The Palm Oil Market and Price Outlook

Presentation to the 2018 FEMEXPALMA Conference

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The outline of this presentation

In order to understand the recent surge in palm oil output, one must begin with the impact of biofuels on oils demand.

Therefore, I describe why the growth in the production of palm oil was absolutely essential after 2000.

Then I explain how the growth of biofuel demand for oils has transformed the behaviour of vegetable oil prices.

I consider how the quantity of Malaysian palm oil stocks influences the behaviour of CPO prices worldwide.

I will conclude with a discussion of the outlook for CPO prices, taking account of the influence of petroleum prices and of the demand for biofuel.

Growth of world GDP vs. oil and meal demand

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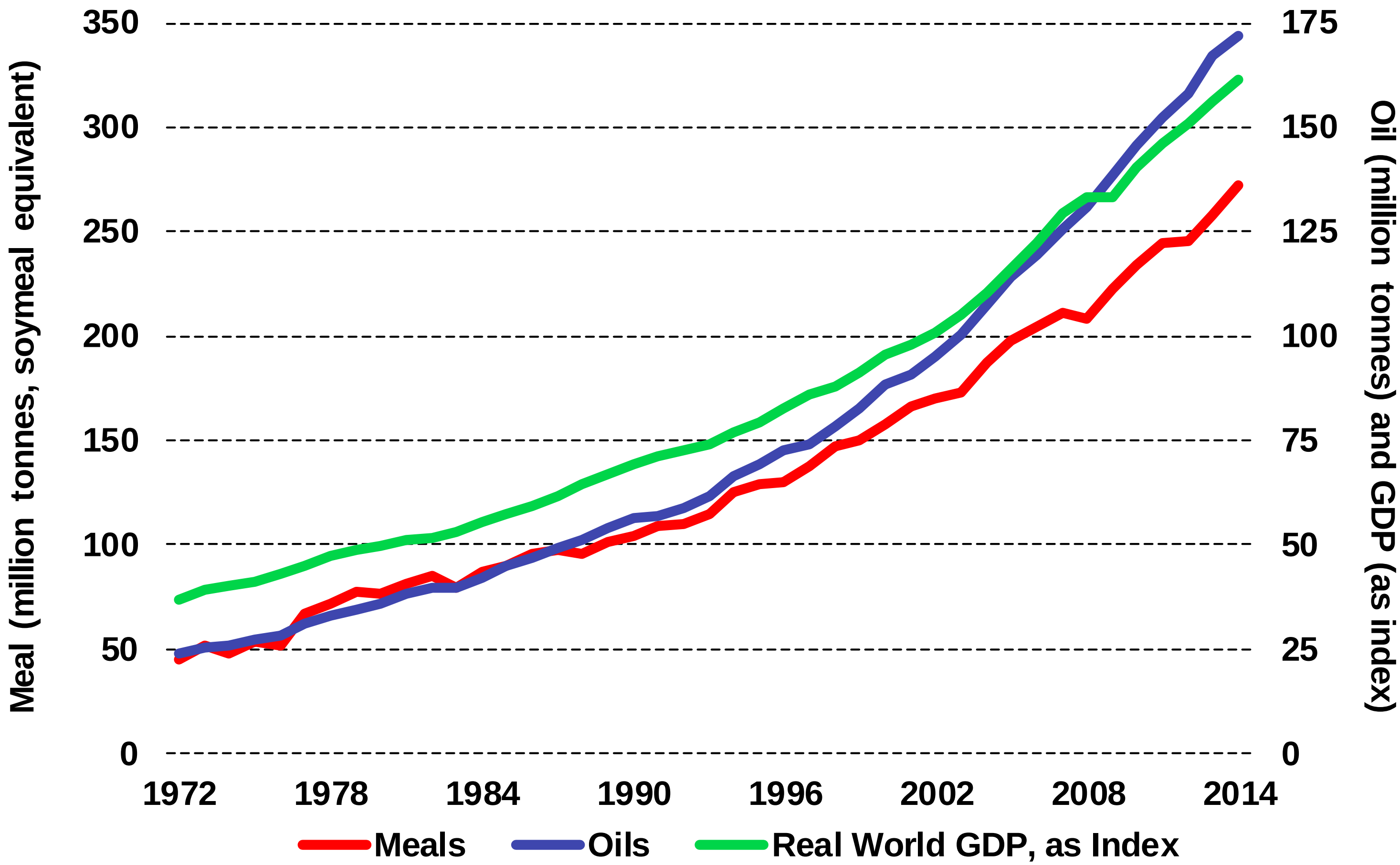
After 2000, biofuels pulled demand growth for oils above that in GDP, and in meal. The world needed extra oil more than it needed extra meal.



Palm is the best crop to meet the extra need for oil

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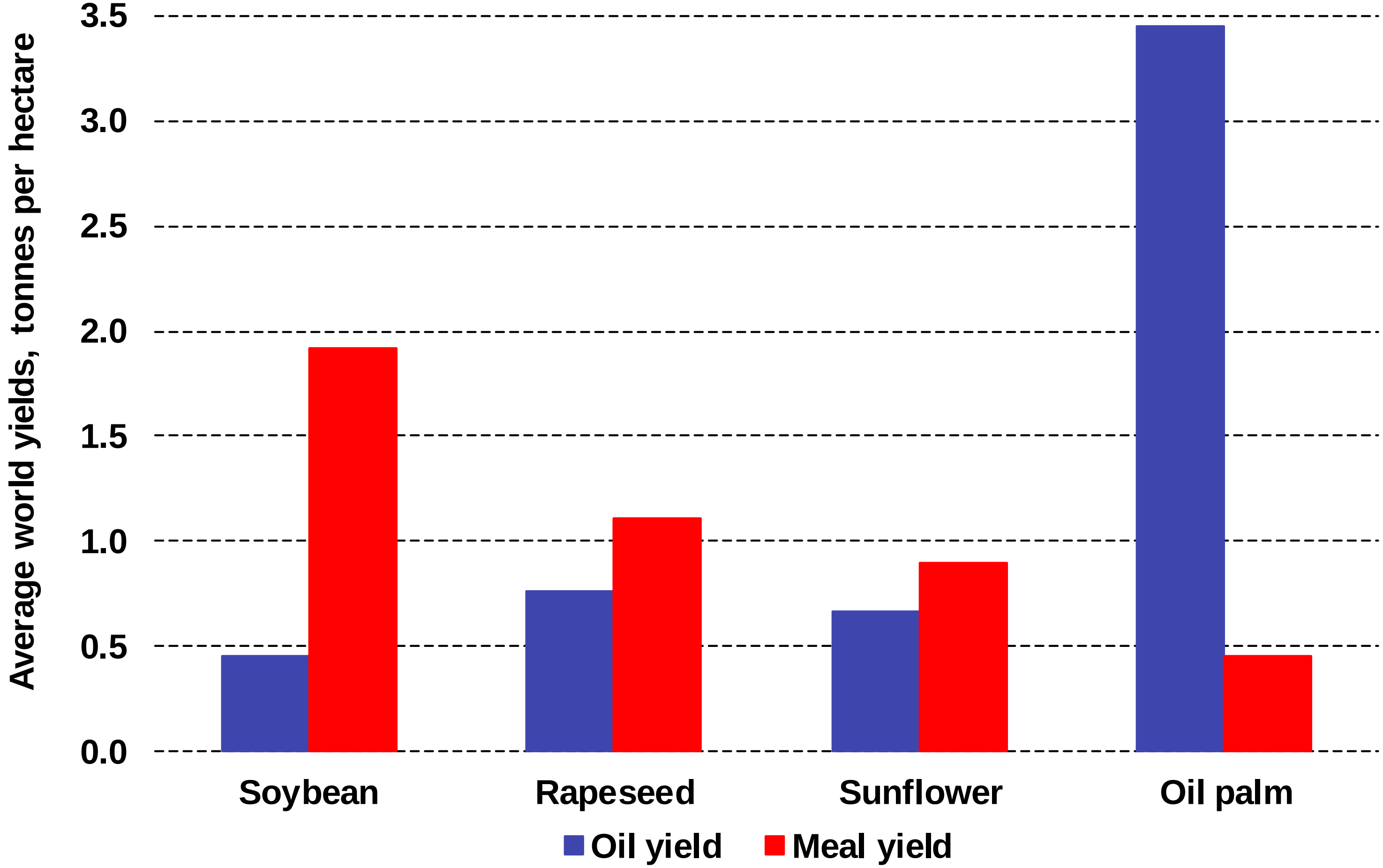
Oil palm yields eight times as much oil per hectare as soybeans, but only 20% as much meal per hectare. Rapeseed and sunflower lie in between.



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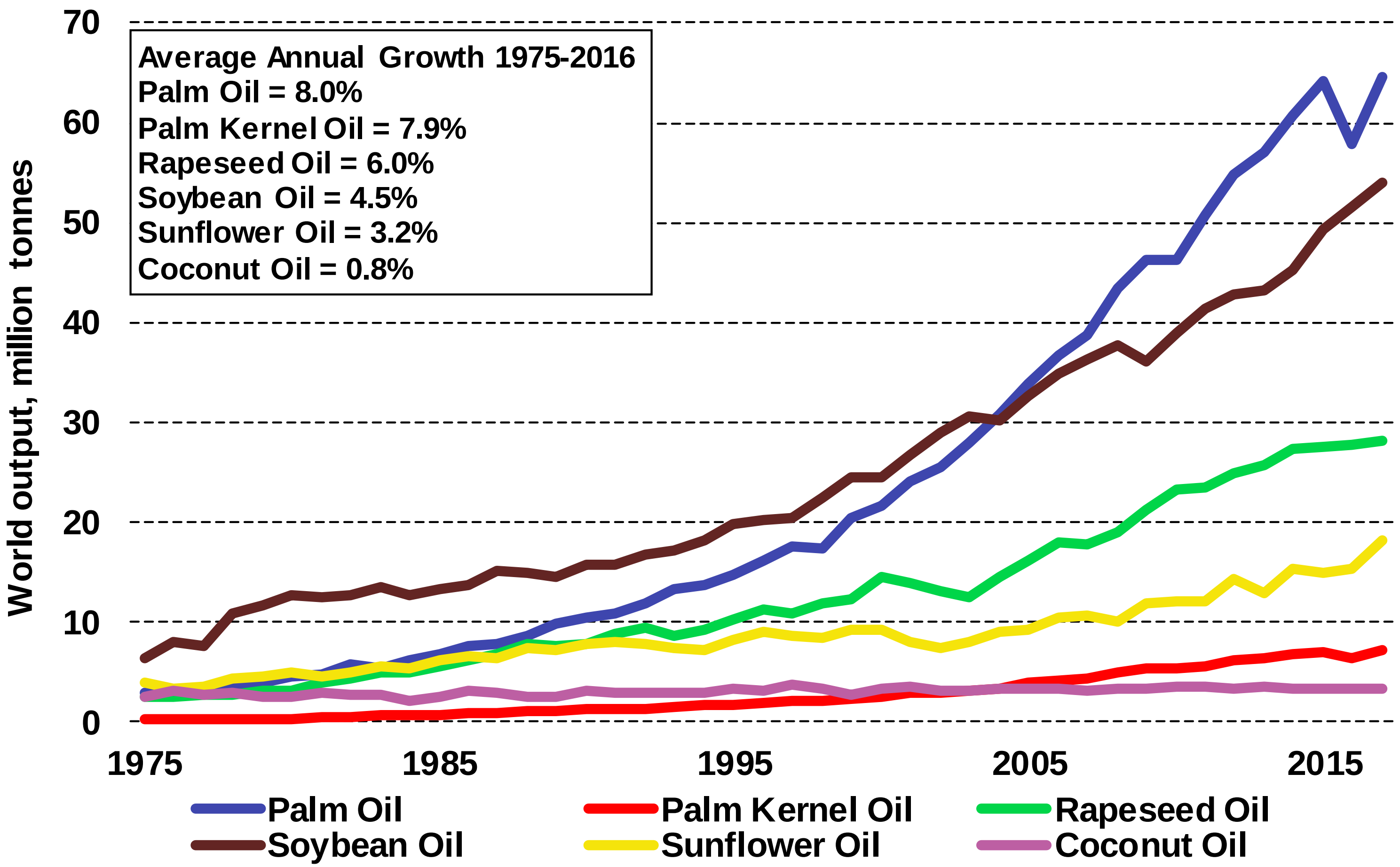
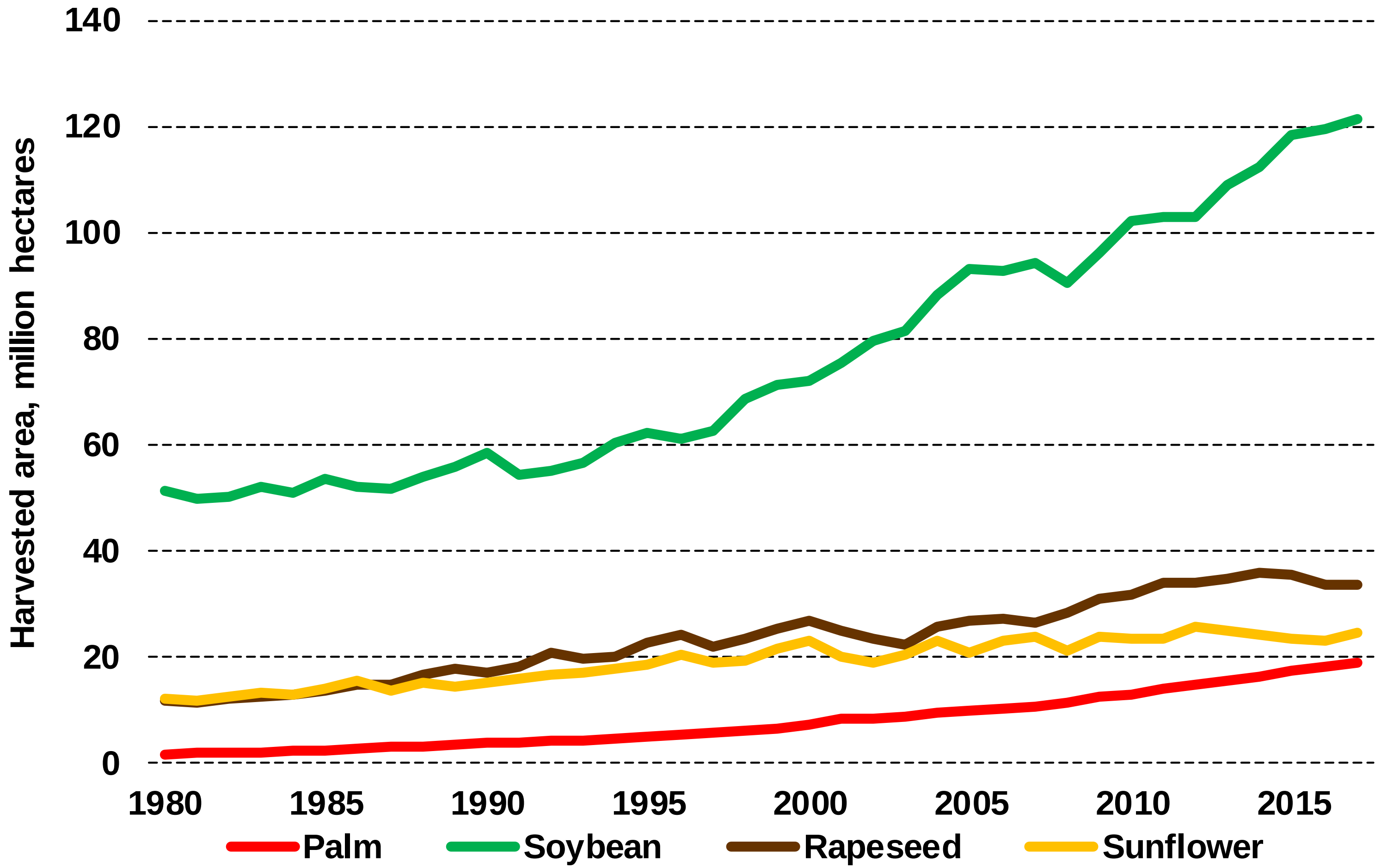
Palm + palm kernel oil output overtook soy oil in 2000

Oil palm meets the major share of world oil demand growth. Soybean oil supply grows as a result of increased crushing of soybeans for meal.



Demand growth boosted global areas of all oil crops

Although oil palm is now easily the world's leading source of vegetable oils, it still has the smallest harvested area of all the four main oil crops.



Palm oil met the market's needs after 2007

The consumption of the products from oil crops, i.e., oils and meals, was transformed after the advent of biofuels.

Unlike the previous growth in oil and meal demand, driven by population and income growth, the biofuel era created a demand for oils, without any matching demand for meals.

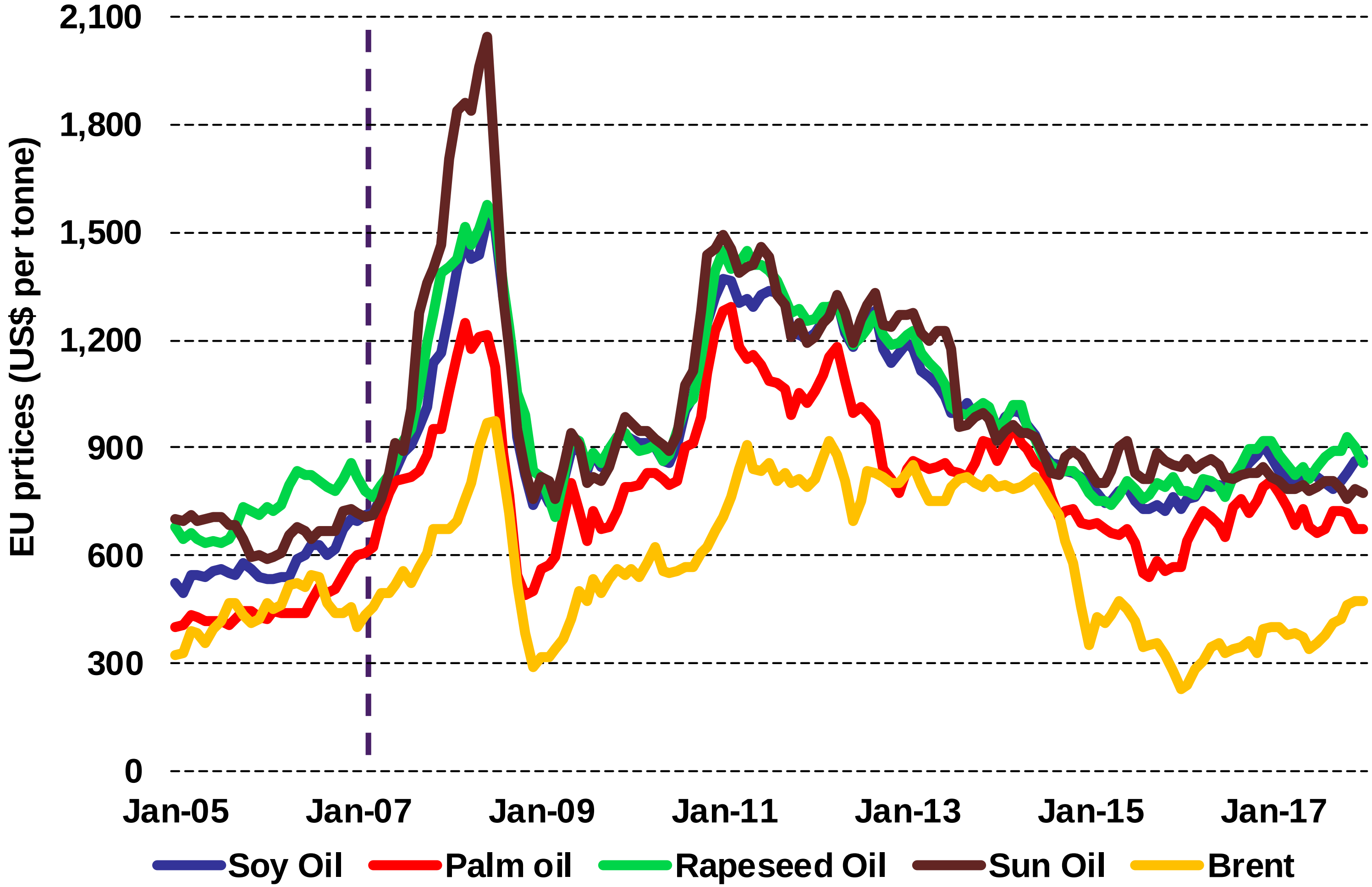
Oil palm was the best crop to meet this new world balance, yielding lots of extra oil without very much extra meal.

In addition, it is striking to see how much more efficient oil palm is than annual oil crops in its production of oil per hectare. This has limited the growth in the pressure on the area of land needed to meet the extra demand for oils.

The influence of biofuels and petroleum prices on the prices of vegetable oils

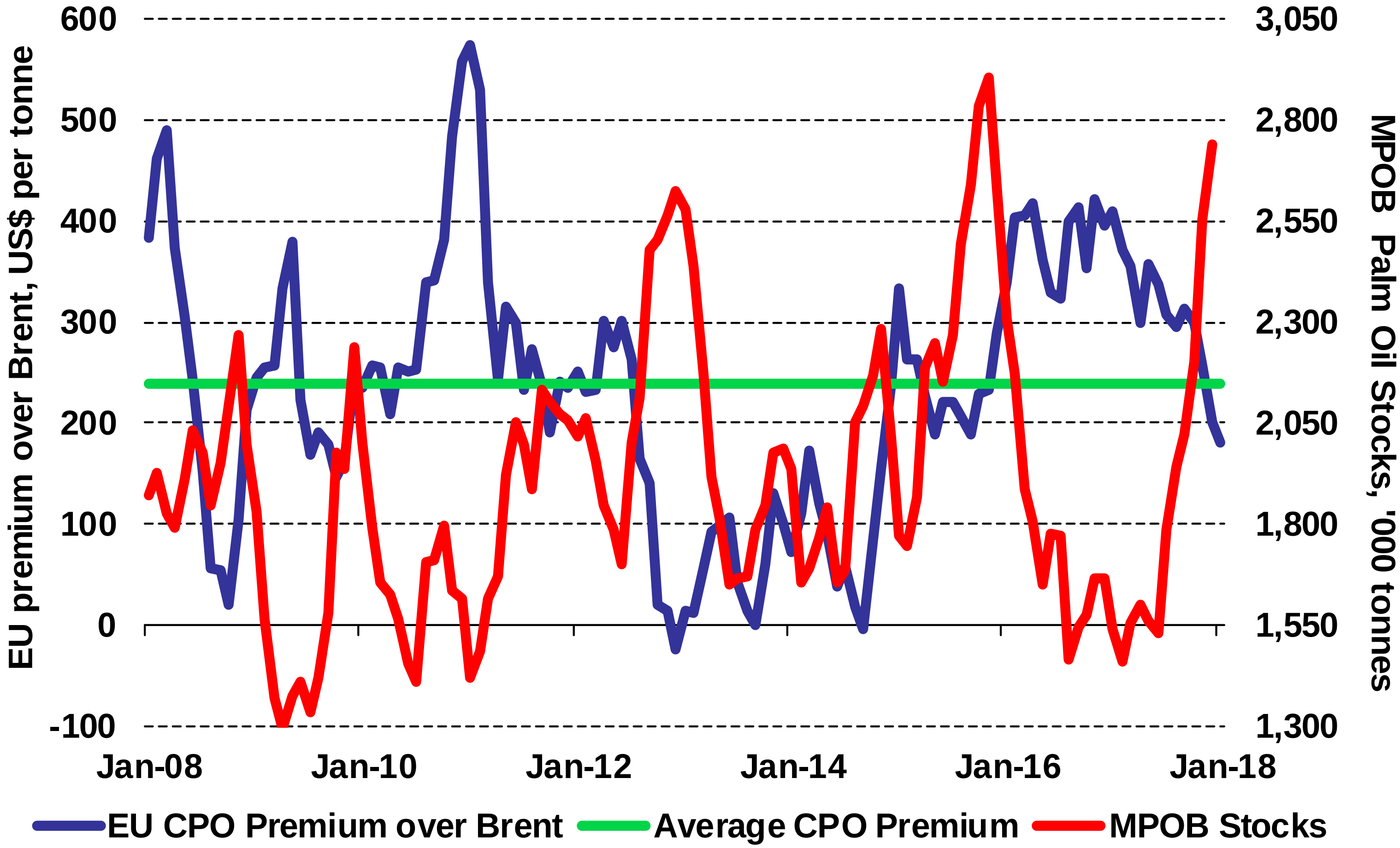
After 2007, EU vegetable and crude oil prices became linked

Whenever, since 2007, EU CPO prices touched Brent crude prices, they bounced back. Brent is now the floor to CPO prices and CPO the floor to other oils prices.



The CPO premium over Brent is driven by stock levels

If Malaysian stocks are high, downward pressure on prices cuts the EU CPO premium over Brent. If stocks are low, the premium rises to ration demand.



A price band has emerged linking CPO and Brent

Since 2007, every time that CPO prices in Rotterdam move towards Brent crude, the Brent price acts as a floor for CPO.

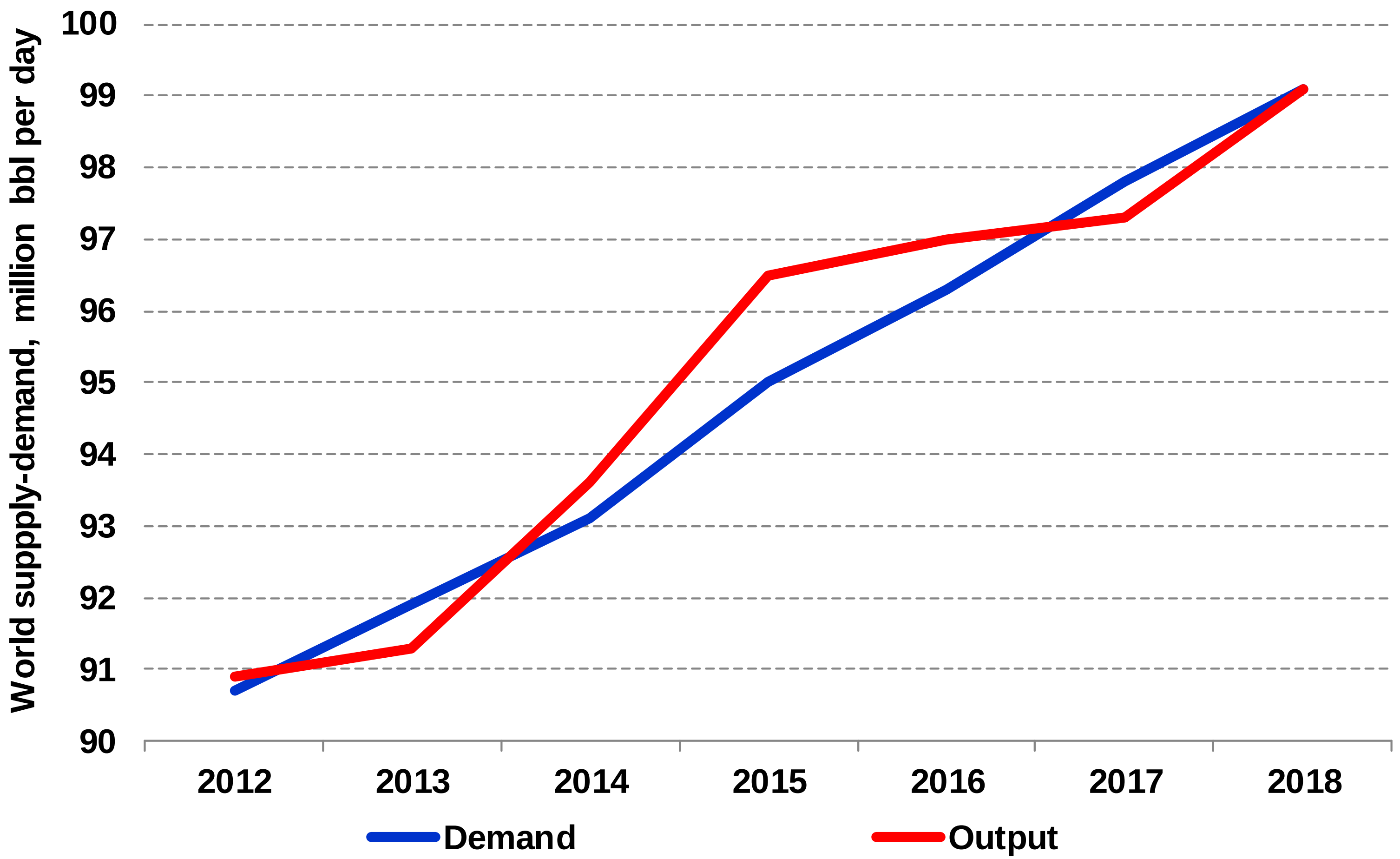
This is no coincidence. When EU CPO prices approach Brent levels, FOB CPO prices in S.E. Asia are below Brent prices (due to the freight costs to the EU). In addition, Indonesian export taxes make its CPO prices even lower. Therefore, at the EU price floor, CPO becomes a competitive source of diesel fuel in S.E. Asia, without any need for subsidies.

In the price band, the CPO premium over Brent is greatly influenced by stocks. The size of the premium moves in the opposite direction to Malaysian stocks, which the market uses as the indicator of the world supply-demand balance.

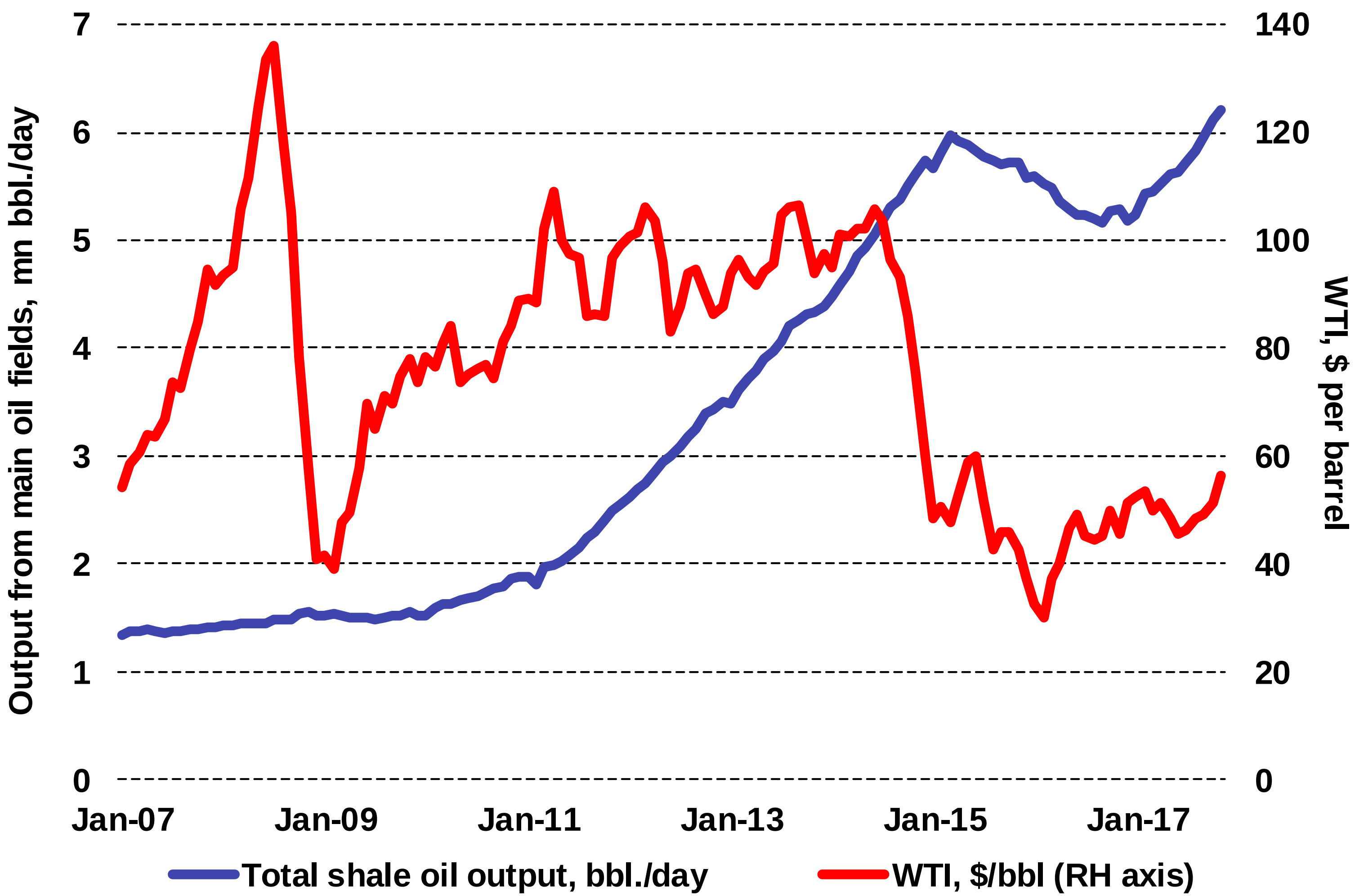
The crude oil market

OPEC slowed oil supply growth, but US shale is filling the gap

The IEA says the world had a deficit in 2017, but should be in balance in 2018.



US shale oil provided 4 million bbl/day out of the total 7.5 million bbl world output increase between 2012 and 2017



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Implications for crude oil prices

The balance in the crude market has finally switched towards a global deficit, after a long period of very high stocks.

Credit for this goes to the Saudi government and its need to get the best possible price for Aramco at its IPO this year.

I expect OPEC cuts to last till Aramco has had its IPO. After that, you can expect output cuts to end, primarily because traditional oil exporters can see the US shale oil industry taking advantage of higher prices to ramp up their output.

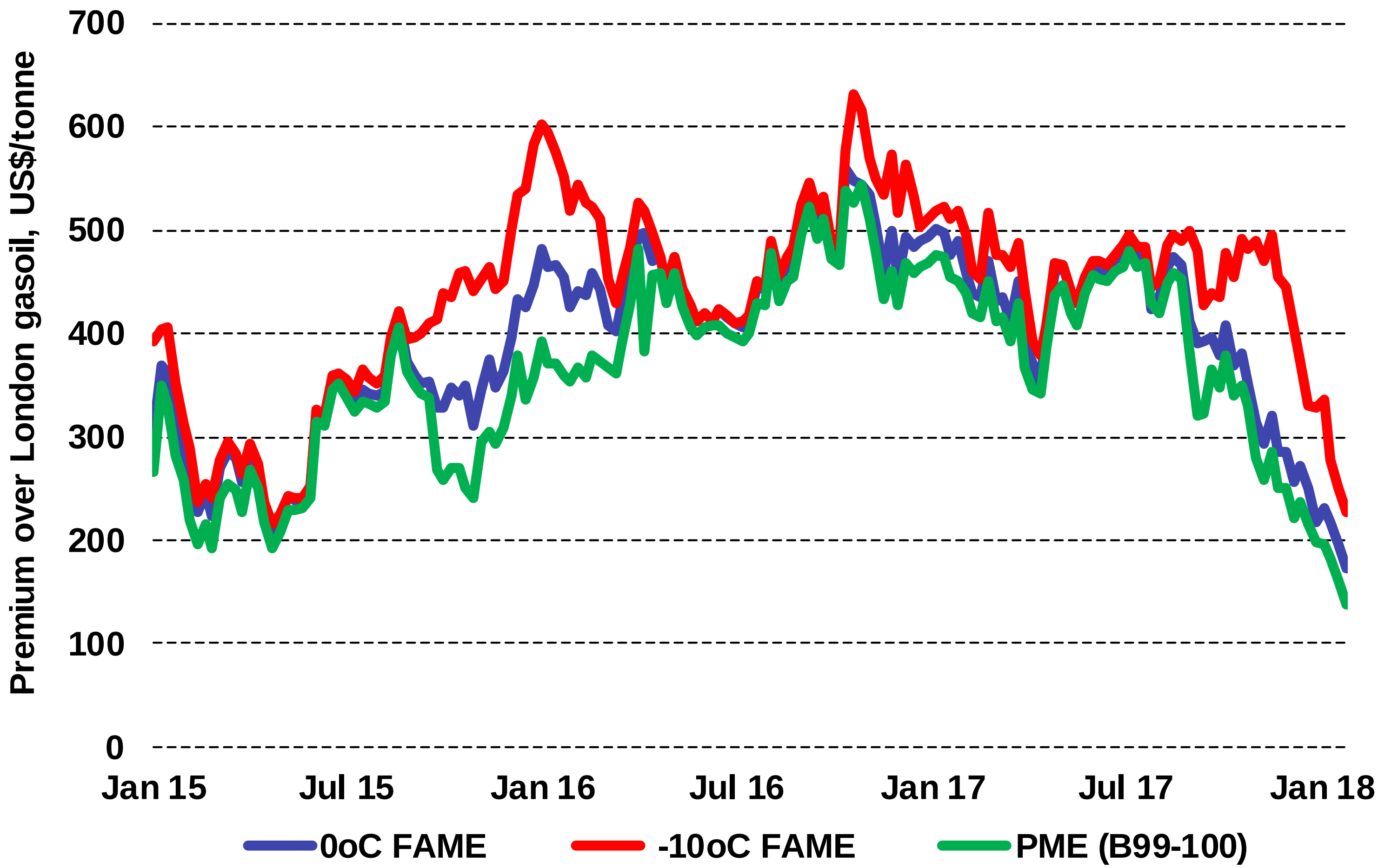
As long as Brent prices are supported at $65-$70 by OPEC, the floor to the EU price band will be near $500, and so oils will trade in a range above that, with the CPO premium over Brent determined by stock levels.

Other factors influencing oils prices

Biofuels will be the most important

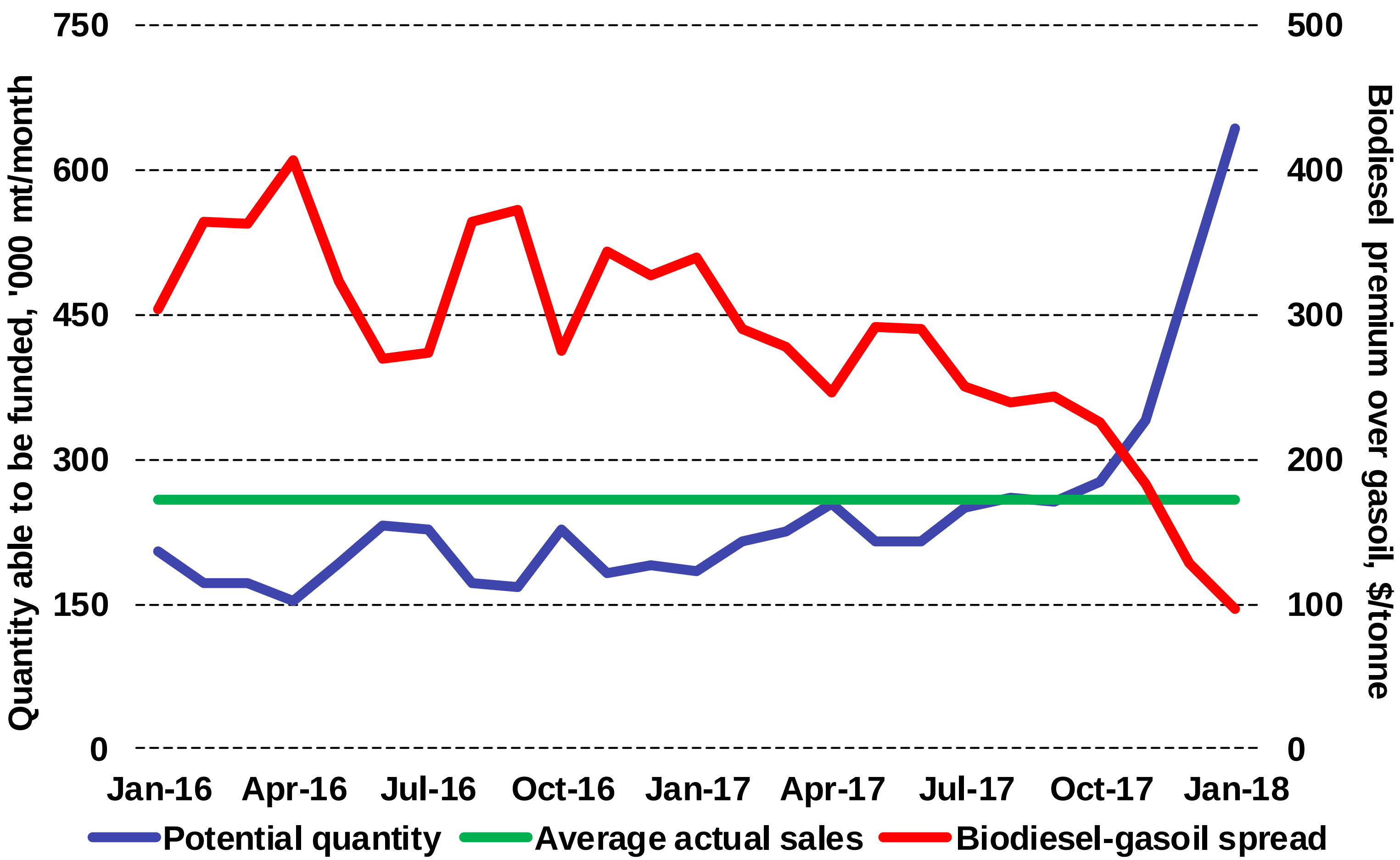
Biodiesel use increases as its premium over diesel shrinks

EU biodiesel premia over gasoil have shrunk rapidly in recent months.



Indonesian biodiesel use is funded from export levies. If the CPO-gasoil spread is low, large tonnages can be funded

This shows how much can be financed from $750 mn/year of levies. The slump in CPO-Brent spreads means much more Indonesian biodiesel can be funded.



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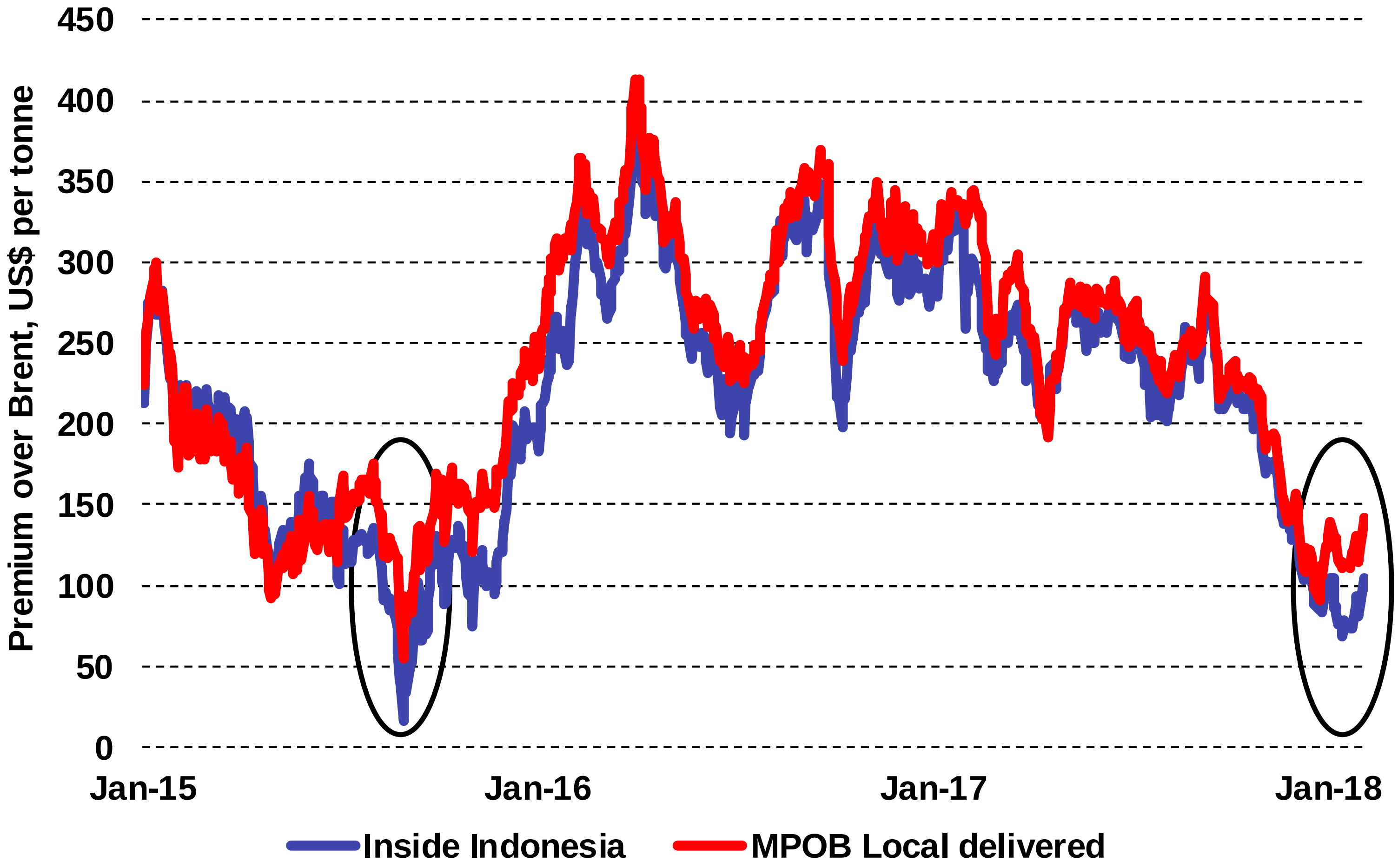
Daily S.E. Asian CPO-Brent spreads are below 2016-17 lows

The slump in spreads has been overlooked because of the rise in Brent prices. Note the very recent widening of the gap between Malaysia and Indonesia.



What does this mean for prices?

With OPEC holding Brent near $70 till Q4, with a floor to the EU CPO price at <u>$500 per tonne</u>, the key factors are:

1. If the US revives <u>$1/gallon</u> ($300/tonne) US tax credits, this will support vegetable oil prices

2. If <u>Indonesia's CPO Fund</u> supports biodiesel production as intended, local use will expand greatly, lifting CPO prices.

3. The appearance of <u>La Niña</u> after a very severe El Niño will sustain the recovery in CPO output round the world.

4. <u>CPO stocks</u> will fall till May and then rise rapidly. This will raise the CPO-Brent spread for 4 months, before they fall.

5. Remember that <u>EU</u> anti-palm oil policies affect <u>sentiment</u>, they do not affect demand at all, this year.

Price forecasts

FOB S.E. Asia CPO should rise towards $690 by May.

Key triggers, in chronological order, will be (1) US tax credits (within weeks); (2) MPOB stocks falling; and (3) Indonesia increasing its mandate, with an announcement by April.

From May, stocks will rise. The speed of the rise depends on the willingness of Indonesia’s CPO Fund to raise the mandate.

In Q3, FOB prices will drop to $630 and Rotterdam to $670.

In Q4, prices will fall further, as the Aramco IPO removes the need for OPEC cuts, and because of growing OPEC worries about the competition from US shale oil.

Each $10/bbl drop in Brent prices reduces CPO by $70/tonne.

Thank you for your attention

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