

Agenda

Advancing economics in business

Thanks for sharing: can exchanging information be good for competition?

The UK Office of Fair Trading recently consulted on commitments offered by several motor insurance providers following concerns about the exchange of pricing data between competitors. What was the logic behind the commitments, and what are the competitive effects of sharing price data in the insurance sector?

As part of an ongoing investigation, the Office of Fair Trading (OFT) consulted on the commitments offered by several motor insurance providers.¹ The investigation had raised concerns that, by subscribing to a particular piece of market data analysis software, insurance companies were able to access not only the pricing information they themselves provided to brokers through the software, but also pricing information supplied by competing insurers. The OFT warned the insurance industry that, because of the nature of the information exchanged, there was an increased risk of price coordination.

The OFT announced in January 2011 that it was minded to accept legally binding commitments from the seven representative firms involved as a means of addressing its concerns. The commitments state that the insurers must not be able to access *future* price information of other insurers and/or price information that is less than six months old. Furthermore, the data needs to be anonymised and averaged across at least five insurers.

It is perhaps not surprising that sharing data on *future* prices would not be allowed, since this could facilitate collusion, for example by allowing firms to know quickly and precisely how the other users of the price information are planning to behave in the market, potentially making it easier to detect deviation from any price coordination. However, the OFT has allowed the sharing of data on prices, albeit historical ones only. This is in contrast to the European Commission's Block Exemption Guidance for the insurance sector, which allows the sharing of claims data only, not price data.²

To assess whether the sharing of certain types of data could harm competition, two important questions need to be answered:

- given the characteristics of the insurance market, is coordination feasible, and is the exchange of price information between insurance companies likely to harm competition in such a market?
- given the characteristics of insurance as a product, are there any pro-competitive effects from the exchange of price information? In other words, is it likely to be beneficial to end-consumers?

The first question would be answered by assessing the characteristics of the insurance market to see whether these would make it feasible for firms to coordinate on prices and for that coordination to be maintained. Economic theory suggests that, under certain conditions, an exchange of price information between suppliers may help to facilitate price coordination and, as a result, lead to higher prices in the market in question. However, price transparency is not a sufficient condition for price coordination. The market has to display certain characteristics to enable firms to align and sustain coordination. The decision of the General Court in *Airtours* set out the conditions necessary for tacit price coordination.³ The key characteristics of the car insurance market suggest that it could be difficult to sustain coordination: market concentration and barriers to entry and switching tend to be low, and although the products are homogeneous, pricing is bespoke (ie, risk-based) and costs differ across providers.

What are the pro-competitive effects of sharing price data?

Insurance provides protection against the risk of an uncertain loss. By their very nature, the costs of providing insurance are unknown at the time when the risk is underwritten and the price for the insurance

agreed. Insurers need to earn sufficient income from premiums to be able to cover claims from the policy-holders whom they insure, which means that they must be able to measure the risks accurately and set premiums in line with these risks.

Given the unique characteristics of insurance, information-sharing between insurance providers can make the market function more efficiently and improve outcomes for consumers. As explained below, sharing price data enhances insurers' ability to monitor and price risks more accurately in their insurance portfolio. It may also facilitate new entry and enhance price competition.

Risk-based pricing is fundamental to the way in which insurance markets work. When setting premiums, insurers take into account various sources of information to increase the accuracy of pricing. These include actuarial and statistical data drawn from the claims experience in their own insurance books, data tables based on shared high-level data from several insurance companies and joint calculations of risks and costs, and the prices observed in the market. However, even though shared high-level data on claims costs and prices in the market is a useful source of information, insurers still compare this with their own data and use their own assessment to determine their premium rates and policy terms. The way an insurer deploys and uses shared data is in itself a driver of competitiveness in the market.

Ability to monitor and price risks more accurately

The pricing risks in insurance are significant, and mis- or under-pricing has been one of the key factors underlying past defaults of insurance companies.⁴ At the level of the individual provider, and in the absence of information-sharing, the uncertainties are magnified in cases where there is little data on which to estimate risk or set prices. This may be because the firm does not have much experience of underwriting the risk in question, or because the risk is specific to a small class of insured customers. Due to the random variation in claims costs, volatility is inherent, even when insurance firms can spread the risk across a large number of insured individuals or firms. In small samples, the statistical results will be even more volatile and prone to error, which makes it difficult to set prices—an insurer may over-price (and not sell any insurance products) or under-price (and not receive payments that are sufficiently high to cover the costs), thus risking failure.

Without information-sharing, and in particular if an insurer has only a few customers (eg, where there is specialised risk coverage, new risks are involved, or the insurer is simply a small player in a larger market),

there is an interaction with the competitive dynamics of the market that can make the provision of such services unstable. The dynamics work as follows: for insurers that serve only a few customers, the volatility of the claims costs can mean that, where an insurer has (purely by chance) had a lower-than-average claims rate in the past, it may be induced to set a low price looking forward, based on its belief that the claims rate of its past and current customers is representative of the market as a whole. However, future customers gained as a result of this low price are unlikely to have the same (randomly caused) rate, and would be expected to have a higher claims rate on average. Hence, this group would be undercharged and would turn out to be uneconomic to serve. The converse (where the historical record indicates a high claims rate as a result of random variations, which will suggest higher prices going forward) will tend to result in uncompetitive prices and will therefore not be taken up by customers. These examples illustrate that if there is a lack of shared data, providers (in particular those without a deep pool of previous claims on which to base their assessments) may find it difficult to develop a commercial strategy that is economic, if it is based solely on their own information.

Moreover, unless the insurer can otherwise monitor and control the mix of its portfolio (eg, through targeted marketing), there would not only be the risk of incorrectly pricing the existing portfolio, but also uncertainty around the (future) portfolio mix. For example, if an insurer (mistakenly) set prices for certain risks too low, it would probably attract applications from a specific group of consumers (ie, those who exhibit the risk that is underpriced), potentially resulting in an over-exposure to that group.

If an insurance provider sets premiums that are too low for a given risk (and lower than those of its competitors), it could end up with a risk pool that is underpriced, reducing its financial viability. Depending on the degree of underpricing and the importance of the underpriced insurance book compared with the insurer's overall portfolio, this can in principle result in the default of the insurer. In other words, sharing price information enhances insurers' ability to monitor and price risks more accurately in their insurance portfolio, and therefore contributes to financial stability.

Benefits of sharing price data over sharing claims data?

There are likely to be greater benefits from sharing price information than sharing other types of information, such as claims data. Apart from the practical difficulties of sharing claims data at a sufficiently detailed level (such as differences in the definitions used by insurers), one of the limitations of sharing claims data is that it becomes available only

after a certain period of time (when claims occur). Moreover, in the first instance it provides only estimates of the costs of the claim,⁵ while the actual claims costs become available only much later once cases have been closed. The pricing of insurance requires continuous monitoring of new risks—if claims data is used to identify new risks, the risks would be picked up only once any claims have been settled.

Impact of sharing price data on competition and new entry

In the absence of sharing price data, the uncertainty about the risks and the prices set by other insurers may mean that an insurer errs on the side of caution and applies a risk margin to premiums (or imposes other product restrictions to reduce the risk). With all insurers facing a similar problem, premiums in the market can be expected to be higher than if insurers had imperfect information about risks, but nonetheless could control prices to avoid attracting a disproportionate share of 'bad' or underpriced risks. Put differently, information about competitors' prices gives insurers more information about the pool of risks that they insure, removing a key source of uncertainty. This, in turn, can reduce the risk margin that they otherwise need to apply in their pricing, and correspondingly can also lower premiums paid by consumers. It also enables insurers to undercut competitors' prices in areas where they consider margins to be high relative to their own

cost base. In the absence of price information, insurance companies may not be able to identify areas in the markets where margins are high, or where, based on their better claims data or ability to price risks, they are able to offer lower premiums or more attractive terms and conditions than other insurers for a given risk. Finally, sharing price data may enhance competition by making it easier for new players to enter the insurance market and for existing insurance companies to enter new areas of the market.

Insurance as an exception in sharing information on prices?

While sharing price information in other industries may rightly be seen as anti-competitive, the special features of insurance mean that, in this case, it can be beneficial to consumers. It reduces pricing risks for providers, which in turn can lower the risk margin they need to apply when setting premiums. It can also enhance price competition and promote new entry and product innovation, all with corresponding benefits for customers in terms of lower premiums and more or better risk coverage. Finding the right balance between these pro-competitive effects of sharing price information and possible anti-competitive effects is complex, and the OFT investigation into car insurance is a useful case study of how this balance can be explored.

¹ Office of Fair Trading (2011), 'Motor Insurers Agree to Limit Data Exchange after OFT Investigation', press release, 04/11, January 13th; and Office of Fair Trading (2011), 'OFT Consults on Amendment to Commitments Offered in Motor Insurance Case', press release, 108/11, September 30th. Oxera advised one of the insurance companies involved in this investigation.

² European Commission (2010), 'Commission Regulation (EU) No 267/2010 of 24 March 2010 on the Application of Article 101(3) of the Treaty on the Functioning of the European Union to Certain Categories of Agreements, Decisions and Concerted Practices in the Insurance Sector', OJ L83/1.

³ See *Airtours/First Choice*, Case IV/M.1524, [2000] OJ L93/1.

⁴ The Financial Services Compensation Scheme (FSCS) has been involved in 26 failures in the general insurance market in the UK, most of which occurred prior to the establishment of the FSCS in 2001 (and were dealt with by its predecessor). See Oxera (2007), 'Insurance Guarantee Schemes in the EU', report prepared for the European Commission, and <http://www.fscs.org.uk/what-we-cover/products/insurance/insurance-insolvencies/>.

⁵ The insurance companies' methods for estimating the claims costs are also likely to vary quite markedly, making it yet more difficult to use estimates of claims.

If you have any questions regarding the issues raised in this article, please contact the editor, Dr Gunnar Niels: tel +44 (0) 1865 253 000 or email g_niels@oxera.com

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