# New investment opportunities in the Ukrainian pharmaceutical industry

## Brief overview

Roland Berger
Strategy Consultants

Kyiv, February, 2009

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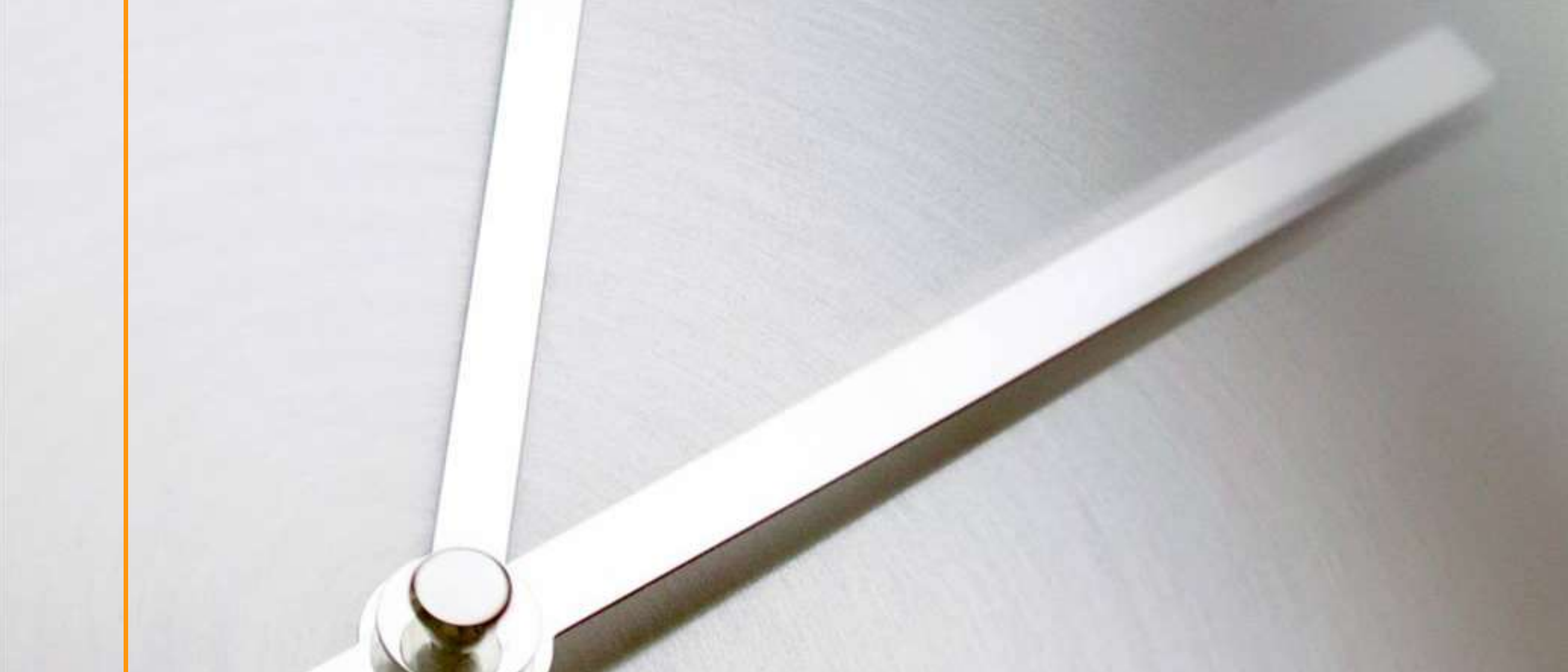
# It is a right time to invest in a fast-growing and high-potential Ukrainian pharmaceutical market

## Management summary

1. The Ukrainian retail pharmaceutical market is **one of the fastest growing markets in Europe**, growth fueled by the **increase in average price** per pack
2. **Domestic producers dominate the market in volume terms**, while **loosing** significantly in **value** terms to foreign producers; **generic drugs prevail** in Ukraine
3. The crisis will temporarily **slow down the market growth** and c**hange the demand structure in favor of local producers;** the **growth is projected to renew** as the economy recovers
4. **Fragmented nature** of the Ukrainian pharmaceutical market allows an **unimpeded entry; benefits of pioneering** the market remain as no global or regional player has invested yet
5. Willingness of local producers to sell businesses was offset by their **extremely high price expectations** until recently – the situation is poised to **change under current circumstances**
6. Financial crisis also resulted in **significant decrease in capital expenditures**, making **greenfield development a viable alternative**
7. **Roland Berger Strategy Consultants**, one of the world's leading strategy consulting firms with strong local competence in Ukraine, will be your **best partner supporting you through investment life-cycle**

Source: Roland Berger Strategy Consultants



# A. Ukrainian pharmaceutical industry – best time to invest

# Current economic situation invites a closer look at investment opportunities in the Ukrainian pharmaceutical market

**STRATEGIC INVESTORS**
**ARE YOU AMONG THEM?**

**WINDOW OF OPPORTUNITY TO ENTER THE UKRAINIAN MARKET**

**COST OF MARKET ENTRY**

- DECREASING LAND PRICES
- DECREASING CONSTRUCTION COSTS
- LOW PERSONNEL AND UTILITIES COSTS VS EUROPE
- DECREASING PRICE EXPECTATIONS OF TARGETS

**MARKET POTENTIAL**

- ~3 BN USD MARKET
- ANNUAL GROWTH RATES ~30%
- GROWTH POTENTIAL FOR HIGH VALUE-ADDED DRUGS
- AMPLE ROOM FOR CONSOLIDATION

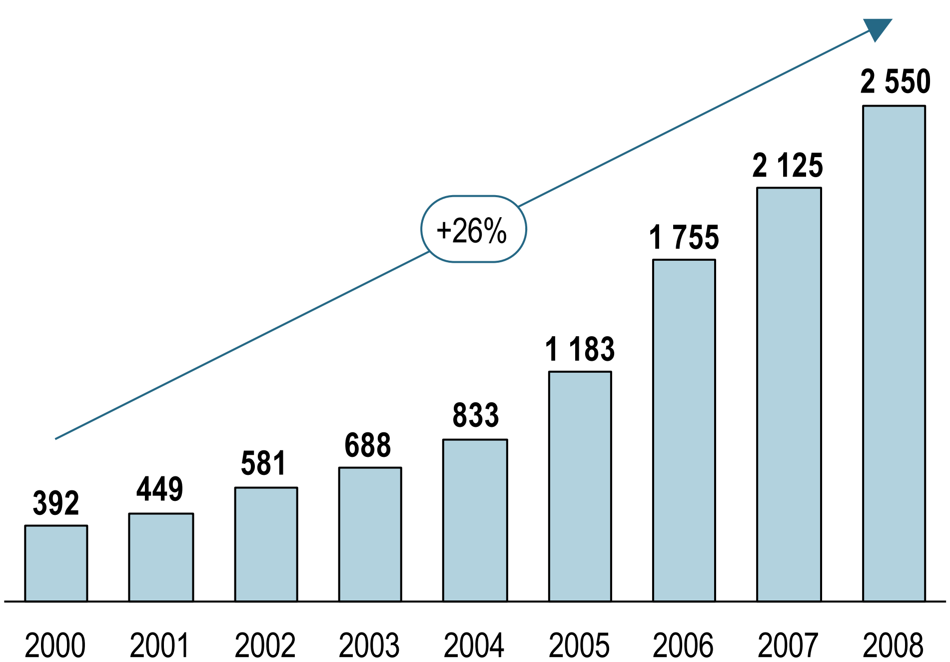
**FINANCIAL INVESTORS (E.G. PRIVATE EQUITY)**

Source: Roland Berger Strategy Consultants

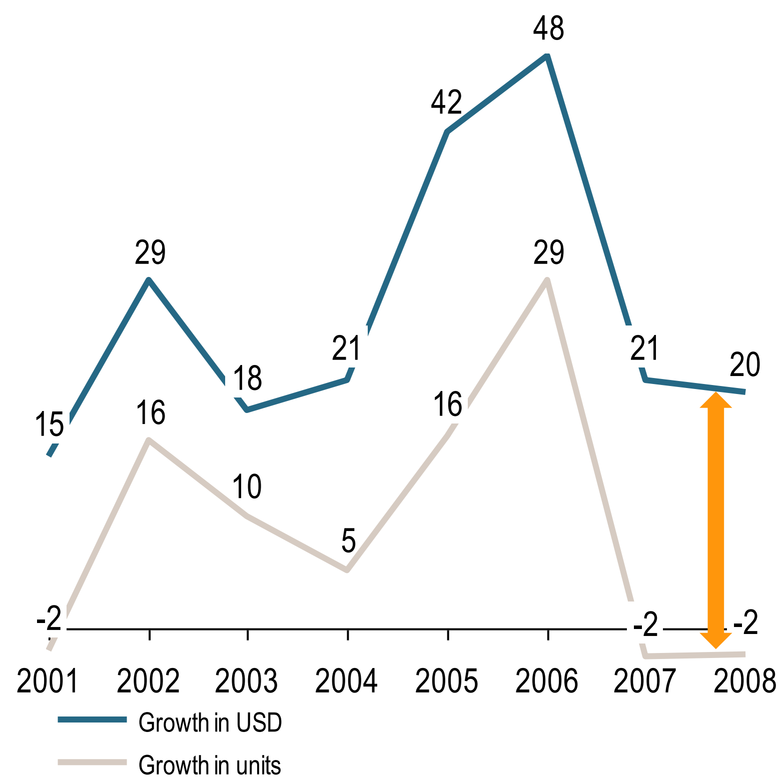
# Up to date, Ukrainian pharmaceutical market has been growing steadily at 26% p.a., driven by growing consumer spending

## Historical development of the Ukrainian retail pharmaceutical market

### VOLUME OF THE UKRAINIAN RETAIL PHARMACEUTICAL MARKET[1], 2000-2008 [M USD]




### GAP BETWEEN MARKET GROWTH RATES AS MEASURED IN DOLLARS AND UNITS, 2000-2008 [%]



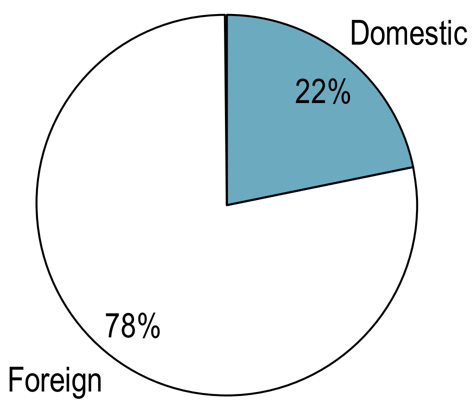

1) Includes drugs and food supplements

# Foreign pharmaceutical producers dominate Ukrainian market in value terms; generic drugs prevail

## Ukrainian retail pharmaceutical market: key facts

### STRUCTURE OF MARKET IN VALUE TERMS, 2008

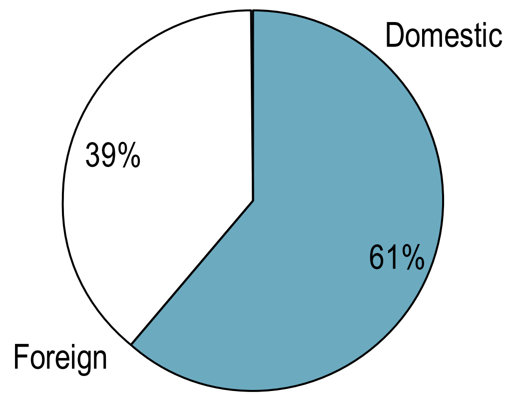
**100% = USD 2.6 bn**




1 Foreign producers target mid and top price segments

### STRUCTURE OF MARKET IN VOLUME TERMS, 2008

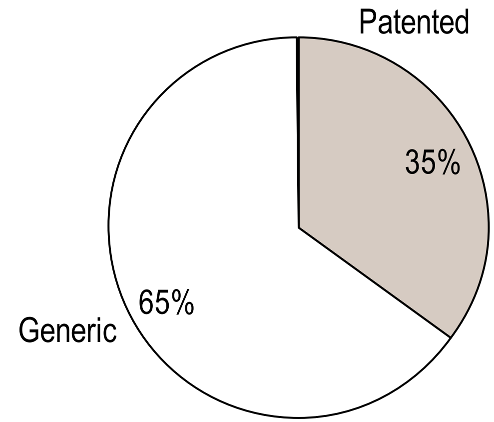
**100% = 1.1 bn units**




2 Domestic producers traditionally focus on cheap mass products

### STRUCTURE OF MARKET IN TERMS OF LEGAL STATUS, 2007

**100% = USD 2.1 bn**

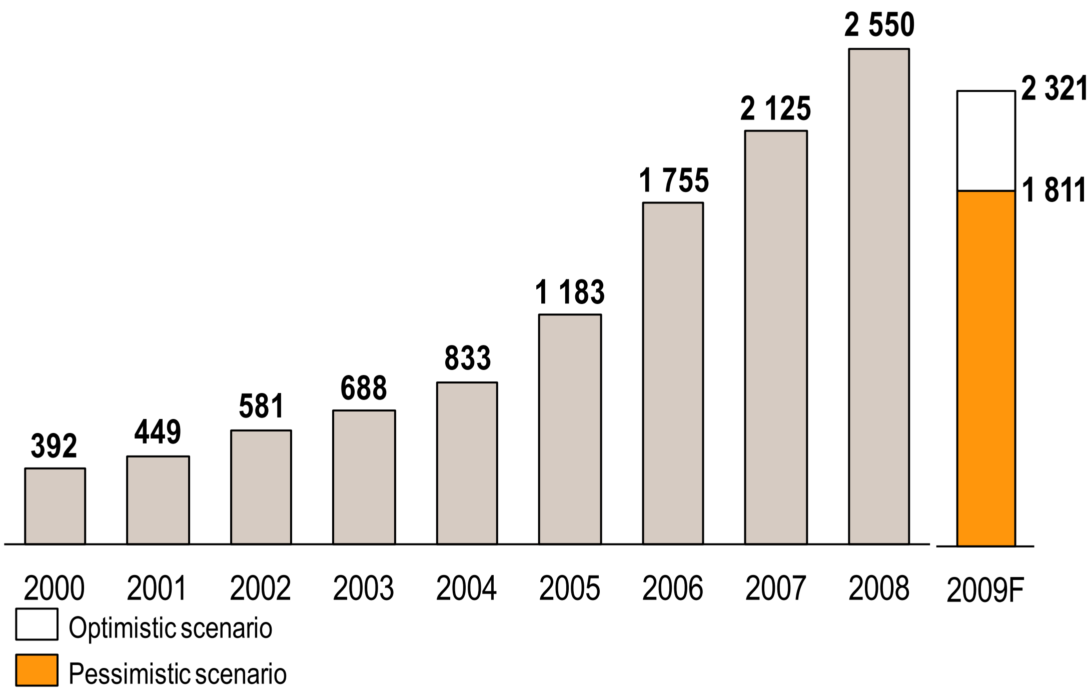



3 Low entry barriers for generic products

Source: Business-Credit, Sokrat, Roland Berger Strategy Consultants

# Despite a forecasted decrease in the retail pharmaceutical market, domestic producers have an opportunity to increase sales

## HISTORICAL VOLUME OF THE UKRAINIAN RETAIL PHARMACEUTICAL MARKET, 2000-2008 [M USD] AND FORECAST FOR 2009 [M USD]




## COMMENTS

> Devaluation of the local currency will **adversely affect the price of imported drugs**

> Diminishing income of Ukrainians will force them **to switch from** more expensive **imported drugs to** affordable **local** substitutes

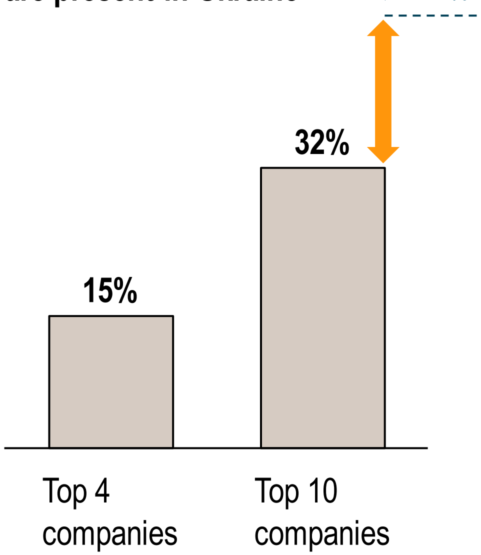
> The lowest per capita pharmaceutical consumption among CEE countries, development of medical insurance and possible introduction of reimbursement system **evidence high growth potential of the market** after economy recovers

Source: Business-Credit, Nomura, Roland Berger Strategy Consultants

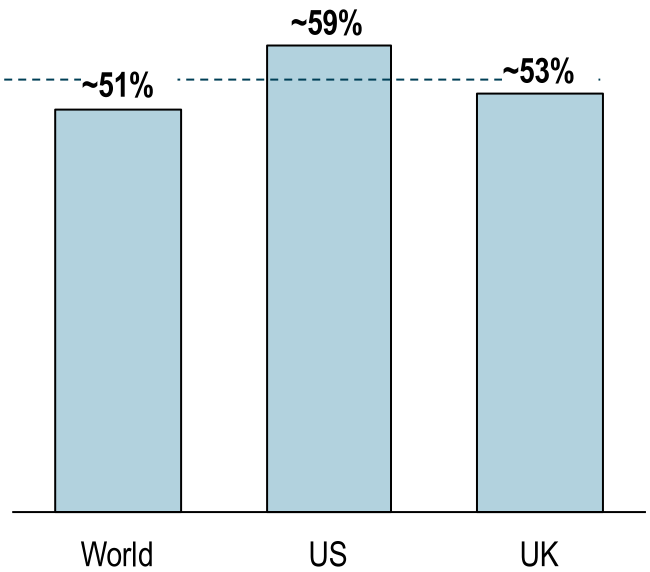
# Ukrainian pharmaceutical market is very fragmented – many players compete for small market shares

## MARKET FRAGMENTATION[1] IN UKRAINE, 2007

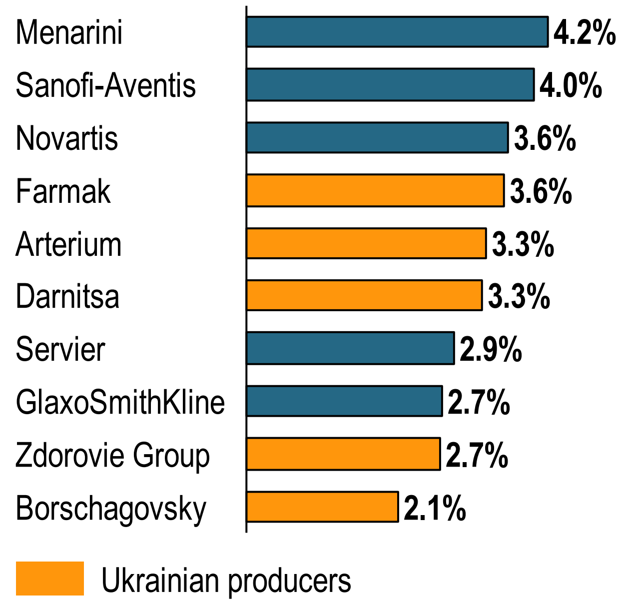
**Overall ~600 producers are present in Ukraine**




## MARKET SHARES OF TOP 10 COMPANIES IN OTHER COUNTRIES[2]




## MARKET SHARES[1] OF TOP 10 COMPANIES IN UKRAINE, 2007




**High potential for industry consolidation**

1) Including retail and hospital sales channels
2) Figures for the World, US, and UK are for the years 2003, 2002, and 2001 respectively

Source: Sokrat, Datamonitor, IMS, Roland Berger Strategy Consultants

# There is no clear leader among domestic producers – in 2007 Farmak and Arterium outperformed previous leader Darnitsa

## Top 5 domestic producers, 2007

| Company | Description | Sales, [m USD] | Growth rate, % | Market share[1)], % | NPM[2)], % |
|---|---|---|---|---|---|
| **Farmak** | Aggressive marketing strategy. Attracted 32 m USD in 2006 from EBRD for production modernization | 78.2 | 37 | 3.6 | 10 |
| **Arterium** | Leader in sales to hospitals (government tenders) among domestic producers. 135 products | 74.8 | 25 | 3.4 | 10 |
| **Darnitsa** | Most technologically-advanced production facilities. 240 products. Weak R&D. Low debt | 73.5 | 5 | 3.3 | 6 |
| **Zdorovie Group** | Strongly competitive product portfolio. Strong R&D. 50 m USD invested in new facilities | 61.0 | 13 | 2.8 | 5 |
| **Borschagovsky** | Attempted to sell 69% shares in October 2008 for 144 m USD. No debt | 46.5 | 15 | 2.1 | 11 |

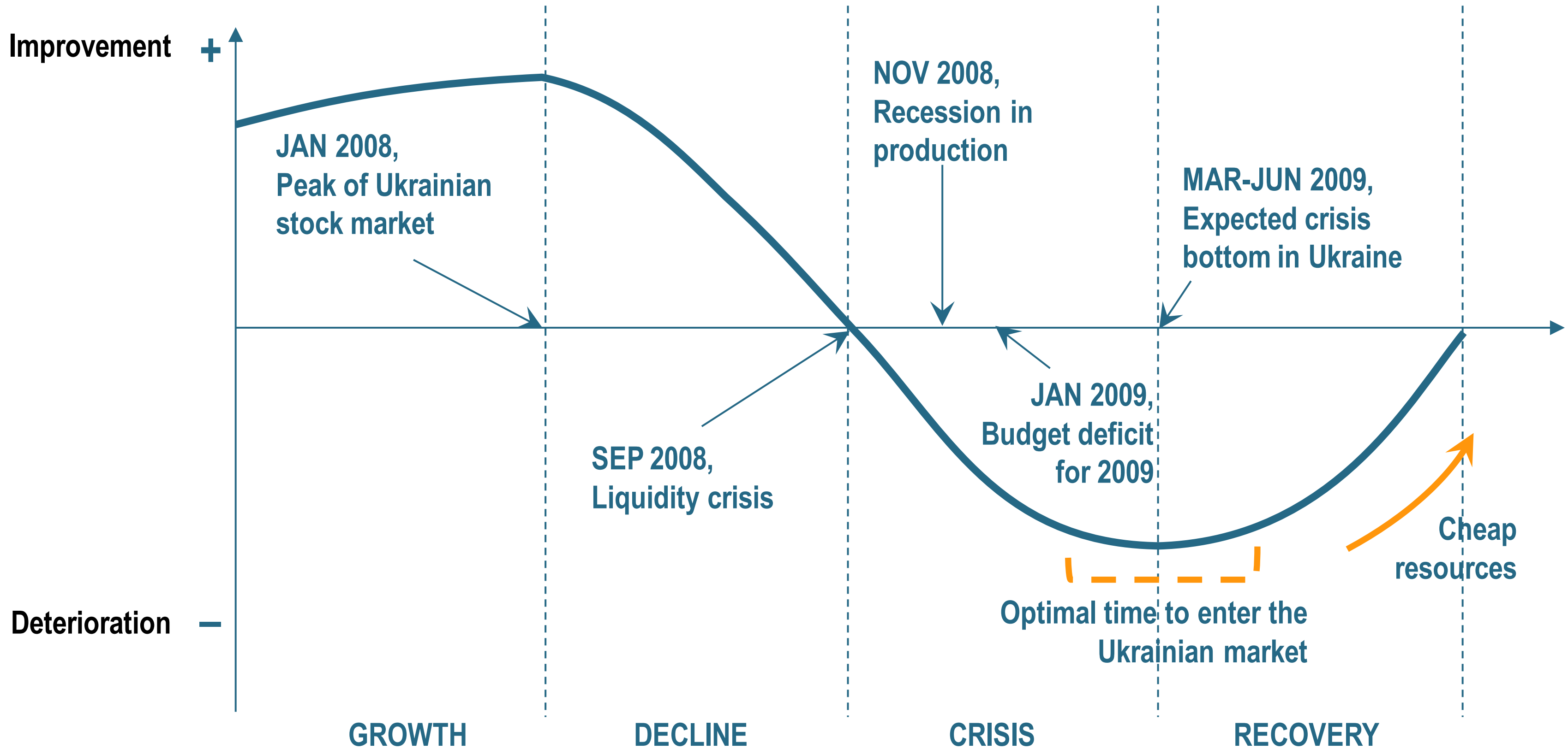
1) Includes retail and hospital sales channels
2) Net Profit Margin

Source: Sokrat, Nomura, Commersant, Roland Berger Strategy Consultants

# A crisis in the Ukrainian economy represents an opportunity to catch the next growth wave from the very beginning

## Economy development in Ukraine and optimal time to enter the market

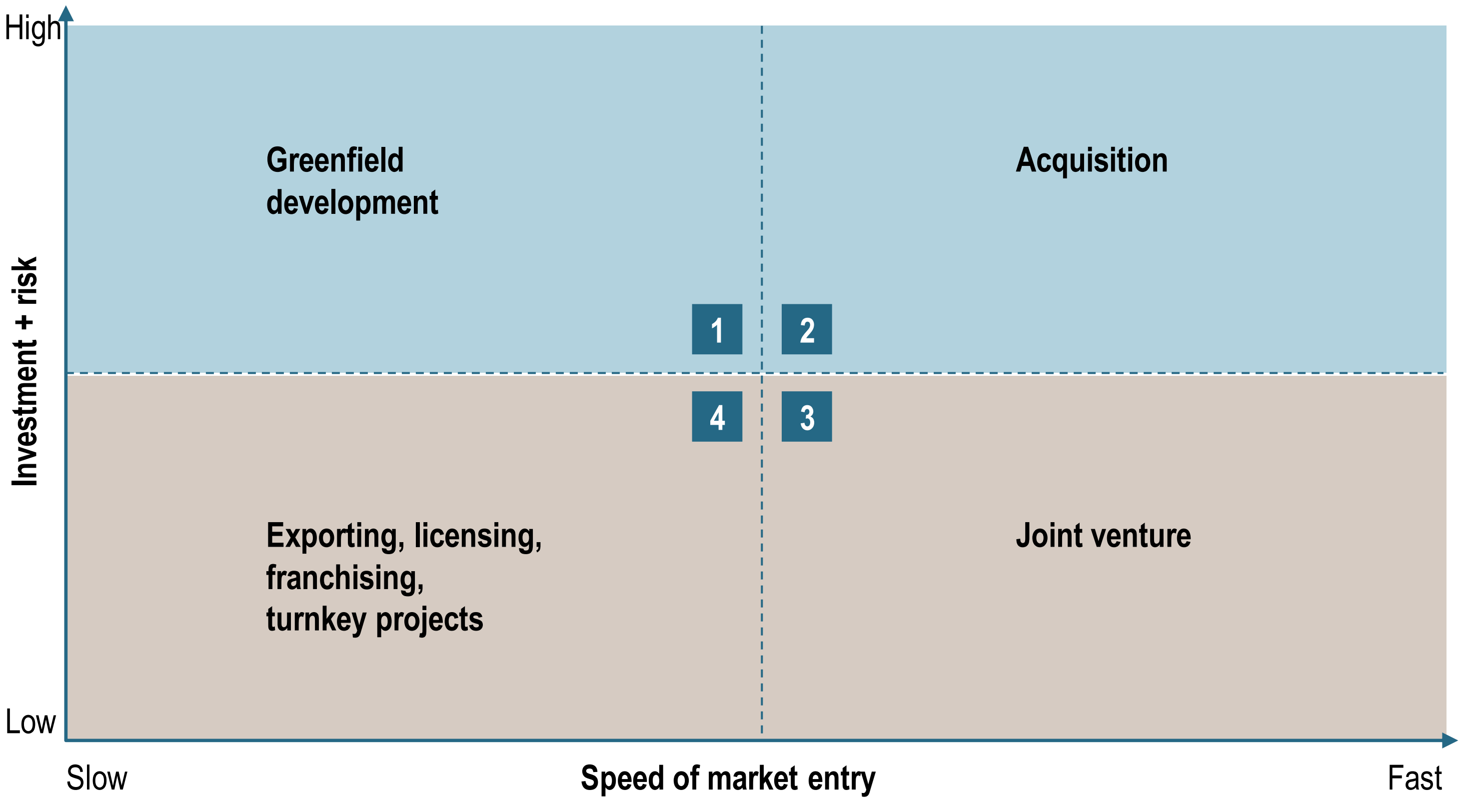
ECONOMY DYNAMICS




Source: Roland Berger Strategy Consultants

# Two alternative market entry strategies are currently feasible in Ukraine – acquisition and greenfield development

## Market entry strategies




### COMMENTS

> Up to date, foreign pharmaceutical companies confined their market penetration in Ukraine to **export and outsourcing of drugs production only**

> At the moment, opportunities exist to grow in Ukraine through **acquisition and greenfield development**

Roland Berger Strategy Consultants

# Due to high price of targets, foreign direct investments in Ukrainian pharmaceutical production have been minimal so far…

## Overview of investments in the Ukrainian pharmaceutical market

### CLOSED DEALS

| Company | Nature of investments | Amount |
|---|---|---|
| Maxwell Biocorporation | Production facility and out-patient clinics | ~90 m USD |
| Sopharma | Acquisition of OJSC "Vitaminy" which was the 13th largest Ukrainian producer at that time | ~10-12 m USD |
| Gedeon Richter | Packaging facility for drugs manufactured in Hungary | ~6 m USD |
| Bioton | 29% stake in local insulin producer Indar | >5 m USD |

### ATTEMPTED DEALS

- In October 2008 Borschagovsky CPP initiated sale of **69% of shares for 144 m USD**. Possible acquirers included Russian Pharmstandart and Arterium; the deal however wasn't closed
- In 2008 Bioton attempted to purchase a majority stake in Indar. Deal failed due to secret acquisition of the stake by an offshore company Gerist Invest, presumably **to raise the price of the deal**
- In 2007 Darnitsa negotiated selling company with TEVA and Actavis. Deal **failed due to high price**

Source: Nomura, Expert Ukraine, Roland Berger Strategy Consultants

# … but credit crunch and recent regulatory introductions will force local producers to seek cooperation with foreigners more actively

## Major pressures for Ukrainian producers

**1 Financial**
- No access to funds for operations and growth
- Liquidity problems trigger sales of assets, e.g. Finance and Credit's decision to sell Arterium

**2 R&D**
- In view of Ukraine's accession to WTO, some manufacturers (e.g., Darnitsa) will need to seriously redesign their portfolio as cheap copying of patented drugs becomes impossible in Ukraine

**3 Technological**
- Introduction of GMP requirements (now postponed till 2011) will require an investment of 1 to 18 m USD per production line

### POSSIBLE TARGETS

Darnitsa
Arterium
Borschagovsky
Farmak
Zdorovie Group

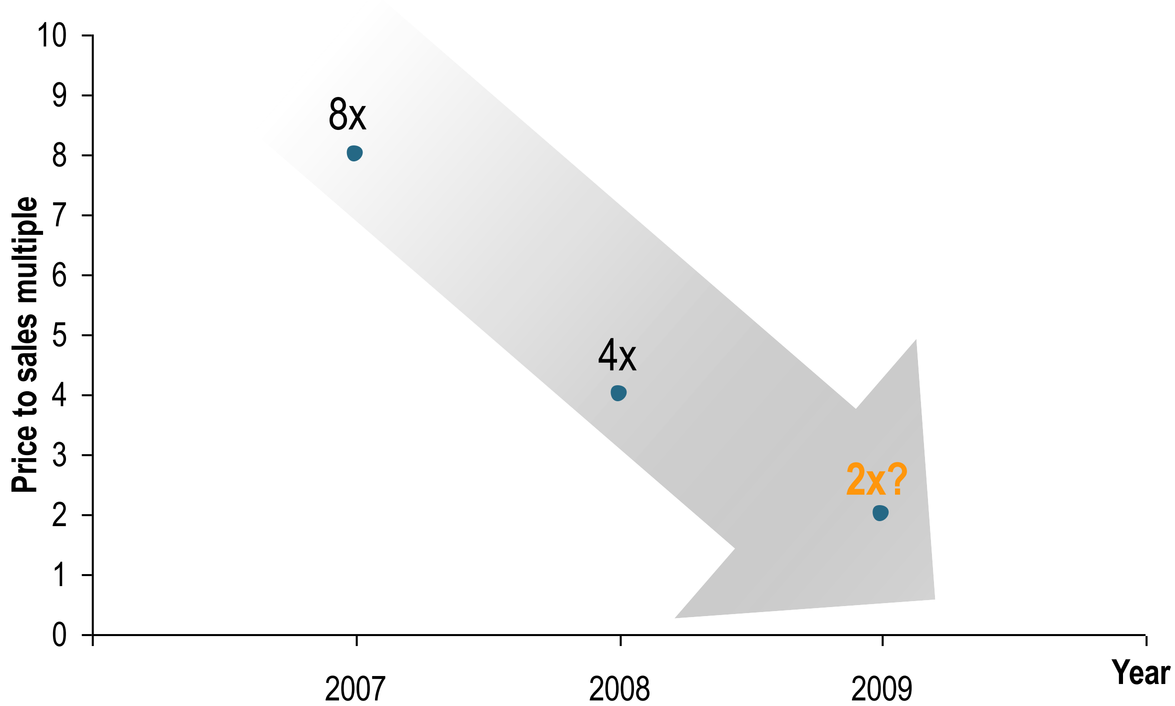
### POSSIBLE BUYERS

Zentiva
KRKA
Berlin-Chemie Menarini
Gedeon Richter
Dr. Reddy's
Ranbaxy
sanofi aventis
Teva
Cipla

Source: Nomura, Roland Berger Strategy Consultants

# Peak of price expectation in 2007 will likely be followed by a trough in 2009

## Change in price expectations on the Ukrainian pharmaceutical market




### COMMENTS

> Multiple for 2007 was derived from Darnitsa's announced capitalization of the company based on private placement of company's stock on the Frankfurt stock exchange

> Multiple for 2008 was calculated based on the plans of Borschagovsky plant to sell 69% of its shares for 144 m USD

> In 2009 comparable Russian company Valenta (3rd largest domestic producer) announced that it estimated the company's price at 200-220 m USD (sales volume ~100 m USD in 2008)

Source: Expert, Vedomosti, Roland Berger Strategy Consultants

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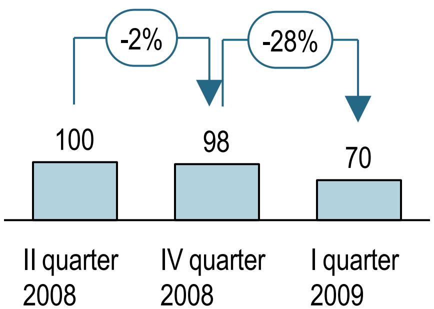
Strategy Consultants

# Financial crises significantly reduced capital expenditures and other relevant costs for greenfield development in Ukraine

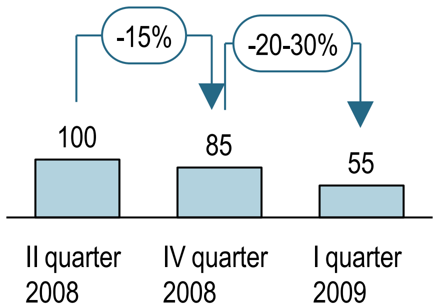
## Changes in selected costs in Ukraine, II quarter 2008 = 100%

### LAND PRICES



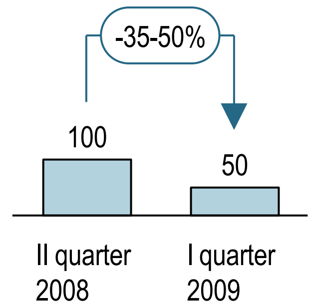

> Prices for **land plots in Kyiv region** are currently **24% less** compared to II quarter 2008 and are expected to drop by **30% through April 2009**
> Approximately **140 thousand hectares** are available for sale nearby Kyiv
> Prices **range** from **13 to 73 '000 USD** per hectare depending on location

### CONSTRUCTION MATERIALS




> Prices for **building materials** dropped by **15%** on average and are expected to drop by **20% -30% through March 2009**

### PERSONNEL




> Companies reduced **expenditures on salaries** by **35-50%** due to exchange rate fluctuations and actual reduction in overall staffing
> **Qualified personnel available** on the market due to recent layoffs

### PROS AND CONS OF GREENFIELD

**PRO**

- No premium is paid
- Control over quality of assets
- No discrepancies between corporate cultures
- No hidden costs and conflicts
- Favorable attitude of state authorities

**CONTRA**

- Industry expertise is essential
- Delayed entrance due to time lost on construction
- Sales team needs to be organized from scratch
- Significant investment translates into exit barrier

Source: SV-Development, expert interviews, press research, Roland Berger Strategy Consultants


# B. Roland Berger Strategy Consultants – global player with a strong local competence

Roland Berger
Strategy Consultants

# Roland Berger Strategy Consultants is a partnership of European origin – 2,000 employees in 25 countries

**36** offices in **25** countries

**EUR 600 m** revenues in 2007

**170** partners, **2000** employees

1970-2007 revenue CAGR of **+15%**

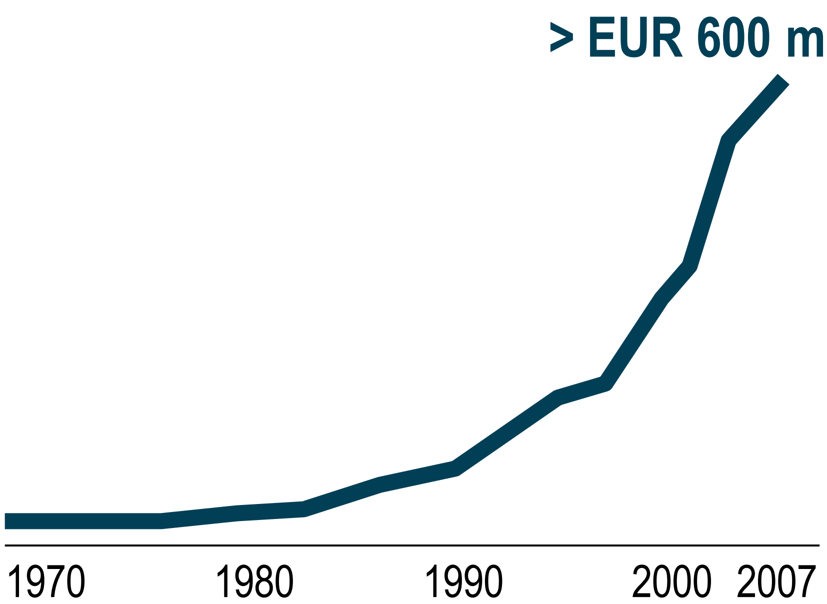
Amsterdam I Barcelona I Beijing I Berlin I Brussels I Bucharest I Budapest I Casablanca I Chicago I Detroit I Düsseldorf I Frankfurt I Hamburg I Hong Kong I Istanbul I **Kyiv** I Lisbon I London I Madrid I Manama I Milan I Moscow I Munich I New York I Paris I Prague I Riga I Rome I São Paulo I Shanghai I Stuttgart I Tokyo I Vienna I Warsaw I Zagreb I Zurich

Source: Roland Berger Strategy Consultants

# Our company's values have enabled us to become one of the fastest growing strategy consultancies in the world

## Our company's entrepreneurial success since 1967

### OUR SALES GROWTH

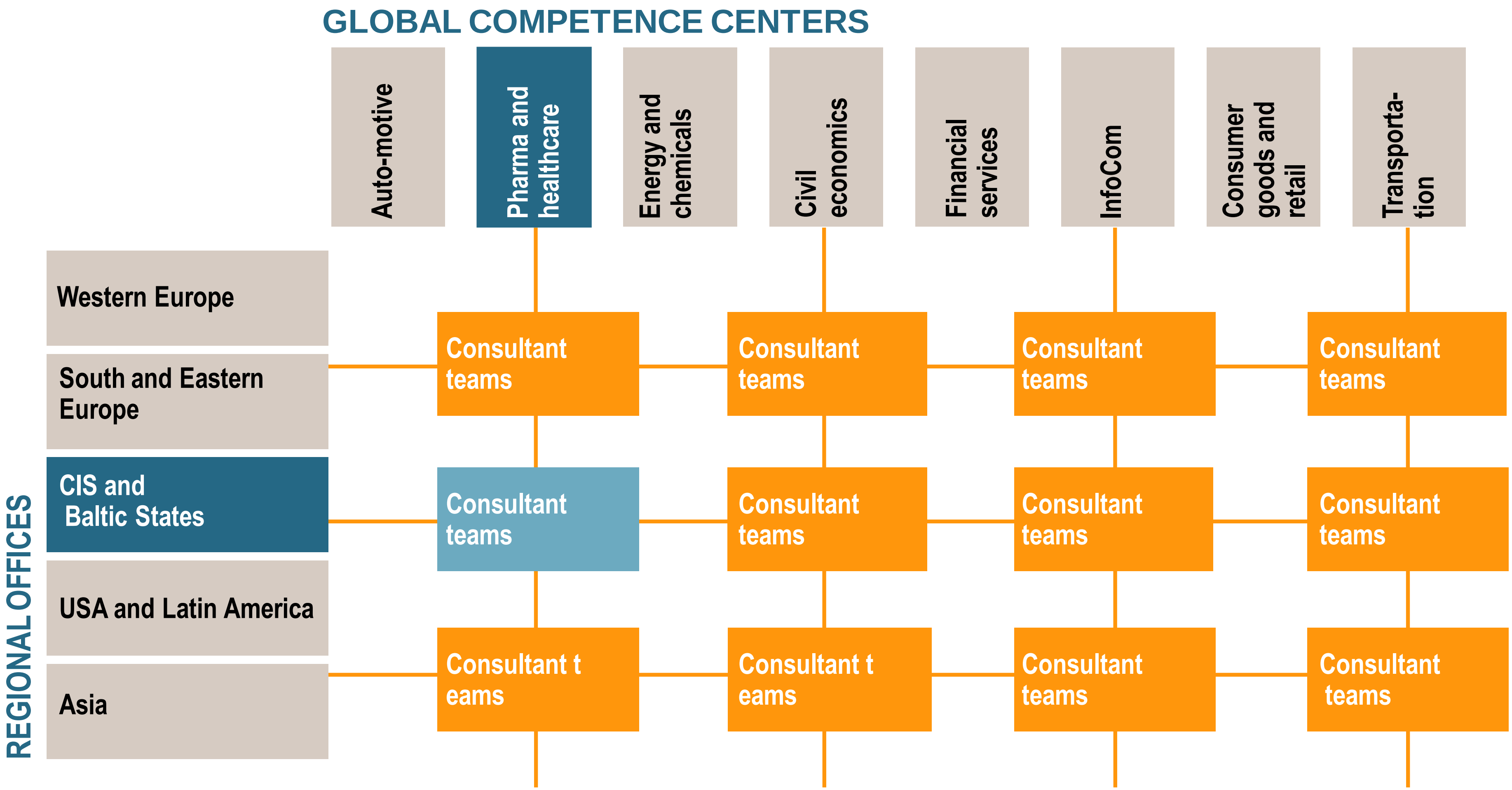



### OUR MARKET POSITION 2007[1)]

| | |
|---|---|
| Germany | No. 2 |
| **Growth regions China and Russia/CEE** | No. 2 |
| Core markets Western Europe | No. 3 |
| World | No. 5 |

1) In the strategy segment

# Key to success – interdisciplinary expert teams from the global competence centers and regional offices



# For more than 10 years we have served our clients to overcome all crises and to expand successfully in CIS

## Roland Berger Strategy Consultants in CIS

### Baltic States

**Industries**

- Logistics
- Oil and Gas
- Automotive
- Aerospace

**Clients**

MAŽEIKIŲ NAFTA, LOT, YUKOS, airBaltic, DAIMLERCHRYSLER

### Ukraine

**Industries**

- Steel
- Automotive
- Engineering
- Financial Services
- Consumer goods
- Retail
- Pharma
- Aerospace

**Clients**

EKO STAHL, ŠKODA AUTO, ДНЕПРОСПЕЦСТАЛЬ, DAIMLERCHRYSLER, АЛЬФА-БАНК, VW, Miba, Carrier, BEKAERT


### Russia

**Industries**

- Oil/Gas and chemicals
- Financial Services
- Telecom
- Utilities
- Automotive
- Construction
- FMCG & Retail
- Pharma
- Engineering
- Media
- Aerospace
- Steel & Mining

**Clients**

TOTAL, BASF, ТНК, NIRMA, SIEMENS, bp, TATNEFT, SISTEMA, ŠKODA AUTO, Wyeth, МОСМАРТ ГИПЕРМАРКЕТ, brose, Siberia, BASIC ELEMENT, B/S/H/, KARSTADT, MUSTANG, AEROFLOT, Heineken, DAIMLERCHRYSLER

# C. Roland Berger – your market entry partner in Ukraine: experience and project examples

Roland Berger
Strategy Consultants

# World leading pharmaceutical companies are among our clients

## Selected clients of Roland Berger in pharma and healthcare

# We have supported many pharmaceutical companies with strategy, organization, and efficiency improvement projects

## Selected projects in pharma and healthcare: Central and Eastern Europe

**CLIENTS**

PLIVA – A member of the Barr Group
sicomed
Wyeth
Roche
NYCOMED
sanofi aventis – Because health matters
Lilly
Pfizer

**PROJECTS**

> Market studies
> Market entry strategies
> Sales force effectiveness
> Products strategies
> Organizational Excellence
> Government Tender Management
> Portfolio Maximization

Source: Roland Berger Strategy Consultants

# Roland Berger employs a systematic approach in identifying attractive targets among products and companies for acquisition

## Selected project examples in pharmaceuticals (1/5)

### CLIENT

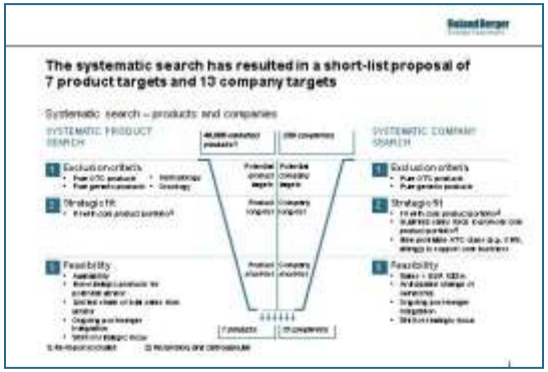
- **European producer of pharmaceutical and healthcare products**

### OBJECTIVE

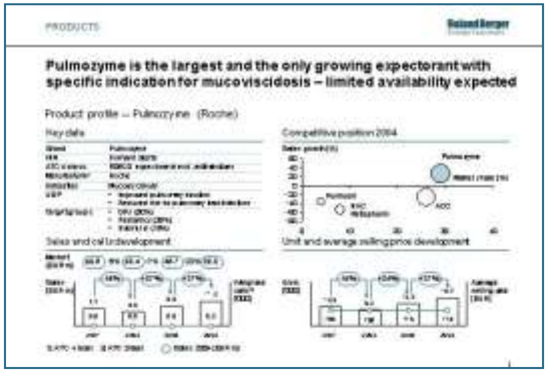
- Identification of pharmaceutical products and/or companies for acquisition to achieve critical mass in the market

### APPROACH

- Systematic screening for products and/or companies by therapy areas
- Review of products on an opportunistic basis as they become available








# Our experts conducted a thorough research of the Russian market in order to prepare a comprehensive strategy for a global leader

## Selected project examples in pharmaceuticals (2/5)

### CLIENT

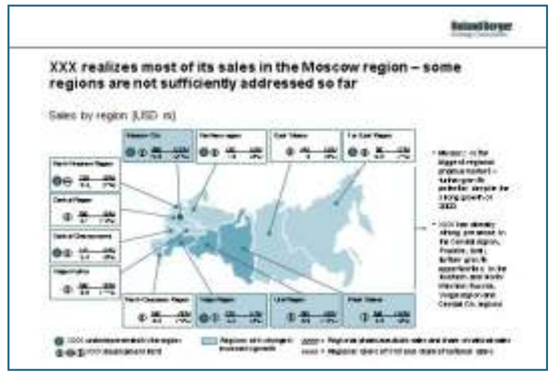
- **Global pharmaceutical company**

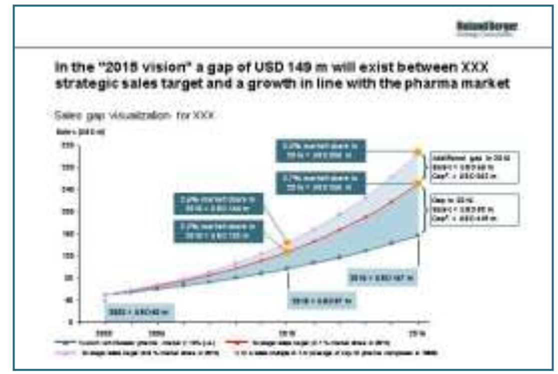
### OBJECTIVE

- Analysis of the Russian health care environment and pharmaceuticals market incl. forecast until 2015
- Development and assessment of strategic alternatives; setting strategic goals
- Development of a rough business plan

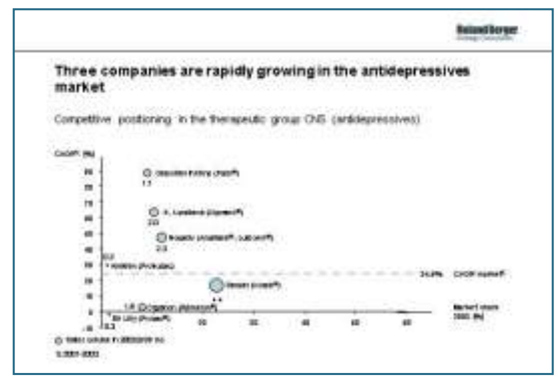
### APPROACH

- Desk research
- Numerous expert interviews
- Patient flow modeling
- Business planning








Source: Roland Berger Strategy Consultants

Roland Berger
Strategy Consultants

# In Ukraine Roland Berger carried out a close-up research of ways to win government tenders

## Selected project examples in pharmaceuticals (3/5)

### CLIENT

- **Global pharmaceutical company**

### OBJECTIVE

- Identification of key characteristics of tenders
- Establishment of commercial guide-lines to define appropriate conditions
- Definition of the commercial processes and related timelines, roles and responsibilities
- Definition of an appropriate structure accordingly

### APPROACH

- Definition of Ukrainian tender market requirements
- Review Client's tender management in Ukraine
- Definition of an improved tender management process and supporting organization

# Roland Berger played an instrumental role in facilitating the sale of production facility for a big regional player

## Selected project examples in pharmaceuticals (4/5)

### CLIENT

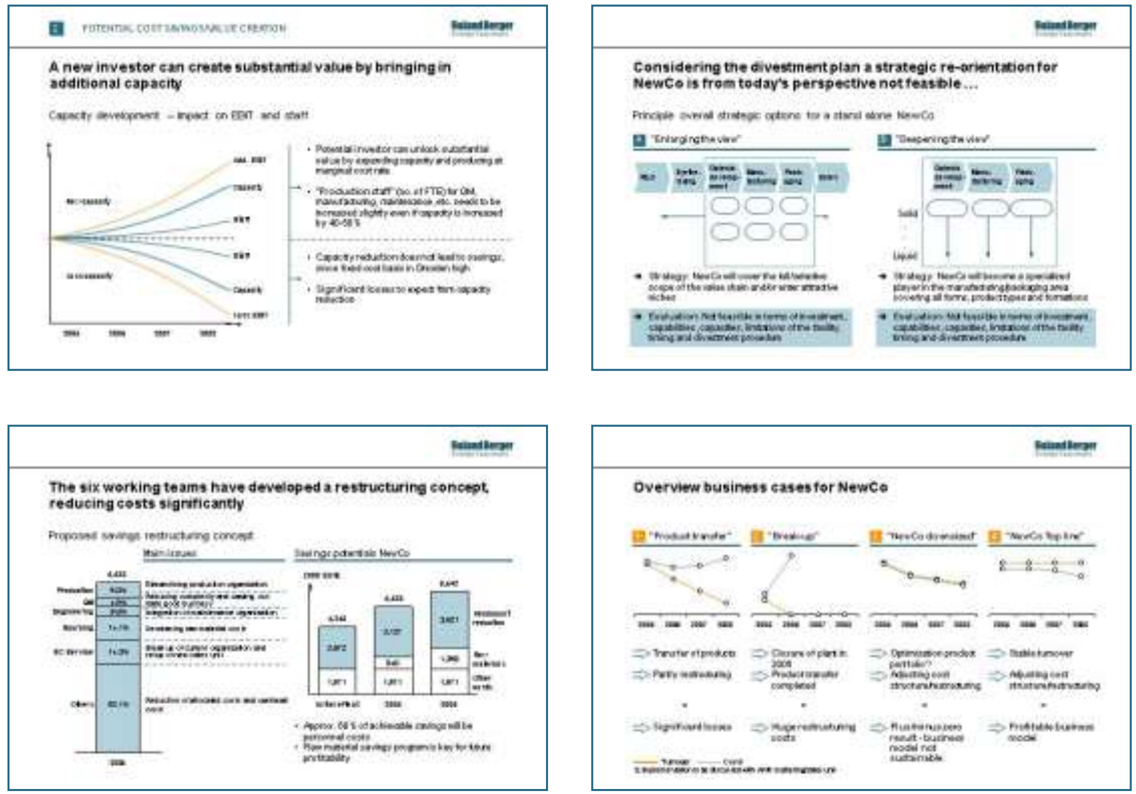
- **Large Croatian pharmaceuticals company**

### OBJECTIVE

- Facilitation of the sale process of a pharmaceutical production site
- Preparation of a "Valuation Model" to support the management in the sale process

### APPROACH

- Development of different scenarios for production site restructuring
- Business planning with three scenarios
- Structured assessment and recommendation for one scenario
- Preparation of the info memorandum and start of investors search
- DCF modeling and valuation



# In a recent project Roland Berger focused on an in-depth analysis of Russia's generics market

## Selected project examples in pharmaceuticals (5/5)

### CLIENT

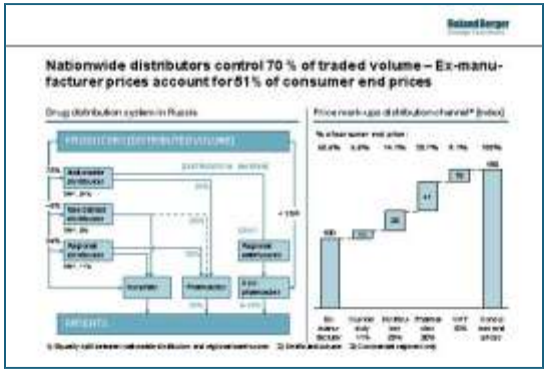
- **Global pharmaceutical company**

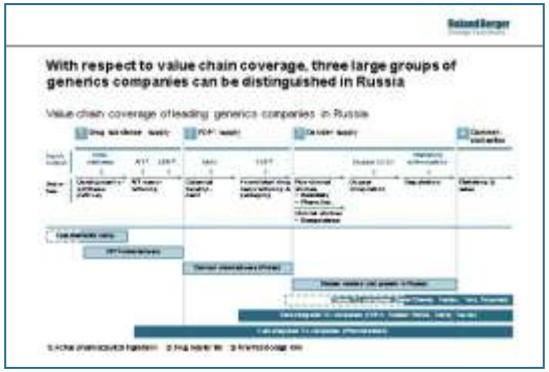
### OBJECTIVE

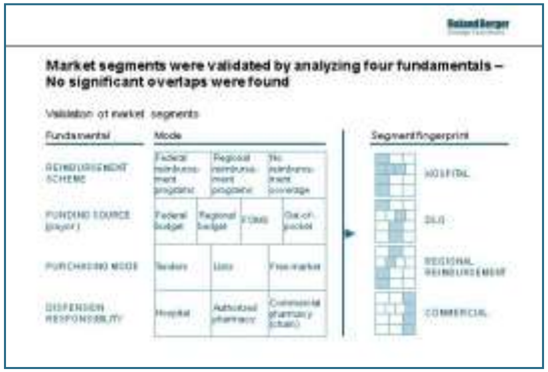
- Derivation and analysis of strategic options for generics market entry in Russia

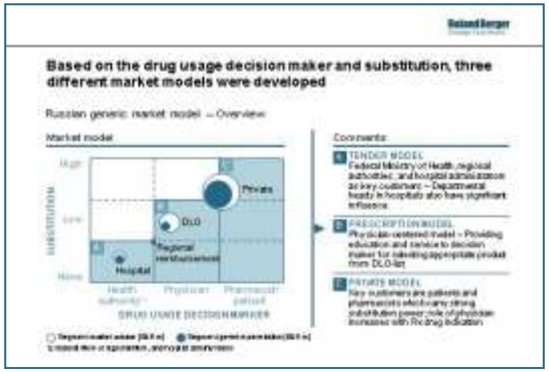
### APPROACH

- Market intelligence, definition of market determinants, derivation of market model
- Definition of strategic levers, prioritization and selection of strategic options
- Detailed description and top-down business planning



# Four key officials are responsible for Roland Berger business development in Ukraine

## Contact persons in Roland Berger

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# We deliver **results**