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### Conclusion

This work studies the competitive effect of the introduction of flex cars on the fuel retail market in the state of Rio de Janeiro. Theoretically, as the percentage of flex cars rise, so does the cross-price elasticity between ethanol and gasoline. Fuel stations will respond to the higher degree of substitution between gasoline and ethanol by increasing the competition level between them, i.e., lower fuel retail prices will be charged in equilibrium.

Our results show that an increase in the percentage of flex automobiles indeed reduces fuel prices and increases the sensitivity between the two products. These results have important economical implications.

First, the fact that lower prices are being charged by fuel stations augments consumers' welfare. This welfare gain is not restricted to consumers that own a flex car. Even consumers that drive mono-fuel cars are facing reduced fuel prices due to the introduction of flex cars. Whether the appropriate financial incentives are provided, flex cars can replace old mono-fuel cars faster than they would without the regulator's intervention. This would imply more competition between stations and, thus, more welfare gain for consumers.

Second, the increase in the correlation between gasoline and ethanol is a strong indication that the competition between gasoline and ethanol is actually rising. This finding is an evidence in favor of the fact that fuel prices are falling due to an increase in the competition between the two products caused by the introduction of flex cars. This reinforces the argument that our results represent a legitimate competition effect and not a spurious one.

We also verify that our results are robust to changes in the dependent variable and to changes in the regressors. Finally, we investigate the robustness of our results running regressions in which we control for another dimension of competition between stations: spatial competition.