Drip pricing: UK experience

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Introduction
Hot topic in the UK

- Front page of Guardian newspaper (money supplement) last Saturday.

- The OFT is looking into payment surcharges in the travel industry.

Meanwhile, passengers on easyJet this summer face a change of up to £23 for a single suitcase on a return flight. By then flights, summer, while Aer Lingus now levy a £25 charge on all bags.

A recent survey of frequent flyers shows that it can cost up to £30 to take away your laptop, £20 to charge that same one ticket. You can grab the larger ones and save because your bag weighs less in your hand.

What's more, we found that the offer by the "no-cost" airlines to be much more than ones that could be carried without charge. But, we were unimpressed by the "no-cost" offers of Ryanair, EasyJet and Aer Lingus.

Budget airlines are not the only ones to increase charges; the UK's money supplement. It reported on a story about the OFT's investigation into payment surcharges in the travel industry. The supplement also highlighted the increase in charges for additional services, such as baggage fees.
Value is an abstract concept – people use cues from the world around them to decide if an offer is good or bad value.

Price framing therefore has the power to influence and mislead.

Misleading price frames may lead to consumers spending more than they need to, buying a product which is not best for them, wasting time or suffering annoyance, disappointment or regret.

Misleading pricing is not only bad for the consumer, it is also bad for competition, and creates an uneven playing field between fair dealing businesses and those that push the boundaries too far.
In December 2010 the OFT published a study focusing on the impact of price frames on consumer decisions. The study:

- Explored the behavioural psychology literature on how price frames trigger behavioural biases
- Included an economic experiment to measure how search and purchasing decisions are affected by price frames, and
- Surveyed 3000 consumers about their experience and attitudes toward price frames.

6 price frames were considered: Drip Pricing, Reference Pricing, Time Limited Offers, Volume Discounts, Complex Pricing/Tariffs and Bait Pricing

Drip pricing – where additional costs are revealed through the retail process – was found to have the most egregious effects.
Drip pricing triggers a number of common behavioural biases

- **Anchoring:**
  - consumers ‘anchor’ to the piece of information they think is most important – the headline price
  - they then fail to adjust their perception of the ‘value of the offer’ sufficiently as more costs are revealed

- **Endowment effect:**
  - consumers feel they’ve already made the decision to purchase
  - this creates loss aversion – consumers have committed time and effort to the search before being hit with extra charges

- **Commitment and consistency:**
  - consumers have a desire to be consistent with their previous actions so once they’ve started the process they are less likely to walk away
Drip Pricing – effect?

- Psychology literature identifies a number of effects on consumer behaviour triggered by drip pricing:
  - Higher demand and perceived value of the deal
  - A lower recall of the total price
  - Reduction in shopping around and comparing prices
  - Increased difficulty in comparing total prices
  - Strengthened belief that as they are choosing a product based on their particular need – prices will be about the same everywhere

Consumer purchasing decisions are driven by who has the cheapest headline prices – disadvantaging those firms that include all compulsory charges in the headline price
Basic economics of drip pricing
But is it realistic that all consumers are affected and does it matter?

Perhaps more realistic to consider there are 2 groups of consumers:

- Sophisticated consumers spot traders using hidden charges,
- Whilst naive consumers don’t.

However neither consumers can avoid the drip if they want the product and the trader cannot discriminate between naïve and sophisticated consumers.

Therefore naïve consumer will purchase based on headline price and sophisticated consumers will consider total cost when comparing offers.
Only naïve consumers fall for deceptive frame.
- Equivalent to pushing out their demand by making product seem cheaper.
- Sophisticated consumers do not fall for frame.

May also have additional indirect effects:
- May increase search costs for sophisticated in order to avoid frames.
- This may make individual trader demand more inelastic creating additional detriment.

See Gabaix and Laibson (2006) “Shrouded attributes, consumer myopia, and information suppression in competitive markets”
The likelihood and extent of harm from drip pricing depends on:

- How large a proportion are naïve customers? Are there enough sophisticated consumers to ‘protect’ the naïve?
- Can the firms treat naïve and sophisticated differently?
- How important and transparent is the add-on?
- Are there third parties operating in the market to inform consumers (creating reputation)?
- Will consumers learn?
- Will profits simply be competed away in ‘primary market’?
A ‘real’ world example
So that’s what we expect to happen – but are consumers really that confused?

Designed a lab experiment where (student) subjects are exposed to the different frames and real money is at stake.

The Baseline model:

- Two ‘shops’ draw prices at random from a distribution
- Search is costly – there are 3 levels of search cost
- Subjects are endowed with a “payoff function” that maps units of a good purchased into earnings. For example, 120 for first unit, 80 for second, 20 for third, 10 for the fourth.
- Four different ways of scaling payoffs (“four different products”)
HOME SCREEN

Travel cost: 2.0

Product available to buy: Red

GO TO SHOP 1

GO TO SHOP 2

I'm DONE!
A shop with straight prices

SHOP 1

Price of product (per unit): 105

Units to buy: 

[Buttons: Buy, Go home!]
The Baseline Consumer Problem

See shop front

Decide: Which shop to enter

See price in shop one

Decide: buy in shop 1 or search shop 2 (at cost)

See another shop front

Search

Decide: buy in shop 2 or return to shop 1 (at cost)

Search

See price in shop two

Decide: Number of units to buy shop 2

Travel

Decide: Number of units to buy shop 1

Decide: End or continue to shop?

Buy

‘Real’ world…
Baseline looked complex – but participants could do this well
- First shop: 78.6% of choices optimal
- Second shop: 86.7% of choices optimal

90.5% of all errors which did occur were due to over searching

As search costs increased, search activity is reduced and the outcome is closer to the optimal result.

Could adding a simple drip really make such a difference? Just 2 ‘clicks’ to get from the headline price to the final price
The ‘Drip’ Pricing Problem

1. See shop front
2. Decide: Which shop to enter
3. See price in shop one
4. Decide: buy in shop 1 or search shop 2 (at cost)
5. Search
6. Decide: Number of units to buy shop 1
7. Drip: extra postage
8. Drip: extra shipping
9. Decide: Still Buy? Buy nothing? Or back to other shop?
10. Travel
11. See another shop front
12. Decide: which shop to enter
13. See price in shop two
14. Decide: buy in shop 2 or return to shop 1 (at cost)
15. Travel
16. Decide: Number of units to buy shop 2
17. Drip: extra postage
18. Drip: extra shipping
19. Decide: Still Buy? Buy nothing? Or back to other shop?
If we add in just 2 ‘clicks’:

- Over-search is eradicated and instead there is under-search.
- 9% more search error – consumers don’t shop around enough
- 14% more purchasing errors – consumer buy too many units
- In 27% of all cases where consumers should not have bought from the first shop they do when faced with a drip price
- Purchasing errors at the second store (buying too much) made worse where there are high search costs and/or high value products
- The first trader visited receives 111.8% of optimal sales

We compared 5 price frames and drip pricing resulted in the largest welfare loss relative to the baseline
Drip Pricing – ‘real’ world

Why?

- Not a result of sunk costs (might play a role in real life).
- Most likely explanation is loss aversion. The moment consumers see a low price they imagine buying the good at this price – this increases willingness to pay.

Real world

- Subjects did improve their performance as the experiment repeated – “learning” – but only to a limited degree and not enough to eliminate all mistakes.
- Would expect effects to be worse in general population – we’re not all economics students and often real world ‘drips’ are more complex.
- Experiment shows why firms invest in being the first trader a consumer visits, albeit overall effect on industry profits could be negative!
Consumer reactions
Not just purchasing error – a separate consumer survey for the pricing study found that consumers are annoyed…

- 75% objected to the use of drip pricing – increasing further for products bought infrequently

- 70% thought all compulsory charges should be in the headline price

- 39% thought the cost of extras was much higher than expected

- 44% would have bought elsewhere if they’d known the total price upfront
...and confused:

- 74% thought the headline price was unclear on what was included
- 51% believed they could have got the product cheaper elsewhere
The legal position in the UK
Several pieces of legislation cover drip pricing in the UK:

- The **Consumer Protection from Unfair Trading Regulations** (CPRs) came into force in 2008, and implemented the EU Unfair Commercial Practices Directive (UCPD). Contain prohibitions on misleading practices:
  
  - **Regulation 5 – Giving false information to, or deceiving, consumers (misleading actions)**
    
    E.g. Advertising a product using a headline price and then revealing only during the purchasing process, or subsequent to this, that other compulsory charges, such as tax, apply which will increase the total price paid.

  - **Regulation 6 – Giving insufficient information to consumers (misleading omissions)**
    
    E.g. Failing to disclose the existence of any additional charges payable, such as postage and packing, insurance etc, until the point of sale.

- For practices to be unfair they must cause, or be likely to cause, the average consumer to make a different decision – this can be anything from choosing to enter a shop to making additional ‘clicks’ through an online booking process.
UK Legal framework

Sector specific (Airlines)

- The **Air Services Regulation (ASR)** came into force in 2008. EU legislation directly applicable in the UK.
- Article 23 essentially states that all charges which are unavoidable and foreseeable at the time the headline price is displayed, should be included in that price, including taxes, surcharges and fees.
- Optional charges shall be communicated in a clear, transparent and unambiguous way at the start of the booking process and their acceptance by the customer will be on an ‘opt-in’ basis.

Brand new legislation (payment surcharges)

- In 2011 the **Consumer Rights Directive (CRD)** was adopted by the European Council of Ministers. Member states are required to transpose into national law within 2 years.
- Article 19 states that 'Member States shall prohibit traders from charging consumers, in respect of the use of a given means of payment, fees that exceed the cost borne by the trader for the use of such means'.
- The UK Treasury has announced its intention to consult on the early adoption of this Article in light of the concerns raised by the OFT on payment surcharges.
- Articles 5 and 6 also set out what information needs to be presented (clearly) to consumers prior to completing the transaction.
Core concern relating to drip pricing is where compulsory charges are not revealed until late in the purchasing process – for example payment surcharges.

The OFT has defined payment surcharges as:

- any charges which vary depending on the payment mechanism the consumer chooses to use, and/or
- which are only added to the total price when a consumer selects which payment mechanism they intend to use.

OFT believes failure to provide upfront information on compulsory charges can constitute a breach of the CPRs e.g.

- Misleading action to state a false headline price, where the charge is de facto compulsory
- Misleading omission to fail to include required information
- Not professionally diligent to price in a way that makes price assessment difficult
As a minimum OFT recommends traders:

- Include all compulsory charges in the headline price.
- Flag with headline price compulsory elements which have a range of charges and include the lowest meaningful compulsory charge in the headline price.
- Clearly display the total price prior to payment being accepted.
- Includes any additional charge associated with automatically opting consumers in to extras in the headline price.
- Other charges are accurately described, set out clearly and are easily accessible (‘1-click’ away).
But it is not straightforward... there can be a trade off between efficiency of pricing and clarity of pricing.

- It is not our starting point to dictate what pricing models businesses should use.
- E.g. (1) Payment surcharges - How to present compulsory charges that are incurred on a per transaction rather than a per item basis?
  - If we argue all compulsory charges (per transaction/per person) should be included in the headline price.
  - Could encourage firms to move to a per person charge (lower headline price).
  - But a per transaction charge is arguably more cost reflective and may work out cheaper (i.e. for a family).
  - Should we allow a degree of price complexity provided it is transparent?
Drip Pricing – Questions

E.g. (1 cont.)

London to Paris
£50 per person
(+£10 payment transaction fee)

London to Paris
£54 per person
(based on 2 people return)

- Which is most transparent?
- Which is easiest to calculate for a family of 4?
- Which is cheapest?

The OFT has launched enforcement action against UK airline to ensure transparency and clarity of payment surcharges
E.g. (2) Does the layout of prices confuse consumers?

Prices are not ‘dripped’ but:

- Do anchoring affects still affect consumer decisions when prices are partitioned?
- Do consumers believe prices that are only included in the ‘shopping basket’ are not in the businesses control or likely to be the same across all businesses?
- Are price comparison sites able to capture these prices?
E.g. (3) Is transparency enough where charges are complex? Prices are upfront but...

... vary by time of day

... and by size of order

These are all issues that are coming up in cases and which may present areas for further work.
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