

# Competition in the distribution of medicines

October 2016



KONKURRENCE- OG FORBRUGERSTYRELSEN

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**Competition in the distribution of medicines**

**Danish Competition Council**

Danish Competition and Consumer Authority

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# Chapter 1

## Summary and recommendations

*The pharmaceutical market has major economic and health-related significance*

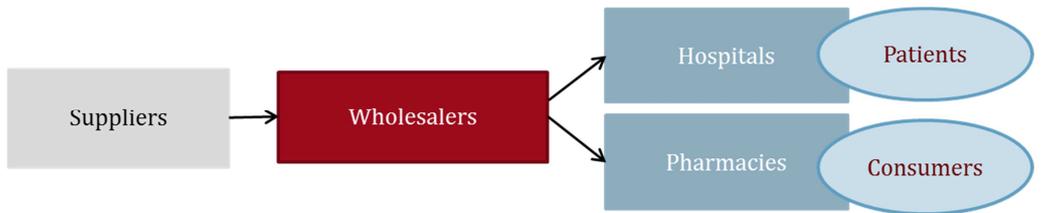
### 1.1 Background to and delimitation of the report

Most Danes come into contact with the healthcare sector and the pharmaceutical market. In 2015, more than 4 million Danes bought prescription medicines while almost 2.7 million received hospital treatment in 2014.

In 2014, Denmark’s expenditure on medicines amounted to DKK 21.4 billion, corresponding to slightly more than 1 per cent of GDP. In 2014, the primary sector (mainly privately-owned pharmacies) sold medicines to consumers worth DKK 11.8 billion, of which DKK 5.6 billion was reimbursed by the public sector while public-sector expenditure on medicines at hospitals amounted to DKK 9.6 billion.

Overall, the pharmaceutical market has three distribution channels, see figure 1.1: Suppliers, wholesalers and ‘retailers’. Suppliers develop and manufacture medicines while wholesalers distribute the medicines from the suppliers to the ‘retailers’. ‘Retailers’ can be divided into two channels: pharmacies selling medicines to consumers and hospitals redistributing medicines to patients. This report focuses on competition in the distribution of medicines from suppliers to pharmacies and hospitals.

Figure 1.1 Distribution channels in the pharmaceutical market



**Note:** *Suppliers* are parallel importers and manufacturers who develop, manufacture and supply medicines while *wholesalers* are both pre-wholesalers, who handle stocks and distribution for suppliers, or ‘traditional’ wholesalers, who buy medicines from suppliers and resell, and pure distributors.

Source: The Danish Competition and Consumer Authority

*International studies show that Danish pharmacy customers pay high prices for patented medicines*

All distribution channels on the path to the consumers are, to a greater or lesser extent, subject to market powers and are therefore in a position to charge higher margins, which must be expected to feed through, fully or partly, to higher pharmaceutical prices for the consumers.

International studies show that Danish pharmacy customers pay fairly high prices for patented medicines. Original medicines (which also comprise patented medicines) make up 59 per cent of sales by pharmacies. Conversely, consumer prices of generic medicines are fairly low compared with prices abroad. Generic medicine sales account for 14 per cent of pharmacy sales (and 51 per cent of the total volume of medicine sales).

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The low prices of generic medicines in Denmark reflect to some extent the competition among suppliers of medicines to pharmacies arising from the so-called 14-day fixed-price periods (auction system). Every 14 days, all suppliers must report prices to an auction system, after which pharmacies must offer customers the least expensive product in a group of substitutable products. The effect of the system on prices of patented medicines, for which no direct substitutes exist, is less pronounced as these products are either not exposed to competition at all or only to a limited extent from parallel imported original products.

***The pharmaceutical market is subject to extensive regulation***

The pharmaceutical market differs from other retail markets in being subject to extensive regulation. The regulation aims to take a number of social issues into account, including healthcare issues such as supply reliability, quality and transparency as well as ensuring that public expenditure on medical reimbursements and medicines used at hospitals are kept under control.

The Danish Competition and Consumer Authority/the Danish Competition Council (*Konkurrencerådet*) have previously called attention to competition issues in the pharmaceutical market, such as in a report on the pharmacy sector (2010) and in a request made to the Danish Minister of Health and the Danish Minister for Business and Growth (2012) under section 2(5) of the Danish Competition Act (*konkurrenceloven*), and in a competition case concerning wholesalers supplying pharmaceutical products to pharmacies (2014). Moreover, the European Commission has conducted several competition cases against pharmaceutical suppliers who have illegally attempted to restrict competition in order to promote sales of own products.

The report on the pharmacy sector and the section 2(5) request concluded that the regulation of the pharmacy sector substantially restricts competition in the market for pharmacy services: The regulation of the pharmacy sector restricts access to the market, eliminates price competition and provides only limited incentive for pharmacies to compete on customer services. The regulation was eased with effect from 1 June 2015 and enabled pharmacies to set up, move or close down pharmacy branches or outlets within a range of 75 kilometres from the pharmacy. As a result of the new rules, the number of prescription dispensing units has increased and, as a result, availability and competition have been strengthened to some extent.

The analysis made in this report particularly focuses on competition among wholesalers in the distribution of medicines for the treatment of human beings, that is, both prescription medicines, over-the-counter (OTC) medicines sold by pharmacies only, liberalised OTC medicines and medicines for hospitals only. Basically, wholesalers are defined as enterprises involved in the distribution of medicines from suppliers to retailers.

***The analysis measures competition and offers recommendations of how to strengthen competition***

The analysis measures competition among wholesalers, illustrates factors impacting competition and offers recommendations of how to strengthen competition.

The wholesale market cannot be considered in isolation from the retail and supplier markets. In consequence, factors impacting the other distribution channels in the pharmaceutical

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market, that is, suppliers, pharmacies and hospitals, are also taken into account if they are deemed to be of significance to the competition among wholesalers.<sup>1</sup>

Strengthening of competition in the distribution of medicines could entail lower consumer prices, lower public healthcare expenditure, higher productivity, increased availability and improved customer service.

## 1.2 Key findings of the report

There are marked differences in the regulation, framework conditions and market structures of wholesalers supplying medicines to pharmacies and hospitals, respectively. This is reflected in huge differences in the competitive environment of the two wholesale markets.

*Competition in the distribution of medicines to pharmacies could become more effective*

The distribution of medicines to pharmacies is subject to limited competition. The market is strongly regulated and the market structure is characterised by two major wholesalers having handled almost all supplies for a number of years. Therefore, competition in the market can be strengthened.

*The distribution to hospitals does not appear to be exposed to competitive challenges to the same extent*

Competition in the distribution of medicines to hospitals does not appear to be exposed to competitive challenges to the same extent as the distribution to pharmacies. The number of wholesale suppliers to hospitals is higher (at least seven at the moment) and market shares of wholesalers fluctuate fairly strongly. In addition, many suppliers prefer to handle the distribution themselves. Wholesalers of medicines to hospitals largely compete on low prices in order to be selected by the pharmaceutical suppliers. Furthermore, suppliers regularly change their wholesaler. In the past five years, new wholesalers have entered the market and several business models for the distribution are being applied. Finally, margins on the distribution to hospitals are sharply lower than margins on the distribution to pharmacies, possibly reflecting the more limited competition in the distribution of medicines to pharmacies. It should be emphasised that competition among suppliers of medicines to hospitals has not been analysed in this report. The conclusion only concerns the *distribution* of medicines.

Moreover, our analysis places particular emphasis on the distribution of medicines to pharmacies and our recommendations are made specifically in respect of this part of the distribution.

*Two wholesalers account for [95-100] per cent of the distribution of medicines to pharmacies*

### **Competition in the distribution of medicines to pharmacies can be made more effective**

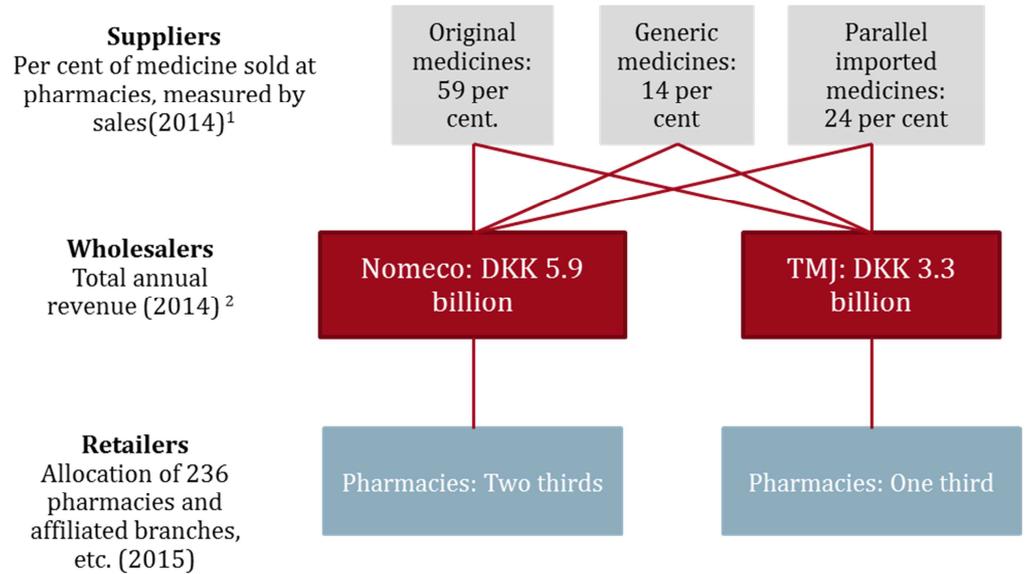
Today, the wholesale enterprises Nomeco and Tjellesen Max Jenne (TMJ) account for [95-100] per cent of the distribution of medicines to Denmark's 234 pharmacies and 158 branches, etc. Both wholesalers provide the pharmacies with a full range of medicines (and are referred to as 'full-line wholesalers' in this report). Both Nomeco and TMJ are part of international groups operating in the wholesaling market in 25 and 14 countries, respectively.

The remaining share of the medicines supplied to pharmacies, [0-5] per cent, is supplied by PharmaService, a Danish family-owned wholesale enterprise selling medicines from selected suppliers.

<sup>1</sup> Grocery stores are allowed to sell *liberalised OTC medicines* to consumers. The distribution of OTC medicines to grocery stores is not taken into account in the report. Grocery stores carry a limited number of the overall range of medicines and their sales only account for a minor share of primary sector sales (less than 5 per cent).

Pharmacies can freely choose their wholesaler and also whether they prefer to use one or several wholesalers. However, under Danish legislation, pharmacies must be able to offer all approved medicines to their customers. Nearly all pharmacies use one of the full-line wholesalers as their primary wholesaler, from whom they buy almost all their medicines. Nomeco acts as primary wholesaler for two thirds of the pharmacies while TMJ acts as primary wholesaler for one third of them, see figure 1.2.

Figure 1.2 **Distribution of medicines to pharmacies**



**Note 1:** The figure covers 97 per cent of the distribution to pharmacies; the remaining 3 per cent of the medicine sold by pharmacies covers magistral medicines and vaccines from Statens Serum Institut.

**Note 2:** Nomeco's and TMJ's revenue also includes any sales to other market players than pharmacies, such as hospitals and retailers. Total procurement by pharmacies account for DKK 8 billion. TMJ's sales have been adjusted for a 2014/2015 financial year covering 15 months.

Source: Total Sales of Medicines in Denmark, 2010-2014, Table 1, published by the Danish Health Data Authority. The financial statements of Nomeco and TMJ.

**Suppliers of medicines to Danish pharmacies find it difficult to bypass the two wholesalers**

As pharmacies purchase nearly all their medicines from their primary wholesaler, suppliers wishing to sell medicines to Danish pharmacies cannot, in practice, bypass the two full-line wholesalers as trading partners. All suppliers of medicines to pharmacies have business relations with both full-line wholesalers. The terms and conditions as well as payments from suppliers to wholesalers for the distribution of medicines to pharmacies are negotiated by the supplier and the wholesaler. The margins charged by the two wholesalers for distributing the suppliers' medicines to pharmacies only vary slightly.

**New wholesalers have failed to establish a foothold in the market**

No new wholesale enterprises or new business models for the distribution of medicines to pharmacies have managed to establish a foothold in the market in the past ten years. Several enterprises have made unsuccessful attempts to gain access to the market using the direct-to-pharmacy business model (PharmaChange and Pharmadirect). Under the direct-to-pharmacy model, the wholesaler only handles logistics, but does not own the product. The direct-to-pharmacy model is used in countries such as the Netherlands, the UK and Italy and accounts for 10 per cent, 10 per cent and 20 per cent, respectively, of their medicines distribution.

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In Denmark, suppliers hesitate to try out wholesalers using other business models than the one applied by the full-line wholesalers. As an example, PharmaChange and Pharmadirect have found it difficult to obtain agreements with suppliers, which is crucial to gaining access to the market.

**Only moderate fluctuations in wholesalers' market shares**

The market shares of wholesalers have fluctuated less in Denmark than in comparable countries in the past ten years. This is seen both in countries in which, like in Denmark, vertical integration is not allowed, i.e. that wholesaler and pharmacy have the same owner (France, Italy and Germany), and in countries in which vertical integration is allowed (Belgium, the Netherlands, Norway, the UK and Sweden).

**Pharmacies stay with their primary wholesaler**

Fairly few pharmacies change their primary wholesaler. All in all, 18 per cent of the pharmacies (38) decided to change their primary wholesaler at least once in the period 2010-2015. This means that, every year in the past six years, 2-4 per cent of the pharmacies changed their primary wholesaler. 38 per cent of the pharmacies did not consider changing their wholesaler. Still, many pharmacies experience competition between the two full-line wholesalers and the pharmacies are basically satisfied with their current wholesaler. However, in the pharmacies' experience, the wholesalers mainly compete on services offered to pharmacies, such as stock management and ordering of products (and not on price).

In the period 2005-2014, total earnings generated by wholesalers exceeded those of wholesalers in countries which, like Denmark, do not allow vertical integration between wholesalers and pharmacies. High earnings may indicate weak competition.

**Wholesale margins are lowest on the distribution of low-price products**

Denmark is somewhat mid-range when wholesale margins on individual pharmaceutical products (measured as sales price/purchase price) are compared with those of other EU countries. However, Danish wholesale margins vary across the range of medicines depending on whether they are original, generic or parallel imported products. Wholesale margins on medicines delivered to pharmacies in generic packaging are significantly lower than those on parallel imported medicines, while margins on original medicines are somewhere in between. The fact that wholesale margins are lowest on low-price products may provide undesirable incentives for wholesalers to aim for more expensive products.

**Competition in the distribution of medicines to pharmacies is weakened by regulation and market structure**

The weakened competition in the distribution of medicines to pharmacies may reflect factors restricting (price) competition among wholesalers in the market<sup>2</sup> and factors constituting barriers to entry for new players/business models. In addition, the extensive regulation of the pharmacy sector contributes to weaker competition among wholesalers in that it dampens the incentives of pharmacies to scan the market and place orders where they obtain the most favourable combination of price and service. The limited pressure from pharmacies underpins the potential of wholesalers and suppliers for charging high prices.

The scope for price competition among wholesalers is limited by public-sector regulations which, in practice, prevent wholesalers from competing on the medicine prices offered to pharmacies and on the discounts granted on the medicines.

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<sup>2</sup> In 2014, the Danish Competition Council ordered Nomeco and TMJ to stop fixing fees and other business conditions if they had not already stopped doing so. The Council found that the two enterprises had restricted competition by announcing identical rules of returns and repayments of medicines to all suppliers of medicines in the Danish market.

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**Pharmacy purchase prices (PPP) of medicines are the same irrespective of which wholesaler the pharmacy uses**

The regulation means that the medicine prices paid by pharmacies must be the same irrespective of which wholesaler the pharmacy uses. In consequence, wholesalers cannot attract/retain pharmacies as customers by lowering their medicine prices.

The regulation also implies that wholesalers can only offer discounts to pharmacies on medicines if the pharmacies exhibit a behaviour that entails *direct* cost savings for the wholesaler (so-called cost-based discounts). Accordingly, wholesalers have very limited scope for offering discounts with a view to gaining market shares. Further, wholesalers must publish cost-based discounts offered on medicines (duty to display information).

**Nomeco and TMJ apply largely identical standard delivery and discount terms**

A review of the full-line wholesalers' standard delivery and discount terms show that they are largely identical for the two enterprises. This appears not only to reflect costs and cost structures and thereby indicates that the duty to display information determines the standard delivery and discount terms, the use of which as a competition parameter is therefore limited.

At the same time, the legal requirement of cost-based discounts contributes to reducing the scope of wholesalers for offering discounts and, thereby, competing on price. And in the pharmacies' experience, the wholesalers do not compete on cost-based discounts. Therefore, in practice, the price competition on medicines among wholesalers appears to be suspended.

In practice, the lack of scope for competing on price creates barriers to entry for new market players who are unable to attract pharmacies by competing on price, which is typically a key competition parameter in a market.

The fixed medicine prices (combined with the limited scope for offering discounts) also create barriers to entry for new business models for the distribution of medicines as it renders it difficult for wholesalers to offer pharmacies alternative combinations of price and service that could be more effective and of greater value to consumers.

A significant share of the wholesalers' cost-based discounts are based on revenue (the product of price multiplied by volume sold). In consequence, pharmacies are offered larger discounts on high-price products, and large pharmacies have better scope for obtaining larger discounts (and thereby higher earnings) than small pharmacies. Given that a significant number of discounts are based on revenue and not, for instance, on the number of deliveries, order frequency or packaging, it is questionable whether the discounts offered by wholesalers are in fact cost-based (that is, whether they really reflect a behaviour by the individual pharmacy that entails direct cost savings for the wholesaler).<sup>3</sup>

**In practice, discounts reduce the incentives of pharmacies to try out other wholesalers**

The way the discounts of the two full-line wholesalers have been designed acts to diminish the incentive of pharmacies to try out other wholesalers or to buy some of their medicines from other (short-line) wholesalers. The main reason is that it will be fairly expensive for other wholesalers to compensate the pharmacies for missing out on discounts from the full-line wholesalers if the pharmacies use another wholesaler for part of their medicine supplies. In addition, due to a variety of terms and conditions, the discount systems may not be entirely transparent. Accordingly, the *design* of the discounts offered by the two full-line wholesalers may contribute to creating barriers to entry for new wholesalers in the market.

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<sup>3</sup> It is observed that a cross-ministerial working group under the Ministry of Health (*Sundheds- og Ældreministeriet*) will focus on the issue of whether the discount types received by pharmacies from medicines wholesalers have an impact on the impartiality of pharmacies in connection with purchasing and dispensing of medicines. As part of the task, the various discount types will be mapped and assessed. The report of the working group is expected to be ready in 2016

***The general requirement of cost-based discounts renders it difficult for new and small wholesalers to offer competitive discounts***

Also, the *general legal requirement* of cost-based discounts may, *per se*, create barriers to entry for new/small (short-line) wholesalers. The reason is that, all else equal, new/small wholesalers have to offer even higher discount rates than full-line wholesalers in order to compensate pharmacies for missing out on discounts from full-line wholesalers. This is hardly possible without violating the legal requirement of cost-based discounts as small wholesalers do not enjoy the same economies of scale in distribution as large wholesalers and, in consequence, will find it difficult to offer larger cost-based discounts than the full-line wholesalers.

As price competition among wholesalers is ruled out in practice, service and logistics quality are key competition parameters for wholesalers eager to win pharmacies as customers.

***Wholesalers' competition on service and logistics quality results in very close collaboration between pharmacies and wholesalers***

As wholesalers mainly compete on service and logistics quality, very close collaboration is established between the individual pharmacy and its full-line wholesaler. In many cases, the collaboration is so close that it resembles a *de facto* vertical integration. The existing close relations between pharmacies and wholesalers may contribute to streamlining existing work procedures of wholesalers and pharmacies but, as mentioned, those relations create high barriers to entry for new wholesalers eager to penetrate the market.

***Eventually, wholesale services are financed by pharmacy customers and public medical reimbursements***

Today, full-line wholesalers undertake specific service tasks for pharmacies, such as the ordering and returning of products and stock management. Wholesalers undertake service tasks for pharmacies without receiving any (explicit) payment or by offering pharmacies discounts on medicines. Eventually, this service is financed through medicines prices, i.e. the consumers, and medical reimbursements by the public sector.

***The regulation involving 14-day fixed-price periods and generic substitution creates preferences for full-line wholesalers and furthers close collaboration between wholesalers and pharmacies***

By allowing wholesalers to handle the ordering of products and stock management, pharmacies avoid the major logistic challenges following from the 14-day fixed-price periods (including the substitution system and the full-range requirement) under the pharmacy regulation. The 14-day fixed-price periods entail that the pharmacies' purchase and sales prices and part of their actual range (and demand) change every 14 days. Accordingly, the regulation of 14-day fixed-price periods supports the close collaboration between pharmacies and wholesalers.

The 14-day fixed-price periods also contribute to creating a preference for full-line wholesalers and close relations between wholesalers and pharmacies because the entire supply of products and the logistics can be organised by one wholesaler. To 74 per cent of pharmacies, it is of major or decisive importance that their primary wholesaler carries a full range. This renders it difficult for wholesalers other than full-line wholesalers to gain a foothold in the market and, accordingly, creates barriers to entry for new wholesalers and new business models in the market.

***Wholesalers' IT solutions are decisive for pharmacies' choice of supplier***

The wholesaler's IT solutions play a pivotal role for the delivery of services to pharmacies. More than 90 per cent of pharmacies state that the wholesaler's overall IT solutions for the ordering of products and stock management are of major or decisive importance to their choice of primary wholesaler. In consequence, a new wholesaler must be able to offer well-functioning IT solutions in order to attract pharmacies as customers.

***It is difficult and costly for new wholesalers to develop IT systems that cater for pharmacies***

Wholesalers who have previously attempted to penetrate the market have called attention to the fact that it is technically difficult and costly for new wholesalers to develop IT solutions that can be integrated/exchange data with the IT systems of pharmacies. Add to this that the access to the interface currently applied to exchange data with the IT systems of pharmacies (Pharmalink) is managed by the existing wholesalers and the access to and conditions for use of Pharmalink are not considered to be fair.

Enterprises which have previously tried to get a foothold in the market have indicated that it is technically difficult – and perhaps practically impossible – to add an additional IT solution

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to a pharmacy which is already hooked up to a VMI solution, which is one of the IT solutions offered to customers by Nomeco. Thus, the vast majority of Nomeco's customers use the VMI solution. To pharmacies using a so-called VBO solution, linking up to the IT systems of pharmacies does not represent an equally technical challenge. VBO is the solution used by the majority of TMJ's customers.

In practice, the IT challenges imply that many pharmacies are unable to order products electronically from several wholesalers at the same time. This constitutes a barrier to entry, especially for small-line wholesalers because their customers depend on ordering products from other wholesalers in order to be able to offer a full range.

Access to (data from) the pharmacies' IT systems gives existing full-line wholesalers insight into vital information about the pharmacies' stock levels, sales and product priority. Information on the product priority of pharmacies using the VMI solution is only available to Nomeco. Given the pharmacies' frequent replacement of products due to the 14-day fixed-price periods, such information is crucial to the wholesalers if they are to supply the right products to the pharmacies. In addition, the information enables the wholesalers to streamline their own business, thereby reducing costs. Wholesalers who do *not* have access to the pharmacies' IT systems and, hence, data on sales, stocks and substitution priorities will be left in a significantly weaker competitive position.

*Delivery failures lead to higher consumer prices and boost medical reimbursements*

Wholesalers must report package delivery failures (back orders) to the health authorities if the wholesaler is unable to meet demand for that package from just one pharmacy the following day. Wholesalers report delivery failures to pharmacies in quite a lot of cases – about 800 reports every day. This reduces the range available to consumers while at the same time increasing costs for both consumers and the public sector due to higher consumer prices and higher medical reimbursements, respectively, because delivery failures typically occur for the least expensive products.

When a product is on back order with the primary wholesaler, pharmacies have only limited incentive to procure the least expensive products from another wholesaler. In consequence, the wholesalers have little incentive to ensure that sufficient products are in stock. Also, wholesalers generate the lowest earnings on the least expensive products. The current market regulation and structure encourages wholesalers to sell the most expensive products.

*Due to a fairly closed customer base, new wholesalers can only compete for the customers of existing wholesalers*

The Danish Pharmacy Act (*apotekerloven*) restricts the number of pharmacies and stipulates that only pharmacists may own pharmacies. This implies that the customer base competed for by existing and potential wholesalers is fairly closed; therefore, new wholesalers will have to compete directly with TMJ and Nomeco for their existing customers. That constitutes a barrier to entry.

*The regulation of the pharmacy sector restricts competition among pharmacies and turn pharmacies into passive customers*

Moreover, despite being eased in 2015, the regulation of the pharmacy sector also limits the scope for competing on a number of parameters. For instance, pharmacies cannot compete on prices as both purchase and sales prices are fixed and the number of pharmacies is regulated by means of a licensing system determining the rules of ownership and location. This restricts competition among pharmacies.

Finally, the compensation system diminishes the incentive of pharmacies to increase revenue as pharmacies with high revenue must pay compensation to pharmacies with low revenue.

The limited scope for competition and for generating earnings through effective operations entails that pharmacies have limited incentive to streamline their operations, including looking for the best and most price-effective distribution solutions. This also reduces the incentive of wholesalers to compete for customers.

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Thus, our findings demonstrate that the regulation of a distribution channel in a market (here pharmacies) has considerable consequences for competition in the other distribution channels (here wholesalers) in the market. Therefore, regulation of one channel has an impact on the entire value chain of a market.

Box 1.1 sums up the key findings of our analysis as described in detail in chapters 3-6.

**Box 1.1**  
**Key findings**

***Key findings of analysis:***

- » The distribution of medicines to hospitals and pharmacies is characterised by major differences.
- » Competition in the distribution of medicines to pharmacies could be more effective.

***Competition in the distribution to pharmacies could be more effective:***

- » In practice, suppliers of medicines to pharmacies cannot bypass Nomeco and TMJ as 99 per cent of pharmacies use one of the two full-line wholesalers as their primary wholesaler, from whom they buy almost all their medicines.
- » Two wholesalers account for [95-100] per cent of medicine sales to pharmacies and, despite several attempts, no new enterprises or business models have managed to establish a foothold in the market in the past ten years.
- » Suppliers hesitate to try out wholesalers using other business models than the one applied by the full-line wholesalers.
- » In Denmark, the market shares of wholesales have only changed marginally in the past ten years and less than in comparable countries.
- » Fairly few pharmacies scan the market and change their wholesaler. In the period 2010-2015, 2-4 per cent of the pharmacies changed their primary wholesaler each year. In the past six years, 38 per cent of the pharmacies have not considered changing their wholesaler.
- » In the period 2005-2014, total average earnings of wholesalers in Denmark were higher than in countries which, like Denmark, do not allow vertical integration between wholesalers and pharmacies.
- » However, Danish wholesale margins on identical products only vary marginally, while margins across the range of medicines vary depending on whether the medicines are original, generic or parallel imported products.
- » Wholesale margins are lowest on the least expensive products, which may provide an incentive to sell the most expensive products.

***Limited scope for price competition:***

- » Pharmacy purchase prices (PPP) of medicines are the same irrespective of which wholesaler the pharmacy uses. For this reason, it is not possible to compete on prices charged to pharmacies.
- » The regulation involves that wholesalers' discounts on medicines must be cost-based, for which reason there is strongly limited scope for offering discounts.
  - » Overall, the regulation restricts competition on discounts.
  - » The regulation creates barriers to entry for new market players as they are unable to attract pharmacies by competing on price/discounts.
  - » The way the wholesalers' discounts are designed acts to reduce the incentive of pharmacies to try out other wholesalers or to place orders with several wholesalers because the pharmacies then miss out on discounts.
- » The regulation means that wholesalers' discounts must be displayed publicly (the duty to display information).
  - » Nomeco and TMJ apply largely identical standard delivery and discount terms, indicating that the duty to display information sets a standard for the discounts, the use of which as a competition parameter is therefore limited.
- » Given that the introduction of alternative combinations of price and service is rendered difficult by the fact that prices are fairly fixed, there is only limited scope for price competition, which constitutes a barrier to entry for new business models.

***Barriers to entry:***

- » The 14-day fixed-price periods make great demands on the ordering of products and stock management undertaken by the wholesalers. This creates a preference for dealing with one full-line wholesaler and furthers close collaboration between wholesalers and pharmacies.
- » A key prerequisite for attracting pharmacies as customers is a well-functioning IT solution.
  - » It is very difficult and costly to develop IT solutions that interact with the IT systems of pharmacies.
  - » The access to exchange data with the IT systems of pharmacies by buying a user licence for Pharmedata is subject to the terms and conditions determined by Nomeco and TMJ in the

contract for such a licence.

- » Potential competitors have experienced that it is currently considered technically difficult – and perhaps practically impossible – to add an additional IT solution to a pharmacy that is also hooked up to a VMI solution, which is the case for a large number of pharmacies.
- » The licensing system under the Pharmacy Act entails a fairly closed customer base, meaning that, by and large, wholesalers can only compete for the customers of existing wholesalers.

***Pharmacies have limited incentive to be active customers:***

- » Given the regulation of the pharmacy sector, notably the fixed sales prices, the licensing system and the compensation system, pharmacies have limited incentive to compete and are therefore turned into passive customers. This reduces the incentive of wholesalers to compete for customers.

### 1.3 Recommendations

The report suggests that competition in the distribution of medicines to pharmacies can be made more effective, for example by making the regulations more expedient. This may contribute to a reduction in the pharmaceutical prices at pharmacies.

The aim of the recommendations is to strengthen competition in the distribution of medicines to pharmacies. Strengthened competition in the distribution of medicines may encourage wholesalers to streamline their processes, which may lower their costs as well as lower the profit of wholesalers and thereby reduce suppliers' costs for the distribution of medicines.

Lower costs for distribution would enable suppliers to offer lower purchase prices to pharmacies as the distribution costs are included in wholesalers' purchase prices from suppliers.

Lower purchase prices for pharmacies would lead to lower pharmaceutical prices for the consumers. As public medical reimbursements depend on the pharmacy's sales price of medicines, strengthened competition in the distribution channel and in the pharmacy sector may also lead to lower public expenditure on medicines.

The recommendations address the factors which, according to the findings of the report, contribute to weak competition in the distribution of medicines to pharmacies.

***Substantial barriers to entry for new players should be reduced***

*Firstly*, the existing substantial barriers that prevent new players from initiating distribution of medicines should be reduced. A real chance for new players to enter the market is a precondition for effective competition in this market.

***Wholesalers should be given better opportunities to compete on price and a greater incentive to compete on delivery capability***

*Secondly*, wholesalers should be given better opportunities to compete on prices charged to pharmacies and a greater incentive to compete on their delivery capability. That would give wholesalers a (greater) possibility of using price to attract pharmacies and of providing a different combination of price and quality/services.

***Pharmacies should have a greater incentive to scan the market***

*Thirdly*, pharmacies should be given a greater incentive to actively scan the wholesale market and purchase medicines where they receive the best value-for-money solution in terms of both medicines and service. This would require changes in the regulation of the pharmacy sector, which would also strengthen competition among pharmacies. These recommendations would thus increase competition in the distribution of medicines, but also strengthen the incentive of pharmacies to streamline operations, etc.

The Danish Competition Council's recommendations are presented in the paragraphs below and are subsequently summarised in Table 1.1.

The recommendations are compatible with essential health policy issues such as security of supply, availability and impartiality in the access to medicines as well as socio-economic issues on guaranteeing control of public expenditure on medical reimbursements and hospital

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medicines. The doctor would still prescribe the medicines and thus to some extent determine the demand, and the 14-day fixed-price period (the auction system) and the generic substitution would be maintained. Accordingly, pharmacies would still not be able to determine what should be dispensed to the consumers. That means that pharmacies would still have to dispense the products that are in position A. The recommendations are not deemed to entail any direct changes in the impartiality and independence of pharmacies in relation to the dispensing of medicines. However, the recommendation on maximum sales prices at pharmacies is expected to result in lower average medicines prices, but would discontinue the current priority of identical consumer prices all over the country.

The incentive of suppliers to report low prices at auctions would not be directly affected by the implementation of the recommendations if the rules and procedures (generic substitution and the 14-day fixed-price periods) that ensure price competition in the supply channel were preserved.

### **Access to (information in) IT systems of pharmacies should be made independent of wholesalers**

In practice today, pharmacies have outsourced their ordering of products and stock management to TMJ and Nomeco. Wholesalers handle these tasks by means of their IT solutions, through which they electronically (and automatically) monitor the sale and stock status for the items which they, in their capacity as primary wholesaler, supply to the pharmacy. A pharmacy's primary wholesaler thereby has a *de facto* monopoly on the information on sales, stocks and priorities concerning several A products, which is necessary to perform this task for the pharmacy.

Pharmacies basically only want to do business with wholesalers and other suppliers if electronic ordering of products is offered, and preferably a model where the wholesaler/supplier handles the ordering as it would be resource demanding for pharmacies to place orders themselves.

Former wholesalers in the market call attention to the circumstance that it is technically difficult and costly for new wholesalers to develop and provide solutions that will interact and exchange data with the IT systems of the pharmacies and thereby manage the ordering of products and stock management in the pharmacies.

Data exchange with the IT system of pharmacies currently requires the use of the Pharmalink interface. Access to and terms of use of Pharmalink are controlled by the existing wholesalers. Previous experience suggests that access to and the terms of use of Pharmalink are not considered to be fair.

In addition, previous experience suggests that it is considered to be technically difficult and perhaps practically impossible for a pharmacy using a VMI solution to *electronically* order products from various wholesalers.

The lack of access to the IT systems of the pharmacies and to information on sales, stocks and substitution priorities is deemed to be one of the major barriers to entry for new players in the market.

*Access to the IT systems of pharmacies should be made independent of wholesalers, and it should be possible for everybody to gain insight into sales, stocks and priorities*

It is recommended that a model be developed in which access to the IT systems of pharmacies and the information needed for the ordering of products and stock management in the pharmacies be made independent of the wholesalers and their IT systems. That may be done by a third party (not a wholesaler) providing an IT solution to which all wholesalers should have equal access, possibly in return for a licence or lease payment. If technically possible, the interface could be set up as a module in the pharmacies' own IT systems. In the alternative, it is recommended that requirements be established to ensure that access to the information in the IT systems of pharmacies is granted on equal terms to wholesalers in the market, that

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compliance with the rules is subject to control and that failure to comply with the rules can be sanctioned.

The aim of the recommendation is to make it possible for all to order products electronically through various wholesalers if the pharmacy so wishes. At the same time, it would guarantee that all wholesalers would have more equal opportunities to access information on stock status and sales of the products with which they supply pharmacies as well as information on substitution priorities. That would improve the chances of more wholesalers being able to supply products to the same pharmacy without it causing massive additional costs for the individual pharmacy. At the same time, that would give new players a better chance of entering the wholesale market, which would strengthen competition in the distribution of medicines.

#### **Alternative purchasing systems for some product groups should be examined further**

Today, suppliers must report their pharmaceutical prices for 14 days at a time (14-day fixed-price periods). As concerns products belonging to the same substitution group, pharmacies must offer consumers the product with the lowest reported price (generic substitution). All medicines sold in pharmacies are comprised by the 14-day fixed-price period, even medicines that are subject to no or only limited competition.

International studies show that prices of generic medicines in Denmark are relatively low, which may be due to the fact that the auctions held at the end of the 14-day fixed-price periods increase competition in the supply channel for this type of medicine. However, at approx. 14 per cent, generic medicines make up only a small part of pharmacies' sales (but 51 per cent of the total volume of pharmaceuticals sales). Conversely, prices of patented medicines, which are subject to only very limited competition, are high relative to other countries. This indicates that a 14-day fixed-price period is not the best instrument to increase competition in the distribution of medicines subject to no or only very little competition.

*It should be examined whether any purchase systems other than the 14-day fixed-price period could be applied to some products*

It is recommended that the pros and cons of using purchase systems other than a 14-day fixed-price period be examined for some types of medicine, particularly for patented medicines and medicines outside the scope of substitution groups. Alternative purchase models might include (long-term) tendering or price reference systems with a view to strengthening competition in the wholesalers' distribution of these products and pave the way for new wholesalers and business models in the market. At the same time, the impact of alternative models on the competition between suppliers should be taken into account.

#### **Gains and costs of a 14-day fixed-price period should be further examined with a view to introducing a longer fixed-price period**

The relatively short fixed-price periods of 14 days and the consequential frequent renewal of prices and products in pharmacies contribute to the circumstance that, to an increasing extent, pharmacies are outsourcing key tasks such as ordering of products and stock management to full-line wholesalers. That creates very close relations between pharmacies and wholesalers. At the same time, the system creates a preference among pharmacies for full-line wholesalers because it increases the advantage of purchasing from only one wholesaler. The system could thus constitute a barrier to switching wholesalers and trying out other wholesalers. That weakens competition in the wholesale channel.

In addition, the frequent renewal of products in pharmacies involves costs for handling and transportation of goods, etc., back and forth between wholesalers and pharmacies. High transport costs are ultimately covered by higher pharmaceutical prices.

Possibly, a longer fixed-price period, e.g. one to three months instead of 14 days, might contribute to even lower prices also for generic medicines. The reason is that the gain obtained by winning the auction is increased by the length of the period, which might mean that suppliers would fix a lower price. That might sharpen competition in the supply channel

and thus provide lower prices. At the same time, a longer period would reduce transport and logistics costs. However, there is a risk that small suppliers with surplus stocks or parallel importers would not have the same opportunity to participate in auctions if the period is too long. Moreover, a longer fixed-price period will entail that the exposure to competition will occur less frequently.

It is recommended to analyse in detail whether it could be advantageous to extend the fixed-price period to more than 14 days, for example, to one to three months to give new wholesalers a better chance to enter the market as well as to reduce costs for the transportation of medicines. At the same time, it is necessary to focus on the impact of such an extended period on the competition between suppliers, on prices and on the number of competing enterprises. It should be considered whether an extended fixed-price trial period for selected products should be conducted.

### **Introduction of maximum pharmacy purchase price (maximum PPP)**

Today, the pharmacy purchase price (PPP) is determined by the suppliers upon negotiation with the wholesalers. The price therefore includes distribution costs. Wholesalers therefore influence the price through the margin that they negotiate with their suppliers. The regulation of the PPP implies that the list price at which pharmacies purchase medicines is the same irrespective of which player (wholesaler or manufacturer) they purchase from. However, wholesalers have the opportunity to offer cost-based discounts, which to some extent results in differences in the actual purchase prices. As an example, pharmacies with high revenues will in practice be granted larger discounts and thereby obtain a lower purchase price overall compared with pharmacies with lower revenues.

The very limited possibility for wholesalers to compete on price creates barriers to entry for new players in the market and means that wholesalers mainly compete on services offered and the quality of logistics services. Moreover, the fixed PPP may contribute to competition on service and thereby create close relations between wholesalers and pharmacies.

It is recommended that the fixed PPP be replaced by a maximum PPP. The supplier that has reported the lowest maximum PPP would still win the 14-day fixed-price period for an A product, and the substitution, the reimbursement system and the competition on price among suppliers would remain unchanged relative to today. Similarly, the pharmacy sales price (PSP) would still be calculated on the basis of the maximum PPP reported.

The introduction of a maximum PPP would give wholesalers the opportunity to sell medicines to pharmacies at a price lower than the maximum PPP reported. The supplier would be able to do the same if it decided to handle its own medicines distribution. The gains involved in purchasing from a wholesaler (or supplier) offering a lower PPP would benefit the pharmacies in full or in part. If a maximum PSP were also introduced as recommended below, it would be possible to pass on the gains to the consumers (and public finances).

The impartiality of pharmacies in dispensing of medicine would remain guaranteed in that, as has been the case so far, the pharmacy's purchasing and dispensing would be controlled by the writing of prescriptions by doctors and the current substitution system, which would not be affected by the maximum PPP.

The recommendation would render it possible for wholesalers to compete on price to attract pharmacies. That could strengthen competition among existing wholesalers. Moreover, it would make it easier for new players to enter the market as they would then be able to use price as a competitive parameter. New players would also have the chance to offer a different combination of price and service to pharmacies than the existing wholesalers, which would facilitate 'new business models' that might add more value for the consumers.

*The PPP reported should be changed to a maximum price instead of a fixed price*

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### **Removal of the requirement that wholesalers' discounts on prescription medicines for pharmacies must be cost-based**

Legislators' aim with the regulation of the cost-based discounts has been to encourage pharmacies to conduct their purchases in a more expedient manner (to guarantee a rational distribution). In theory, discounts also provide an opportunity for certain competition on price among wholesalers. In practice, however, this has turned out to be impossible due to the duty to display information, see below.

Today, discounts are considered to be cost-based only if granted on the basis that the pharmacies demonstrate a behaviour that implies *direct* cost savings for the wholesaler. As an example, wholesalers are today unable to offer discounts based on streamlining of their own enterprise or as an attempt to enter the market.

The requirement that wholesalers' discounts on prescription medicines for pharmacies must be cost-based causes a limitation of wholesalers' possibility to compete on distribution discounts. That limits the price competition among wholesalers. Moreover, the legal requirement of cost-based discounts and the current interpretation/design of this might constitute a barrier to entry for new/small wholesalers.

*The requirement that wholesalers' discounts must be cost-based should be removed*

It is recommended that the requirement that wholesalers' discounts to pharmacies must be cost-based be removed. Discounts would still have to be designed in consideration of the prohibition comprised by the Medicinal Product Directive<sup>4</sup> against providing pecuniary advantages to pharmacists or doctors for the purpose of promoting sales of medicinal products (that could affect impartiality and independence) as well as in consideration of the prohibition comprised by the Competition Act against abuse of a (collectively) dominant position.

Removal of the requirement of cost-based discounts would give wholesalers a better possibility of competing on distribution discounts to pharmacies (and thus in fact on the purchase price). That would strengthen competition among wholesalers. At the same time, such removal could ease the access to the market for completely new players as they would be able to use discounts to attract pharmacies.

A removal would imply that wholesalers could also offer distribution discounts based on streamlining of their own enterprises. In addition to increased price competition among wholesalers, such removal would thus create an opportunity for wholesalers to offer a different combination of pharmaceutical prices and services provided to pharmacies which could be more effective and perhaps add more value for the consumers. If the recommendation is implemented together with maximum sales prices, this gain could benefit consumers and tax-payers in the form of lower prices of/expenses for medicine.

The impartiality in the dispensing of medicines would remain secured by means of several factors: The doctor would still prescribe the medicines and the 14-day fixed-price period (the auction system) and the generic substitution would be maintained. The rules that are meant to secure the impartiality and independence of pharmacies would thus not be affected by this recommendation. It is also recommended to increase control as to whether the applicable rules for distribution and sale of medicinal products are observed as well as sanctions in case of non-compliance.

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<sup>4</sup> The Medicinal Products Directive (2001/83) of 6 November 2001.

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### **Removal of the requirement that wholesalers must display their discounts on prescription medicines**

Wholesalers' cost-based discounts to pharmacies are subject to a so-called duty to display information, meaning that wholesalers are obligated to publish information about such cost-based discounts. Accordingly, wholesalers currently publish on their websites their standard delivery and discount terms.

The standard delivery and discount terms used by Nomeco and TMJ are more or less identical. That might indicate that the duty to display information sets a standard for the discounts.

As a result of the market structure with only two wholesalers handling almost all sales to the pharmacies and selling largely identical products and services as well as the remaining market regulation, the duty to display information may limit the incentive of the two major wholesalers to offer better discount terms to pharmacies. That is because an improvement of discount terms by one wholesaler will not result in more customers as its competitor can copy the discount terms straight away, but it will typically result in lower revenue for both wholesalers.

The transparency provided by the duty to display information could thus support the coordination of the wholesalers' standard delivery and discount terms and thereby limit the use of discounts as a competitive parameter, which would then lead to higher purchase prices for pharmacies.

It is recommended that the duty to display information about wholesalers' discounts on medicines for pharmacies be removed to the effect that wholesalers must no longer publish on their websites the discounts and discount terms offered to pharmacies.

*The duty to display information about wholesalers' discounts should be removed*

This recommendation could increase competition based on discounts (and thus on actual prices) among wholesalers and thereby strengthen competition in the distribution of medicines to pharmacies. It would also reduce the barriers to entry for new players. It could still be required that discount terms be reported to the relevant authority, currently the Ministry of Health, or that the discounts offered to pharmacies be documented by other means.

### **Incentive to secure the delivery of products in demand should be strengthened to minimise delivery failures**

A wholesaler must report a failure to deliver a product if the wholesaler is unable to meet the demand for the product from just one pharmacy the following day. In many cases, a delivery failure will mean that the consumer buys another, and often more expensive, product instead. In case of failure to deliver an A product, a new and higher reimbursement price based on the product with the second-lowest price is determined. Therefore, another consequence is increased public expenditure on medical reimbursements. At almost 800 reports each day, the number of delivery failures on the part of the two wholesalers is high.

*The incentive of wholesalers and pharmacies to ensure delivery of the products in demand should be strengthened*

It is recommended that the procedure for reporting of delivery failures be changed as the current regulation in combination with the market structure may entail increased expenses for both the consumers and the public sector. Today, delivery failures affect all pharmacies in Denmark if the demand of one single pharmacy cannot be fully met. This means that today the consequences of a delivery failure are unnecessarily far-reaching. Instead a limit could be set as to when a (nationwide) delivery failure should be reported, or a more individual system could be introduced in which a delivery failure affects only the pharmacies where the demand cannot be met.

It is also recommended that wholesalers' incentives to provide the least expensive products (A products) be strengthened. One possibility is to impose a duty on pharmacies to purchase the A product as long as it is available from just one wholesaler. In case only one wholesaler has reported a failure to deliver an A product, another possibility is to make that wholesaler sell the second-least expensive product at the price of the A product. In addition, it would be expedient to make sure that suppliers have access to wholesalers' stock status of the individual supplier's own products. That would make it easier for the suppliers to guarantee an appropriate supply of the A products in particular. Moreover, it could be a requirement that suppliers report their delivery capability for all packages at [medicinpriser.dk](http://medicinpriser.dk) and possibly that this must be confirmed just before the beginning of the fixed-price period.

Finally, it is recommended that it be checked to a wider extent whether suppliers, wholesalers and pharmacies comply with the rules and that sanctions be imposed in case of non-compliance with the rules.

The effects of changing the procedure could be fewer reports of delivery failures, which would increase the product range available to the consumers. Particularly A products must be expected to see a higher degree of availability. Altogether, it would result in lower medicines expenses for the consumers and lower costs for public medical reimbursements.

#### **Introduction of maximum pharmacy sales prices (PSP) to the consumers**

Today, the pharmacy sales prices (PSP) to consumers of prescription medicines are determined by the Danish Medicines Agency (*Lægemiddelstyrelsen*). The PSP is the same for all pharmacies. That means that the consumers will pay the same price for pharmacy-only medicines irrespective of their location in Denmark. Accordingly, pharmacies cannot use sales prices to attract customers.

Purchase prices for pharmacies are fixed, and pharmacies cannot compete on price relative to the consumer, and those factors limit the pharmacies' incentive to scan the wholesale market and to place their orders where they will obtain the best combination of service and price. That makes it difficult for new wholesalers to enter the market as the pharmacies have limited financial incentives to scan the wholesale market.

The preconditions for creating competition among wholesalers are most advantageous if the customers, meaning the pharmacies, actively scan the wholesale market and purchase medicines where they obtain the best value-for-money solution (in terms of both medicines and service).

Therefore, it is recommended that maximum sales prices be adopted at pharmacies instead of fixed sales prices. That would give pharmacies the opportunity to sell medicines to consumers at a price that is lower than the fixed maximum sales price.

The supplier who has reported the lowest (maximum) PPP would still win the 14-day fixed-price period for an A product that must be available to consumers at the pharmacy. The system of substitution and reimbursement would also continue in its current form, and the price competition among suppliers to win the fixed-price period would be preserved. The maximum PSP is therefore deemed to entail lower average consumer prices compared with today, but, unlike today, prices might differ from pharmacy to pharmacy and across the country.

As it is recommended that maximum pharmacy purchase prices (maximum PPP) be adopted at the same time, the benefit of pharmacies purchasing medicines from the wholesaler offering the lowest price would also benefit consumers and taxpayers.

The impartiality of pharmacies is deemed to remain guaranteed in that, as has been the case so far, the pharmacy's purchasing and dispensing would be controlled in part by the writing of

*Maximum pharmacy sales prices (PSP) should be adopted instead of fixed sales prices*

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prescriptions by doctors and in part by the current substitution system, in which pharmacies have a duty to offer the least expensive product to the consumers. None of these factors would be affected by the adoption of a maximum PSP, and impartiality and independence at pharmacies would thereby be preserved.

### **Introduction of a less restrictive right of establishment for pharmacies**

The regulation of the licensing system for pharmacies lays down rules on ownership and location. The rules include that only pharmacists may own pharmacies and that only a limited number of pharmacy licences exist. That limits the group of owners as well as the possibility of establishing pharmacies.

The rules of the licensing system on quantity limitation and ownership constitute barriers to entry for new wholesalers in the market as the wholesalers' customer base is frozen by the regulation. New wholesalers would therefore have to compete with TMJ and Nomeco for their existing customers.

The licensing system limits the incentive of individual pharmacies to perform streamlining and renewal procedures. That means less focus on cost minimisation, including purchase prices.

Therefore, pharmacies should be given a greater incentive to actively scan the wholesale market and purchase medicines where they obtain the best value-for-money solution in terms of both medicines and service. That would lower the barriers to entry for new wholesalers.

It is recommended that the wholesalers' customer base be more open by adjusting the pharmacy licensing system to create a less restrictive right of establishment.

*The pharmacy licensing system should be adjusted to create a less restrictive right of establishment*

Firstly, it is recommended that it be made possible for others than pharmacists to own pharmacies (however, all pharmacies must have an affiliated responsible pharmacist) and, secondly, it is recommended that the limitation on the number of pharmacies (i.e. the number of licences) be removed.

This recommendation would primarily strengthen competition among pharmacies. In addition, the recommendation would contribute to a reduction of the barriers to entry for new wholesalers in the market by opening up the customer base and for new forms of distribution. Depending on the agreement with the wholesaler, more pharmacies, branches and outlets might entail higher distribution costs. The size of the market for prescription medicines is expected to remain unchanged with this recommendation as the doctor would still prescribe the medicines.

### **Adjustment of the design of the compensation programme of pharmacies**

The compensation programme is a financial compensation of pharmacies. The purpose is to ensure a financial basis for the operation of pharmacies in peripheral areas. The programme implies that pharmacies with relatively high revenues pay a fee, whereas pharmacies with lower revenues receive a contribution.

Pharmacies generating relatively low revenues will therefore always be guaranteed a certain financial foundation and thus have limited incentive to compete, expand and increase sales as they would lose all or part of a contribution otherwise obtained. Comparably, pharmacies generating relatively high revenues will have limited incentive to increase their sales, for instance by gaining market shares, as they would then have to pay a higher fee. This minimises the incentive for pharmacies to compete and create higher revenue, which may contribute to reducing competition in the wholesale market.

The lack of competitive pressure from pharmacies limits wholesalers' incentive to actively compete for customers and may constitute a barrier to entry for new wholesalers.

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*The compensation programme should be adjusted to the effect that the pharmacies with the highest sales would no longer finance the pharmacies with the lowest sales*

It is recommended that the current layout of the compensation programme be adjusted to the effect that the pharmacies generating the highest sales would no longer finance the pharmacies generating the lowest sales.

To continue to guarantee proper geographic access to medicine all over Denmark, selected pharmacy locations that could otherwise be difficult to run profitably would be covered through invitations to tender for pharmacy operation. The costs involved could be financed through the fees payable by all pharmacies to the Danish Medicines Agency. In that way, the programme would be financed broadly by all pharmacies/players (and thus principally by all pharmacy customers).

Adjusting the current cost-based compensation programme would increase the incentive of pharmacies to focus on revenue. That applies both to pharmacies with high revenues because they would no longer be subject to partial set-offs and to pharmacies with low revenues because they would no longer receive contributions through the system.

That would give pharmacies a greater incentive to purchase their products where prices are lowest. It would strengthen wholesalers' incentive to compete on price and also lower the barriers to entry for new wholesalers in the market.

#### **Adjustment of future gross profit framework of pharmacies**

The total gross profit of pharmacies is agreed by the Danish pharmacists association (*Danmarks Apotekerforening*) and the Ministry of Health. The gross profit framework makes up the basis for the Danish Medicines Agency's determination of pharmacy sales prices (PSP) to consumers. The PSP should be adjusted so that the agreed gross profit framework would be observed. Altogether, pharmacies could thus earn neither more nor less than agreed under the gross profit framework.

Today, the cost-based discounts of pharmacies are comprised by the gross profit framework in that half of the cost-based discounts are used to lower the PSP, whereas pharmacies are allowed to keep the other half. This allocation is meant to ensure that pharmacies have an incentive to purchase their products where they receive the best discounts and to simultaneously pass on some of the gains to the consumers.

In continuation of the recommendations on a maximum PPP and the removal of cost-based discounts, it is therefore also essential to ensure that pharmacies have an incentive to purchase their products where it best pays off from a financial perspective.

*The gross profit framework should be designed so as to allow pharmacies to keep a sufficient share of a financial gain from purchasing products at low prices*

Therefore, it is recommended that the future gross profit framework of pharmacies allow for the pharmacies themselves to keep a sufficient share of the financial gain from purchasing from a wholesaler with lower prices/higher discounts.

Allowing pharmacies to keep a larger share of the financial gain from purchasing from the wholesaler offering the lowest prices would increase the incentive of pharmacies to scan the wholesale market for the best possible combination of prices of medicines and service. That would give wholesalers a greater incentive to compete on price and would also lower the barriers to entry for new wholesalers in the market.

Table 1.1 offers a complete overview of the Competition Council's recommendations of how to strengthen competition in the distribution to pharmacies. Moreover, the table summarises whether the individual recommendation would reduce the barriers to entry for new wholesalers, improve the possibility of price competition and increase the incentive to ensure delivery capability and/or strengthen the incentive of pharmacies to scan the wholesale market. The recommendations would have the biggest possible impact on the wholesale market and prices of medicines if implemented collectively as one package.

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Table 1.1 Recommendations made by the Competition Council and impact of the recommendations

Recommendation made by the Competition Council	Impact of recommendation		
	Reduced barriers to entry for new wholesalers	Strengthens existing wholesalers' possibility of competing on price and the incentive to ensure delivery capability	Strengthens the incentive of pharmacies to scan the wholesale market
Access to (information in) IT systems of pharmacies should be made independent of wholesalers so that all wholesalers would have equal access to the IT systems of pharmacies.	X		
Alternative purchasing systems for some products should be examined further so that selected products could be purchased through long-term offers or price reference systems.	X	(X)	
Gains and costs of a 14-day fixed-price period should be further examined to determine whether it might be advantageous to extend the fixed-price period.	X		
Maximum pharmacy purchase prices should be introduced instead of fixed purchase prices.	X	X	X
The requirement that wholesalers' discounts on medicines to pharmacies must be cost-based should be removed so wholesalers could customise discounts according to their business model.	X	X	X
The requirement that wholesalers must display their discounts on prescription medicines should be removed.	X	X	X
Incentives to secure the delivery of products in demand should be strengthened to minimise delivery failures		X	X
Maximum pharmacy sales prices to consumers should be introduced instead of fixed sales prices.			X
A less restrictive right of establishment for pharmacies should be adopted so persons other than pharmacists may own pharmacies and pharmacy owners may determine the number of pharmacies themselves, etc.	X		X
The current layout of the pharmacies' compensation programme should be adjusted so the pharmacies with the highest revenue would not be financing the ones with the lowest revenue.			X
The future gross profit framework of pharmacies should allow for pharmacies to keep a significant part of the gain from lower prices/larger discounts.			X

#### 1.4 Structure of the report

*Chapter 2* of the report provides an introduction to the pharmaceuticals market in general. Initially, para. 2.2 introduces the currently applicable health policy issues in the market as well as the issue of controlling public expenditure. Subsequently, paras. 2.3-2.6 introduce the three distribution channels in the market: suppliers, wholesalers and the two retail sales channels (pharmacies and hospitals), with a particular focus on wholesalers.

*Chapter 3* analyses the competition in the distribution of medicines to pharmacies and hospitals on the basis of a number of competition indicators. The chapter includes analyses of entry into and mobility in the wholesale market as well as the income and profit of wholesalers.

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*Chapters 4-6* put focus on a series of factors that affect competition in the distribution of medicines to pharmacies. The factors in question are barriers preventing new wholesalers from entering the market (Chapter 4), wholesalers' possibilities of and incentives to compete on price and delivery capability (Chapter 5) as well as the incentive of pharmacies to be active customers in the wholesale market (Chapter 6). The chapters also present recommendations as to how competition in the distribution of medicines to pharmacies can be strengthened.

*Annex 1* comprises a presentation of the approach to the analysis and the methodology and data used, whereas *Annex 2* offers a brief introduction to the organisation in other countries with which Denmark normally compares itself. Experience from other countries is continuously included in the analysis. Finally, *Annex 3* provides a description of veterinary medicines. *Annex 4* comprises a list of references.

For the purpose of the report, an *appendix* has also been composed, which includes the questionnaire survey conducted by the Danish Competition and Consumer Authority among the pharmacies as well as the survey's distribution of responses.

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