ENERGY POLICY

European fuel tax cuts increase Russian oil profits

European fuel tax cuts will lead to significant income transfers to Russia, thus undermining the Union's sanction efforts against the country. EU politicians should instead consider alternative policies, such as direct income transfers to households, if they want to shield citizens from increased fuel prices without benefiting Russia.

Johan Gars[1], Daniel Spiro[2] and Henrik Wachtmeister[3] ✉

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The policy problem

The war in Ukraine has led to significant increases in the oil price, which is passed on to households in the form of increased fuel prices. These fuel-price increases have significant negative financial effects on households, some of which are hit harder than others. One policy response in the EU has been to lower fuel taxes to soften the blow. However, such a policy stimulates oil demand in a situation where supply is the limiting factor and hence increases the oil price further. The increased oil price implies a de facto income transfer from the EU to the oil suppliers. Importantly, this includes suppliers in Russia, who the EU is trying to isolate economically due to the invasion of Ukraine. The question for policy makers that we address in our study is whether this effect is sizable and what alternative policies exist.

The findings

We first estimate that EU countries on average already have, or intend to, cut fuel taxes by around 20 eurocents per litre. We then find that this will lead to an increased oil price with significantly increased Russian oil profits. In the first year and up to three years later, Russia's oil profits can be expected to increase by more than 8 million euros per day. This is equivalent to around 3,000 million euros in a year, 0.2% of Russia's pre-invasion GDP and 5% of its estimated pre-invasion military spending. This is independent of whether the EU implements an import ban on Russian oil. Our analysis thus indicates that lowering fuel taxes undermines the EU's efforts to restrict Russia's economic abilities. As households are being hit significantly by the increased fuel price, we study an alternative policy measure: direct income transfers to households with the same fiscal burden (€170 million per day) as the tax cut (Fig. 1). Our analysis finds that Russian oil revenues then increase by only a sixth compared to the tax cut. Such income transfers are more flexible as households can use them for road fuel as well as for anything else. The transfers can also be targeted at those hit particularly hard by fuel-price increases.

The study

In our study, we set up a quantifiable model of supply and demand of the market for road fuel and crude oil. The results thus follow from the simple but fundamental principles of supply and demand. To apply the model, key parameters such as supply and demand elasticities, import flows, extraction costs, tax rates and planned cuts, fuel processing costs, and so on were quantified based on a large number of previous studies as well as novel data analysis. Some of the parameters were matched to how the oil market can be expected to behave over different time horizons. A variety of perturbations to the model and its values showed the results to be fairly robust to investigated changes. On a 1 to 12-month horizon, the results could be a third of our reported base case, or 70% higher. ❐

Messages for policy

- Tax cuts designed to shield households from higher fuel prices following Russia's invasion of Ukraine can be expected to raise the underlying oil price and increase Russian oil profits.
- This unintended income transfer from the EU to Russia is independent of whether the EU implements an oil-import embargo. Fuel tax cuts can thus undermine EU efforts to sanction Russia.
- An alternative policy of direct income transfers to households would lead to much smaller profit increases for Russia while still meeting the EU's objectives of shielding citizens from high fuel prices.
- Income transfers are more flexible from a household's perspective. Instead of aiding people only at the pump, the same amount of money is put in their wallets.

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[1]Beijer Institute, The Royal Swedish Academy of Sciences, Stockholm, Sweden. [2]Dept. of Economics, Uppsala University, Uppsala, Sweden. [3]Dept. of Earth Sciences, Uppsala University, Uppsala, Sweden. ✉e-mail: henrik.wachtmeister@geo.uu.se

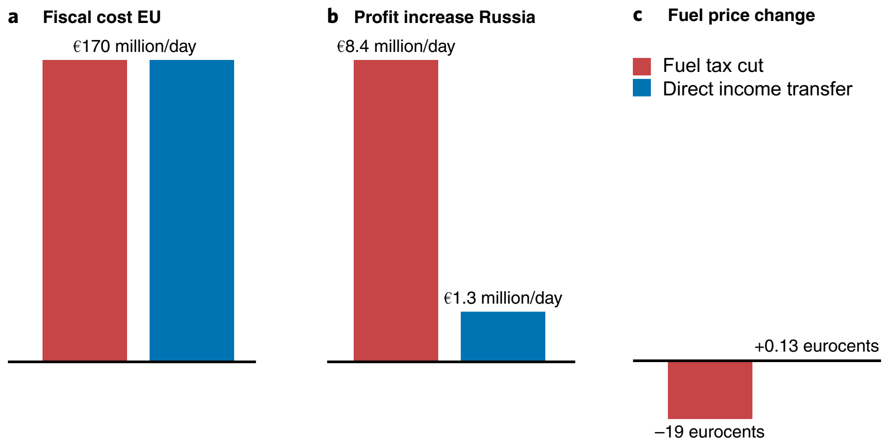

Fig. 1 | Effects of a 20 eurocent fuel tax compared to an equally sized direct income transfer to households. Presented results are for our central case in the short term (1 to 12 month horizon). **a**,**b**, The fiscal cost for EU governments is the same for both policies (**a**) but the increase in oil profits for Russian companies is much higher for the tax cut (**b**). **c**, The tax cut yields lower fuel prices at the pump, while the income transfer yields a slight price increase. Bars show the relative size of the policy effects and are not to scale. Data taken from J. Gars et al. *Nat. Energy* https://doi.org/10.1038/s41560-022-01122-6 (2022); Springer Nature Ltd.

Further Reading

Sanctions adopted following Russia's military aggression against Ukraine. *European Commission* https://ec.europa.eu/info/business-economy-euro/banking-and-finance/international-relations/restrictive-measures-sanctions/sanctions-adopted-following-russias-military-aggression-against-ukraine_en (2022).
This website outlines the sanctions adopted by the EU against Russia.

Oil Market Report (IEA, 2022); https://www.iea.org/reports/oil-market-report-may-2022.
The International Energy Agency tracks and projects Russian oil supply in its monthly reports.

A Dereliction of Fuel Duty: Europe's €9 Billion Gift to Putin and the Rich (Transport & Environment, 2022); https://www.transportenvironment.org/wp-content/uploads/2022/03/2022_03_study_fuel_excise_duty_measures.pdf.
This report outlines the plans for fuel-tax reductions early after the invasion and discusses other effects such as on the climate and distributional issues.

Montag, F., Sagimuldina, A. and Schnitzer, M. Are temporary value-added tax reductions passed on to consumers? Evidence from Germany's stimulus. Preprint at https://arxiv.org/abs/2008.08511 (2020).
This research analyses the extent to which tax cuts are attenuated by an increase in the underlying fuel price.

Wachtmeister H. *World Oil Supply in the 21st Century: A Bottom-up Perspective*. PhD thesis, Uppsala Univ. (2020).
A background on the global oil market and some of the key quantitative values used in our study.

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Competing interests

The authors declare no competing interests.