%** of the world's production (though it receives only 1.5% of its value)
- According to estimates, the Indian pharmaceutical market will grow to **US\$ 55 bn** by **2020** from a market size of US\$ 12.6 bn in 2009 (CAGR ~14.5%)
 - It has the **potential** to reach US\$ 70 bn in an aggressive growth scenario (CAGR of 17%)
 - In a pessimistic scenario characterized by regulatory controls and economic slowdown, the market will be depressed and is expected to reach US \$ 35 bn (CAGR ~10%)

Pharmaceutical Industry >> Overview



- Pharmaceutical product **exports** rose from US\$ 6.23 bn in 2006-2007 to US\$ 8.7 bn in 2008-2009 at a CAGR of 21.25%
 - **Exports** are as important as **domestic sales** for the Indian pharmaceutical industry, because both segments **contribute almost equally to total revenue**
- The growing biotech industry would help India to gain a share of the global opportunity currently emerging around **biosimilars**
 - The biosimilars market is likely to grow by around US\$ 2 bn by 2014, to reach a value of **US\$ 19.4 bn**, following key patent expiry for epoetin alfa, filgrastim, interferon beta 1a, interferon alpha, human growth hormone (hGH) , and insulin-glargine

Pharma and Related Industries >> Healthcare Sector

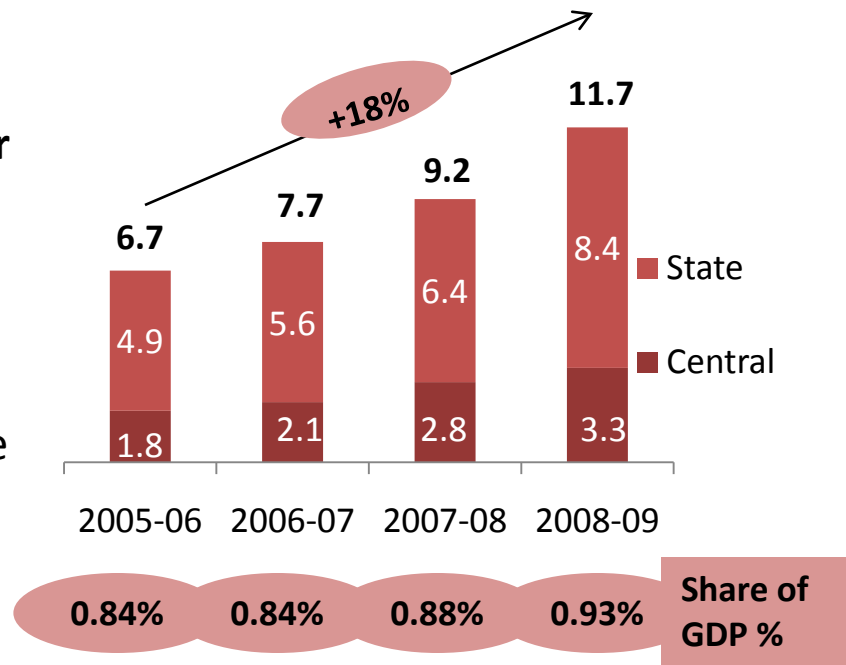
Healthcare:

- The healthcare sector comprises of hospital and allied sectors including healthcare facilities, medical diagnostic and pathology labs and medical insurance
 - Hospitals account for 50% of the healthcare spend
- The industry grew at a good pace (9.3% CAGR) during 2000-09 to reach US\$ 35 bn and is expected to touch **US\$ 77 bn** by **2012** registering a CAGR of 23%
- A combination of increasing life expectancy and ageing population, lifestyle diseases, increasing ability to afford quality healthcare and growing medical insurance penetration are the **major growth drivers** for this industry
 - Increasing awareness and the rise of medical tourism are other growth drivers

Pharma and Related Industries >> Healthcare Sector

- The government proposes to increase public expenditure on healthcare to **2-3% of the nation's GDP** from the current low of 1%
- The increase in government spending would translate into **higher level of access in tier-II towns and rural markets**
- Also, it has been estimated that **direct government purchase** from pharmaceutical companies would be valued at **US\$ 4.5 bn by 2020** (currently close to US\$ 1 bn)
 - The hindrance to growth being low prices and thus, decreased profitability

Total Spend by government (central and state) on healthcare in India (US\$ bn)



Source: Ministry of Health and Family Welfare Website; Central Bureau of Health Intelligence Website; Reserve Bank of India State Finances; McKinsey Analysis



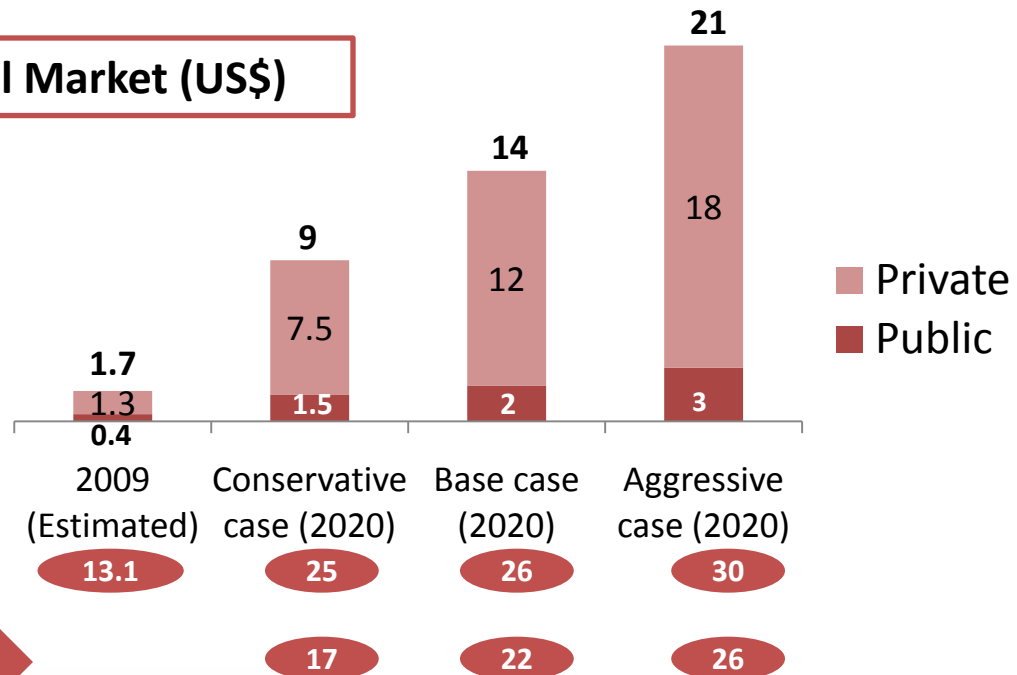
Pharma and Related Industries >> Hospitals

Hospitals:

- The hospital segment includes **private and public institutional sales**, as well as a large part of the **public health market**
- **80 to 85%** of the hospital market is being accounted for by the **retail segment**
- In 2020, the retail segment is expected to remain the main stay of the market

Projected Size of Hospital Market (US\$)

Hospital market will grow to ~US\$ 14 bn by 2020



Pharma and Related Industries >> Health Insurance

Health Insurance:

- By 2020, nearly 650 mn people will enjoy health insurance coverage
- **Private insurance coverage** will grow by nearly **15%** annually till 2020
- However, the largest impact will be seen through **government-sponsored programmes** that are largely focused on below poverty line (BPL) segment and are expected to provide coverage to nearly 380 mn people by 2020
- 2010-11 budget allocated US\$ 2920 mn (increased by 15% over the previous year) under the National Rural Health Mission

Pharma and Related Industries >> Vaccines

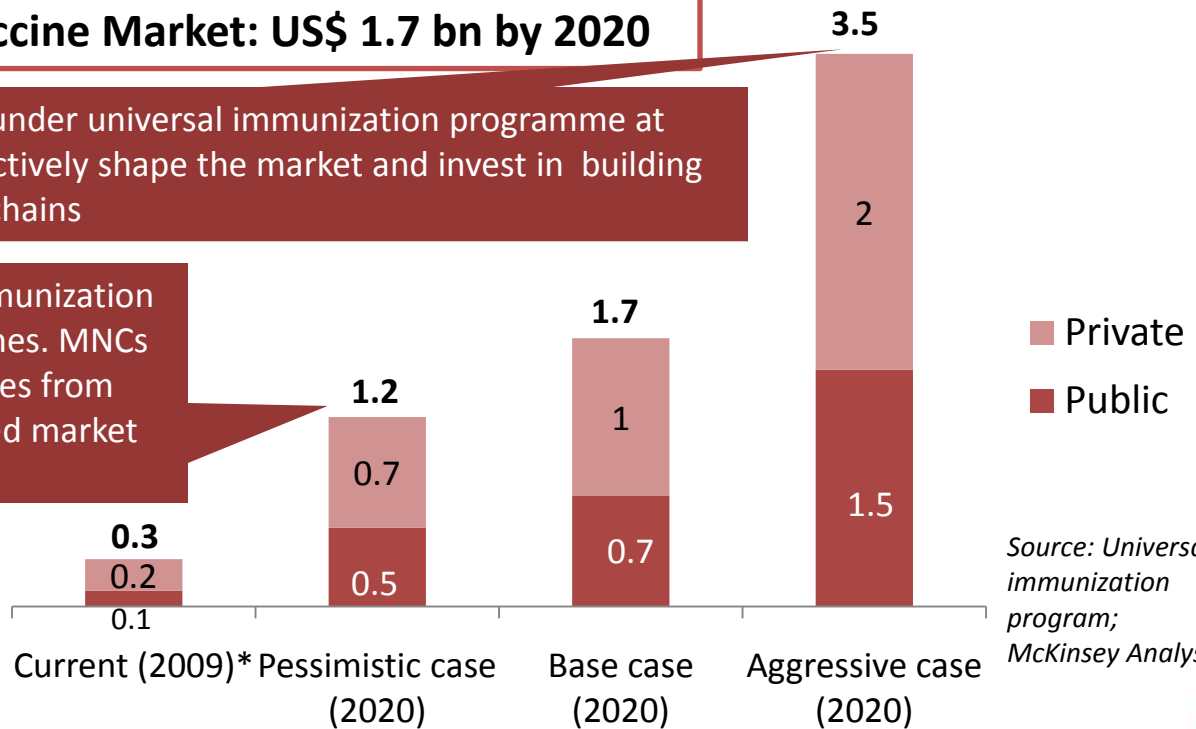
Vaccines:

- At **2% penetration**, vaccines are significantly under-penetrated, despite the high burden of diseases that can be prevented through vaccination
- The market is currently estimated at US\$ 250 mn, with the private segment accounting for two-thirds of the direct market.

Projected Size of Vaccine Market: US\$ 1.7 bn by 2020

4 new vaccines will come under universal immunization programme at WHO prices. Players will actively shape the market and invest in building distribution through cold chains

Expansion of universal immunization program with 3 new vaccines. MNCs will launch selected vaccines from global portfolio with limited market shaping



Source: Universal immunization program; McKinsey Analysis



Pharma and Related Industries >> Role of Private Sector



The Role of the Private Sector:

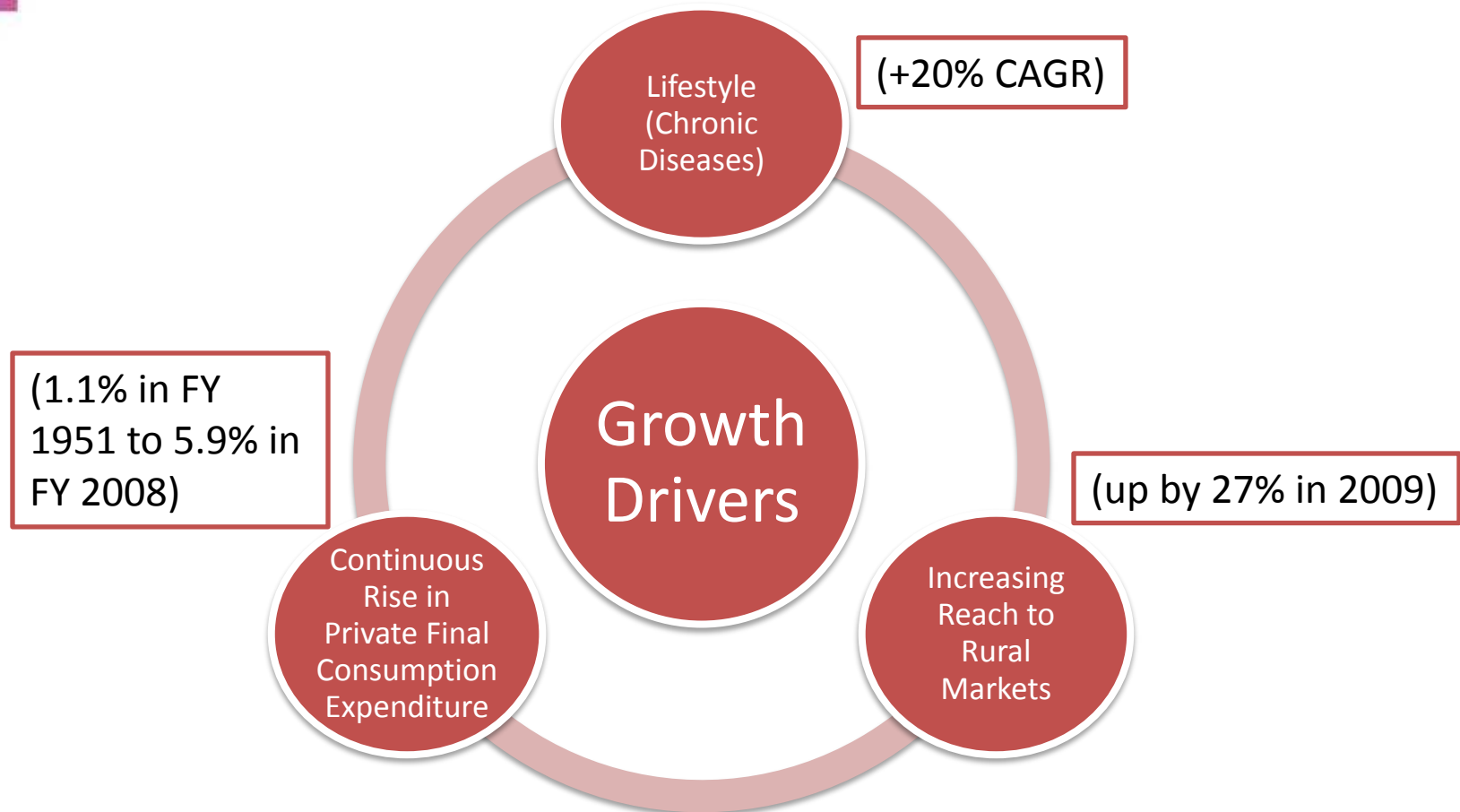
- Almost **80%** of India's overall spending on healthcare is accounted for by the **private sector, among the highest globally**
- **National healthcare spending** is about **5.5%** of the nation's gross domestic product(GDP), **government spending** is only at about **1%** of GDP, as compared to 3.5 % for Brazil and 1.9% for China
- Despite the dominance of the private sector, the organized private hospital players are still at nascent stages of growth. The unorganized players contribute about 90% of the private healthcare market
- According to an estimate by CRISIL, India's largest private healthcare provider – **Apollo Hospitals Group has a share of only 8500 beds of the 10.5 mn beds in the country.** An additional 6 lakh beds would be required in the next 10 years (~20% for cardiac and oncology procedures).
- Thus, **large investments** in this space would be made, but **mostly by existing private players.** The high cost as well as the gestation period would pose as entry barriers to new players.

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Growth Drivers of Pharmaceutical Sector



The chronic diseases segment would outpace industry growth rate because of changing lifestyles leading to ailments such as cardiovascular disease and diabetes



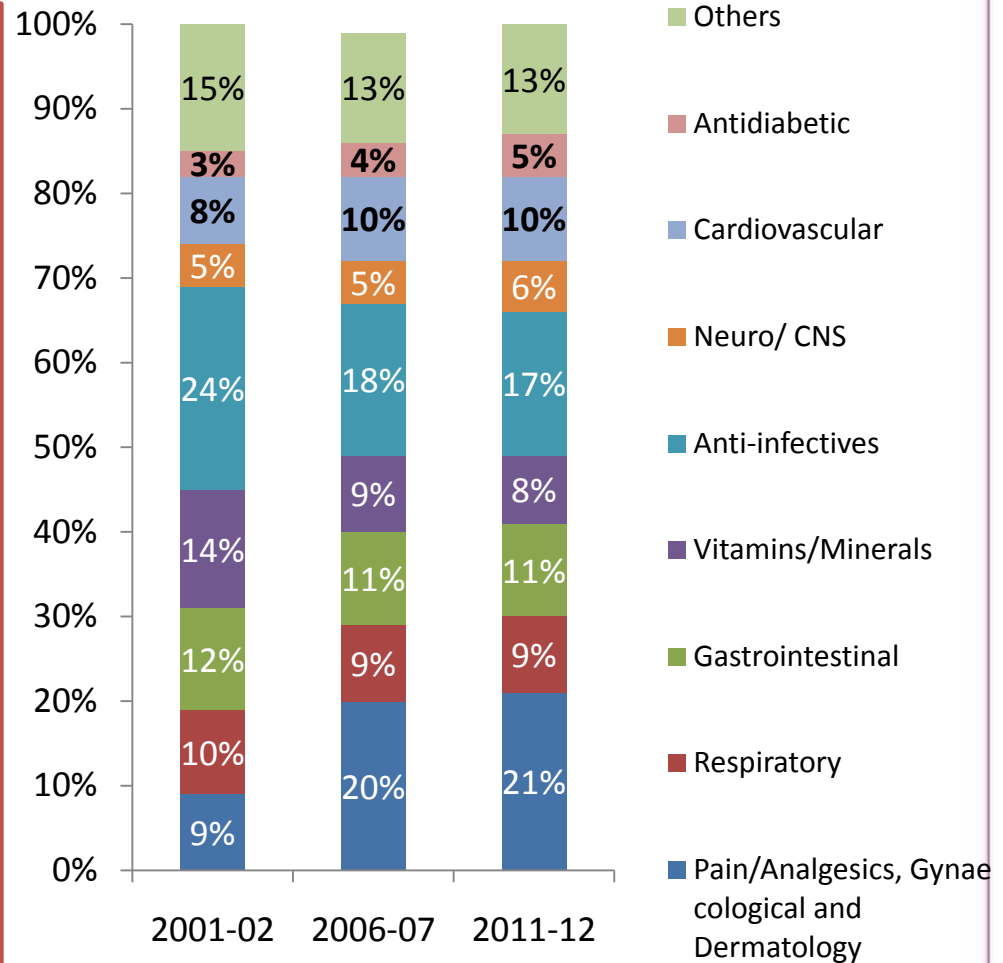
Growth Drivers of the Pharmaceutical Sector

- **Changing Therapeutic Needs**
- **Patents And Generics**
- **MNCs On The Hunt**
- **Over The Counter Market**
- **Urbanization**
- **Medical Devices**



Growth Drivers >> Changing Therapeutic Needs

- In 2001, anti-infectives, gastrointestinal and vitamins accounted for 50% of the domestic market. However, by 2012, they are expected to account for 36%.
- Conversely, chronic segment therapies such as neurological and cardiovascular drugs, anti-diabetics would account for 64% of sales in 2012, an increase of 14% as compared to 2001.
- Indian formulations business recorded growth of 17.4% in 2009



Growth Drivers >> Patents And Generics



Patents:

- Opening up a fairly **new growth avenue** both **domestically and internationally** are Indian pharmaceutical product patents
- The remarkable success of a few recent launches of patented products such as Januvia and Galvus demonstrates the true potential of patented products
 - It also indicates that these products can drive **tremendous growth in specific disease areas**
- Around US\$ 70 bn worth drugs are expected to go off-patent in the US over the three years and up to US\$ 200 bn worth of drugs will go off-patent between 2010-2015

Generics:

- Governments around the world have started pushing for generic drugs in order to keep healthcare costs under check. This in turn has created a conducive environment for Indian companies.
- Indian drug-manufacturers have already established a strong presence in large and regulated markets such as the US and Japan

Growth Drivers >> Patents And Generics

- **India's manufacturing clout** has made it a massive threat to established generic firms, since it now **produces more than 20% of the world generics**
- Indian Companies today account for **35% of the Abbreviated New Drug Application (ANDA) approvals** granted by the US Food and Drug Administration (FDA) until February 2009
- The global generic market is estimated to reach at \$140-150 bn by 2015, while Indian formulations exports will reach on \$12-13 bn by that time.
 - The margins are expected to reduce as cost benefits would be transferred to consumers
- Indian companies are entering into strategic alliances with global companies to jointly promote drugs and strengthen their portfolio



Growth Drivers >> MNCs On The Hunt

Indian pharmaceutical sector growth has resulted in a number of **acquisitions as well as tie-ups** and it is estimated that this trend will continue.

Prominent names acquired in the recent years include Ranbaxy, Dabur Pharma, Shanta Biotech, Piramal Healthcare, Matrix Lab and Orchid Chemicals

GlaxoSmithKline (GSK) has a tie-up with Dr. Reddy's Laboratories (DRL), while **Pfizer** has aligned with Aurobindo Pharma, Strides Arcolab and Claris Life Sciences on its side

Abbott has teamed up with Cadila Healthcare, while Astra Zeneca formed an alliance with Indian-based Torrent Pharmaceuticals

The recent acquisition of Piramal Healthcare's domestic formulations business by Abbott has created a totally different **benchmark for valuations**, as the deal concluded at more than 9x sales on trailing basis.

MNCs' focus to enter India is mostly owed to sustainable and higher **growth for long-term, gaining access** to the US FDA-approved **capacities** and **product baskets**, and **leveraging the low-cost model** in the country

Growth Drivers >> MNCs On The Hunt

- Some Indian companies are **setting up their own marketing subsidiaries abroad**
 - Over the past several years companies such as DRL, Cipla and Lupin have grown internationally in their own right as well
 - Other Indian pharma companies like Glenmark, Orchid and Aurobindo Pharma also have wholly-owned subsidiaries in different parts of the globe
- Meanwhile, the **increasing population of the higher-income group** in the country is further expected to open a **potential US \$8 bn market for MNCs selling costly drugs by 2015**
- The takeover of Indian companies by MNCs can orient them away from the Indian market, thus **reducing domestic accessibility of drugs** produced by them
 - The Ministry of Health is looking at this development from the angle of vital drugs being available to Indians during any public health emergency
 - The aggressive eye of global pharma giants on Indian high-performers has also led the **Indian Government** to strike a note of caution and is **considering stricter takeover norms for the sector**

Growth Drivers >> Over The Counter Market

- The OTC market was worth about US\$ 1.8 bn in 2009 and expected to grow between 14% to 16% to reach US\$ 14 to 18 bn by 2020
- The **Government** is now considering plans to **expand the list of drugs** which can be sold outside pharmacies, since many common household remedies are more difficult to obtain in India than in other developing countries
 - An expansion of list would substantially **increase the potential market opportunity** in this segment
- Prescription (Rx) to OTC **switch coupled with chemist activation initiatives** can be instrumental in this regard
 - The success of brands such as Calcium Sandoz, Revital and Volini gel are suitable cases in point
 - These decisions will involve large production capacity while coping with near-term dips in profitability
- **Consumers** are increasingly **open to self-medication** and there are considerable number of brands that enjoy consumer salience and equity. These brands over time will make the Rx-to-OTC switch.

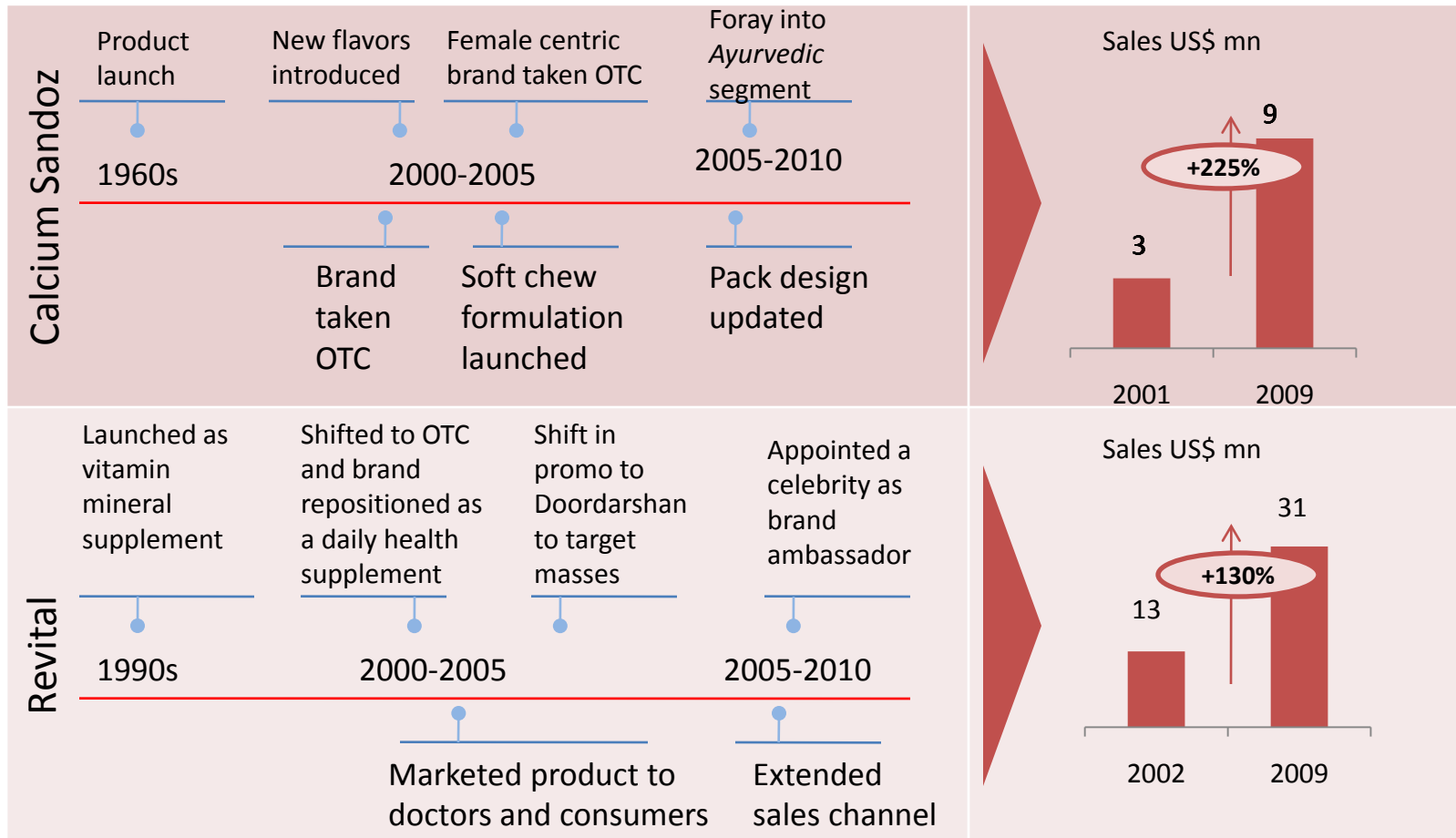
Growth Drivers >> Over The Counter Market

Segment	Growth drivers	Size US\$ bn	Growth %						
Rx-to-OTC	<ul style="list-style-type: none"> Increasing brand investments Range of line extensions – from related indications to prevention of ailments Penetration to non-chemist channels with brand extensions (e.g. AYUSH) 	<table border="1"> <tr> <th>Year</th> <th>Size US\$ bn</th> </tr> <tr> <td>2008</td> <td>1.6</td> </tr> <tr> <td>2020</td> <td>8-10</td> </tr> </table>	Year	Size US\$ bn	2008	1.6	2020	8-10	14-16
Year	Size US\$ bn								
2008	1.6								
2020	8-10								
'Pure play OTC'	<ul style="list-style-type: none"> Shift to therapeutic and stronger science-based claims, driven by current and new players with range of extensions under master brand 	<table border="1"> <tr> <th>Year</th> <th>Size US\$ bn</th> </tr> <tr> <td>2008</td> <td>1.4</td> </tr> <tr> <td>2020</td> <td>5-6</td> </tr> </table>	Year	Size US\$ bn	2008	1.4	2020	5-6	13-14
Year	Size US\$ bn								
2008	1.4								
2020	5-6								
Nascent category (condition-specific supplements)	<ul style="list-style-type: none"> Entry of players who will shape this high potential market (e.g. diabetic nutrition, heart health) through therapeutic products 	<table border="1"> <tr> <th>Year</th> <th>Size US\$ bn</th> </tr> <tr> <td>2008</td> <td>0</td> </tr> <tr> <td>2020</td> <td>~1-2</td> </tr> </table>	Year	Size US\$ bn	2008	0	2020	~1-2	31-38
Year	Size US\$ bn								
2008	0								
2020	~1-2								



Growth Drivers >> Over The Counter Market

Actively driving OTC/OTX route can produce significant brand growth



Growth Drivers >> Over The Counter Market



Role of Chemists:

- **Need:** Rise of **organized retail chains** in pharmaceuticals
 - However, in a move that could be much more significant, the traditional chemist channel is segmenting
- **Strong advisory role :** Increasingly **creating avenues for point-of-sale activation**
 - In the relatively lower income micro-markets within metro and Tier-I cities, chemists are **sought after for advice**
 - In affluent micro-markets within metros, chemists are **upgrading** and looking for opportunities to increase income through display schemes and cross-selling other categories
- **Influencers:** Increasingly, chemists are able to **influence patients** to undergo diagnosis even for chronic conditions such as hypertension

Growth Drivers >> Urbanization

Urbanization: tier-I and tier-II towns

- **Metro and tier-I markets** each **account for about 30%** of the Indian pharmaceuticals market. Mass therapies constitute the majority of this market.
- **Rural markets** have been **growing** at an estimated compounded annual rate of over **16%** over the last few years
 - Driven by **income growth and greater penetration**, the growth rate is above the overall market
- Going forward, the **share of rural markets** will move up to **25% by 2020**, up from the estimated 20%
- Currently, **tier-II markets**, in contrast, will **gradually reduce** from the current estimated 20% of the market share to around 15% or less
 - However, tier-II markets have an **important role in providing rural access**
 - Critical support to rural markets by being the sales headquarters, supply chain stocking points and centre for primary and secondary care

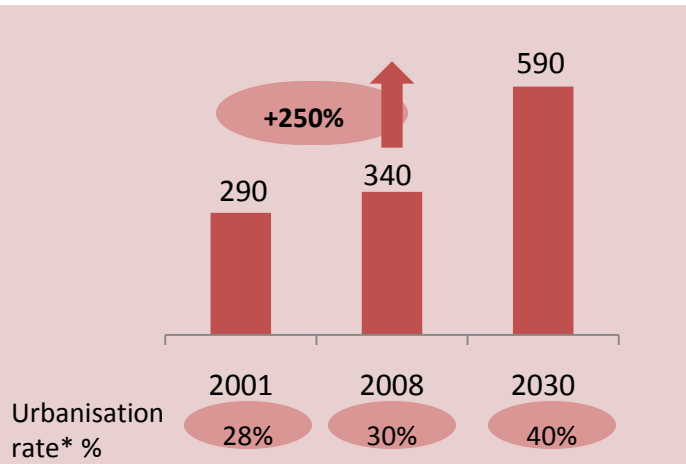
Driven by continued urbanization, metro and tier-I cities will grow with the market and remain its mainstay during the next decade, contributing upto 60% of the incremental growth

Growth Drivers >> Urbanization

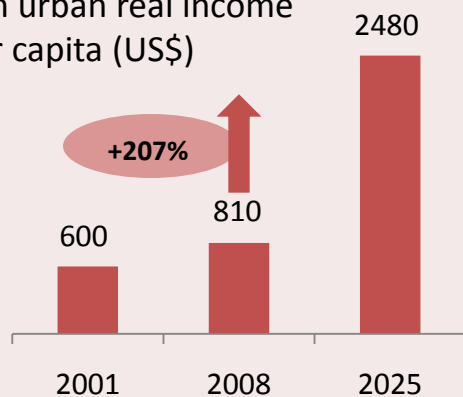
- During the last five years, **metro and tier-I smaller cities' market** grew at an estimated rate of **14% to 15%**, in line with the overall market
- Current momentum is expected to continue, and this segment is expected to become a **US\$ 33 bn market** by **2020**
- **This growth will be driven by:**
 - 1. Rapid urbanization** will lead to 250 mn people moving from rural areas to urban centres during the next two decades, with a majority of them moving to the top 70 cities
 - Share of urban areas in the national GDP will rise from the current 58% to 70% by 2020
 - While this will lead to **1.7 times growth in the urban population**, it will also have profound implications on healthcare delivery
 - **Migrants** will seek out **healthcare centres** while making cost-efficacy their priority in the absence of family physicians

Growth Drivers >> Urbanization >> Increase in share of metro and tier-I towns

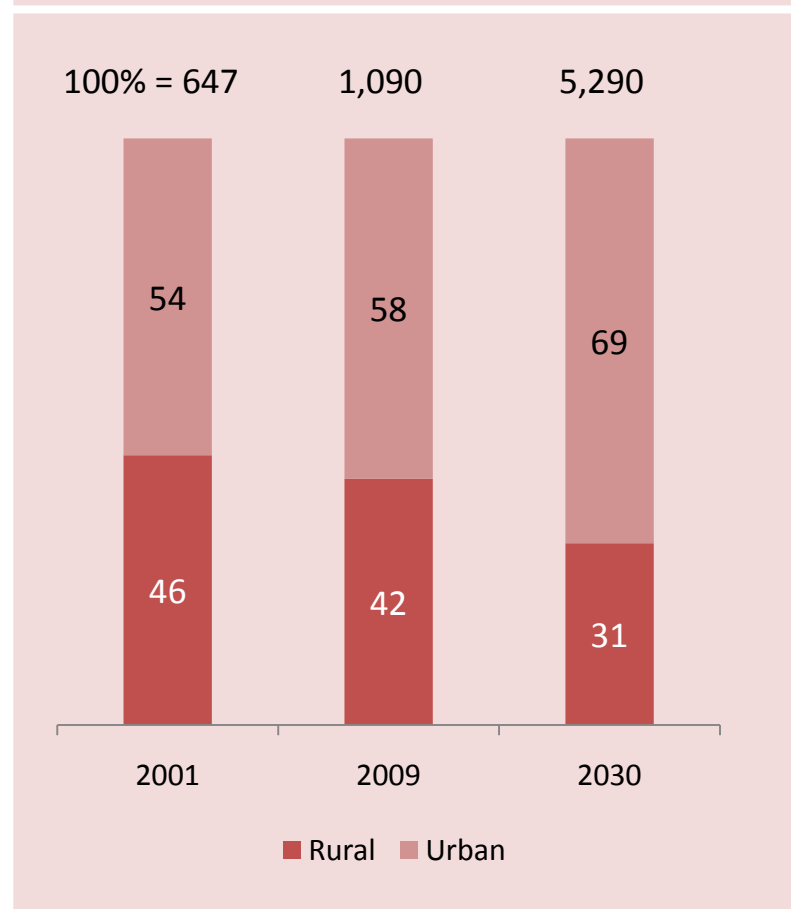
Growth in urban population (mn)



Growth in urban real income levels per capita (US\$)



Share of India's GDP %, US\$ bn



*Defined as the ratio of urban to total population based on the census definition of urban areas: population >5,000; density >400 persons/sq. km; 75% of male workers in non-agricultural sectors; and other statutory urban areas.

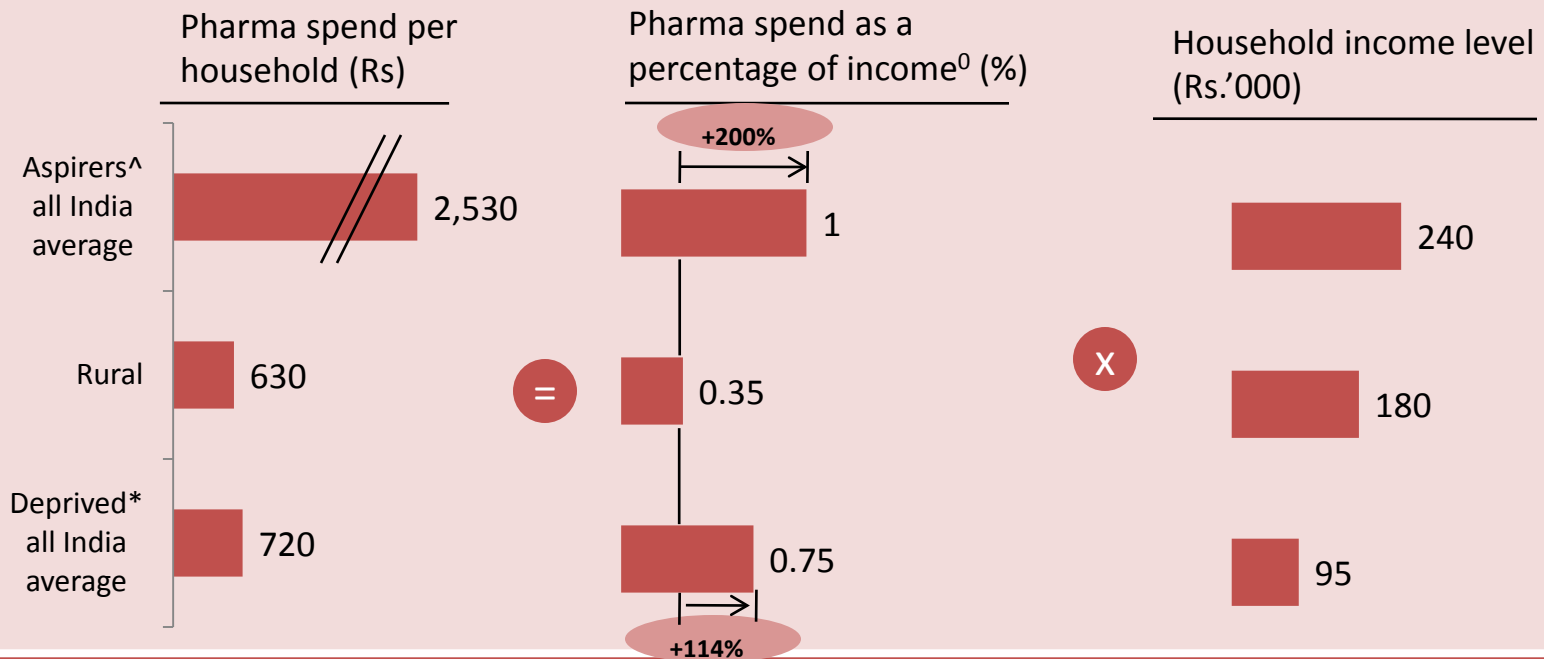


Growth Drivers >> Urbanization

2. **Medical infrastructure** will increase in terms of scale and scope
 - Corporate hospital chains will **extend their hospital network** in the top 70 cities; **innovative formats** will plug gap in healthcare delivery in tier-I markets; and **hub and spoke delivery models** that provide access to higher secondary care procedures are on the rise within the top 200 to 250 towns
 - The rural population is more likely to move to urban hubs for more secondary and tertiary treatments rather than seeking treatment at the nearest tier-II town
3. **Compliance** has the potential to rise sharply
 - Interestingly, while diagnosis and treatment levels in metros and tier-I markets are 30% to 40% higher than in rural areas, compliance levels remain similar
4. **Affordability** will be the **single largest driver of growth**
 - More than 28 million households, nearly 20% of all households in rural areas, will move out of the deprived income class in rural areas during the next decade
 - In addition, **health coverage through government schemes** will further enhance affordability and enable rural patients to be treated for serious illnesses and higher cost procedures

Growth Drivers >> Urbanization >> Impact of accessibility on growth in untapped tier-II/rural markets

Deriving accessibility in untapped Tier-II/Rural markets can have significant impact on growth



By driving accessibility in untapped markets, potential exists to significantly increase pharmaceuticals spend

* Annual income <Rs. 90,000/household at 2001 price levels;

^ Annual income <Rs. 90,000-2,00,000/household at 2001 price levels;

⁰ Based on share of wallet spent on healthcare in each income class and average spend of 16% on pharma within healthcare across classes



Growth Drivers >> Medical Devices

- The current Indian market of medical devices, diagnostics and equipments is estimated at about **US\$ 2.1 bn**
 - This segment is expected to expand at a good pace with the growth in overall healthcare spend
- The Indian medical devices and diagnostics market is projected to reach **US\$ 3 bn by 2012**
- In the medical equipments and supplies segment, the Indian market touched US\$ 1.7 bn in the year 2010 with an annual growth rate of 23% according to industry estimates
- The imaging devices market is now estimated at US\$ 290 mn (Rs. 1300 crore), while the electronic treatment devices market has touched the mark of US\$ 222 (Rs. 1,000 crore)

Source

- Businessworld: The Marketing Whitebook 2011-2012



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