EconoFact Chats: Global Energy Markets in the Wake of the Sanctions on Russia

David Victor, UC San Diego

Published on 10th April 2022

Michael Klein:

I'm Michael Klein, executive editor of EconoFact, a nonpartisan web based publication of the Fletcher School at Tufts University. At EconoFact, we bring key facts and incisive analysis to the national debate on economic and social policies, publishing work from leading economists across the country. You can learn more about us and see our work at www.econofact.org.

Michael Klein:

I remember the oil shocks of the 1970s.Gas prices skyrocketing, people only being allowed to purchase gas on particular days, depending upon whether the last number on their license plate was odd or even, turning down thermostats, and the recessions and inflation of that decade. In the wake of the war in Ukraine and the sanctions put on Russia, are we about to enter another stagflation episode -- a time of both economic stagnation and high inflation? Some have argued that a high cost of oil and gas is a price that we should be willing to pay for the sake of the Ukrainian people and to stop Russian aggression.

Michael Klein:

What are the costs borne by Russia for sanctions related to its energy exports? How much to date have these exports been limited, and what are the prospects for further limits? To answer these questions, I'm pleased to welcome to EconoFact chats, David Victor of the School of Global Policy and Strategy at UC San Diego. David is also the co-director of UCSD's Deep Decarbonization Initiative, which focuses on strategies for bringing the world to nearly zero emissions of warming gases. And he's also a non resident senior fellow at the Brookings Institution. David, thanks very much for joining me today.

David Victor:

Well, it's really a pleasure to be with you, Michael.

Michael Klein:

David, rising oil prices have gotten a lot of attention, as was the case in the 1970s when people saw the price at the pump going up, but all prices have been rising since the 1970s. If we look at the price of a barrel of oil, how high is it now as compared to spikes in the past, if we take into account inflation?

David Victor:

Well, we're not yet at the level of the spikes in the past. The highest oil price on record is this brief spike in 2008 in the wake of the last financial crisis where oil prices reached at about $160 a barrel in today's dollars. In the late 1970s, the Iran, especially after the Iranian crisis, 1978, 1979, in the wake of that, we went up to about $135 a barrel. Right now we're about $110, $100 a barrels moving around very quickly in part because of policy announcements and uncertainty around what happens to the Russian supplies, and oil prices today are about double what they were about a year ago in the deep parts of the pandemic. So they're high, but they're not as high as they've been historically.

Michael Klein:

A year ago they were unusually low though, as well, right?

David Victor:

Yeah, they were unusually low. In fact, before that, there was a period, at least for parts of the global oil market, like around West Texas, where there's a lot of supply and not a lot of infrastructure where prices were actually negative. People were being paid to take oil production off their hands. So it's a really big turnaround. And that turnaround happened before the current crisis in Russia and Ukraine. As the global economy started to rebound, you saw a demand for jet fuel, demand for gasoline, all kinds of oil products, demand surged, and that helps explain why oil prices were about $70 a barrel in December, now they're up, as I mentioned, kind a 100, $110 a barrel. So it's been a big increase in oil prices even before the Russian supply came into question.

Michael Klein:

So you mentioned what happened in the late 1970s with the crisis in Iran. Is a spike in the price of oil now reminiscent of that?

David Victor:

It's a little bit reminiscent in the sense that there were geopolitical tensions that then affected supply in oil, and that supply in oil as it came off the markets then affected price. Of course, the details are very different, in the late 1970s, particularly around the Iranian revolution, what you saw was, actually, a larger fraction of global oil supply came offline, strikes began in the oil fields in late 1978, ran through 1979. I think at peak, we lost about 7% of world oil production.

David Victor:

By contrast today, nobody's actually quite sure how much oil production might be in play right now because of the opacity around the Russian exports. But something like 3% of oil production may be in play right now in the form of potentially lost Russian exports to the global market. Those are the numbers that last week the International Energy Agency cited. So, it's a smaller volume of oil. I think there are a couple of other big differences here. Of course, we're wealthier than we were then. So our capacity to absorb some of the macroeconomic shocks is greater.

David Victor:

One of the other big differences is that in the late 1970s, you saw the spike in oil prices, and then you saw macroeconomic distress. Right now we're seeing the opposite. We saw the rebound of the global economy, which helps to explain why oil prices were already on the rise. And so far, when you look at the weekly analysis of, for example, US gasoline consumption, you haven't really seen the impact of these extremely high gasoline prices on demand. So far, it doesn't look like we're seeing the macroeconomic shock that would often follow a big spike in commodity prices. And in following that would result in a decline in demand and then prices settling back down.

Michael Klein:

So history doesn't repeat itself, but as Mark Twain said, history rhymes?

David Victor:

I think that's exactly right. And we see a lot of rhyming here and we're probably also going to see some rhyming in questions around the political response. Will this time be different when it comes to responses in terms of reducing our dependence on oil?

Michael Klein:

So, we're focusing on the effect of the war in Ukraine and the sanctions on Russia. How important in fact is Russia as an oil producer?

David Victor:

Well, Russia is an enormously important oil producer. It's a one eighth of world's oil production, huge fraction, similar fraction of the world exports. Oil is a fungible commodity for the most part, and so, as Russian exports are declining, other producers could step in. It also makes it very difficult from a sanctioning point of view. You see this extraordinary sanctioning activity by the Western countries, in some sense, Putin has done for the western countries what no western leader could do, which was to unify the west around sanctioning.

David Victor:

And so that has started to reduce the direct import of Russian oil into some of the Western countries. The United States, a few weeks ago, announced it wouldn't accept any Russian oil. Problem of course is that, that oil once it's on a tanker can go anywhere in the world, and you're starting to see it indeed flowing to other countries that are more willing to accept those imports.

Michael Klein:

So, even given that fact, David, there is a view that Europe is on the front line?

David Victor:

Yeah, I think they're on the front lines. And of course they're really on the front lines when it comes to natural gas. The major Russian exports, hydrocarbon exports, are oil that dominates the economic earnings that the Russian state and also Russian oil and gas producers earn; but also natural gas, and Europeans are physically on the front lines for natural gas consumption because they're importing that gas by pipeline. So, if those supplies were to falter, and they so far have not faltered; if those supplies were to falter, then the Europeans would be vulnerable, and of course they're funding the very war that's going on in Ukraine by paying for the gas. There's a tremendous amount of pressure in Europe, in particular, around natural gas.

David Victor:

But also on oil, Europeans are the largest importers of oil from Russia. They import some of that oil by tanker, but actually quite a lot of it comes in by pipeline in various forms. And so some of the refineries, for example, in Central Europe that are located along a pipeline that specifically designed to bring Russian oil into Central Europe, those refineries don't have very many other sources of oil, and so, there's going to be a lot of distress as they try to find alternatives.

Michael Klein:

Well, as you were alluding to one of the problems with an effort to sanction oil exports from Russia, is that there are countries that are not participating in the sanctions. So I guess Russia could just send its ship transporting oil to those countries instead. Right?

David Victor:

Yeah, that's exactly right. We're starting to see some evidence that that's actually happening. The number one challenge in any kind of sanctions regime is that the sanctions are only as good as the unity of the sanctioners. And in the case of sanctions against a fungible commodity like oil, it's particularly difficult to

organize and hold together the sanctioners. So we're seeing more cargos go to India and to China. And in particular, we're seeing the Chinese and Indian buyers demand a discount on the price that they're going to pay the Russians.

David Victor:

I think that the other effect that's at work, that's really interesting and powerful is that, Russia's become a pariah, and so it's very hard for Western banks, Western insurance companies, ships, at least the owners of these ships for them to do business with Russia. And so, there's all kinds of friction that has been introduced into a market, the oil market that used to be a hallmark of friction-free or very low friction.

Michael Klein:

So some people were saying that, "look, the price of oil is going up, that's actually helping Russia." But you're suggesting that there are all these as you call them frictions. So, even if the price of oil is going up, Russian oil exporters might not be getting as much per barrel or at least that they're not realizing the full amount of the increase because of these frictions and the difficulties facing them. Is that correct?

David Victor:

Yeah, I think that's exactly right, and it's not the case that the frictions have completely offset the rent that Russian exporters are earning, but we can take a step back from this. Russia is one of the lower cost oil producers in the world market. And so, when there's a big rise in oil prices, all of that increase in oil prices is in effect a rent that could flow back to Russian producers.

David Victor:

And what's happened with all these frictions is that, something like half of that rent has been whittled away, that's in the form of discounts to big buyers like in China and India; extra fees that are being paid to insurance companies to charterers and so on. So not all of it's flowing back to the Russian state, but the Russian state is still earning more money than it would otherwise. I'm not saying that this makes the war in Ukraine kind of economic proposition for Russia, quite the opposite, but it has ironically given them a little bit of an economic boost.

Michael Klein:

So I'd like to pivot a little bit now, you had started to mention natural gas, and that's another key energy export from Russia. Can you talk a little bit more about the importance to Europe of natural gas from Russia?

David Victor:

Well, Europe's enormously dependent on Russian natural gas, they get something like 40% of their natural gas from Russia, principally by pipeline. Back when Russia was the Soviet Union, the United States raised all kinds of concerns about the dependence on Soviet supplies. Those supplies have turned out to be extremely reliable, and that's because the Russian suppliers know that the buyers need the gas and the gas buyers know that they need supply from Russia. The big problem is the money that flows back from all these gas supplies.

David Victor:

So, I think what we're going to start to see is that, Europeans are moving as quickly as they can to reduce their dependence on Russian gas exports. They're going to be buying a whole lot of gas by tanker, so called liquified natural gas, LNG, including from the United States. And we're going to see that LNG

offset fairly quickly, at least some of the Russian gas supply. And then they're doubling down on a longer term program to reduce their dependence on natural gas all together.

Michael Klein:

So what is the scope for European countries to get natural gas from other sources? Is it going to be quantifiably a big amount or is it only a little bit at the edges?

David Victor:

Well, I think about 10 to 20% of European gas supply could probably be sourced from other sources, and that's going to be LNG. There's no other, other than North Africa where the existing natural gas projects can't be expanded very quickly, and there are political reasons why it's going to be hard to do more projects in Northern Africa, you're really talking about LNG and then maybe over the longer time, more natural gas by pipeline from the Eastern Mediterranean and Egypt, Israel and some ... there are number of very interesting gas finds there, to some degree in Turkey, but Turkey's already a big consumer of natural gas.

David Victor:

In the near term, the story is really about LNG. I think one of the challenges for redirecting that gas in the form of LNG is those extra LNG cargos that are on the global market are cargos that would otherwise go to East Asia. And so that gas already has destinations. It's going to be moved to Europe. That means that anyone who's importing natural gas in the global market right now, they're going to be importing gas that's at much higher price than they would otherwise, and that's one of the reasons why natural gas prices in Europe are the highest we've ever seen. They are five to six times a level of natural gas prices here in the United States, because the marginal supply of gas into Europe is now an LNG cargo that otherwise would be fetching a huge price in East Asia.

Michael Klein:

Is there a way in which this is a double edge sword? That is the difficulty in redirecting existing natural gas networks also means that, as Europe starts to cut its natural gas imports from Russia through these pipelines, Russia would have a really hard time redirecting its sales if it can't sell it to Europe through Nord Stream 1 or if Nord Stream 2 is not operational. An article in the L.A. Times you wrote that, before the invasion of Ukraine, you said that Nord Stream 2 should be blocked if Putin followed through with his threats, and well, Putin did, and the Nord Stream 2 pipeline was in fact canceled.

David Victor:

Yeah. So we wrote that piece, Michael O'Hanlon, a colleague of mine from Brookings and I wrote that piece in the L.A. Times before the shooting war started. And we argued in that piece for what we thought was a pretty aggressive sanctioning regime. And frankly we've been pretty impressed by the strength of the sanctions that the Western countries have put into place that included cancellation of the Nord Stream 2 pipeline, that pipeline actually never started operations, it was ready to go, would've doubled the supply of gas that could be moved by pipeline directly from Russia to the lucrative German market, it would've allowed them to offset some of their dependence on Ukraine.

Michael Klein:

Were you surprised, as well as impressed?

David Victor:

A little bit surprised, I was certainly very impressed. I have to say the Western countries for the most part have done an extraordinarily good job of putting together quickly their sanctions and [holding?] Themselves together.

Michael Klein:

How important are energy exports for the Russian economy?

David Victor:

They're vital to the Russian economy. They're huge part of the earnings that the Russian state gets in the form of royalties and so on. The country for the most part is basically a petro-state. So I think over the long term, other than whatever they're going to be able to sell to China and to India and a few other countries, over the long term, this is going to spell very severe macroeconomic harm to the Russian government.

David Victor:

Since those sanctions in Crimea, they've already started to try and make themselves less dependent on Western technology, that's had some impact in oil production, they're more Russified oil production, so a little more independent of Western technology and capital; but for the big, most lucrative long term gas export projects like LNG, they really depend on Western technology.

Michael Klein:

And it's not easily done to substitute national technology or national firms for international firms that provide the production capacity for LNG. Right?

David Victor:

Yeah, that's correct. And again, in the case of oil, they can do some of that substitution, and right now they're earning a lot more money from oil than they have been from natural gas. But the prospect for natural gas was brighter, a lot brighter for them, especially when they had the capacity to put that gas on the global market through LNG.

Michael Klein:

So following up on this, I had my colleague Chris Miller on the podcast a few weeks ago, and he talked about the effort to construct so-called Fortress Russia; to protect Russian industries and consumers from being cut off from the world through sanctions. How does this work for the energy sector? You've already mentioned a couple of things. Is there more to that?

David Victor:

Well, I think you're now going to see the Fortress Russia try to do more. I'm very skeptical about their capacity to replace Western technology in the case of LNG as I've mentioned. They can do more in the case of oil. One of the most interesting wild cards right now is actually nuclear power. The Russians are the dominant exporter of nuclear reactors and the fuel cycle that goes with those nuclear reactors, and that's all Russified technology. So you could see Russia hunting around for customers that are willing to buy their products, and having an all Russian supply chains, and they've got that for nuclear.

David Victor:

Russia is also a big coal exporter. You've seen a big uptick in the last month or so in coal prices and exports from Russia to China. We used to import a little bit of coal actually from Russia in the United States, specialized coal. We're not going to be doing that anymore. So they're positioned to offset a little bit of the loss that they're going to have, but for the most part, I think it's looking pretty bleak for the Russian energy sector.

Michael Klein:

David, you mentioned coal, and when I was introducing you, I mentioned that you're part of an initiative which focuses on strategies for bringing the world to nearly zero emissions of warming gases. There is clearly an environmental urgency to doing this. Do you think that the emergence of a political urgency for moving away from hydrocarbons from Russia might help speed the move to more renewable energy sources that are not as environmentally damaging?

David Victor:

Well, I think it's a good question. It's a huge unknown. My take right now is on the short term, this is going to be harmful to the climate change agenda, because you've got high energy prices, voters are looking at energy and inflation. They're worried about that, they're not worried about climate as much, and you've got a scrambling for additional sources of hydrocarbons, including coal. And so, emissions will probably go up, all else considered. That's the short term. I think the really big question is the longer term.

David Victor:

And here I have a cautious optimism that actually this time is going to be different. Because in particular in Europe, the motivation to act on climate was very powerful before this crisis, and the crisis has had the effect of having the European government double down on their investments in hydrogen, actually to some degree in nuclear, there's a little bit of a mini renaissance going on there, renewables of course, energy efficiency. You put all that together, you have a program where for the longer term, at least in Europe, and maybe in a few other places, you have a program that's going to get more serious about climate rather than less serious.

Michael Klein:

So following up on that a little bit, to what extent do you think political concerns with other countries that are important producers of oil or other hydrocarbon energy sources may be coming to the forefront in the wake of the Russian invasion of Ukraine? Could this be an object lesson for trading a lot of energy with countries that might be politically unstable or autocracies? And do you think these concerns might help move the transition to a more environmentally sustainable future?

David Victor:

I don't know how much those concerns are going to affect the environmentally sustainable future. What I do know is that there's going to be a new wave of concern about our suppliers of oil, and frankly, to some degree, our suppliers of oil who have not stepped up to the plate. What's really striking to me as someone who studies the oil markets in part is that the big suppliers have been almost silent in terms of additional supplies. The Saudis, the Emiratis in particular. They've expanded output a little bit, but exactly on the schedule that the OPEC had planned before the crisis was there.

David Victor:

So they frankly have been unhelpful, and they have other political concerns. The Saudi government is upset with us about the way we've been treating their leadership and on and on and on. But they have not been reliable suppliers. In addition to all that, you're going to see countries that have been on the fringe of oil supply for various reasons, brought back in, Iran, Libya, now significant new supplies coming out of Libya, maybe even Venezuela. And those countries may well be geopolitical beneficiaries, certainly economic beneficiaries from the need for additional supplies in the global market.

Michael Klein:

Well, these are really important issues, David, and I thank you for joining me today and speaking about these because there's both a political and an economic aspect of these issues. And there's also of course, the more long run concern because of the environment and what hydrocarbons are doing to the health of the planet. So thanks a lot for joining me.

David Victor:

Well, thank you, Michael, for inviting me to your terrific program.

Michael Klein:

This has been EconoFact chat, to learn more about EconoFact and to see the work on our site, you can log into www.econofact.org. EconoFact is a publication of the Fletcher School at Tufts University. Thanks for listening.