



Singapore is one of the most expensive places in the world to buy a car. But surging car prices have the unintended consequence of stimulating driving among the people who bought the cars, according to a study. In other words, car buyers reason that as they have paid so much to buy a car, they should get maximum use out of it, the writer says, citing the study he conducted with NUS Business School Professor Ho Teck Hua and NTU Assistant Professor Sadat Reza. ST PHOTO: KUA CHEE SIONG

High car prices may spur owners to drive more, not less

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For *The Straits Times*

Traffic congestion is blighting cities across the world. Monster jams hampering today's metropolises are frustrating drivers, increasing fuel consumption and emissions, and creating a drag on economic growth. Tackling traffic congestion is a major challenge for governments worldwide and Singapore is no exception.

Among other measures, the Singapore Government has made car ownership costly and kept alternatives affordable and efficient to keep cars off the roads. But does this approach work in creating a "car-lite" society and avoiding gridlock in the rush hour? People from other countries are often shocked by the cost of car ownership in Singapore, now one of the most expensive places in the world to buy a car.

New car buyers must bid in a twice-monthly auction for a

certificate of entitlement (COE) and the cost is added to the vehicle price. The COE premium for a small car will currently set you back \$25,920 but prices fluctuate depending on demand and supply. Last year, the Government said it would freeze the number of vehicles on the road and the decision was followed by a rise in COE prices. Car owners also need to pay an Additional Registration Fee (ARF) which further elevates the cost of owning a car in Singapore.

The rigorous measures to tackle traffic congestion in Singapore have been studied by many countries plagued by traffic issues but none has specifically investigated the effectiveness of high-cost car ownership on managing traffic congestion.

In a study at the National University of Singapore (NUS) Business School with Professor Ho Teck Hua from NUS and Assistant Professor Sadat Reza from the Nanyang Technological University, published in the international journal *Management Science*, we found that surging car prices had the unintended consequence of

stimulating driving among the people who bought the cars. In other words, car buyers reason that as they have paid so much to buy a car, they should get maximum use out of it.

HIGHER CAR PRICES DON'T CURTAIL USAGE

To assess the impact of high car ownership costs on car usage, we used data from 8,264 cars of a particular brand sold in Singapore between 2000 and 2013. When each car was serviced, we tracked the kilometres driven and analysed this usage against the overall cost of ownership and congestion on Singapore's roads. Interestingly, we found that people drove more when they bought a car with a higher price due to the increased cost of COEs and ARFs. High car ownership costs were associated with more driving even for experienced and wealthy car owners.

When someone invests a lot in something like a car and the investment cannot be reversed, they mentally want to justify those costs by using the car more. We found that this thinking changes over time.

For the first 48 months of car ownership, usage remains high to compensate for the initial purchase. Then as the car ages, usage gradually decreases but the higher the initial cost, the longer this takes.

To find out how many extra kilometres this phenomenon has added to our roads, we analysed the period from 2009 to 2013. During this time, the quota of COEs was reduced from 17,030 to 6,546 and COE premiums rose from \$11,278 to \$24,316. This increase resulted in owners driving their cars 5.6 per cent or 86km more per month than they would have otherwise.

AVOIDING THE CONCORDE FALLACY

Our findings also deepen our understanding of other situations where consumers and businesses invest upfront and feel the need to protect or maximise their investment at any cost.

For example, if you've paid a levy to play in a casino but you start losing, do you leave or stick with it? According to our research, most people are likely to stick with it as they've invested in the levy and believe it would be a waste to walk

away – even though staying may mean spending more.

This phenomenon can also become an issue for businesses. It is sometimes known as the "Concorde Fallacy", referring to the fact that the British and French governments continued to fund the Concorde's joint development even after it became clear there was no longer an economic case for the aircraft.

Another scenario can be seen with General Electric's former chief executive officer Jeff Immelt, who ran the conglomerate for 16 years and was criticised for staying too long given the company's weakening performance during his tenure. CEOs need to ask themselves if they are still achieving the goal they set for their company or are just emotionally attached to what they have invested in time, money and reputation.

A NEW WAY TO EASE CONGESTION

By keeping car ownership prohibitively costly and limiting the number of cars on the road, Singapore has avoided the massive traffic jams that hamper many cities. But we cannot ignore the fact

that those who can afford a car won't want to leave home without it.

The Singapore Government is well aware of the dangers of relying on high car ownership costs to manage congestion and is already reducing vehicle taxes and shifting towards usage charges.

In fact, from 2020, Singapore will implement a new sophisticated road-pricing system which will use the Global Positioning System to vary the amount drivers pay based on distance, time, location and vehicle. Drivers will receive real-time information about the cost and how busy the roads are.

This will encourage people to consider other routes or alternative means of transport and may prove to be a more effective way to reduce congestion than imposing higher car ownership costs that inadvertently motivate Singapore's motorists to drive more.

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