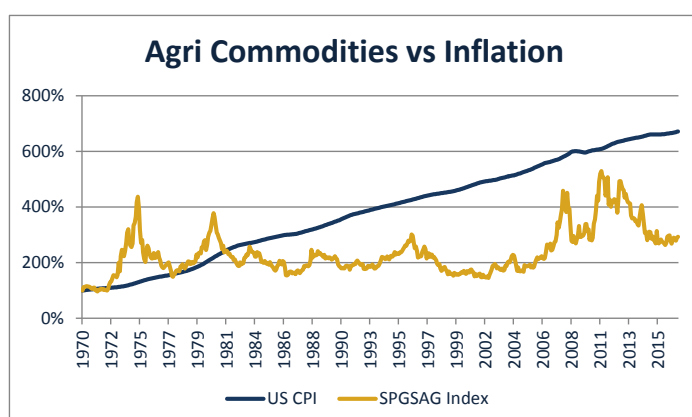


IN THIS QUARTERLY THOUGHT PIECE WE ILLUSTRATE HOW INVESTORS CAN OPTIMISE COMMODITY INVESTMENT RETURNS BY CONSIDERING THE SEASONAL TRENDS INHERENT IN AGRICULTURAL COMMODITY MARKETS

EXECUTIVE SUMMARY

- + Commodity investors can outperform passive long only commodity strategies by considering strategies that capture the seasonality of commodity markets
- + Seasonality in agricultural commodity markets exists due to iterative supply and demand cycles
- + Recurring themes and trends can be identified by studying the seasonal fluctuations of commodity prices and how they relate to underlying fundamental factors
- + Seasonality opportunities in commodity markets can be captured systematically and expressed through quantitative strategies
- + Merricks Capital has extensive experience in this area and has designed a systematic trading system to extract seasonal risk premia from commodity futures markets

THERE ARE BETTER WAYS TO GAIN EXPOSURE TO COMMODITIES



Source: Bloomberg

There are better ways for investors to gain exposure to commodities. Seasonality analysis can be used to overcome the underperformance of passive long commodity investments by optimizing the timing of trade entry and trade exit, utilizing both relative value and directional trading strategies.

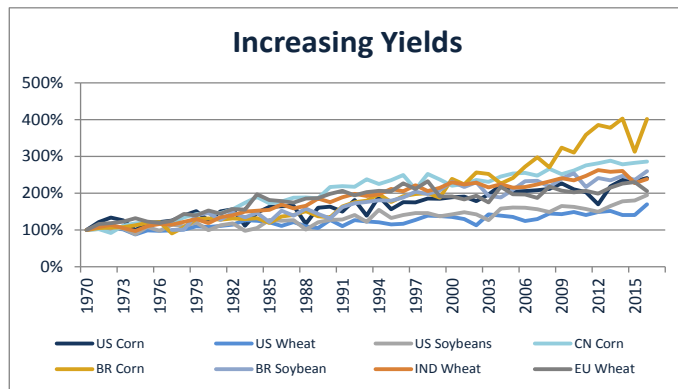
Traditionally commodity investment has involved allocations to long only strategies, often seen as a hedge to inflation. The key problem with this strategy is that agricultural commodity prices underperform inflation in the long run due to technological advances that support increasing yield

and planted acreage. Research and development in agriculture has significantly improved crop genetics, soil fertility, moisture retention and disease control. Improved farming practices and advanced technology such as no-till sowing, yield mapping, selective fertilizer and spraying techniques have permitted the cropping of land previously considered non-arable.

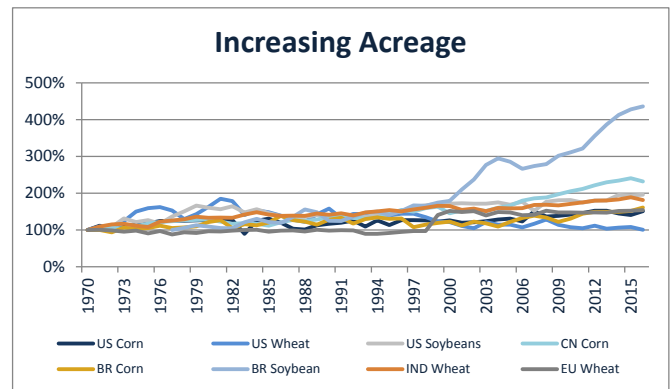
THERE ARE BETTER WAYS TO GAIN EXPOSURE TO COMMODITIES (CONTINUED)

The chart below illustrates the improvement in crop yields since 1970 highlighting the particularly large outperformance of corn, a result of the introduction of Genetically Modified (GM) varieties in early 2000.

Acreage expansion has been particularly apparent in Brazil where advancement in cropping techniques and improved infrastructure has resulted in a large scale clearing of native grasslands for the production of soybeans and corn as shown below right.



Source: Bloomberg



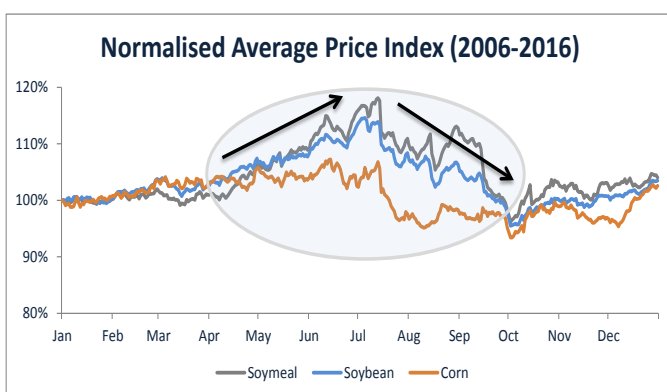
Source: Bloomberg

Increasing productivity will continue to weigh on agricultural commodity prices and prove a consistent headwind for passive long only strategy returns.

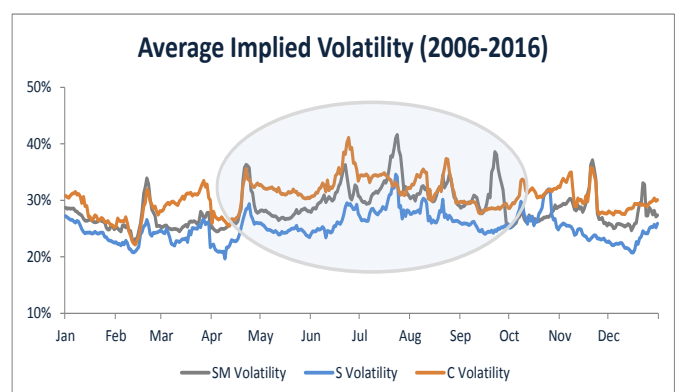
PLAYING THE SEASONALITY OF AGRICULTURAL COMMODITY PRICES

Agricultural commodities are valued based on the market's expectation of supply and demand. Due to the relatively short 6 month cropping life cycle of grain and oilseed crops, these supply and demand factors are reliably cyclical.

One of the strongest seasonal themes for agricultural commodities is the build up of weather risk premium ahead of United States summer planting window between May and June, followed by the risk off period between August and September as the crop matures. During these periods, market participation is most active, highlighted by the annual peak in volatility, aggregated volume and open interest in US corn, soybean and soybean meal futures markets as shown below.



Source: Bloomberg



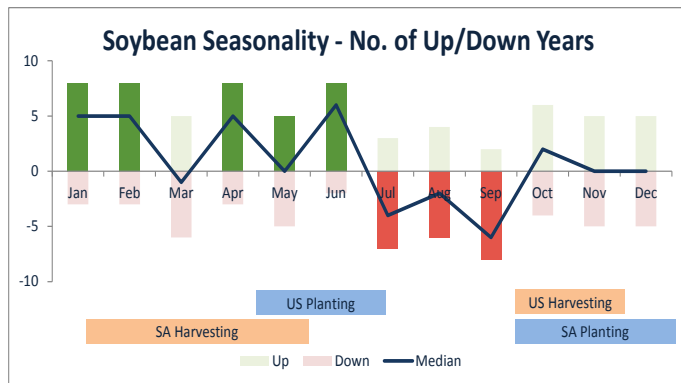
Source: Bloomberg

US Soybean Seasonality

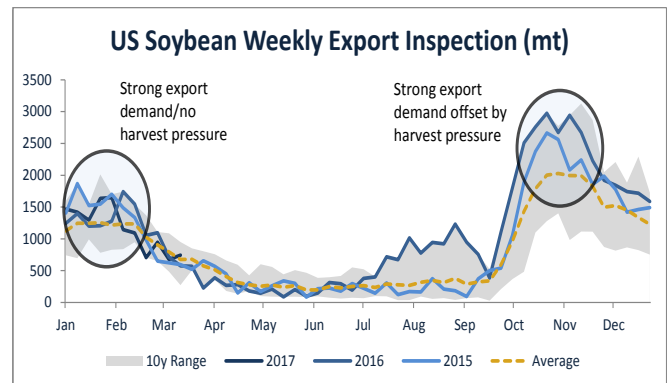
Global soybean production is dominated by the United States in the Northern Hemisphere and Brazil and Argentina in the Southern Hemisphere. Due to the dominance of US deliverable soybean futures markets, prices respond aggressively to the production and demand prospects for US soybeans. These price moves are biased to specific periods of the supply and demand cycle. In the past 10 years, soybean markets have presented the below seasonality results.

PLAYING THE SEASONALITY OF AGRICULTURAL COMMODITY PRICES (CONTINUED)

- + **January to February** – 8/10 up years. Strong US soybean export demand period without the harvest pressure experienced in Q4 provides a long bias for soybeans.
- + **April to June** – 7/10 up years. Weather risk premium starts to build up into the US summer crop planting season which gives a long bias to the soybean complex.
- + **July to September** – 7/10 down years. Risk off period. Weather risk premium is discounted as the US crop is being made.



Source: Bloomberg, Merricks Capital

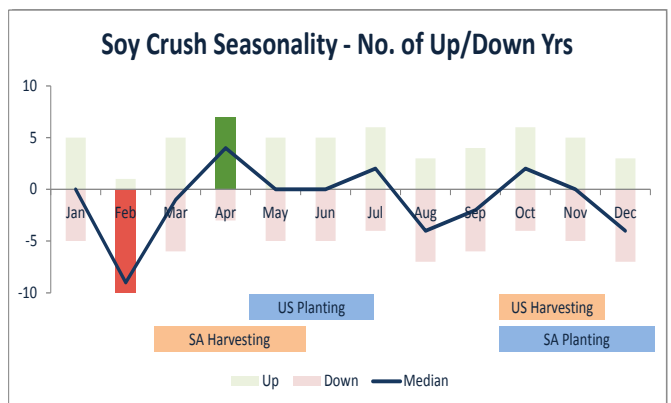


Source: Bloomberg

US Soybean Crush Seasonality

Argentina and the US compete for global soybean meal export market share. When supply from each exporter overlap, we find crush margins fall as competitive pressure is at its highest. Similarly when crush rates in the US are at their lowest, there is less competitive pressure and margins rise. Soybean crush margin has the following seasonality:

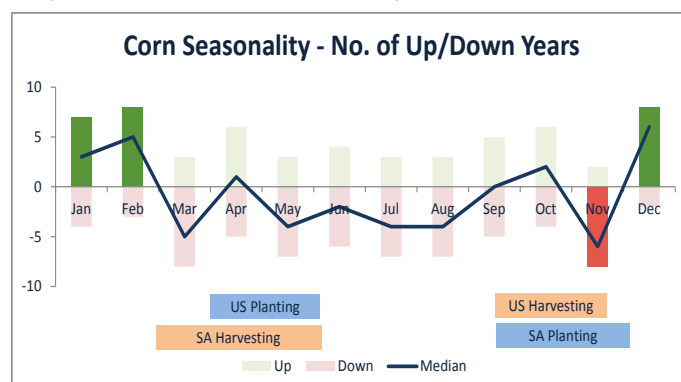
- + **February** – 9/10 down years. Strong downside seasonality for US soybean crush margin in February as US and South American crush overlap.
- + **April** – 7/10 up years. Crush margin peaks in April as meal prices appreciate on strong US domestic demand to secure supplies for the last quarter of the crush year. Soymeal also attracts a higher weather risk premium than soybeans leading into the US summer.



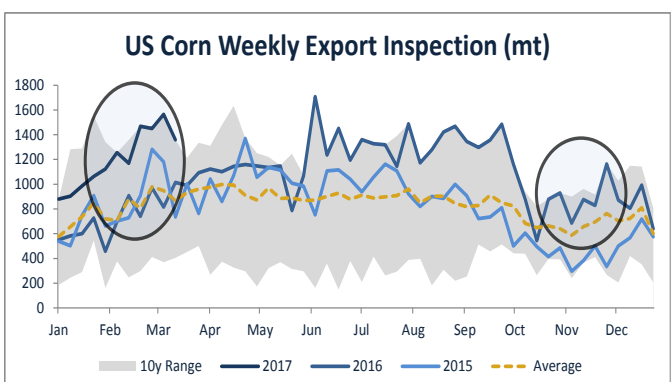
Source: Bloomberg, Merricks Capital

US Corn Seasonality

The United States is the world's largest producer of corn. Price is sensitive to the timing of export demand as this determines the price floor and movement of surplus.



Source: Bloomberg, Merricks Capital



Source: Bloomberg

PLAYING THE SEASONALITY OF AGRICULTURAL COMMODITY PRICES (CONTINUED)

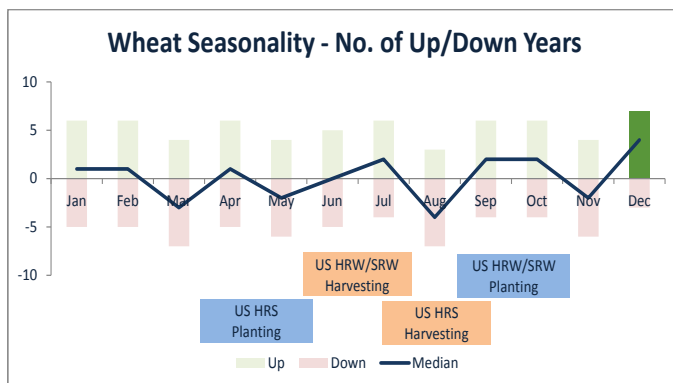
In the past 10 years, corn has shown the following seasonality:

- + **November** – 8/10 down years. Corn is a short in November on harvest pressure and inventory pile up due to exporters’ preference to move soybeans before corn.
- + **December to February** – 7/10 up years. Corn appreciates during its peak export sales period and as harvest pressure rolls off.

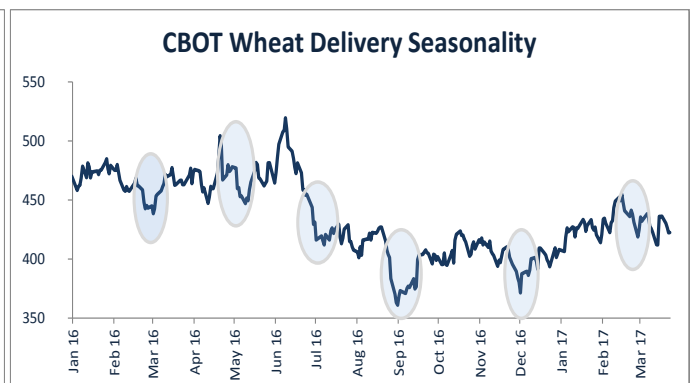
US Wheat Seasonality

The US wheat market is the global benchmark for wheat futures pricing. It also has a very liquid physical market. Due to the fact that futures are physically deliverable, convergence between futures and physical tends to occur toward futures expiry. This results in a strong seasonality leading into futures delivery periods.

- + **Delivery period** – Wheat has a persistent trend to sell off towards each of its delivery periods as weak basis encourages deliveries into the futures market. The sell off is usually followed by a correction bounce during the first few days into its delivery period as shown in the chart below.
- + **December** – 7/10 up years. The strong corn seasonal has been lifting wheat in December. The higher December wheat price is also a function of short covering into the end of the year as speculative short positioning is unwound.



Source: Bloomberg, Merricks Capital

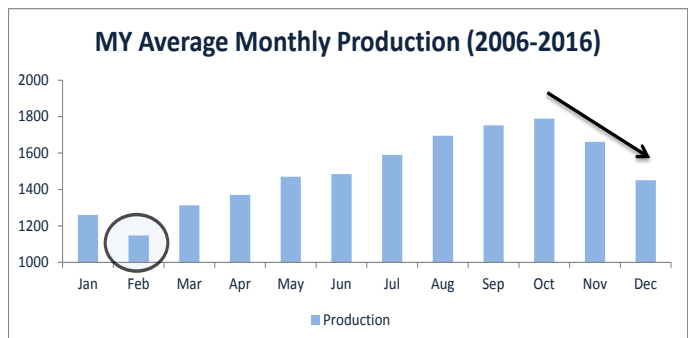
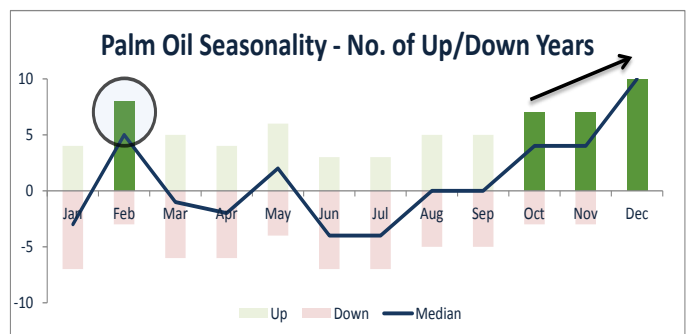


Source: Bloomberg, Merricks Capital

Malaysia Crude Palm Oil Seasonality

Palm oil is the largest global vegetable oil export market. Malaysian crude palm oil displays one of the strongest seasonal patterns due to the consistent peak and trough of crop production. Unlike grain and oilseed crops, palm oil is a tree crop that is harvested all year round and displays a consistent pattern to tree yield.

- + **December** – 10/10 up years. Seasonally declining production and monsoonal weather causes flooding and lower palm oil harvest.
- + **October to November** – 7/10 up years. Declining production from October’s peak supports palm oil prices in Q4.
- + **February** – 7/10 up years. February marks the seasonal low of palm oil production combined with seasonal strength in the soy complex.



Source: Bloomberg, Merricks Capital

CONCLUSION

Seasonality in commodity prices exists due the cyclical nature of agricultural production and demand periods. Seasonality plays an important role in commodity trading and forms a powerful tool for optimising trading entry and exit timing as well as identifying new opportunities from strong seasonal trends. This strategy can produce superior investment returns compared to passive long only strategies.

Merricks Capital conducts seasonality analysis extensively as part of its investment process. Merricks Capital’s extensive fundamental experience in commodities has provided the foundation for the development and implementation of a systematic process which seeks to extract seasonal risk premia associated with the seasonality of fundamental factors and their effects on commodity futures markets.

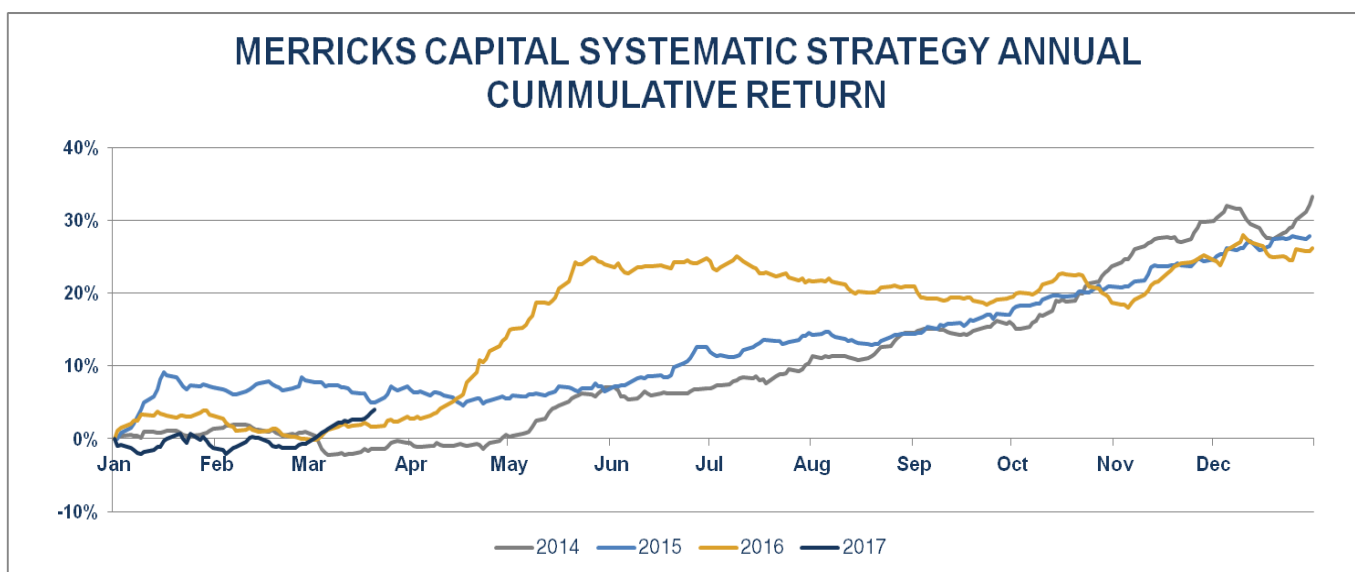
MERRICKS CAPITAL SYSTEMATIC STRATEGY

Year	Returns	Average Net Exposure	Average Gross Exposure	Annualised Vol	Sharpe	Sortino	Peak to Trough	Days to Recover
2014	31.89%	-14.5%	254.7%	9.4%	3.37	6.05	-4.45%	7
2015	26.34%	-7.0%	246.0%	9.4%	2.80	5.37	-4.56%	46
2016	24.73%	43.2%	263.7%	13.7%	1.78	3.63	-6.98%	17
2017 (YTD)	3.58%	16.1%	236.6%	7.1%	7.28	12.28	-2.81%	21

* Performance numbers include management fees and administrative cost

*Backtest for 2014 is compiled using training data from 2004-2013

*Backtest for 2015 is compiled using training data from 2005-2014



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