

# Swedish consumers reaction to Bonus-Malus and its immediate consequences

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## Problem description

In September 2017 the Swedish government made it clear that the (then) existing emission tax system for new cars would be repealed and replaced by a new tax system (GOS, 2017a), referred to as “Bonus-Malus” (effective from the 1<sup>st</sup> July 2018). According to the updated regulation there will be no tax exemption for new cars (including the so called environmentally friendly cars), but a provision is kept as a bonus (ranging between 10,000 and 60,000 SEK) for super environmental cars, and a higher tax for other cars (see GoS, 2017b, and BilSweden, 2017). With the new regulation, the government aims to achieve lower CO<sub>2</sub> emission while at the same time increasing tax revenues (GOS, 2017b).

BilSweden observed a 12.3 % increase in new light private car registration (<http://www.bilsweden.se/>) in April 2018. Whether this change is attributable to the Bonus-Malus effect or just a random fluctuation is somewhat unclear. Tax as a tool for controlling CO<sub>2</sub> emissions has been frequently used in the Nordic countries (see e.g. Duer et al., 2011), experiences and the effective nature of such policies are mixed (Duel et al. 2011 and D'Haultfœuille. et al., 2014). A well-known “energy paradox” (Allcott and Wozny, 2014) implies that the consumers tend to underestimate the future economies of energy efficiency while at the same time being concerned about the capital costs which leads them to buy fuel inefficient cars more in numbers than expected. Implying an increase in sales of cars in the Malus category prior to the launch of the reform which in turn has a direct effect on the CO<sub>2</sub> emissions in both short and the long run. In an evaluation of a similar tax reform adopted in France in 2008, D'Haultfœuille et al. (2014) found that the policy had neither a short-term nor a long-term effect in reducing CO<sub>2</sub> emissions (though the effect might depend on the exact implementation of the policy). It is therefore interesting to investigate, a) the Swedish consumers reaction and b) see whether if the reform has attained the Swedish government’s intended target.

## A few interesting questions worthwhile investigating in this regard are:

- Does the bonus malus reform imply any observable trends?
- If at all any trends have been observed, do the trends imply that CO<sub>2</sub> levels would be mitigated as anticipated?
- Given the reform’s expectation that sales of cars in the bonus category would exceed sales of ones in the malus category has a direct implication the revenues. Has this been achieved? Are the implications positive or negative? Can the reform be directly attributed to changes, if any?
- How about increase in tax revenue? Which way is it tipping? Bonus or Malus?

## References

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