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CUTTING PUTIN'S ENERGY RE
'SMART SANCTIONING' RUSSIAN OIL AND GAS

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In the wake of the Russian aggression against Ukraine, major sanctions have been imposed by Western countries, most notably with the aim of limiting Russia's access to hard international currency. However, Russia remains the world's rst exporter of oil and gas, and at current energy prices this provides large hard currency revenues. As the war continues, European governments are under increased pressure to scale-up their energy sanctions, following measures taken by the United States, the United Kingdom, Canada and Australia. Given the inelasticity of Russia's oil and gas supply, the most e cient way for Europe to sanction Russian energy would not be an embargo, but the introduction of an import tari that can be used exibly to control the degree of economic pressure on Russia.

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The major sanctions imposed on Russia in the wake of its invasion of Ukraine have most notably aimed at limiting Russia's access to hard international currency. However, Russia remains the world's first exporter of oil and gas, generating large hard currency revenues. At current energy prices, Russia's energy revenues are estimated at about $700 million per day for crude oil and refined products, and about $400 million per day for natural gas sent via pipelines to the European Union[1].

The proceeds of oil and gas exports account for about half of Russia's federal budget[2]. As the war in Ukraine continues, importing governments are therefore under increased pressure to target these exports through scaled-up sanctions.

The United States, the United Kingdom, Canada and Australia have said they will ban or phase down energy imports from Russia by the end of 2022. However, the main buyer of Russian fossil fuels, the EU, has so far refrained from a full oil and gas embargo. Instead, the EU has set out a new energy strategy – REPowerEU – which has as its goals the reduction by nearly two thirds of EU gas imports from Russia by end-2022 and making Europe independent from all Russian fossil fuels well before 2030[3]. REPowerEU does not represent a sanction on Russia, but is rather a political decision to reduce permanently the EU's overdependency on Russian energy.

For the EU, an immediate fossil-fuel embargo would have implied substantial costs, as tfe(m(n)]J0 Tc 0 Tw 26.77 0 T8

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Therefore, the impact of an oil tax on Russia depends on the relative elasticities of supply and demand. In the following, we show that Russian oil and gas exports to Europe are inelastic. Moreover, we argue that especially for oil, demand is rather elastic while we propose steps to increase the demand elasticity of gas.

The inelasticity of Russian oil and gas exports to Europe

In 2021, 60 percent of Russia's oil exports went to European Organisation for Economic Co-operation and Development countries. For Russia, redirecting substantial oil exports from Europe to non-OECD-countries such as China and India would be difficult because of bottlenecks in the domestic and export infrastructure, and differences in oil quality between east-bound and west-bound fields. This would make it very costly for Russia to sidestep a Western tax on its oil. An attempt to do so would amount to a self-embargo. Russia's inability to export at full production capacity (minus domestic consumption) will result in domestic storage filling up rapidly, eventually forcing refinery and production shut-ins, hurting medium-term Russian oil export capacity. A full European import stop for Russian oil would thus have high economic cost for Russia.

In 2021, 75 percent of Russian natural gas exports went to OECD Europe. About 90 percent of this gas was transported via four major pipeline systems. T Tw -e()2 (. n)1 (s)--2 (a)ll Eurofilling reliacelly fon pipelinmsn ime

There are two strategic ways to support smart sanctioning, and to reduce the risk of retaliatory measures.

First, Putin's options should be limited. A large international demand cartel that agrees on a minimum tariff on Russian energy would make it more difficult for Russia to avoid the tariff and more costly to retaliate against the tariff. By imposing an embargo (= infinite tariff), the US, UK, Canada and Australia already meet the criteria for becoming cartel members. Requiring only a more moderate tariff to become a cartel member would increase the likelihood of cooperation by the EU and other regions.

Second, the EU needs more strategic options. Put simply, it needs to prepare for the worst, a full stop to supplies. Even if the EU does not seek an embargo, better preparations increase the effectiveness of the tariff by increasing demand elasticity, ie by making it easier for European demand to shift to other sources, and by limiting the harm Putin could impose on the EU by choosing an embargo.

This will require bold government action to complement private-sector action. EU governments should temporarily suspend regulations that prevent the increased use of immediately available energy resources, or the fast deployment of renewables and the corresponding infrastructure. Governments should also throw big money at the relevant players and use clever market design tools, comparable to interventions during the COVID-19 pandemic (Castillo *et al*, 2021; Cramton *et al*, 2020), to accelerate the build-up of the necessary infrastructure. Plus, governments should start acting immediately to reduce Russian imports.

In concrete terms, three steps should be taken urgently.

- First, EU governments should act together to procure as much alternative oil, gas and coal as possible. For gas, this would primarily be in the form of LNG. EU joint purchasing of gas would increase bargaining power. For oil and coal, there should be an internationally coordinated effort to make sure that producing countries with seizable spare capacity scale-up their production to compensate for a possible cut off from Russia.
- Second, EU governments need to make sure gas storage is replenished adequately ahead of next winter. This entails a regulatory change to oblige companies owning gas storage sites in Europe to refill them to at least 80 percent capacity by October 2022[6]. As winter is the season in which Putin has the strongest leverage over Europe, this represents a key element to ensure EU resilience.

[6] European Commission press release, 'REPowerEU: Joint European action for more affordable, secure and sustainable

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