

# COVID-19 Effects on the Mexican Oil Sector and the Hedge Fund

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## Introduction

The coronavirus outbreak resulted in a major global disruption in every economic, social and political sphere around the world. Negative perspectives have plunged the financial markets and the economic outlook for the next years reflects a stagnant world economy. In order to overcome this major impact, most of the world economies have opted for fiscal stimulus, some of which have been as ambitious as 10% of GDP. This inflow of money should be properly allocated within the demand in order to offset the “demand destruction” due to uncertain economic scenarios and job losses around the world.

Even before this major disruption, the oil market was struggling. Tensions between Saudi Arabia and Russia, and lower Chinese consumption resulted in the lowest oil prices since 2016. Now the oil market has to juggle between a global demand destruction and the lowest oil prices in years. With production in a halt in different industries, limited commuting and transportation, lower domestic demand and air traveling almost suspended, even cheap oil prices will not foster consumption. It is accounted that 60% of global oil demand is for transportation and just in the USA there has been a reduction of 50% of gasoline demand.

For the case of Mexico—a minor oil producer but highly dependent on oil revenues—, lower oil prices represent a concerning reduction in fiscal revenues. Besides, given the quarantine in the country, there has been an average reduction of 13.5% in gasoline consumption (SENER, 2020). With a lower oil demand and historical low oil prices, the only strong card that the Mexican oil sector has is its oil hedge. In this context, this article presents a brief perspective of the Mexican oil market and the possible role of oil hedge in future perspectives after the COVID crisis.

## The perfect storm

On the last meeting with the OPEC and OPEC+ members (Mexico being part of the latter one), the Energy Ministry opposed firmly against Mexican oil production cuts of 400 thousand BPD. This decision created divided views nationally and internationally. The outcome of this rough negotiation was a total expected cut of 100 thousand BPD and USA will account for the 250 thousand BPD extra that will fulfill the original requested cut plan. From this scenario two factual and underlying issues are clear: the high oil dependency to USA and the uncertain scenario of the Mexican’s oil production.

Mexico was a strong oil producer from the 70’s to the early 2000’s reaching the production peak of 1238 million of annual barrels in 2004 (SIE, 2020). Since

then the main oil field, Cantarell, has been in a constant decline without any other relevant oil field discovered as important as this one. During this period the Mexican economy was highly correlated with oil boom and bust following a rent dependent pattern (Puyana, 2015). These shocks can be more clearly appreciated in the ratio of oil rents as percentage of GDP. In 2008 was a total of 10.8% and for the first quarter of 2019 it was 6.6% (Sanchez, 2019).

The decline in Mexican oil production and proved reserves came also with a reduction in refinery capacity and a growing deficit of natural gas. The Mexican refinery utilization rate was of 36% for 2019 (IEA, 2019). Mexico depends on USA refinery power where the former exports crude oil and then imports the final product from the latter. Mexico imports 80% of the gasoline and 65% of its diesel demand from U.S. (IEA, 2019). At the same time, U.S. became one of the biggest producers of shale gas and given its cheap price, the geographical position of Mexico and the environmental benefits of natural gas<sup>1</sup>, Mexico became a high importer of U.S. natural gas. In summary, Mexico became highly dependent of U.S. energy production. This vulnerability and dependency of the oil sector creates an urgency for oil hedge contracts. Although hedging has been common since 2001 (Sarabia, 2019),

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See footnotes at end of text.

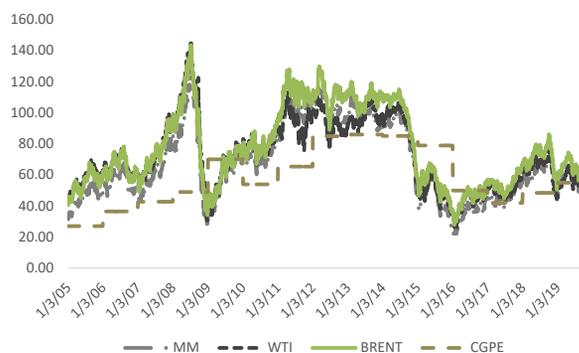


Figure 1: Oil prices in dollars, January 2005- December 2019  
Based on IEA and SHCP

in recent years it was harder to buy this insurance given market volatility and lower oil rents. Just this year, PEMEX only manage to cover the total amount of 243 thousand of BPD, last year it was 320 thousand of BPD (Sigler, 2020).

Oil hedge is a low liquid instrument that gives few

options to the owner. In previous years when PEMEX wanted to get more liquidity or other options given an overpriced hedge contract, it opted for transactions Over the Counter (OTC), the most common ones being swaps. But in Mexico there is no OTC market, so PEMEX relied on intermediate transactions in OTC international markets. In this regard is clearer why the Energy Minister was so reluctant to accept oil cuts. This may become one of the few years where an overpriced oil hedge is finally paying off to Mexico. Past oil hedge agreements have represented a loss for PEMEX. These hedge contracts also covered for the shocks in WTI prices that impact directly on Mexican oil. Figure 1 shows the high correlation between oil prices of the Mexican Mix and WTI<sup>2</sup>, as well the General Criteria of Economic Policy (CGPE). CGPE's are the yearly forecast of oil prices that the Mexican government uses to calculate fiscal revenues and oil hedging. Figure 1 illustrates how oil price forecasts fall short given the real prices impacting on oil hedging decisions.

### PEMEX after COVID-19

In the present economic jeopardize perspective there are some considerations that Mexico should take into account. First of all, there is a probability that these instruments, either a hedge or an OTC, become insolvent. Issuing institutions may become insolvent and will not be able to pay the coverage in agreement (Gross, 2020). Second, the allocation of these financial instruments will determine the energy policy in Mexico and the World. Given the already imminent governmental intervention with fiscal stimulus (although the first signals from Mexico have been contrary to this trend) it will be worth analyzing where the money will be allocated. In a Global scenario with low oil prices and a substantial global fiscal stimulus, we may see a rebound of oil demand. In this sense there has been a call to allocate any financial instrument, either OTC's or sovereign funds in clean energy options (Saidi, 2020). There is also a call to "nationalize" these financial options. For example, sovereign wealth funds should become more actively domestic by creating domestic partnerships with foreign firms.

Investment will be the key element to achieve economic growth opting for sustainable options although Mexico is opting for a different route. One of the main projects from the present government is a new refinery, Dos Bocas. Even though the main purpose of this project is to reduce energy dependency from the USA, there has been some voices claiming its unsuitability. With lower proved reserves and now, in a low-price scenario, its economic viability is even more questionable. Still in the current situation with

investment in halt, any inflow of capital will help the economy. Besides, after hitting one of the lowest prices, the Mexico's president, Andres Manuel Lopez Obrador, declared it will be suitable to invest in green energies, one of the first positive approach he has had regarding the issue.

The proper allocation of hedge funds or OTC's will be essential to materialize these projects. Either creating stronger domestic partnerships, allocating financial instruments within the country or direct them to greener options. In any other situation the best response could have been investing in low-intense sectors, mainly the service sector, but this time these sectors have been the more vulnerable to the COVID crisis. Even more, their only option may be money inflow from other sectors like the oil market. The energy sector can become the main driver reactivating stagnant investments. This time OTC's and hedge funds not only will transfer systemic risk from market shocks but also from the new Black Swan: COVID-19.

### Footnotes

1 Considered as a transitional fuel

2 Not only highly correlated but determined since the WTI price is used to calculate the Mexican Mix Price.

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