

Hanseatic India Colloquium

Healthcare, biotechnology and pharmaceutical sciences

**Enabling bilateral business activities in healthcare:
the role of the financial sector**

Hamburg, 14 November 2008



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Leistung aus Leidenschaft. **Deutsche Bank**





Agenda

1

Personal perspective in the bilateral context

2

Why a worldwide healthcare franchise?

3

And why is India particularly attractive in this context

4

History, business models and expected changes

5


The enabling role of the financial sector

6

Key risk and success factors

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1. Personal perspective in the bilateral context

Perspective	Implications
 <p>Exclusive life sciences dedication</p> <p>European standpoint</p> <p>Bird's eye view from a banks business perspective</p> <p>Stronger focus on debt than on equity</p>	<p>As part of Deutsche Bank's healthcare franchise, the expert team life sciences is dedicated exclusively to pharmaceuticals and biotechnology in Germany. This implies knowledge of the technology, markets, pharmaceutical and reimbursements regulations, etc</p> <p>Although the EU countries are trying to harmonize regulations, sub-sector aspects and individual country issues may be particularly relevant</p> <p>We interact not only with the companies, but with all types of market participants, and are therefore in a good position to capture early developments in business models, market sentiment, regulatory developments, etc</p> <p>At this point in time we observe a stronger bilateral focus on trade and debt financing requirements, as opposed to M&A, Equity Capital Markets, etc</p>

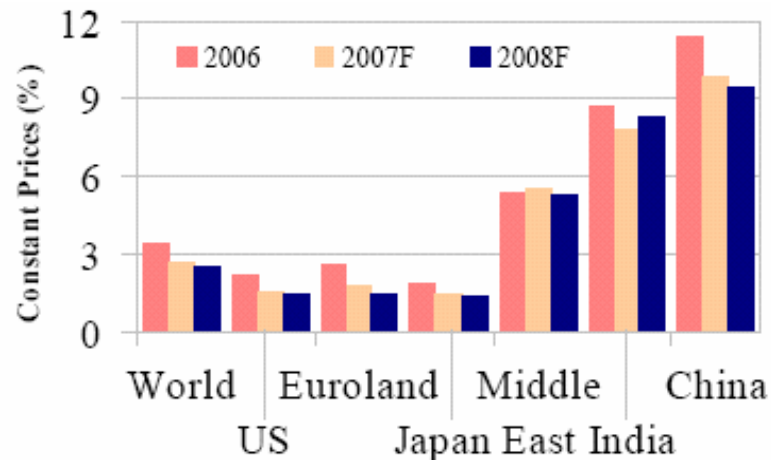
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2. Why a worldwide healthcare franchise?

- Healthcare is an essential sector –also from an economic view:
 - the worldwide industry size amounts to about 10% of global GDP
 - in Germany healthcare expenditures are 10.5% of GDP
 - the world pharmaceutical market amounted to US\$713.2bn in 2007 (BPI)
 - German pharmacy sales reached €22.8bn (+10.6%) in 2007 (mtp, BPI)
- However, to be able to really help clients from a financial sector perspective, it is necessary to have a deep understanding of many industry specific issues and a multidisciplinary approach
- The issues at stake are associated to both technology and economics, to be able to position specific developments in the correct market and regulatory context in front of pharmaceutical companies and both equity investors and debt capital markets

2. However, there are macroeconomic challenges ...

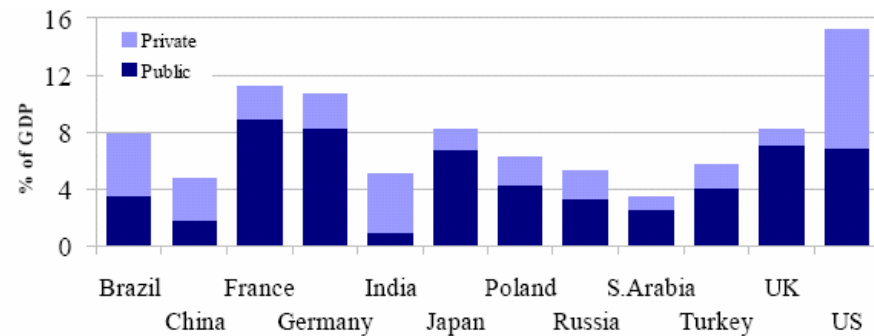
Global GDP Growth is slowing...



Source: Deutsche Bank Research

As well as opportunities...

Health expenditures as % of GDP (2005)



Source: WHO

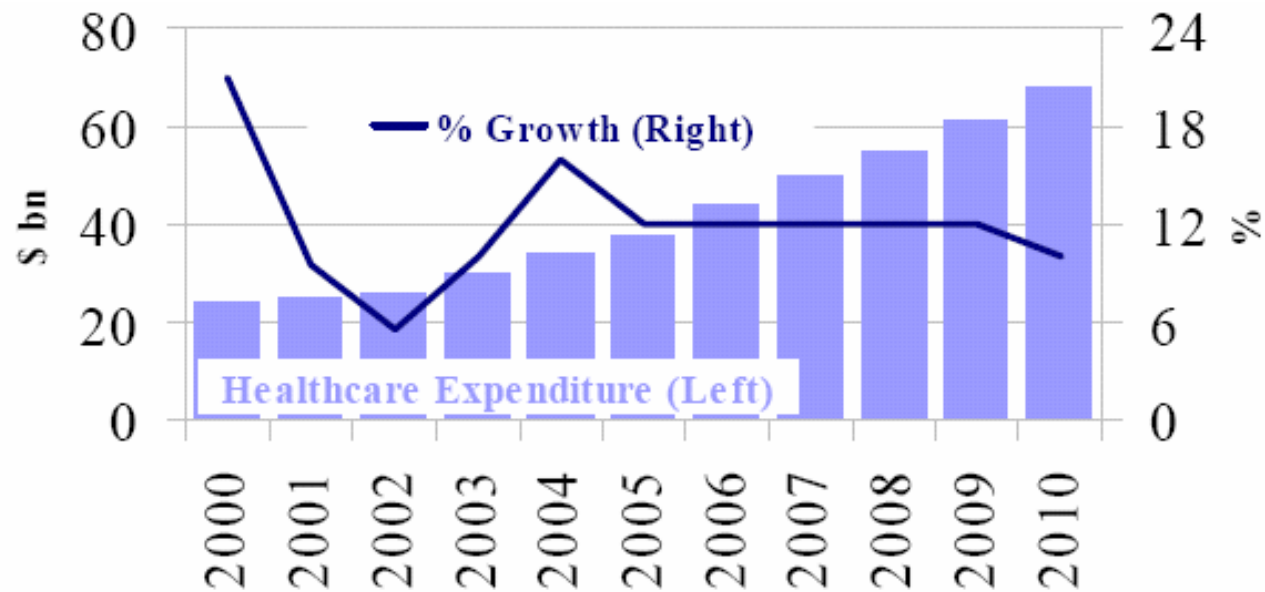
3. Why is India particularly attractive in this context? (1/2)

- India's pharmaceutical market is ranked 13th globally
 - growing at 10% annually
 - its drug exports have been growing at 10% annually
 - with 85 facilities, India has the largest number of US FDA approved drug manufacturing facilities outside of the US
 - Indian firms account for 35% of drug applications submitted to FDA

- India currently spends < 5% of its GDP on healthcare
 - however, new initiatives seek to enable a greater proportion of the population to better access life-saving drugs

3. Why is India particularly attractive in this context? (2/2)

India's healthcare expenditure & growth



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Source: Planning Comm., Govt of India, CS estimates

Dr. Tomas Kahn - 14 November 2008 - 6

4. History, business Models, expected changes in the bilateral pharmaceutical business

- In the past India was perceived as a provider of bulk APIs
- This has completely changed, with Indian companies not only providing finished pharmaceutical products, clinical development services, etc, but also acquiring companies in Germany and worldwide
- OTC products, particularly herbal medicines, were neglected in the past, but are interesting products for European MidCap pharmaceutical companies for several reasons
- In the immediate future, generic growth will have even more impact, due to significant loss of patent protection in the next years
- Due to pricing pressures for generics, eg tenders in Germany, we expect in future co-operations for development and distribution of innovative new medicines in both Europe and Asia
- This will be significant challenge for many reasons, eg technical, IP, regulatory and developmental hurdles. However, finding the optimal partner and financing the different steps may pose the most demanding part of the whole process

5. The enabling role of the financial sector:

What should a financial partner have in place to be able to help?

- First of all, to show a sustainable presence in both India and Germany – and in all relevant regions worldwide
- Deep knowledge and experience in the healthcare sector, dedicated industry groups
- Provide the broadest possible spectrum in financial services, starting with local relationship management to coordinate all activities including
 - Transaction Banking (account management, cash management, trade finance, etc)
 - Investment Banking (for M&A and capital markets transactions)
 - Global Markets services (like foreign exchange, interest rate hedging, debt instruments, etc, as well as equity research)
 - Private Banking solutions

As an example

Deutsche Bank provides equity research coverage for 72 companies in India, among them 7 Pharma/Biotech companies: Biocon, Cipla, Lupin, Dr. Reddy's Labs, Ranbaxy, Sun Pharma, Wockhard

6. Key success and risk factors - for the business, partnering and the interaction with the financial sector

■ Key success factors

- product and geographical diversification
- carefully defined niche strategy and partner selection
- excellence in R&D and life cycle management
- branding - ability to promote and deliver 'value for money'
- keep the balance between cost containment and talent management
- sound financial profile, investor base and bank partners

■ Key risk factors

- product withdrawals and related litigation claims
- complex and dynamic regulatory environment
- payor concentration, reimbursement issues, rebate contracts, etc
- patent challenges and brand devaluation



7. Backup: Selected Deutsche Bank healthcare credentials

Health care M&A practice

Health care debt transactions

Health care equity financings

7. Backup: Healthcare M&A practice

EMEA

<p>Adcock Ingram Adcock Ingram EUR525 million Spin-off listing of Adcock on the Johannesburg Stock Exchange and unlisting from Tiger Brands Sole financial adviser and sponsor August 2008</p>	<p>Shire Shire EUR349 million Acquisition of Jentiv AG Sole Financial Adviser July 2008</p>
<p>Abraaj Capital USD696 million Acquisition of 58% in Academ Eagle Buy-side Adviser August 2007</p>	<p>HCA HCA Inc. CHF474 million Sale of HCA Switzerland to Colony Capital Sole Financial Adviser July 2007</p>
<p>Novator EUR5.3 billion Acquisition of Actavis Group Irl Financial Adviser July 2007</p>	<p>Apax Partners Mölnlycke Health Care AB EUR2.9 billion Sale of Mölnlycke Health Care Group to Investor AB and MRFI by Apax Sole Adviser to Apax Partners March 2007</p>
<p>UCB SA EUR4.4 billion Acquisition of Schering Pharma AG Financial Co-Adviser January 2007</p>	<p>ALTANA Altana AG EUR4.5 billion Sale of Pharma division to Nycomed Financial Adviser December 2006</p>
<p>Capio Capio AB EUR2.7 billion Acquisition of Capio by Apax Partners and Nordic Capital Financial Adviser November 2006</p>	<p>AstraZeneca AstraZeneca Plc GBP560 million Acquisition of the remaining 41% stake not already owned in Cambridge Antibody Technology Corporate Broker August 2006</p>

Cross-border

<p>Otsuka Otsuka Pharmaceutical Group Undisclosed Acquisition of Intergene Pharma Financial Adviser August 2008</p>	<p>Fresenius AG USD4.6 billion Acquisition of APP Pharmaceuticals Sole Financial Adviser/Global Financing Coordinator July 2008</p>
<p>MISYS Mitsui Healthcare Systems USD330 million Merger of Mitsui Pharma Healthcare division and Abbotts Inc. Joint Financial Adviser and Joint Corporate Broker March 2008</p>	<p>PHILIPS Royal Philips Electronics USD4.9 million Acquisition of Resonance Inc. Lead Financial Adviser March 2008</p>
<p>BRADLEY PHARMACEUTICALS Bradley Pharmaceuticals Inc. USD346 million Merger with Nycomed Adviser to Special Committee February 2008</p>	<p>Alcon Alcon Inc. EUR130 million Acquisition of Visionlight AG Financial Adviser November 2007</p>
<p>eppendorf Eppendorf AG USD119 million Acquisition of New Brunswick Scientific Co Inc. Financial Adviser July 2007</p>	<p>AstraZeneca AstraZeneca PLC USD15 million Bridge Credit Facilities financing the acquisition of Medimmune Inc. Lead Arranger/Borrower April 2007</p>
<p>PLIVA Pliva Inc. USD2.5 billion Sale to Becton Dickinson Sole Financial Adviser October 2006</p>	<p>Fresenius Medical Care Fresenius Medical Care AG USD3.0 billion Acquisition of Renal Care Group, Inc. Sole Financial Adviser March 2006</p>

US

<p>Lilly Eli Lilly & Co. USD6.5 billion Acquisition of HClOne Systems Financial Adviser Pending August 2008</p>	<p>Apax Partners USD1.4 billion Take private of Thiberto Group Inc by Apax Partners Sole Adviser August 2008</p>
<p>CVS Caremark CVS Caremark Corporation USD2.5 billion Acquisition of Longsight Stores Corporation Joint Financial Adviser August 2008</p>	<p>Bentley Bentley Pharmaceuticals Inc. USD360 million Sale to Teva Pharmaceuticals Sole Financial Adviser July 2008</p>
<p>One Equity Partners One Equity Partners USD575 million Sale of Oncology Therapeutics Network to McKesson Corp. Joint Financial Adviser October 2007</p>	<p>POLYMEDICA CORPORATION PolyMedica Corporation USD1.5 billion Sale of PolyMedica to Medco Health Solutions Sole Financial Adviser August 2007</p>
<p>AmersourceBergan AmersourceBergan Corp. Undisclosed Tax-free spin off of Pharmacia LTO and merger with Kinasee Pharmacy Services Financial Adviser July 2007</p>	<p>COHESIVE TECHNOLOGIES Cohesive Technologies Undisclosed Sale to ThermoFisher Financial Adviser December 2006</p>
<p>STIEFEL Stiefel Laboratories Inc. USD700 million Acquisition of Connetics Corporation Sole Financial Adviser December 2006</p>	<p>HEALTHCARE REIT Health Care REIT Inc. USD877 million Acquisition of Winstone Medical Properties Trust Sole Financial Adviser December 2006</p>

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7. Backup: Healthcare Debt Financings

Bonds and notes offering

<p>FRESENIUS</p> <p>Fresenius SE</p> <p>Terms not disclosed Debt financing</p> <p>Lead Arranger Lead Bookrunner</p> <p>Pending</p>	<p>Johnson & Johnson</p> <p>USD1,598 million Investment grade bond</p> <p>Bookrunner</p> <p>June 2008</p>	<p>AstraZeneca</p> <p>EUR499 million Investment Grade Bond</p> <p>Bookrunner</p> <p>June 2008</p>	<p>GlaxoSmithKline</p> <p>USD9 billion Investment Grade Bond</p> <p>Co-Manager</p> <p>May 2008</p>	<p>Sanofi-Aventis</p> <p>EUR270 million 4.983% bonds due May 2013</p> <p>Joint Bookrunner</p> <p>May 2008</p>	<p>UnitedHealth Group</p> <p>USD3 billion Senior notes offering</p> <p>Co-Manager</p> <p>February 2008</p>	<p>GlaxoSmithKline</p> <p>EUR3.5 billion Bond issue</p> <p>Bookrunner</p> <p>December 2007</p>
<p>Aetna</p> <p>USD700 million Senior Notes Offering</p> <p>Co-Manager</p> <p>November 2007</p>	<p>UnitedHealth Group</p> <p>USD1.6 billion Senior Notes Offering</p> <p>Joint Bookrunner</p> <p>November 2007</p>	<p>COVIDIEN</p> <p>USD2.75 billion 4-Tranche inaugural debt transaction</p> <p>Bookrunner</p> <p>October 2007</p>	<p>AstraZeneca</p> <p>EUR5 billion Bond issue</p> <p>Joint Book-Running Manager</p> <p>September 2007</p>	<p>Johnson & Johnson</p> <p>USD2,600 million Senior Notes Offering</p> <p>Joint Bookrunner</p> <p>August 2007</p>	<p>CardinalHealth</p> <p>USD2,275 million 1,410 million senior term loan 865 million subordinated notes</p> <p>Joint Bookrunner</p> <p>March 2007</p>	<p>Eli Lilly & Co</p> <p>USD2.5 billion Senior Notes Offering</p> <p>Joint Bookrunner</p> <p>March 2007</p>

Credit facilities

<p>Eli Lilly & Co</p> <p>USD4.0 billion Bridge financing for the acquisition of InClone Systems</p> <p>Joint Lead Arranger</p> <p>Pending</p>	<p>CVS Caremark Corporation</p> <p>USD1.5 billion Bridge facility to support acquisition of Longs Drugs Stores Corporation</p> <p>Joint Bookrunner and Joint Lead Arranger</p> <p>August 2008</p>	<p>Primary Health Care</p> <p>AUD2.3 billion Senior Secured Facilities</p> <p>Lead Arranger, Underwriter and Bookrunner</p> <p>February 2008</p>	<p>Leveraged spin-off of APP</p> <p>USD1.15 billion Senior Secured Credit Facilities</p> <p>Joint Lead Arranger/Bookrunner/ Administrative Agent</p> <p>November 2007</p>	<p>Alliance Boots</p> <p>GBP8,270 million Senior Secured Credit Facilities SEP750 million Subordinated Facilities Financing the LBO of Alliance Boots by KKR and Stefano Pessano</p> <p>Joint Mandated Lead Arranger/Joint Bookrunner</p> <p>July 2007</p>	<p>Novator</p> <p>EUR3.6 billion Credit facilities financing the acquisition of Actavis Group hf</p> <p>Mandated Lead Arranger and Sole Bookrunner</p> <p>July 2007</p>	<p>AstraZeneca Pic</p> <p>USD15 billion Bridge Credit Facilities Financing the acquisition of MedImmune Inc</p> <p>Lead Arranger/Bookrunner</p> <p>April 2007</p>
<p>Graceway Pharmaceuticals</p> <p>USD875 million Senior Secured Credit Facility for the acquisition of 3M Pharmaceutical Division</p> <p>Co-Arranger</p> <p>January 2007</p>	<p>Stiefel Laboratories Inc</p> <p>USD848 million Senior Secured Credit Facilities</p> <p>Sole Bookrunner</p> <p>January 2007</p>	<p>HCA Inc</p> <p>USD16.8 billion Senior Secured Credit Facilities</p> <p>Joint Bookrunner</p> <p>November 2006</p>	<p>Apax Partners</p> <p>Undisclosed Senior Credit Facilities Recap financing of Mölnlycke Health Care Group</p> <p>Joint Finance Arranger</p> <p>May 2006</p>	<p>Fresenius Medical Care AG</p> <p>USD5.0 billion Senior Credit Facilities financing the acquisition of Renal Care Group Inc</p> <p>Joint Lead Arranger/Joint Bookrunner</p> <p>March 2006</p>	<p>HealthSouth Corp</p> <p>USD2.6 billion Senior Secured Credit Facilities</p> <p>Co-Manager</p> <p>March 2006</p>	<p>Apax Partners</p> <p>EUR1,030 / EUR180 million Senior Credit Facilities / Mezzanine Credit Facility Financing the acquisition of Mölnlycke Health Care AB</p> <p>Financial Adviser and Joint Lead Finance Arranger</p> <p>June 2005</p>

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7. Deutsche Bank Healthcare Equity Transactions

	IPOs	Follow-on offerings	Convertibles	
US	<p>MedAssets MedAssets USD245 million Initial Public Offering Senior Co-Manager December 2007</p>	<p>GOLDEN POND HEALTHCARE Golden Pond Healthcare Inc USD135 million Initial Public Offering Sole Bookrunner November 2007</p>	<p>HEALTHCARE REIT Health Care REIT Inc USD336 million 1-day marketed follow-on offering Lead Bookrunner September 2008</p>	<p>ACORDA THERAPEUTICS Acorda Therapeutics Inc USD131 million Block trade offering Sole Bookrunner August 2008</p>
	<p>MAP PHARMACEUTICALS Map Pharmaceuticals USD69 million Initial Public Offering Co-Lead Manager October 2007</p>	<p>MASIMO Masimo USD233 million Initial Public Offering Joint Bookrunner August 2007</p>	<p>IPC - THE HOSPITALIST COMPANY IPC - The Hospitalist Company USD65 million Follow-On Offering Co-Manager July 2008</p>	<p>ACORDA THERAPEUTICS Acorda Therapeutics Inc USD82 million Follow-On Offering Joint Bookrunner February 2008</p>
	<p>CADENCE PHARMACEUTICALS Cadence Pharmaceuticals Inc USD54 million Initial Public Offering Co-Lead Manager October 2006</p>	<p>WARNER CHILCOTT Warner Chilcott Plc USD1.1 billion Initial Public Offering Co-Manager September 2006</p>	<p>DYAX Dyax USD50 million Follow-On Offering Co-Manager July 2007</p>	<p>AMAG PHARMACEUTICALS AMAG Pharmaceuticals Inc USD163 million Follow-On Offering Co-Manager May 2007</p>
	<p>ENDO PHARMACEUTICALS Endo Pharmaceuticals Inc USD379.5 million Convertible Senior Subordinated Notes Sole Bookrunner April 2008</p>	<p>LINCARE Lincore Holdings Inc USD500 million Convertible Senior Subordinated Offering Joint Bookrunner October 2007</p>	<p>INTEGRA LIFESCIENCES Integra Lifesciences USD330 million Convertible Notes Offering Joint Bookrunner June 2007</p>	<p>LIFEPOINT HOSPITALS LifePoint Hospitals USD500 million Convertible Senior Subordinated Notes Co-Manager May 2007</p>
	<p>EURAND EURand NV USD112 million Initial Public Offering Joint Bookrunner May 2007</p>	<p>SANTHERA Santhera Pharmaceuticals AG CHF89 million Initial Public Offering Sole Global Co-ordinator and Sole Bookrunner November 2006</p>	<p>FRESENIUS Fresenius SE EUR289 million Accelerated bookbuild Joint Bookrunner August 2008</p>	<p>ALAPIS Alapis Holding SA EUR817 million Rights issue Joint Global Co-ordinator and Joint Bookrunner July 2007</p>
	<p>JERINI Jerini AG EUR50 million Initial Public Offering Joint Bookrunner November 2005</p>	<p>ARPIDA Arpida Inc CHF97 million Initial Public Offering Sole Bookrunner May 2005</p>	<p>MERCK Merck KGaA EUR2.1 billion Follow-On Offering Joint Global Co-ordinator and Joint Bookrunner February 2007</p>	<p>BBBIOTECH BB Biotech AG CHF196 million Mandatory exchangeable Bonds Sole Bookrunner and Lead Manager May 2007</p>
Europe	<p>BBMEDTECH BB Medtech AG CHF105 million Mandatory exchangeable Bonds Sole Bookrunner and Lead Manager May 2007</p>	<p>SHIRE Shire Plc USD899 million Follow-On Offering Joint Bookrunner February 2007</p>	<p>SHIRE Shire USD1,000 million Convertible Bond Offering Co-Lead Manager May 2007</p>	

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