

COMPETITIVE MARKETS
AND CONSUMER WELFARE

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INACTIVE CONSUMERS IN SUBSCRIPTION MARKETS

An increasing number of products are sold through subscriptions. In this study we find a high degree of consumer inactivity in subscription markets.

A natural experiment suggests that when consumers are prompted to actively restart a subscription (due to payment card rejections) the number of consumers who decide to cease their subscriptions increases by 70 percent. National consumer surveys confirm that a substantial minority of consumers are passively maintaining subscriptions they no longer use or value.

Læs artiklen ↓

Why analyse subscriptions?

An increasing number of products rely on subscription-based payment models. According to a study by McKinsey the subscription e-commerce market has grown by more than 100 percent a year in the US since 2013¹.

Subscriptions are automated transactions where payment and delivery happens without requiring any further action from the consumer. This is especially true for so-called direct debit where the payment is initiated by the creditor, unlike most other forms of payment, where the customer takes the initiative to make the payment after receiving a bill or invoice from the creditor. This sets these subscription based payments apart from traditional market transactions where consumers continuously compare and evaluate products and services prior to paying for them. Digitalisation has contributed to the rise of subscription-based payment models by further reducing transactional frictions and by adding new commercial domains, e.g. streaming services, which have subscriptions built into the core of their service. Subscription based payment schemes may benefit consumers by lowering transaction costs. However, if consumers are not prompted to take an active position when they pay for their services, these models may also lead to passivity and customer loyalty that is not aligned with consumer interest. In that case, there is a clear risk that consumers will retain a subscription for too long.

Businesses and companies that handle subscription payments are aware of these mechanisms. One of the most widely used payment solutions in Denmark is called “Betalingsservice”, and the provider of this solution has previously advertised that the service allows subscription providers to retain customers between 4 and 7 times longer than other forms of payment, (KFST, 2014:p. 16).

If consumers fail to actively search for the supplier with the best combination of price and quality, businesses will be less inclined to keep prices low and to innovate and develop new products. Thus, inactive consumers may hamper competition and the benefits all consumers derive from it, see box 1.

Research design

The Danish Competition and Consumer Authority conducted a study to determine the extent of consumer inactivity and inattention on subscription based markets. The analysis consists of two parts:

The first part of the analysis is a natural experiment that utilized three years of payment data from 117,000 unique subscriptions to estimate the increased likelihood that consumers will terminate subscription if they actively have to renew them.

The second part is a national representative consumer survey that outlines how consumers perceive their own use and benefits from subscriptions. The survey consisted of 19 questions distributed to 1.200 respondents. Both parts of the analysis demonstrate that subscription-based markets tend to promote inactive consumers that neglect critically evaluating their subscriptions.

Natural experiment: Rejected card payment act as a natural decision point

The purpose of the natural experiment is to analyse how consumers react when their credit card payment for a subscription is rejected and they manually have to update their payment information to retain the subscription.

When consumers experience a rejected payment it creates a natural decision point where it must be actively decided

Box 1: Subscription advantages and drawbacks

Subscriptions provide a range of benefits for consumers and businesses. For consumers, it is a convenient way of buying a product on a recurring basis, without needing further action and without having to worry about reminder fees for late payment etc.

For businesses, subscriptions may reduce administrative costs, ensure stable payments as well as create the opportunity to collect data and apply this information to update and develop products and services. For companies, subscription schemes may also imply that customers stay loyal for longer.

On the other hand (and related to consumer loyalty), research has demonstrated that consumers are not always paying attention to how many subscriptions they currently have and that consumers may be underutilizing the services

they subscribe to.² A study has shown that payment saliency, i.e. the level of attention the consumer pays to the actual process of paying for their subscription, plays a role in how actively she uses her subscriptions³.

This tendency can cause problems in an increasingly digitalized market where payments are becoming increasingly frictionless, with fewer decision points where the consumer has an opportunity to evaluate the costs and benefits of a given subscription.

Finally, subscriptions may encourage companies to promote passive consumers as they receive payments regardless of how actively consumers engage with their services, at least in some subscription-based markets

¹ McKinsey, 2018

² DellaVigna and Malmendier, 2006.

³ Gourville and Soman, 1998.

whether the subscription is still worth paying for. If the consumer wants to keep the subscription, they have to take action to update the payment information. If not, the subscription ends as a default. This way, the consumer is prompted to reconsider the subscription.

The experiment uses payment data from approximately 117,000 unique subscriptions distributed on 1,225 subscription services. The observations cover three years of monthly payments from October 2015 to October 2018. The subscriptions fall into either a control group, where no payment rejection occurs, or an intervention group, where at least one payment is rejected during the observation period. The underlying assumption is that card rejections are exogenous events and that these happen as if random due to card expiration, card termination (e.g. due to being misplaced), card replacement (e.g. from switching banks) and similar factors unrelated to the individual subscriber's economic status.

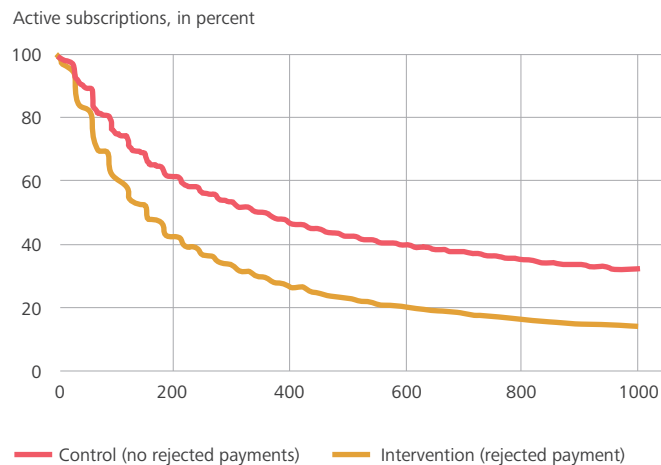
The applied method is the Cox Proportional-Hazards model that compares the relative survival of subscriptions from control- and intervention groups over the observational period.

The estimation show that the relative risk relation between the control- and intervention group is approximately 1.7. This implies that consumers are 70 percent more likely to let their subscription terminate if they experience a card rejection relative to consumers who do not. This difference is statistically significant at the 1 percent level.

One can also consider the survival rate over time for each of the subscription groups. Over a period of 1.000 days, only 14 percent of the subscriptions that belong to consumers who encounter a rejected card payment "survives", whereas approximately 32 percent of the subscriptions survive if payments are not rejected. Hence, activating consumers through the rejection of a card payment imply a reduction of approximately 55 percent of the number of subscriptions that the consumer wants to keep, cf. figure 1.

The experiment demonstrates that, in many cases, consumers do not evaluate their subscriptions continuously. A clear decision point, which also includes that the subscription is cancelled by default, lead to a dramatic increase in the share of cancelled subscriptions.

Figure 1: Subscription survival during the observational period



The estimated effects of debit card rejection can be considered causal and unbiased if the people experiencing rejection are randomly selected. The data does not contain information on the type of subscription, or the socio-economic status of the individual subscriber. As such, it is not possible to determine, whether the tendency to cancel a subscription is more pronounced for certain types of subscriptions or among certain types of subscribers.

If payments were rejected due to factors that are related to subscription cancellation, then there could be a bias since the control- and intervention groups may not be comparable. There will be a particular concern if consumers who have relatively poor finances are more likely to experience payment card rejections, since this group is also more likely to cancel subscriptions for economic reasons.

To test whether card rejections are independent from financial ability, a survey was run on a representative sample of Danish consumers asking whether they had experienced rejected payments for a subscription and why.

The results reveal that a minority (12 percent) of consumers has experienced card rejections in relation to payments for continuous subscriptions within the last two years. The most common cause for card rejections is card expiration, cf. figure 2. Only a small minority of 7 pct. have had their card rejected for economic reasons, mainly related to overdraft. The "other" category primarily covers instances where payments were rejected due to an error in the suppliers' payment systems.

Finally, the survey data demonstrates that the risk of experiencing a cancelled card-payment is not determined by household income level, as households with lower income do not report card cancellations at a higher rate compared to households with higher incomes, cf. figure 3.

Figure 2: National poll: What caused the card rejection?

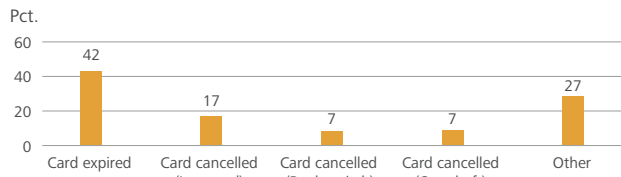
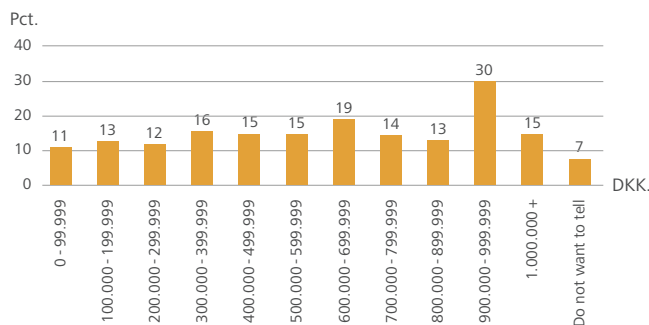


Figure 3: National poll: Credit card cancellations relative to household income levels



National survey: Consumers' attitudes towards subscriptions

The national consumer survey shows that almost all consumers (in Denmark) have at least one subscription, cf. figure 4. A majority (54 percent) spend between 0-40 EUR on subscriptions monthly, cf. figure 5. However, these estimates – reported by consumers themselves – may significantly underestimate true consumer spending on subscriptions. In a study of 2.500 American consumers, Waterstone Group found that actual spending on subscriptions were more than twice the level of their self-reported spending.⁴

Figure 4: National poll: How many subscriptions do you have (besides telephone, internet and insurance)?

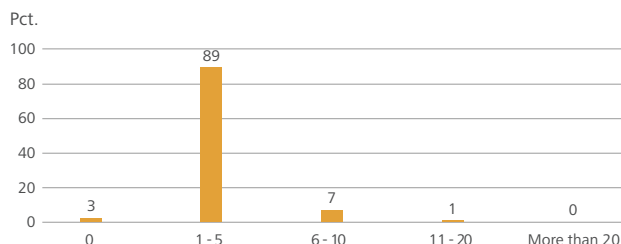
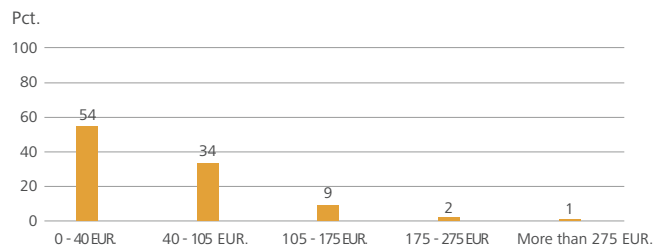


Figure 5: National poll: How much do you spend each month on subscriptions (besides telephone, internet and insurance)?



The survey also asks respondents if they have experienced inactivity and underutilization in their own subscription use. The results show that some 22 percent of respondents confirmed that they “had continued paying for subscriptions they no longer used” or that they “did not get enough value out of their subscriptions” or both, cf. figure 6. When this analysis is extended to specific markets, it is clear that, although some markets are worse than others, all subscription markets are affected by both inactivity and underutilization to some degree, cf. figure 7.

Figure 6: National poll: Do you pay for subscriptions you no longer use / Do you get enough value out of your subscriptions?

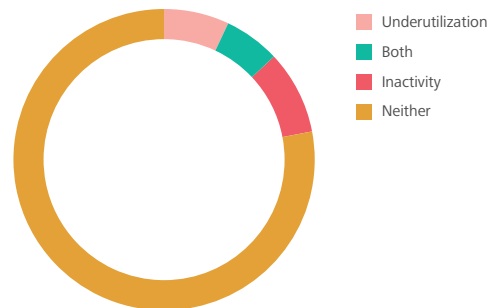
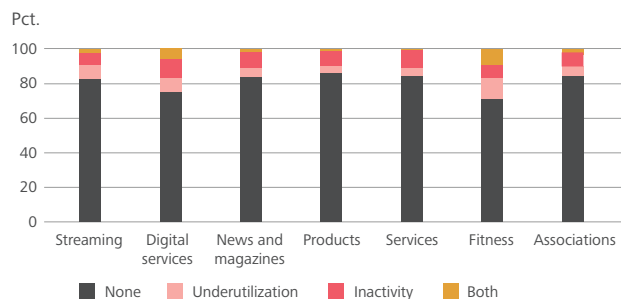


Figure 7: National poll: Do you pay for subscriptions you no longer use / Do you get enough value out of your subscriptions? Specific markets



The results from the survey confirm that a substantial minority of consumers are not getting enough value from their subscriptions and that they pay for subscriptions they no longer use. The analysis also suggests that consumers could be nudged to take an active position on their subscriptions and reduce the number of inactive subscriptions they pay for.

Subscriptions and consumer regulation

The framework for entering into an agreement for a subscription is to a large extent freedom of contract. The focus of the current legal framework is therefore on initiating and cancelling a contract, and it does not take into account that the contract for a subscription may be running for several years, and that consumers could benefit from continuous feedback on whether or not to retain their ongoing subscriptions.

It is entirely up to the individual subscription provider to decide the level and type of feedback that the customer receives about the use of the subscription. Businesses may therefore design feedback and information to their subscribers as a means to maintaining payments beyond what consumers would accept if they had to actively (and consciously) pay for the individual transactions ■

Artiklen er skrevet af Andreas Maaløe Jespersen, Chefkonsulent og Konkurrence- og Forbrugerstyrelsens ekspert i forbrugeradfærd

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