Roland Berger
Strategy Consultants

"Medicine for full-line wholesalers"

Final presentation

BG Pharma

Amsterdam, February 16, 2010

This document covers the conclusions which arose from the first phase, and is intended for the members of BG Pharma

Document scope

First phase objectives

- Gain insight into the current position, performance and added value of Dutch full-line wholesalers
- Use this insight as the basis for a framework for discussions with policymakers and stakeholders

First phase activities

Determine the current position and added value of full-line wholesalers

Perform an international benchmark on the efficiency of full-line wholesalers

Analyze the current business model, legislation and regulation

Roland Berger
Strategy Consultants

Contents

Page

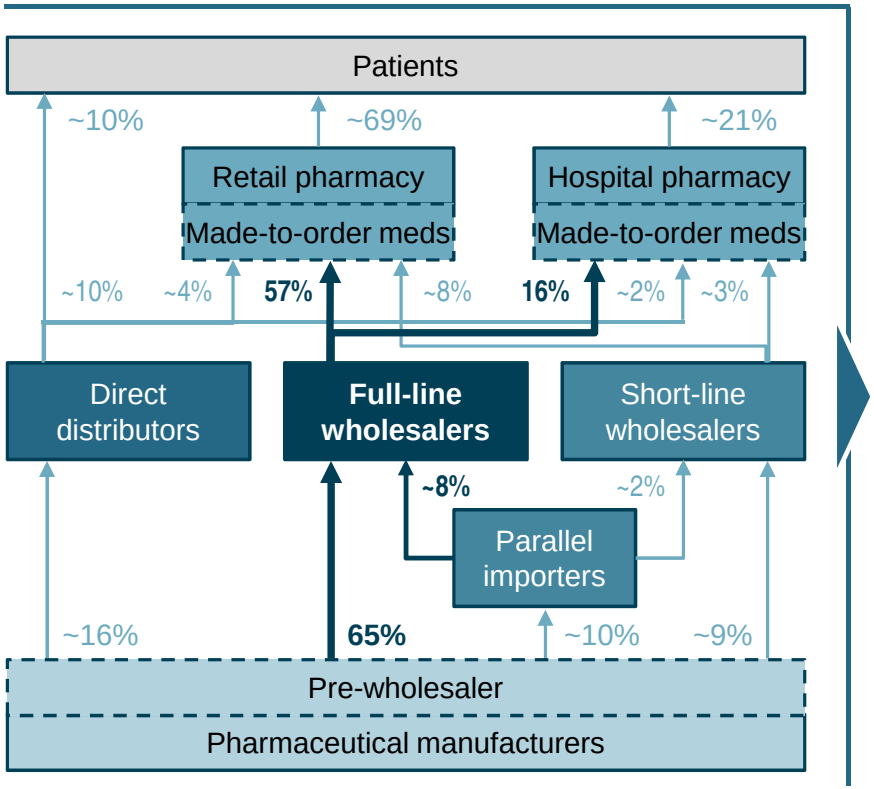
Amsterdam
Bahrain
Barcelona
Beijing
Berlin
Brussels
Bucharest
Budapest
Casablanca
Chicago
Detroit
Düsseldorf
Frankfurt
Hamburg
Hong Kong
Istanbul
Kyiv
Lisbon
London
Madrid
Milan
Moscow
Munich
New York
Paris
Prague
Riga
Rome
São Paulo
Shanghai
Stuttgart
Tokyo
Vienna
Warsaw
Zagreb
Zurich

A. In the foreseeable future, full-line wholesalers will face structural losses thanks to market developments

Full-line wholesalers are the most important drugs distribution channel for pharmacies and hospitals

Dutch pharmaceutical supply chain in 2009

Total drugs turnover 2009: EUR 5,017 m

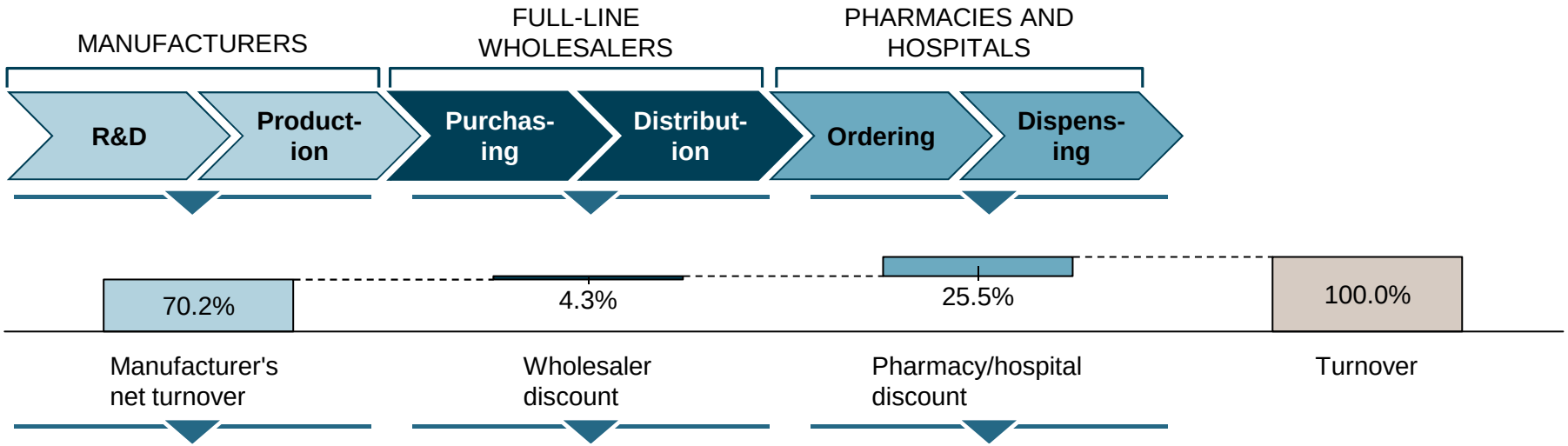


Players	Activities
Full-line wholesalers	Distribution of the complete assortment of pharmaceutical drugs
Short-line wholesalers	Distribution of a limited assortment of only expensive or high-demand drugs
Direct distributors	(Exclusive) drug distribution directly to the patient or through pharmacies and hospitals
Parallel importers	Import of brand-name drugs outside the official channels of the manufacturer
Pre-wholesalers	Exclusive distribution of drugs from the factory to wholesalers in the Netherlands
Made-to-order medication	Automatic, customized repackaging of repeat prescriptions for extra and intramural health care
Pharmacies	• Retail pharmacies (1,948 in 2008) • Dispensing doctors (561 in 2008)
Hospitals	91 in 2008

Source: SFK; Farminform; BG Pharma; Roland Berger

Full-line wholesaler revenue comes from the pre-negotiated discount minus the customer discount

Revenues full-line wholesalers (base case 2007)



Manufacturer revenue is determined by the turnover (number of items times the AIP[1)]) minus the pre-negotiated discount from the wholesaler (percentage of turnover)

Wholesaler revenue is determined by the level of turnover and the percentage pre-negotiated discount minus the discount passed on to pharmacies and hospitals

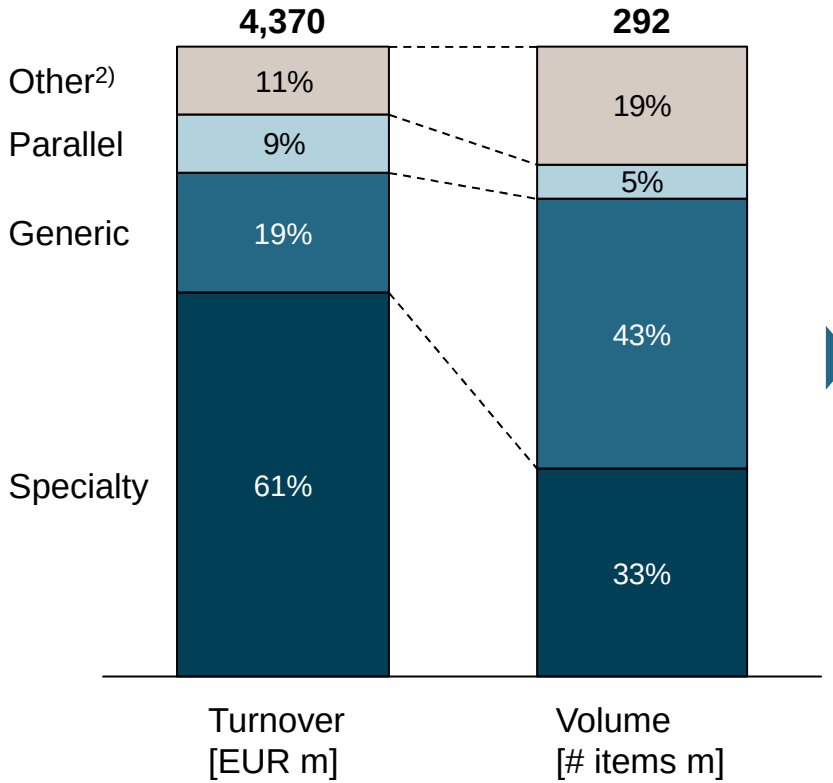
Pharmacy and hospital revenue is determined by the percentage discount from the wholesaler[2)]

1) Government-regulated Apotheek Inkoop Prijs (AIP), or "pharmacy purchasing price"; 2) Pharmacies also receive revenues from the prescription reimbursement program

Source: BG Pharma; Roland Berger

Because of price differences, specialty drugs account for most of the turnover

Turnover[1)] and volume mix, full-line wholesalers in 2007



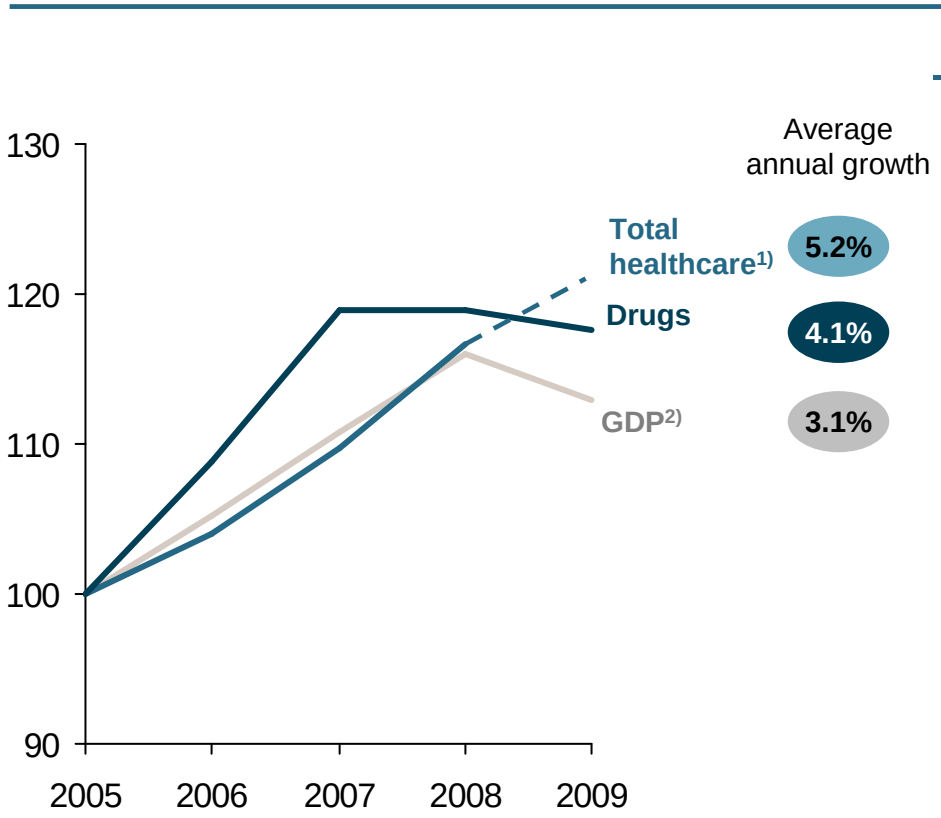
- As a result of price differences between specialty and generic drugs, specialty drugs accounted for the largest turnovers in 2007, even though generics volumes were higher
- Full-line wholesaler revenues are therefore heavily dependent on the relatively "expensive" specialty drugs
- Even though this effect is tempered by the generally higher percentage discounts for generics than for specialty drugs, specialty drugs are still responsible for over 50% of revenue levels
- The revenue and volume mix of full-line wholesalers changed in the period 2007-2009 due to market developments

1) Products x AIP / consumer price; 2) Includes raw materials, over-the-counter (OTC) products and medical devices

Source: BG Pharma; Roland Berger

The pharmaceutical sector plays a larger-than average role in limiting the growth of health care expenditure

GDP growth and health care and drug expenditure [index: 2005 = 100]



Market developments

- In recent years, the government has focused a lot of attention on curbing health care expenditure
- Between 2007-2009, drug expenditure dropped, whereas sales volumes climbed
- In the same period, total health care expenditure rose
- The pharmaceutical sector thus plays a larger-than average role in the government objectives
- The most important developments that have contributed to the turnover decrease are:
  - Introduction of the preference policy
  - Substitution of specialty drugs with generics

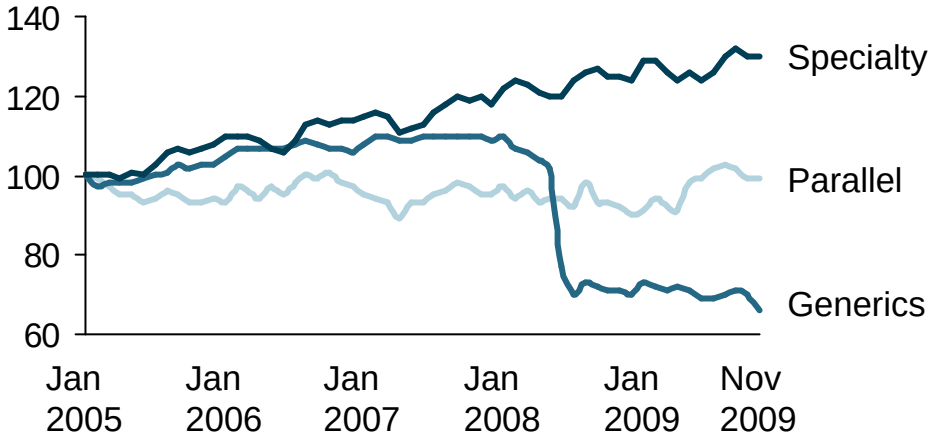
1) Expected rise of about 5% in 2009; source Roland Berger; 2) 2.75% decrease in 2009; source CPB December 2009

Source: CBS; CPB; IMS Health; Roland Berger

The preference policy has led to a drop in prices and total discounts for generic drugs

Preference policy generic drugs

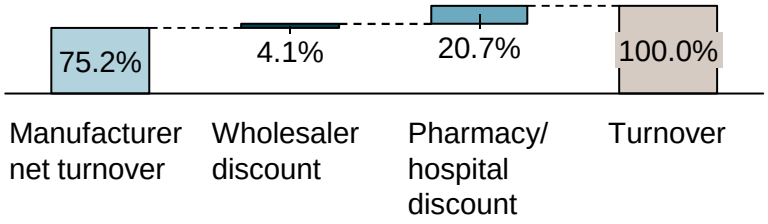
Price development drugs [index: January 2005 = 100]



- The 2008 introduction of the preference policy for generic drugs has led to a price drop of more than 40%
- Specialty drug prices, in contrast to generics, have increased even more – in total, 30% more compared to January 2005

Impact on full-line wholesalers

Turnover makeup 2009



- Lower wholesaler revenues due to drop in generics turnover
- Because of price drops, the total discount has declined from 29.8% to 24.8%
- Up to now, wholesalers have been able to compensate for most of this decline by charging it to pharmacies and hospitals (pre-negotiated discount drop from 25.5% to 20.7%)

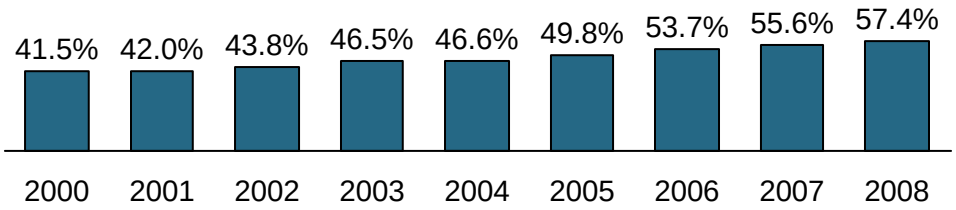
Source: Farminform; Roland Berger

The proportion of cheaper generic drugs in total drug volume is increasing, and will continue to do so

Substitution with generic drugs

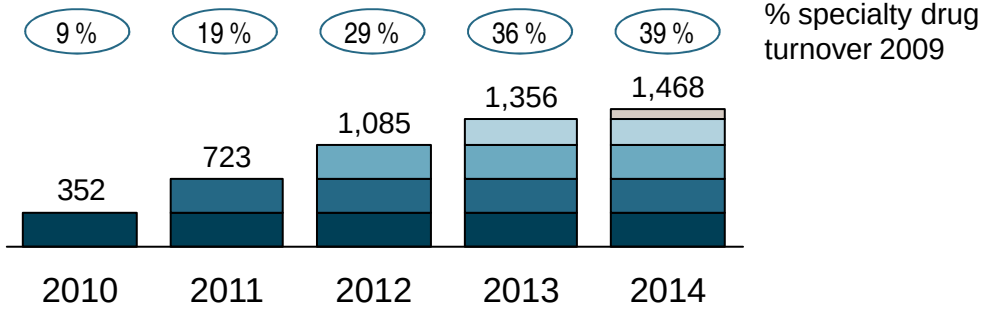
Relative volumes of generic drugs is increasing

Generics as percentage of total prescriptions (at pharmacies)



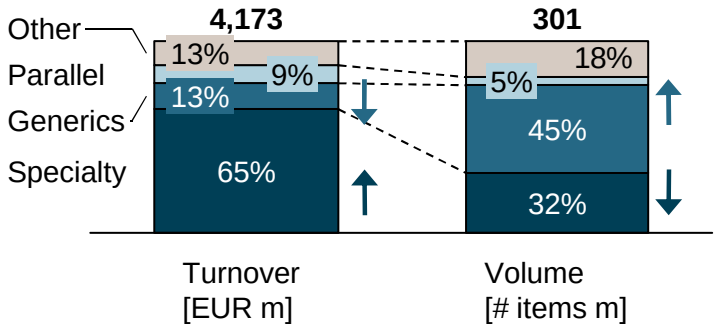
This will continue in the coming years

Overview of expiring patents in the Netherlands [EUR m]



Impact on full-line wholesalers

Turnover and volume mix, wholesalers 2009



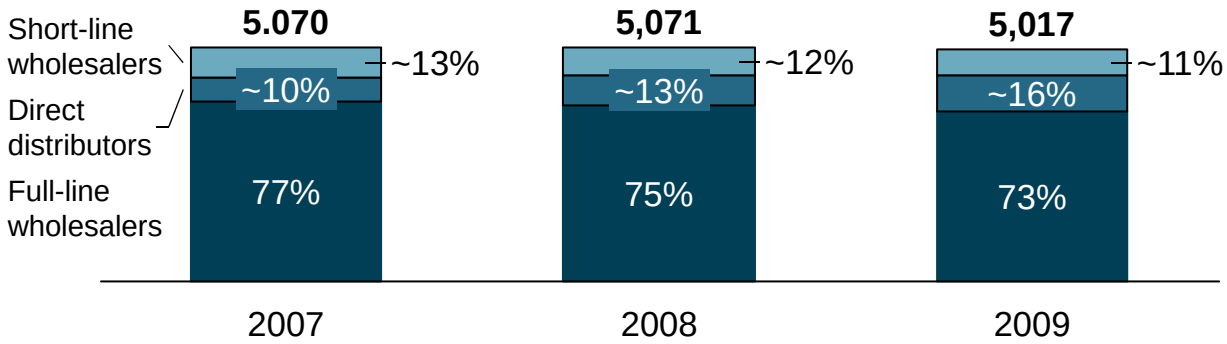
- Lower revenues due to drop in turnover as a result of the substitution of "expensive" specialty drugs for "cheap" generics
- This substitution, combined with the price drop in generics, has led to an added increase in dependency on "expensive" specialty drugs

Source: Farminform; Roland Berger

The market share of direct distribution has increased as a result of specific patient demand and the manufacturer's market advantages

Substitution with direct distribution

Drug turnover by distribution channel [EUR m]



- Manufacturers are increasingly turning to the exclusive distribution of drugs through direct distributors as a way to increase links with the patients and to reduce the total discounts in the value chain (wholesalers, pharmacies and hospitals)
- Manufacturers are thus responding to customer demand by delivering (repeat) prescriptions to and administering them in the home
- Direction distribution is especially interested in "expensive" specialty and high-demand drugs thanks to the respectively high absolute discounts and relatively cheap distribution

Impact on full-line wholesalers

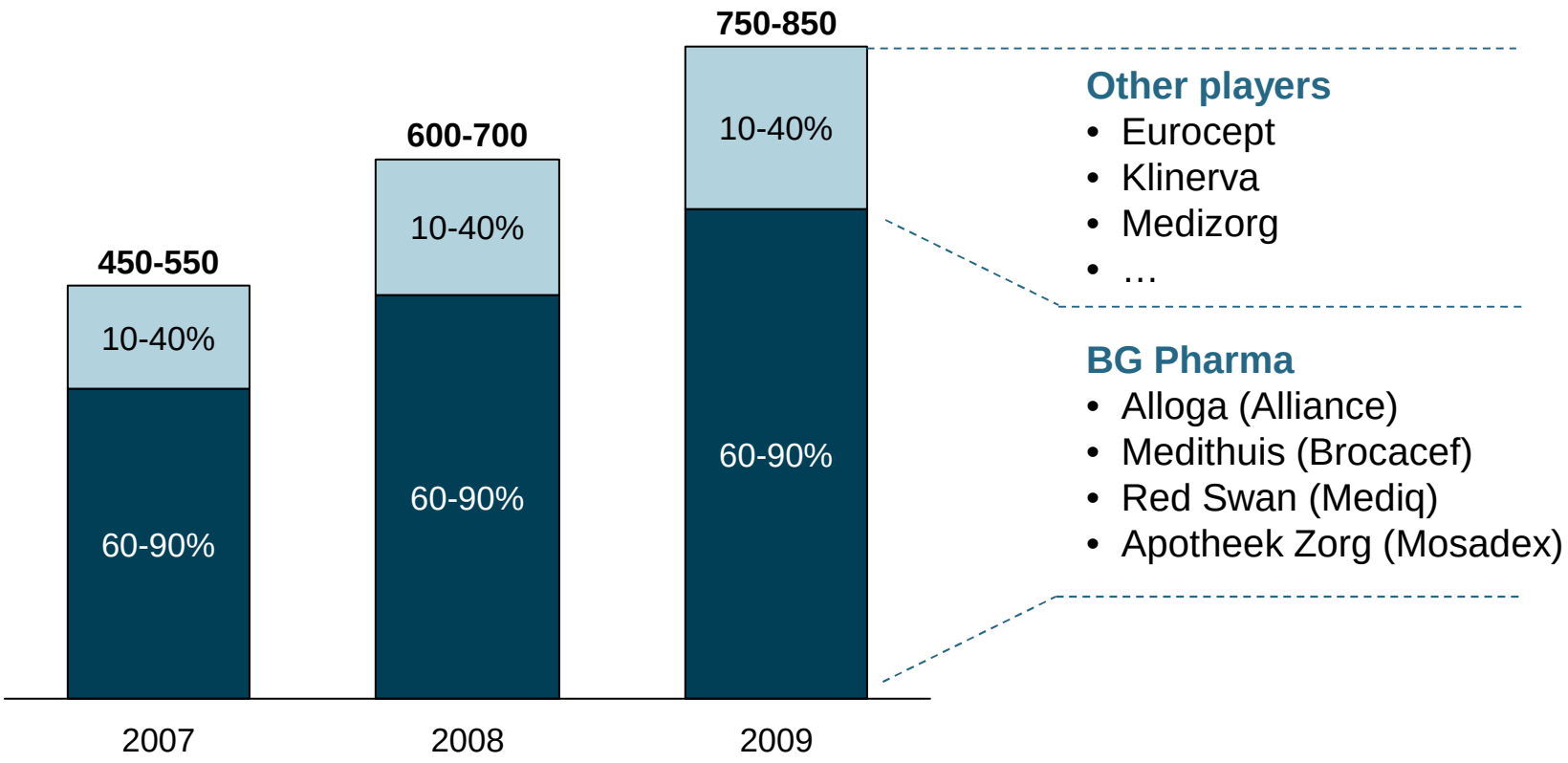
- Lower revenues for the wholesalers due to drop in turnover
- The effect on full-line wholesaler revenues is enhanced by the relative drop in the financial attractiveness of drugs

Source: Farminform; Roland Berger

Roland Berger
Strategy Consultants

Next to full-line distribution, the members of BG Pharma are responsible for the growth of direct distribution

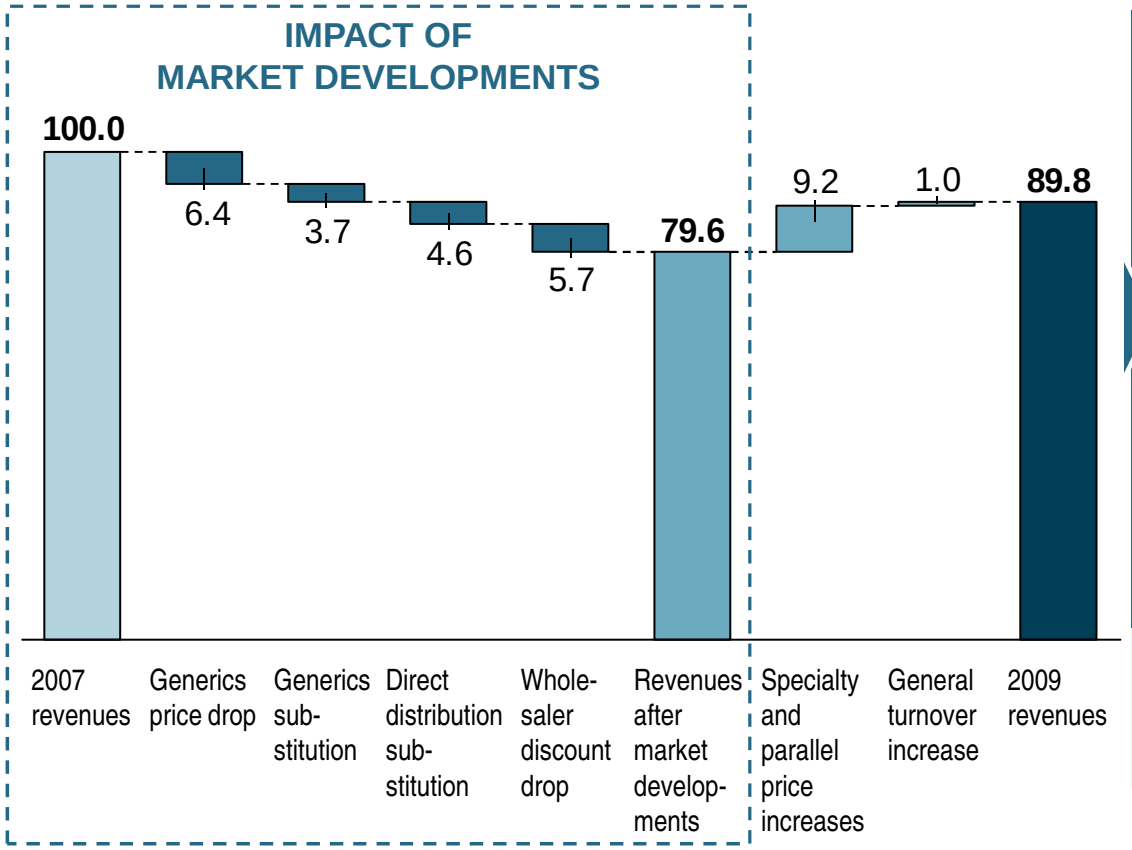
Key players in direct distribution [EUR m]



Source: SFK; BG Pharma; Roland Berger

In the foreseeable future, full-line wholesalers will face structural losses thanks to market developments

Revenue development from normal business operations[1)] [index: 2007 = 100]



- Market developments have led to a drop in full-line wholesaler revenue – this trend is expected to continue
- A possible positive effect of the increase in specialty drug prices is that it may somewhat offset the growth in generics and direct distribution substitution
- Because costs are practically constant, full-line wholesalers will eventually face structural losses (within three years max)

In the foreseeable future, full-line wholesalers will face structural losses thanks to market developments

1) Normal business operations exclude extra activities such as pharmacy takeovers and sales of assets

Source: BG Pharma; Roland Berger

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

B. Structural adaptation of the business model is the only long-term solution

Full-line wholesalers are efficient, and there is thus limited room for further improvements

Improved efficiency

I Improved efficiency

- The Dutch full-line wholesaler is 29% more productive than expected, if the influence of external factors is corrected for
- The Dutch full-line wholesaler has an efficient logistics network with relatively low transport costs

The full-line wholesalers are efficient, and there is thus limited room for further improvements

II Introduction of a PSO[1)]

- By introducing a PSO, the government can safeguard the "public responsibility" of full-line wholesalers
- Only a small part of the activities particular to full-line wholesalers can be designated as "public" responsibilities

The limited size of the costs for "public" functions means that the PSO is not a structural solution

III Business model adaptation

- The business model should be structurally adjusted to provide the necessary link between revenues and costs
- The wholesalers find themselves deadlocked because of the "first-mover disadvantage" in the existing market structure

Because of the deadlock, full-line wholesalers are not able to adjust their business models by themselves

1) Public Service Obligation

Roland Berger
Strategy Consultants

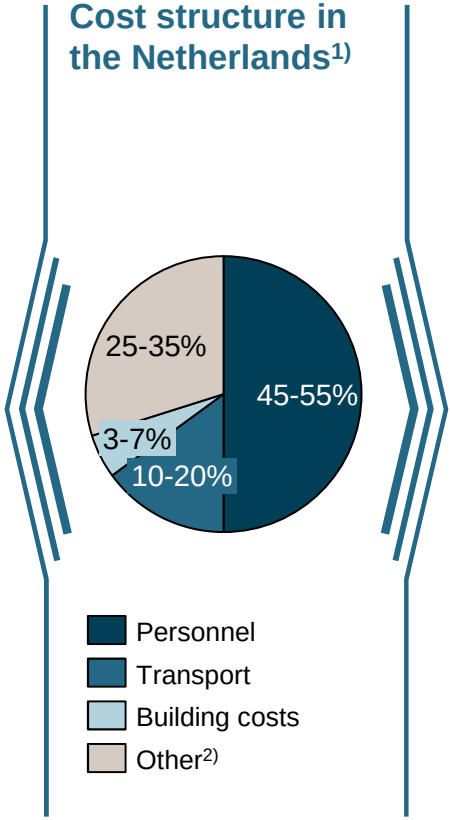
The efficiency of full-line wholesalers has been compared internationally on productivity and logistics efficiency

Efficiency full-line wholesalers

International productivity benchmark

- Productivity (volume per FTE) is a good measure for determining the efficiency **of 80-90% of the costs**
  - The number of FTEs is directly related to the size of personnel costs
  - The number of FTEs is a good indicator of the size of the organization and thus the accompanying building and other costs
- In order to compare productivity internationally, turnover has been measured per FTE, where **turnover is corrected** for the **differences in price levels** of drugs

Cost structure in the Netherlands[1)]



International logistics efficiency benchmark

- All Dutch full-line wholesalers, except Alliance Healthcare, have outsourced transport – this is comparable to the situations in most other European countries
- Therefore, **productivity is not a good indicator** for transport cost efficiency
- **Logistics efficiency** is therefore **compared separately**, based on the most important drivers and percentage size of transport costs

1) Based on incomplete data, completed with Roland Berger assumptions; 2) Other costs include sales costs, IT, office costs, materials

Source: BG Pharma; Roland Berger

Roland Berger
Strategy Consultants

Turnover per FTE has been corrected for the influence of external factors in order to compare productivity internationally

Internal and external factors' influence on productivity

External factors[1)]

The turnover per FTE in each country has been corrected for the influence of external factors in order to compare productivity across Europe

External factors considered:
- Pharmacies per capita
- Ease of distribution
- Population density
- Hospital pharmacies per capita
- Number of SKUs
- Turnover per capita
- Number of products that constitute 80% turnover
- Health care expenditure
- Generics market share
- km^2 per pharmacy
- Percentage turnover pharmacies
- Percentage direct distribution

Internal factors

Internal factors that can be influenced by the wholesaler can help explain differences in productivity

Internal factors considered:
- Turnover per wholesaler
- Turnover per warehouse
- Number of deliveries per day
- Population per warehouse
- km^2 per warehouse
- FTE per warehouse
- Market share of GIRP-associated wholesalers

1) From the perspective of the full-line wholesaler

Source: GIRP; Roland Berger

Roland Berger
Strategy Consultants

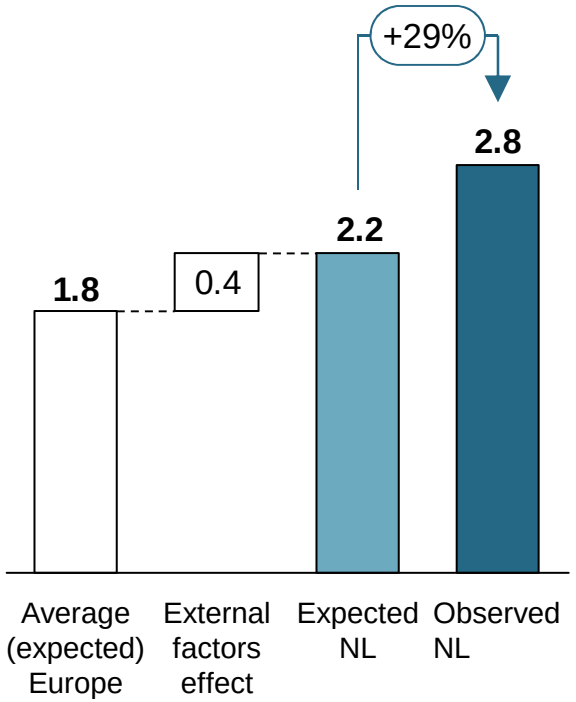
To determine actual productivity, expected productivity was compared to observed productivity

International benchmark

Approach

- The productivity of Dutch full-line wholesalers was compared to those of 12 other European countries
- The productivity per country was aided by a regression analysis that was corrected for the influence of external factors
- 12 external factors were assessed for individual or combined influence on productivity in a country, where a P-value of 5% or less was generally accepted as statistically significant
- Only the number of pharmacies per million residents was found to significantly influence productivity
- In order to determine actual high/low productivity, the calculated expected productivity was compared to observed productivity

Example NL results [EUR m / FTE]



Source: GIRP; BG Pharma; Roland Berger

Roland Berger
Strategy Consultants

Only the number of pharmacies per million residents was found to have significant statistical influence on productivity

Results regression analysis turnover/FTE with external factors

Significant influence

- Pharmacies per 1,000,000 residents
  - Negative correlation
  - P-value: 3.2%
  - Value NL: 115
  - Average of 13 countries: 266
- The R^2, the measure which clarifies the differences between countries, is relatively low at 0.36
- Considering that only 13 observations were included, this does not affect predicted value

Possible influence

- Ease of distribution (IMD Index)
  - Positive correlation
  - P-value: 31% (in combination with pharmacies per 1,000,000 residents)
  - Value NL: 8.04
  - Average of 13 countries: 8.18

Sensitivity:
If ease of distribution is included as an explanatory factor, productivity in the Netherlands is 34% higher than expected (vs. 29% without ease of distribution as explanatory variable)

No/insignificant influence[1)]

- Population density
- Hospital pharmacies per 1,000,000 residents
- Stock keeping units (SKUs)
- Turnover per capita
- Number of products that constitute 80% turnover
- Health care expenditure
- Generics market share
- km^2 per pharmacy
- Percentage turnover by pharmacy
- Percentage direct distribution

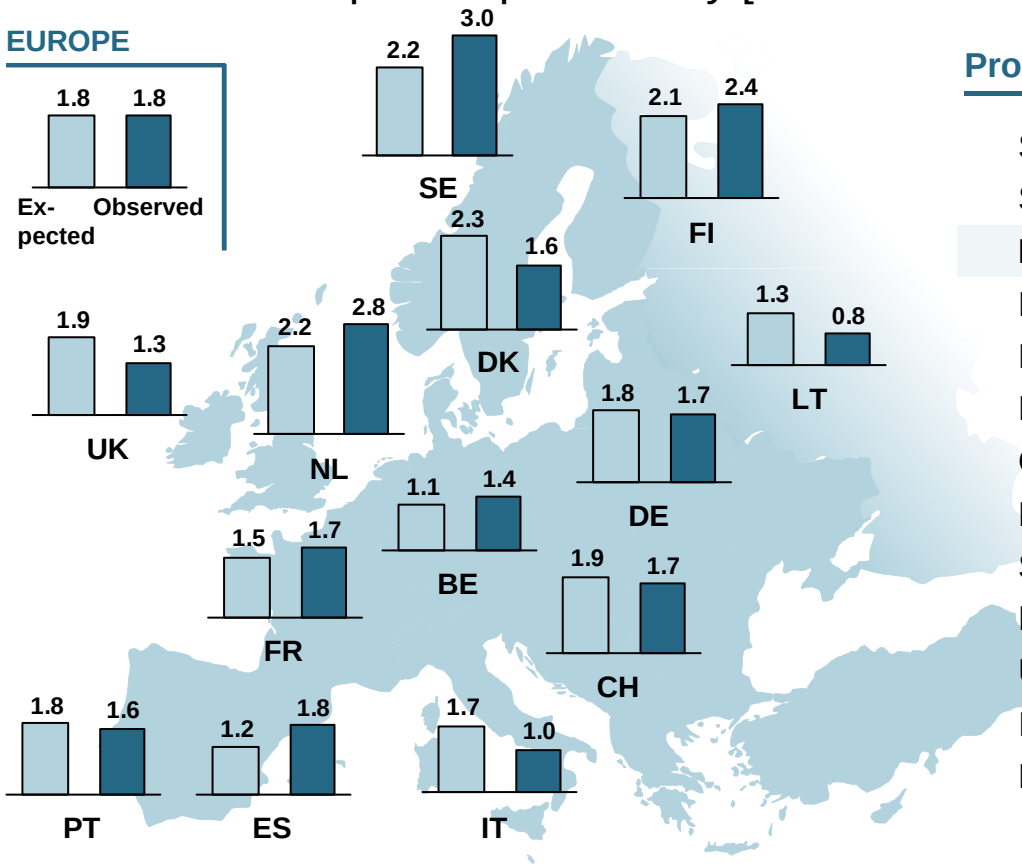
1) For these factors, it is statistically impossible to conclusively demonstrate their effects on productivity in a country; thus there is no claim that these factors can have no influence

Source: GIRP; BG Pharma; Roland Berger

Roland Berger
Strategy Consultants

The Dutch full-line wholesaler is 29% more productive than expected, if external factors are corrected for

Observed and expected productivity [turnover/FTE, EUR m][1)]



Productivity differences as % of expectation

Spain	46%
Sweden	38%
Netherlands	**29%**
Belgium	18%
Finland	17%
France	17%
Germany	-5%
Portugal	-8%
Switzerland	-8%
Denmark	-31%
United Kingdom	-33%
Italy	-37%
Lithuania	-38%

1) Netherlands 2009, other European countries 2008 (if unavailable: 2007)

Source: GIRP; BG Pharma; Roland Berger

Roland Berger
Strategy Consultants

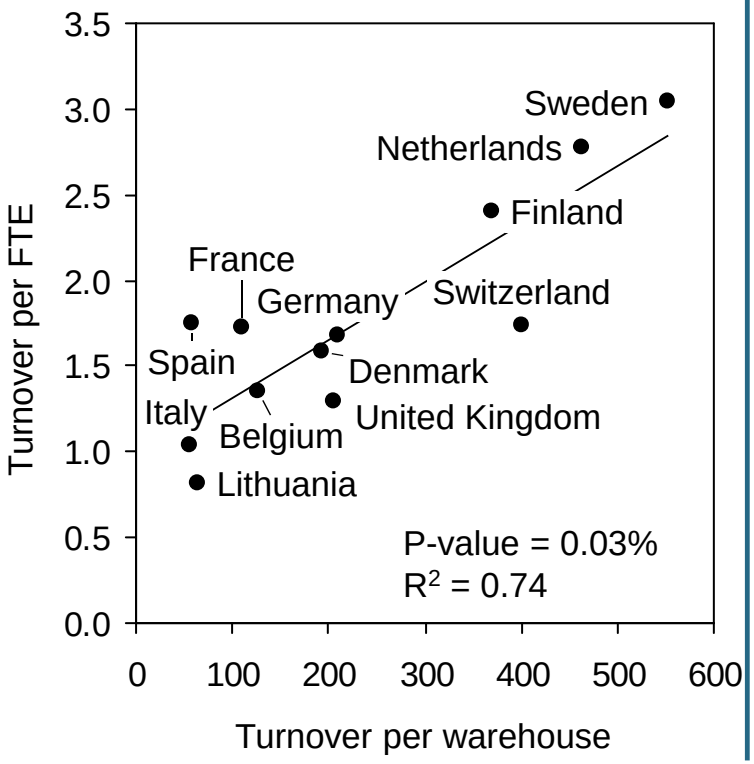
The higher productivity in the Netherlands can be largely explained by its relatively larger warehouses

Analysis internal factors[1)]

Approach

- A regression analysis on internal factors was conducted to explain the productivity differences
- 7 internal factors were assessed for individual or combined influence on productivity in a country
- Only the turnover per warehouse was found to have significant influence on productivity
- Expected productivity for the Netherlands amounts to EUR 2.5 m/FTE (observed is 9% more) – this is more than the EUR 2.2 m/FTE calculated for the external factor pharmacies per capita (observed is 35% more)
- The high productivity in the Netherlands is therefore largely explained by the lower number, and larger size, of the warehouses

Impact turnover per warehouse [EUR m]



1) For internal use by BG Pharma; not intended for communication to external stakeholders

Source: GIRP; BG Pharma; Roland Berger

Roland Berger Strategy Consultants

Turnover per warehouse is the only internal factor that has a clear and significant statistical impact on productivity

Results regression analysis turnover/FTE with internal factors

Significant influence

- Turnover per warehouse
  - Positive correlation
  - P-value: 0.03%
  - Value NL: 464
  - Average of 12 countries: 234

Possible influence

- km^2 per warehouse
  - Positive correlation
  - P-value: 38% (in combination with turnover/warehouse)
  - Value NL: 4,614
  - Average of 13 countries: 15,564

Sensitivity:
If this variable is included as an explanatory factor, then the productivity of the Netherlands is 17% higher than expected (vs. 9% without size of wholesaler as explanatory variable)

No/insignificant influence[1)]

- Number of deliveries per day
- Residents per warehouse
- Turnover per wholesaler
- km^2 per warehouse
- FTE per warehouse
- Market share of GIRP-associated wholesalers

1) For these factors, it is statistically impossible to conclusively demonstrate their effects on productivity in a country; focusing on these factors can nevertheless be considerably important for the productivity or profitability of an individual wholesaler

Source: GIRP; BG Pharma; Roland Berger

Roland Berger
Strategy Consultants

The integration of wholesalers and pharmacies accounts for Spain's higher productivity

Situation of the most productive countries based on external factors

External factors	EUR	ES	SE	NL
Expected productivity [EUR per FTE]	1.8	1.2	2.2	2.2
Observed productivity [EUR per FTE]	1.8	1.8	3.0	2.8
Difference in productivity	n/a	46%	38%	29%
Pharmacies per m residents	266	476	93	115

Internal factors	EUR	ES	SE	NL
Average warehouse turnover	234	59	553	464
Difference in productivity as % of expected, calculated for the internal factor turnover per warehouse	n/a	47%	3%	9%

Productivity explanation

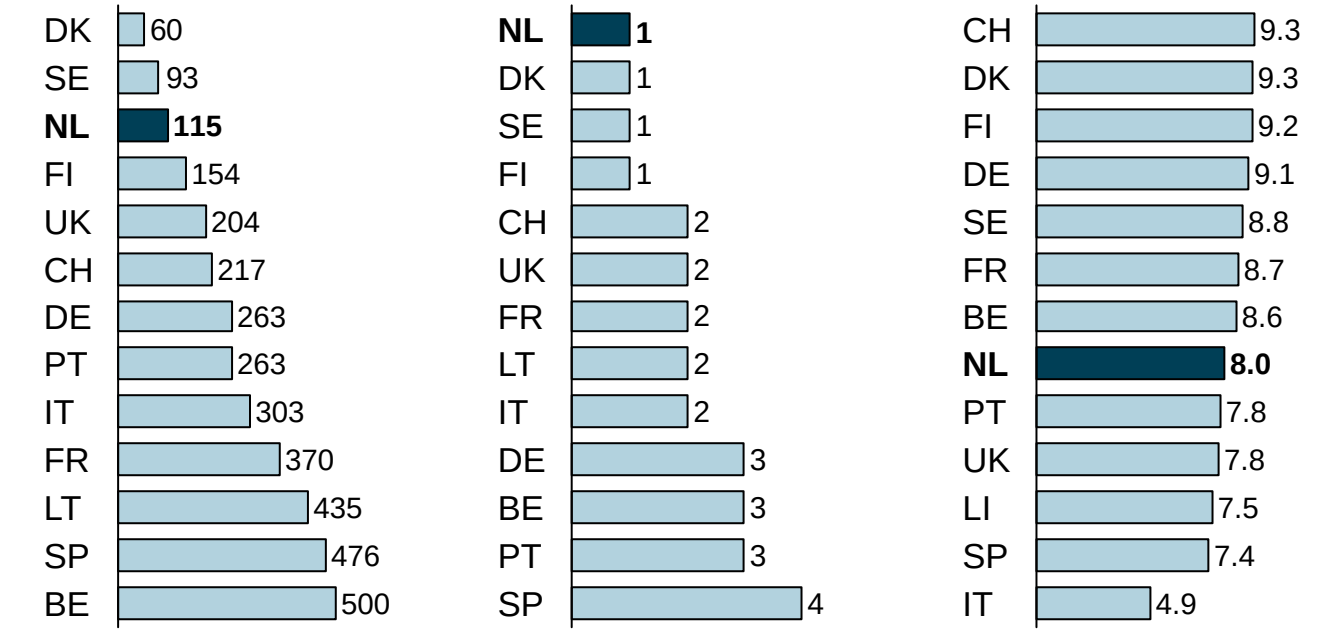
- Spain is more productive because, via cooperatives, pharmacies own the wholesalers. As such, the wholesaler is an integrated part of the pharmacy, and only conducts its activities under the authority of cooperating pharmacies. In total, 85% of drug distribution in Spain occurs via such cooperatives
- Sweden and the Netherlands are more productive thanks to their relatively larger warehouses

Source: GIRP; BG Pharma; Roland Berger

Dutch full-line wholesalers have an efficient logistics network with relatively low transport costs

Logistics efficiency

Drivers of logistics efficiency[1)]



Transport costs as percentage of turnover

- The transport costs as percentage of turnover are comparable to Denmark, Germany, France, Italy, Spain and the United Kingdom
- Based on these analyses, it can be concluded that the Netherlands has relatively low transport costs
- The low number of pharmacies and deliveries per day in the Netherlands appear to be the most important drivers

1) Data shown comes from GIRP and not from the members of BG Pharma

Source: GIRP; BG Pharma; Roland Berger

Roland Berger
Strategy Consultants

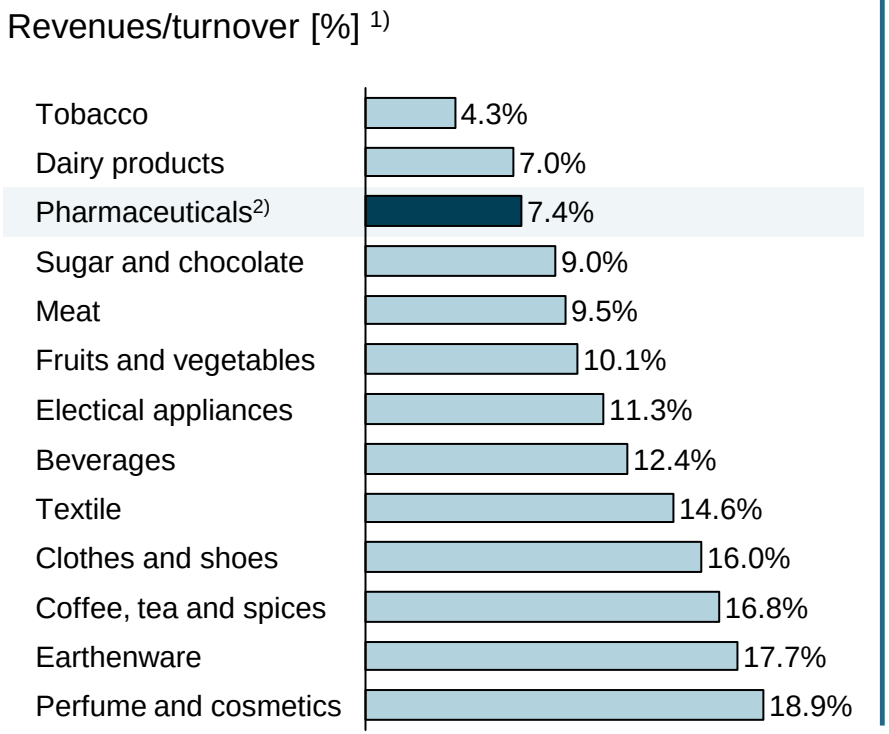
Dutch full-line wholesalers appear to be more efficient than European wholesalers in other industries

Industry-wide benchmark

Approach

- The efficiency of pharmaceutical wholesalers in 13 European countries (including the Netherlands) in terms of revenues as a percentage of turnover was compared to the average percentage of wholesalers in other industries in the European Union
- The revenues of European pharmaceutical full-line wholesalers as a percentage of turnover are relatively low
- It seems that pharmaceutical wholesalers are efficient and no unnecessarily high margins are charged
- This effect is further enhanced in the Netherlands, where compared to other European countries the full-line wholesaler is more efficient

Wholesaler industry efficiency [2006]



1) The same as added value or gross margin; 2) Based on data from GIRP

Source: Eurostat; GIRP; Roland Berger

The limited size of the costs for "public" functions means that the PSO is not a structural solution

Introduction of a PSO

I Improved efficiency

- The Dutch full-line wholesaler is 29% more productive than expected, if the influence of external factors is corrected for
- The Dutch full-line wholesaler has an efficient logistics network with relatively low transport costs

The full-line wholesalers are efficient, and there is thus limited room for further improvements

II Introduction of a PSO[1)]

- By introducing a PSO, the government can safeguard the "public responsibility" of full-line wholesalers
- Only a small part of the activities particular to full-line wholesalers can be designated as "public" responsibilities

The limited size of the costs for "public" functions means that the PSO is not a structural solution

III Business model adaptation

- The business model should be structurally adjusted to provide the necessary link between revenues and costs
- The wholesalers find themselves deadlocked because of the "first-mover disadvantage" in the existing market structure

Because of the deadlock, full-line wholesalers are not able to adjust their business models by themselves

1) Public Service Obligation

Roland Berger
Strategy Consultants

Dutch legislation and regulation have no specific guidelines for revenues, selection and services of wholesalers

Relevant legislation and regulation

Dutch drug law

- Permit required (Art. 18)
- Storage and distribution conform to European guidelines for good distribution practices (Art. 36)
- Enough selection and supply available to respond quickly to demand (Art. 36)
- Plan in place that guarantees the drug recall from the market (Art. 37)
- Up-to-date administration (Art. 38)
- Purchases and sales via authorized parties only (Art. 39)

European guidelines for good distribution practices

- Suitable and adequate workspace (Art. 6)
- Immediate identification and storage of opiates and "cold chain" drugs (Art. 8)
- Periodic monitoring of storage temperatures and separate storage of drugs (Art. 9)
- System in place that guarantees the replacement of supplies – First In First Out (Art. 12)
- Adequate supply available for emergency response to customers (Art. 16)

- Dutch legislation and regulation establish only general requirements for the storage and distribution of drugs
- There are no specific guidelines in the Netherlands for the level and structure of revenues, volume and makeup of selection and type and quality of services

Source: Geneesmiddelenwet (February 8, 2007); Guideline on GDP of Medicinal Products for Human Use (94/C63?03)

Roland Berger
Strategy Consultants

By introducing a PSO, the government can safeguard the "public responsibility" of full-line wholesalers

Public Service Obligation

Overview PSOs in Europe[1)]






- **Availability requirements**
  - **Scope**: Requirements vary from "adequate selection" (e.g. Spain) to "at least 90% of all drugs available on the market" (e.g. Italy, France)
  - **Quantity:** Requirements vary from "adequate supply" (e.g. Spain) to "supply minimums of 167% of the average monthly turnover"[2)] (e.g. Belgium)
- **Delivery requirements**
  - Maximum delivery time between 12 and 24 hours (e.g. France, Italy)
  - Wholesalers have taken steps to be able to meet demand during vacations and emergencies (e.g. Spain, Belgium)
  - Obligation to serve all pharmacies in the geographical market, regardless of earlier deliveries (e.g. Italy)
  - The obligation to supply may also exist outside of the "normal" geographical market (e.g. Sweden)

Explanation

- The **objective** of a **PSO** is to safeguard **"public responsibility**": activities that are **vitally important** for the **patient**, but which under normal market conditions are **not guaranteed**
- A PSO can furthermore prevent the responsibilities of full-line wholesalers and the lack of responsibilities for short-line wholesalers and direct distributors from leading to "cherry picking"

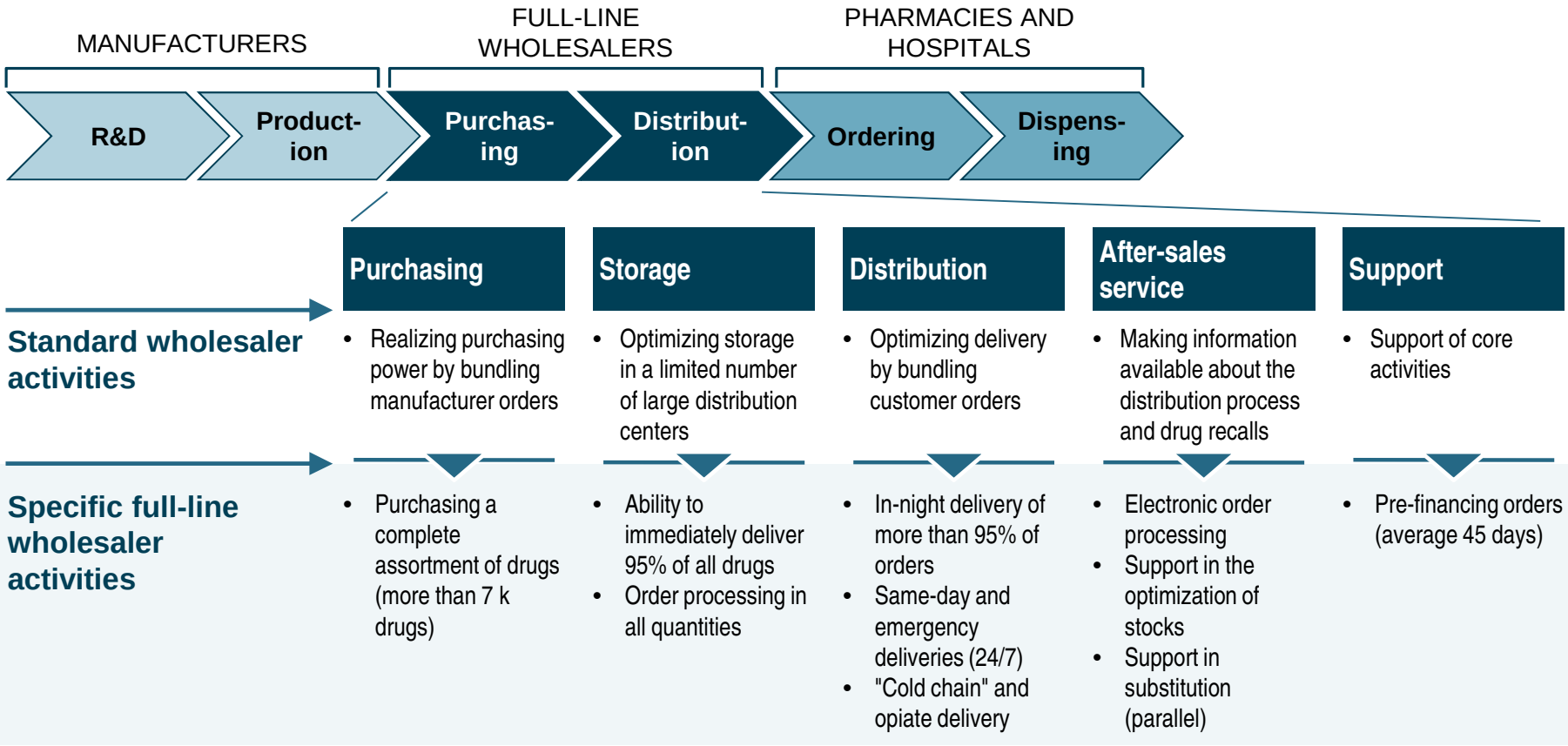
1) The 6 countries with a PSO represent 73% of the total pharmaceutical market n the 13 European countries researched; 2) For special drugs, serums and vaccines

Source: GIRP; BG Pharma; Roland Berger

Roland Berger
Strategy Consultants

Next to their standard activities, full-line wholesalers conduct specialized activities

Overview of the activities of full-line wholesalers



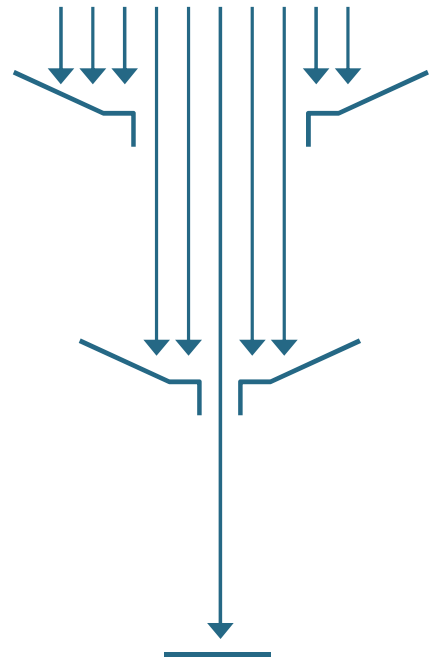
Source: BG Pharma; Roland Berger

Roland Berger
Strategy Consultants

Only a limited number of specialized activities can be designated as "public" responsibility

Added social value of specialized activities

Specialized activities



Inherent to the business model

Specialized activities that are inherent to the business model of a full-line wholesaler, and which should be conducted by all market players given normal market conditions

- Purchasing of the complete assortment
- Immediate delivery of drugs
- In-night delivery
- "Cold chain" and opiate delivery
- Electronic order processing

Optional within the business model

Specialized activities that are not directly related to the business model of a full-line wholesaler; market players have the choice to conduct these activities or not

- Order processing in all quantities
- Stocks support
- Substitution support
- Order pre-financing

Meeting a "public responsibility"

Specialized activities that are not directly related to the business model and which have a direct effect on the quality of total distribution, but by conducting these activities a "public responsibility" is met

- Same-day and emergency delivery (24/7)

Source: BG Pharma; Roland Berger

Roland Berger
Strategy Consultants

The limited size of the costs for activities with a "public" responsibility means that the PSO is not a structural solution

Cost structure full-line wholesalers[1)]

	Purchasing	Storage	Distribution	After-sales service	Support	TOTAL
Standard activities						65-75%
Specialized activities inherent to the business model	Purchasing of complete assortment	Immediate drug delivery	"Cold chain" and opiate delivery In-night delivery	Electronic order processing		19-26%
Specialized activities optional within the business model		Order processing in all quantities		Stocks support Substitution support	Order pre-financing[2)]	2-6%
Specialized activities with added social value			Same-day and emergency delivery			2-5%
TOTAL						**100 %**

1) Based on incomplete data, completed with Roland Berger assumptions; 2) Additional costs are zero, considering payment period of 45 days does not substantially deviate from the average payment period in the Netherlands (European Payment Index spring 2009)

Source: BG Pharma; Roland Berger

Because of the deadlock, full-line wholesalers are not able to adjust their business models by themselves

Business model adaptation

I Improved efficiency

- The Dutch full-line wholesaler is 29% more productive than expected, if the influence of external factors is corrected for
- The Dutch full-line wholesaler has an efficient logistics network with relatively low transport costs

The full-line wholesalers are efficient, and there is thus limited room for further improvements

II Introduction of a PSO[1)]

- By introducing a PSO, the government can safeguard the "public responsibility" of full-line wholesalers
- Only a small part of the activities particular to full-line wholesalers can be designated as "public" responsibilities

The limited size of the costs for "public" functions means that the PSO is not a structural solution

III Business model adaptation

- The business model should be structurally adjusted to provide the necessary link between revenues and costs
- The wholesalers find themselves deadlocked because of the "first-mover disadvantage" in the existing market structure

Because of the deadlock, full-line wholesalers are not able to adjust their business models by themselves

1) Public Service Obligation

Roland Berger
Strategy Consultants

In contrast to most countries, the Netherlands does not regulate the revenues of full-line wholesalers

Overview of regulations on the revenues of wholesalers

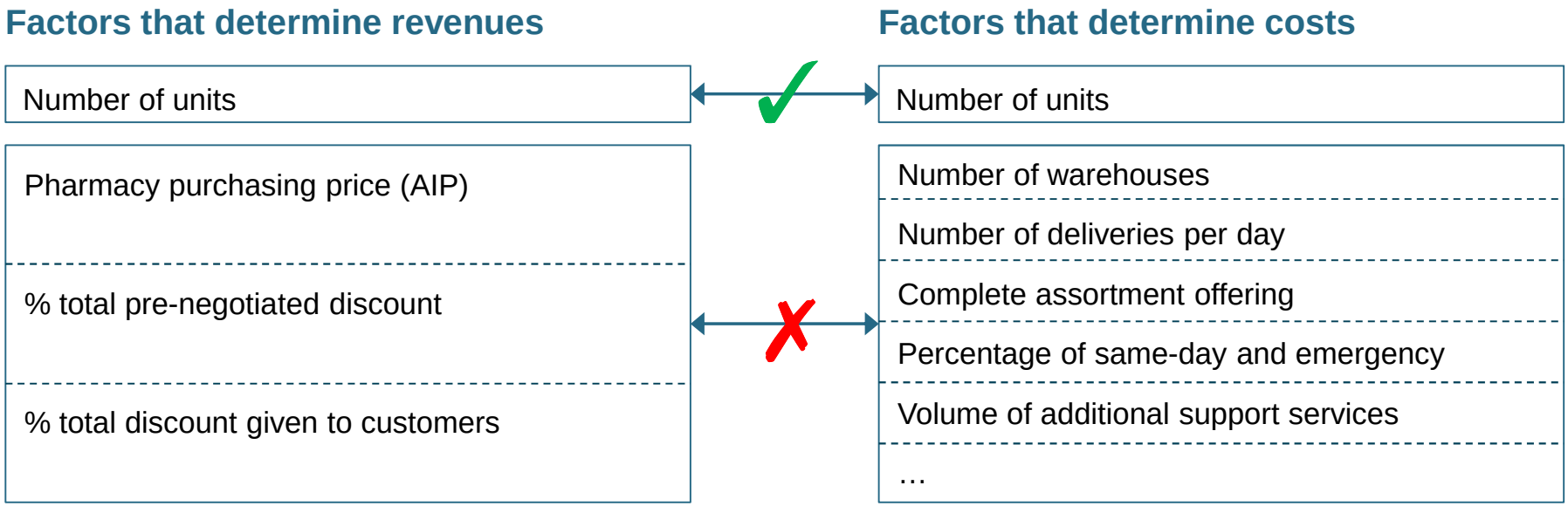
Country[1)]	No regulation	Regulation			Revenues from additional services
		Degressive %	Fixed %	Maximum	
Netherlands	✓				**None**
Germany		✓		✓	None
UK			✓		Yes, 0-5% of total revenues
France		✓		✓	None
Italy			✓	✓	None
Switzerland		✓		✓	Unknown
Sweden	✓				Yes, 0-5% of total revenues
Denmark	✓				None
Spain			✓	✓	Unknown
Belgium		✓		✓	Unknown
Portugal			✓		Unknown
Finland	✓				Yes, >30% of total revenues
Lithuania		✓		✓	Unknown

Source: GIRP; BG Pharma; Roland Berger

Roland Berger
Strategy Consultants

The business model should be structurally adjusted to provide the necessary link between revenues and costs

Current business model full-line wholesalers



- A reduction in revenues is not accompanied by a reduction in the cost level for full-line wholesalers, considering that the factors that determine cost level (e.g. logistics network, complete assortment offering and additional services) do not change
- Only structural adjustment of the business model for full-line wholesalers can provide the necessary link between revenues and costs, and thus offer a long-term solution

Source: Roland Berger

Full-line wholesalers are in a deadlock and are not able to adjust the business models by themselves

Current deadlock in business model adjustment

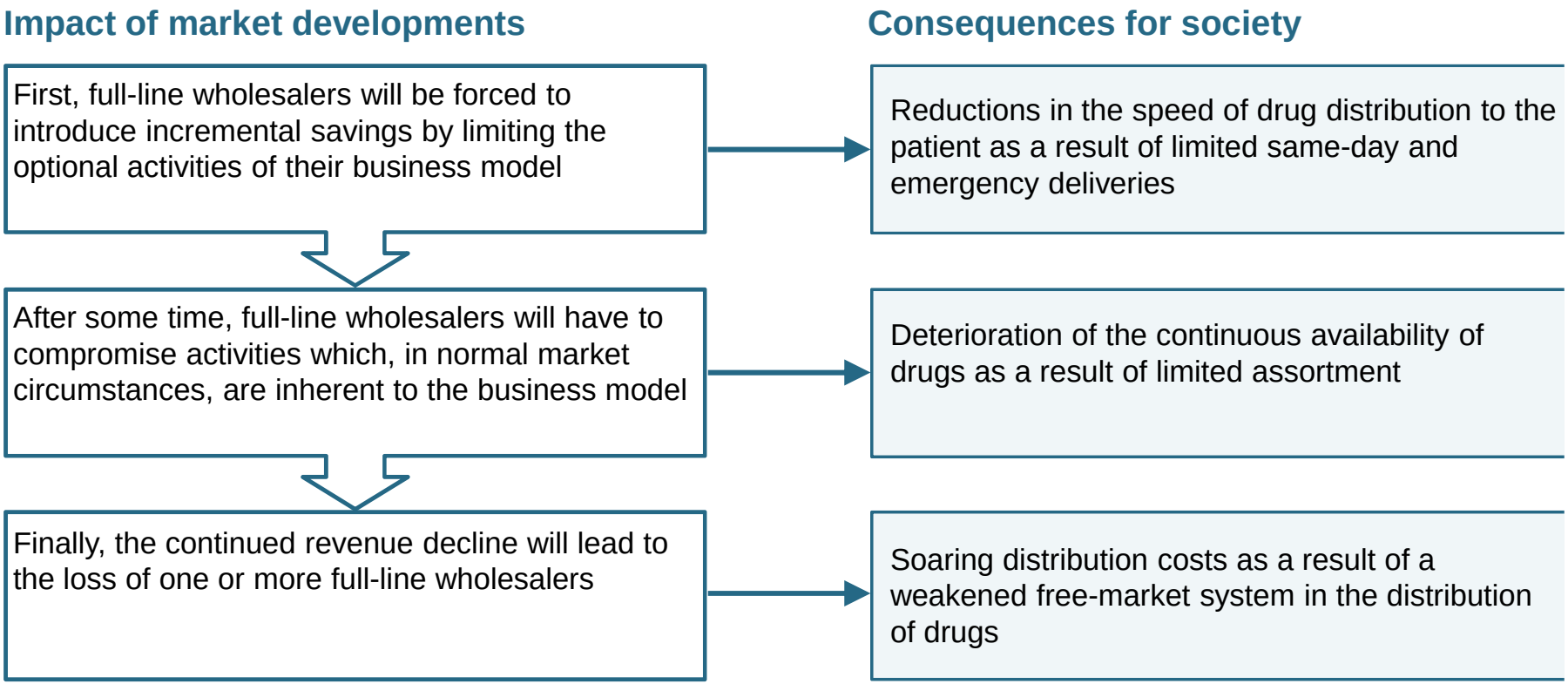
- The first wholesaler to structurally adjust its business model will be punished by the market
  - Customers that would then have to pay more would be approached by competitors which see them, and the higher turnover, as a way to continue operating within the current business model
  - As a result, the turnover of the wholesaler with the new business model will drop and will not be enough to cover the virtually fixed costs
- The "first-mover disadvantage" leads to a deadlock, given that the current market structure does not afford individual businesses the ability to adjust the business model unless they face extremely high costs
- The common market principles that stimulate innovation in a sector (e.g. adjustment to new conditions and introduction of innovative products give an organization an advantage) do not apply in this situation

Source: Roland Berger

Roland Berger
Strategy Consultants

Thanks to the current deadlock, market developments will ultimately impact society with direct and negative consequences

Social effects of the deadlock



Source: Roland Berger

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

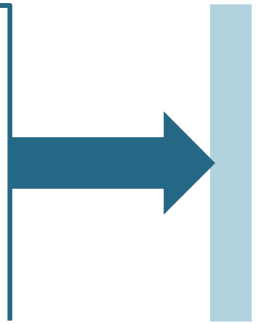
C. The government can support full-line wholesalers in realizing a successful transition

The government can support full-line wholesalers by breaking the deadlock and by enabling the transition

Breaking the deadlock

Full-line wholesalers cannot break the deadlock themselves

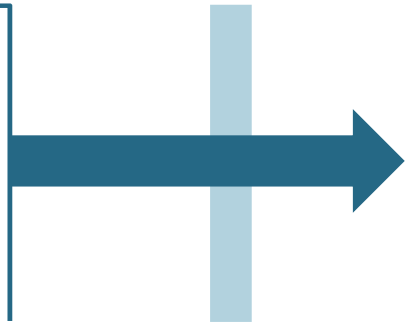
- Full-line wholesalers cannot adjust the business model on their own, and are therefore stuck in a deadlock
- To break the deadlock, a sector-wide agreement is necessary
- The creation of a sector-wide agreement is at odds with competition law, which means that full-line wholesalers cannot come together to break the deadlock



The government can help by breaking the deadlock

- In order to break the deadlock, the government can provide support by:
  - Authorizing the ability to agree upon a date when full-line wholesalers individually adjust their business model

  or by:
  - Temporarily imposing a compensation program which will allow full-line wholesalers to make structural adjustments during the transition period



Source: Roland Berger

During the transition period, cost levels, service levels and the free market should be safeguarded

Resulting transition model

Conditions for the transition model

- The government will probably require that during the transition period, full-line wholesalers guarantee that:
  - Total distribution costs for drugs do not rise
  - The full-line assortment and service level are preserved
  - Ample free market continues to exist
- In the transition period, a PSO can also be introduced to stimulate competition between wholesalers on a level playing field
- Introducing a temporary compensation program will guarantee that full-line wholesalers receive sufficient revenues during the transition period so that they can continue to conduct their current activities; this will ensure that society is not negatively impacted while they make the necessary structural adjustments

Examples of (temporary) compensation programs

Digressive percentage

Wholesaler revenue based on a digressive percentage of turnover, where the percentage decreases as the price of a drug rises

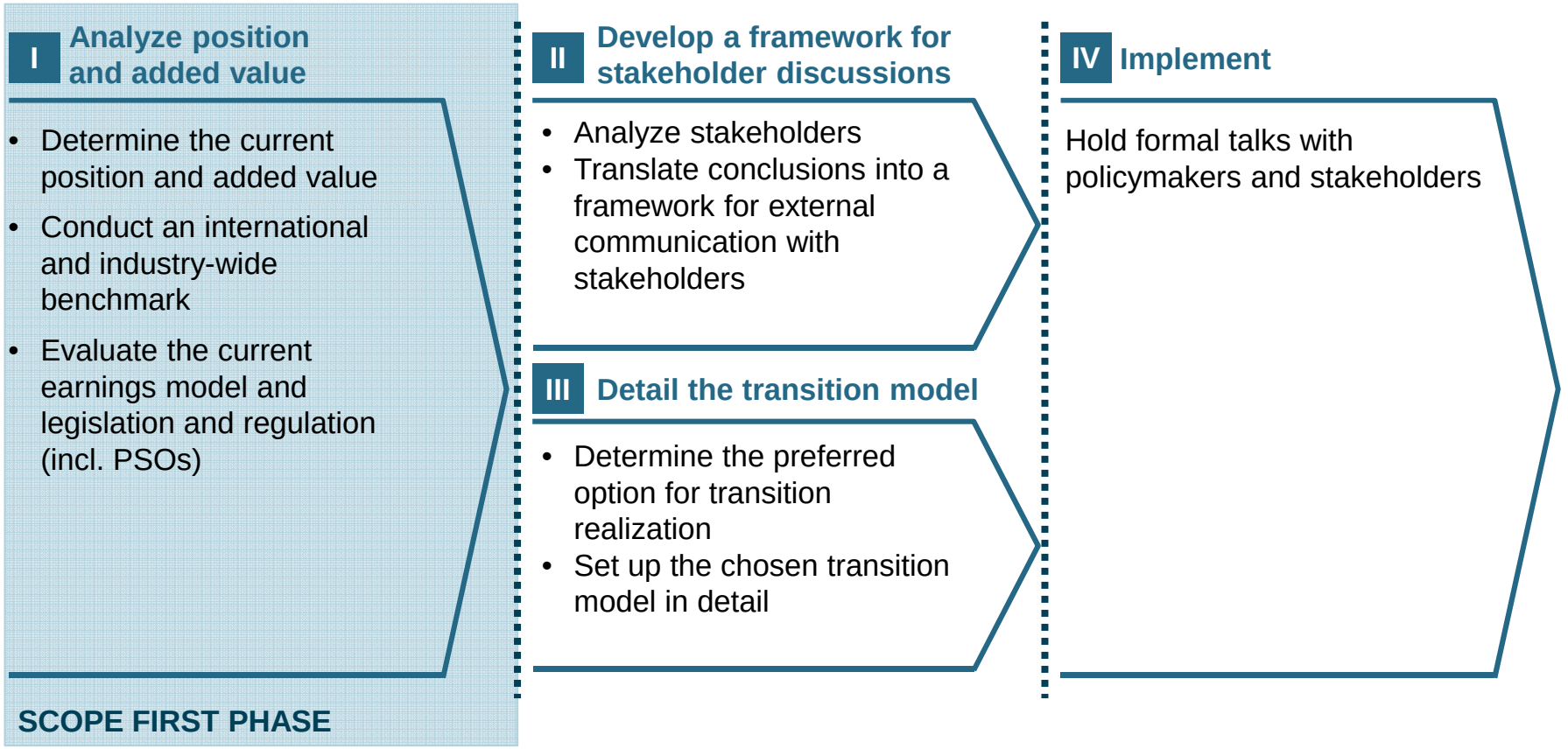
Unit reimbursement

Wholesaler revenue based on a fixed reimbursement per unit delivered

Source: Roland Berger

Roland Berger recommends a framework for discussions with stakeholders and that the transition model is detailed

Next steps



Source: Roland Berger