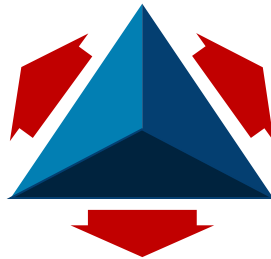


Strategic vision of Pharma Market

Evolution 2012 - 2016



– ACIP Presentation, Paris –

January 30, 2013

 **Smart Pharma Consulting**

Introduction

This presentation draws strategic orientations for pharma companies considering the expected trends in the market environment over the period 2012 - 2016

Content

Key point # 1: Why will drug price pressure increase?

Key point # 2: What is really changing in the pharma business model?

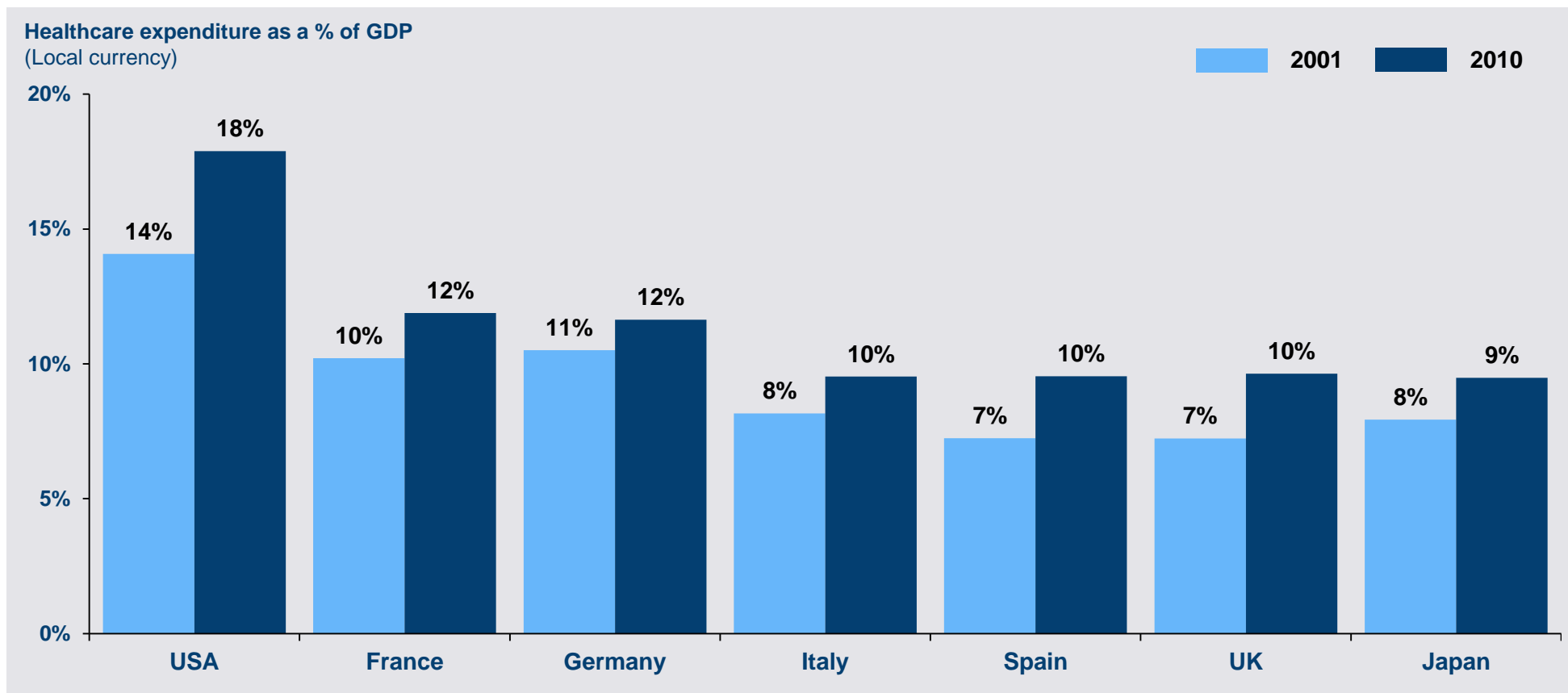
Key point # 3: What strategies pharma companies should adopt?

Key point # 1

Why will drug price pressure increase?

Despite series of cost containment measures implemented by governments, the weight of healthcare expenditure in developed countries has increased between 2001 and 2010

Healthcare expenditure as a percentage of GDP¹



Source: WHO Global Health Expenditure Database – EUROSTAT: general government expenditure by function (2010 data) – US Government Spending Details (2010 data) – Japan Statistical Yearbook 2012 (2010 data) – Smart Pharma Consulting analyses

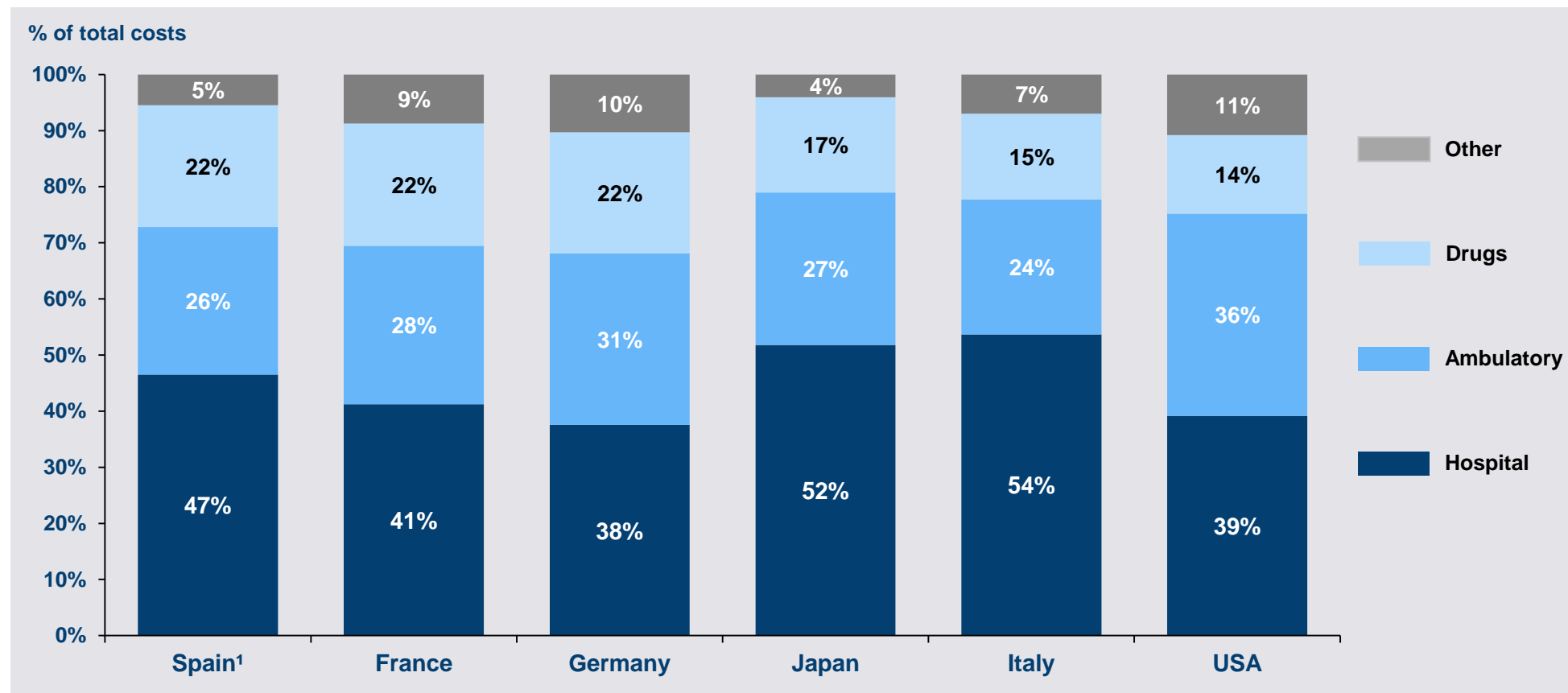
¹ Gross Domestic Product

Key point # 1

Why will drug price pressure increase?

Expenditure for drugs is far behind that for hospital and ambulatory care, but it is targeted by governments because it is easier and quicker to contain

Breakdown of healthcare expenditure (2010)

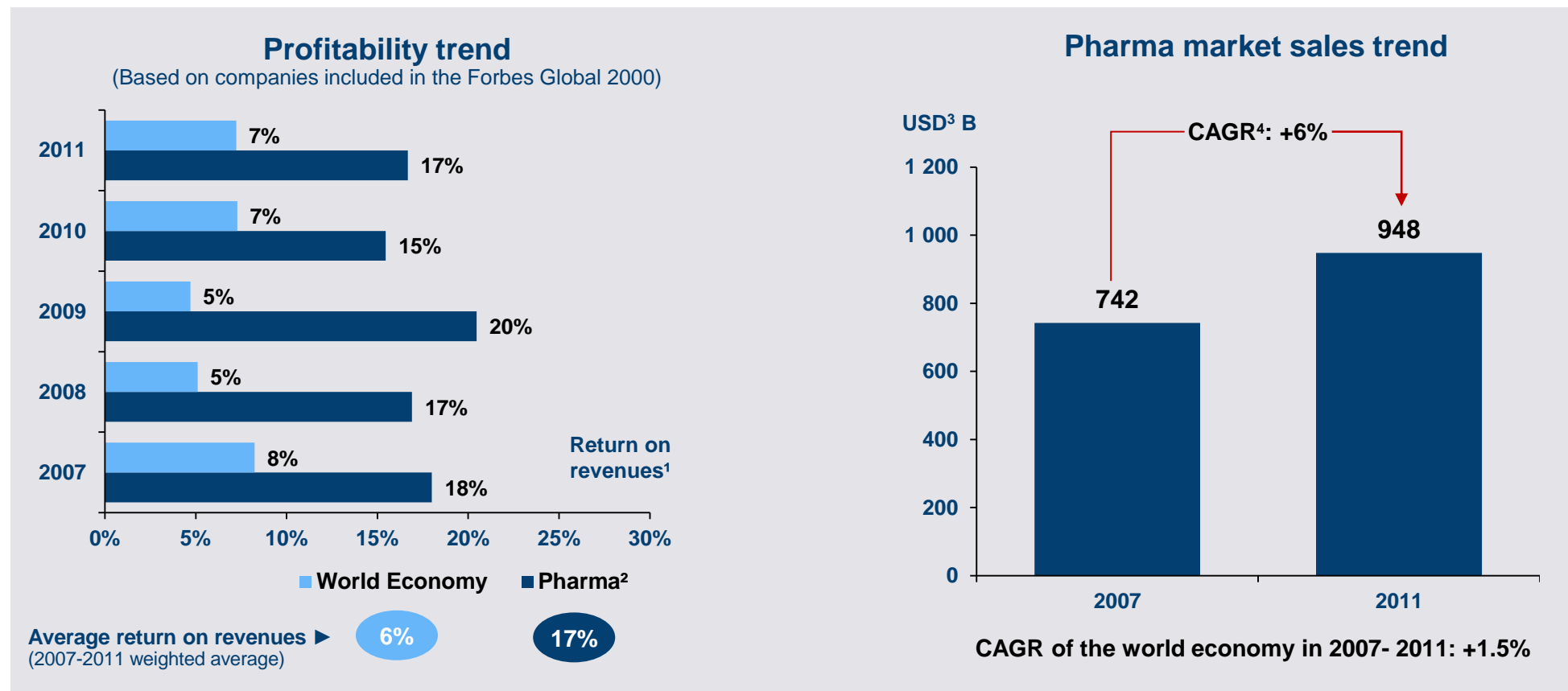


Key point # 1

Why will drug price pressure increase?

Considering the high profitability and growth rates exhibited by pharma companies, health authorities and payers do not hesitate to pressurize drug prices

Global pharmaceutical market attractiveness (2007-2011)



Source: IMS Medicines Outlook Through 2016 (July 2012) – Nicholas Hall's OTC Yearbook 2012 – Forbes: The Global 2000 (2012) – Annual reports 2011 – Smart Pharma Consulting analyses

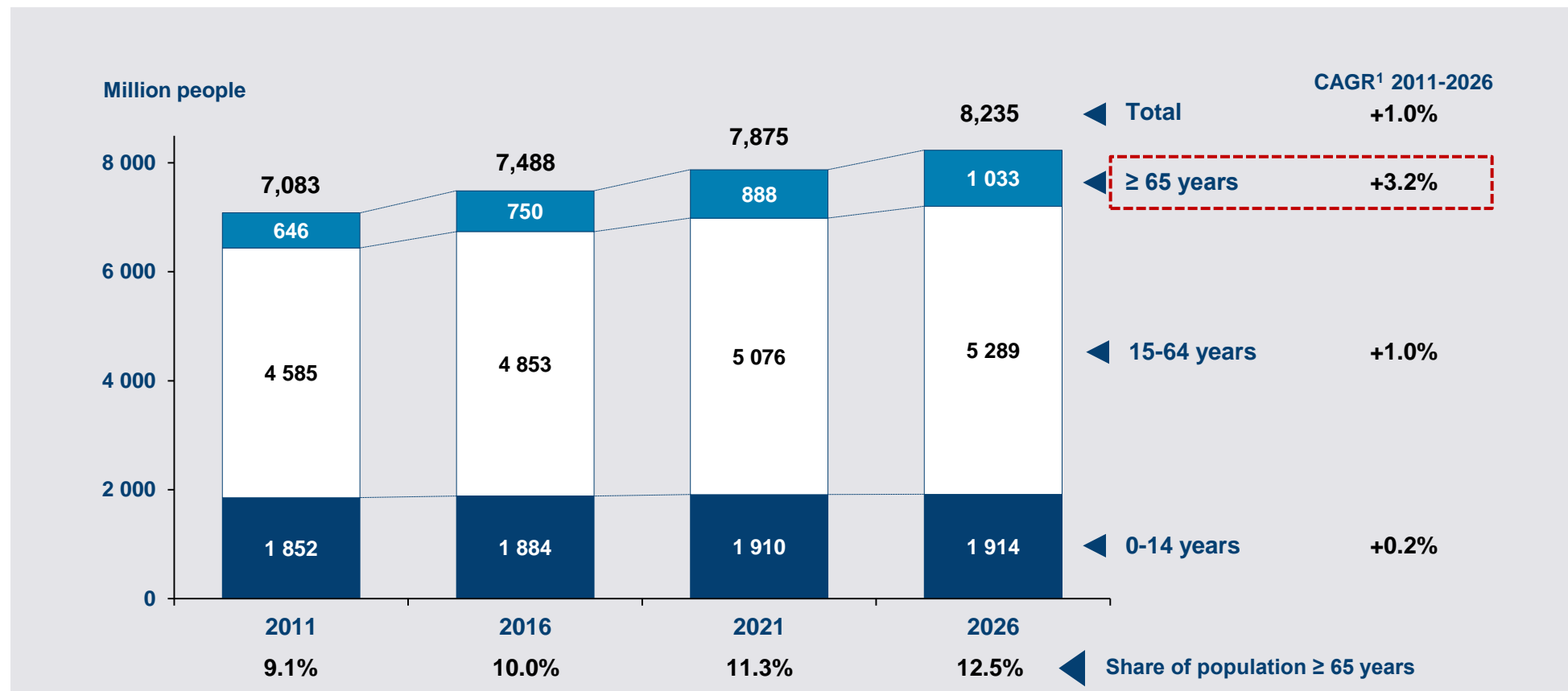
¹ Return on revenues = Net Profit / Total Revenues – ² Including biotech and J&J, Fresenius, Baxter, which are accounted in the medical equipment and other supplies industry and excluding companies whose business is mainly focused on distribution – ³ Constant US dollar (2011) – ⁴ Compound annual growth rate

Key point # 1

Why will drug price pressure increase?

Due to the steady rise of the global population and the increasing share of the elderly, long term healthcare costs will grow faster than national economies will

World population increase and ageing (2011-2026)



Source: UN World Population Database (2010 revision) – Smart Pharma Consulting analyses

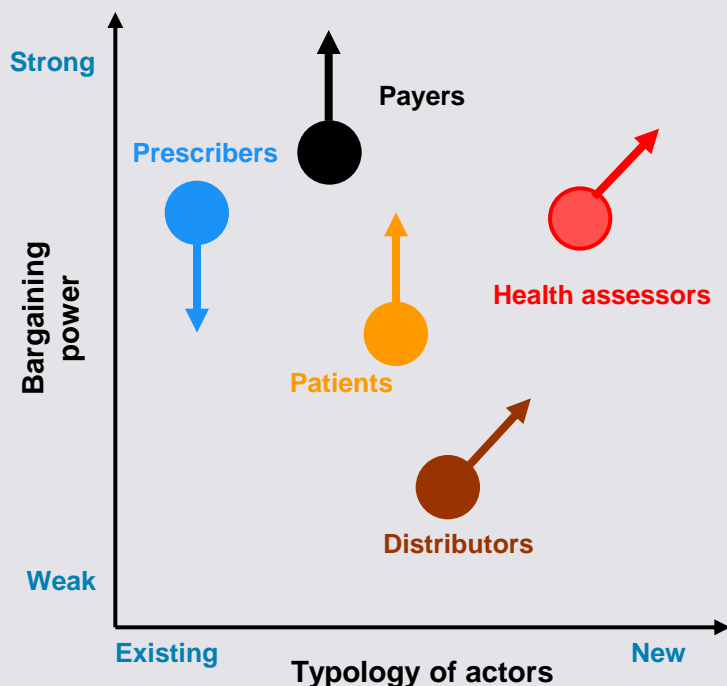
¹ Compound annual growth rate

Key point # 2

What is really changing in the pharma business model?

Payers have no choice but to apply tighter drug price controls and limit access to non cost-effective drugs, using more robust and relevant medico-economic methods

Redistribution of bargaining power



- Increasing control of physician prescriptions, such as:
 - Mandatory % of generics prescriptions within generics/off-patent drugs directories (e.g. France, Germany, UK)

- Increasing role of payers in controlling costs:
 - Cost penalties for companies if products are not efficacious (e.g. Velcade in the UK, Nexavar in Italy)
 - Direct negotiation of rebates with health insurance companies (e.g. Germany)

- Requirements regarding access to medical information
- New physician-patient relationships

- Vertical integration of the distribution channel (pre-wholesalers and wholesalers, agents, VTOs¹, pharmacists)

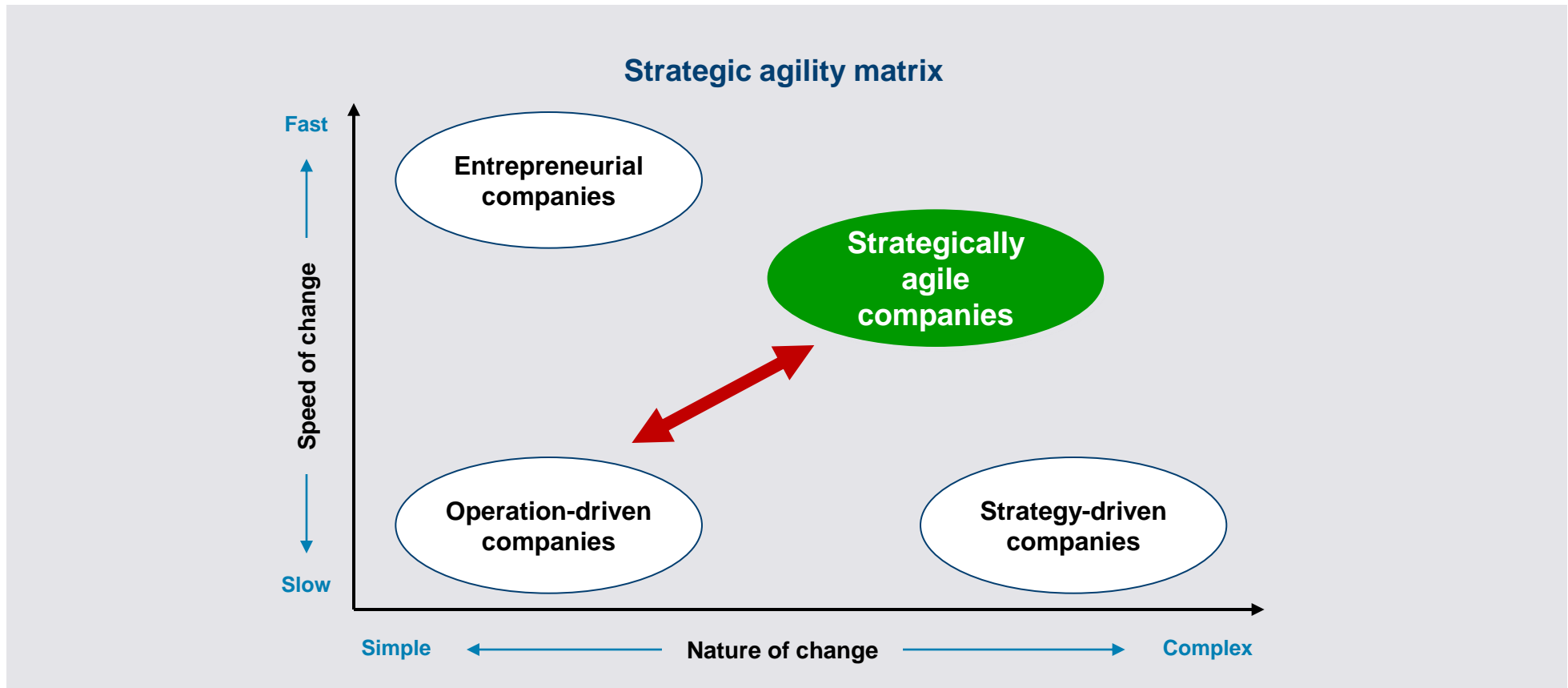
- Medico-economic analyses of new compounds by specialized authoritative bodies (IQWiG² in Germany, NICE³ in the UK, HAS⁴ in France) using new data such as RWE⁵ data

Key point # 3

What strategies pharma companies should adopt?

To optimize their performance, pharma companies operating in complex and fast-changing markets need to become strategically more agile

The efficiency challenge of pharmaceutical companies



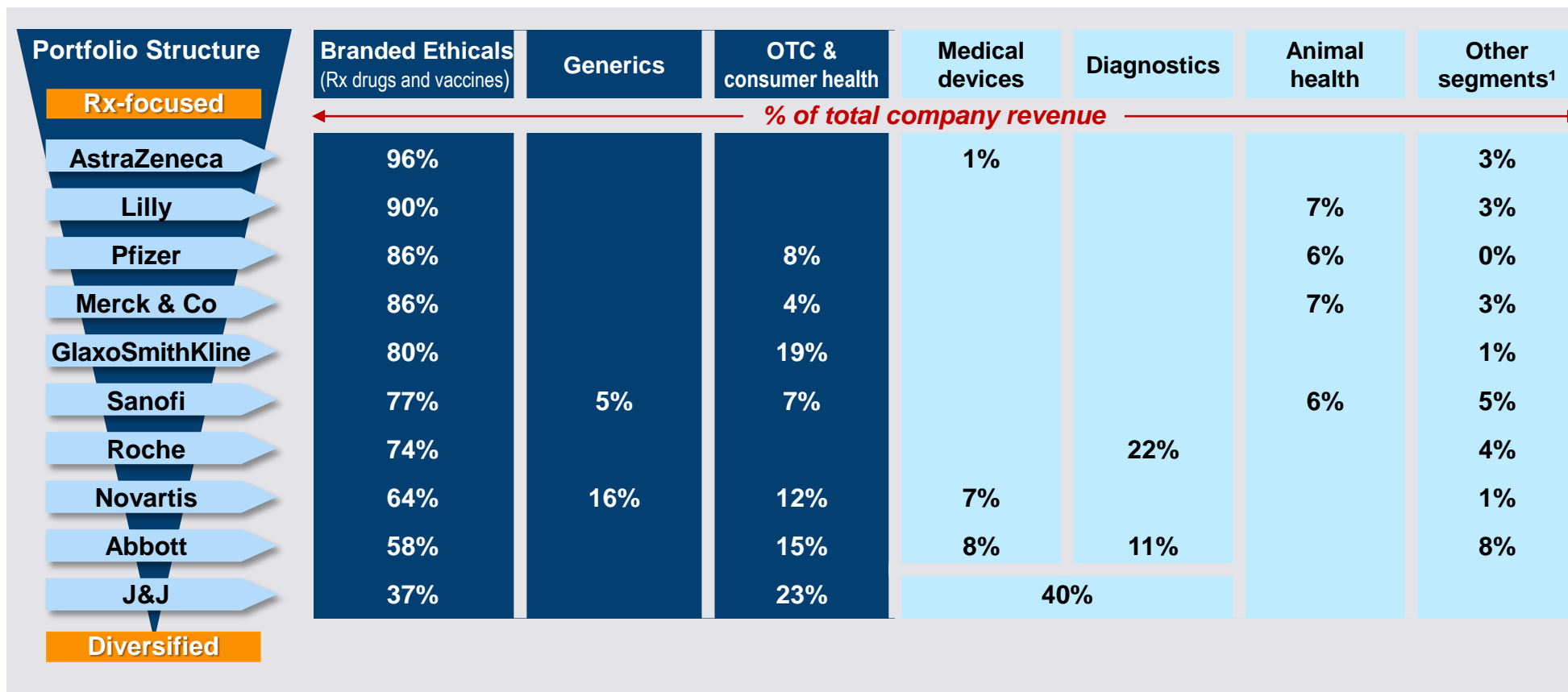
Source: Adapted from Y. Doz & M. Kosonen – Smart Pharma Consulting analyses

Key point # 3

What strategies pharma companies should adopt?

Pharma companies may adopt opposed portfolio strategies: diversification across several healthcare segments or concentration on innovative Rx-driven segments

Business structure of the leading pharmaceutical companies (2011)



Source: Annual reports 2011 – Evaluate Pharma World Preview 2018 (June 2012) – Smart Pharma Consulting analyses

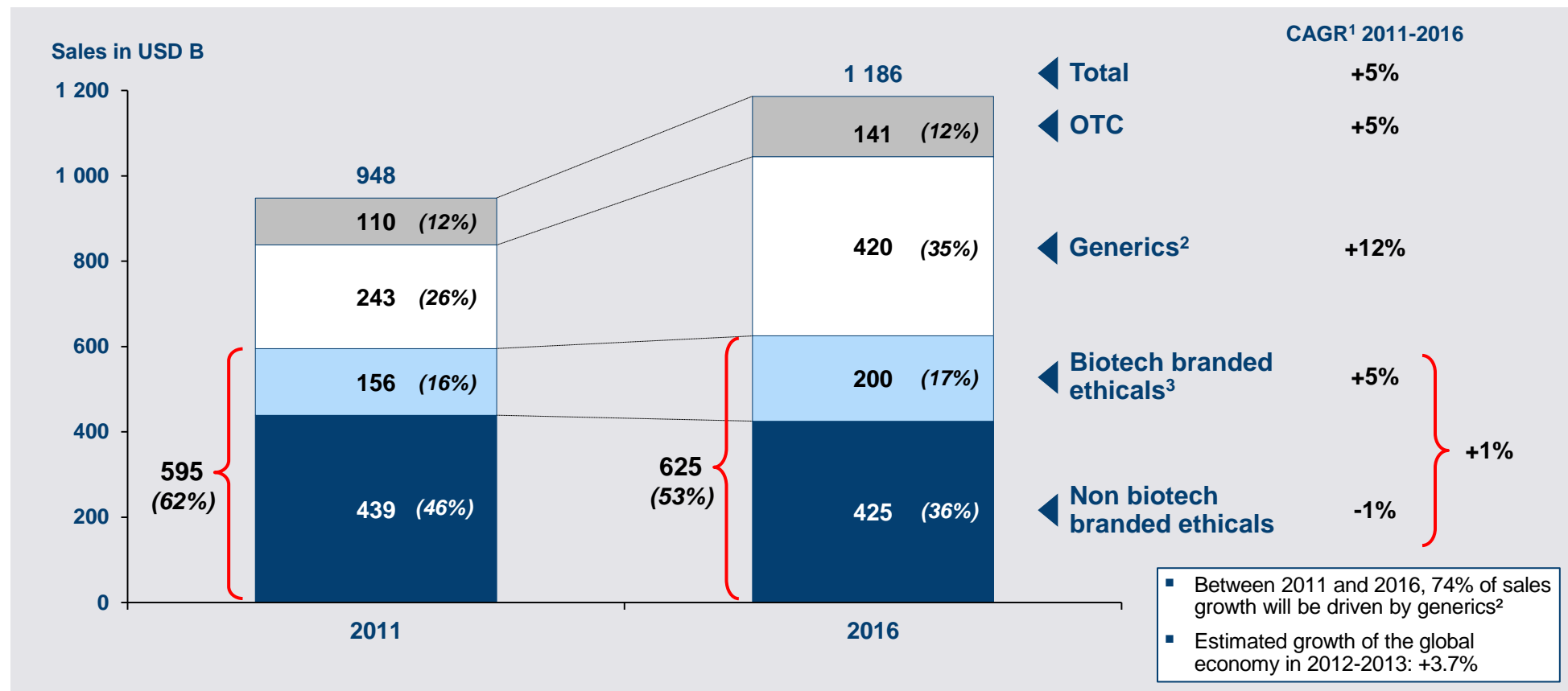
¹ Includes royalties, alliance revenues, unclassified sales, contract manufacturing, etc.

Key point # 3

What strategies pharma companies should adopt?

Branded ethicals will remain the main segment, but the share of generics will increase due to major patent expiries and growth of branded generics in emerging markets

Growth by key strategic segment (2011-2016)

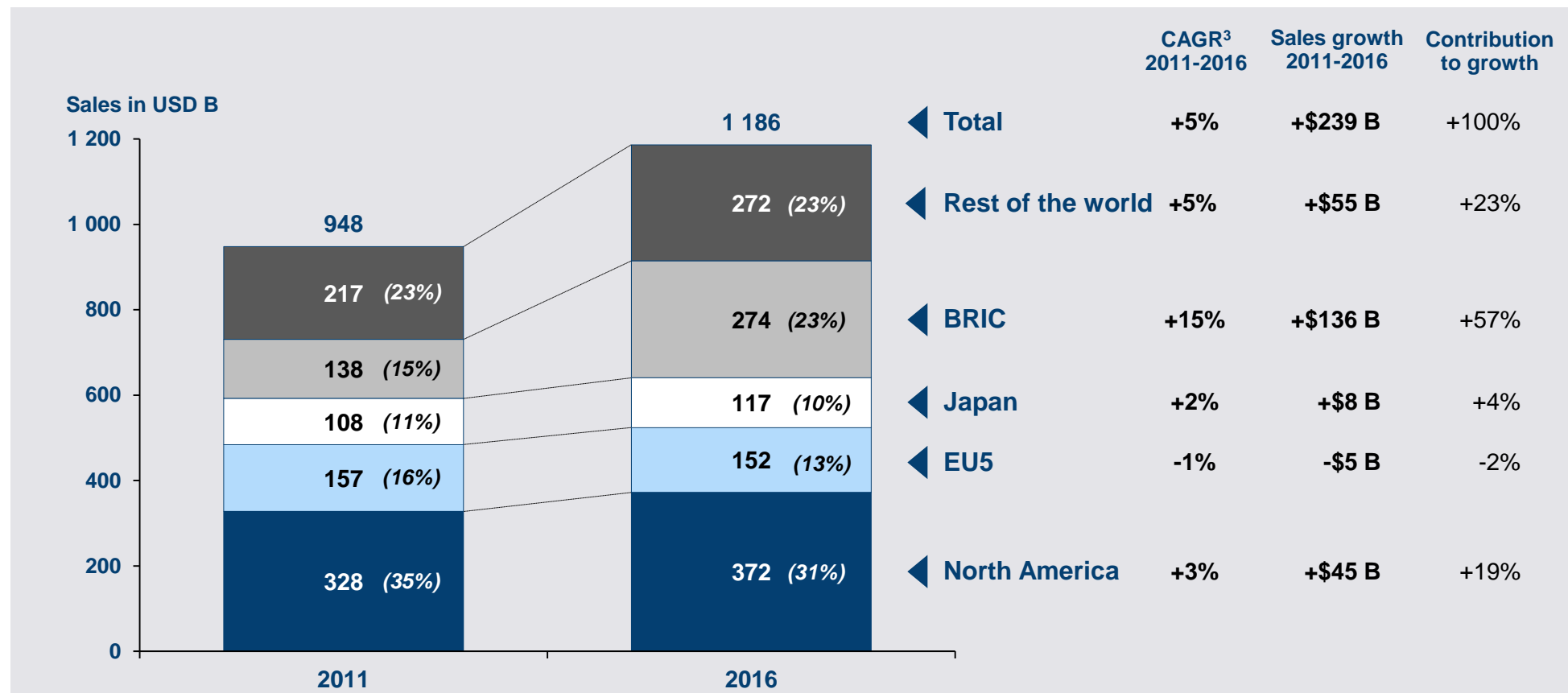


Key point # 3

What strategies pharma companies should adopt?

Sales in EU5¹ are expected to decline by 2016 due to cost containment measures in healthcare and the EU debt crisis, while BRIC² will be the main contributor to growth

Growth by geographical area (2011-2016)



Source: IMS Medicines Outlook Through 2016 (July 2012) – Nicholas Hall's OTC Yearbook 2012 – Smart Pharma Consulting analyses































¹ France, Germany, Italy, Spain, UK – ² Brazil, Russia, India, China – ³ Compound annual growth rate

Key point # 3

What strategies pharma companies should adopt?

If all pharma companies are trying to capitalize on high growth markets (e.g. BRIC), they do not necessarily have the right portfolio and price strategy to succeed there

Pharma companies development strategy (2011)

		Big Pharma		Mid Pharma	
		Strategic segments		Strategic segments	
		Rx branded Focused	Diversified	Rx branded Focused	Diversified
Geographical coverage	Focused	<ul style="list-style-type: none">  BMS  Lilly  Takeda 		<ul style="list-style-type: none">  Allergan  Amgen  Astellas  Biogen Idec  Celgene  Chugai  Daiichi Sankyo  Eisai  Gilead Sciences  Mitsubishi T. 	<ul style="list-style-type: none">  Mylan
	Diversified	<ul style="list-style-type: none">  Astrazeneca  GSK  Merck & Co  Pfizer  Sanofi 	<ul style="list-style-type: none">  Abbott  Bayer  Boehringer Ing.  J&J  Novartis  Roche  Teva 	<ul style="list-style-type: none">  Merck K.  Novo Nordisk 	<ul style="list-style-type: none">  Baxter  Otsuka

Note: Rx branded focused: Ethicals sales ≥ 75% of total product sales

Geographically focused: >50% of sales in a single geographical region (e.g. USA, Europe, Japan, etc.)

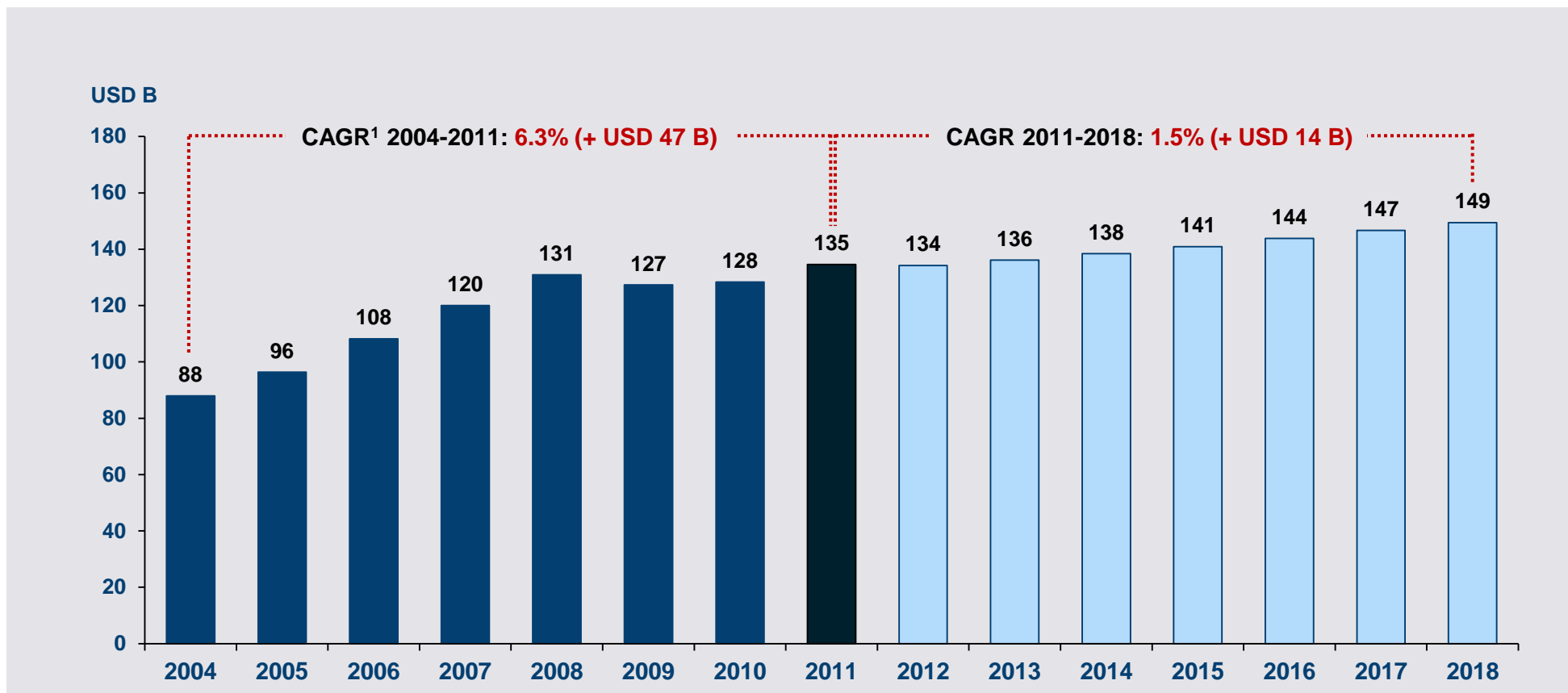
Source: Companies annual reports (2011) – Smart Pharma Consulting analyses

Key point # 3

What strategies pharma companies should adopt?

Pharma companies are expected to increase their R&D spending over the next seven years, but the incremental investment will be much lower than over the past years

Worldwide pharmaceutical R&D spending (2004-2018)



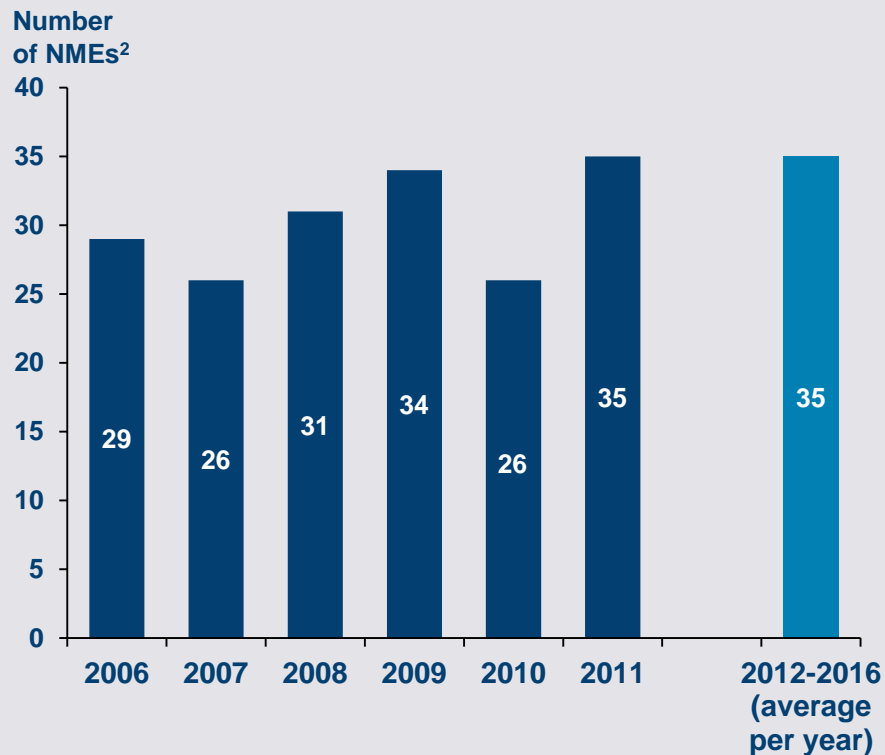
Source: Evaluate Pharma World Preview 2018 (June 2012) – Smart Pharma Consulting analyses

¹ Compound annual growth rate

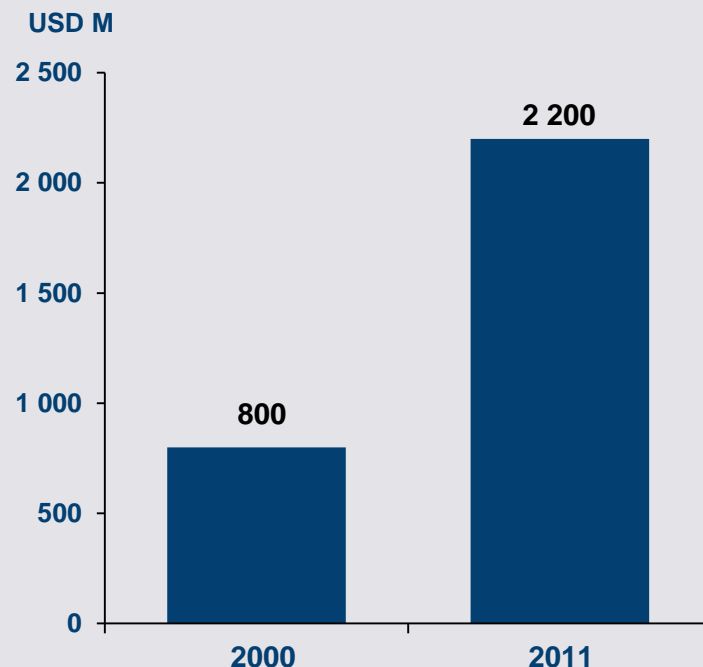
Rationalization and streamlining plans should not be sufficient to improve the R&D productivity in the next five years and R&D costs will continue to grow

R&D productivity issues

Launches¹ of New Molecular Entities (NMEs)



Estimated cost per approved new drug



Source: Evaluate Pharma World Preview 2018 (June 2012) – IMS Health MIDAS Dec. 2011 – IMS Medicines Outlook Through 2016 (July 2012) – Smart Pharma Consulting analyses

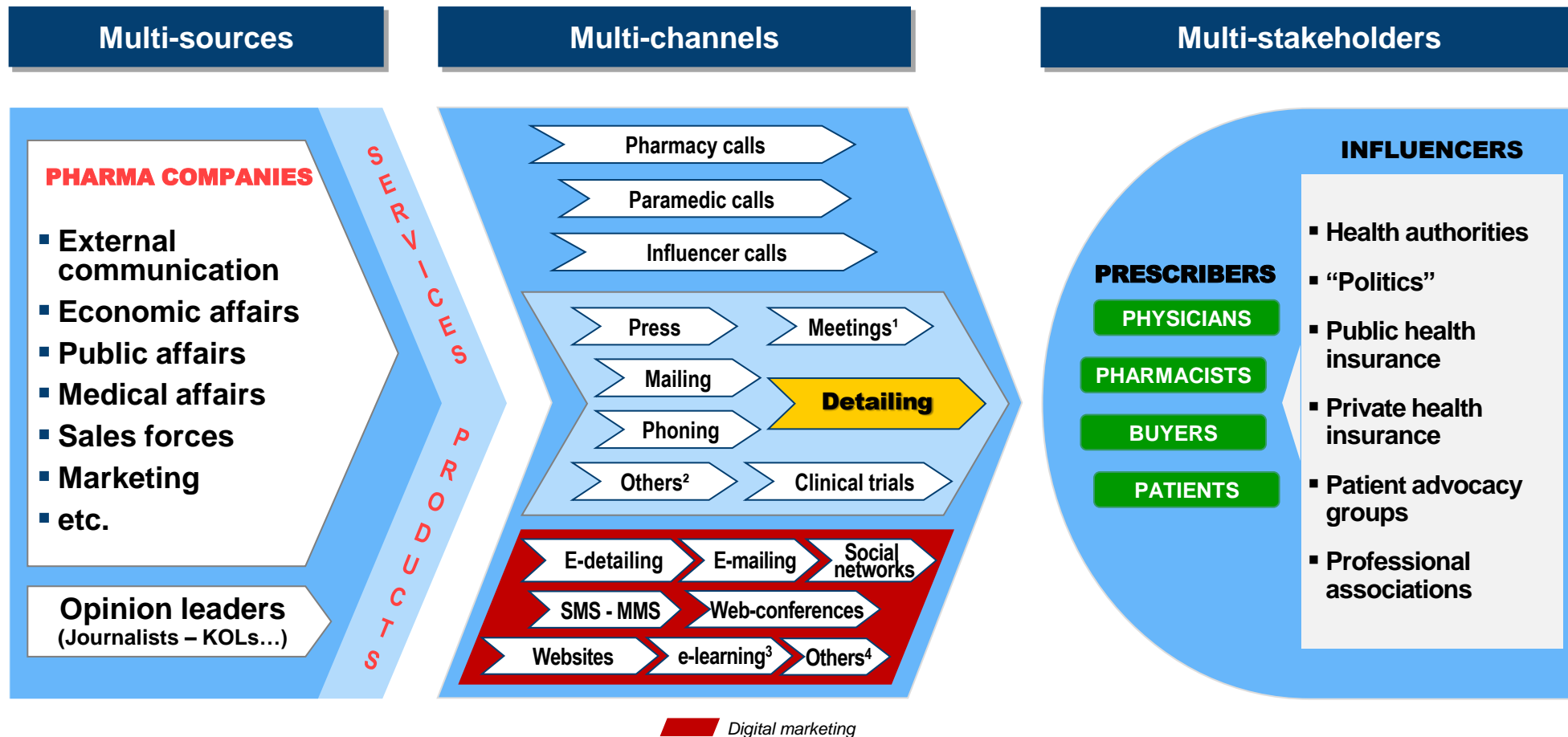
¹ Launches in the USA – ² New Molecular Entities

Key point # 3

What strategies pharma companies should adopt?

As prescription decisions increasingly depend on multiple clients, pharma companies need to adopt a more complex and coordinated promotional approach

Changes in the pharma promotional environment



Source: Smart Pharma Consulting analysis

¹ Round tables, symposia, congresses... – ² Sampling, gimmicks, grants, prescription pads... – ³ Continuous medical education through a digital interface – ⁴ Screen savers, popup windows...

Conclusions

To maintain their momentum, global pharma companies must look for external growth opportunities...

Pharma companies recommended strategies (1/2)

- Pharma companies should remain focused on the segments most highly valued by stakeholders such as secondary care products for which unmet medical needs as well as social and economic burden are very important (e.g. cancer, neurodegenerative diseases, etc.)
- Pharma companies could selectively diversify on top of their core business (i.e. branded ethical segments in high-income countries) following two complementary directions by:
 - Developing their operations in less regulated segments (e.g. OTCs, food supplements, medical devices, diagnostics, animal health, etc.)
 - Strengthening their geographical presence in emerging and lower income countries, which exhibit higher growth rates, by marketing low-priced drugs to acquire a greater local market share
- Although these two directions represent an additional source of revenue growth and a way of mitigating business risks, they will also negatively impact companies' profitability

Conclusions

...while improving their operational efficiency and fighting to improve the preference of stakeholders for their products and services

Pharma companies recommended strategies (2/2)

- M&As are the most effective means for pharma companies to diversify in a larger number of strategic segments and to develop their geographical coverage
- M&As should also be used along with partnerships to acquire expertise and presence in highly valued therapeutic segments
- Cost reduction & operational efficiency improvement should be carried out through the design of more agile and more customer-centric organizations
- The slowdown in growth of the pharma market, under the pressure of regulators and payers, should lead pharma companies to focus their efforts on gaining market share
- Pharma companies that will show the highest gain in market share gain will be those that will excel at strengthening the preference of stakeholders¹ for their brands
- To strengthen the preference of stakeholders, pharma companies should improve their corporate reputation, the value of their products and the quality of the services they offer