

## SWINGS AND ROUNDABOUTS: AN ECONOMIC ANALYSIS OF PRICE DISCRIMINATION AND CROSS-SUBSIDY

### 1. BACKGROUND

In September 2016 the FCA published [Occasional Paper No.22](#) (the "Paper"), concerning price discrimination and cross-subsidy in financial services. The Paper was driven by the FCA's work on consumer protection and competition in financial services. Price discrimination and cross-subsidy are used widely in financial services, due to consumer behaviour, costs and the nature of contracts. The trend is likely to increase with greater use of Big Data, as firms are able to react more effectively to consumer behaviour.

The purpose of the Paper is to examine these pricing practices through an 'economic lens', to consider their consequences, and establish when they may give rise to regulatory concerns warranting an intervention. Ultimately, the economic analysis suggests that there is no blanket rule for pricing practices, and there can be positive and negative impacts. Whether a particular practice is detrimental or beneficial is case specific, and must be determined by reference to the facts at hand, particularly whether the practice is causing harm to consumers.

### 2. WHAT IS PRICE DISCRIMINATION?

Price discrimination can be defined generally as pricing that leads to different mark-ups over cost for different consumers. The two main examples of price discrimination are:

- (a) Where firms charge different prices to different consumer groups for the same product, due to differences in their sensitivity to the price of that product, and the price differences cannot be explained by variations in the costs of supplying the product.
- (b) Where the all consumers are charged the same price, but different consumers experience different mark-ups because of varying costs between consumers.

If the price differences result solely from the variation in the cost of supplying consumers with a range of risk profiles, this is not an example of price discrimination.

Some groups of consumers are more sensitive to price than others. For example, wealthy consumers may be less sensitive to price and less inclined to switch suppliers to make small savings. Or, a particular group may be more inclined to stay with a specific supplier regardless of price differences offered by others, due to loyalty to that provider.

### 3. WHAT IS CROSS-SUBSIDY?

Cross-subsidy is when a firm charges a loss-making price for some consumer groups or products, but then recovers that loss from the profitable sales of another product, or of the same product to another group of consumers. There are two types of cross-subsidy:

- (a) **Between consumers:** where one group is charged below the cost of supplying the product, and this loss is offset by charging another group of consumers above the cost of supply.
- (b) **Between products:** where the profits made on one product are used to allow a firm to sell another product at a loss.

## 4. ANALYSIS

### 4.1 Price discrimination

Consumer groups with low price sensitivity will generally be charged a higher mark-up than those with high sensitivity. If firms are able to categorise consumers according to their price sensitivity, using information on purchasing habits or common characteristics, then it may be useful to mark up the price to each group inversely to the price sensitivity of the consumers in that group. So, the highly sensitive consumers are charged a low price, and the less sensitive are charged a higher price. The price offered depends on how likely consumers are (i) to buy the product if the price increases, but also (ii) to buy the product from a rival. Price is therefore inversely related to the consumers' overall sensitivity to the market price and the rival price.

#### Variations to the rule

It is not always the case that the higher price is charged to consumers with low sensitivity to the market price of the product, or to those who value the product the most. For example, if the consumers in question place a high value on insurance cover, but are not very loyal to their existing provider, then they will have a high sensitivity to the price of a rival firm. To offset this, the existing provider may charge a low price to that group.

#### Effects

When firms price discriminate the prices offered to both new and existing customers may decrease compared to when uniform pricing is used. When a firm offers low prices to attract new customers and charges higher prices to its existing customers, rival firms may target the existing customers with a low price. The original firm is then forced to respond by lowering the price for its existing customers.

Academic analysis suggests that price discrimination can sometimes create greater benefits than uniform pricing. Studies also indicate that the effects of such pricing depend on a combination of factors, including the size of consumer groups, prices offered by rivals, consumer sensitivity and the cost of the effort to shop around. This means that regulators need to consider the specific facts in play carefully before deciding whether to intervene.

### 4.2 Cross-subsidy

Cross-subsidy occurs in various situations:

#### (a) Add-on pricing

Insurance cover which is sold as a standalone product is often cheaper than cover sold as an add-on at the point of sale of the main product. Some consumers who buy the main product will not buy the high-priced add-ons, and competition may force the overall profit from the sale of add-ons and the main product to zero. In this case, the main product might be sold at a loss, which will lead to cross-subsidy between add-on buyers and consumers who only buy the main product.

#### Effects

People may be deterred from buying the add-ons because of the cost, and more sophisticated customers will go to considerable effort to avoid them. There may be redistribution from non-sophisticated customers to sophisticated customers, as the sophisticated customers benefit from a lower price on the primary product.

#### (b) Contingent charges

Similarly, customers may incur contingent charges for certain types of services that are related to the main product. These services can be likened to add-ons, as they are only paid for if they are

used. If contingent charges are particularly high, consumers might expend a lot of effort to avoid them. Such excessive caution can be costly to consumers, so must be considered as a relevant impact.

Measures that lower the cost of avoiding contingent charges may improve market effectiveness, because as well as lowering the cost to the sophisticated consumers, they also make it easier for the naïve consumers to become more sophisticated. When setting contingent charges, firms will choose pricing structures that mirror the proportion of sophisticated and naïve consumers. The naïve consumers will pay more while the sophisticated will get a good deal. Something to consider about these pricing structures is that while the sophisticated consumers will benefit from a low cost, they will also have to deal with a level of inefficiency – e.g. they will have to adapt how they use their accounts to avoid the high charges, in potentially inefficient ways.

(c) **Front-book and back-book**

Some firms offer good deals to new customers (known as the 'front-book'). The 'back-book' customers, who are the established patrons, will receive less favourable deals. Doing this allows firms to group consumers: the 'sophisticated' and the 'non-sophisticated', the 'active' and the 'inert'. Firms will use the profits from sales to inert back-book customers to draw in more active front-book customers.

**Effects**

Such a pricing structure does not necessarily suggest weak competition, and in fact, it may actually require quite intense competition to attract new customers. Regulators must examine cases of cross-subsidy on a specific case-by-case basis, taking care to look at the underlying business model before deciding whether any intervention is appropriate.

**5. SO, SHOULD WE BE CONCERNED?**

The economic analysis indicates that there is no general rule as to whether these practices are harmful or beneficial.

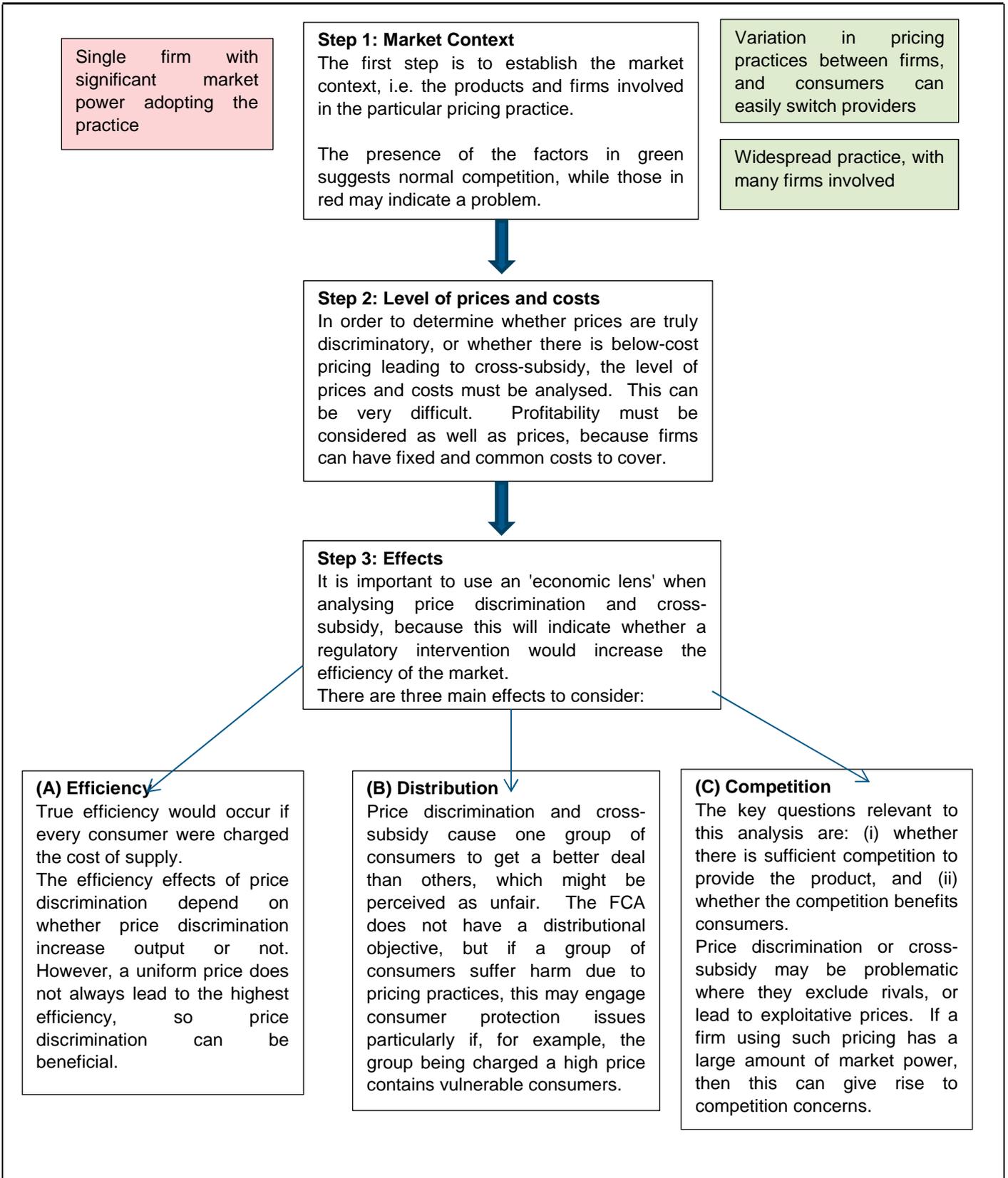
On the one hand, price discrimination can encourage competition as firms charge lower prices to win customers, and may actually benefit consumers more than uniform pricing. It can also expand the market by allowing priced-out customers to access it, and may be an efficient way for firms to cover their fixed and common costs. On the other hand, price discrimination can also have negative impacts, and may indicate distorted or weak competition. If certain types of cross-subsidy and price discrimination are used by firms with substantial market power, they can drive out rivals and thereby reduce competition further. The pricing practices may also mean that while some consumers benefit from lower prices, those faced with higher prices may stop purchasing the product.

The FCA's policy is that the mere existence of price discrimination or cross-subsidy does not necessarily mean an intervention is needed. The deciding factor will be whether the practice is causing any harm, which must be determined on a case-by-case basis.

**6. FRAMEWORK FOR INTERVENTION**

When assessing pricing practices, the FCA will look at the substance of the practice rather than its form. The key question is what effect the particular pricing practice has on competition and consumers. Figure 1 below summarises the framework and steps involved in considering whether an intervention is appropriate.

**FIGURE 1: FRAMEWORK FOR INTERVENTION**



7. INTERVENTIONS

7.1 Is an intervention appropriate?

Price discrimination does not always require intervention, because it is often a feature of normal market competition. If the FCA is minded to intervene, it should first take care to identify the problem and the possible solutions. It is important to take time to think through interventions thoroughly, as inappropriate intervention can have undesirable consequences for competition. An intervention is more likely to be successful if it targets the cause of a problem, rather than the symptoms. Generally, interventions that do not go as far as setting or capping prices have had a more positive impact.

7.2 What sort of intervention might there be?

The table below has been adapted from Table 1 of the Paper:

INTERVENTION AND LEVEL OF INTERVENTIONISM	DESCRIPTION	WHEN THIS MAY BE USED	RISKS
Remedies to reduce barriers to entry  <b>Low</b>	Measures that simplify market entry, for example, by reducing regulatory requirements	In cases where barriers to entry cause concerning market power	If barriers to entry are due to fixed costs then this may be difficult
Informational or educational remedies  <b>Low</b>	Disclosure informed by consumer behaviour may help consumers to identify and mitigate potentially harmful pricing practices	Where price discrimination or cross-subsidy result from underlying behaviours.  Where the aim is to encourage effective competition.	It may be hard to decide how best to disclose information.  Resource-intensive.  Behaviourally informed disclosure may be undermined by other strategic disclosures by firms.
Intervention at point of sale  <b>Medium</b>	Regulators may take action to regulate how products are sold, including banning the sale of add-ons at the point of sale.	Where the underlying behaviours cannot be remedied.  Where the aim is to encourage effective competition.	This may reduce consumer surplus and choice, and may lead to inefficient uptake and use of financial services.
Interventions to restrict prices or price capping  <b>High</b>	Regulators might impose restrictions on price discrimination practices, or price caps. This could involve proscribing the structure of pricing.	Where markets are not working well, but only the symptoms can be tackled and not the cause of the issue.	It may be difficult to set the optimum price level or cross-subsidy. It may reduce consumer choice and effective competition, and lead to increased prices and profitability elsewhere.

INTERVENTION AND LEVEL OF INTERVENTIONISM	DESCRIPTION	WHEN THIS MAY BE USED	RISKS
Prohibition of price discrimination or below-cost pricing  <b>High</b>	Regulators may ban price discrimination or cross-subsidy	Where markets are not working well, but only the symptoms can be tackled and not the cause of the issue.	This may reduce consumer choice and reduce efficiency for certain consumer groups.  May reduce competition and total efficiency of the market.