

The true price of oil

Oil has reached its true price, let's leave it in its true place: in the ground

Nicolas Haeringer May 7 .2020

On April 20, in the United States, the price of a WTI crude barrel (West Texas Intermediate Crude) fell below the highly symbolic “zero dollar” mark. By the end of the day, it had fallen further, to a counter-intuitive negative price of -37.63\$, triggering astonishment across the world. However, we don't think that is an anomaly, rather that oil might actually have reached its true price. On a purely cyclical basis, oil is now too abundant in the United States — but from a climate point of view, it is structurally overabundant. If we want to keep global warming “well below” 2°C, the overabundance of oil is thus the reality of the days, months and years to come, not just that of a black Monday for oil on Wall Street.

Paper oil...

The oil, whose price has dropped below 0\$ is not real oil, but paper oil: no consumer has ever been paid to take possession of the 159 litres a barrel contains. Actually, the WTI Crude oil barrel's price is just the price of a specific type of oil, produced in a specific country (the United States), on a specific stock market. At the same time, the BRENT barrel's (named after the major oil platforms in the North Atlantic) amounted to around \$20. Furthermore, the price that has collapsed is the price of a barrel to be delivered in May. Since 1983 and the creation of these so called “futures markets”, financial institutions have been taking possession of such contracts to speculate on their prices: they trade billions of “paper oil” every month. By doing so, they set an indicative oil price — but they don't seek to buy real oil: most of them do not have the possibility, let alone the skills, to transport, to store or to refine crude oil. This paper oil, of barrels to come are bought and sold on futures markets thousands of times before being physically “produced”. They have to dispose of these contracts before they expire.

On April 20, by dint of speculation, the holders of these contracts were indeed willing to pay to get rid of an oil they had never intended to physically buy. Prices were plummeting down to negative prices, a “possibility” which has recently been allowed on this particular market.

What has collapsed is therefore not the price of “real oil, but the value of a financial security. Of course, this isn't without impact on “real oil”: the price of barrels have the pretension of “regulating” oil markets — quotation marks are obviously required here, for the “regulation” is not a rational one, *a fortiori* with regard to global warming. Yet, the barrel's price, and the expectations of its future development, are devilishly important, for the oil industry is using them to decide on its future investments, their location as well as to assess their theoretical profitability.

... but real drilling

The barrel's price is not only a variable on which traders speculate, but an indicator with which oil producers, especially oil exporting countries, also try to play. By deciding to open or close the valves, some states, such as Saudi Arabia and Russia, have the ability to play on the quantities produced globally, as they attempt to lower or raise the barrel's value. Those who do have this capacity can do so to stimulate production, to encourage investment in exploratory drilling, to allow expensive fields to be open for production, or for geopolitical reasons in an attempt to put certain players out of business. At \$20, only Saudi Arabia is currently able to produce profitable crude oil — at the expense, however, of state investment and redistributive policies: the petro-monarchy doesn't lose money, but it does not earn enough to maintain its high way of life. Above \$100, oil companies invest massively in the most expensive drilling operations, thus pushing the boundaries of extractivism ever further.

These indicators are fundamental: of course the stock market value of a company like Total or Exxon is based on its annual results, but above all on the size of the fields for which it holds operating permits. Fossil fuel companies are therefore under pressure, to continue exploring new fields, even if we have to drastically reduce our CO2 emissions. Even before they are exploited, these reserves are transformed into financial assets, and the markets are left with the responsibility of valuing them.

Gambling on oil

The current oil crash has the merit of highlighting that investing in oil isn't reasonable at all: "Black Monday" is evidence that what was perceived as a physical asset with a monetary value could turn into a liability that must be disposed of at (almost) any price. Nonetheless, institutional investors, both private and public, still consider oil to be one of the most profitable and reliable investments available. According to them, the barrel's price could only increase in the future, whether as a result of increased consumption or resource scarcity. There (and there only), investors and some environmentalists tend to agree, who consider that the consequence of the peak oil will be to drive up its price irremediably. This, say the latter, would be good news for the climate: expensive oil would be a lever to encourage a drop in consumption, working as an incentive to increase renewable energy production, thermal insulation, etc.

The invisible hand of the market would turn green, and create the conditions for a fossil fuel phase out. This is unfortunately a tale. The price of a barrel is therefore not correlated to the quantity of barrels contained in the reserves being exploited, but to a complex set of anticipations involving a very large number of variables (geopolitical ones, financial ones, etc.). Furthermore, it is largely decoupled from the production costs of these very barrels.

Oil is a financial product, and just like any other, it is the subject of intense speculation — on the ups, but also on the downs. However, all the world's largest investors are heavily dependent on oil revenues. Energy multinationals are heavyweights in stock market indexes: for around 15% of the

global stock market value. The asset management's giants are fond of the financial profitability of the sector and continue to put oil investments at the core of their strategy.

From 2016 (i.e. the Paris Agreement was adopted at COP25) to 2018, the 33 largest banks injected \$1.9 trillion into the fossil industry. Coal, gas and oil receive more than \$370 billion each year in public subsidies. The IMF calculated that, if we were to take into account all the socialized and hidden costs of oil (e.g. the costs of climate impacts which are supported by the community rather than paid by the industry), the total subsidies, as well as direct and indirect public support amount to 10 million dollars... per minute (or 5.3 trillions per year).

Stop the money pipeline

These figures should be considered with attention: far from being evidence that investing in oil is safe and reasonable, they're proving that this is a dire gamble, for without this massive support, the oil sector wouldn't be profitable at all. No other sector is benefiting from such a massive financial and political backup.

Climate activists, in an odd yet circumstantial alliance with some financial experts, have alerted institutions for more than ten years about the famous "stranded assets": if we take the climate seriously, fossil fuel companies' stock market valuation can only be reduced to a mere few dollars. In order to drastically reduce our greenhouse gas emissions, we must organize the phase out of the oil industry, that is: to plan and manage its gradual decline (although, given the urgency, it has to be less and less gradual and slow).

This case has been made for many years now by the divestment movement. Despite its many successes, world leaders, influenced by lobbyists are still more than reluctant to cut ties with an industry which literally fuels them with cash. But the dire impacts of the pandemic could change the landscape and the realm of political possibilities. The current oil prices' collapse will push the fossil fuel industry to drastically reduce their investments and weaken even the biggest players on the field. To that extent (and to that extent only), this is excellent news — and a much more promising opportunity than bailing out the sector.

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Indeed, oil is now being traded for what its real price would be if markets were taking climate change into account: zero dollar. The WTI crude price has fallen because the resource is temporarily too abundant. Containment and the consequences of the pandemic on the economy have reduced demand (by probably 30 to 40% globally), and storage capacity is close to saturation. And, in the US, wells can't be shut down easily, to mitigate production.

Overabundance is here cyclical — and once the pandemic is over, we would get back to business as usual, and so would the barrel's trading scheme. According to some economists, prices would

quickly rise above \$100, due to a consumption boom. Our assumption is that we should look at it the other way around: from a climate standpoint oil is a superabundant resource *per se*. We have too much, far too much, abusively too much oil.

In this perspective, the price of oil, as a superabundant raw material regulated by financial markets, should therefore be zero — or almost zero. The true price of oil in the light of climate change is therefore its current price. This is good news, for the cheapest (and least climate-costly) way to store oil is to leave it where it is: in the ground; and the best way to stop investing in the exploration and exploitation of new fields, in the lack of public bans, is for its price to be fully depreciated.

What next?

Are these the premises of an even greater economic crisis? If the barrel's price was to stabilise at such low levels for a long time, the whole sector would be put at test — leading to probable bankruptcies and job losses — and destabilising many states whose budgets depend on oil profits: the situation will be particularly complicated for Saudi Arabia, the United Arab Emirates, Ecuador, Iraq, Kuwait and Russia, while the social situation may become even more tense in Algeria and Venezuela. Norway's redistributive policies, although it has a wealth sovereign fund, could also be affected. Job destructions will be massive in Canada, and even more so in the United States, whose sector is fragmented and not resilient. The poorest among oil exporting countries, first and foremost African states, whose manna is largely captured by large corporations and the highest ranking elites, will see their resources melt away even more.

If the barrel rises above \$100 again, the consequences will be different, yet no less worrying. Unlike some of our closest allies, we don't think that higher oil prices are good news for the climate. Demand is only marginally correlated to the barrel's price. But the higher it is, the more the fossil fuel industry invests. Reserves that have not been produced until now because they are not very profitable will be brought into production. Pressure will rise to increase production, transport and refining capacities, bringing the objectives of reducing CO2 emissions to a beautiful but forgotten promise. The price of oil isn't a decisive instrument for climate action — what will define the transition to a just and renewable future for all is not the amount at which a barrel is being traded a thousand times before it is even extracted, but political will.

Conversely, the billions that would not be injected into new wells would then be available to fund the insulation of buildings; organise the relocalization of production, especially food production; develop renewable energies and implement policies of efficiency to drastically reduce our energy consumption, etc. This is the only way we can protect the rights of workers from the fossil fuel industry (including the whole supply chain).

Of course, some fossil fuel companies are so wealthy that they should be able to withstand the price contraction. But it would finally allow states to engage in a real bargain with players hitherto perceived as too powerful. At least, masks would come off: States could no longer pretend that the omnipotence of the oil majors is preventing climate action. The bankruptcies of the weaker players

would provide an opportunity to begin the socialisation of the sector — or to bail them out under clear conditions of reconversion.

The current period is in many ways a historic opportunity to redefine the economy, to finally turn our backs at fossil fuels, to begin the reconstruction of a new, just and sustainable economy. If we compare the impact of carbon-intensive stimulus packages to a just recovery based on renewable energy and justice, it is hard to overestimate the importance of what is at stake these days. The policies that are being developed as we write will largely determine what our climate will look like for the decades, if not centuries to come. This is indeed a moment of truth for the climate justice movement. We've often been mocked for being better at thinking about the end of the world than the post-extractivism era. Today, we're being urged to think and build a future liberated from fossil capitalism, or else our world will eventually end up in ruins — the stakes are high, but this is worth the fight!

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