



*The Global Event
for Biotechnology*

June 17-20, 2008 • San Diego Convention Center • San Diego, CA

The Right Spice: Biopharmaceutical Market Entry in India

June 17, 2008

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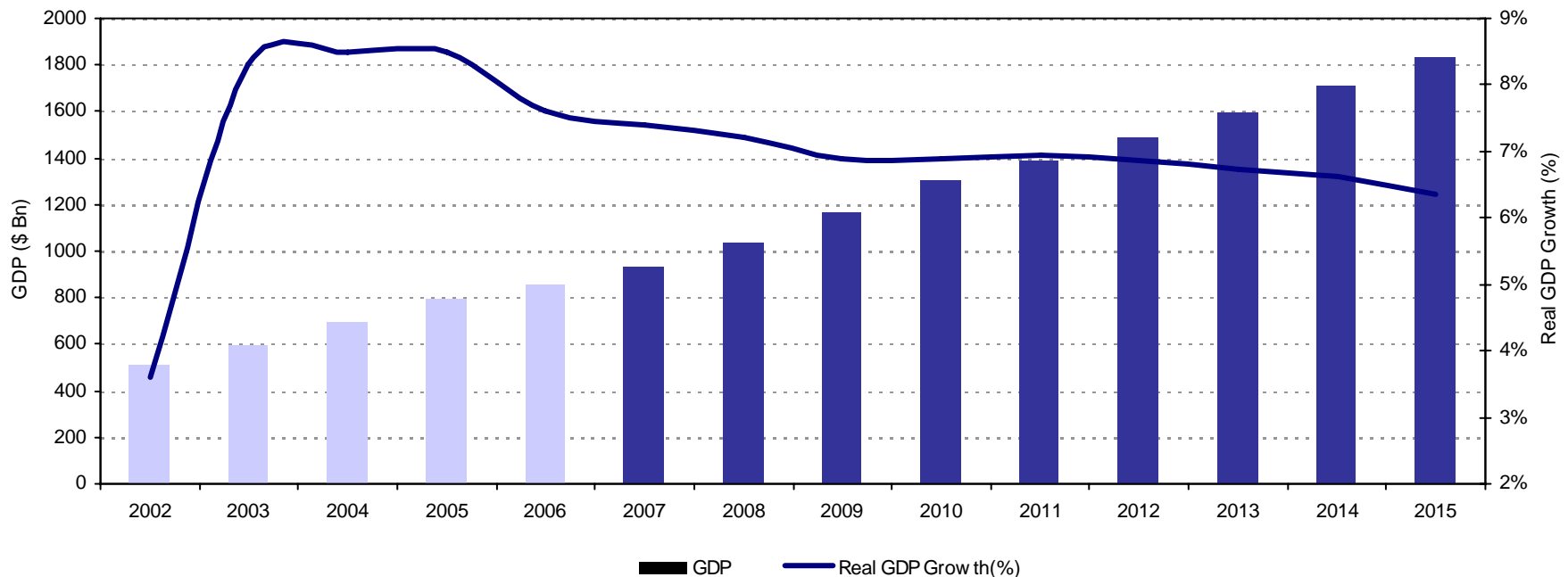
Panel

- Glenn H. Snyder, Principal, Deloitte Consulting LLP (moderator)
 - Dr. Simon Best, Founder and Chairman, Ardana Bioscience
 - Dr. Siddhartha Kadia, Vice President, Global Marketing and E-commerce, Invitrogen
 - Dr. Viloo Morawala Patell, Founder, Chairperson & Managing Director, Avesthagen
 - Dr. Romi Singh, Executive Director, Global Regulatory Affairs, Amgen
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The Biopharmaceutical Market in India

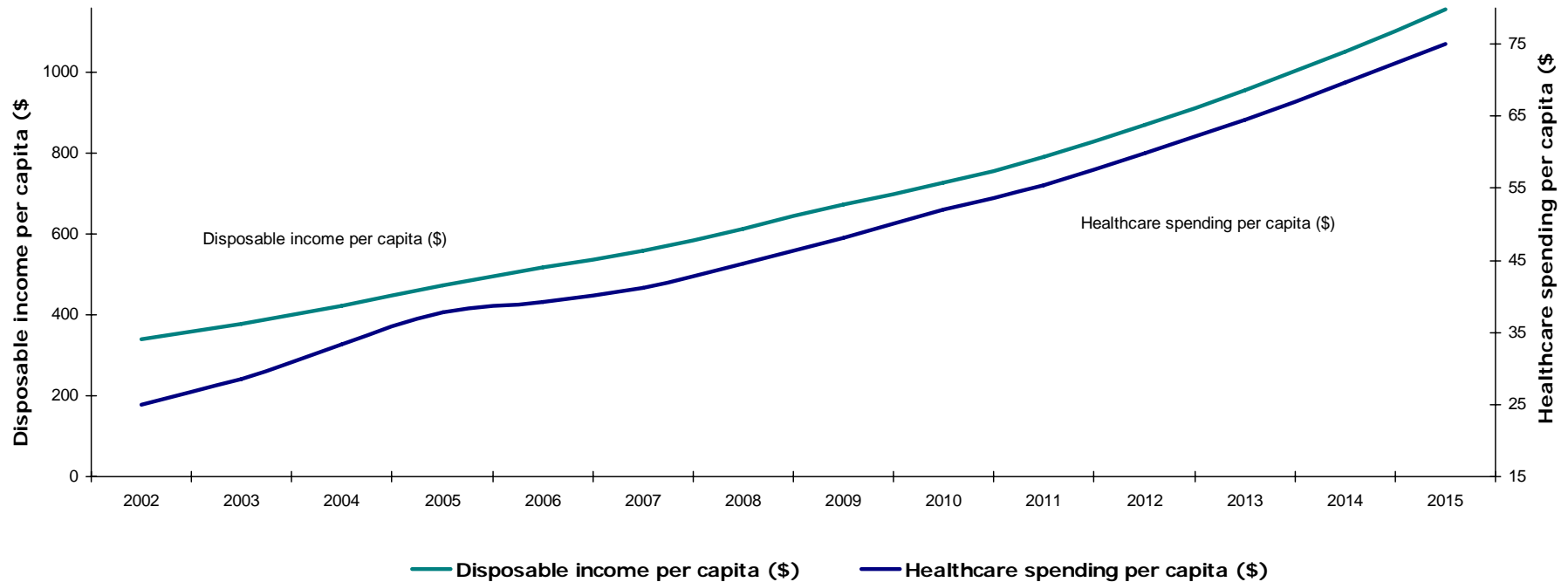
Riding a surge of productivity, the Indian economy is expected continue to grow through 2015 and beyond

India's economic boom will continue



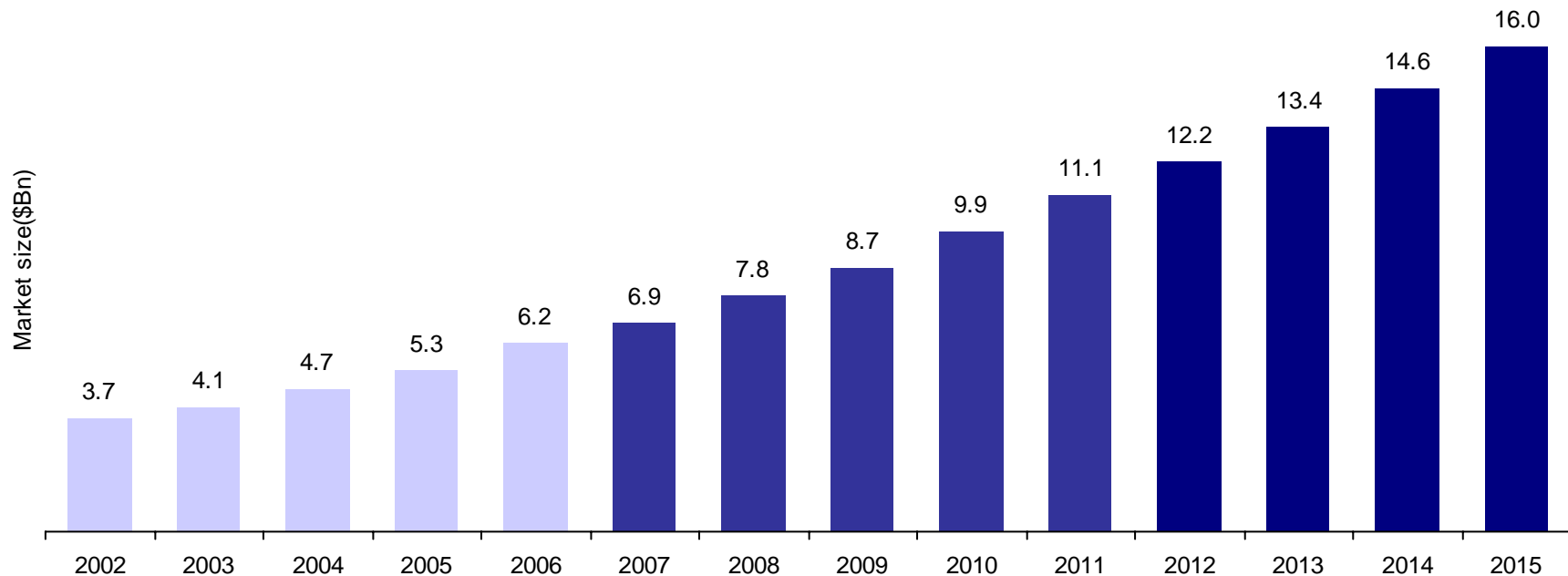
Healthcare spending is tracking the rapid rise in disposable income, but remains well below developed world levels

Strong rise in per capita healthcare spending in India



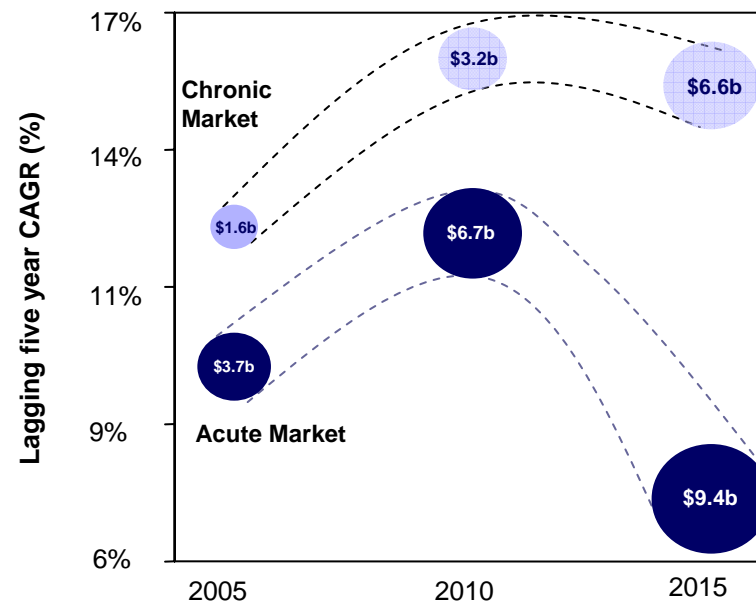
We project the Indian biopharmaceutical market will triple by 2015; however, significant uncertainty remains

Indian Retail Pharmaceutical Market



The historic focus on acute therapies will shift to increased growth in chronic therapies for areas like CVD and CNS; by 2015, the gap between the two will have narrowed

Disease patterns: A surge in Chronic therapies

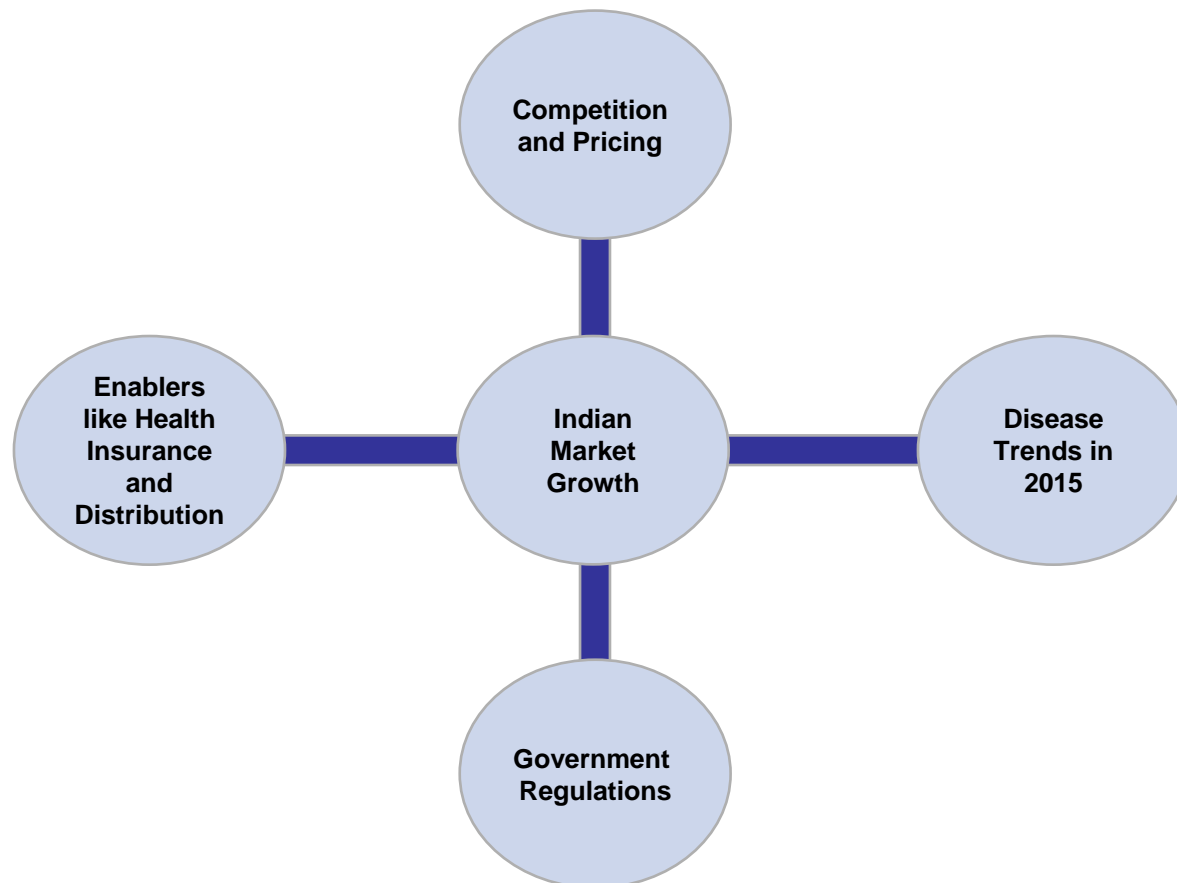


*Size of the bubble represents the size of the market

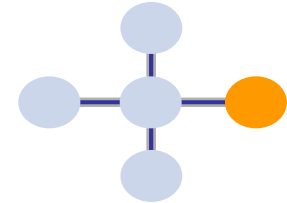
Source: CRIS INFAC, Deloitte Consulting LLP analysis.

Future State Drivers

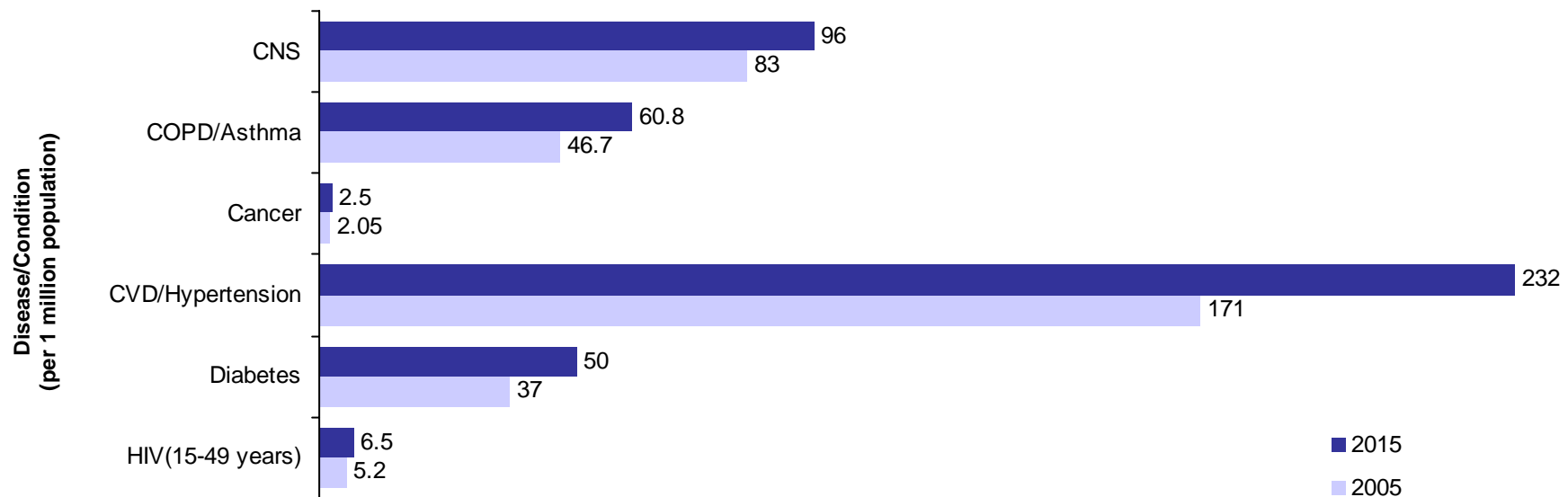
The future of the life sciences market in India is contingent upon a combination of factors that include...



Chronic diseases could drive demand for new drugs coupled with India-specific innovations



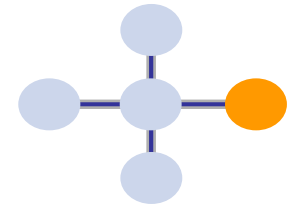
Disease Trends in India (2005 vs. 2015)



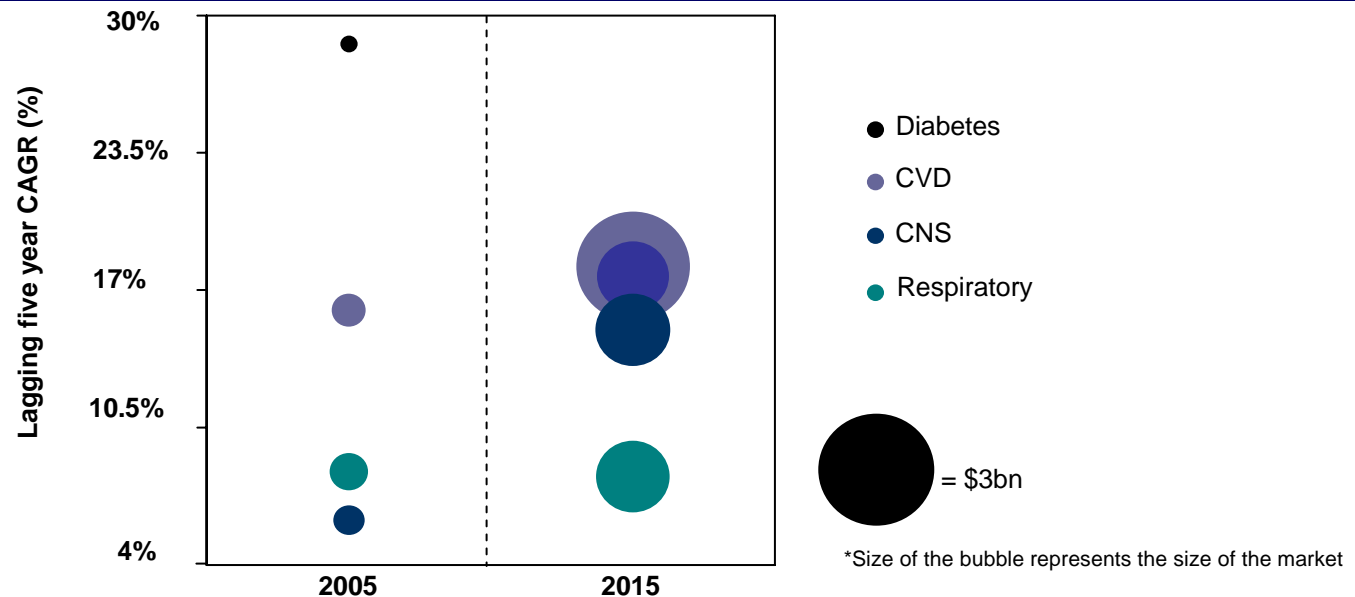
**Strategic
Risk**

Will the demand for acute therapies relegate the need for chronic therapies to the back seat?

Chronic diseases like cardiovascular disease and diabetes could drive demand for new drugs coupled with India-specific innovations



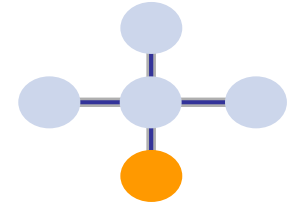
Major growth markets are CVD, CNS & Anti-diabetics



**Strategic
Risk**

Will the demand for acute therapies relegate the need for chronic therapies to the back seat?

Changes in patent laws and other regulations will likely generate India-specific innovations

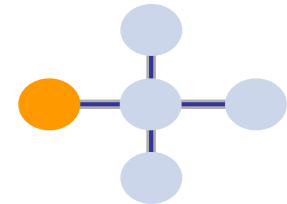


	Before 1970	1970-2005	2005 Onwards
Patent laws	<ul style="list-style-type: none"> Recognized product patents Patent term-20 years 	<ul style="list-style-type: none"> Excluded product patent coverage Limited process patent to 7 years 	<ul style="list-style-type: none"> Recognized product patents Data exclusivity not guaranteed
Pricing and Royalty	<ul style="list-style-type: none"> Royalty rates of around 10-15% No price ceilings 	<ul style="list-style-type: none"> Royalty rates reduced to 4% Price ceilings on most drugs in the market 	<ul style="list-style-type: none"> Royalty of 5% on local sales Reduction in the number of drugs under price ceilings
Regulatory	<ul style="list-style-type: none"> Drug Price Control Order (DPCO) Drugs & Cosmetics Act 	<ul style="list-style-type: none"> Excise duty levy Phase I clinical trials to be conducted in India only when foreign trial data is available 	<ul style="list-style-type: none"> VAT implementation Dual VAT/GST system MRP based levy Concurrent trials possible

**Strategic
Risk**

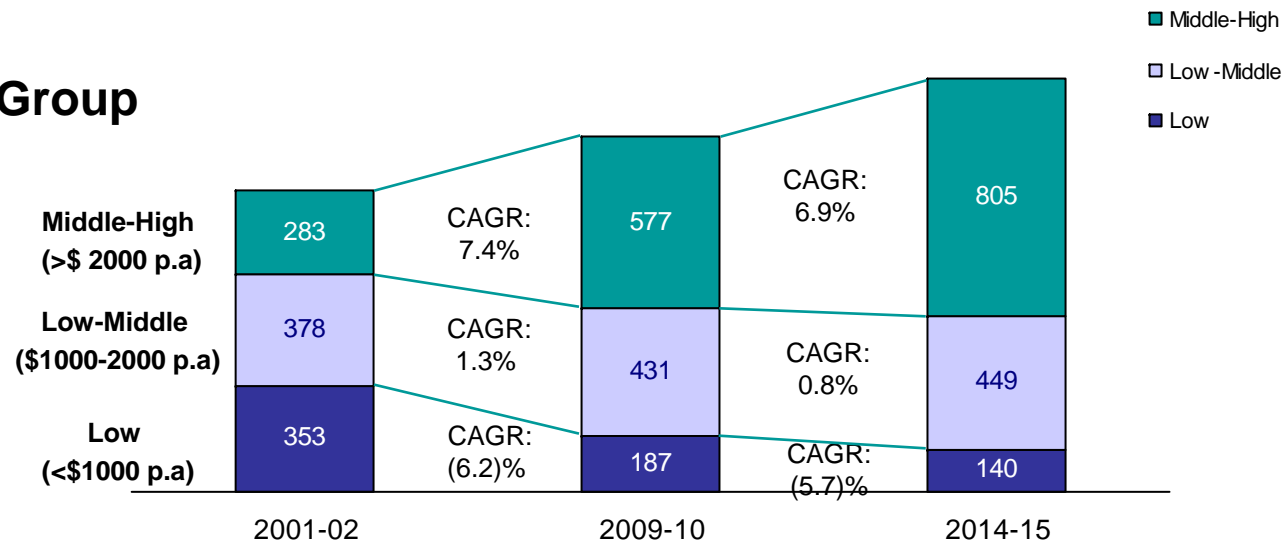
What if the IP / regulatory environment turns sour for MNCs?

Disposable income and the (slow) spread of health insurance will emerge as important demand enablers by increasing affordability



Population (Mn) by Annual Income Level

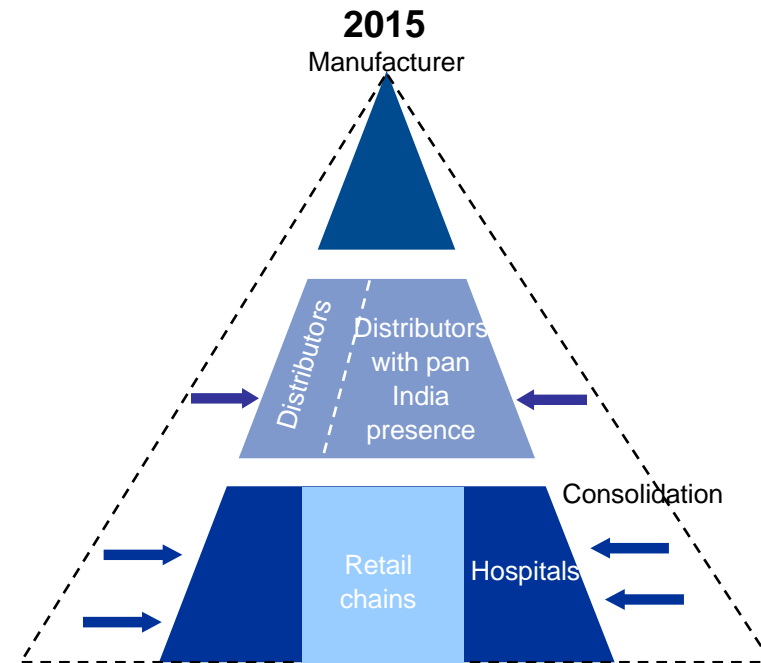
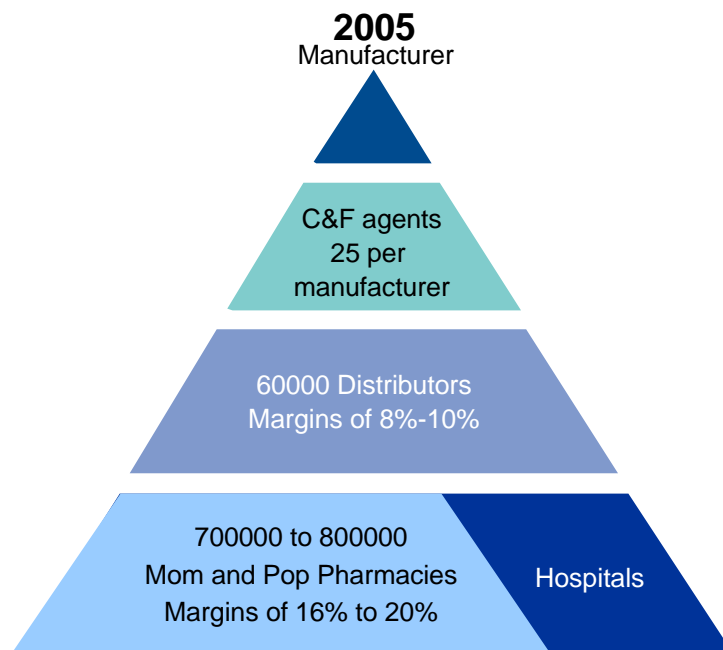
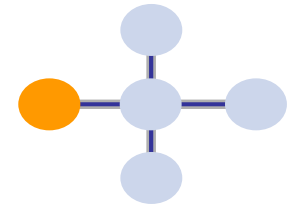
Income Group



**Strategic
Risk**

Will the lack of systems and infrastructure act as a bottleneck in the spread of health insurance?

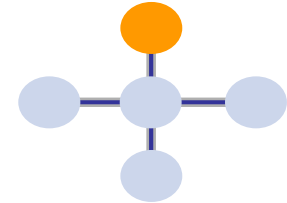
Retail and distribution consolidation could further augment market growth by reducing systemic inefficiencies and increasing reach



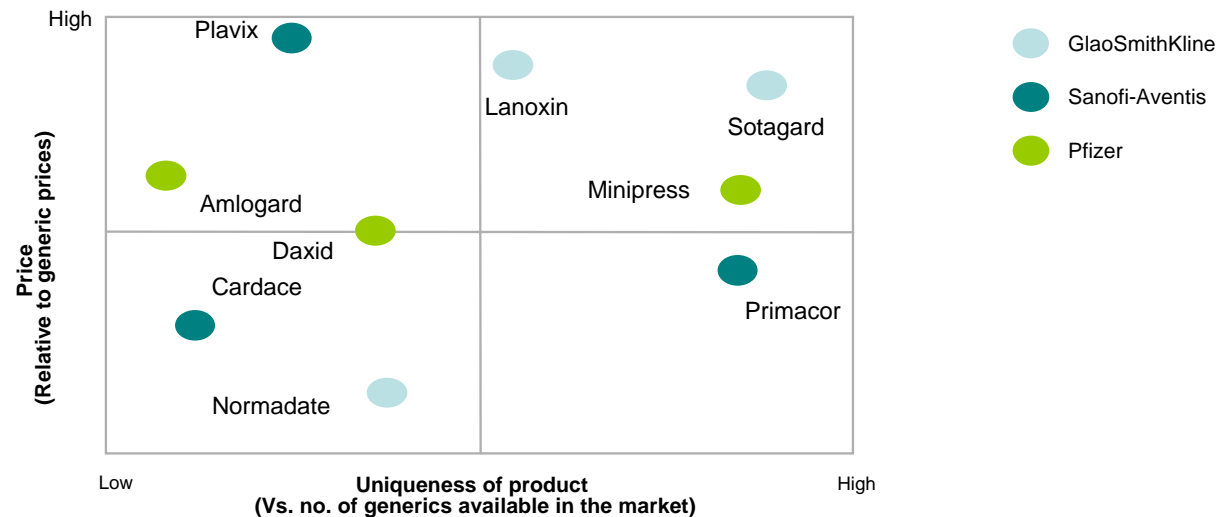
**Strategic
Risk**

Will protectionist policies succeed in restricting the retail consolidation ?

Strong product portfolios need to be accompanied with innovative pricing strategies to enhance market penetration



MNC Pricing strategies in India (CVD and CNS TAs)



**Strategic
Risk**

What if Indian companies match the MNC value proposition at competitive prices?

Summary: Strategic Risks

- Will the demand for acute therapies relegate the need for chronic therapies to the back seat?
 - What if the IP / regulatory environment turns sour for MNCs?
 - Will the lack of systems and infrastructure act as a bottleneck in the spread of health insurance?
 - What if Indian companies match the MNC value proposition at competitive prices?
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