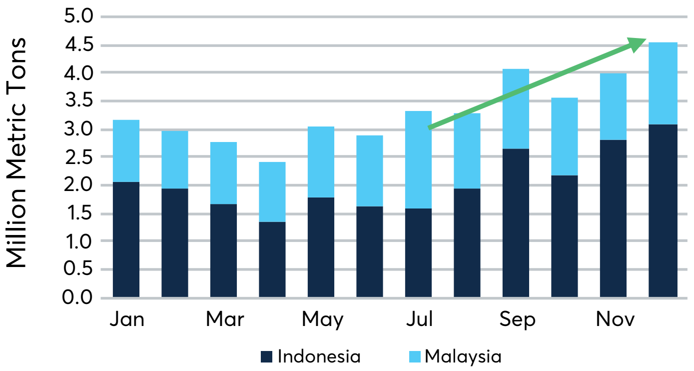
Crude Palm Oil – Hedging And Storage

The volatile price movement of crude palm oil (CPO) during 2018 provides a good learning opportunity about the key features of using futures contracts to protect a producer’s physical exports against adverse price movements.

CPO Prices Typically Rise During the Second Half of the Calendar Year

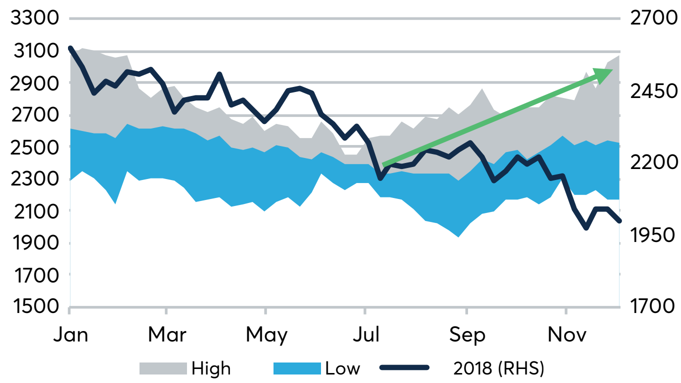
CPO production and exports tend to rise from August to November each year due to increased demand from India and China, the two largest CPO import countries. This period coincides with the Indian Diwali festival and the Chinese mid-Autumn festival, which are celebrated not only in India and China, but also in Greater China and South East Asia. Producers and traders hope to sell CPO at higher prices during these peak production months.

Seasonality of Export Volume (2014-17)



Source: UN Comtrade

Seasonality of Price (2014-17)



Source: Bloomberg. Pattern similar for past 15 years

CPO Prices Fell During the Second Half of 2018

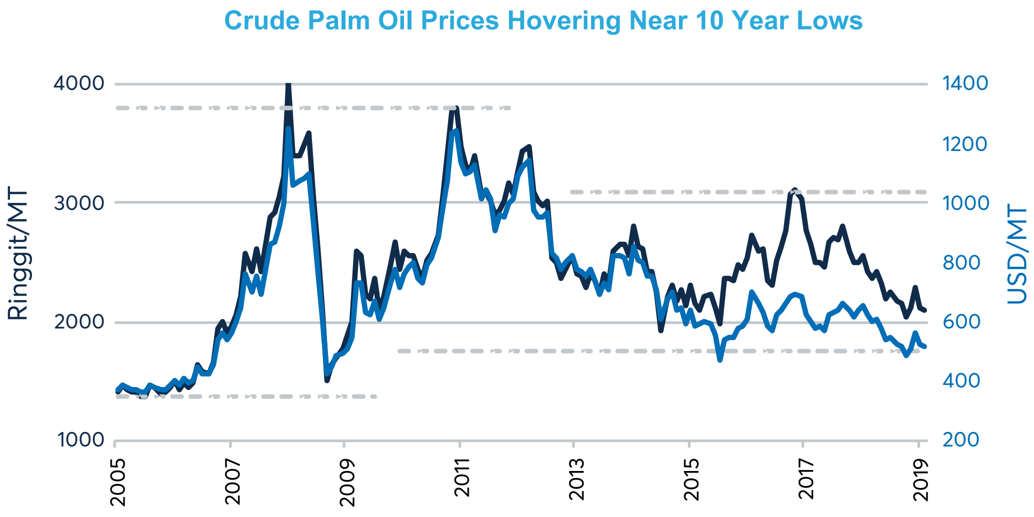
However, this historical price trend was broken in 2018 due to geopolitical activities that affected the demand for CPO. In January 2018, the European Union Parliament voted to phase out the use of palm oil as a biofuel in Europe.

Hedging and Protection to Producers from Falling CPO prices

During the past several years, producers might have left their physical positions unhedged during this peak production period because CPO prices have tended to rise during the second half of the calendar year. However, these same producers might have been adversely affected by the fall in CPO prices during the second half of 2018, a period when they were accustomed to making money. Had they hedged their physical positions with a CPO futures contract, they might have introduced some measure of protection from the fall in CPO prices, and likely to have maintained their targeted profit margins.

Downside Risks to Current CPO Prices

CPO prices have recovered slightly in the first quarter of 2019. Even though prices have been hovering around 10-year lows of $520/MT, there is always potential for prices to go lower. CPO prices reached even lower levels looking back 20 years; they traded at $360 in both 2005 and 2006 and briefly touched $400 in 2008. Given this volatile potential for price movements, many producers have hedged their physical positions with futures contracts even when they believed that CPO prices could rise.



Data Source; Bloomberg. MYR devalued against USD since 2014

Fundamentals that Could Cause CPO prices to Rise

There are some potential factors for CPO prices going forward. New biodiesel mandates implemented in Indonesia and Malaysia could potentially buoy domestic demand for palm oil.

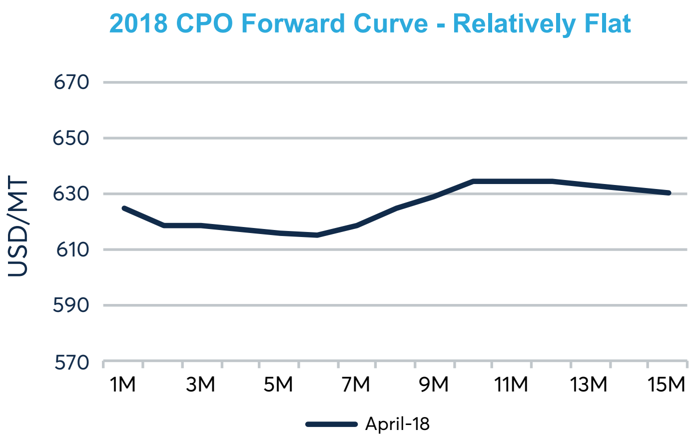
Fundamentals That Could Cause CPO Prices to Fall

On the other hand, the market factors that caused CPO prices to decline in 2018 could resurface. The European Union Parliament has tightened the rules on the use of CPO for biofuel production, which will likely have a continuing negative impact on CPO demand.

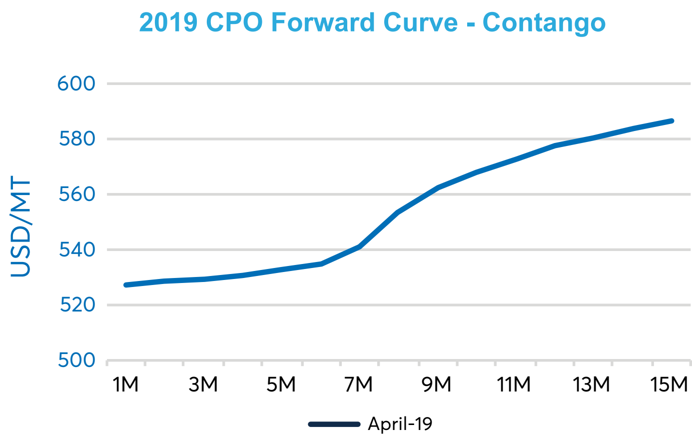
Hedging is Typically About Locking in Forward Prices

The CPO forward price curve in 2018 is useful for explaining the typical objective of hedging your physical exposures with futures contracts. Assume that you have contracted to deliver a physical CPO cargo in seven months' time, at the prevailing cash price at that time.

The 2018 CPO forward price curve shows that the cash price (proxied by the 1-month forward or 1M price) was $625, and the 7-month forward futures (7M) contract was priced at $620. By taking a short position in the 7M futures contract, you would have locked in the price of your physical sales at $620. Details on how the hedging mechanism works can be found on our CME Group Educational website. https://www.cmegroup.com/education.html



Data Source: Bloomberg



Data Source: Bloomberg

Conditions Sometimes Favorable for Storage or Carry Strategies

As CPO production and sales tend to peak between September and November, the CPO forward curve is typically more contango in shape (i.e. distant prices greater than current prices), such as the one discovered so far in 2019. Some CPO producers might already be using the strong contango to delay their physical sales and holding out for higher potential prices.

Storage plays are business decisions which a producer could carry out without involving futures contracts, but if their physical CPO positions are unhedged, they are exposed to potential downside price movements. A CPO futures contract might provide some price protection when a producer engages in a storage play.

Assume that it is February, and CPO deferred month prices look like the 2019 CPO forward curve above. A producer has CPO available to sell and the March contract month is priced at $530/MT and the December contract month (10M) is priced at $565/MT. This means that, in theory, a producer can take a short futures position on the December 2019 contract, and effectively lock in his CPO sales price at $565/MT ($35/MT higher than the price prevailing in the March contract). Provided the cost to store CPO from March to December is lower than $35/MT, the producer may profit by delaying the time he plans to market product.

As a producer, you already have a natural cash position in your physical inventory, so you can hedge your physical storage play by taking a short position in the far-dated contract month. This enables you to protect the effective price of your physical sales should cash prices fall. And you could potentially participate in the price upside as cash prices rise, by rolling your futures positions to the next forward contract months, until the time you make delivery.

CPO Futures Help Producers to Manage Price Risks in a Cost-Effective Manner

There are various palm oil futures and swaps instruments in the market. The advantages of CPO hedging using the CME-cleared swap (produce code: CPC) or the futures (produce code: CPO) contract are:

- You avoid physical delivery because the contract is settled in cash.
- You can help minimize counterparty risk as your trades are submitted through CME for clearing.
- If you trade palm oil with international counterparties, you may avoid unnecessary foreign exchange costs as the CME contracts are executed in U.S. dollars.
- You may have margin offset benefits if you are trading other related products listed by CME Group.

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