



Department for  
Business & Trade

# **ESTIMATING THE PREVALENCE AND IMPACT OF ONLINE DRIP PRICING**

September 2023

## About the authors



Alma Economics combines unparalleled analytical expertise with the ability to communicate complex ideas clearly.

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# Executive summary

## Context and objectives

Drip pricing occurs when consumers are shown an initial price for a good/service (known as the base price) while additional fees are revealed (or “dripped”) later in the checkout process. These “dripped” fees can either be mandatory (e.g., booking fees) or optional (e.g., seat reservation on a flight). This practice means that consumers may be “baited” into choosing a product because of its (low) base price, yet possibly have to pay a much higher price to complete the purchase as consumers do not become aware of dripped fees until they have already started the checkout process.

Online retailers potentially use drip pricing as a way to encourage purchases and increase profits. Findings from previous research has shown that drip pricing negatively impacts consumer decision-making and satisfaction (Santana, Dallas and Morwitz 2020). Consumers might select products with a lower base price and, due to behavioural biases, often choose to complete the purchase despite dripped fees rendering the final cost of the item higher than any alternatives. In addition, drip pricing may limit price competition if (i) consumers do not pay sufficient attention to how much dripped fees impact the product price, (ii) consumers are constrained in how much time they can spend to find out a product’s true price or (iii) consumers cannot easily compare prices across providers. However, to date, little was known about the prevalence of drip pricing among sellers in the UK and consequently, the detriment that it may cause UK consumers.

In this context, Alma Economics was commissioned by the Department for Business and Trade (DBT) to answer the following research questions:

- What is the prevalence of online and in-app drip pricing across relevant sectors in the UK for the most popular products or services purchased through these means?
- What are the most common types of dripped charges added?
- How harmful are the dripped fees?
- How do drip pricing strategies vary across the sectors examined?

## Methodology

To understand the prevalence and impact of drip pricing in the UK, we manually collected data from 525 online providers (websites and apps) in four sectors: retail, hospitality, entertainment and transport & communication. We purchased one good or service from each provider and collected detailed information about the checkout process and any charges involved, such as:

- The name of the provider, the relevant sector and whether the provider was accessed through a website or app.
- The base price of the item and the total number of checkout pages.
- The name, description, price, and checkout page number of any dripped fee.
- Whether any dripped fee was pre-selected or mandatory/optional.

To create our sample, we focused on the sectors, providers and categories of goods/services that UK consumers most frequently purchase online. Specifically, we used case studies from previous research to select broad sectors where drip pricing is common, then used ONS data on UK household expenditures to select the goods/services with the greatest level of household expenditures within those sectors. Market share data, data on the most popular websites and apps (i.e., number of visits and downloads), as well as the top 10 pages of Google search results were used to determine the list of providers to sample. Our final sample included providers across four sectors: entertainment, hospitality, retail and transport & communication.<sup>1</sup>

In addition, to understand how consumers may be impacted by dripped fees, we calculated the number of providers that utilise the most harmful types of fees based on the characteristics of the dripped fees in the checkout process. Drip pricing strategies are not equivalent across providers, and the detriment to consumers from dripped fees depends on their size, timing, clarity and perceived fairness. For example, some fees may cover expenses for services which provide consumers with utility (e.g. delivery fees), fees may be mandatory or optional and the timing in which fees are introduced (as part of the checkout process) may differ. Consequently, some dripped fees will be more harmful to consumers than others. We considered five criteria to contribute to the harmfulness of a dripped fee and assessed the degree of harm by measuring the number of criteria that each provider fulfilled. These factors include the provider checkout process having (i) at least one dripped fee that is mandatory, (ii) at least one dripped fee greater than 25% of the product price, (iii) at least one dripped fee that is optional and pre-selected, (iv) at least one dripped fee that is presented past the halfway point of the checkout process and (v) at least three dripped fees.

## **Main findings**

Our results show that drip pricing is common across online providers in the sectors examined, though the specific characteristics of dripped fees included in checkout processes (such as the type and number of dripped fees, their position in the checkout process, their size relative to the base price and their harm to consumers) varies by sector.

### **Prevalence and harm of dripped fees across all providers**

1. 46% of the 525 online and mobile app providers in our sample include at least one dripped fee (not including delivery fees) as part of their checkout process.<sup>2</sup> Out of the four sectors in our sample (entertainment, hospitality, retail, transport & communication), dripped fees are most frequently found in the transport & communication sector (72% of

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<sup>1</sup> An indicative list of more detailed subsectors within each of the four sectors is included in the appendix (Table 33).

<sup>2</sup> We exclude delivery fees from our main analysis for three reasons: delivery fees are the most common type of dripped fee, most consumers expect to pay for delivery (especially for products only sold by a small number of providers) and, if optional, these fees can be seen as providing positive utility (through the consumer's preference for the increased convenience/time saved from being able to purchase products online). For more detail, please see page 17.

providers) and least frequently in the retail sector (15% of providers) once delivery fees are excluded.

2. Nearly half of providers (41%) included dripped fees that met more than one criterion of harm (mandatory, pre-selected and optional, presented past the halfway point of the checkout process, costing more than 25% of the product price, 3+ dripped fees).
3. Across all sectors, service fees (fees charged to receive/purchase a service, such as booking or processing fees) tended to meet the most criteria of harm (all service fees in our sample were mandatory, and almost three-quarters were presented late in the checkout process). Other harmful types of fees included luggage fees and fast-track fees: while both these fees were almost always optional, they were costly relative to base product prices and occurred late in the checkout process.
4. The median mandatory dripped fee was 6% of the base product price, while the median optional dripped fee was 14% of the base product price. The largest average fees relative to the base product price were found in the transport & communication sector.

### **Prevalence and harm of dripped fees within specific sectors**

5. Within the entertainment sector, consumers purchasing event tickets (93% of providers), cinema tickets (69% of providers) and gym memberships (60% of providers) were most likely to encounter dripped fees that meet more than one criterion of harm.
6. Within the hospitality sector, consumers ordering food and drink for delivery were most likely to encounter dripped fees that met more than one criterion of harm (39% of providers).
7. Within the transport & communication sector, consumers purchasing flight tickets (81% of providers), sending a parcel (55%) and purchasing bus tickets (45%) were most likely to encounter dripped fees that meet more than one criterion of harm.
8. If delivery fees are excluded, dripped fees are relatively rare in the retail sector: most occurrences can be classified as additional product suggestions or insurance fees, which were not assessed as harmful to consumers.<sup>3</sup>

### **Variation of drip pricing strategies by provider and product characteristics**

9. Harmful dripped fees are more commonly found in products purchased less frequently (such as flight or concert tickets), while there is no clear relationship between dripped fee degree of harm and product price once delivery fees are excluded.
10. Providers selling the same product/service often do not vary in the type of mandatory dripped fees included, while the type and number of optional dripped fees is less consistent across providers. In general, our data suggests that the number of dripped fees in a checkout process is not necessarily correlated with the final price paid by

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<sup>3</sup> Additional product suggestions were recorded in case they were presented as an optional add-on but were nearly essential for the primary product or service to function as expected or advertised. For instance, if a consumer purchases a software license, but during the installation, they are strongly suggested to buy an "essential optimisation tool" for the software to run smoothly, this suggestion is essentially a masked dripped fee.



consumers, although we could not directly quantify this due to differences in perceived quality between products.

11. Providers that sell products on desktop websites and mobile applications use the same set of dripped fees on both platforms. However, dripped fees on mobile applications in general are slightly more likely to be harmful, as the checkout processes on mobile applications tend to be longer than checkout processes for the same product on desktop websites.

### **Total amount of spending influenced by dripped fees**

12. After factoring in provider market share, consumer expectations and the size/degree of harm of the dripped fees, dripped fees (other than delivery fees) are estimated to cause UK consumers to spend an additional £595 million to £3.5 billion online each year. This is a conservative estimate of the total detriment caused to consumers due to dripped fees as our model does not factor in the impact of search costs or consumers selecting multiple optional fees.

### **Conclusion and broader implications**

Overall, our findings demonstrate that drip pricing is a common strategy used by online providers in certain sectors in the UK, despite the existence of consumer protection legislation. For instance, the Consumer Protection from Unfair Trading Regulations 2008 prohibit the omission of material information, including the price, the manner in which the price is calculated, and the provision of information in a way that is untimely or unclear. Furthermore, excluding delivery costs and other unavoidable costs from the total price could be a breach of the Consumer Contracts (Information, Cancellation and Additional Charges) Regulations 2013.

Drip pricing strategies (the type of dripped fees used, the size of the dripped fees and where they are presented in the checkout process) vary across sectors, however we find that specific types of dripped fees (such as service fees) tend to consistently meet multiple criteria of harm. In addition, these fees are concentrated in specific types of products (rather than being widely used).

While drip pricing for a single provider might not significantly reduce consumer surplus,<sup>4</sup> drip pricing adopted by multiple providers selling the same product imposes market-wide frictions: because drip pricing obscures the true cost of a product, this pricing strategy imposes hassle costs on consumers as they try to gather price information before deciding on a product to purchase. As a result, consumers who are not able to fully gather information about true product prices may end up spending more for the same product than in the absence of drip pricing.

As such, our findings demonstrate that greater scrutiny of drip pricing is needed in the UK to protect consumers, with specific focus on the hospitality and entertainment sectors (due to the

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<sup>4</sup> Consumer surplus refers to the difference in the price that consumers pay for a product/service and the price that they are willing to pay for the product/service.

presence of mandatory fees in these sectors) and service fees (as these fees consistently meet multiple criteria of harm). Increased transparency around dripped fees (such as presenting all mandatory fees included in a product's total price upfront) allows for greater dissemination of market information and minimises opportunities for potential manipulation of the consumer search process.

While our research focused specifically on understanding the prevalence of dripped fees, future research should examine how consumers might vary in their response to specific types of dripped fees (in particular quantifying the role of consumer expectations in "repeated" settings), how consumer behaviour is impacted by the number of potential "competing" providers selling the same product and what types of interventions might be most effective in minimising consumer detriment resulting from distorted purchasing behaviour.

# Background

## Overview of dripped fees

Drip pricing is a strategy often used by online retailers to encourage purchases of their goods and services (Rasch et al. 2020).<sup>5</sup> While there is some inconsistency in definitions of drip pricing in previous research, most rely on two main components. First, it involves a base price that is displayed to consumers at the start of the purchasing process, which is most frequently the first time that a consumer sees a good/service and its cost together (Friedman 2019). The base price, which is lower than the final price that a consumer could have to pay for the item, has also been described as the “bait” (Rasch et al. 2020) or “headline” price (Friedman 2019). Second, it involves additional fees or charges that are “dripped” i.e., revealed later in the checkout process (Friedman 2019). Although there are many different types of such fees, common to all is that they widen the gap between what a consumer initially thought that a good/service would cost them when they began the purchasing process, and the final price that they may end up paying after all fees have been added on.<sup>6</sup>

This strategy may negatively impact consumers in various ways. Once a consumer discovers the dripped fees, they have two options: (i) complete the purchase and pay the (likely) higher final price of the product or (ii) abandon the purchase (and continue their search for a similar item if they wish). Lock-in pricing strategies and loss aversion theories explain that since consumers have already spent time making an initial decision informed by the product’s base price, they will be reluctant to abandon it and continue their search when they discover the additional charges (Rasch et al. 2020). As such, consumers likely spend more money than initially intended, or is necessary, and do not purchase the highest value-for-money product (Gabaix and Laibson 2006). Indeed, several studies have demonstrated that when presented with different options, consumers frequently select a product with a lower base price and choose to complete the purchase despite dripped fees rendering the final cost of the item more expensive than its alternatives (Santana, Dallas and Morwitz 2020; OFT 2010). Finally, following through with the purchase of an item with dripped fees may further impact consumer satisfaction and wellbeing, as consumers prefer price fairness and transparency (Totzek and Jurgenson 2021).

While findings from previous research make it clear that drip pricing impacts consumer decision-making and satisfaction, to date relatively little was known about the prevalence of the practice, particularly in the UK. Furthermore, there has been a lack of research for purchases made on mobile applications (“apps”). Without this knowledge, it is difficult to assess the extent that the practice may harm consumers and whether there is a case for greater government intervention. To address these research gaps and gain a better understanding of the impact of drip pricing in UK markets, we collected data through purchasing popular goods and services from 525 providers across four sectors known to use the strategy. Based on these findings, we

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<sup>5</sup> Partitioned pricing is another term commonly used to refer to the practice of splitting into the total price paid by consumers for a product into a base price and additional charges. Some previous research uses partitioned pricing interchangeably with drip pricing (OFT 2010), while others refer to partitioned pricing as a more general form of drip pricing where the base price and additional charges could also be presented simultaneously (Totzek and Jurgensen 2021).

<sup>6</sup> Specific types of drip pricing (for example, dripped mandatory fees) are currently not allowed under UK law. The Chartered Trading Standards Institute’s guidance for traders on pricing practices states that “a failure to include compulsory charges in the up-front price may breach the [Consumer Protection from Unfair Trading Regulations 2008]” (CTSI 2018).

subsequently built a model to estimate the financial harm that UK consumers incur from drip pricing. Specifically, the aims of this research were to understand:

- What is the prevalence of online and in-app drip pricing across relevant sectors in the UK for the most popular products or services purchased through these means?
- What are the most common types of dripped charges added?
- How harmful are the dripped fees?
- How do drip pricing strategies vary across the sectors examined?

## Method

To gain insight into the prevalence of drip pricing strategies among online providers, we manually collected data from 525 providers across four sectors:

- Retail
- Hospitality
- Entertainment
- Transport & communication

The sectors were selected because (i) an initial literature review revealed that they were sectors where drip pricing strategies are highly common (Friedman 2019) and (ii) data on UK household expenditure indicated that goods and services within these sectors are frequently purchased online by UK consumers.<sup>7</sup>

We sampled a range of different providers (including websites and apps) within each sector and utilised several approaches to identify these, including: (i) market share data, (ii) the most frequently visited websites and most popular apps (e.g., from SimilarWeb and the Google Play Store), as well as (iii) the first 10 pages of Google search results using relevant keywords (“hotel stay” and “food delivery” are examples of keywords within hospitality). The multiple approaches ensured that we captured providers we may have otherwise missed, and that these 525 providers represent both the most popular providers among UK consumers (site visits/market share data) as well as the providers most commonly encountered by UK consumers when buying a product for the first time (Google search results). Therefore, our study is based on a reflective sample of online checkouts regularly completed by consumers.

From each provider, we ‘purchased’ either one good or one service.<sup>8</sup> This was done by completing all parts of the checkout process (selecting an item, adding it to a basket, entering personal details, etc.) except the final payment and confirmation stage. The product purchased was drawn from a list that had been identified at the beginning of the project. Based on UK household expenditure data, this basket consisted of the top 5 categories of items that UK consumers spend the most of their annual income on.

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<sup>7</sup> These four sectors combined make up around 62% of average UK household expenditures based on findings the ONS Living Costs and Food Survey (FY 2022).

<sup>8</sup> All providers across the three non-retail sectors only allowed one product to be added to a shopping basket at any given point in time – for example, you could buy two tickets to the same music concert but not one ticket for a classical music concert and a second ticket for a jazz concert. For providers in the retail sector, delivery fees varied by the type of product (for example, delivery could be more costly for a sofa compared to a poster), but non-delivery fees typically did not increase based on the number of products added to a shopping basket.

Due to the inconsistency in definitions of drip pricing in previous research, it was important that we decided what we would consider as a dripped fee at the beginning of the project. We based our definition of drip pricing on Ahmetoglu et al. (2014), Sullivan (2017) and OFT (2013). The main feature of drip pricing is the temporal price separation: the initial (i.e. base) price for a product displayed to consumers only represents a fraction of the final price consumers will pay, with additional prices “dripped” in throughout the checkout process. As such, we considered a dripped fee to be any fee added after the product and its base price was presented together (i.e. the first page of the checkout process), including:

- Mandatory additional charges, such as payment method charges, taxes and resort, booking or processing fees.
- Fees related to the original product chosen but charged separately, such as hotel cleaning fees.
- Optional surcharges for add-ons or improved customer experience, such as seat selection fees for airlines.

As each researcher completed the process to purchase a product, they manually recorded detailed information as well as screenshots of each page of the checkout process. Before data collection began, we ran a small pilot of the process by collecting and discussing data from 20 providers across sectors. This allowed us to identify variations in checkout processes and ensure consistency in data collection across researchers, with screenshots used for quality assurance (to verify that data was recorded correctly). Table 1 lists the main information collected for each good/service.

**Table 1. Provider, product and dripped fee characteristics included in data collection**

Data collected for all providers	Data collected for providers with dripped fees
<ul style="list-style-type: none"> <li>• The name of the provider</li> <li>• Whether the provider was accessed through a website or app</li> <li>• The relevant sector</li> <li>• The name of the item</li> <li>• The base price of the item</li> <li>• Whether the provider utilised dripped fees</li> <li>• The total number of pages in the checkout process</li> </ul>	<ul style="list-style-type: none"> <li>• The name of the dripped fee</li> <li>• The price of the dripped fee</li> <li>• Whether the dripped fee was pre-selected</li> <li>• Whether the dripped fee was mandatory or optional</li> <li>• The checkout page number the fee appeared<sup>9</sup></li> <li>• Type of dripped fee</li> </ul>

In addition, to better understand the type of dripped fees that providers use to encourage consumer purchases, we divided all dripped fees into broader categories. Table 2 below outlines the 10 most frequently observed categories of dripped fees.

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<sup>9</sup> A page was defined as each instance that new information appeared on the screen.

**Table 2. Most common categories of dripped fees**

<b>Dripped fee category</b>	<b>Description</b>	<b>Sectors with highest frequency<sup>10</sup></b>
Delivery fee	Fee charged for the delivery or shipping of a product or service (e.g., delivery of a laptop).	Retail (89% of fees)
Additional product suggestions <sup>11</sup>	Fee charged for additional products (related to the main product) suggested by the provider to also purchase (e.g., adding a laptop case to the purchase of a laptop).	Hospitality (46% of fees), retail (34% of fees)
Luggage fee	Fee charged for bringing luggage on transport services (e.g., check-in luggage on flights).	Transport & communication (93% of fees)
Insurance fee	Fee charged for insuring a product or service (e.g., travel insurance, refund and cancellation protection, warranty).	Transport & communication (78% of fees)
Food/drink fee	Fee charged for adding food and/or drink to a service (e.g., hotel breakfast, vouchers at airport).	Transport & communication (50% of fees), hospitality (50% of fees)
Service fee	Fee charged to receive/purchase a service (e.g., booking fees, processing fees, handling fees).	Entertainment (43% of fees), hospitality (37% of fees)
Seat reservation fee	Fee charged for reserving a seat on transport services (e.g., choosing a seat on a flight).	Transport & communication (100% of fees)
Car seat fee	Fee charged for including a car seat in a rented car (e.g., infant seat).	Transport & communication (100% of fees)
Fast track fee	Fee charged for the benefit of receiving preferential treatment in	Entertainment (56% of fees)

<sup>10</sup> In other words, if you look at all dripped fees belonging to a specific category, which sector do most of these dripped fees belong to?

<sup>11</sup> Additional product suggestions are not always true dripped fees: if consumers are presented with similar products they can add to their basket, unless these products are automatically selected by default or mandatory then they are not taking advantage of the consumer's existing commitment to purchase the product they have proceeded with and invested in. This means that consumers are more likely to decline the dripped fees. Additional product suggestions also represent standalone products that are not closely tied to the original product (and thus could be treated as separate purchases rather than an add-on fee).

	relation to a service (e.g., fast track/priority lane at an airport or amusement park to skip queues).	
Customer support fee	Fee charged for expanded or priority access to customer support services	Transport & communication (87% of fees)

Overall, our approach ensured that we sampled the sectors, providers and categories of goods and services that UK consumers are most frequently exposed to. As such, we were confident that our estimates for the prevalence of drip pricing and the harm that the strategy may cause to consumers reflect the experience of the average UK consumer.

### Criteria for assessing harmful dripped fees

Within our definition of drip pricing set out on page 14, there are a range of different features that determine how harmful a dripped fee is. Many dripped fees could be seen as directly providing positive utility to consumers, as the fee is presented as the price paid for a specific service (for example, insurance fees allow more risk-averse consumers to cancel a ticket purchase for a refund in the future or select a more comprehensive product warranty). However, even if the consumer benefits from the service provided (“in exchange” for the dripped fee), the lack of transparency around the total product price paid by consumers and the delayed (“dripped”) nature of the fee means that consumer decision-making might still be biased and consumers could end up spending more on the product than if all fees had been presented upfront during the product selection process.

To understand how consumers may be impacted by dripped fees, we calculated the number of providers that utilise the most harmful types of fees based on the characteristics of the dripped fees in the checkout process. We considered five factors to contribute to the harmfulness of a dripped fee and assessed the severity of harm by measuring the number of criteria that each provider fulfilled. As such, each provider could attain a score (otherwise referred to as “degree of harm”) between 0-5 of least to most harmful. A degree of harm of 0 meant that a provider had no dripped fees that satisfied our criteria of harm while a degree of harm of 5 meant that a provider had dripped fees that satisfied all criteria of harm. Below we describe our criteria:

- **The provider checkout process includes at least one dripped fee that is mandatory:** We consider a mandatory dripped fee to be harmful because (i) it removes consumers’ choice whether they wish to purchase an add-on or not and (ii) makes the base price unattainable. Furthermore, many mandatory fees do not provide added value to the good or service but are solely administrative (e.g., booking fees, service fees).
- **The provider checkout process includes at least one dripped fee greater than 25% of the product price:** The higher the price of the add-on relative to the base price, the larger the discrepancy between the price the consumer believed a good or service cost, and the price they could end up paying. While many higher cost add-ons are optional, they often add value to a good or service and/or consumers may expect them to have been included in the base price (e.g., bringing luggage on a flight). For our framework of dripped fee harm, we selected a 25% threshold as this generally is the upper limit of

dripped fees shown to have a detrimental impact on consumer behaviour in online experiments (Huck, Schmid and Wallace 2013).<sup>12</sup>

- **The provider checkout process includes at least one dripped fee that is optional but pre-selected:** Fees that are optional but automatically added to a basket may be harmful to consumers by appearing to be mandatory, e.g. consumers can choose between a (faster) paid delivery option or a (slower) free delivery option, but the paid delivery option is selected by default. Consumers who complete the purchasing process quickly may not realise that the fee has been added as it goes against their expectations. This practice is by far the least common out of our five criteria of harm.
- **The provider checkout process includes at least one dripped fee that is presented past the halfway point of the checkout process:** The further a consumer has gotten in the checkout process and the more time they have spent purchasing a good or service, the more likely they may be to follow through with a purchase to avoid incurring additional search costs. Our criterion is based on the halfway point of the checkout process as at this point a consumer has likely invested more time already than they have remaining.
- **The provider checkout process includes at least three dripped fees:** We considered providers utilising a large number of dripped fees for one product harmful because (i) it likely widens the gap between the base price and the possible total price a consumer will pay and (ii) it creates multiple opportunities for a consumer to be harmed throughout the checkout process. In other words, the more fees are included in the checkout process, the more cognitive effort is required for the consumer to compare final prices, undermining a consumer's ability to find the best deal. We selected three dripped fees as the criterion for harm as this was the average number of dripped fees per provider in our sample.

For all relevant tables in the findings section, we report estimates based on a subsample of non-delivery dripped fees and the full sample of dripped fees (in parentheses). Delivery fees are the most common type of dripped fee, most consumers expect to pay for delivery (especially for products only sold by a small number of providers) and, if optional, these fees can be seen as providing positive utility (through the consumer's preference for the increased convenience/time saved from being able to purchase products online).<sup>13,14</sup> As Table 3 (in the findings section) shows, removing delivery fees sharply reduces the prevalence of dripped fees in the retail sector (from 84% of providers to 14% of providers). Because delivery fees were only observed in providers in the hospitality and retail sectors, we only include delivery fee

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<sup>12</sup> More specifically, Huck, Schmid and Wallace (2013) found that a two-drip process (the first dripped fee costing 5-15% of the product price, the second costing 10-20% of the price) led to a 25% decrease in consumer surplus. We average the two dripped fees to a single dripped fee costing 25% of the product price.

<sup>13</sup> A YouGov study jointly conducted with the logistics platform Seven Senders found that only 17% of UK consumers expected delivery for online products to always be free, and 52% of UK consumers said that their willingness to pay for delivery depends on the product and its availability: <https://ecommercenews.eu/delivery-costs-most-important-factor-when-choosing-online-stores/>

<sup>14</sup> On the other hand, mandatory fees do not necessarily provide positive utility to consumers, as consumers may feel that the convenience of delivery is not outweighed by the delivery fee (for example, a consumer might prefer to collect a £5 takeaway from the restaurant rather than pay an additional £3 to have it delivered to their house.)



estimates for these two sectors (estimates for the entertainment and transport & communication sectors would remain unchanged for the subsample of non-delivery fees).

## Findings

### Prevalence of dripped fees

Out of the 525 providers across four sectors (entertainment, hospitality, retail, transport & communication) in our sample, slightly less than half (46%) use drip pricing. Dripped fees (other than delivery fees) are relatively uncommon in the retail sector (15% of providers) but occur in more than half of providers in the entertainment (54%), hospitality (56%) and transport & communication (72%) sectors.

As seen in Tables 3 and 4:

- When delivery fees are excluded, only 15% of retail sector providers include dripped fees (mostly additional product suggestions). However, when delivery fees are included, the prevalence of drip pricing in the retail sector increases to 83%.
- 72% of providers in the transport & communication sector include at least one dripped fee, with common dripped fee categories including insurance fees, seat reservation fees and luggage fees.
- 56% of providers in the hospitality sector include at least one dripped fee, with common dripped fee categories including additional product suggestions, service fees and food/drink fees.
- Across non-retail sectors, drip pricing is least common in the entertainment sector (54% of providers in this sector include at least one dripped fee). In particular, this sector includes providers that offer cloud-based services such as music or movie streaming, and pricing for these services typically is based on a flat monthly (or annual) price with no additional fees. The most common dripped fee categories in this sector include service fees, ticket/service delivery fees and insurance fees.

**Table 3. Number of providers with dripped fees by sector**

Sector	Total providers	% providers with 1+ dripped fee	% providers with 1+ non-delivery dripped fee
Entertainment	92	54%	54%
Hospitality	118	70%	56%
Retail	177	83%	15%
Transport & Communication	138	72%	72%
<b>All sectors</b>	<b>525</b>	<b>72%</b>	<b>46%</b>

**Table 4. Most common fee categories (ranked by percentage of providers for each sector)**

<b>Rank</b>	<b>Entertainment</b>	<b>Hospitality</b>	<b>Retail</b>	<b>Transport &amp; communication</b>
1	Service fee (33%)	Delivery fee (28%)	Delivery fee (81%)	Insurance fee (42%)
2	Ticket/service delivery fee (10%)	Additional product suggestions (21%)	Additional product suggestions (7%)	Seat reservation fee (25%)
3	Insurance fee (9%)	Service fee (18%)	Insurance fee (4%)	Luggage fee (24%)
4	Joining or membership fee (7%)	Food/drink fee (17%)	Installation or removal fee (3%)	Customer support fee (13%)

## **Prevalence of harmful dripped fees**

Table 5 shows the distribution of harmful dripped fees (based on fee characteristics set out on page 15) across providers within a sector:

- 28% of providers had no dripped fees that were considered especially harmful based on the predefined criteria.
- Slightly less than half of providers (41%) included dripped fees that met more than one criterion of harm (degree of harm greater than 1). 4% of providers included dripped fees that met almost all criteria of harm (degree of harm equal to 4), and these providers were distributed across all four sectors.
- Out of our five criteria of harm, consumers are most likely to encounter late dripped fees (32% of all providers in our sample), mandatory dripped fees (21% of all providers) and expensive dripped fees (17% of all providers).
- Pre-selected but optional dripped fees are the least common characteristic of dripped fees out of our five criteria of harm (only 1% of providers included these types of dripped fees).

**Table 5. Share of providers for each harm score by sector**

Sector	Harm score					
	0	1	2	3	4	5
Entertainment	46%	2%	15%	32%	5%	0%
Hospitality	30% (30%)	10% (10%)	19% (17%)	23% (37%)	4% (5%)	0% (0%)
Retail	18% (17%)	3% (2%)	6% (20%)	3% (30%)	3% (31%)	0% (1%)
Transport & Communication	28%	8%	33%	28%	4%	0%
<b>All sectors</b>	<b>28% (28%)</b>	<b>6% (5%)</b>	<b>18% (22%)</b>	<b>19% (31%)</b>	<b>4% (14%)</b>	<b>0% (0%)</b>

Note: Figures in parentheses include delivery fees.

**Table 6. Share of providers meeting each criteria of harm by sector**

Sector	1+ mandatory dripped fee <sup>15</sup>	1+ dripped fee >25% product price	Pre-selected & optional fees	1+ dripped fee after 50% done <sup>16</sup>	3+ dripped fees
Entertainment	45%	15%	1%	34%	14%
Hospitality	21% (37%)	13% (15%)	1% (1%)	40% (54%)	19% (21%)
Retail	3% (59%)	8% (37%)	0% (2%)	8% (77%)	6% (31%)
Transport & Communication	8%	32%	1%	57%	44%

<sup>15</sup> Tables 6, 8, 10, 12, 14 and 16 show the percentage of providers within each subsector that meet the criteria listed in the column header: for example, 45% of providers in the entertainment sector in our sample include at least one mandatory dripped fee.

<sup>16</sup> This column refers to dripped fees that appear at least halfway through the checkout process.

<b>All sectors</b>	<b>21% (37%)</b>	<b>17% (27%)</b>	<b>1% (1%)</b>	<b>32% (59%)</b>	<b>20% (29%)</b>
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Note: Figures in parentheses include delivery fees.

## Breakdown of harmful dripped fees: sectoral analysis

In the following section, we present a breakdown of dripped fees for each of the four sectors in our sample. The section for each sector includes two tables: the first shows the distribution of harmful dripped fees for more detailed subsectors, and the second shows the distribution of each criterion of harm for these subsectors. Note that subsector estimates should be treated with caution, as for some subsectors the estimates presented are based on as few as four providers in our sample.

### Breakdown of harmful dripped fees: entertainment

- Within the entertainment sector, consumers purchasing event tickets (93% of providers), cinema tickets (69% of providers) and gym memberships (60% of providers) are more likely to encounter dripped fees that meet more than one criterion of harm.
- Consumers purchasing cinema tickets are more likely than not to encounter fees that are mandatory and late in the checkout process. For instance, one provider charged a mandatory booking fee that made up 6% of the total price and appeared on the second to last page of the checkout process.
- Consumers purchasing gym memberships are more likely than not to encounter mandatory and expensive dripped fees, for example, one provider charged a mandatory joining fee that made up 39% of the base price.
- Almost all providers selling event tickets in our sample include mandatory dripped fees that appear late in the checkout process (these are usually booking or service fees).

**Table 7. Share of providers for each degree of harm (entertainment sector)**

Subsector	Harm score					
	0	1	2	3	4	5
Cultural and sightseeing attractions	36%	8%	36%	12%	8%	0%
Cinema tickets	30%	0%	17%	52%	0%	0%
Event tickets	7%	0%	7%	79%	7%	0%

Gym membership	40%	0%	0%	30%	30%	0%
Digital software	100%	0%	0%	0%	0%	0%

**Table 8. Share of providers meeting each criteria of harm (entertainment sector)**

Subsector	1+ mandatory dripped fee	1+ dripped fee >25% product price	Pre-selected & optional fees	1+ dripped fee after 50% done	3+ dripped fees
Cultural and sightseeing attractions	32%	28%	0%	24%	24%
Cinema tickets	70%	0%	0%	52%	0%
Event tickets	86%	14%	7%	79%	36%
Gym membership	60%	60%	0%	30%	20%
Digital software	0%	0%	0%	0%	0%

### **Breakdown of harmful dripped fees: hospitality**

- Within the hospitality sector, consumers ordering food and drink for delivery are most likely to encounter dripped fees (excluding delivery fees) that meet more than one criterion of harm (41% of providers). In addition, 25% of providers offering package holidays in our sample meet four out of our five criteria of harm. For example, one provider included delivery, service and small order fees that together represented 48% of the base price and were displayed on the 2<sup>nd</sup> page (out of 4) of the transaction process.
- Consumers purchasing food/drinks for delivery are more likely than not to encounter mandatory and late dripped fees (36% and 38% of providers, respectively, after excluding delivery fees).
- Late dripped fees are also found in 40% of providers offering food/drink for in-person dining or takeaway in our sample.

**Table 9. Share of providers for each degree of harm (hospitality sector)**

Subsector	Harm score					
	0	1	2	3	4	5
Hotels & other accommodation	39%	16%	23%	22%	0%	0%
Food/drink delivery order	13% (13%)	3% (3%)	5% (3%)	28% (69%)	8% (13%)	0%
Food/drink in-person order	60%	0%	0%	40%	0%	0%
Package holidays	0%	50%	25%	0%	25%	0%

Note: Figures in parentheses include delivery fees.

**Table 10. Share of providers meeting each criteria of harm (hospitality sector)**

Subsector	1+ mandatory dripped fee	1+ dripped fee >25% product price	Pre-selected & optional fees	1+ dripped fee after 50% done	3+ dripped fees
Hotels & other accommodation	14%	12%	0%	41%	22%
Food/drink delivery order	36% (84%)	8% (13%)	3% (0%)	38% (82%)	13% (18%)
Food/drink in-person order	0%	40%	0%	40%	0%
Package holidays	25%	50%	0%	25%	50%

Note: Figures in parentheses include delivery fees.

## Breakdown of harmful dripped fees: retail

- Within the retail sector, once delivery fees are excluded, consumers purchasing electronics are most likely to encounter multiple criteria of harm, in particular an above-average number of dripped fees or dripped fees that occur late in the checkout process.
- For instance, consumers purchasing laptops from one provider would encounter additional product suggestions (such as a deluxe internet security software package) as well as insurance fees (such as a total warranty extension).

Table 11. Share of providers for each harm score, by retail subsector

Subsector	Harm score					
	0	1	2	3	4	5
Clothing & Footwear	21% (20%)	0% (2%)	5% (20%)	6% (32%)	0% (26%)	0% (2%)
Household goods	13% (13%)	6% (2%)	10% (13%)	2% (33%)	6% (37%)	0% (2%)
Digital content subscription	94%	0%	0%	6%	0%	0%
Health and beauty goods	0% (0%)	0% (0%)	0% (6%)	0% (13%)	0% (81%)	0% (0%)
Consumer electronics	8% (8%)	31% (8%)	15% (46%)	8% (31%)	0% (8%)	0% (0%)
Groceries	9% (9%)	0% (0%)	9% (9%)	0% (64%)	0% (18%)	0% (0%)
Games & toys	20% (20%)	0% (10%)	0% (70%)	0% (0%)	0% (0%)	0% (0%)
Sports & outdoors	50% (50%)	0% (0%)	0% (13%)	0% (25%)	0% (13%)	0% (0%)

Note: Figures in parentheses include delivery fees.



**Table 12. Share of providers meeting each criteria of harm (retail sector)**

Subsector	1+ mandatory dripped fee	1+ dripped fee >25% product price	Pre-selected & optional fees	1+ dripped fee after 50% done	3+ dripped fees
Clothing & Footwear	2% (56%)	6% (35%)	0% (2%)	9% (74%)	3% (29%)
Household goods	8% (65%)	13% (44%)	0% (4%)	10% (83%)	2% (29%)
Digital content subscription	0%	6%	0%	6%	6%
Health and beauty goods	0% (94%)	0% (88%)	0% (0%)	0% (94%)	0% (56%)
Consumer electronics	0% (31%)	15% (15%)	0% (0%)	15% (85%)	38% (54%)
Groceries	0% (91%)	9% (81%)	0% (0%)	0% (82%)	9% (9%)
Games & toys	0% (0%)	0% (0%)	0% (0%)	0% (70%)	0% (10%)
Sports & outdoors	0% (38%)	0% (25%)	0% (0%)	0% (38%)	0% (25%)

Note: Figures in parentheses include delivery fees.

### **Breakdown of harmful dripped fees: transport & communication**

- Within the transport & communication sector, consumers purchasing flight tickets (81% of providers), sending a parcel (55%) and purchasing bus tickets (45%) are most likely to encounter dripped fees that meet more than one criterion of harm. For example, consumers purchasing bus tickets from one provider would encounter a booking fee that is mandatory and appears on the second to last page of the checkout process.
- Out of all subsectors, providers selling bus tickets are the most likely to have dripped fees that meet most criteria of harm (11% of providers).
- Consumers purchasing flight tickets are likely to encounter late dripped fees or an above-average number of dripped fees (80% and 53% of providers, respectively)
- Consumers renting cars are also more likely than not to encounter late dripped fees or an above-average number of dripped fees, while late fees are also common in providers offering letter/parcel delivery services.

- Mandatory fees are most common in providers selling bus tickets (33% of providers).

**Table 13. Share of providers for each harm score, by retail subsector**

Subsector	Harm score					
	0	1	2	3	4	5
Flight tickets	15%	3%	37%	44%	0%	0%
Car rental	7%	22%	56%	11%	4%	0%
Bus tickets	56%	0%	6%	28%	11%	0%
Train tickets	60%	13%	13%	7%	7%	0%
Letter/parcel delivery	33%	11%	33%	22%	0%	0%
Mobile plan	83%	0%	17%	0%	0%	0%

**Table 14. Share of providers meeting each criteria of harm (transport & communication sector)**

Subsector	1+ mandatory dripped fee	1+ dripped fee >25% product price	Pre-selected & optional fees	1+ dripped fee after 50% done	3+ dripped fees
Flight tickets	3%	42%	2%	80%	53%
Car rental	4%	30%	4%	52%	67%
Bus ticket	33%	22%	0%	39%	33%
Train tickets	13%	13%	0%	20%	20%
Letter/parcel delivery	0%	22%	0%	56%	0%
Mobile plan	0%	17%	0%	0%	17%

## Examining individual criterion of harm

### Mandatory dripped fees

- Within each provider's checkout process, very few dripped fees (5%) within the transport & communication sector are mandatory.
- Excluding delivery fees, mandatory dripped fees are most commonly found in the entertainment sector (45% of providers have at least one mandatory dripped fee) and least commonly found in the transport & communication sector (only 8% of providers have at least one mandatory dripped fee).
- A larger share of dripped fees within providers across the other three sectors are mandatory, with dripped fees in the entertainment sector (e.g., service or booking fees) more likely to be mandatory than optional (70% of dripped fees for each provider are mandatory). For example, for a UK event tickets provider, consumers purchasing a £5 ticket to a disco night also had to pay a £3.95 booking fee (and this was the only dripped fee presented to consumers).

**Table 15. Prevalence of mandatory fees by sector**

Sector	Average number of mandatory dripped fees per provider	Share of mandatory dripped fees per provider <sup>17</sup>	Share of providers with 1+ mandatory dripped fee
Entertainment	0.5	70%	45%
Hospitality	0.3 (0.6)	33% (49%)	21% (37%)
Retail	0.1 (0.7)	21% (44%)	3% (59%)
Transport & Communication	0.1	5%	8%
<b>All sectors</b>	<b>0.2 (0.5)</b>	<b>28% (38%)</b>	<b>21% (37%)</b>

Note: Figures in parentheses include delivery fees.

<sup>17</sup> This refers to the percentage of dripped fees within each provider that are mandatory (the remainder are optional dripped fees).

## Cost of dripped fees relative to product price

- More expensive dripped fees are concentrated in the retail and transport & communication sectors. In particular, around one-third of providers in the transport & communication sector include at least one dripped fee costing more than 25% of the product price (twice the prevalence of the entertainment and hospitality sectors).
- The median dripped fee ranges from 10% of the product price for providers in the hospitality sector to 17% for providers in the retail sector.
- Consumers purchasing gym memberships and flight tickets are among most likely to encounter dripped fees costing at least 50% of the product price (50% and 22% of providers, respectively). For example, for an intra-Europe flight costing £66.99, one airline charges consumers £38.99 to bring a 26kg checked bag.

**Table 16. Prevalence of costly dripped fees by sector**

Sector	Share of providers with 1+ dripped fee >10% product price	Share of providers with 1+ dripped fee >25% product price	Share of providers with 1+ dripped fee >50% product price
Entertainment	35%	15%	9%
Hospitality	29% (38%)	13% (15%)	6% (7%)
Retail	10% (61%)	8% (37%)	3% (14%)
Transport & Communication	57%	32%	17%
<b>All sectors</b>	<b>31% (51%)</b>	<b>17% (27%)</b>	<b>8% (12%)</b>

Note: Figures in parentheses include delivery fees.

## Dripped fees that are both pre-selected and optional

- Very few providers across all four sectors have pre-selected and optional dripped fees.
- Out of the six providers in our sample with pre-selected and optional fees, examples included a pre-selected takeaway bag fee (£0.10) for a food/drink delivery order, a pre-selected roadside assistance service package for a car rental company (£20.46) and a pre-selected more expensive nominated-day delivery option (£4.99) when less expensive delivery options were available.

**Table 17. Prevalence of pre-selected and optional fees by sector**

Sector	Share of providers with pre-selected and optional fees
Entertainment	1%
Hospitality	1% (1%)
Retail	0% (2%)
Transport & Communication	1%
<b>All sectors</b>	<b>1% (1%)</b>

Note: Figures in parentheses include delivery fees.

### **Dripped fees that appear late in the checkout process**

- Excluding delivery fees, across the four sectors in our sample, the transport & communication sector has the highest prevalence of fees appearing at least halfway through the checkout process (57% of providers), and the entertainment sector has the lowest prevalence (34%).
- Across subsectors in the entertainment, retail and transport & communication sectors, air travel (80% of providers) and event tickets (79%) have the highest share of providers with fees appearing at least halfway through the checkout process. For example, on one event ticket provider’s website, consumers were informed of a £2.95 admin fee (for a £175 music festival ticket) on the page view immediately before they were required to enter their payment details.

**Table 18. Prevalence of fees appearing late in the checkout process by sector**

<b>Sector</b>	<b>Share of providers with 1+ dripped fee after 50% done</b>	<b>Share of providers with 1+ dripped fee after 75% done</b>	<b>Share of providers with 1+ dripped fee after 90% done</b>
Entertainment	34%	12%	3%
Hospitality	40% (54%)	17% (28%)	3% (3%)
Retail	8% (77%)	4% (53%)	3% (12%)
Transport & Communication	57%	29%	6%
<b>All sectors</b>	<b>32% (59%)</b>	<b>15% (34%)</b>	<b>4% (7%)</b>

Note: Figures in parentheses include delivery fees.

### **Checkout process includes an above-average number of dripped fees**

- Most providers only have one or two dripped fees in their checkout process, and the average (mean) number of dripped fees per provider is 2.5.
- Providers in the transport & communication sector are most likely to have an above-average number of dripped fees (almost half have at least three dripped fees, and 22% have at least six dripped fees).
- On the other hand, providers in the entertainment sector are the least likely to have an above-average number of dripped fees (only 14% of providers have at least three fees).
- Across subsectors, consumers renting cars or purchasing flight tickets are the most likely to encounter checkout processes with at least three dripped fees (67% and 53% of providers, respectively). For example, consumers renting a car from one popular provider (total cost £466) would encounter optional dripped fees for satellite navigation (£95), child seats (three different types, each costing £90) and a carbon offset donation (£1.25).

**Table 19. Share of providers with an above-average number of dripped fees by sector**

<b>Sector</b>	<b>Median number of dripped fees per provider</b>	<b>Share of providers with 3+ dripped fees</b>	<b>Share of providers with 6+ dripped fees</b>
Entertainment	1	14%	1%
Hospitality	1 (1)	19% (21%)	13% (13%)
Retail	0 (2)	6% (31%)	2% (9%)
Transport & Communication	2	44%	22%
<b>All sectors</b>	<b>1 (2)</b>	<b>20% (29%)</b>	<b>12% (12%)</b>

Note: Figures in parentheses include delivery fees.

## Comparing mobile applications and desktop websites

Table 20 shows the prevalence of dripped fees by sector for the 45 mobile apps in our sample.

- 31 out of 45 providers (69%) included at least one dripped fee in the checkout process, though for providers in the entertainment sector prevalence of dripped fees was only 22%.
- Compared to all providers in our sample, providers on mobile applications were more likely to include 3+ dripped fees in the checkout process (27% compared to 20%), have at least one dripped fee costing at least 25% of the product price (33% compared to 17%) and have at least one dripped fee at least halfway through the checkout process (49% compared to 32%).
- Providers on mobile applications were equally likely to have at least one mandatory dripped fee.

However, our sample for providers on mobile apps was much smaller than our sample of providers on desktop websites (due to concentrated market share among popular apps), and as a result these findings might not be directly comparable. In particular, when we compared dripped fees for the 16 providers in our sample with both desktop websites and mobile apps, we found that the dripped fees included in the checkout process were exactly the same, with the only difference in the number of pages in the checkout process. 11 of the 16 providers' mobile apps had longer checkout processes, though dripped fees were always presented in

the same order and with the same surrounding text across both mobile apps and desktop websites.

**Table 20. Share of providers for each harm score by sector (mobile apps only)**

Sector	Harm score					
	0	1	2	3	4	5
Entertainment	78%	0%	0%	22%	0%	0%
Hospitality	31% (31%)	8% (0%)	8% (15%)	38% (38%)	15% (15%)	0% (0%)
Retail	7% (7%)	7% (0%)	33% (7%)	27% (33%)	13% (47%)	0% (7%)
Transport & Communication	25%	13%	38%	25%	0%	0%
<b>All sectors</b>	<b>31% (31%)</b>	<b>7% (2%)</b>	<b>20% (13%)</b>	<b>29% (31%)</b>	<b>9% (20%)</b>	<b>0% (2%)</b>

Note: Figures in parentheses include delivery fees.

**Table 21. Share of providers meeting each criteria of harm by sector (mobile apps only)**

Sector	1+ mandatory dripped fee	1+ dripped fee >25% product price	Pre-selected & optional fees	1+ dripped fee after 50% done <sup>18</sup>	3+ dripped fees
Entertainment	22%	0%	0%	22%	11%
Hospitality	31% (38%)	38% (38%)	8% (7%)	54% (54%)	23% (23%)
Retail	20% (80%)	53% (60%)	0% (7%)	53% (93%)	20% (47%)
Transport & Communication	0%	25%	0%	63%	63%

<sup>18</sup> This column refers to dripped fees that appear at least halfway through the checkout process.



<b>All sectors</b>	<b>20% (42%)</b>	<b>33% (36%)</b>	<b>2% (4%)</b>	<b>49% (62%)</b>	<b>27% (36%)</b>
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Note: Figures in parentheses include delivery fees.

## Prevalence of harmful fees by category of fee

- Being late in the checkout process is the most common criterion of harm (applying to 66% of all dripped fees), followed by costing at least 25% of the product price (31% of all dripped fees).
- Service fees are the most likely fee category to be mandatory (all but one service fee in our sample was mandatory), and around half of these fees are constant in value (i.e., did not vary based on the price of the product purchased).
- Luggage fees and fast track fees are the most likely fee categories to cost more than 25% of the product price (76% and 59% of fees, respectively).
- The highest proportion of delivery fees are found in the 2<sup>nd</sup> half of the checkout process (93%, compared to 66% across all fees).

Table 22. Share of dripped fees meeting each criterion of harm, by top 10 categories of fees<sup>19</sup>

Fee category	Total fees	Mandatory?	>25% product price	Pre-selected and optional	After 50% checkout done
Delivery Fee	369	42%	31%	1%	93%
Additional Product Suggestions	144	0%	38%	0%	42%
Luggage Fee	143	0%	76%	0%	45%
Insurance Fee	142	0%	24%	0%	57%
Food/Drink Fee	102	0%	5%	0%	77%
Service Fee	70	99%	4%	0%	74%
Seat Reservation Fee	62	0%	26%	0%	50%

<sup>19</sup> The fifth criteria of harm (at least three dripped fees) is not included in this breakdown as this can only be counted at the provider level and not the individual dripped fee level.

Car Seat Fee	35	0%	17%	0%	49%
Fast Track Fee	32	0%	59%	0%	44%
Customer Support Fee	31	3%	13%	3%	71%
<b>All fees</b>	<b>1,200</b>	<b>19%</b>	<b>31%</b>	<b>0%</b>	<b>66%</b>

### Breakdown of fee categories: entertainment

- Across providers in the entertainment sector, service fees are the most common category of dripped fee, followed by fast track fees.
- The majority of all service fees across subsectors meet more than one criterion of harm.
- Other examples of harmful dripped fees include ticket/service delivery fees (for consumers purchasing event tickets) and joining/membership fees (only encountered by consumers purchasing gym memberships).
- On the other hand, most examples of insurance fees, fast track fees and ticket/service delivery fees (for tickets to cultural events and experiences) meet no more than one criterion of harm.

**Table 23. Number of dripped fees and share of harmful dripped fees by fee category (entertainment sector)<sup>20</sup>**

Fee category	Cinema ticket	Cultural events and experiences	Event ticket	Gym membership
Service Fee	16 (75%)	8 (50%)	8 (50%)	0 (0%)
Fast Track Fee	0 (0%)	16 (6%)	3 (0%)	0 (0%)
Ticket/Service Delivery Fee	1 (100%)	10 (0%)	6 (83%)	0 (0%)
Insurance Fee	0 (0%)	2 (0%)	6 (17%)	0 (0%)

<sup>20</sup> For each cell value in this table, the first number refers to the total number of fees and the second number refers to the share of harmful dripped fees (relative to the total number of fees). For example, there are 10 examples of service fees across providers selling cinema tickets in our sample, and out of these 10 fees, 6 meet more than one criterion of harm (60%). We exclude any category of fee with fewer than three appearances in our sample.

Additional Product Suggestions	0 (0%)	0 (0%)	3 (0%)	4 (0%)
Joining/Membership Fee	0 (0%)	0 (0%)	0 (0%)	6 (100%)

### Breakdown of fee categories: hospitality

- The most common type of dripped fee encountered in providers within the hospitality category (after excluding delivery fees) is a suggestion to purchase additional related products.
- The most common type of dripped fee meeting more than one criterion of harm is service fees (encountered by consumers ordering food/drinks for delivery or booking hotels and other accommodation).
- Dripped fees encountered by consumers ordering food/drinks for delivery in general tend to be more harmful than fees found in other subsectors.
- The majority of service fees and taxes found in the checkout process for hotels and other accommodation meet more than one criterion of harm, though these fees are relatively less common.

**Table 24. Number of dripped fees and share of harmful dripped fees by fee category (hospitality sector, excluding delivery fees)<sup>21</sup>**

Fee category	Food/drink delivery order	Food/drink in-person order	Hotels & other accommodation	Package holidays
Additional Product Suggestions	21 (0%)	3 (100%)	35 (11%)	4 (50%)
Food/Drink Fee	0 (0%)	0 (0%)	51 (10%)	0 (0%)
Service Fee	19 (84%)	0 (0%)	8 (75%)	0 (0%)
Luggage Fee	0 (0%)	0 (0%)	0 (0%)	11 (9%)
Insurance Fee	0 (0%)	0 (0%)	7 (0%)	3 (0%)
Check-in Fee	0 (0%)	0 (0%)	9 (0%)	1 (0%)

<sup>21</sup> Only includes dripped fee categories with at least 10 fees

### Breakdown of fee categories: retail

- As with hospitality, the most common dripped fee encountered in providers within the retail sector is a suggestion to purchase additional products (though none of these fees meet more than one criterion of harm).
- The most harmful types of dripped fees are taxes, joining/membership fees (such as an annual subscription for free delivery) and service fees, though these fees were only encountered in 9 out of 177 providers in our sample.

**Table 25. Number of dripped fees and share of harmful dripped fees by fee category (retail sector, excluding delivery fees)**

Fee category	Clothing & footwear	Consumer electronics	Groceries	Household goods
Additional Product Suggestions	11 (0%)	21 (0%)	10 (0%)	6 (0%)
Insurance Fee	0 (0%)	12 (0%)	0 (0%)	3 (0%)
Installation Fee	0 (0%)	3 (0%)	0 (0%)	4 (0%)
Taxes	1 (100%)	0 (0%)	0 (0%)	3 (100%)
Customer Support Fee	0 (0%)	2 (0%)	0 (0%)	1 (0%)
Joining/Membership Fee	3 (100%)	0 (0%)	0 (0%)	0 (0%)
Service Fee	0 (0%)	0 (0%)	0 (0%)	1 (100%)

### Breakdown of fee categories: transport & communication

- Across providers in the transport & communication sector, luggage fees are the most common category of dripped fee, followed by insurance fees and seat reservation fees.
- The majority of all service fees across subsectors meet more than one criterion of harm, though this type of dripped fee is generally uncommon (only ten appearances in our sample).
- For all other dripped fee categories in this sector, the majority of these fees do not meet more than one criterion of harm: around one-third of luggage fees encountered by consumers purchasing flight tickets are harmful (degree of harm greater than 1), and around one-fifth of insurance fees are harmful.

- Across all providers offering mobile plans, only three dripped fees were identified and none of these met more than one criterion of harm.

**Table 26. Number of dripped fees and share of harmful dripped fees by fee category (transport & communication sector)**

<b>Fee category</b>	<b>Air travel</b>	<b>Bus ticket</b>	<b>Car rental</b>	<b>Letter/parcel delivery</b>	<b>Train tickets</b>
Luggage Fee	128 (34%)	4 (0%)	0 (0%)	0 (0%)	0 (0%)
Insurance Fee	69 (23%)	2 (0%)	30 (13%)	3 (0%)	5 (20%)
Seat Reservation Fee	56 (7%)	6 (0%)	0 (0%)	0 (0%)	0 (0%)
Food/Drink Fee	50 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Car Seat Fee	0 (0%)	0 (0%)	35 (17%)	0 (0%)	0 (0%)
Customer Support Fee	21 (14%)	0 (0%)	5 (0%)	0 (0%)	0 (0%)
Additional Product Suggestions	4 (25%)	2 (0%)	2 (0%)	0 (0%)	6 (0%)
Environmental Fee	13 (8%)	0 (0%)	2 (0%)	0 (0%)	0 (0%)
GPS Fee	0 (0%)	0 (0%)	14 (7%)	0 (0%)	0 (0%)
Ticket/Service Delivery Fee	3 (0%)	5 (0%)	0 (0%)	1 (0%)	3 (0%)
Fast Track Fee	12 (17%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Service Fee	2 (50%)	6 (67%)	0 (0%)	0 (0%)	2 (50%)
Additional Driver Fee	0	0	10	0	0

## Prevalence of harmful dripped fees by price range<sup>22</sup>

- 27% of products in our sample did not include fees that met any criterion of harm.
- For the full sample, consumers purchasing products costing less than £50 were much more likely to encounter harmful dripped fees (around 60% of products had fees that met at least three criteria of harm). However, when delivery fees are removed, prevalence falls to 30% for products less than £25 and 38% for products costing between £25 and £50, in line with prevalence for other price ranges. As such, there is not a clear relationship between the price of a product and the prevalence of dripped fees.

Table 27. Share of products for each harm score by product price range

Price range	Harm score					
	0	1	2	3	4	5
Price < £25	33% (33%)	1% (1%)	8% (8%)	19% (30%)	3% (28%)	0% (1%)
Price between £25-£50	16% (16%)	5% (6%)	13% (19%)	22% (49%)	3% (10%)	0% (1%)
Price between £50-£100	31% (31%)	2% (2%)	19% (30%)	22% (30%)	3% (4%)	0% (0%)
Price > £100	26% (26%)	15% (12%)	25% (33%)	15% (27%)	2% (3%)	0% (0%)
All	<b>27%</b> <b>(27%)</b>	<b>7% (6%)</b>	<b>17%</b> <b>(23%)</b>	<b>19%</b> <b>(32%)</b>	<b>3% (12%)</b>	<b>0% (0%)</b>

Note: Figures in parentheses include delivery fees.

## Prevalence of harmful dripped fees by product purchase frequency

In addition to exploring the relationship between product prices and prevalence/harm of dripped fees, we can also test if products purchased less frequently by consumers are more likely to have harmful dripped fees. If consumers are familiar with different providers for a specific product they want to buy, when they encounter an unexpected or harmful dripped fee on one provider's checkout process, they might be more likely to switch to another provider. On the other hand, if consumers are not sure how many other providers might offer the specific

<sup>22</sup> The analysis that has been conducted in relation to price range has been done so on a product- rather than a provider-level since prices are assigned to specific products rather than providers.

product, then their search costs will potentially be higher and they are more likely to continue with the first provider despite the cost of dripped fees incurred.

Because there are no publicly available comprehensive datasets that provide information in how often UK households purchase specific products or services, we use the share of UK households which purchased the product in the past two weeks as a proxy.<sup>23</sup> It is reasonable to expect these two variables to be correlated: if a relatively small number of households from a representative sample purchased the product in the past two weeks, the less frequently the average household is likely to purchase the product over the course of one year.

As Table 28 shows:

- Products that are purchased less frequently tend to have more harmful fees. If delivery fees are excluded, for products purchased by fewer than 5% of households in the past two weeks, 62% of these products/services have dripped fees meeting more than one criterion of harm.
- In comparison, only 26% of products/services purchased by more than 5% of households in the past two weeks have dripped fees meeting more than one criterion of harm.

**Table 28. Share of products for each harm score by purchase frequency range**

Share of households	Harm score					
	0	1	2	3	4	5
0-1%	15% (15%)	20% (15%)	40% (48%)	8% (20%)	3% (3%)	0% (0%)
1-3%	25% (25%)	6% (4%)	16% (22%)	31% (35%)	6% (14%)	0% (0%)
3-5%	16% (16%)	4% (4%)	34% (38%)	36% (39%)	0% (2%)	0% (0%)
5-10%	36% (36%)	8% (6%)	8% (19%)	10% (23%)	5% (17%)	0% (0%)
Greater than 10%	31% (30%)	6% (6%)	10% (15%)	14% (33%)	3% (16%)	0% (1%)
All	<b>27% (27%)</b>	<b>7% (6%)</b>	<b>17% (23%)</b>	<b>19% (32%)</b>	<b>3% (12%)</b>	<b>0% (0%)</b>

Note: Figures in parentheses include delivery fees.

<sup>23</sup> This data is taken from the ONS Living Costs and Food Survey:

<https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/expenditure/bulletins/familyspendingintheuk/april2021tomarch2022>.

## Comparing dripped fees across providers for the same product

We specified eight products in our sample that would be purchased across multiple providers to effectively compare the cost of dripped fees to consumers when deciding which online provider to use. These include the following:

- Monthly off-peak gym memberships
- Weeknight cinema tickets for a blockbuster film
- 1-night hotel stays
- Weeknight dinner delivery for one person
- Economy flight ticket from London to Amsterdam
- Compact car rental for 1 day
- Paperback book
- High-performance laptop (price >£1,500)

For all eight products, we found that most mandatory fee categories were consistent across providers, which aligns with academic evidence showing that drip pricing strategies encourage providers towards a distortive equilibrium based on competing on base price as opposed to final price (Blake et al. 2021). However, there was some variation in optional fee categories and the sizes of dripped fees relative to the base product price. We present two example case studies (cinema tickets and gym memberships) below.

**Table 29. Case study: Cinema tickets**

Provider	Base price	Mandatory booking fee	Dripped fee > 25% of base price	Late dripped fee	Pre-selected and optional	Other optional dripped fees?
Arc Cinema	£8.95	-	-	-	-	-
Brewery Arts	£9.50	-	-	-	-	-
Cineworld	£6.99	£0.95	No	No	No	-
Empire Cinemas	£10.99	£0.70	No	No	No	-
Everyman Cinema	£13.35	£2.25	No	Yes	No	-
Genesis Cinema	£7.50	£1	No	No	No	-



Merlin Cinemas	£8.50	£0.75	No	Yes	No	-
Odeon	£27.50	£1	No	Yes	No	-
Picturehouse Cinemas	£12.30	£0.70	No	No	No	-
Savoy Cinema	£7.50	£0.70	No	Yes	No	-
Showcase Cinemas	£11.50	£1	No	Yes	No	-
Vue	£6.99	-	-	-	-	-
Waterfront Cinema	£8.70	-	-	-	-	-

Our sample included 13 different cinemas, representing a mix of large national chains, smaller regional chains and independent cinemas. The majority (9 of 13) of providers required users to pay a booking fee when purchasing a ticket online for a blockbuster movie (the Super Mario Bros. movie) for a weekday showing, though there was not a correlation between the presence of a booking fee and either i) the size of the cinema chain, or ii) the base ticket price. The dripped fee tended to be relatively small compared to the ticket price (no more than £2 in all cases). All providers allowed users to choose a specific seat in the theatre. However, some providers displayed the booking fee on this seat selection page, while other providers only displayed the base ticket price and only added the booking fee on the checkout page when the user was required to enter personal details.

**Table 30. Case study: Gym memberships**

Provider	Base price	Joining or Membership Fee	Dripped fee > 25% of base price	Late dripped fee	Pre-selected and optional	Other optional dripped fees?
Bannatyne's	£55.99	£25	No	No	No	Spa package, towel hire
Energie Fitness	£31.99	£29.99	Yes	No	No	
Gold's Gym	£29.99	£15	Yes	Yes	No	

Gym Group	£35.99	£15	Yes	No	No	Yanga Sports Water
Jetts Fitness	£49.95	£19.50	Yes	No	No	
Puregym	£25.99	£15	Yes	Yes	No	Unlimited Sports Water, Buddy Access, Extended Class Booking
Snap Fitness	£39.99	-	-	-	-	-
Virgin Active	£69	-	-	-	-	-

Our sample included eight different gym chains that offered an off-peak monthly membership. Out of these eight chains, six required users to pay a joining or membership fee when signing up online, and these fees were relatively large compared to the actual monthly membership cost. However, most of these fees were communicated early in the checkout process, with only one fee first introduced after the user had completed more than 2/3 of the checkout process. A few gym chains also listed optional add-ons (including sports water, towel hire and the ability to bring friends to the gym), though these types of dripped fees were not consistently found across gym chains in our sample.

## Total amount of spending influenced by dripped fees

UK consumers spent a total of £106 billion on online retail platforms in 2022, representing one-quarter of all retail spending and an increase of over 40% since 2019.<sup>24</sup> With our research finding that drip pricing can be found in nearly half of providers across the entertainment, hospitality, retail and transport & communication sectors, it is possible that consumers who are exposed to dripped fees when shopping online are negatively impacted by making a product purchase that is more expensive than what would have been made if the prices of the dripped fees had been known upfront (some consumers may have forgone the purchase entirely had they originally known about the dripped fees).

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<sup>24</sup> <https://www.retailresearch.org/online-retail.html>

We can try to estimate the total amount of spending influenced by drip pricing strategies through an indicative model described below:

1. For each product in our sample, we start with total spending by UK consumers in 2022, adjusted for the proportion of spending which takes place online.<sup>25</sup> For most products (both goods and services), we apply the proportion of Internet sales relative to all sales based on the ONS Retail Sales Index.<sup>26</sup> For a small subset of services, we assume that 90% of UK consumers purchase these online.<sup>27</sup> These include air fare (international or within UK); hire of self-drive cars, vans, bicycles; holiday in the UK; Internet subscription fees; live entertainment (theatres, concerts, shows); mobile phone accounts/purchases; package holidays abroad; and entertainment packages.
2. To weigh spending more heavily for products that are purchased less frequently, we factor in the z-score of the inverse share of UK households which purchased the product within a two-week window.<sup>28,29</sup> If products are purchased less frequently by consumers, dripped fees for these products are likely to be more harmful to consumers. This is because if consumers are less familiar with the different types of dripped fees a provider might include in its checkout process, then consumers might be less able to keep a mental sum of the “true” price of the product and thus more susceptible to paying a higher price.
3. We next factor in the proportion of providers (for each product) that include dripped fees in their checkout process (this excludes from our model consumer spending on providers that do not include dripped fees). We can either use the simple average (dividing the number of providers that include dripped fees by the total number of providers) or a weighed average (using data on site visits from UK-based individuals between February and April 2023). Site visits are broadly indicative of a provider’s market share; all else equal, providers that attract a greater number of visitors are likely to have higher turnover compared to providers that attract a smaller number of visitors. Note that in this step, we are also assuming that consumers are equally likely to purchase a product with the provider across all products sold by the provider.<sup>30</sup>

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<sup>25</sup> Each product in our sample was mapped to a specific code in the UN Classification of Individual Consumption According to Purpose (COICOP), which used by the ONS when reporting estimates of household expenditures.

<sup>26</sup> <https://www.ons.gov.uk/businessindustryandtrade/retailindustry/datasets/retailsalesindexinternetsales>

<sup>27</sup> While it is still possible to purchase these services in person (for example, going to a travel agent to buy flight tickets), this has become increasingly uncommon in recent years due to the convenience and time saved from online purchases. In addition, we were not able to find any publicly-available comprehensive dataset that lists the proportion of Internet sales for different services.

<sup>28</sup> A z-score, also known as a standard score, is a statistical measure that helps us understand how far away a particular data point is from the mean of a dataset and in what direction.

<sup>29</sup> <https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/expenditure/datasets/familyspendingworkbook1detailedexpenditureandtrends>

<sup>30</sup> For example, if a retail provider sells furniture and household textiles and there are 1 million unique visitors to the provider’s website from the UK, we assign the “weight” of the 1 million unique visitors to both furniture and household textiles. This captures the fact that a provider typically applies the same business (marketing/pricing) model across all products it sells, rather than adopting a product-specific approach.

4. To capture the relationship between harmful dripped fees and the likelihood that dripped fees are selected, we factor in the average welfare loss for consumers who purchase products with dripped fees (based on the average degree of harm). In other words, we assume that if a provider has dripped fees with more harmful characteristics, then consumers are more likely to select these dripped fees during the checkout process. For simplicity, we assume that the average welfare loss is 10% (for consumers who purchase a product with dripped fees with at least one harmful characteristic, i.e. degree of harm equal to 1), 20% (for consumers who purchase a product with dripped fees with at least two harmful characteristics), etc. up to 50% for five harmful characteristics (i.e. degree of harm equal to five). While we were not able to find previous research that provided quantitative estimates on how consumer behaviour or welfare is impacted by specific characteristics of dripped fees, our assumption for this range of values is somewhat qualitatively similar to the estimates presented in Office of Fair Trading (2013), which included one scenario of dripped fees that combined multiple criteria of harm in an experimental setting.
5. The above scale of harm is applied by taking a 10% baseline welfare loss assumption and multiplying it by the average degree of harm for each type of fee. For example, if a specific type of fee had, on average, a degree of harm of 1.4 (i.e., this fee most frequently met 1 or 2 criteria of harm), the 10% baseline assumption is multiplied by 1.4 to arrive at an estimated welfare loss of 14% on average. If another type of fee had a degree of harm of 2 on average, the 10% baseline assumption is multiplied by 2 to arrive at a 20% average consumer welfare loss for this type of fee.
6. Finally, we incorporate the price of the average dripped fee relative to the base product price. This yields an estimate of the total online spending by UK consumers due to exposure to dripped fees.

As an example, for the product category “Live entertainment: theatre, concerts, shows”:

**£56 million** (Additional consumer spending) = **£2.5 billion** (total expenditures) x **90%** (proportion of spending which takes place online) x **1.17** (weight based on inverse purchase frequency) x **95%** (weighed share of providers that include dripped fees) x **10%** (baseline welfare loss due to dripped fees) x **1.4** (average degree of harm) x **16%** (average cost of dripped fees relative to product price)

**Table 31. Total amount of UK consumer spending attributed to dripped fees (excluding delivery fees), by sector<sup>31</sup>**

Sector	Additional consumer spending online
Entertainment	£266.2m
Hospitality	£389.4m
Retail	£478.7m
Transport & Communication	£473.8m
<b>All sectors</b>	<b>£1.6b</b>

**Table 32. Total amount of UK consumer spending attributed to dripped fees (alternative scenarios)**

Alternative scenarios	Total additional consumer spending
Consumer behaviour is influenced by dripped delivery fees (in addition to non-delivery fees)	£3.5 billion
Expensive dripped fees reduce (instead of increase) the likelihood that consumers purchase a product with dripped fees	£1.4 billion
3+ dripped fees in a checkout process reduces (instead of increases) the likelihood that consumers purchase a product with dripped fees	£1.3 billion
Both expensive dripped fees and 3+ dripped fees in a checkout process reduce the likelihood that consumers purchase a product with dripped fees	£1.2 billion
Baseline likelihood of consumers purchasing a product with dripped fees with at least one harmful characteristic reduced from 10% to 5%	£803 million

<sup>31</sup> Full calculations for additional consumer spending online within each of the four sectors are detailed in Tables 37-40 in the Appendix.

Additional harmful characteristics of dripped fees do not increase the likelihood of purchasing a product with dripped fees <sup>32</sup>	£595 million
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Based on the indicative model described above, we estimate that between £595 million and £3.5 billion of additional UK consumer spending in 2022 (£1.6 billion in our baseline scenario) arose from dripped fees.

### Limitations

- While our model focuses specifically on the total amount of spending arose from dripped fees, the estimates presented do not capture the true total detriment to UK consumers, as we do not include the additional search costs potentially incurred by consumers. To date little evidence exists on either 1) the proportion of consumers that choose to search for other providers if dripped fees are initially encountered and 2) the amount of time spent reviewing different providers and comparing prices.
- We also assume all consumers respond to dripped fees in the same way, but in practice there may be significant variation in behavioural responses depending on the product, provider (page layout/design) or consumer awareness/expectations.
- Finally, since we average across all dripped fees in a provider’s checkout process, we do not capture the impact of dripped fees that are most commonly selected by consumers or dripped fees that are frequently selected together. For providers that include multiple dripped fees in their checkout process that consumers are likely to select (such as airlines, which include a combination of luggage, fast track and seat selection fees, among others), the total consumer spending influenced by dripped fees is likely to be higher.
- In short, by adjusting the total consumer spending on providers with dripped fees by the relative market share of these providers, consumers’ previous exposure to those providers’ checkout process and the size/degree of harm of the dripped fees, we estimate that dripped fees cause UK consumers to spend an additional £595 million and £3.5 billion online each year. Given that this estimate does not cover the impact of search costs or consumers selecting multiple dripped fees, we believe this is a conservative estimate and that the true total detriment to UK consumers is likely to be higher.

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<sup>32</sup> In other words, dripped fees are classified as either “more harmful” or “less harmful” instead of a 0-5 scale.

## Conclusion

Our study is one of the first to demonstrate the prevalence of drip pricing among online providers, as well as the extent of harm that it may be causing consumers, in the UK. We purchased goods and services from 525 providers across four sectors to assess the prevalence of drip pricing and subsequently developed a model to estimate the likely financial cost incurred by consumers. Our main findings are:

- 46% of providers in our sample utilise drip pricing (excluding delivery fees). The prevalence ranges from 14% of providers in the retail sector to 72% of providers in the transport & communication sector.
- Slightly less than half of providers (41%) included dripped fees that met more than one criterion of harm in our framework. Consumers purchasing event tickets, cinema tickets or flight tickets; renting a car or ordering food/drink for delivery were most likely to encounter dripped fees that met more than one criterion of harm.
- Across all sectors, service fees tended to be the most harmful (mandatory and late in the checkout process), as well as luggage fees and fast-track fees (costly and late in the checkout process).
- The median optional dripped fee is much more expensive than the median mandatory dripped fee (£20 compared to £2), and there are a small number of very expensive fees (mostly fees for overweight luggage and fast-track fees for theme parks).
- Harmful dripped fees are more commonly found in products purchased less frequently, while there is no clear relationship between dripped fee degree of harm and product price once delivery fees are excluded.
- Providers that use drip pricing do so consistently across both their websites and mobile apps.
- Dripped fees cause UK consumers to spend an additional £595 million to £3.5 billion online each year.

Overall, our findings demonstrate that drip pricing is a common strategy used by online providers in the UK, despite the existence of consumer protection legislation (such as the Consumer Protection from Unfair Trading Regulations 2008). We recognise that many dripped fees provide positive utility to consumers: for example, delivery fees, which make up the largest proportion of dripped fees (especially in the retail sector), might be relatively less harmful to consumers (as they can be seen as benefitting some consumers through the convenience and time saved of shopping for physical products online). In addition, some previous research has suggested that drip pricing may only lead to small market inefficiencies: for example, if (i) the market for the product is competitive, or (ii) market power exists but consumers frequently purchase the same product (a “repeated” setting), consumers might correctly anticipate the total price after dripped fees and rent shifting

from consumers to firms may be small (Elzinga and Mills 2001; Carlton, Gans and Walman 2010).

While drip pricing strategies (the type of dripped fees used, the size of the dripped fees and where they are presented in the checkout process) vary across sectors, we find that specific types of dripped fees (such as service fees) tend to consistently meet multiple criteria of harm. In addition, these fees are concentrated in specific types of products (rather than being widely used). While drip pricing for a single provider might not significantly reduce consumer surplus, drip pricing adopted by multiple providers selling the same product imposes market-wide frictions through the impact of hassle costs incurred by consumers in gathering price information. In other words, our findings provide suggestive evidence that drip pricing can encourage providers towards a distortive equilibrium based on competing on base price as opposed to final price: this equilibrium “raises the reservation prices of consumers, softens price competition and increases industry profits” (Baye and Morgan 2019).<sup>33</sup> As a result, consumers are often negatively impacted: because consumers choose specific products to purchase online without knowing the actual cost of the product, these products (especially products with a limited supply such as event tickets) “may not necessarily go to consumers who value them most” (Federal Trade Commission 2020). Most importantly, for mandatory dripped fees, the distortive equilibrium does not depend on the amount of utility consumers derive from the additional “service” provided by the dripped fee: rent shifting and inefficiencies in consumption will still occur whether or not consumers benefit from the dripped fee “service”.<sup>34</sup>

As such, our findings demonstrate that greater scrutiny of drip pricing is needed in the UK to protect consumers, with specific focus on the hospitality and entertainment sectors (due to the presence of mandatory fees in these sectors) and service fees (as these fees consistently meet multiple criteria of harm). First, increased transparency around dripped fees (such as presenting all fees included in a product’s total price upfront) allows for greater dissemination of market information and minimises opportunities for potential manipulation of the consumer search process. Second, the impact of price competition means that online providers might not be able to unilaterally adopt greater transparency in pricing (moving away from drip pricing strategies) without intervention, as providers who “act first” may lose market share if consumers are deterred by higher initial advertised prices.

While our research focused specifically on understanding the prevalence of dripped fees, future research should examine how consumers might vary in their response to specific types of dripped fees (in particular quantifying the role of consumer expectations in “repeated” settings), how consumer behaviour is impacted by the number of potential

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<sup>33</sup> The reservation price is the highest price that a consumer is willing to pay for a product (if a product is priced higher than the reservation price, the consumer will choose not to pay for the product).

<sup>34</sup> Rent shifting represents a transfer of welfare from consumers to sellers due to consumers being “locked-in” to paying the dripped fee. This results in inefficiencies in consumption because “too many” consumers purchase a product with dripped fees because their decision to purchase is based on the lower base price (for a theoretical discussion, see Borenstein, MacKie and Netz 1995).



“competing” providers selling the same product and what types of interventions might be most effective in minimising consumer harm resulting from distorted purchasing behaviour

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# Appendix

## List of subsectors

Table 33. List of subsectors (within each broad sector) in sample of providers

Sector	Examples of subsectors with dripped fees
Entertainment	<ul style="list-style-type: none"><li>• Cultural and sightseeing attractions</li><li>• Cinema tickets</li><li>• Event tickets</li><li>• Gym membership</li><li>• Digital software</li></ul>
Hospitality	<ul style="list-style-type: none"><li>• Hotels &amp; other accommodation</li><li>• Food/drink delivery order</li><li>• Food/drink in-person order</li><li>• Package holidays</li></ul>
Retail	<ul style="list-style-type: none"><li>• Clothing &amp; footwear</li><li>• Household goods</li><li>• Digital content subscriptions</li><li>• Health and beauty goods</li><li>• Consumer electronics</li><li>• Groceries</li><li>• Games &amp; toys</li><li>• Sports &amp; outdoors</li></ul>
Transport & communication	<ul style="list-style-type: none"><li>• Flight tickets</li><li>• Car rentals</li><li>• Bus tickets</li><li>• Train tickets</li><li>• Letter/parcel delivery</li><li>• Mobile plans</li></ul>

## Average size of dripped fee

- Optional fees tend to be much larger (relative to the product price) than mandatory fees (the median optional dripped fee is 14% of the product price compared to 6% of the product price for the median mandatory fee).
- Providers in the transport & communication sector have the greatest difference in the size between mandatory and optional fees (5% of the product price compared to 15% of the product price).
- Out of all fee categories, luggage fees tend to be the largest in size relative to the product price (one common business model, especially among low-cost airlines, is offering low base ticket prices with costly add-ons). Fast track fees and additional product suggestions also tend to be expensive relative to the base product, as they can be seen as directly providing additional utility to consumers.

**Table 34. Average (median) size of dripped fee by sector**

Sector	Mandatory or optional dripped fee?	Median dripped fee cost	Median dripped fee cost relative to product price <sup>35</sup>
Entertainment	Mandatory	£2	10%
	Optional	£13	15%
Hospitality	Mandatory	£1 (£2)	5% (7%)
	Optional	£24 (£24)	11% (11%)
Retail	Mandatory	£3 (£4)	9% (17%)
	Optional	£33 (£7)	12% (15%)
Transport & Communication	Mandatory	£1	5%
	Optional	£17	15%

<sup>35</sup> The percentages are not proportional to the average dripped fee cost because the number of mandatory and optional dripped fees vary significantly by provider.

All	<b>Mandatory</b>	<b>£2 (£4)</b>	<b>6% (11%)</b>
	<b>Optional</b>	<b>£20 (£14)</b>	<b>14% (15%)</b>

**Table 35. Average (median) size of dripped fee, top 10 most common dripped fee categories**

<b>Fee category</b>	<b>Median dripped fee cost</b>	<b>Median dripped fee cost relative to product price</b>
Delivery Fee	£5	16%
Additional Product Suggestions	£20	19%
Luggage Fee	£65	54%
Insurance Fee	£16	13%
Food/Drink Fee	£13	6%
Service Fee	£1	6%
Seat Reservation Fee	£15	10%
Car Seat Fee	£24	15%
Fast Track Fee	£28	31%
Customer Support Fee	£12	9%

## Length of checkout process

- The average checkout process was 10 pages<sup>36</sup>.
- Providers in the entertainment sector tended to have the shortest checkout process, while providers in the transport & communication sector tended to have the longest checkout process (thus allowing for additional opportunities to display optional add-ons to users).
- Across all sectors, the average dripped fee occurred slightly past halfway through the checkout process, aligning with evidence from academia on anchoring biases (consumers are more likely to pay fees that occur towards the end of the checkout processes due to perceived sunk costs).
- Out of all fee categories, delivery fees tended to occur latest in the checkout process (almost three-quarters through the process on average), as these fees often depended on the user's home (or other address used for shipping) and thus could not be added to the total price until the user had finished entering all of their personal details.

**Table 36. Average (median) number of pages and position of dripped fees in checkout process by sector**

Sector	Median # pages in checkout process	Median checkout page number of dripped fee
Entertainment	6	3
Hospitality	8	5
Retail	9 (8)	4 (6)
Transport & Communication	11	6
<b>All</b>	<b>10</b>	<b>6</b>

<sup>36</sup> For this analysis, we define a "page" not as an individual webpage but as a different view. If the user had to scroll down to fill out additional inputs or click the "next" button, this view counted as a separate page in our analysis.

**Table 37. UK consumer spending influenced by dripped fees (excluding delivery fees), entertainment sector**

<b>Product category</b>	<b>Total UK household expenditures</b>	<b>% consumer purchases made online</b>	<b>Purchase frequency weight (transformed z-score)</b>	<b>% providers with dripped fees (weighed)</b>	<b>Average degree of harm</b>	<b>Average cost of dripped fees (%)</b>	<b>Baseline welfare loss (%)</b>	<b>Additional consumer spending online</b>
Museums, zoological gardens, theme parks, houses and gardens	£2,043m	25%	1.16	100%	1.40	122%	10%	£102m
Subscriptions to sports and social clubs	£5,618m	25%	1.01	88%	1.70	48%	10%	£102m
Live entertainment: theatre, concerts, shows	£2,452m	90%	1.17	95%	1.41	16%	10%	£55m
Spectator sports: admission charges	£1,124m	25%	1.18	77%	1.25	15%	10%	£5m
Cinemas	£919m	25%	1.16	70%	1.22	9%	10%	£2m
Lottery	£2,452m	25%	0.99	0%	0.00	0%	10%	£0m
Magazines and periodicals	£1,430m	25%	0.95	0%	0.00	0%	10%	£0m
Subscriptions for leisure activities and other subscriptions	£2,145m	25%	1.03	0%	0.00	0%	10%	£0m



<b>Total</b>	-	-	-	-	-	-	-	<b>£266m</b>
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**Table 38. UK consumer spending influenced by dripped fees (excluding delivery fees), hospitality sector**

<b>Product category</b>	<b>Total UK household expenditures</b>	<b>% consumer purchases made online</b>	<b>Purchase frequency weight (transformed z-score)</b>	<b>% providers with dripped fees (weighed)</b>	<b>Average degree of harm</b>	<b>Average cost of dripped fees (%)</b>	<b>Baseline welfare loss (%)</b>	<b>Additional consumer spending online</b>
Package holidays - abroad	£25,435m	90%	1.11	58%	1.00	14%	10%	£210m
Holiday in the UK	£23,290m	90%	0.90	78%	0.89	12%	10%	£153m
Hot and cold food	£6,742m	25%	0.79	98%	1.77	11%	10%	£26m
Restaurant and café meals	£36,672m	25%	0.52	0%	0.00	0%	10%	£0m
<b>Total</b>	-	-	-	-	-	-	-	<b>£389m</b>

**Table 39. Total amount of UK consumer spending influenced by dripped fees (excluding delivery fees), retail sector<sup>37</sup>**

<b>Product category</b>	<b>Total UK household expenditures</b>	<b>% consumer purchases made online</b>	<b>Purchase frequency weight (transformed z-score)</b>	<b>% providers with dripped fees (weighed)</b>	<b>Average degree of harm</b>	<b>Average cost of dripped fees (%)</b>	<b>Baseline welfare loss (%)</b>	<b>Additional consumer spending online</b>
Women's outer garments	£18,591m	25%	0.83	70%	2.00	33%	10%	£178m
Men's outer garments	£10,113m	25%	1.02	97%	0.50	81%	10%	£102m
Detergents, washing-up liquid, washing powder	£2,758m	25%	0.71	100%	3.00	38%	10%	£57m
Other major electrical appliances, dishwashers, micro-waves	£4,290m	25%	1.17	100%	2.00	21%	10%	£52m
Bedroom textiles, including duvets and pillows	£2,452m	25%	1.11	100%	1.50	46%	10%	£47m
Pet food	£8,172m	25%	0.74	100%	0.50	13%	10%	£10m

<sup>37</sup> There were 51 product categories in total that were classified as part of the retail sector, but for purposes of space Table 39 only includes product categories for which additional consumer spending online due to dripped fees was greater than £500,000. The remaining 38 product categories totalled £161,602 million in UK household expenditures.

Baby toiletries and accessories (disposable)	£1,226m	25%	1.00	100%	3.00	6%	10%	£6m
Garden furniture	£1,022m	25%	1.19	100%	2.00	9%	10%	£6m
Personal computers, printers and calculators	£7,457m	25%	1.12	16%	1.00	15%	10%	£5m
Fancy, decorative goods	£3,371m	25%	1.03	28%	1.33	15%	10%	£5m
Men's accessories	£613m	25%	1.15	100%	1.00	25%	10%	£4m
Kitchen and domestic utensils	£2,247m	25%	0.99	17%	1.50	31%	10%	£4m
Take away meals eaten at home	£11,849m	25%	0.83	3%	1.00	21%	10%	£2m
<b>Total</b>	-	-	-	-	-	-	-	<b>£479m</b>

**Table 40. Total amount of UK consumer spending influenced by dripped fees (excluding delivery fees), transport & communication sector**

<b>Product category</b>	<b>Total UK household expenditures</b>	<b>% consumer purchases made online</b>	<b>Purchase frequency weight (transformed z-score)</b>	<b>% providers with dripped fees (weighed)</b>	<b>Average degree of harm</b>	<b>Average cost of dripped fees (%)</b>	<b>Baseline welfare loss (%)</b>	<b>Additional consumer spending online</b>
Air fares (international)	£6,435m	90%	1.15	100%	1.85	30%	10%	£363m
Hire of self-drive cars, vans, bicycles	£1,226m	90%	1.20	99%	1.59	18%	10%	£37m
Mobile phone purchase	£3,065m	90%	1.16	100%	1.00	10%	10%	£32m
Other than season tickets	£4,188m	25%	1.10	74%	0.97	22%	10%	£18m
Air fares (within UK)	£715m	90%	1.19	65%	1.75	18%	10%	£16m
Postal services	£2,145m	25%	0.99	32%	0.70	45%	10%	£5m
Video, cassette and CD hire, including online entertainment packages	£4,392m	90%	0.70	11%	0.23	52%	10%	£4m
Internet subscription fees (ex. combined packages)	£2,452m	90%	1.05	26%	1.00	0%	10%	£0m
Mobile phone account (excluding combined payments)	£23,495m	90%	0.18	27%	0.33	0%	10%	£0m

<b>Total</b>	-	-	-	-	-	-	-	<b>£474m</b>
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