Institute and Faculty of Actuaries

IFoA Covid-19 Action Taskforce (ICAT) for General Insurance Pricing Actuaries

Case Study: Personal and Commercial lines Motor

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If you have any questions please reach out on our LinkedIn Page: https://www.linkedin.com/company/ifoa-covid-19-action-taskforce-impact-on-gi-pricing

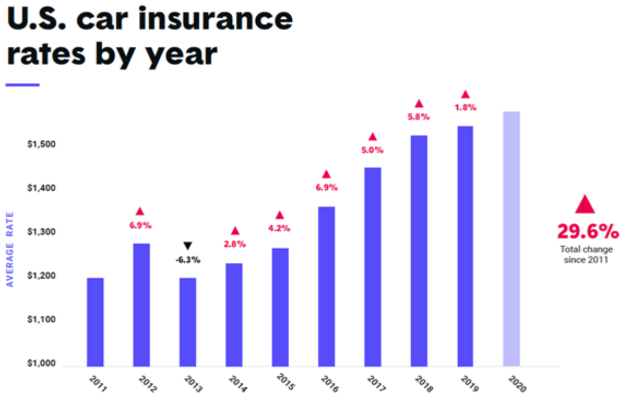
Personal and Commercial Lines Motor

What coverage is provided

- Third party injury and third party physical damage tends to be a compulsory cover across many countries
- Optional covers include accident damage, fire, theft, medical expenses and contents cover
- Policies are typically annual but can be less for e.g. 7 days new vehicle cover, hiring a rental vehicle

Current Pricing Environment

- Personal lines Motor in UK is highly competitive and is pre-dominantly bought online
- Pricing is an area that is facing increasing scrutiny from the regulator over new business and renewal pricing, implied margins, treatment of vulnerable customers etc
- Although there are compliance costs associated with this, insurers may also benefits from increased customer lifetime value
- This differs across the world e.g. in Canada several Crown corporations provide the bulk of Auto insurance to the population. This makes insurance more affordable but has also meant fewer rebates due to COVID-19 compared to other countries e.g. the UK



Impact on prices during COVID-19 has varied by region:

- US: Auto pricing increased over the year by approximately 5%-7%
- UK: "Car insurance prices have dropped by £5 (1%) in three months, and £18 (2%) over the past year."
- Europe: Auto liability generally stable
- Argentina/Colombia and Mexico: Pricing down 5-15%

Sources: https://www.confused.com/car-insurance/price-index
https://www.thezebra.com/
https://www.marsh.com/uk/insights/research/global-insurance-market-index-q3-2020.html

Motor Insurance in the news

- The impact of COVID-19 on motor insurance has had significant coverage in the international news
- Dominating the headlines is the significant reduction in road traffic during national lockdowns, prompting several insurers to give rebates, which are favored over a reduction in premiums
- Much of the coverage tends to be surrounding the direct impact on rates, however there are additional considerations to allow for over the next 12-18 months. For example:
    - *There has been a drop in new vehicle sales (particularly pronounced in Europe). This will inevitably drive a drop in top line and potentially a drop in average premium motor insurers can expect due to less demand*
    - *Simultaneously, insurers will still face the same fixed costs and therefore this limits the average premium reduction*
- Additional worries include consumer reluctance to go back to transit as lockdowns have lifted, which again suppresses motor rates

How has Motor been affected by COVID-19?

Impending global recession
- Impact of unemployment rates on purchase of Motor insurance
- Volatility in value of assets will impact pricing and reserving – particularly those with PPO's on their books

Reduction in claims frequency
- Significant fall in traffic volume as lockdown invoked by Governments
- Many insurers issuing rebates to customers
- Some commercial customers may have seen an increase in mileage for e.g. delivery trucks

Claims processing
Likely to affect development factors given expected delays in processing claims during lockdown
This is partially offset by fewer claims during the lockdown

Drop in top line due to:
- Customers cancelling insurance for second cars
- Reducing coverage e.g. no commuting
- Reduction in new vehicle drift due to fall in new car sales. This is mitigated to some extent by an increase in the price of used vehicles as seen in the US

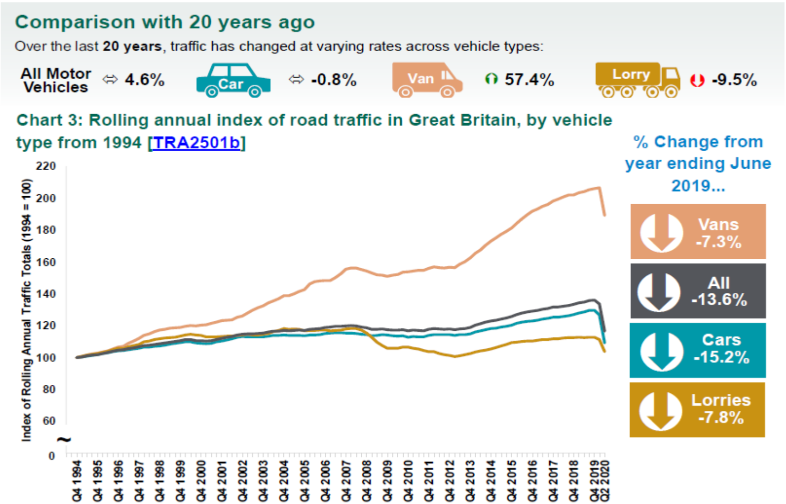
Increase in severity
- Increased cleaning costs for vehicles being repaired
- People speeding on emptier roads leading to increased severity/fatalities
- Some treatments e.g. physio may have been delayed or cancelled due to distancing requirements. Impact of this is yet to unfold

Supply chain issues:
- Issues in gaining parts for repairs
- Bigger issue during the height of lockdown. May lead to longer periods to repair
- Also raises the question of viability of using reclaimed parts

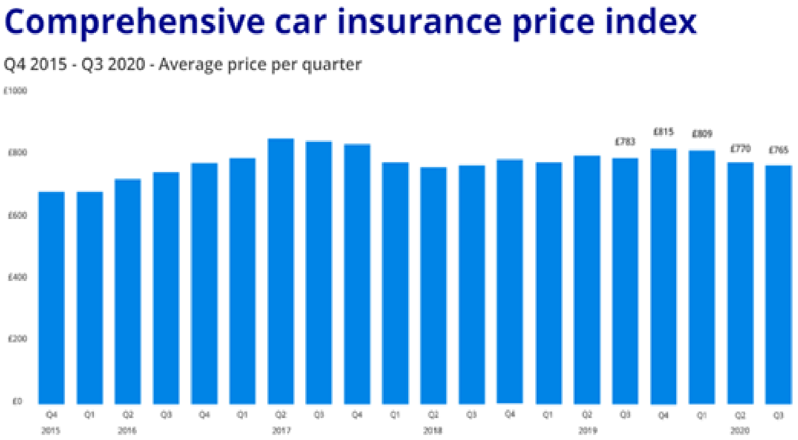
Crime / Fraud
- Organised crime/fraud may reduce due to a reduction of traffic on the roads
- Opportunistic fraud may increase due to individuals losing their jobs

Change in the way the roads are being used
WFH means fewer commuting journeys but at the same time, speeding has increased given roads are emptier. Frequency tends to be lower but severity higher for these claims

UK Motor – impact to date



- UK Government data shows that there was an overall drop in Road Traffic in 2020, which coincided with the national lockdown
- Although the biggest impact was on cars, it did still result in a decrease in traffic through other types of road transport (i.e. overall drop 13.6% compared to Q2 2019)



- Interestingly, UK Car Insurance rates also dropped over the same period but only by approximately 1%-2.5%
- This is because although road traffic has dropped there has been an increase in road accidents e.g. due to speeding (source Met Police)
- Theft rates have been cyclical over the year i.e. during lockdown there was a drop in theft claims however as restrictions are lifted thefts have also increased

Sources: https://www.gov.uk/government/statistics/provisional-road-traffic-estimates-great-britain-july-2019-to-june-2020
https://www.confused.com/car-insurance/price-index
https://www.standard.co.uk/news/crime/speeding-drivers-london-71-rise-coronavirus-lockdown-a4482701.html

How will the Motor landscape change for policyholders?

Less appetite to own a car (or a second car) if individuals are not commuting to work / less frequently as working from home becomes more popular

Policyholder reaction to receipt/non-receipt of a rebate.
Where a receipt is received does this increase trust in the insurer and less likelihood to move at renewal?

Potential for a greater adoption of telematics as drivers and insurers look at innovating new products allowing for more flexibility in coverage / T&C's

Reluctant to use transit may mean people turn to micro-mobility or other environmentally friendly and safer alternatives.

Short/medium term impact of individuals not having driven for several months. Behavioural changes arising post lockdown may lead to more reckless driving amongst certain age demographics

Not all motor insurance around the world is sold online. Where it is not, there may be a movement towards selling online to avoid having to purchase face to face in Broker office

Rating Factors and changes due to COVID-19

Rating Factor	Post COVID-19 change?
Individual rating factors	• Occupation may become a stronger rating factor as an indication of the likelihood of working from home • Unemployment status will be more important due to increased likelihood of fraudulent claims • Similarly, trade/industry would become a stronger factor for commercial motor for eg taxi's, delivery drivers, rental vehicles. Both would be proxies for mileage • Credit scores – given impending recession • Ability to pick up on behavioural changes in driving
Vehicle Rating Factors	• Vehicle values impacted by changes in demand for new and used vehicles • New vehicle drift may change from historical norms • Drop in new vehicle sales not uniform across all vehicle types for eg electric vehicles sales still remain strong
Policy rating factors	• Vehicle use is a key factor • Over the short term geography may become important if regional lockdowns persist • Rural areas may see an increase in frequency due to different working habits • Conversely urban areas/cities may not experience the same level of traffic as prior to lock down
Base rate/seed rate considerations	• Key problem is where do we see overall frequency stabilising at? • Do we reflect reduction in frequency/increase in severity in base rates • There may be a shift in risk profile between perils for eg if cars are parked at home more requiring an increase in fire and theft rates across the board • Is number of vehicles still most relevant exposure measure?

Additionally, there will be new factors to consider e.g:

- Developing models to cope with demand for Usage Based Insurance (UBI)
- Increase in demand for home deliveries as people are deterred from visiting restaurants
- Impact of any delays in maintenance/repairs due to COVID-19 will need to be factored into pricing

Personal lines:

- May start explicitly asking about working from home
- Need for social overlay for eg essential workers mileage driven will not reduce but what would the public perception be to charging higher rates for these individuals

Commercial lines:

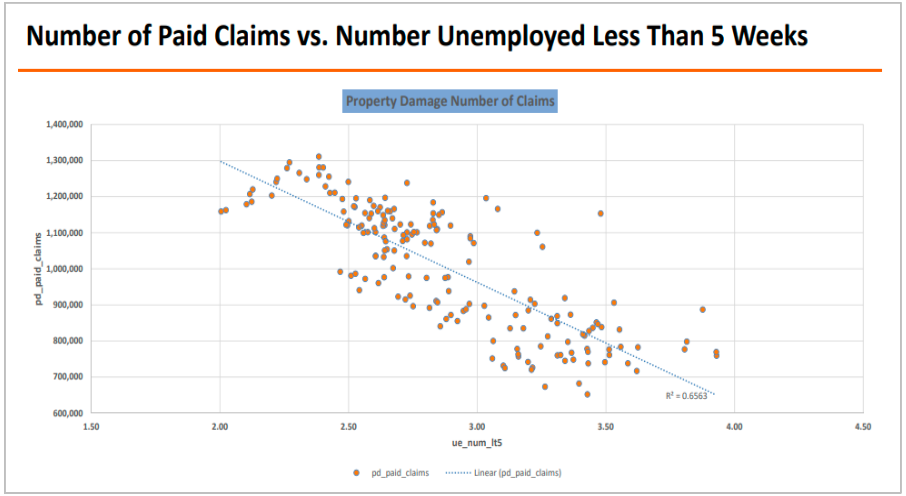
- Lockdown has accelerated consumer spending habits to being online – creating an instant demand for delivery vans and associated insurance.

Where will future claims frequency stabilise?

A recent CAS research paper indicates a clear link between PD claims and unemployment levels in the US

Factors influencing claims frequency in the study includes macro-economic factors including:

- Unemployment
- GDP
- Fuel prices
- CPI for new vehicles



Key Findings

- Across most US states there's been a reduction in commute times and lower claims frequency. However, premium lapses are also expected so profits remain uncertain for insurers
- Bodily Injury claims (most costly type of motor claim) also dropped across most states when the initial lockdown was imposed
- There is a clear link between Unemployment and Property Damage paid claims (longer you are unemployed the larger the claims severity as suggested by the graph on the left hand side)
- Projections performed on future unemployment rates and economy (shown to affect claims experience) are difficult due to the following:
  (1) Although office workers were able to WFH, key workers still needed to commute
  (2) Some countries eg India saw an increase in car demand as public transport shut down but travel to the office was still needed
  (3) As lockdown restrictions lifted in the summer people wanted to travel and so surges in car demand occurred – meaning demand is cyclical on severity of lockdown
  (4) Any economic scenario is uncertain given the government intervention means impact on economy is much more severe than historical experience

Source: https://www.casact.org/community/affiliates/camar/1020/COVID19.pdf

What will future car usage look like post COVID-19 ?

Alternatives to driving

A PwC survey* on transportation preferences post COVID-19 restrictions showed:

- The majority of consumers interviewed prefer to use their own car and demand for car ownership is expected to increase post COVID-19 for US and China (remains relatively unchanged for Germany)
- Majority of consumers suggested a significant downward shift in the use of Public transport, shared micro-mobility, car-sharing, taxi/uber,…, with the exception of China where Taxi/Uber is still used
- Future desire for working from home will inevitably impact the motor industry
- Yet to see if there be a post-vaccine surge in travel (and therefore demand for motor insurance)
- China and the USA remains open to the subscription of a new car (65%, 25% respectively) but Germany lags (only 8% see this as a desirable option).
- Picture is unclear for wider demand (as only 3 countries were considered)

Mobility patterns after COVID-19 restrictions (%)[1)]

*Source: https://www.pwc.com/gx/en/strategyand/assets/digital-auto-report-2020.pdf

Motor Insurance - future considerations

Motor manufacturers

- Joint ventures between manufacturers on R&D as they rethink their operational models (given car ownership has fallen)

- Responding to changing demands following COVID-19 eg a study shows Chinese consumers have the greatest intent to buy/lease/subscribe to a car*

Competitiveness Pressures

- Insurers will need to consider on how to improve margins through supplier consolidation

- Motor pricing has historically been competitive. If one insurer decides to use motor as a loss leader, could it drive the whole market down, and vice versa?

- New entrants eg Amazon and Elon Musk

Changes in working habits

- Does working from home remain to hold long term?

- In which case do insurers expect to see a long term reduction in frequency (for commuters) but increase in demand in other cars e.g. deliveries?

- Will Governments use this as a catalyst for low emission vehicles to meet policy targets? Will this also affect future rating factors

New products

- Usage Based Insurance or Pay as you go Micromobility (still in early stages) might become increasingly popular as consumers seek safer alternatives to public transport that are also environmentally friendly.

- Recognition that these demands will vary across different demographics of the population.

*Source: https://www.pwc.com/gx/en/strategyand/assets/digital-auto-report-2020.pdf