

Market definition

Summary

1. The evidence we have seen indicates that the economic markets relevant to this inquiry are those of the supply of domestic bulk LPG in Great Britain and in Northern Ireland.

The product market

Demand-side substitution

2. Our approach to market definition (outlined in the CC guidelines¹) is to consider whether a hypothetical monopolist (or a number of firms acting in concert) of certain products or services could profitably sustain a small but significant non-transitory increase in price ('SSNIP'), normally in the region of 5 per cent. The usual benchmark for this price rise is the existing price level. However, our guidelines note that one difficulty in considering the SSNIP test is that current market prices may be above the competitive level. If the CC's understanding of the market leads it to believe that prices are substantially above the competitive level, the CC would normally wish to use prices indicative of the competitive level in its analysis of market definition.² In the present case, owing, in particular, to the presence of barriers to switching discussed in Appendix G, prices appear to be substantially above the competitive level (see Annex 3 to Appendix I). Prices indicative of the competitive level may consequently be a more appropriate benchmark than existing prices. But in any event, the evidence on pricing tends to suggest that the SSNIP test would lead us to define the market as domestic bulk LPG even if applied to prevailing (rather than competitive) prices.
3. The application of the SSNIP test is an iterative process and we began by considering a narrow product market, namely the supply of domestic bulk LPG.³ The closest functional substitute for LPG is natural gas. However, in Great Britain, almost all customers are in locations that do not have access to the mains network, so they do not have scope to switch to natural gas. Natural gas is substantially cheaper than LPG in both Great Britain and Northern Ireland (suppliers accepted that the price of natural gas was approximately half that of LPG). (Distinctive characteristics of the Northern Ireland market are discussed below at paragraphs 15 to 17.)
4. The strongest candidate for demand-side substitution with respect to domestic bulk LPG is heating oil, which is chosen by around one-third of the 3 per cent of customers who stop using LPG each year. Heating oil performs a similar range of functions to LPG and, while it is cheaper than LPG, it is seen as having some disadvantages compared with LPG (for example, heating oil is less suitable for cooking than LPG, and LPG is regarded as a 'cleaner' fuel). In addition, switching between heating oil and gas requires a change in central heating boilers, a costly

¹Market Investigation References: Competition Commission Guidelines (CC3), part 2.

²CC3, paragraphs 2.4, 2.9 and 2.10.

³CC3, paragraph 2.5. As explained in paragraph 11 below, we did also consider whether the product market could in fact be narrower.

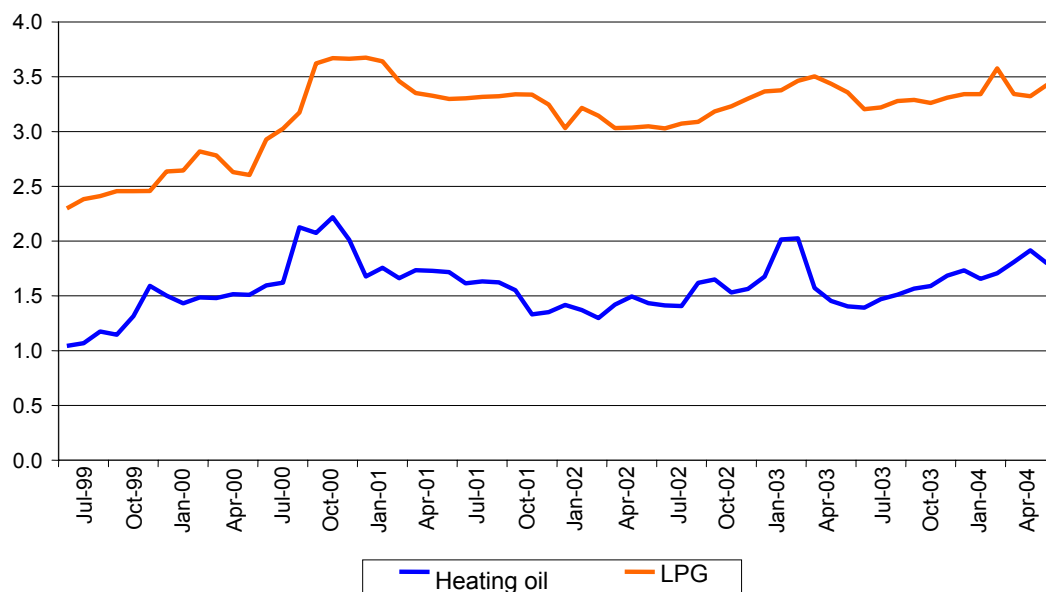
activity⁴ which a customer is very unlikely to consider before the existing boiler needs to be replaced (the hardware has an average life of around 15 to 20 years). The rate of switching from domestic bulk LPG to heating oil (around 1 per cent) or to other fuels (at most around 1 per cent: see Appendix G, Table 10) is low.

5. Competition between domestic bulk LPG and other fuels may be stronger for new-to-market customers (and for customers whose central heating boiler is coming up for replacement). However, as we have noted (see Appendix G, Table 9), the rate of new customers coming into the market is small relative to the size of the market overall, and suppliers generally charge lower prices to new customers, while sustaining higher prices to established customers (see the discussion of pricing policies in Appendix I).
6. In the short run, a customer with a gas-run heating system (and other gas appliances), who is not on the mains network, has little alternative but to continue buying LPG, whether from the current supplier or another, and limited scope to reduce consumption.
7. Suppliers have generally argued that, in the long term, heating oil and (to a lesser extent) other fuels place some constraint on the price of domestic bulk LPG, though most did not contend that they are close enough substitutes to be considered part of the same market. [§] argued that heating oil constrained domestic bulk LPG prices over the longer term, because of the need to maintain an acceptable differential between the prices of domestic bulk LPG and heating oil. In practice, the price relationship between domestic bulk LPG and heating oil is complex in that both depend in part on the wholesale price of oil. However, the major suppliers do not attribute changes made in the retail price of domestic bulk LPG in recent years to changes in the price of heating oil or any other fuel.
8. As heating oil appears to be the most popular alternative for domestic customers who stop using bulk LPG, we looked in particular at the relative prices of these two fuels. Historical prices of domestic bulk LPG and heating oil are shown in Figure 1. Average prices for domestic bulk LPG are based on data from the major suppliers (one supplier provided data for part of the period only; data from another supplier was extrapolated from annual figures). Domestic bulk LPG prices (per kilowatt hour) are around double those of heating oil. Two products with substantially different prices may be in the same market if consumers make a price/quality trade-off. However, in our view, a domestic bulk LPG customer paying, for example, a 100 per cent premium over the price of a product that performs the same functions as LPG would be unlikely to respond to a 5 per cent change in the relative price (which would increase the premium by around 10 per cent).

⁴Calor, on its website, estimates the typical cost of an oil boiler as £2,370, with a further cost of £1,285 for the oil tank and installation. BP quoted an oil heating publication (www.oilfredup.com) which argues that Calor overstates the cost of oil installation by around £990.

FIGURE 1

Retail prices of heating oil and domestic bulk LPG, July 1999 to June 2004

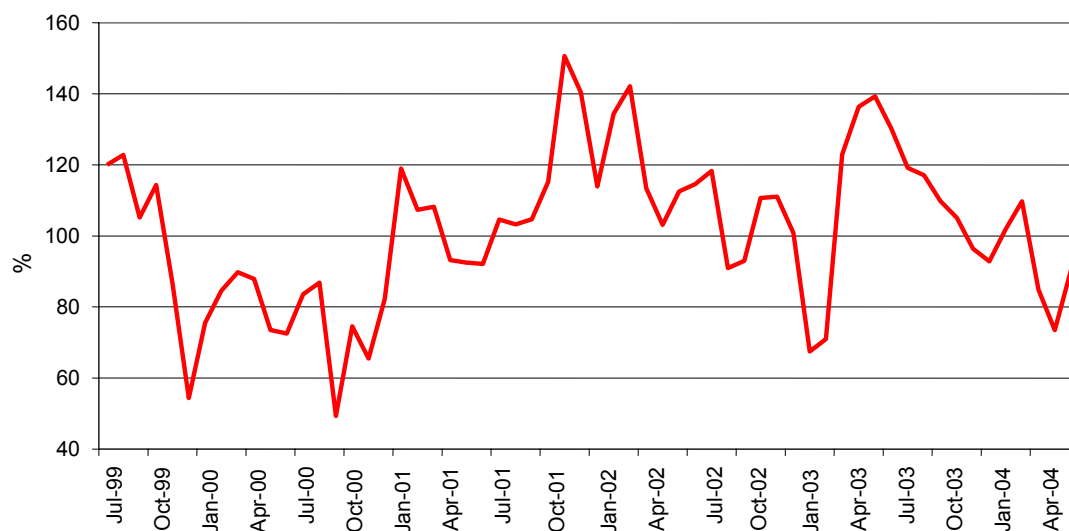


Source: CC based on data from major suppliers.

- The two series shown in Figure 1 clearly tend to move in the same direction, reflecting the co-movement in their input costs. However, as Figure 2 shows, considerable fluctuations have occurred in the average price of domestic bulk LPG relative to heating oil. The LPG premium was below 90 per cent for 14 consecutive months (throughout 2000). It was over 110 per cent for two separate six-monthly periods (over the winter of 2001/2002, and again over summer 2003). We have received no evidence that customers responded to these changes in the relative price by switching between LPG and heating oil. Indeed, as discussed in paragraphs 51 and 52 of Appendix G, switching rates are consistently very low, including switching from LPG to heating oil.

FIGURE 2

LPG premium over heating oil, July 1999 to June 2004



Source: CC based on data from major suppliers.

10. In summary, for the reasons set out above, we do not consider that a price rise of 5 per cent above the competitive level would result in customers switching to heating oil. We therefore conclude that domestic bulk LPG is a distinct market from heating oil.
11. It might be argued that the product market is in fact narrower than domestic bulk LPG. The level of switching between suppliers is very low, despite significant price differences: the fact that certain suppliers have sustained average price levels of more than 5 per cent above others (see, in particular, paragraph 58 of Appendix G) might suggest that each supplier is in a separate market. In addition, the ability of suppliers to price discriminate—by introducing a general price increase and then ‘price defending’ customers who signal an intention to switch supplier—reinforces the suppliers’ ability to sustain prices of 5 per cent or more above the competitive level.⁵
12. [X] commented that the price difference between suppliers ‘may well reflect the added value of other features of supply’ (for consideration of non-price competition arguments more generally, see Appendix F). We have seen no evidence in support of this. Indeed, customers of the two major suppliers which charge higher average prices appear (on the basis of the ORC survey) to be less satisfied with value for money from their supplier, and less satisfied with their supplier overall, than customers of suppliers who charge lower average prices. [X] also argued that, in order to conclude that each supplier was in a separate market, the CC would have to show that each supplier was profitably able to raise its prices above competitive levels, ie that each supplier was earning excess profits. We note that the extent to which higher prices lead to higher profits depends on the efficiency of the firm, so the ability to raise prices above competitive levels does not necessarily lead to excess profits.

⁵Indeed, it could be argued that heating oil is a more important price constraint than other suppliers: a customer who is considering changing to heating oil might be expected to compare prices over a longer period (ie the life of the boiler), and so to be less easily dissuaded from switching by a temporary discount. In practice, suppliers lose around twice as many customers to heating oil as to each other. However, as discussed in paragraphs 4 to 10, we consider the price constraints from heating oil to be too limited to justify including it in the market for domestic bulk LPG.

13. On the other hand, while noting the limited price constraint suppliers appear to place on each other, we consider that defining each supplier, or even each account, as a separate market in itself would be inappropriate. One reason for this is that we recognize at least some competitive interaction between suppliers. Another reason is that we see the products and services supplied by suppliers as being essentially similar.⁶ In addition, as indicated by the analysis of barriers to switching in Appendix G, the limited price constraint between suppliers is to some extent due to current market practices, rather than necessarily inherent in the product itself. An over-narrow market definition, while recognizing the limitations on competition in this market, would not provide a useful framework within which to analyse the effects of market features.
14. We also considered whether the supply of domestic bulk LPG should be seen as a distinct market from the supply of the bulk tanks themselves. We noted that most suppliers of LPG to domestic bulk customers retain ownership of the tank, and charge customers for its maintenance (the integrated model of supply prevalent in the industry, whereby the supplier takes full responsibility, not only for the delivery of the LPG, but also for the installation of the tank and its ongoing maintenance, is described in more detail in Appendix D). On the one hand, we noted that this practice was not universal and the supply of tanks and of LPG could, in principle, be carried out as separate economic activities. On the other hand, this practice was sufficiently widespread amongst almost all of the major suppliers that separate consideration of tank supply and LPG supply would not greatly affect our analysis, for example of market shares. We believe it is valid to regard the supply of both LPG and tanks as part of the economic markets relevant to this inquiry.

Demand-side substitution in Northern Ireland

15. Unlike customers in Great Britain, many customers in Northern Ireland are in areas where natural gas is available. This is partly because the gas network has been extended only recently and some customers have delayed switching. However, [redacted] also told us that some domestic customers considered LPG stored in a bulk tank to give them greater security of supply than natural gas supplied through a pipeline.
16. On the whole, sales of domestic bulk LPG in Northern Ireland, and the customer bases of the two suppliers there—Calor NI and Flogas NI—have fallen over the past decade due to the extension of the natural gas network. However, we understand that the two suppliers have not responded to customer switching by reducing their prices. One reason for this appears to be that the difference in price between LPG and natural gas is such that a customer comparing the two on price will almost always prefer natural gas. Consequently, it does not appear that the availability of natural gas constrains the price of LPG—rather it has led to an inevitable reduction in the size of the domestic bulk LPG market in Northern Ireland.
17. We were told that heating oil had historically been more popular in Northern Ireland than in Great Britain. However, we have seen no evidence that the nature of the relationship between domestic bulk LPG and other fuels in Northern Ireland is different from that in Great Britain. There is limited price competition between heating oil and LPG. In summary, we consider a distinct product market to exist for the supply of domestic bulk LPG in Northern Ireland.

⁶Our guidelines state that, in applying the SSNIP test for product market definition, the CC will start by considering each product (narrowly defined) in the market reference (CC3, paragraph 2.5).

Supply-side substitution

18. Supply-side substitution refers to the ability of other firms to supply, at short notice, an effective substitute without significant investment in plant, equipment, skills or marketing. The hardware and distribution systems required to supply bulk LPG to commercial⁷ customers are similar, if not identical, to those of domestic bulk LPG. However, a (hypothetical) commercial-only bulk LPG supplier could not readily respond to a general increase in the domestic price by switching supply from commercial to domestic customers. A commercial supplier would need to identify, and market to, domestic customers. As a result, such a supplier would face many of the barriers encountered by a new entrant into the domestic bulk market (described in Appendix G), albeit with some potential advantages due to its infrastructure and marketing expertise. In practice, most suppliers of commercial bulk LPG (including all of the major suppliers) also supply the domestic market and vice versa. Hence, in our view, such firms are best considered already as competitors within the domestic markets in Great Britain (and Northern Ireland), rather than potential sources of supply-side substitution.

Metered estates

19. We also considered whether domestic customers in metered estates should be considered as belonging to a separate economic market. The different types of metered estates are discussed in Appendix A. While metered estate customers are typically charged lower prices (see Appendix I, paragraph 37), suppliers told us that this reflected the lower unit costs of supply (because tanks on metered estate are typically larger). The same firms supply to both types of customers, and while supply to metered domestic estates may have some distinct features, we have concluded that it is within the same economic market as domestic bulk LPG supplied to individual tanks.

The geographic market

National markets

20. The logistics of domestic bulk LPG supply require the supplier to use a depot within at most around 100 miles of all customers who are served from that depot. Apart from a small amount of cross-border trade from the Republic of Ireland to Northern Ireland, we have received no evidence that any customers in the UK are supplied by companies located outside the UK, nor arguments that there is scope for such supply to take place.

Local markets in Great Britain

21. Supply of domestic bulk LPG has a local dimension in Great Britain, with smaller suppliers building reputations in their local area, and the larger suppliers recognizing the importance of a local sales-support presence. A depot can economically supply domestic customers to a range of around 100 miles, although in practice they may focus their activities on customers who are closer than this. However, with one exception, the larger suppliers generally decide price levels, pricing policies, and price changes on a national level. In addition, taking 50 miles as a conservative estimate of the range to which a depot supplies, data provided by the main parties

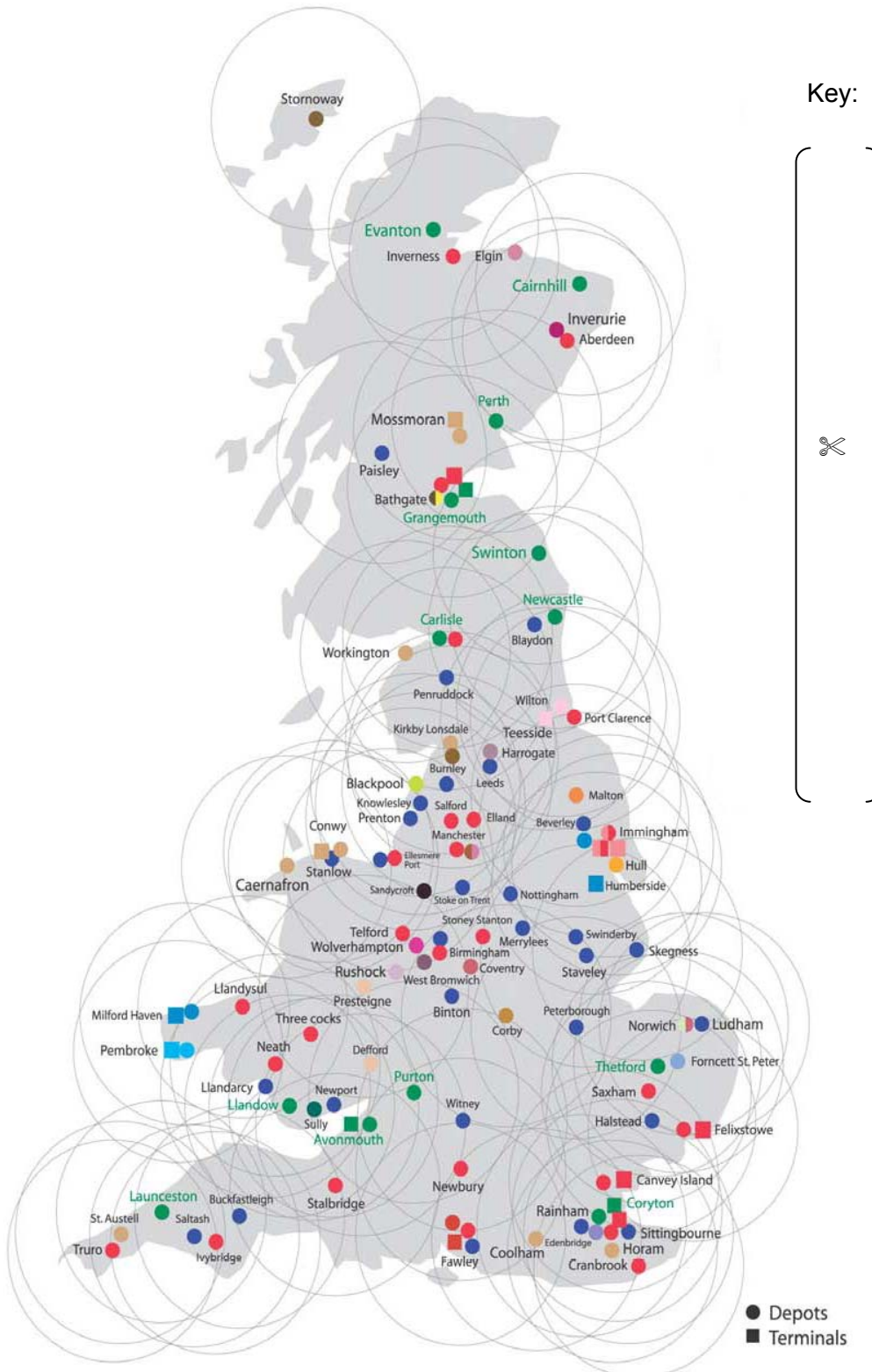
⁷Or agricultural or industrial customers.

indicate that there are few depots which do not overlap with others in their range of supply (see map), and there is a continuous chain through most of Great Britain.⁸ Figure 3 shows a map of LPG depots (not confined to domestic bulk LPG), based on submissions to the CC.

⁸We note, however, that the usual 'chain of substitution' effect—in which if firm A is close to firm B, and firm B close to C (but not A), all three can be seen as in the same market, with the price constraint from C transmitted to A via B—is likely to be considerably weakened or broken by price discrimination (ie B could charge one price in response to competition from A and another in response to competition from C).

FIGURE 3

Map of depots and terminals



Source: Suppliers.

22. In Figure 4, customers are divided on the basis of the depot which supplies them, and an average has been calculated. On the whole, average prices appear to be broadly similar across Great Britain. [X]

FIGURE 4

Average price by depot region

[X]

Source: Suppliers.

Northern Ireland

23. Northern Ireland appears to be a distinct geographic market, both from Great Britain and from the Republic of Ireland. Although LPG is internationally traded, at the domestic level, supply from Great Britain from a firm not already present in the Northern Ireland market would require substantial investment in marketing and distribution. This is also true of supply from the Republic of Ireland, albeit that the suppliers told us that a small amount of cross-border trade may occur at present. The two suppliers with a substantial presence in Northern Ireland do not supply outside Northern Ireland, although the parent companies of both also own companies which supply to other markets, including Great Britain. We have not identified any distinct local markets within Northern Ireland.
24. We conclude that, despite the local element, there is no evidence of distinct local markets, so the geographic scope of the economic markets relevant to the inquiry into domestic bulk LPG is Great Britain-wide and Northern Ireland-wide respectively.