Price-setting behaviour in the United Kingdom

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It is important for central banks to understand how companies set prices, since price-setting behaviour plays a key role in the monetary policy transmission mechanism. Surveys of companies have been conducted in a variety of countries to shed light on this issue. Earlier this year the Bank of England asked companies who are contacts of the Bank's Agents about how they set prices. The survey adds to and updates our understanding. It indicates that the frequency with which companies change their prices varies considerably across sectors but that over the past decade a significant number have increased the frequency of price changes. Different factors influence price rises and falls but nearly half of companies change their prices within three months of an increase in costs or a fall in demand.

Introduction

It is important for central banks to understand how companies set prices, since price-setting behaviour influences the way in which monetary policy affects the economy. There are many reasons why monetary policy may affect the real economy, at least in the short run. At least part of the reason is that some prices are slow to adjust, that is, they are *sticky*. Many of the economic models that are frequently used for monetary policy analysis assume that there are some constraints on price adjustment, often called 'nominal rigidities'. If prices are sticky, then changes in nominal interest rates affect the real interest rate and so monetary policy influences real economic activity. Understanding the extent of these nominal rigidities, their causes, and the degree to which they react asymmetrically to changes in demand or supply is therefore crucial.

The Bank of England has recently conducted a survey of companies' price-setting behaviour to try to improve its understanding of the extent of price rigidity by asking companies who are contacts of the Bank's Agents directly about these issues. This article analyses the responses of these companies, surveyed over the period December 2007 to February 2008. The Agents speak to these contacts on a regular basis to help build a picture of current conditions in the UK economy to help inform the Bank of England's Monetary Policy Committee.[2] Asking firms directly about how they set prices is not a new exercise. Previous examples include surveys for the United States (see Blinder (1991)), Canada (see Amirault *et al* (2005)), the euro area (see Fabiani *et al* (2005)), as well as an earlier survey that the Bank of England conducted for the United Kingdom in 1995 (see Hall *et al* (1996, 2000)).

The aim of this new survey was to obtain a comprehensive view of price-setting across the whole economy and to shed light on how price-setting behaviour had changed in the light of significant changes such as inflation targeting in the United Kingdom,[3] the growing emergence of China in the world economy and the advent of the internet. These macroeconomic changes may have influenced the frequency of price changes by companies. The survey took place against a backdrop of large external commodity price rises and after the initial deterioration in credit conditions. It is possible that respondents were influenced by such circumstances.

The article is organised as follows. First it provides some background details on the survey and describes the main characteristics of the companies that responded. It then discusses the price reviewing process carried out by companies and the frequency of actual price changes. The following sections examine the factors influencing price changes and how prices react to significant changes in demand and costs.

The survey

The survey was sent to a selection of the business contacts of the Bank's Agents in two waves over the period December 2007 to February 2008. The earlier survey conducted in 1995 was to a large degree composed of

(1) Miles Parker is currently on secondment at the Reserve Bank of New Zealand.
(2) The latest *Agents' Summary of Business Conditions* is available at www.bankofengland.co.uk/publications/agentssummary/index.htm.
(3) The introduction of inflation targeting in 1992 preceded the earlier survey in 1995. However it was still relatively new at that time and the Bank of England did not have operational independence until 1997 (after the earlier survey).

manufacturing companies. Given the further expansion of the service sector since then, the aim of this new survey was to obtain a more comprehensive view of the economy by using a broader sample of companies. The sample included all companies that had responded to the 1995 Bank of England survey and remained contacts of the Bank of England's Agents. Additional companies were then chosen at random from the Agents' contacts, so that the share of each industry in the full sample matched that industry's share in aggregate GDP. Within each industry the sample was designed to be broadly representative of the economy by size of firm, as measured by the number of employees.

The final sample consisted of 2,331 companies, out of which there were 693 respondents (a response rate of around 30%). The industrial breakdown was broadly consistent with shares in UK GDP (**Table A**). There was a large spread of firm size by turnover, with around 9% of the sample having a turnover of less than £1 million a year and around a third of the sample with a turnover of more than £50 million (**Chart 1**). In terms of market share, the majority of companies perceived themselves to have a market share of less than 5%, whereas a fifth of the respondents stated they had a market share above 20% (**Chart 2**). The annex lists the questions.(1)

Table A Survey respondents by industry(a)

Industry	Number of responses	Percentages	Memo: Share of GVA(b) (percentage)
Manufacturing	154	22.2	18.1
Electricity and gas supply	9	1.3	2.1
Construction	70	10.1	7.4
Wholesale, vehicle repairs and fuel	44	6.3	7.9
Retail	62	8.9	7.2
Hotels and restaurants	30	4.3	3.8
Transport, storage and communication	87	12.6	9.6
Financial intermediation	46	6.6	9.0
Real estate, renting and business services	150	21.6	29.1
Recreational, cultural and other personal services	41	5.9	5.9
Total	**693**	**100**	**100**

(a) Columns may not sum to 100 due to rounding.
(b) Share of gross value added (GVA) is calculated based only on the sectors listed. These sectors account for over 75% of total GVA.

Chart 1 Company size by turnover

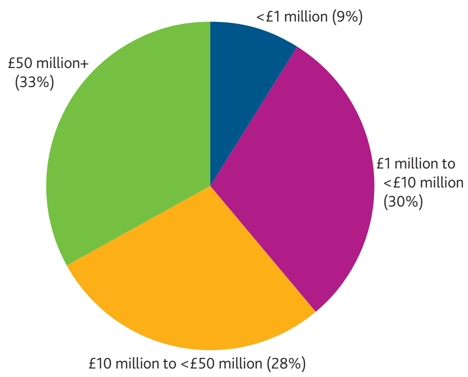
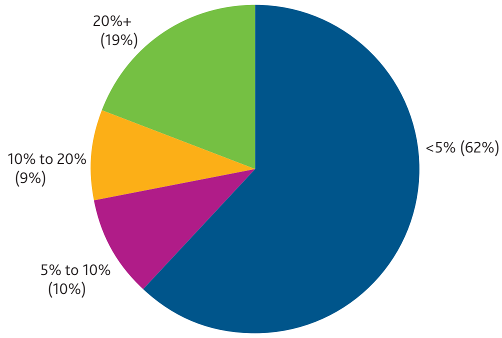


Chart 2 Market share of companies in survey

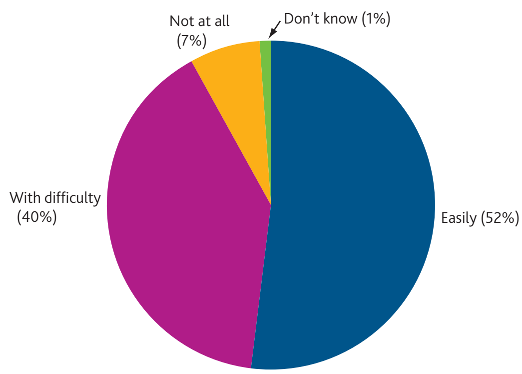


Price reviews

Individual companies are unlikely to adjust prices continuously because price reviews and changes are costly to conduct and implement. The first stage of the process of price adjustment is for a firm to evaluate whether its current price is optimal since it may be costly to charge the 'wrong' price. This section investigates how companies review their prices, as well as looking at the frequency of such reviews.

One factor affecting the cost of gathering information is the ease with which companies can find out their competitors' prices. Around half the respondents said they could discover their competitors' prices easily, with only 7% saying they could not find it out at all (**Chart 3**). However, there was a marked divergence between industries, with nearly 90% of companies in the retail and hotels and restaurants sectors being able to find competitors' prices easily. This is unsurprising as hotel rates are widely publicised. But a fifth of construction companies could not discover their competitors' prices at all, probably because unpublished bilateral contracts are common in that sector.

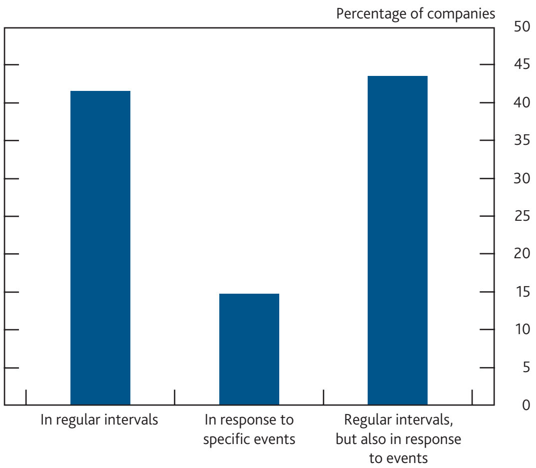
Chart 3 Ease of finding out competitors' prices



(1) Many of the questions in the survey were similar to those used in the euro-area surveys (see Fabiani *et al* (2005)).

Companies were asked whether they reviewed their prices in regular intervals or in response to specific events. This allows a distinction to be drawn between the two forms of pricing behaviour that underlie most modern macroeconomic models: 'time-dependent' rules (where companies change their prices only at specific intervals) and 'state-dependent' ones (where companies change their prices whenever they like, depending on the state of the economy).(1) The results suggest that more companies review their prices at regular intervals than in response to specific events (**Chart 4**). But it is not unusual for companies to review prices both at regular intervals and in response to specific events, for example following a substantial change to costs. Even if companies review their prices at regular intervals in the short run, ultimately price-setting will depend on the state of the economy as profits and therefore economic survival depend on economic conditions.

Chart 4 How companies review their price



Companies were asked about the information they use when reviewing their prices. About a fifth of companies use rules of thumb or primarily backward-looking information (**Table B**). Over a third of companies review prices mainly looking forward, whereas nearly half of companies set the price primarily for current conditions. There are differences across firm size (measured by the number of employees) — larger companies appear to be more forward looking than smaller companies — and across industry — for example, retail and wholesale companies are more likely to set prices based on current rather than expected future developments. These results, together with the limited international survey evidence to date, are broadly consistent with empirical work that suggests that pricing decisions today depend on expected future inflation, past inflation and real marginal cost (the cost of producing an extra unit of output divided by the price).

Table B Information used when reviewing prices

Percentage of companies in each category	
Rule of thumb	12
Set price primarily given conditions that have applied in the recent past	8
Set price primarily for current conditions	45
Set price primarily looking forward over the near future	35

The survey then asked companies how often they reviewed their main price. This is designed to shed light on the informational costs of changing price, that is, the cost of gathering information necessary to determine if the current price is appropriate. These costs are different from those involved in *implementing* a new price. If reviewing prices were costless, companies would be continuously doing so.

A small proportion of respondents review their prices daily, which may suggest that they find it is relatively costless to review prices or that the costs of not reviewing prices are high (**Table C**). Around one third of companies review prices at least monthly, whereas around one quarter only do so on an annual basis. Companies that perceive that they face intensive competition often appear to review prices frequently. This may suggest that they have more incentive to check that their price is not out of line with their competitors as the demand for their product is more sensitive to price. Overall, based on all companies in the sample, the median firm reviewed its price twice per year.

Table C Frequency of price review(a)

Percentage of companies	
Daily	6.8
Weekly	11.0
Monthly	13.9
Quarterly	12.0
Half-yearly	15.6
Annually	25.5
Irregularly	8.2
Other	7.1

(a) Column does not sum to 100 due to rounding.

Price changes

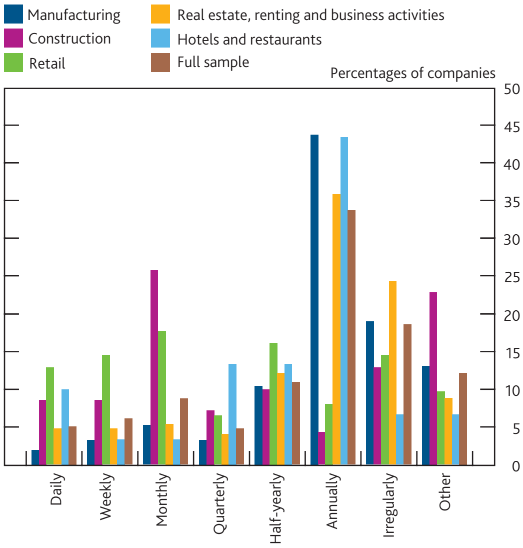
The second part of the price adjustment process is the implementation stage. Surveys can shed light on how sticky prices are by asking companies directly how often they change prices in a given period.

How often do companies change prices?

The survey suggests that the median number of times that prices are changed is once per year. But there are some important differences between sectors, which can be seen by looking at the frequency of price changes for selected sectors (**Chart 5**). Many UK construction and retail companies

(1) The latter approach, where prices are not reviewed routinely, but in response to a sufficiently large change in market conditions is appealing, but has been less commonly used in macroeconomic modelling as it is more complicated to use.

Chart 5 Frequency of price changes in selected sectors



reported that they changed their prices at least monthly whereas manufacturing, real estate/business activities and hotels and restaurants generally did so less frequently. Firm size (measured by the number of employees) also has an impact on how often companies reset prices. Larger companies are more likely to set prices at high frequencies, with a quarter of large companies resetting prices at least monthly, but only 15% of small companies doing so. Like other strands of micro pricing work, the Bank's survey reveals that heterogeneities are present and capturing these in models used for macroeconomic analysis is very difficult. This is an area for further research.

An interesting question is whether companies that change prices less frequently are more forward looking in their price-setting. **Table D** shows the proportion of companies that use each type of information by frequency of price change. For example, the top row shows that 11% of companies that change prices daily use the 'rule of thumb' approach and 9% use primarily information on past conditions, with 63% focusing on current conditions and 17% on future conditions.

Table D Relationship between the frequency of price change and information used reviewing prices[(a)]

Percentages of companies in each category

	Rule of thumb	Primarily past conditions	Primarily current conditions	Primarily future conditions	Total at each frequency
Daily	11	9	63	17	100
Weekly	5	10	48	38	100
Monthly	5	2	55	38	100
Quarterly	12	3	55	30	100
Half-yearly	11	12	41	36	100
Annually	17	9	38	36	100
Irregularly	12	10	48	30	100
Other	5	5	47	43	100
Total of each information type	**12**	**8**	**45**	**35**	**100**

(a) Rows may not sum to 100 due to rounding.

Perhaps surprisingly, there is no significant evidence that companies that set prices half-yearly or annually rely more than average on forward-looking information. But, as expected, those companies setting prices daily look mainly at current conditions and less at future conditions.

Do companies change prices more frequently than a decade ago?

There are many reasons why pricing behaviour may have changed over the past decade, such as a move to a lower inflation environment, technological advances or an increase in competition. By itself, a move to a lower and more stable inflation environment may reduce the frequency at which companies need to adjust their prices. However, technological advances may enable companies to change their prices more often, by making it easier and less costly to implement price reviews and changes. Or increased competition may lead to companies changing their prices more often if the cost of charging the wrong price is greater in a more competitive environment.

The survey asked companies whether the frequency of price adjustment has changed in the past decade. The findings suggest that the frequency of pricing changes is the same as a decade ago for around half of companies, but for many companies (39%), pricing has become more flexible over the past decade. Companies were asked to give reasons why the frequency of resetting their prices had changed. For those firms that had increased the frequency of price changes, the most commonly cited explanations were increased competition and increased variability of input costs.[(1)] A small proportion of companies changed prices less often (6%), with a common response being that this was because of a more stable macroeconomic environment with lower inflation. So, for the United Kingdom, over the past decade, an increase in competition and higher variability of input prices may have increased the frequency of price changes, yet the more stable macroeconomic environment may have resulted in a small number of companies amending their prices less often.

How are prices determined?

The survey also asked companies which factors influenced their pricing decisions for their main product or activity. Many of the economic models used for monetary policy analysis assume that companies choose to set their price as a mark-up over marginal costs. The Bank survey finds widespread use of the mark-up over costs form of pricing, with 25% of respondents describing constant mark-up pricing as 'very important' and 33% doing so for variable mark-up pricing (which could be related to the economic cycle). Around a third of companies reported that setting prices largely based on competitors' prices was 'very important'.

(1) A recent survey carried out by the Bank of Canada (Amirault *et al* (2005)) reached a similar conclusion.

Do factors such as firm size or competitive environment have an impact on how prices are determined? The results suggest that large companies are more likely to use variable mark-up pricing than small companies. In terms of competition, companies that perceive that they face strong competition are more likely to set prices based on their competitors' prices than other approaches.

Why do prices not adjust?

The survey suggests that the median firm reviews its price more often than it changes prices. As Hall *et al* (1996, 2000) point out, there could be many reasons why this might occur, such as costly price adjustment or the type of demand or cost conditions that the company faces. For example, there may be costs to reprinting price lists (physical 'menu costs'), or companies may be concerned about initiating a price war (often referred to in the economic literature as 'co-ordination failure') or of breaching implicit or explicit contracts with their customers. It is possible that some of these factors may be more important for price rises (or price falls), that is, the effects might not be symmetric. For example, concerns about antagonising customers are likely to be less relevant for price reductions than increases. To allow for this, the survey allowed respondents to differentiate between factors which might influence why they do not raise prices or cut prices separately.

The main factors that tended to be cited by survey respondents as explaining price stickiness were explicit and implicit contracts, a desire not to antagonise customers and co-ordination failure. Companies citing the importance of contracts may wish to avoid damaging long-term relationships with their customers, whereas companies citing co-ordination failure may be concerned about initiating a price war. About a third of companies reported that they do not raise prices because their input costs do not change much. So-called 'menu costs' (costs such as time, effort or reprinting) did not seem to provide a major reason for why prices may be sticky. This confirms findings from other surveys.

Factors influencing prices

The previous section investigated how often companies change their prices and discussed reasons why prices might be sticky. This section examines which factors cause prices to change and whether these effects are asymmetric. Companies were asked about the importance of a range of cost factors (such as labour costs, raw material prices and financial costs) and market conditions (demand and competitors' prices) for price adjustment. Unlike other surveys, this survey asked companies about the importance of expected changes in key variables as well as actual changes, and it also distinguished between domestic and overseas competition.

Table E shows the importance of various factors perceived to drive prices upward.(1) Increases in labour and raw material

Table E Most important factors leading to a rise or fall in price (based on share of companies responding 'very important' or 'important')(a)

Rise	Rank	Fall	Rank
Increase in cost of labour	1	Actual decline in demand	1
Increase in the prices of fuel, raw materials or input/components	2	Actual price reduction by one or more of your domestic rivals	2
Actual rise in demand	3	Expected decline in demand	3
Increase in costs arising out of regulation	4	Significant reduction in market share	4
Actual price increase by one or more of your domestic rivals	5	Expected price reduction by one or more of your domestic rivals	5
Expected rise in demand	6	Decrease in the prices of fuel, raw materials or input/components	6

(a) Companies were asked to rank the importance of eleven factors. The table lists the top six factors only (based on companies responding 'very important' or 'important', with equal weight given to each).

prices emerge as the most important determinant in driving prices upward. A variety of other factors were also considered to be important, such as actual or expected rises in demand and price increases by competitors, particularly domestic rivals.

In terms of driving prices downward, demand conditions and competitors' prices were the most important factors.(2) Given the weak outlook for economic activity in the United Kingdom, the results from the price survey suggest that this is likely to be a key factor restraining price rises in the current conjuncture.

How do prices adjust following a demand or cost shock?

The survey asked companies how they would adjust prices in response to demand and cost shocks. Starting with the effect of changes in the value of sterling, importers were asked: *How much does the exchange rate change before you would adjust your price of goods sold in the United Kingdom?* The responses shown in **Table F** suggest that around two thirds of importing companies would change prices if the exchange rate changed by up to 10%. Companies appear to respond symmetrically to depreciations and appreciations.

Table F Exchange rate change needed before importers adjusted their UK prices(a)(b)

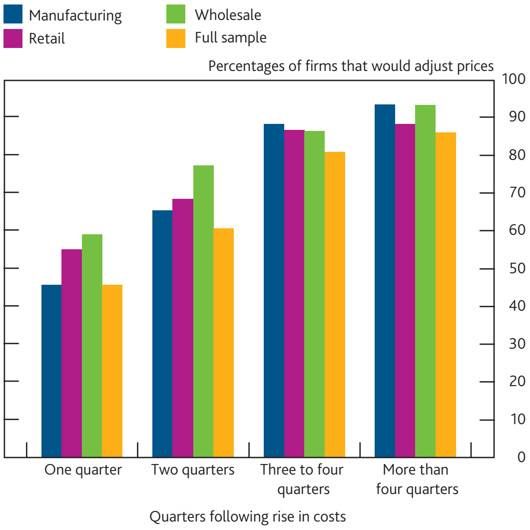
Sterling appreciation	Percentage of companies	Sterling depreciation	Percentage of companies
<2%	14	<2%	13
2% to <10%	49	2% to <10%	53
10% to <20%	26	10% to <20%	24
20%+	12	20%+	11

(a) Based on 143 responses from companies that operate in international markets as importers.
(b) Columns may not sum to 100 due to rounding.

(1) 6% of companies reported that they never adjust prices upward, so are excluded from the table.
(2) 26% of companies reported that they never adjust prices downward so are excluded from the table.

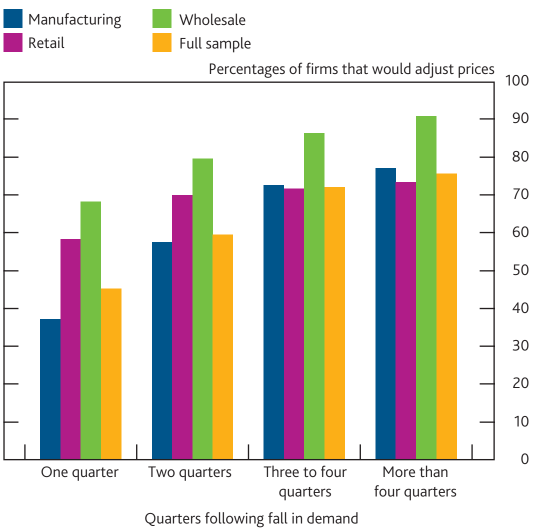
All companies were then asked how long it takes them to reset prices following shocks. Focusing first on costs: *After a significant increase in production costs, how much time on average elapses before you raise your prices?* **Chart 6** shows the cumulative response. In response to a significant increase in production costs, nearly half of companies raise their prices within a quarter (and half of those react within one month). Over 80% of companies respond to such an increase in costs within one year, whereas 12% of companies said they do not change their price in response to an increase in production costs.

Chart 6 Percentage of companies changing price in reaction to significant increase in costs



Turning to demand, companies were asked: *After a significant fall in demand, how much time on average lapses before you reduce your prices?* The survey suggests that just under half of companies cut their prices within a quarter and over 70% of companies respond to such a fall in demand within a year (**Chart 7**). However, nearly a quarter of companies said they would not change their price in response to a fall in demand. The survey also points to differences in the speed of reaction between industries — retailers and wholesalers said they were far more likely than manufacturers to react to falling demand within the first quarter.

Chart 7 Percentage of companies changing price in reaction to significant fall in demand



Conclusions

It is important to understand how companies set prices, since price-setting behaviour plays a key role in the monetary policy transmission mechanism. The latest Bank of England survey improves our understanding of price-setting by asking companies directly about these issues.

Many companies review their prices at regular intervals, rather than responding to specific events. However, it is also common for companies to use a combination of the two. Overall, the median firm reviews its price twice per year and changes its price once a year. However, there are important differences between sectors — for example, UK construction and retail companies change their prices more often than companies in the manufacturing and other services sectors. And firm size has an impact on how often companies reset prices, with larger companies changing prices more often than smaller companies. So, there are important heterogeneities at work. Further work may be needed to investigate this.

Over the past decade, a substantial number of companies have increased the frequency at which they change prices. Companies mainly attributed that to an increase in competition over the period, which increases the cost to the firm from deviating from the optimal price, and higher variability of input prices.

The survey revealed that different factors influence price rises and price falls. Higher costs — in particular, labour costs and raw materials — are the most important driver behind price rises, whereas lower demand and competitors' prices are the main factor resulting in price falls. It also provides some insights about the speed of response to changes in cost and demand conditions. Nearly half of companies change their prices within a quarter following an increase in costs or a fall in demand.

Annex
Price-setting questionnaire

General information

1. What is your main product or activity, by domestic turnover? ____________________

2. What is the 'market share' of your main product or activity in the United Kingdom?
☐ <5% ☐ 10% to <20%
☐ 5% to <10% ☐ 20%+

3. Roughly how many products do you currently sell in the United Kingdom? ____________________

4. On average, approximately how many full-time equivalents does your company employ in the United Kingdom?
☐ 0–49 ☐ 250+
☐ 50–249

5. Approximately what size was your UK turnover in the last financial year?
☐ <£1m ☐ £10m to <£50m
☐ £1m to <£10m ☐ £50m+

6. What do you regard as the principal market for your main product or activity?
☐ The United Kingdom ☐ North America
☐ European Union ☐ The whole international economy
(If one country or other group of countries please specify) ____________________

7. What proportion of the sales of your main UK product or activity is sold to overseas markets?
☐ 0% ☐ 10% to <30%
☐ >0% to <10% ☐ 30%+

8. a) What is the main destination of your sales (choose only one option)?
☐ Retailers/wholesalers ☐ Other private sector companies
☐ Public sector ☐ Directly to consumers

b) If you sell to retailers, wholesalers or other private sector companies, are they within your own group?
☐ Yes ☐ No

9. How intensive is the competition you experience for your main UK product or activity?
☐ Strong ☐ None
☐ Weak ☐ Don't know/No answer

10. How easily can you find out the prices set by your competitors for your main product or activity?
☐ Easily ☐ Not at all
☐ With difficulty/effort ☐ Don't know/No answer

11. Do you face more competition for your main UK product or activity compared with a decade ago?
☐ Yes ☐ The same
☐ No ☐ Not applicable

12. Do you generate the largest share of your UK turnover with long-term or short-term customers?
☐ Long-term (more than one year)
☐ Short-term (less than one year)

Pricing in the United Kingdom

13. The UK price of your main product or activity is (choose only one option)

- ❑ The same for all customers/quantities
- ❑ Depends on the quantity sold (but according to a standard price list)
- ❑ Decided case by case

14. Companies often *review* their prices without necessarily changing them. Do you generally *review* the UK sales price of your main product or activity (choose only one option)

- ❑ In regular intervals
- ❑ Generally in regular intervals, but also in response to specific events (eg as reaction to a substantial change in costs)
- ❑ In response to specific events (eg as reaction to a substantial change in costs)

15. a) How frequently do you actively *review* your UK pricing decisions?

❑ Daily	❑ Half-yearly
❑ Weekly	❑ Annually
❑ Monthly	❑ Irregularly
❑ Quarterly	❑ Other (please specify) ______________________________

If you answered IRREGULARLY or OTHER to question 15 please answer the following question.

b) In the past twelve months how many times have UK pricing decisions been actively *reviewed*? _________________

16. a) At which interval do you *change* the UK price of your main product or activity?

❑ Daily	❑ Half-yearly
❑ Weekly	❑ Annually
❑ Monthly	❑ Irregularly
❑ Quarterly	❑ Other (please specify) ______________________________

If you answered IRREGULARLY or OTHER to question 16 please answer the following question.

b) In the past twelve months how many times have you actually *changed* your UK prices? _______________________

17. Which of the following methods best describes how you set the UK price of your main product or activity (choose only one option)?

- ❑ Rule of thumb (eg change by a fixed amount or percentage; change in accordance with the economy-wide inflation)
- ❑ We set the price primarily given conditions that have applied in the recent past
- ❑ We set the price primarily for current conditions
- ❑ We set the price primarily based on our view of the near future

18. Has the frequency of price adjustments changed for your main UK product or activity in the past decade?

❑ Yes, increased	❑ No, unchanged
❑ Yes, reduced	❑ Not applicable

If yes, why? ____

19. How are UK prices for your main product or activity primarily determined?

Please rank each of the following options by circling the numbers to the right of each statement. Use the following options: 1 = not important; 2 = slightly important; 3 = important; 4 = very important; 0 = not applicable, I can't evaluate.

Price is made up of direct (ie prime or variable) cost per unit plus a fixed percentage mark-up	1	2	3	4	0
Price is based on direct (ie prime or variable) cost per unit, as above, but the percentage mark-up is not fixed	1	2	3	4	0
Price is primarily specified by your principal customer	1	2	3	4	0
Price is primarily determined by your competitors' price	1	2	3	4	0
Price is primarily determined by a regulatory agency	1	2	3	4	0
Price is set at a statutory level	1	2	3	4	0
Price is primarily determined in other ways (please specify)	1	2	3	4	0

____

20. How important are the following factors listed below in terms of causing an *increase* in UK prices?

Use the following options: 1 = not important; 2 = slightly important; 3 = important; 4 = very important; 0 = not applicable, I can't evaluate.

Not applicable — upward adjustment never takes place (go to Q.21)					0
Increase in cost of labour	1	2	3	4	0
Increase in the prices of fuel, raw materials or inputs/components	1	2	3	4	0
Increase in financing costs	1	2	3	4	0
Actual rise in demand	1	2	3	4	0
Expected rise in demand	1	2	3	4	0
Actual price increase by one or more of your domestic rivals	1	2	3	4	0
Expected price increase by one or more of your domestic rivals	1	2	3	4	0
Actual price increase by one or more of your overseas rivals	1	2	3	4	0
Expected price increase by one or more of your overseas rivals	1	2	3	4	0
Significant increase in market share	1	2	3	4	0
Increase in costs arising out of regulation	1	2	3	4	0

21. How important are the following factors in causing a *fall* in UK prices?

Use the following options: 1 = not important; 2 = slightly important; 3 = important; 4 = very important; 0 = not applicable, I can't evaluate.

Not applicable — downward adjustment never takes place (go to Q.22)					0
Decrease in cost of labour	1	2	3	4	0
Decrease in the prices of fuel, raw materials or inputs/components	1	2	3	4	0
Decrease in financing costs	1	2	3	4	0
Actual decline in demand	1	2	3	4	0
Expected decline in demand	1	2	3	4	0
Actual price reduction by one or more of your domestic rivals	1	2	3	4	0
Expected price reduction by one or more of your domestic rivals	1	2	3	4	0
Actual price reduction by one or more of your overseas rivals	1	2	3	4	0
Expected price reduction by one or more of your overseas rivals	1	2	3	4	0
Significant reduction in market share	1	2	3	4	0
Decrease in costs arising out of regulation	1	2	3	4	0

22. What effect will the following changes in market conditions have on your ability to change gross profit margins?

	No effect	Upward effect	Downward effect
A rise in market demand for your product	❑	❑	❑
A rise in domestic competitors' prices	❑	❑	❑
A rise in overseas competitors' prices	❑	❑	❑

23. Companies often differ in how quickly they adjust prices in response to changes in demand and costs. How does your firm respond?

Use the following options: 1 = less than one week; 2 = from one week to one month; 3 = from one to three months; 4 = from three to six months; 5 = from six months to one year; 6 = more than one year; 7 = the price remains unchanged.

After a significant increase in demand, how much time on average lapses before you raise your prices?	1	2	3	4	5	6	7
After a significant increase in production costs, how much time on average elapses before you raise your prices?	1	2	3	4	5	6	7
After a significant fall in demand, how much time on average lapses before you reduce your prices?	1	2	3	4	5	6	7
After a significant fall in production costs, how much time on average lapses before you reduce your prices?	1	2	3	4	5	6	7

24. Companies sometimes decide to postpone price changes or to change their price only slightly. This is generally due to various factors, some of which are listed below. Some of these factors may be more relevant for price rises, whereas others may be more important for price falls. Please indicate how important each of these factors are in your company.

Use the following options: 1 = not important; 2 = slightly important; 3 = important; 4 = very important; 0 = not applicable, I can't evaluate.

	Reasons to decide not to raise the price					Reasons to decide not to lower the price				
The risk that our competitors do not change their prices	1	2	3	4	0	1	2	3	4	0
The risk that we subsequently have to readjust our prices in the opposite direction	1	2	3	4	0	1	2	3	4	0
The existence of written contracts specifying that prices can only be changed when the contract is renegotiated	1	2	3	4	0	1	2	3	4	0
The existence of an implicit contract (regular contact with a customer without any written contract)	1	2	3	4	0	1	2	3	4	0
The preference for maintaining prices at a certain threshold (eg you would rather charge £4.99 than £5.00)	1	2	3	4	0	1	2	3	4	0
The costs implied by price changes (eg printing of price lists or information gathering costs)	1	2	3	4	0	1	2	3	4	0
The variable costs in our company do not change by much with market conditions, making our price quite stable	1	2	3	4	0	1	2	3	4	0
It would antagonise our customers	1	2	3	4	0	1	2	3	4	0
Other (please specify) ______________________	1	2	3	4	0	1	2	3	4	0

For companies that trade in international markets (as importers or exporters), please proceed to Q.25.

If you only operate in the United Kingdom, thank you again for your co-operation in completing this survey.

Information regarding price behaviour in international markets

Only to be filled out by companies operating in international markets, as importers and/or exporters.

Importers (if you are not an importer but an exporter, please go straight to Q.27)

25. How much does the exchange rate change before you would adjust your price of goods and services sold in the United Kingdom?

Sterling appreciation	Sterling depreciation
❑ <2%	❑ <2%
❑ 2% to <10%	❑ 2% to <10%
❑ 10% to <20%	❑ 10% to <20%
❑ 20%+	❑ 20%+

26. Are foreign exchange costs more difficult to pass on to UK consumers now than a decade ago?

❑ Yes ❑ No

If yes, why?

❑ Competition from domestic sources

❑ Competition from foreign sources

❑ Low inflation makes price increases more visible and more difficult to justify

❑ Other factors (please specify) ______________________________

Exporters (if you are not an exporter, thank you for your co-operation in completing this survey).

27. Companies may charge different prices on different markets. Which of the following statements is true for your company (please tick one answer only)?

The price — expressed in sterling — varies across countries (proceed to Q.28)

The price — expressed in sterling — is identical in all countries (proceed to Q.29)

28. How important are the following factors in discriminating your price between markets?

Use the following options: 1 = not important; 2 = slightly important; 3 = important; 4 = very important; 0 = not applicable, I can't evaluate.

Exchange rate changes	1	2	3	4	0
The destination country tax system	1	2	3	4	0
Structural market conditions (tastes, standard of living)	1	2	3	4	0
Cyclical fluctuations in country demand	1	2	3	4	0
Regulation	1	2	3	4	0
Transportation costs	1	2	3	4	0
Other factors, please specify ______________________	1	2	3	4	0

29. If a significant share of your sales (at least 20%) goes to a single country and, if sterling were to permanently appreciate by 5% *vis-à-vis* that country, how would you change the price in that market of your main product or activity (choose only one option)?

In the near term (first six months)	In the longer term
❑ The price would increase by more than 5%	❑ The price would increase by more than 5%
❑ The price would increase by less than 5%	❑ The price would increase by less than 5%
❑ The price would increase by 5%	❑ The price would increase by 5%
❑ The price would remain basically unchanged	❑ The price would remain unchanged

Thank you again for your co-operation.

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