

Regulation and competition in the distribution sector in Belgium

V. Baugnet
D. Cornille
E. Dhyne
B. Robert

Introduction

The distribution sector or trade sector – the two terms are used synonymously in this article – is a key stakeholder in developed economies. In 2007, the trade branches as a whole – automobile, wholesale and retail – accounted for 13.1 p.c. of value added in Belgium, and 14.1 p.c. of total employment. Over and above its direct weight in the economy, the distribution sector is an essential element because of its role as an ultimate channel through which all final consumption goods, the main component of domestic expenditure, have to pass.

Just like other major branches of the economy, over the last few decades, the trade sector has seen – and is still going through – radical changes linked to globalisation and technological advance. The most important developments are the concentration of retail trade, its integration with the wholesale trade, the internationalisation of the large retail groups' business and the incorporation of ICT, which is leading to a reorganisation of modes of distribution.

This article seeks to outline the situation of the distribution sector in Belgium, with particular emphasis on the impact of regulation. The regulatory burden is being closely monitored by the IMF as well as the OECD and its weight in Europe, and particularly in Belgium, is often singled out for criticism. According to both these institutions, greater flexibility in the rules in force in the sector should help to stimulate activity and employment. Referring to the example of the United States, the arguments put forward are that this kind of deregulation policy would lead to an

increase in employment in the sector, notably among low-skilled workers, while also boosting productivity growth. The trade sector does actually appear to be one of the reasons for Europe's lagging behind in potential output growth, notably because of a less advanced integration of ICT into the structure of distribution channels. By reducing barriers to entry, deregulation would also bring about greater competition, as well as having a positive impact on productivity, and, consequently, exert a downward influence on price levels and inflation.

The article analyses these issues by comparing as far as possible Belgium's performance with that of neighbouring countries. The first chapter deals with the regulatory burden. This issue is tackled by using existing international indicators on this subject, as well as by reviewing the main legislation governing retail trade in Belgium. Chapter 2 gives a detailed analysis of the level and growth of productivity in the trade sector in Belgium over the last few years. By determining conditions for market access and carrying out a commercial activity, the regulatory framework also has some influence on the market structure, on the type of shops there are and, ultimately, on the degree of competition. Furthermore, productivity and the degree of competition tend to interact, not least because a higher level of competition within the sector forces companies to be more productive in order to survive or leads to the disappearance of the least productive firms. Market structure and competition-related aspects are addressed in chapter 3, which deals specifically with the food retailing sub-sector. Chapter 4 looks at the impact of competition on prices in Belgium and neighbouring countries. The main

lessons to be drawn from the analysis are summed up in the conclusion. The final part of the article also touches on the economic policy implications.

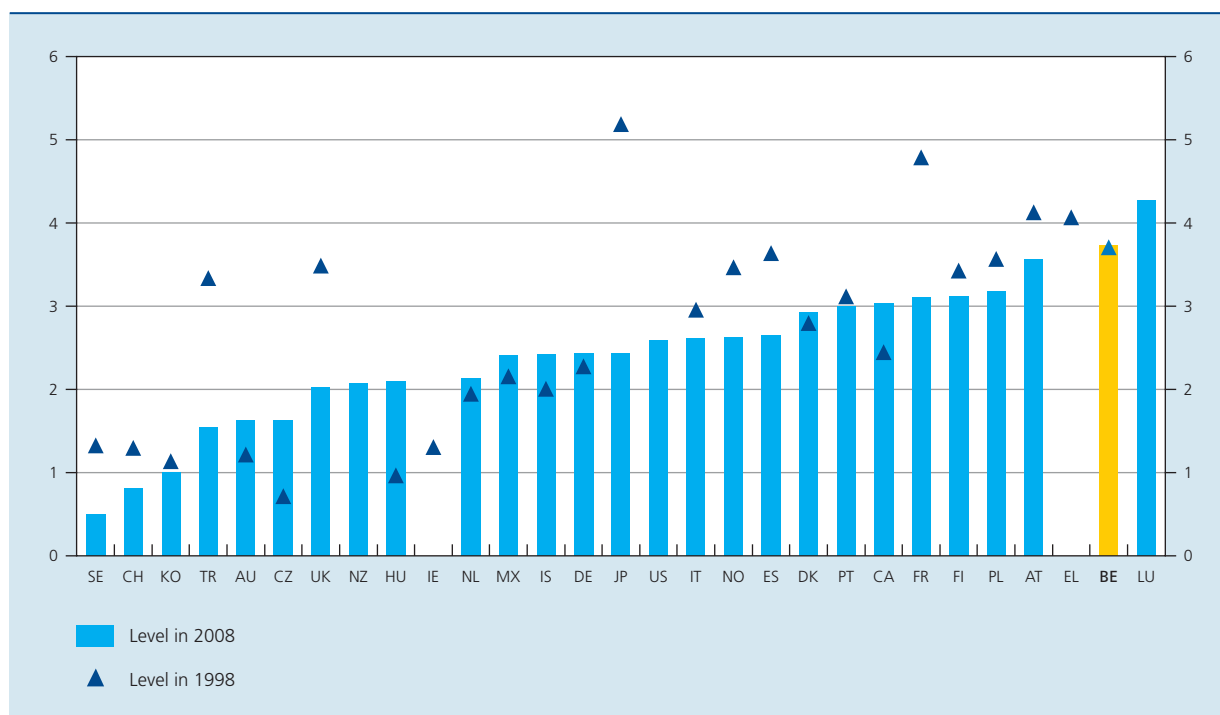
1. Regulation

To get an idea of the degree of regulation in an economy or a specific sector, one possible approach is to refer to summary indicators. These indicators aim to translate the main aspects of a piece of legislation in force into “scores”, which makes it easier to assess the more or less restrictive nature of the law. These indicators have the advantage of being comparable internationally and possibly over time as well. The most frequently used indicator in this field is certainly the Product Market Regulation (PMR) indicator calculated by the OECD which enables the regulatory burden to be measured for the economy as a whole. A sub-set of questions concerns retail trade, a sector for which a specific regulation indicator is established according to the detailed methodology set out in box 1. In order to carry out a more in-depth analysis, and given the limitations affecting this type of summary indicator, it is worth examining these yardsticks in light of the main laws in force in the retail trade sector.

According to the PMR indicators, Belgium had the second most binding regulation in retail trade out of the twenty-seven countries examined by the OECD in 2008, second only to Luxembourg. With an overall score of 3.7 on a scale of 0 to 6, Belgium thus ranks above the three main neighbouring countries, whose scores ranged from 2.1 for the Netherlands to 3.1 for France, with Germany in the middle at 2.4. Generally speaking, the countries where the retail trade sector is the least regulated are not members of the EU, with the exception of Sweden which has the lowest score of just 0.5.

Over the years, Belgium’s overall score has remained below 4, fluctuating between 3.7 in 1998 and 3.9 in 2003 and back down to 3.7 in 2008. At the same time, its ranking has gradually worsened compared with the other countries examined by the OECD, moving up from fifth to second place in the space of ten years. The analysis of intermediary indicators, which cover barriers to market entry, operational restrictions and price controls in particular, suggests that this overall trend breaks down into a deterioration as regards barriers to entry – especially when it comes to rules governing the establishment of large outlets – and some improvement with price controls, although this point is still given less weight in the summary index. It should also

CHART 1 REGULATION INDICATORS IN RETAIL TRADE ⁽¹⁾
(scale of 0 to 6, with a higher score indicating tighter regulation)



Source : OECD (Product Market Regulation summary indicators).
(1) Including automobile trade.

be noted that, in the areas where the Belgian score has held steady over the last ten years, Belgium's position has shown some deterioration vis-à-vis the other countries. Even though some regulatory provisions in the retail trade

sector have not been amended in our country, they have turned out to be more and more restrictive compared with the measures to relax the regulatory framework put in place in other countries.

Box 1 – Methodology for the OECD indicators of retail trade regulation

Since the end of the 1990s, the OECD has built up a system of indicators aimed at measuring regulatory trends on product markets in the euro area countries. These indicators are used in particular for identifying economic policy priorities in the framework of the Growth Strategy the Paris-based institution has developed.

The indicators are either calculated for the economy as a whole, or for specific sectors, on the basis of qualitative information collected from the different states, and then normalised over a scale of 0 to 6. A higher score is taken to mean tighter regulation. The PMR indicator is constructed as a pyramid, aggregating the answers to the basic questions by levels corresponding to various themes, to eventually arrive at a summary indicator.

The OECD indicator for the retail trade sector is based on six detailed indicators, grouping together one or more questions, relating to:

1. registration in the commercial register (for the sale of food products);
2. licences or permits needed to engage in commercial activity (for the sale of food products);
3. specific regulation of large outlets (minimum surface area from which it applies);
4. protection of existing firms;
5. opening hours (whether there is any regulation or not and, subsidiarily, whether it is of a national or local nature);
6. price controls (questions sub-divided per product category).

At an intermediary level, three themes are singled out, which summarise each time the six above-mentioned basic indicators, using a different weighting resulting from a factor analysis. However, the score in each of these three themes depends excessively on certain of these basic indicators, so, by simplification, each of the indicators can first be associated with a specific theme:

- barriers to entry (0.42): mainly indicators 1, 2 and 3;
- operational restrictions (0.34): mainly indicators 4 and 5;
- price controls (0.24): mainly indicator 6.

Finally, the summary retail trade indicator is obtained from the weighted average of the six basic indicators, again using a different weighting. Alternatively, it can be taken as a weighted average of the scores of the three intermediary themes, which give a relatively greater weight to entry barriers and a smaller weight to price controls, as shown by the figures given in brackets above.

The OECD publishes these indicators at five-year intervals. An update for 2008 was published in February 2009, so that a chronological analysis is now possible on a relatively harmonised basis for the years 1998, 2003 and 2008.

While the simplicity of this indicator is undoubtedly an asset, it also shows up its limitations. The criteria selected can sometimes actually give a narrow view of reality; the questions often call for blunt binary answers (yes/no). The findings of this indicator therefore need to be put into perspective, by looking into the legislation in force in Belgium. Moreover, the OECD indicator provides an interesting analytical framework for this exercise, as its very structure enables it to take into account the three laws that are the most frequently cited as potential sources of barriers to retail trade, such as rules for setting up new shops, opening hours and days, and business practices, the latter covering a wide range of provisions (price controls, sales, joint sales, etc.).

Among the three intermediary themes, Belgium's score on barriers to entry rose steadily from 2.6 to 3.4 between 1998 and 2008. The specific regulations governing large outlets are the main reason behind this deterioration, since the rules on establishment of hypermarkets are often regarded as one of the main barriers to entry into the distribution sector. These rules potentially target several objectives: land use planning, environmental protection by avoiding massive traffic flows towards the big commercial centres located on the outskirts of towns, protection of small retailers, etc. At the same time, these provisions can have a harmful impact of limiting economies of scale, protecting existing firms from competition from new entrants and hold up modernisation of the sector.

Since March 2005, the establishment of new hypermarkets in Belgium has come under the scope of the so-called "Ikea" Law⁽¹⁾, which replaced the "*loi cadenas*" dating from 1975. The "Ikea" Law aimed to facilitate such establishments, by simplifying and speeding up the decision-making procedure, while also widening the scope for applicants to appeal. The most striking feature of this law has been a shift in the decision-making centre from the national to the local level. The law makes provision for three scenarios:

- for a (limited) extension or a (nearby) relocation of an existing shop, notifying the municipality authority is sufficient;
- for the establishment of new retail outlets with a commercial surface of between 400 and 1,000 m², the College of mayors and aldermen must reach a decision within 50 days;
- for the establishment of new retail outlets with a commercial surface exceeding 1,000 m², the College also has to ask for the prior opinion of the national Socio-Economic Committee for the Retail Sector (CSEND) – which brings the time-limit for a decision up to 70 days –, but this opinion is not binding, as it was before. For retail outlets of more than 2,000 m², the neighbouring municipalities must also be informed so that their observations can be made.

So, all in all, the time limit for reaching a decision is a maximum of 70 days. In all cases, the decision is assumed to be favourable if the statutory response period is exceeded.

Although some of the "Ikea" Law's provisions are still open to criticism, notably the participation in CSEND of the parties involved (see below), there is no doubt that the legislation has made it easier to establish new large retail outlets than previously. In practice, since 2005, most

requests for setting up commercial establishments have gained the go-ahead. In its 2005 country survey, the OECD had given a positive opinion of the new law, reckoning that it reduced barriers to entry for large outlets, by making the authorisation procedure more transparent and by cutting by half the statutory response period.

This improvement is not reflected in the PMR indicators. Instead, Belgium's score got worse between 2003 and 2008, owing to the fact that the sole criterion used by the OECD concerns the retail floor space above which the regulatory requirements apply and this surface area was lowered to 400 m² under the so-called "Ikea" Law.

Among the neighbouring countries, there is specific legislation governing new commercial establishments in both Luxembourg and France, and is just as restrictive according to the OECD criteria, since its application thresholds refer to comparable surface areas. On the other hand, the score obtained generally tends to be more favourable in countries where there is no specific legislation for large outlets, but where the establishment of shops is subject to general land use planning rules, which are sometimes quite strict. This, for instance, is the case in the Netherlands, a country where retail trade tends to be concentrated in the towns and where the presence of hypermarkets is unusual, but which nevertheless gets a score of zero, reflecting total deregulation, according to the OECD criteria. These examples show that the quantitative figures from the OECD indicators should be interpreted carefully, by putting them in their correct context.

It is for operational restrictions that Belgium gets its worst results, scoring a maximum of 6 for the two main basic indicators in this category. First of all, existing firms are considered to be protected, because, on the one hand, representatives of professional organisations are involved in the granting of authorisations and licences through their participation in the CSEND and, on the other hand, some products can only be sold by outlets that have a *de jure* monopoly, such as the sale of medicines in pharmacies, for example.

Another important criterion taken into consideration is legislation on shop opening hours. This is sensitive issue, as it touches on cultural aspects linked to life in society. From a purely theoretical point of view, the question can bring the various interest groups concerned (consumers, workers, enterprises) into conflict, and the likely impact can change from the short to long term. The main arguments put forward in favour of longer opening hours are greater convenience for the consumer, made all the more necessary by societal developments (such as increased participation of women in the labour market), greater

(1) Law of 13 August 2004 on the authorisation of commercial establishments.

TABLE 1 INDICATORS OF RETAIL TRADE REGULATION⁽¹⁾
IN BELGIUM(scale of 0 to 6, with a higher score indicating tighter
regulation⁽²⁾)

	1998	2003	2008
1. Registration in commercial register	1.5	1.5	2.0
2. Licences or permits	2.0	2.0	2.0
3. Specific regulation of large outlets ⁽³⁾	4.0	5.0	6.0
Barriers to entry	2.6 (12)	2.9 (8)	3.4 (6)
	<i>p.m. 2008:</i> <i>DE (2.1) – FR (2.6) – NL (2.1)</i>		
4. Protection of existing firms ..	6.0	6.0	6.0
5. Opening hours and days ⁽⁴⁾	6.0	6.0	6.0
Operational restrictions	4.8 (5)	4.8 (1)	5.0 (1)
	<i>p.m. 2008:</i> <i>DE (2.9) – FR (4.7) – NL (2.4)</i>		
6. Price controls	4.0	4.0	2.0
Price controls	4.0 (2)	4.1 (2)	2.6 (5)
	<i>p.m. 2008:</i> <i>DE (2.4) – FR (1.7) – NL (1.8)</i>		
Summary indicator	3.7 (5)	3.9 (3)	3.7 (2)
	<i>p.m. 2008:</i> <i>DE (2.4) – FR (3.1) – NL (2.1)</i>		

Source: OECD (Product Market Regulation indicators).

(1) Including automobile trade.

(2) The figures in brackets indicate Belgium's position among a number of OECD countries varying from 26 to 29 depending on the indicators used and the years covered.

(3) Indicator based solely on the threshold floor area above which any regulatory requirements apply.

(4) Whether or not there are any national or regional/local regulations.

profitability for the shops, whether through faster depreciation of fixed costs or a higher turnover, and expanded activity, higher employment and lower prices at both sectoral level and in the economy as a whole. Opponents of extended opening hours, especially on Sundays, doubt that the anticipated benefits, and especially a significant increase in turnover, do actually materialise, and tend to emphasise the inconvenience for the workers, as well as the societal need for a common rest period away from all economic activity.

Research work attempting to assess the impact of experience in liberalising opening hours in some countries has tended to produce rather mixed results. Not surprisingly, the winners seems to be the consumers. Beyond that, the overall impact on prices appears to be modest: initially, there is an upward effect to cover the increase in operating costs, and also as a result of the potential rise in market power of surviving firms, after certain competitors cease trading; and then a downward influence owing to the efficiency gains achieved and the arrival of new competitors on the market. Turnover and employment would tend to increase slightly, but the jobs created often offers less attractive work conditions. In Belgium, opening hours and days in retail trade are governed by a law adopted on 10 November 2006, which streamlined and updated the previous legislation from 1960 and 1973, without changing the main principles enshrined in these laws. As far as opening days are concerned, the principle is one day off a week, or more precisely a 24-hour period of uninterrupted closure starting on any day – normally but not necessarily Sunday – at 5 am or 1 pm. As for opening hours, the principle is authorised opening between 5 am and 8 pm from Monday to Thursday and on Saturdays, and until 9 pm on Fridays and on the eve of public holidays. Three kinds of derogations are possible: according to the type of outlet (transit points, newspaper sales points, motor fuel outlets, etc.), for exceptional circumstances (a maximum of 15 days a year), and in tourist areas.

The criterion taken into account by the OECD for establishing the PMR indicators is the existence of any regulation in this field and if it takes on a national dimension this is regarded as an aggravating factor. On this basis, Belgium gets a maximum score of 6, like many other countries, despite the actual range of opening hours. Thus, the United Kingdom, a country where opening hours are virtually unlimited but nevertheless governed by specific legislation, has also been given a maximum score. Conversely, Germany gets a lower score, owing to the fact that regulations on opening hours fall within the competence of the *Länder*.

In order to better assess the flexibility of rules on opening hours, their actual scope should be surveyed. Compared with the neighbouring countries, Belgium comes somewhere in the middle. Shops in Belgium are open more than they are in Germany, similar to opening hours in Luxembourg, albeit to a lesser extent than in the Netherlands (opening hours until 10 pm on weekdays and Saturdays), and especially in France and the United Kingdom, countries where the restrictions only concern Sundays. On the other hand, the shops in Belgium often opt on a voluntary basis for shorter opening hours than those allowed under the regulatory restrictions, something

which also tends to put their constraining nature into perspective. The collective labour agreements in force in the distribution sector probably play a part here.

The OECD 's 2007 country survey was quite positive about the Belgian law adopted in 2006, pointing up the simplification of the rules governing opening days and hours, as well as the extension of the potential number of Sunday openings. But once again, the improvement in the legislative framework is not reflected in the PMR indicator score, even though it is acknowledged by the OECD.

Finally, price controls make up the last axis for assessing regulation in retail trade. This is the only area in which Belgium has improved its score and its ranking, with the intermediary indicator coming down from 4.1 in 2003 to 2.6 in 2008, and Belgium itself dropping from 2nd to 5th place, thanks to the removal of price controls on bread and to the OECD's taking into account, no doubt mistakenly, a presumed easing of petrol price fixing. So, contrary to the impact of the "Ikea" Law or the regime governing opening hours, the PMR indicator score tends to overestimate somewhat the progress made in the field of price controls.

In Belgium, price controls are governed by the Law of 22 January 1945 on the economic regulation of prices, which also encompasses decrees fixing maximum prices, prior announcements of prices in regulated sectors, programme contracts, etc. A few other provisions affecting prices, such as labelling, discounts, seasonal sales, joint sales, closing-down sales, are covered by the Law on commercial practices, consumer information and consumer protection, the latest version of which dates from 1999. In Belgium, there are plenty of provisions in this area, not often found in the other countries.

With its basic indicator, the OECD first of all assesses whether any prices are fixed in absolute terms, then whether there are any such price controls for certain product categories, such as staple goods, petrol, tobacco, alcohol, medicines, other categories. The overall score thus goes up with the number of products whose prices are subject to controls. By counting two categories of products subject to price controls, including medicines (an area in which price liberalisation had already been covered by an IMF recommendation in December 2008), Belgium is ranked in the middle, rather nearer the top than the bottom. It forms part of a group of countries, along with Germany and the Netherlands, where drug prices are also regulated. Five countries have a higher score, among them Luxembourg which additionally has price controls on tobacco and petrol. Conversely, thirteen countries have a lower score, including France (tobacco), the United

States (alcohol) and the United Kingdom (medicines), along with four countries that do not have any price controls, including Denmark and Sweden.

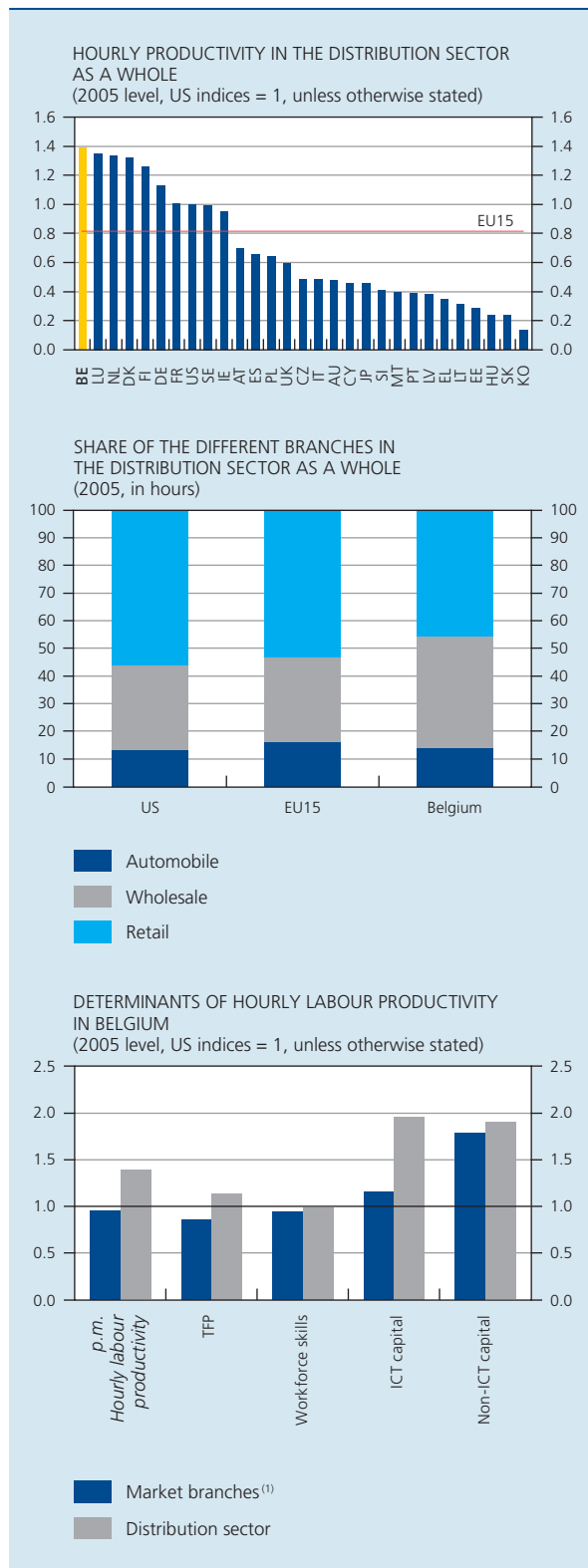
In all, and despite the need to perhaps take a critical look at the OECD's PMR indicators, it is worth noting that Belgium almost always has a score equal to or higher than that of its three main neighbours. This suggests that the retail trade regulatory framework is more restrictive there than elsewhere. Looking at the matter more closely, it appears that it is not so much the content of the legislative provisions as their actual existence, or even the sheer number of them, that leads to this view. When compared with the neighbouring countries, Belgium seems to suffer from a legislative inflation syndrome, whereby any commercial practice is regarded as being controlled by specific legislation. Although Belgian legislation has been reshaped slightly over the last ten years, largely as a result of the transposition of EU Directives, a genuine effort to simplify and streamline existing laws still needs to be made. This is an important point because the perception that the market players have of barriers to doing business is sometimes more of a determining factor than the actual level of these obstacles. If potential competitors get the impression that the Belgian regulations are excessively heavy, they will hesitate before committing themselves to moving into this market, while the stakeholders already present will feel as though they are protected against the arrival of new entrants. This situation *de facto* restricts competition and can give rise to inefficiencies.

2. Productivity

Having given an overview of the degree of regulation in the distribution sector in Belgium in the previous chapter, we shall now try to find out whether its relatively restrictive nature affects the performance of the sector in terms of business and productivity.

In order to do so, we draw on the EU KLEMS database, which provides statistics on economic activity and productivity for most EU countries, as well as for the United States, covering all the various branches of the economy, including distribution. Compiled using methods harmonised under the guidance of the EC, this database notably enables economic growth to be broken down according to the conventional determinants of growth accounting, labour, capital and total factor productivity. For this calculation, it has the peculiarity of measuring the contribution of capital by using an estimate of the services that it provides, rather than directly from the capital stock, while also distinguishing ICT capital from non-ICT capital. Likewise, the contribution of labour input is sub-divided

CHART 2 STRUCTURE AND LEVEL OF PRODUCTIVITY IN THE DISTRIBUTION SECTOR



Sources: EU KLEMS database, March 2008; GGDC database on productivity levels, September 2008.

(1) Per hour worked.

(2) All branches of activity in the economy, with the exception of NACE branches 70 (real estate) and 75-85 (public administration, education and health).

into two components, namely the volume of employment (hours worked) and workforce skills.

Among the countries covered by the EU KLEMS database, the Belgian distribution sector had the highest hourly labour productivity rate in 2005. This was almost 40 p.c. higher than the rate observed in the United States, and 70 p.c. above the EU15 level. Several EU Member States, most of which are neighbouring countries (the Netherlands, Luxembourg, Germany), recorded a higher level of productivity in the distribution sector than in the United States, with France in the same position as the latter.

The generally higher productivity level of the Belgian distribution sector is partly due to its structure, that is, Belgium's relative specialisation in the wholesale trade, which by its very nature is more productive than retail trade. Wholesale trade actually accounts for 40 p.c. of total trade in Belgium compared with a little more than 30 p.c. in the EU15 and the United States. This degree of specialisation reflects Belgium's vocation as a logistics centre for the Benelux and Western Europe. Moreover, the products that are the most important in the Belgian wholesale trade are the same as those in which the industrial sector is specialised: intermediary goods (chemicals and diamonds), machinery and equipment (construction and textiles) and non-food consumer goods (household electrical appliances, television and radio, and glass).

Furthermore, the findings obtained from annual accounts of companies show that the Belgian retail trade sector is among the most productive in the EU15. It is notably more productive than its German and Dutch counterparts, but a little less than the French retail sector.

As for the determinants, this higher productivity in the distribution sector in Belgium than in the United States is primarily evident in the extent to which two types of capital, ICT and non-ICT, are used and also in total factor productivity (TFP). While productivity in the Belgian economy as a whole is close to the rate recorded in the United States, performance appears quite outstanding in the distribution sector, notably because of the extent of ICT capital integrated into the production process.

While Belgium has undoubtedly posted some remarkable performance as regards the productivity level reached in the distribution sector, it is quite a different picture when one observes growth of activity and productivity recorded in recent years.

Belgian distribution has in fact featured among the least dynamic over the last ten years. Growth in real value added for the distribution as a whole averaged 1.1 p.c. a

year from 1995 to 2005, compared with 2.1 p.c. in the EU15 and 4.4 p.c. in the United States. This growth lag behind the United States and the EU15 is evident in all three sub-branches of the distribution sector. The average growth rate in the retail trade has been 0.8 p.c. in Belgium compared with 1.6 p.c. in the EU15 and 5.5 p.c. in the United States.

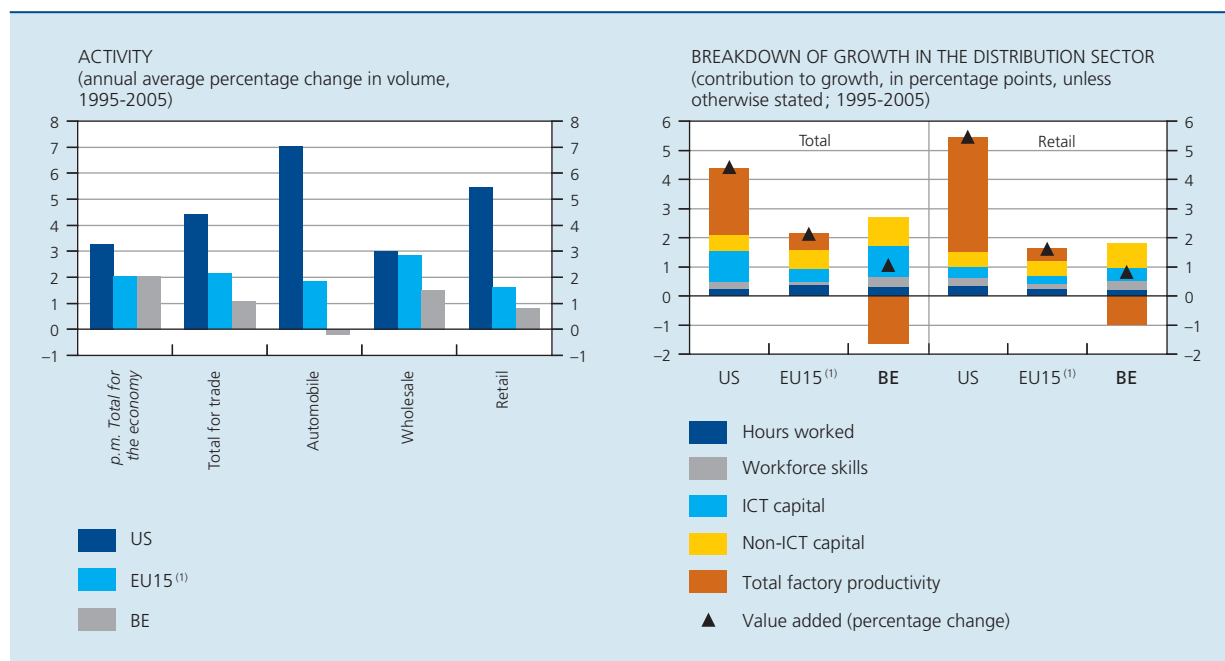
A breakdown of the growth in activity into its main determinants provides further insight into the source of the Belgian distribution sector's growth deficit. In both retailing and the whole distribution sector, the contribution of the factors of production (labour and capital) to growth in activity in Belgium has been similar to or higher than that seen in other economies. Belgium notably stands out for its high contribution of the capital production factor and especially non-ICT capital.

The divergences in growth performance compared with the United States have therefore largely originated from the differences in TFP, whether at the EU level or in Belgium itself where the gap is more pronounced. While the contribution of TFP to growth in the retail trade sector in the United States was on average 3.9 percentage points a year from 1995 to 2005, it was only 0.4 percentage point in the EU15 and even negative in Belgium, at -1.

At this stage in the analysis, it is important to point out that the statistics on productivity levels should be interpreted even more cautiously than those measuring changes: errors and omissions have wider consequences. One such example is the difficulty in measuring the volume of activity in the services sector, resulting partly from account being taken of the quality of service, which can lead to an under-estimation of growth of activity. Assuming that the production factor contributions are measured correctly, these calculation errors are reflected in TFP, since it is calculated residually and, moreover, incorporates many factors which interact amongst one another. In principle, there is no reason to believe that these measurement errors are more determining in Belgium than elsewhere.

It would certainly be tempting to explain Belgium's poor performance in recent years by a simple level effect: the other countries, and the United States in particular, appear to have caught up with Belgium in this respect. But this line of reasoning conflicts with the fact that some countries – most notably the Netherlands – have also posted a high level of retail trade productivity and sustained growth in the sector in recent years, while others (Italy and Portugal) have reported poor performance in both productivity levels and their recent productivity growth rates.

CHART 3 GROWTH IN ACTIVITY AND PRODUCTIVITY IN THE DISTRIBUTION SECTOR



Source : EU KLEMS database, March 2008.

(1) Limited to Belgium, Denmark, Germany, Spain, France, Italy, the Netherlands, Austria, Finland and the United Kingdom.

One argument often put forward to explain the European retail sector's lag in productivity growth behind its American counterpart is the lack of – or the lag in – European investment in ICT. This investment automatically implies productivity gains (hard savings), a classic example being the introduction of bar codes in the retail sector. While this argument appears to be at least partly valid for the EU as a whole, it does not seem to hold for Belgium: on the contrary, the EU KLEMS database indicates that the contribution of ICT capital to growth has been higher in this country than elsewhere, both in the distribution sector as a whole and retail trade in particular. This finding squares with the intensive capitalisation of the Belgian economy, necessary to preserve its competitive edge given the high degree of openness of the economy and the level of labour costs.

Harder to quantify are the “soft savings” also generated by investment in ICT but obtained more or less intensively and even with some time lag as they require other adjustments such as work organisation or managerial changes. They notably imply changes in supplier and customer behaviour (minimum stocks, just-in-time delivery, more detailed and readily available information on consumer habits, etc.). These soft savings can also result from investment made in related sectors: one example being deregulation of road transport which has also helped the reorganisation of retail trade in the United States.

Regulation is also likely to have a major influence on production factor efficiency. For instance, land use planning requirements, which are stricter in Europe, have slowed down the expansion of American-style “big box” hypermarkets, which are deemed to have played a significant role in the rapid development of the distribution sector in the United States. Similarly, the prescribed restrictions on opening hours are considered by some to limit the potential scope for writing off innovation costs. Generally speaking, market opening and the encouragement of competition can promote innovation, and ultimately productivity too. As far as Belgium is concerned, the relatively stringent legislation on distribution, or at least the fact that market players perceive it as being strict, probably hinders the full use of new technologies, despite their abundance, and therefore puts a brake on productivity growth.

Finally, the institutional and cultural context, as well as some geographic factors, may also influence performance in the distribution sector. For example, since innovation-related productivity improvements can only be made by trial and error, it is important to have a favourable context here, focused on promoting the entrepreneurial spirit, overcoming the stigma of business failures and the possibility of rapidly starting up a business again. The

way in which the labour market functions can also play a role here, since general rules or agreements between social partners can turn out to be more restrictive than the specific regulations governing the distribution sector. In the same vein, it can be noted that firms in the retail sector do not make full use of the range of opening hours permitted by the regulatory requirements. On the other hand, the small size of the Belgian market, combined with strong regional disparities, and especially along linguistic lines, are likely to restrict the market penetration rate of foreign firms. At the European level, the lack of harmonisation of regulations between EU Member States, along with the persistent geographical and cultural fragmentation of markets despite the integration process, constitute a similar hurdle to the optimum functioning of the distribution sector.

3. Competition

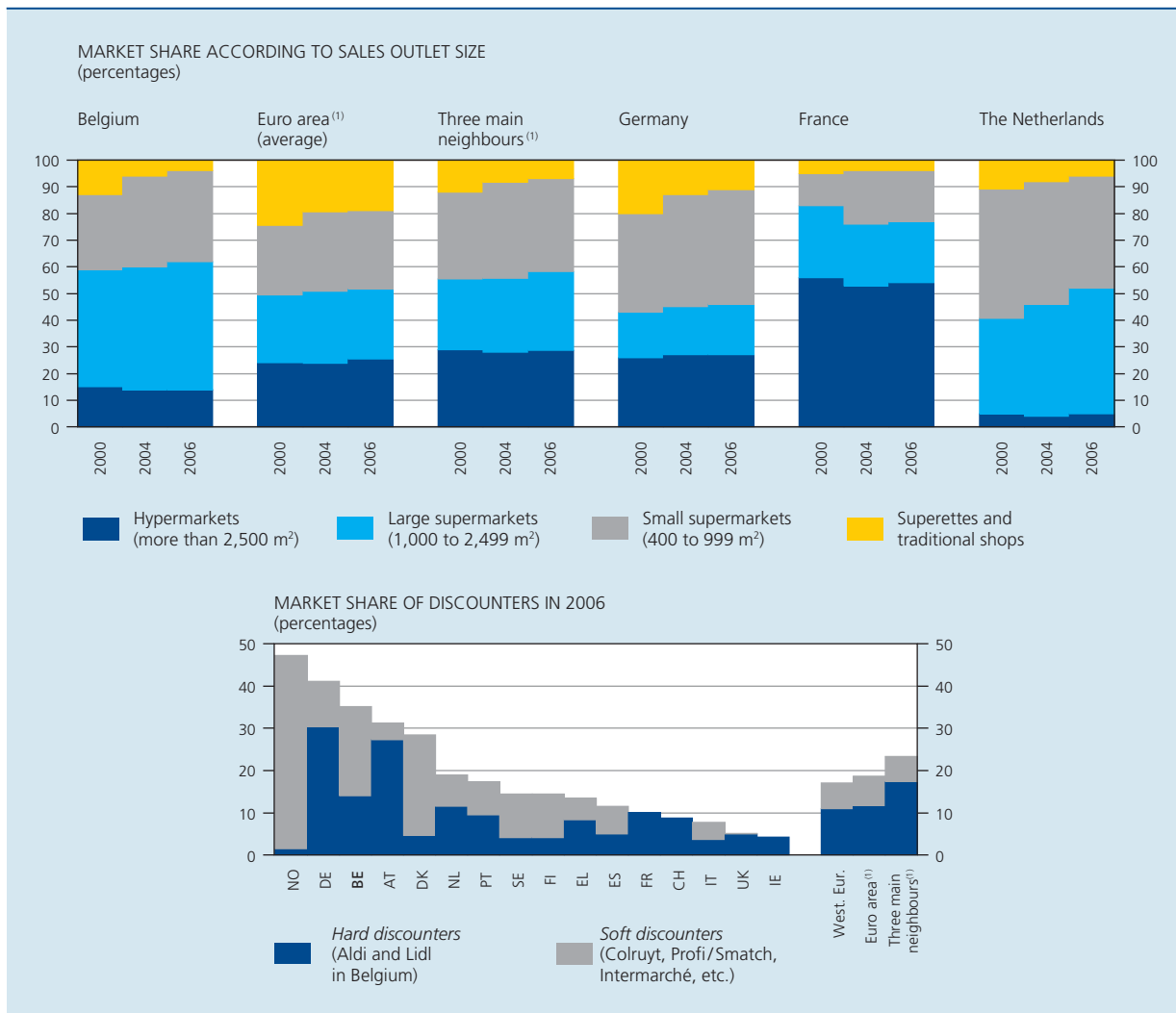
For reasons of data availability, the analysis featuring in this part of the article focuses on the one segment of the retail trade sector with which the general public is the most familiar, namely the supermarkets, or more precisely self-service non-specialised food retailing⁽¹⁾. This definition therefore excludes small specialised shops like bakeries, butcheries, small-scale grocer's shops that are not self-service and whose product range is smaller. It also excludes non-food retailing, even though part of the product range of the outlets under consideration can include non-food goods, albeit to a minor extent.

This sector accounts for roughly 40 p.c. of retail trade turnover in Belgium and the euro area, but this proportion is higher in France and the Netherlands (close to 50 and 60 p.c. respectively). Compared with the food trade as a whole, the non-specialised segment accounts for a little less than 90 p.c. of the total in Belgium and in the euro area, but more than 90 p.c. in our neighbours, with the exception of the Netherlands. This proportion is much lower in the southern countries, especially in Greece and Spain where the small-scale traditional shops are still more predominant.

According to data from AC Nielsen, the evolution of the number of shops in non-specialised food retailing in Belgium suggests a decrease due to the decline in traditional shops, and a parallel increase in the relative importance of self-service stores. A very significant expansion of the *hard discounters* can also be observed, as well

(1) It should also be noted that there is no agreement on how this market can be carved up into categories. Therefore classifications may vary from one source to another, and also explain slight inconsistencies between the data presented, which nonetheless do not ever cast doubt on the findings drawn from them.

CHART 4 STRUCTURE OF NON-SPECIALISED FOOD RETAILING



Source : AC Nielsen.
(1) Unweighted averages.

as a general increase in large outlet retailing, i.e. in the very biggest stores, and a concomitant downward trend in small-scale outlets (with retail floor space of less than 400 m²). Nevertheless, a slight increase in the number of small shops has been noted these last few years, which can be attributed to the boom in new types of local shops.

These developments are also evident from changes in market share of the various types of sales outlet, with the traditional retailers losing market share, a significant expansion in the hard discounters' share and an increase for the supermarket chains. Moreover, loss of market share can be observed for medium-scale retailers and a very slight improvement for the mini-markets (*superettes*), for the above-mentioned reason.

The market share held by supermarkets of over 1,000 m² is higher in Belgium than in the euro area and than the average of the three neighbouring countries. Only France has a bigger market share, mainly due to the very high market share of the hypermarkets, the highest of the euro area. The growing predominance of the biggest retail outlets over the smallest outlets is a widespread trend in Europe⁽¹⁾.

(1) The slightly different pattern in France could be explained by legislation that is more protective of the big supermarkets which, owing to the fact that large-scale outlets were highly developed to start with, limited their expansion to the advantage of smaller outlets, for which the legislation was probably relatively less restrictive. Moreover, the expansion of the hard discount stores, where retail floor space has generally tended to be less than 1,000 m², could account for roughly half of the growth recorded by outlets with 400 to 999 m² of floor space (the hard discount market share in France rose from 10 to 14 p.c. between 2001 and 2007).

The growth of the hard discounters (currently Aldi and Lidl in Belgium) is a very pronounced development – both in terms of numbers and market share – taking place in Belgium as well as in the rest of Europe. In Belgium, it is further boosted by a significant increase in market share held by the soft discounters (like Colruyt) whose stock also includes main brands⁽¹⁾, while the hard discounters generally tend to limit their products to generic brands or brands which they market exclusively. This trend is also spreading to the strategy of other types of supermarkets which are increasingly adding own-brand goods to their product range, i.e. in-house brands in the name of the distributor's store or generic brands. Together, these own brands (including the hard discounters' store brands) accounted for 31 p.c. of retail trade turnover in Belgium in 2007. These developments can be interpreted as a sign of competitive forces at play in the non-specialised food market.

In terms of market share held by the discounters (hard and soft), Belgium thus lies in third place in Western Europe, behind Germany and Norway. This ranking is mainly due to the size of the soft discounters' segment, but the hard discounters' market share also exceeds the average share observed in the euro area, Belgium coming in third place in the European rankings in this respect, behind Austria, and of course Germany, the country where the concept originated and which later exported it elsewhere.

Apart from the hard discounters which, according to Marketing Map, together have a market share of 16 p.c. putting them in 4th and 7th position on the Belgian market (respectively Aldi and Lidl), the four biggest distribution groups in Belgium (Carrefour, Colruyt, Delhaize Le Lion, and Louis Delhaize) account for 76 p.c. of the market for self-service food retailing⁽²⁾. When Makro is added to this quartet, the overall market share rises to 82 p.c. And, if the above-mentioned hard discounters are added too, the market share goes up to 98 p.c. for the seven main distribution groups in Belgium.

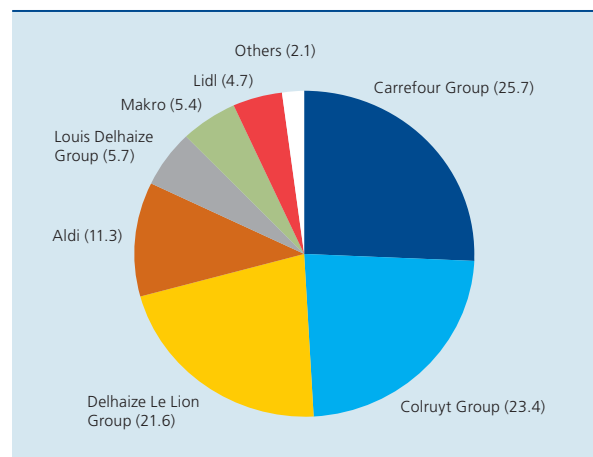
A conventional way of measuring concentration is with the Herfindahl-Hirschmann index (HHI). This is a yardstick used by the anti-trust authorities (in the United States as well as in the European Union). The index is obtained by adding up the squares of market share of all enterprises in a sector. The higher the HHI for a given market, the more production is concentrated in the hands of a small

(1) Also called "national brands", these are agri-food industry brands whose image generally tends to be supported by advertising and which are not linked to any particular retailer.

(2) Grouping together the different brands per distribution chain is not always easy, as the links between the brand name and the group are not always of the same intensity. The degree of autonomy of outlets can also be quite high.

(3) In a theoretical situation with an infinite number of competitors of equivalent size, the market share of each competitor will tend to be near zero and the HHI will be nil. Conversely, in the case of a monopoly (with a market share of 100 p.c.), the HHI will reach 10,000.

CHART 5 MARKET SHARES IN FOOD RETAILING IN BELGIUM (2007 TURNOVER)
(percentages)



Source : Marketing Map.

number of firms. A result of less than 1,000 indicates a low degree of concentration, between 1,000 and 1,800 is average concentration and over 1,800 points to a high degree of concentration⁽³⁾.

The HHI for Belgium varies from 1,720 (on the basis of retail floor area) to 1,890 (on the basis of the turnover of the seven biggest groups), which suggests an average to high degree of concentration at the national level. By way of comparison, the seven main distribution groups in the United Kingdom accounted for 77 p.c. of total market share in 2007, which works out at an IHH of 1,400, or average concentration, and less than that measured in Belgium. Data for France and Germany (2002/2003) show that concentration there is weaker than in Belgium, while it is stronger in the Netherlands.

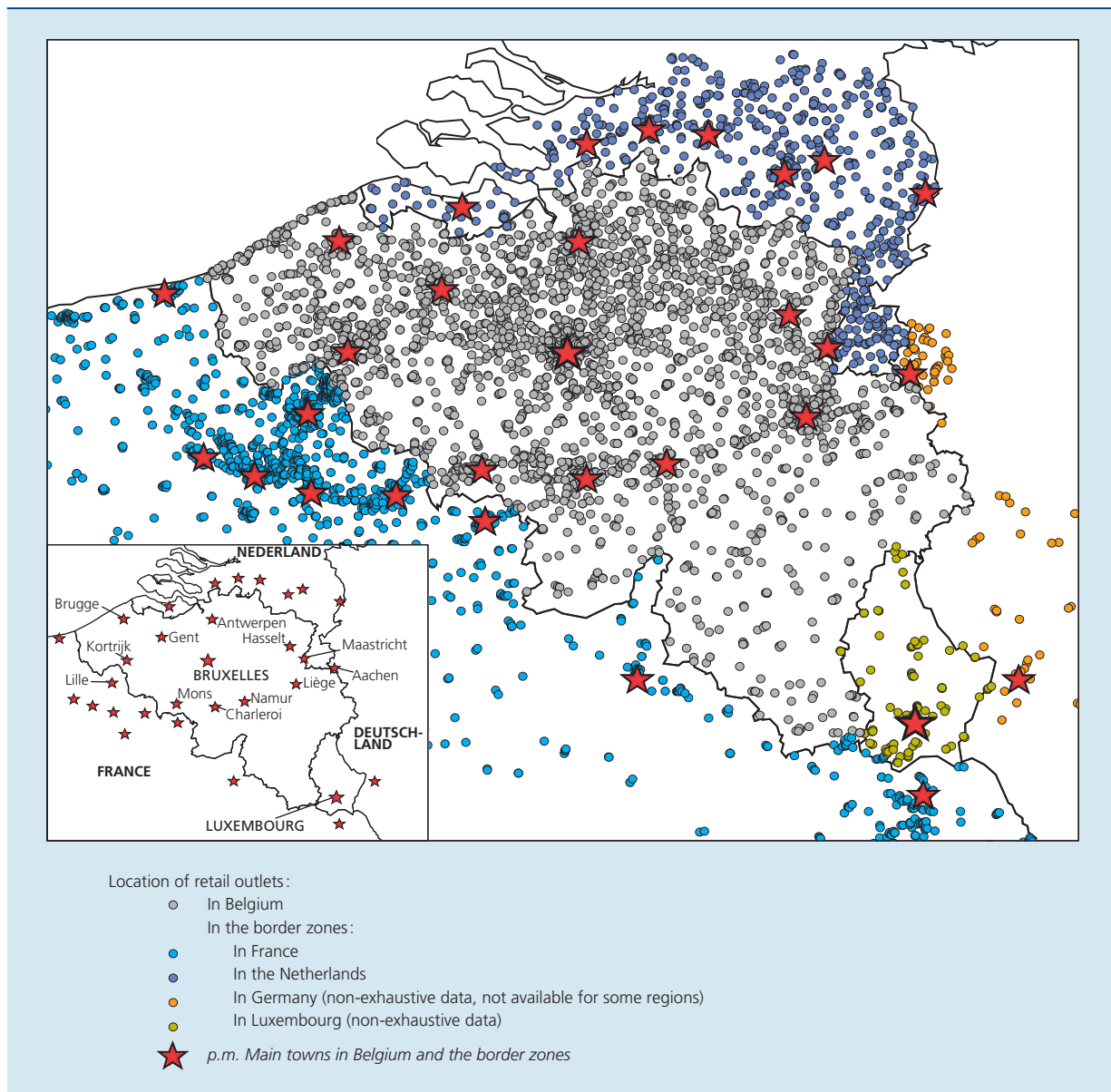
However, there are many reasons to believe that the market to be taken into consideration for calculating the degree of concentration is not actually the national market. Supermarkets do tend to be more active on local markets. So, the HHI at national level is no longer really suitable. It is in fact liable to under-estimate the degree of concentration if retail stores were to share the territory, so that the market would be marked by a lack of competition at local level. Moreover, an HHI calculated at local level is not comparable with a national-level index if at local level the size of the market determines the optimum number of competitors: a market with three competitors could be considered as optimal in view of the size of the local market, but in this case the HHI would indicate a high level of concentration according to the above-mentioned scale.

In order to apply a local approach to Belgium, the most detailed data possible on supermarkets have been used. The main source consists of information provided by the FPS Economy's planology service in the form of a list of retail trade outlets active in Belgium. This sort of list seems to be the only one of its kind in Europe. It is updated every year. The version used in this part of the analysis is the list closed on 31 December 2007. Apart from the name and address of the sales outlet, this list of more than 8,500 shops includes information on the retail surface area and the business sector, which makes it possible to select just the self-service food retail trade outlets, for which the list

is exhaustive. It covers 3,731 self-service food outlets of more than 100 m² of retail floor space. The novelty of the following analysis lies in the possibility of transforming the list into a geographical database, using geocoding services that enable addresses to be transformed into geographical data like those used by GPS navigation systems. The geographical features can thus be used to analyse the local aspects of the self-service food retail market.

One of the first things to be noted is that population density is evidently the main determinant of market size and therefore of the number of shops, as well as the total

CHART 6 LOCATION OF FOOD RETAIL STORES IN BELGIUM AND IN THE BORDER ZONES



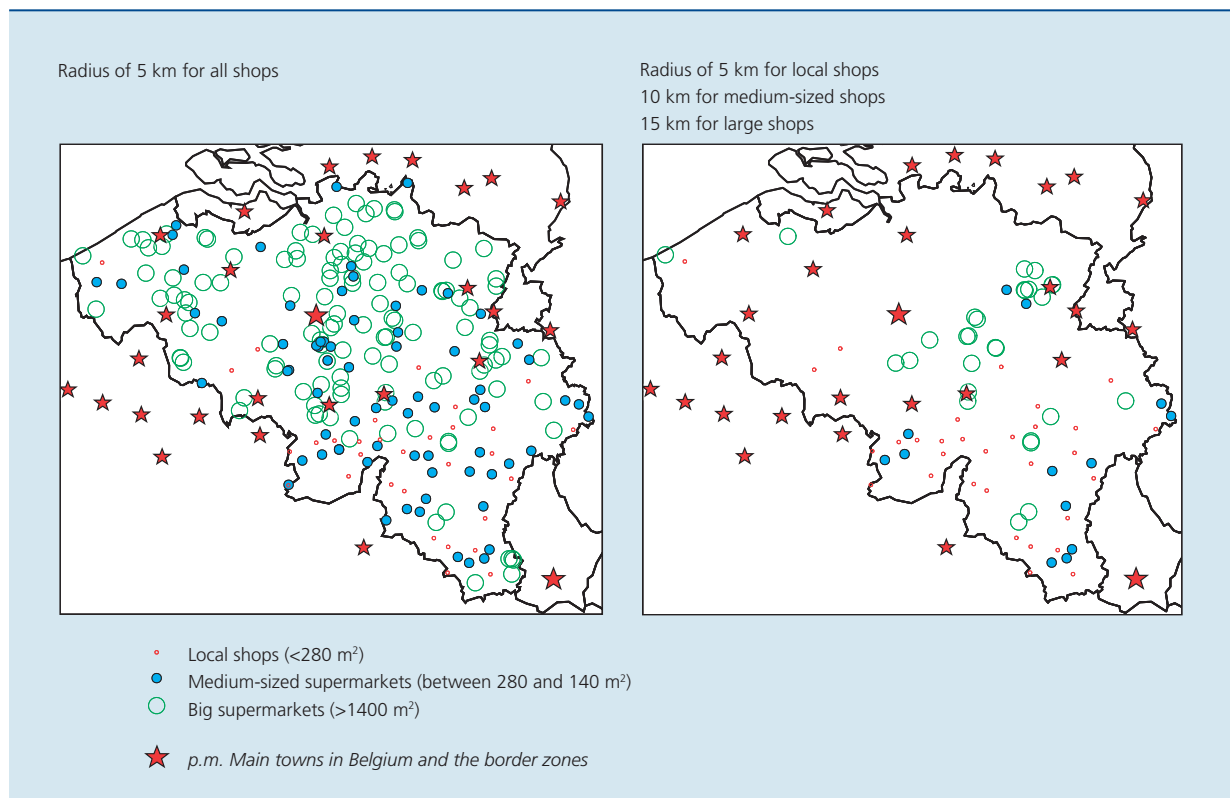
Sources : Atlas Commercial SaarLorLux (DE, LU), FPS Economy (BE), Google Maps (DE), INSEE (FR), KVH(NL), Grand Duchy of Luxembourg Chamber of Commerce (LU), NBB.

supply of retail outlets. The map of self-service food retail outlets of more than 100 m² clearly illustrates the link between the number of shops and population size or economic clusters as well as major road axes (characteristics which are strongly correlated amongst themselves). The most concentrated zones are the area around Brussels, between Brussels and Ghent, between Brussels and Antwerp, between Antwerp and Hasselt down to Liège, the Walloon ridge running from Mons and Charleroi to Namur and Liège, the region around Kortrijk and the coast. Conversely, southern Wallonia and the province of Luxembourg in particular evidently have a lower density of shops, directly linked to the lowest population density, which means a smaller market. It is also interesting to note that the province of Luxembourg, which has a very small number of shops per square kilometre, does actually have a higher number of shops per inhabitant than the other provinces. If supermarkets are singled out according to size among the sales outlets in Belgium, the above observations remain generally valid. The location of the biggest supermarkets is even more closely correlated with population density, and so these stores are even more under-represented in the south of the Walloon Region.

The same type of geographical breakdown can be noted in the neighbouring countries⁽¹⁾. On the map, a high concentration of shops can be seen in the region around Lille in France and towards Mons either side of Kortrijk, where the population density is high. Conversely, along the border with the “Boot” of Hainaut or the province of Luxembourg, shop density – as in the corresponding part of Belgium – is markedly lower, with the exception of the France-Belgium-Luxembourg border region. Along the rest of the Belgo-Luxembourg border, shop density is also relatively low (although the data for Luxembourg are not exhaustive). The situation is undoubtedly similar along the border with Germany, but here too, there is a lack of data. Around Aachen and towards Maastricht, the number of shops again increases significantly, still in relation to economic activity and population. The situation

(1) On the basis of additional data gathered from national sources, it has been possible to draw up the map of self-service food retail outlets in border areas. In some cases, the variables, like the shops’ retail floor space, have had to be estimated – at least in part. In other cases (Germany, Luxembourg), the sources are not exhaustive. In all, roughly 2,800 sales outlets have been identified in the four neighbouring countries. More than 2,200 of them are located less than 50 kilometres away from an outlet in Belgium. Logically, this figure decreases over the distance considered: there are just under 1,000 within 15 km of a shop in Belgium, around 500 at 10 km and roughly 221 within 5 kilometres. The distance is generally shorter in France than in the Netherlands.

CHART 7 LOCATION OF FOOD RETAIL STORES WITH SIGNIFICANT MARKET POWER ⁽¹⁾



Sources: Atlas Commercial SaarLorLux (DE, LU), FPS Economy (BE), Google Maps (DE), INSEE (FR), KVH(NL), Grand Duchy of Luxembourg Chamber of Commerce (LU), NBB.

(1) Market share (estimated on the basis of retail floor space) of over 60 p.c. This is calculated as consolidated market share at group level, taking account of shops in border areas.

along the remainder of the border between Belgium and the Netherlands reveals a high degree of concentration quite uniformly spread out, in line with the high population density in the Netherlands.

Taking the analysis a notch higher, it is possible to measure the degree of competition at the local level in Belgium. Box 2 sets out the concepts and the main findings drawn from two studies abroad, one for the United Kingdom and the other for France. Overall, the indicators obtained put the findings from the comparison of national Herfindahl indices (HHI) into perspective: the number of shops with significant market power at local level appears to be lower in Belgium than in the United Kingdom and France. This indicates higher local competition despite a higher HHI.

Furthermore, the map pinpointing sales outlets with significant market power shows that, in most cases, they are sales outlets located in less favourable markets, that is, in regions with a lower population density, situations for which the definition of the local market (the length of the radius) itself is maybe inadequate, since households there

are used to travelling longer distances to get to shops and other services. It is particularly striking for local shops (a market radius of 5 km) and average-size supermarkets (a market radius of 10 km), almost all located in the least populated part of Wallonia. In the case of the big supermarkets, it is obvious that the shift from a narrowly-defined market (5 km) to a wider market (15 km) reduces the number of market power situations significantly. A good many of the remaining potentially problematical cases are again located in southern Wallonia.

To sum up, these indications suggest that the siting of supermarkets is in line with expectations and does not seem to show any sign of widespread problems. Moreover, competition at local level seems to be playing its role relatively well in Belgium, even though this situation is largely attributable to high population density. Cross-checking the rather qualified interpretation of the market regulation indicators for setting up supermarkets presented in chapter 1, this analysis suggests that the actual impact of these regulatory requirements, which are generally felt to be strict, on the degree of competition at the relevant local level is fairly small.

Box 2 – Measuring the degree of local competition

Drawing on the findings of a study published in 2008 by the anti-trust authority in the United Kingdom, the UK Competition Commission (UKCC), the degree of competition at local level has been measured for Belgium on the basis of data supermarket siting.

First of all, the reference markets are defined in terms of shop size. According to the UKCC report, consumers do not actually consider different sized shops as perfect substitutes for each other. So, in the case of the big supermarkets, the nearest substitute is another large supermarket: following a small but significant increase in prices, the majority of consumers who change store will move towards a large outlet, but not towards small or medium-sized outlets. Therefore, the big shops are mainly (as opposed to only, assumed in the exercise) influenced by competition from other large stores. In our exercise, they are defined as shops with a retail trading space of more than 1,400 m². Medium-sized shops (retail floor space of between 280 and 1,400 m²) not only face competition from other stores of a similar size, but also from big stores. On the other hand, small shops (retail floor space of less than 280 m²) are not relevant competitors for medium-sized stores. Finally, small shops are subject to competition from three types of store. That makes it possible to define three reference markets.

In a second step, a local or geographical dimension is added to this definition depending on supermarket size. The UKCC study shows that the big supermarkets generally tend to compete with the other large supermarkets located within an isochronal radius of 10 to 15 minutes by car around each shop. In the absence of detailed data on journey times in Belgium at such a specific level, the analysis set out below measures these isochrones approximately by a radius of 5, 10 or 15 km around each shop "as the crow flies". In Belgium's case, it is also important to take cross-border competition into consideration. Comparable data have been able to be found for France and the Netherlands, but for Germany and Luxembourg, only partial data are available. Therefore,

the results that take the cross-border market into account are, in principle, the most relevant, but they slightly underestimate actual competition in practice, especially in the regions near Germany and Luxembourg.

The indicator of the degree of competition at local level used in the UKCC study is the number of shops with a market share (on their relevant local market) of more than 60 p.c. This figure is then expressed as a percentage of the total of all the shops. The same indicator has been used, but the market share has had to be calculated on the basis of the retail floor space of the shops, and not on the basis of turnover (owing to a lack of data on turnover per individual store). Moreover, account must be taken of the fact that other shops belonging to (or associates of) the same group are also active on the geographical market of a given store, which *de facto* reduces effective

SHOPS WITH SIGNIFICANT MARKET POWER ON THEIR LOCAL MARKET

(percentages, with corresponding percentages in brackets when cross-border market is taken into account)

	Big supermarkets >1,400 m ² (n = 564)	Mid-size supermarkets, between 1,400 m ² and 280 m ² (n = 2,753)	Local shops < 280 m ² (n = 978)
Belgium⁽¹⁾			
Radius of 5 km	13.1 (12.6)	3.1 (2.9)	3.1 (n.)
Radius of 10 km	3.0 (2.8)	0.3 (0.2)	
Radius of 15 km	1.2 (0.9)		
Belgium – with group consolidated market share⁽²⁾			
Radius of 5 km	28.1 (27.5)	5.1 (4.8)	3.8 (n.)
Radius of 10 km	14.0 (13.5)	1.1 (0.9)	
Radius of 15 km	9.6 (7.3)		
<i>p.m. United Kingdom</i>	(n = 1,853)	(n = 4,265)	
10-minute drive	27	22	n.
15-minute drive	11	10	n.

Sources: UKCC, NBB.

(1) Market share, estimated on the basis of retail floor space, higher than 60 p.c.

(2) Market share, estimated on the basis of retail floor space and consolidated at group level, higher than 60 p.c.

competition, since group strategies can be put in place. Therefore, this exercise has also taken into consideration an indicator based on group consolidated market share. This indicator, in principle more relevant, can nevertheless over-estimate somewhat the lack of competition, and for two reasons. First of all, there is a slight risk of double counting: since several shops belonging to the same group and operating in close proximity can in turn be identified as having market power, while several of them actually share this power. Secondly, it is not impossible that, in some cases, shops run by self-employed owners or franchisees also compete with each other, even within the same group. This can be relatively significant in the case of small and medium-sized shops.



Turning to big supermarkets, as defined by a radius of 5 km, it was found that 28 p.c. of them have significant power when group consolidated market shares are taken into account. By extending the radius to 10 km or to 15 km, which appears to be a more suitable distance for distinguishing the potential market for a large supermarket, it emerges that there are, respectively, no more than 14 p.c. or only 9.6 p.c. of supermarkets that can be regarded as having a market power according to the definition used. Although taking cross-border trade into account has a marginal influence on the overall results, the impact is significant for the border zones.

Corresponding figures available for the United Kingdom are quite similar, with 27 p.c. to 11 p.c. of large supermarkets in a position of strength on their market. However, as the definition of significant power in the UKCC study imposes an additional criterion (that there are only three competitors or less) and as it is based on non consolidated market share, it can be concluded that local competition seems to be stronger in Belgium.

As far as the market for medium-sized supermarkets is concerned, the share of sales outlets considered as being in a dominant position on the markets within a radius of 5 to 10 km varies between 5.1 and 1.1 p.c., rates well below those recorded in the United Kingdom, which suggest that competition is rife in this segment. With only 3.8 p.c. of sales outlets in a position of strength on a market within a 5 km radius, the finding is similar for local shops. In practice, however, these results are less relevant than in the case of medium- to large-scale supermarkets in that a narrower geographical market, within a radius of 1 km for example, should be taken into consideration to determine the market on which other local shops are rivals. Moreover, other small retail trade outlets (mini-markets of less than 100 m² and specialised shops) which are probably part of the same market should also be taken into account.

These conclusions are further confirmed by a robustness test based on a second survey covering France, which was carried out in 2008 by Asterop, a (geo)marketing research consultancy⁽¹⁾. Drawing on the findings of this study, the local dimension has been measured approximately by a circle with a radius of 18.5 km⁽²⁾. The indicator used measures the number of local markets dominated by one or two "leaders". A market dominated by just one group corresponds to a market where the leader has a market share of at least 25 p.c. and a 10 point lead in terms of market share over the second biggest retailer⁽³⁾. A market dominated by two groups has been defined by analogy by taking as the starting point the combined market share of the two groups with the biggest shares. This suggests that 35 p.c. of supermarkets in Belgium would display some form of market power. That appears to be well below the situation described for France where 87 p.c. of all zones investigated are marked by a lack of competition. These differences can most probably be explained by the fact that France has a bigger proportion of large supermarkets, with a lower population density than in Belgium, as well as – until only recently – legislation tending to protect existing supermarkets.

These findings suggest that, on the whole, competition can play its role at the local level without any major obstacles in Belgium.

(1) A summary of the study is available on the following webpage: <http://www.asterop.com/fr/etudes/localenseignes.aspx>.

(2) The reference study in fact defines 630 "zones de vie" of varying size, corresponding to geographically delimited areas that have been studied specially to best reflect economic reality, unlike the standard administrative division of regions and districts (*départements, cantons*, etc.). The average size of a zone corresponds to a circle with a radius of 18.5 km.

(3) 15 points if the market leader has a share of more than 40 p.c. of the market.

4. Price Level

The aim of this section is to analyse Belgium's position in relation to the euro area and its three main neighbours (Germany, France and the Netherlands) in terms of prices

charged by the retail trade sector. This analysis is based on two sources of information, used in many other research papers (Allington, Kattuman and Waldmann, 2005; Rogers, 2007, for example).

The leading source is Eurostat. The EU's statistical institute publishes relative price indices (the purchasing power parities index) making it possible to compare the relative position of prices in a Member State of the European Union with the average for the EU15. The data used in this article cover the period running from 1995 to 2007 and concern the relative price of a selection of products sold mainly by firms in the retail trade sector (NACE 52), namely food and beverages, clothing and footwear, cleaning products and household equipment and toiletries. The second source of information is the CityData database produced by the Economic Intelligence Unit. The objective of this database is to provide detailed information on the cost of living in 140 towns (mainly capital cities or very big towns), across the world, on the basis of price lists from a standard basket of products. These data are available on an annual basis for the period 1990-2008.

Unlike the Eurostat data, the CityData statistics describe the price level expressed in local currency units for a basket of identical goods and services in each country. In addition, the available data relate to individual products and not to a grouping of products. They therefore enable a closer comparison between countries. Lastly, unlike the

Eurostat database, the CityData statistics make it possible to distinguish between prices charged in different types of shops (small retailers, supermarkets and hypermarkets, clothing retail chains, etc.). While this database may have some advantages over the figures published by Eurostat (observation of the price levels, product homogeneity, segmentation by type of retailer), it also has a few disadvantages, notably in terms of representativeness of the price lists (geographical scope limited to large towns and capital cities, basket representative of the consumption of a manager in a multinational enterprise).

Drawing on these two sources, three reference baskets have been constructed depending on the type of retail outlet: a Eurostat basket made up of 13 product categories, a "CityData – Supermarkets" basket and a "CityData – Small retailers" basket both composed of 88 products. Three other comparison baskets have also been constructed on the basis of CityData figures: a basket of 16 products sold by small clothing outlets, the same basket for clothes shops belonging to retail chains, and a basket of 36 products (excluding clothes) and services not sold in supermarkets and hypermarkets. The composition of these baskets is explained in box 3.

Box 3 – The three reference baskets and the three comparison baskets

The reference baskets

The Eurostat basket is made up of 13 product categories sold by retail trade sector firms. These categories are: Bread and cereals, Meat, Fish, Milk, cheese and eggs, Oils and fats, Fruit and vegetables (including potatoes), Other food products, Non-alcoholic beverages, Alcoholic beverages, Tobacco, Clothing and footwear, Furniture, household equipment and cleaning products, Various goods and services. These products cover categories 01, 02, 03, 05 and 12 of the international COICOP classification.

The "CityData – Supermarkets" and "CityData – Small retailers" baskets are made up of 88 products: white bread, butter, margarine, rice, spaghetti, flour, sugar, cheese, cornflakes, yoghurt, milk, olive oil, maize and peanut oil, potatoes, onions, mushrooms, tomatoes, carrots, oranges, apples, lemons, bananas, lettuce, eggs, peas, canned tomatoes, canned peaches, canned sliced pineapple, filet mignon, steak, stewing beef, roast beef, minced beef, veal chops, veal fillet, roast veal, leg of lamb, lamb chops, stewing lamb, pork chops, pork loin, ham, bacon, frozen chicken, fresh chicken, fish fingers, fresh fish, instant coffee, ground coffee, tea bags, cocoa, chocolate drink, coca-cola, tonic water, mineral water, orange juice, table wine, superior quality wine, fine wine, local-brand beer, top-quality beer, whisky, gin, vermouth, cognac, liqueur, soap, laundry detergent, toilet tissue, washing-up liquid, insect-killer spray, electric light bulbs, batteries, frying pan, toaster, laundry, dry cleaning (man's suit, woman's dress, trousers), aspirins, razor blades, toothpaste, facial tissues hand lotion, shampoo, lipstick, cigarettes (2 brands).



The comparison baskets

The "CityData – Clothes – Small retailers" and "CityData – Clothes – Chain stores" baskets are composed of the 16 following items: suit (man's), shoes (man's), raincoat (man's), dress, shoes (woman's), cardigan (woman's), raincoat (woman's), stockings, jeans (children's), shoes (children's), sports shoes (children's), dress (children's), jacket (children's), trousers (children's).

The "Citydata – Products and services not sold in retail stores" basket is composed of 36 items: drink at a bar of a Hilton-type hotel, fast-food snack, car hire (two vehicle categories), room in a Hilton-type hotel, room in a moderate hotel, simple meal in a restaurant, two-course meal for two in a restaurant, baby-sitter, hourly rate for domestic cleaning, consultation with the dentist (two types of service), golf course green fee, swimming pool entrance fee, tennis court hire, CD, cinema ticket, theatre or concert ticket, local newspaper, international newspaper, international magazine, colour photo film, novel, unleaded petrol, taxi (3 tariffs), car tune-up in the garage, electricity, gas, telephone (land line, local call) and water.

An analysis of the price differentials calculated from the Eurostat and CityData – Supermarkets baskets shows that the differential between prices charged in Belgium and in the euro area is generally positive. In 2007, it came to 7.7 p.c. on the basis of the Eurostat basket and 8.7 p.c. according to the CityData – Supermarkets basket (7.8 p.c. in 2008 according to this source). So, these two sources give consistent indications. This positive differential can mainly be attributed to the fact that prices in the southern member countries of the euro area are generally lower than those charged in Belgium, in particular in Spain (average differential of 19 p.c. in 2007 according to Eurostat), Portugal (average differential of 20.5 p.c. in 2007 according to Eurostat) and Greece (average differential of 8.7 p.c. in 2007 according to Eurostat). On the other hand, as far as small retail stores are concerned, the data available indicate that the average price level surveyed in Belgium does not appear to differ significantly from the average level recorded in the euro area as a whole.

Compared with price levels in the three neighbouring countries, there is almost no difference between the Eurostat and CityData – Supermarkets baskets up to the year 2004. However, from 2005 onwards, a significant increase in the average differential can be observed, especially for prices recorded in the supermarkets. On average, over the last four years for which data are available, prices charged by supermarkets and hypermarkets in Belgium have been 7.1 p.c. higher than those charged by our neighbours, according to the CityData – Supermarkets basket. Based on the Eurostat basket, the average differential over the period 2005-2007 was 5.9 p.c. On the other hand, if the CityData – Small retailers basket is considered, prices charged in Belgium have been on average 5 p.c. lower than prices in Germany, France and the Netherlands since 1997.

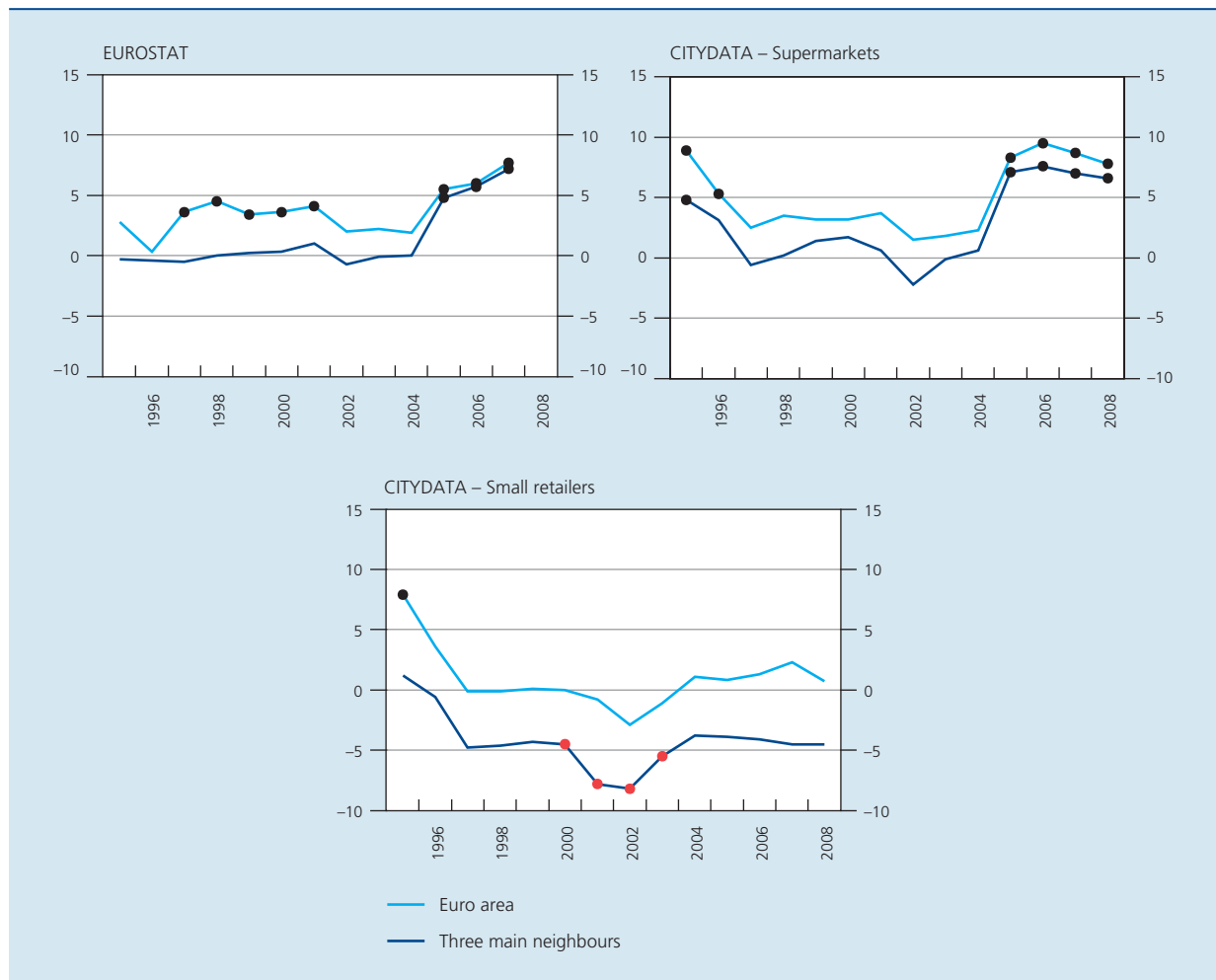
To sum up, the two comparisons point to a sharp deterioration in Belgium's relative position in terms of price levels since 2005. This worsening of Belgium's score concerns its relative position vis-à-vis its neighbours and, according to the CityData database, is mainly to be found in the retail sale in non-specialised stores sector (NACE sector 52.1). Using the data from the three comparison baskets, the analysis of price differentials between Belgium and its three neighbours does not actually point to any deterioration of Belgium's relative position.

As regards the two clothing baskets, starting from an average handicap of 10 p.c. in 1995, a very favourable trend can be noted for the price of clothes sold in shops belonging to retail chains, leading to an average price differential of –28 p.c. in 2008. The price situation among small fashion retailers seems to be leaning structurally in Belgium's favour, with an average price differential of –15.5 p.c. over the years from 1995 to 2008. However, it should be pointed out that these two baskets of goods only include 16 products, which limits their representativeness and amplifies the effect of outliers on the average.

One factor that might explain the fairly average range of lower prices for products sold in shops other than supermarkets and hypermarkets may be linked to the specific nature of the CityData database. As mentioned above, the prices published in this database are only gathered in the big towns. In Belgium's case, sample prices are only taken from Brussels. For Germany, data are only available for the cities of Frankfurt, Munich, Berlin and Hamburg and in France, only for Paris and Lyon. And finally, for the Netherlands, price samples are only available for Amsterdam.

CHART 8 AVERAGE PRICE DIFFERENTIAL BETWEEN BELGIUM AND THE EURO ZONE AND THE AVERAGE FOR THE THREE MAIN NEIGHBOURS⁽¹⁾

(percentage points, difference between Belgium and the reference zone)



Sources: Eurostat, CityData.

A black (red) marker indicates a significantly positive (negative) price differential, at a significance threshold of 5 p.c.

Taking account of the specificities of the towns in which the price samples are collected, the favourable price differential seen in Belgium for these three comparison baskets can be largely attributable to the lower cost of commercial floor space there. According to the CityData database, the average annual cost of renting one square metre of office space, during the period from 2000 to 2007, varied from 328.75 euro in Brussels, and 362.72 euro in Germany (Berlin, Frankfurt, Munich, Hamburg), to 546.94 euro in France (Paris, Lyon) and 418.38 euro in Amsterdam. This indicator is probably a good proxy for the cost of a commercial lease for a small shop, but not necessarily for a large retail outlet in which case other factors influence the cost per m² (legal constraints for establishing the shop, siting on the outskirts of big towns, etc.).

The indicators discussed above point up a distinctive trend in prices in the big retail outlets in Belgium in comparison with the three neighbouring countries. A more in-depth analysis of the price situation vis-à-vis these three countries shows that the deterioration observed from 2005 onwards is mainly due to the relative price situation in Belgium compared with the Netherlands, and to a lesser extent with Germany.

The average price differential with the Netherlands in fact widened from 5.5 p.c. over the period 1995-2004 to 23.3 p.c. for the period 2005-2008, using the CityData – Supermarkets basket. When compared with Germany, the average differential rose from 4.7 p.c. in the 1995-2004 reference period to 8.9 p.c. for the recent period, according to the same source. The price differential with France,

however, is rarely significant. The CityData statistics for the period 2005-2008 show that average prices in supermarkets in Belgium were not significantly different from the average price in the French supermarkets.

A similar trend can be seen from the Eurostat data, even though differences in price levels are evident. For example, the average differential with Germany goes up from 0.6 p.c. in the years from 1995 to 2004 to 4.9 p.c. over the period 2005-2007. Compared with the Netherlands, the average differential is 6.5 p.c. over the period from 1995 to 2004 and 16.8 p.c. over the period 2005-2007. A notable difference can be observed for France. According to Eurostat, the average price differential with France turned significantly positive in 2007.

Theoretically, two major sources of divergence can be put forward to explain price differences between two countries that are members of an economic and monetary union.

Firstly, the higher prices in Belgium might mirror larger operating margins, reflecting a lower degree of competition than in the neighbouring countries. Using the EU KLEMS database, Christopoulou and Vermeulen (2008) estimated mark-up rates in several euro area countries for all the NACE sectors, over the period 1981-2004. Their estimates for the retail trade sector (NACE 52) show that the mark-up in Belgium (21 p.c.) is lower than

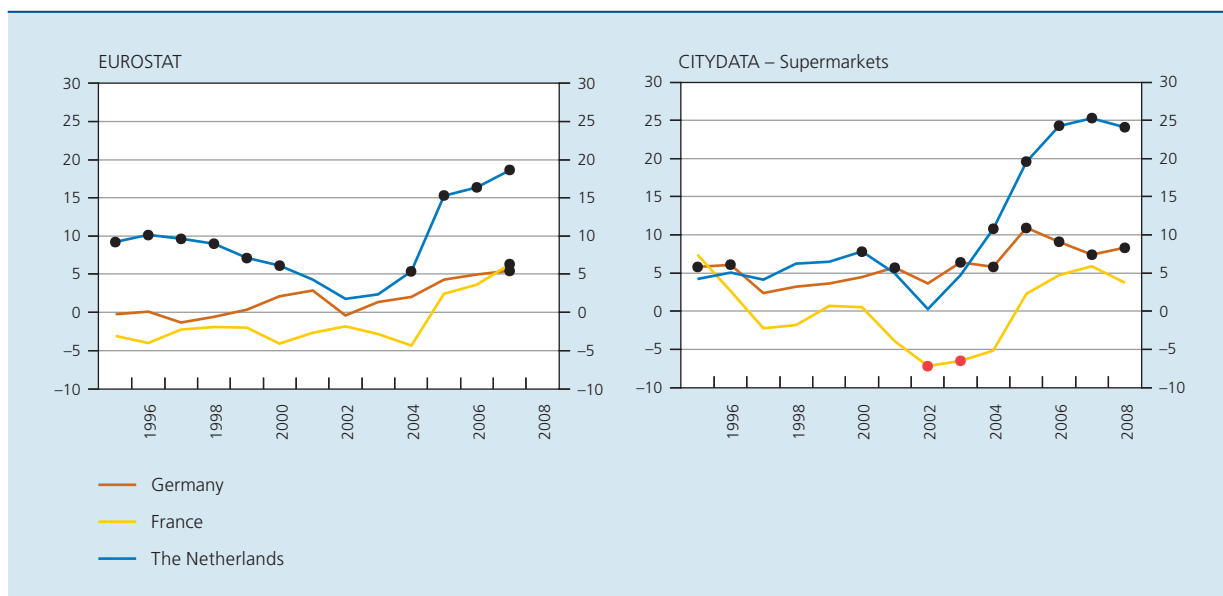
that obtained for the euro area (42 p.c.) and also France (24 p.c.) and the Netherlands (39 p.c.). It is nevertheless higher than that observed in Germany (12 p.c.). The unfavourable price differential observed vis-à-vis the Netherlands does not therefore seem to be the result of an unfavourable profit margin differential. On the other hand, the price differential with Germany could reflect lower margins in Germany, associated with a higher market share held by the *hard discounters*.

Secondly, cost factors specific to the different countries can also affect price differentials per product. Retailers' production costs, in particular, can vary considerably depending on local conditions.

Since 2005, labour costs have risen faster in Belgium than in the three neighbouring countries, and especially Germany. This factor can therefore also help to explain the changes in the price differential with this country. Yet, the deterioration in the price differential observed vis-à-vis the Netherlands from 2004 onwards does not seem to be explained by an unfavourable trend in labour costs in Belgium compared with its Dutch neighbour.

The reason behind the rather unfavourable trend in the supermarket price differential between Belgium and the Netherlands in fact lies in a price war among the main Dutch retailers. In a bid to (re)gain market share, Dutch

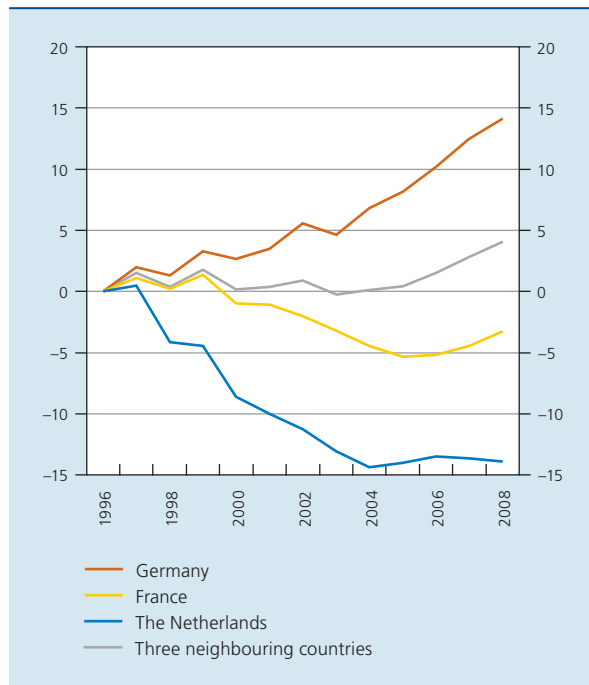
CHART 9 AVERAGE PRICE DIFFERENTIAL BETWEEN BELGIUM AND GERMANY, FRANCE AND THE NETHERLANDS ⁽¹⁾
(percentage points, difference between Belgium and the reference zone)



Sources : Eurostat, CityData.
A black (red) marker indicates a significantly positive (negative) price differential, at a significance threshold of 5 p.c.

CHART 10 RELATIVE CHANGES IN LABOUR COSTS PER HOUR WORKED

(percentage points, difference between Belgium and the reference zone)



Source: Central Economic Council.

retailer Albert Heijn decided to cut the price of over 1,000 products in October 2003. Its main competitors immediately followed suit, which triggered a wave of price cuts on certain consumer goods, and mainly food products. In December 2006, the Albert Heijn group announced that it had reached its market share target and normal competition conditions returned. According to Van Heerde, Gijsbrechts and Pauwels (2008), this price war appears to have resulted in an 8.2 p.c. reduction in the price of food products. It should be noted that this price war was declared in a competitive context which seemed to be marked by high margins (39 p.c. according to Christopoulou and Vermeulen, 2008), which gave firms operating in the sector wide possibilities for cutting prices. Based on estimates made by Christopoulou and Vermeulen (2008), Belgian companies did not have such wide margins of manoeuvre.

Although Albert Heijn's Dutch rivals reacted to these price cuts, this particular price war does not seem to have extended beyond Dutch borders; at least, it does not appear to have spread to Belgian retailers, which could suggest that retail markets are still relatively geographically fragmented. It can not be ruled out that the supermarkets located near the Dutch border agreed to some price reductions without this trend spreading to the whole of the Belgian retail distribution sector.

Box 4 – Price war, causes and consequences

A price war is a phase of price-cutting that leads all stakeholders on a given market to follow the initial price reduction (Urbany and Dickson, 1991). Unlike a situation of normal competition, a price war generates unsustainable price levels in the long term. Heil and Helsen (2001) reckon that there is a price war when the following seven conditions have been fulfilled: (1) market players pay more attention to their competitors' than the consumers' reactions, (2) at first sight, the reaction of all stakeholders to the initial price cut is not something to be desired, (3) none of the stakeholders deliberately wants to trigger the price war, (4) the competitors' reaction is not an "ordinary" reaction, (5) price responses are faster than usual, (6) prices come down, and (7) the downward movement in prices is not sustainable.

An important factor triggering a price war is competition among new entrants. A price war can therefore be due to the implementation of policies aimed at facilitating access to a particular market. However, the introduction of structural reform measures does not necessarily spark a price war. A deterioration of economic conditions, weak loyalty to a brand or high sensitivity of consumers to price levels can also be triggering factors.

Firms that launch into a price war hope to regain market share by improving their image in the eyes of consumers and by squeezing out a series of competitors, which then boosts their market power (and thus their profit expectations) in the long term⁽¹⁾. On the whole, however, it seems that a price war has relatively negative effects for enterprises operating in the sector.

(1) For example, when the Carrefour group took over the GB hypermarket and supermarket chain in July 2000, the French group had announced that it intended to lead a price war in order to regain market share.

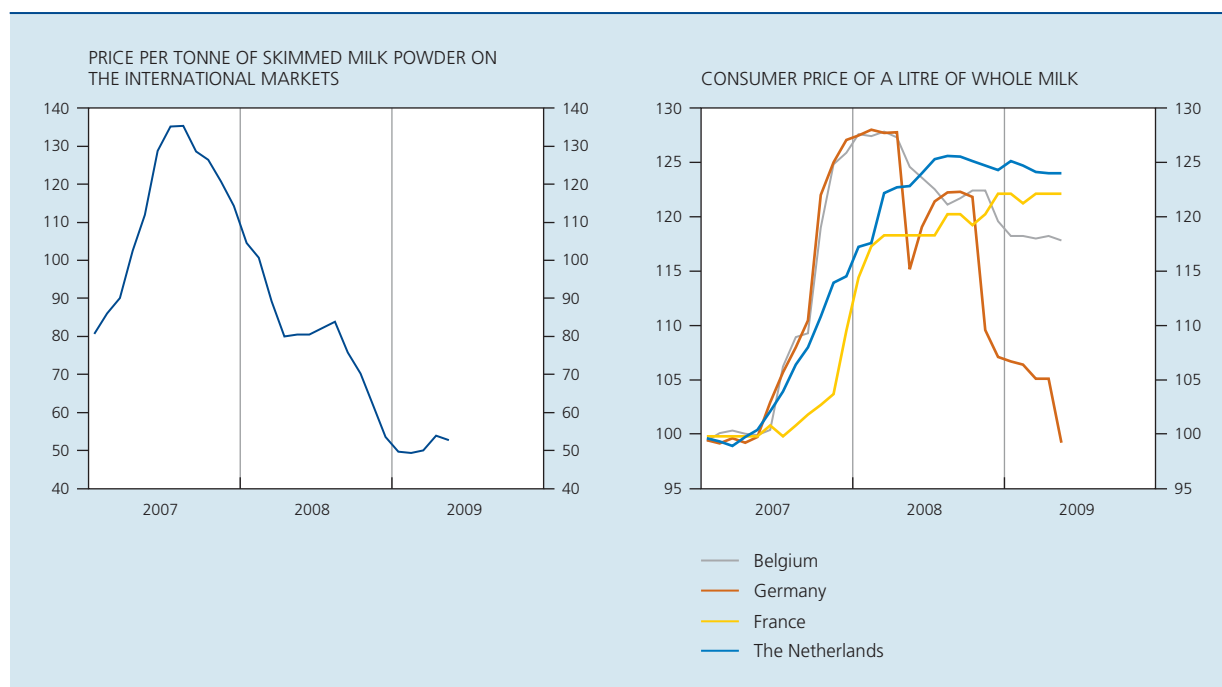
As regards the price war that raged in the retail distribution sector in the Netherlands, at the beginning of the millennium Albert Heijn was faced not only with an unfavourable macroeconomic context, but also with a loss of market share due to the arrival of the hard discounters Aldi and Lidl on the Dutch market. Moreover, it had damaged its image by almost pricing itself out of the market. At the end of the price-war episode, its image among consumers as far as prices were concerned had improved significantly and one rival (Edah) had been squeezed out of the market. From a sectoral perspective, while the drop in prices has been beneficial in the short term for consumers and the firm which started the price war, the reduction of profit margins in the retail distribution sector could have negative consequences in the long run, in terms of investment in R&D or quality of the service provided. Furthermore, the increased concentration in the sector and the resultant drop in competition could also have a negative impact on price developments in the long run (rapid return to higher margins than during the initial period).

Overall, a price war can therefore be regarded as a phase somewhere between two equilibrium situations on the market. If, during this transition, the situation appears profitable for consumers, in the long term it may have negative consequences for them (with competition focused solely on prices to the detriment of quality, less investment in R&D, greater concentration in the sector).

Another way of studying the issue of price formation and competition in the retail distribution sector is to examine the price reaction observed in different countries following a common and identifiable shock of significant magnitude. Such a shock has been observed in the case

of food products, and more particularly for dairy products. Indeed, the price of milk on the international markets increased very sharply during the first half of 2007 before falling again. Consumer prices followed suit with a lag of a few months, but not always to the same extent. It

CHART 11 MILK PRICES
(indices for first half of 2007 = 100)



Sources : AAE, CPB (NL), DGSEI (BE), DESTATIS (DE), INSEE (FR).

should, however, be pointed out that this approach has major limitations since it does not integrate the links in the production chain between the original producer and the final consumer: the change in consumer prices is not always exclusively the result of the retail distribution sector's pricing policy. Nevertheless, it is possible to draw some conclusions from it.

First of all, following the initial shock, the rise in consumer prices for milk was very significant in Belgium, more so than in France and the Netherlands, but of a similar magnitude to that observed in Germany. However, the extent to which these upward cost trends were passed on through the chain does not enable any conclusions to be drawn about the degree of competition. A strong increase in consumption prices can either reflect uncompetitive price formation or quite the opposite: indeed, in a highly competitive environment, not passing on the rise in costs to the consumer is not an easy thing to do for the various stakeholders in the sector, from the production stage to distribution via the processing stage, taking account of their (in principle) already narrow margins.

On the other hand, the symmetry (or lack of) between the initial upward phase and the downswing recorded since the second half of 2008 can be a sign of more (or less) competitive price formation. Here, Belgium seems to occupy a middle rank; while the drop in consumer prices following the fall in costs was not symmetric to the rise, nor as pronounced as in Germany, it is more evident than in France and the Netherlands where milk prices barely fell at all in 2008 and during the first few months of 2009.

Together with the differences observed between countries, this asymmetry between the upward and downward phases may therefore suggest that price formation in Belgium is less competitive than in Germany, but comparatively more than in France or the Netherlands. The less favourable position of Dutch retailers, who have been through a price war in the recent past, could also be explained by the potentially harmful effects in the longer term of this kind of price war, as described in box 4.

Conclusion

The distribution sector is an essential link in the economy. On the one hand, owing to its own intrinsic weight in terms of value added or employment, it makes a major contribution to the overall performance of the economy, notably in productivity terms and, ultimately, as regards generation of income. On the other hand, through its

specific role of getting goods to the final consumer, it has a direct influence on the well-being of the consumer with the diversity of products on sale and via their prices.

In this respect, while the specific regulatory requirements for the sector may be justified by general societal considerations such as land use planning, protection of workers' leisure time, etc. – or sometimes even by the need to take account of specific interests of particular groups –, these rules are likely to act as a brake on purely economic efficiency. Despite the progress made in Belgium over the last few years, some of these regulatory requirements regularly attract the attention of the IMF and the OECD during their surveys of the structural position of the economy, especially since trends in activity and productivity in the distribution sector seem to be lagging behind those observed in the more dynamic European countries or in the United States. These developments would rather tend to suggest an inadequate degree of competition, which could lead to excessively high prices.

This article seeks to fully assess this evidence, by cross-matching the various sources of information available.

First of all, the OECD indicators show that the regulations governing the retail distribution sector are relatively restrictive in Belgium. Admittedly, caution is warranted when using the OECD indicators, owing to the difficulty in translating national laws into an internationally comparable figure. Nevertheless, the range of indices and the comparison of the findings with legislation tend to suggest that, for most of the major themes tackled by the OECD, regulation in Belgium is among the five most restrictive of all the countries covered. Operating conditions – the national character of restrictions on opening times of (large) shops and the monopolies over the distribution of certain products, notably medicines – are tightly regulated in Belgium and are a much greater constraint than market access conditions or direct price regulation.

As regards the economic performance of retail trade, it should be noted that, like most other economic sectors, the retail trade business in Belgium still has a higher productivity rate than in the majority of other European countries and even the United States too. However, unlike trends noted in other branches of activity, this favourable position has been gradually eroded over the last ten years. It does actually seem that Belgium's main problem lies in its inability to improve the efficiency of the production factors being used. So, the relatively strong growth in investment, notably in ICT, is offset by adverse trends in total factor productivity. If these developments continue, they could dampen the overall competitiveness of the distribution sector in Belgium and, along with the increased

openness to international trade that might be triggered by the transposition of the EU Services Directive into national legislation at the end of 2009, could constitute a threat to its sustainability.

The regulatory burden is no doubt one explanatory factor, but it is not the only one. To start with, the size of the market, as a result of the fragmentation between European countries, or even within Belgium itself owing to cultural differences, limits the opportunities to reap economies of scale. Then again, beyond the boundaries of the distribution sector, the general functioning of product and labour markets or the entrepreneurial spirit at play in the economy also come into the equation.

Despite so much regulation, no really striking anomalies are noted in the competitive situation in Belgium. The non-specialised food retail sector has a growing number of big shops, as well as an increasing number of hard discounters. This trend towards hard discounting goes hand in hand with a larger share of generic brand products, in traditional retail outlets too. Moreover, even though the overall indicators point to some concentration at national level, local competition appears to be quite strong; only a few sales outlets have a dominant position at local level, despite quite a restrictive degree of perceived regulation. This is no doubt largely explained by the high population density, which tends to create local markets that are strong enough to be able to accept several competitors.

As far as price levels are concerned, both CityData and Eurostat's data indicate that prices charged by the retail sector are higher in Belgium than in the euro area and the three neighbouring countries. There have also been signs of a recent deterioration in the differential between prices

in the Belgian supermarkets and prices charged by the German and Dutch supermarkets in particular. Compared with Germany alone, adverse developments in labour costs in Belgium can go some way to explaining the trend in price differentials. Similarly, retail business margins seem to be structurally higher than in Germany (wider presence of hard discounters in this country no doubt goes a long way to explaining the low mark-ups in the retail distribution sector). On the other hand, the sharp deterioration of the price differentials between Belgium and the Netherlands recorded in supermarkets can be explained by the price war that raged between the major Dutch retail groups from October 2003 to December 2006.

Overall, it therefore appears that the actual influence of specific regulatory requirements for the retail trade on the efficiency of the sector, on the degree of competition and, ultimately, on consumer prices needs to be looked at very carefully.

On the one hand, coordinating and simplifying the many rules and regulations in force in Belgium would no doubt generate the same results in terms of consumer protection, land use planning, or other objectives, while at the same time breaking down the underlying barriers to entry for new market players caused – in terms of prior information requirements and administrative burden – by the multiplication of regulatory laws. On the other hand, the performance of the distribution sector must be examined taking account of the specific features and general organisational rules of the economy, in which it is just one link. Nevertheless, there is no doubt that a flexible retail sector enjoying effective competition is a necessary precondition for supporting the growth potential of the economy and ensuring consumer satisfaction, and that also means by maintaining an appropriate price level.

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Jan Smets

Director

National Bank of Belgium
Boulevard de Berlaimont 14 – BE-1000 Brussels

Contacts for the Review

Philippe Quintin

Head of the Communication and Secretariat Department

Tel. +32 2 221 22 41 – Fax +32 2 221 30 91
philippe.quintin@nbb.be

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