

Exploring the Use of Third Party Data to Price Insurance in Ireland

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Motivation for Pricing Insurance Using Third Party Data

Insurance Prices have been the focus of much media attention in Ireland in the past 2-3 years
 A "Cost of Insurance Working Group" was established by the Dept. of Finance in 2016 to investigate rising prices in personal and business lines
 The CSO undertook projects to explore new methods for pricing motor insurance and to produce a price index on public and employer liability
 The use of Third Party data became the focus of these projects

Motor Insurance

- Motor insurance is currently priced using a selection of representative profiles
- Small number of profiles priced due to the burden on respondents
- CSO began working with a Third-Party analytics company who scrape a high number of quotes every month

	Third Party Company Data
Risk Profiles	500
Monthly Quotes (maximum)	10,000
Number of Insurers	20
Number of Months	36
Number of Observations	102,380

- Working with Third Party Data allows for a much wider survey of insurers and profiles
- This data will be used in the CPI for Motor Insurance in the near future

Public and Employer Liability

- Investigated a number of different methods for data collection
- Required a number of sector visits
- Very complex sector to price due to heterogeneity

Options	Description	Assessment of Feasibility
1	Detailed survey of businesses	Unfeasible
2	Sending representative profiles to insurance companies	Unfeasible
3	Repricing profiles in CSO using broker pricing portals	Unfeasible
4	Receiving transactions data from insurance companies	Technically feasible but difficult
5	Receiving transactions data from a Third Party service provider	Technically feasible but difficult
6	Using Third Party service provider to price a high volume of profiles	Method pursued by CSO
7	Collecting information from price comparison websites.	Unfeasible

Option 4

- Would give high volume data
- Actual transactions data
- Minimal burden after initial setup of data transfer
- Little to no international precedent
- Complex and significant challenges in developing hedonic pricing model
- Would have required Ministerial Order to make data transfer compulsory
- Issues surrounding the transfer of personal data to the CSO

Option 5

- Would provide high volume data
- Actual transactions data
- Zero burden on insurance companies
- Issues with relying on one data source
- Again no international precedent in dealing with this type of data collection
- Significant challenges in developing hedonic model for pricing
- Issues surrounding the transfer of personal data to the CSO

Option 6

- Third Party service allows the CSO to act as a broker
- Allows for a high volume of profiles to be priced
- CSO still has control over data collection and the types of profiles that are priced
- Minimal burden on insurance companies
- Index has limited scope (Office and Retail)
- No personal data issues (GDPR with sole traders)

Overall Experience Using Third Party Data

The CSO had a varied experience with working with Third Party data.

- It has produced promising results for use in the Consumer Price Index for a motor insurance index and could be put into production in the near future

Less promising results in using data explicitly collected by third parties

- Experienced difficulties in developing methodologies for producing a price index from actual transaction data
- Receiving data of the insurance companies would have required a Ministerial Order to make data transfer compulsory which would have taken a long time
- There were concerns that data collection from service provider in option 5 was dependent on the performance of the company. If the uptake of licenses by brokers was small there would only be a small number of quotations every month.
- Data protection issues with transferring actual transaction data from Third Party to CSO