# Using Cash Settlement in Agricultural Contracts

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# Agenda

# Section One

A Brief History of Agricultural Pricing

# The storied history of agricultural derivatives

c. 4000 BC – first evidence of agricultural derivatives – clay tablets made in Mesopotamia to represent livestock, to save bringing actual animals to market

1611 – the Amsterdam Exchange opens its own purpose-built building

1697 – launch of the Dojima Rice Exchange in Japan

19th century – modern agricultural futures develop in Chicago

*All contracts at this point are physically settled*

Water is scattered to mark the end of trading at the Dojima Rice Exchange

# Agricultural PRAs (equally) storied history

*The Public Ledger* begins publishing agricultural prices in London in 1760 – still publishing to this day

*Urner Barry's Price-Current* first published in 1858

*Kansas City Price Current* published from 1873 onwards

*The Packer* has been publishing news and prices for the fresh fruit industry continuously since 1893

1966 – Cotlook launched as a cotton PRA
1984 – DTN launched to provide grains intelligence
1990 – Kingsman (now Platts) launched as a sugar PRA
2000s – the big global energy PRAs enter agriculture


Vol. I.
The Public Ledger.
Number 61.
Or, Daily Register of Commerce and Intelligence

# What is a Price Reporting Agency?

*"Price Reporting Agencies (PRAs) are firms that assess the fair price of commodities and report these values to a wider audience that then uses those assessments of price either for information purposes or else as the basis for physical or financial transactions."*

- The largest PRAs come from the energy world – Platts, Argus, OPIS, ICIS
- Energy was earliest to embrace the PRA model due to greater price volatility and greater globalization than the agricultural or metals markets
- The use of PRAs is increasingly important in agriculture

# Defining physical and cash settlement

**Physical:**

- At expiration, the contract is settled by physical delivery of the underlying commodity.
- Contract rules must fully describe the characteristics of the underlying commodity (i.e. grade, quality, weight, class, etc.) as well as specify delivery locations.
- Contracts that allow for the delivery of multiple qualities, grades, classes, etc. at values different from ‘par’ should specify ‘non-par’ premiums and discounts commonly observed in the cash market.
- Contracts that allow for delivery at multiple locations should reflect differences in values, if they exist, between ‘par’ locations and ‘non-par’ locations, in the form of locational premiums and discounts.

**Cash:**

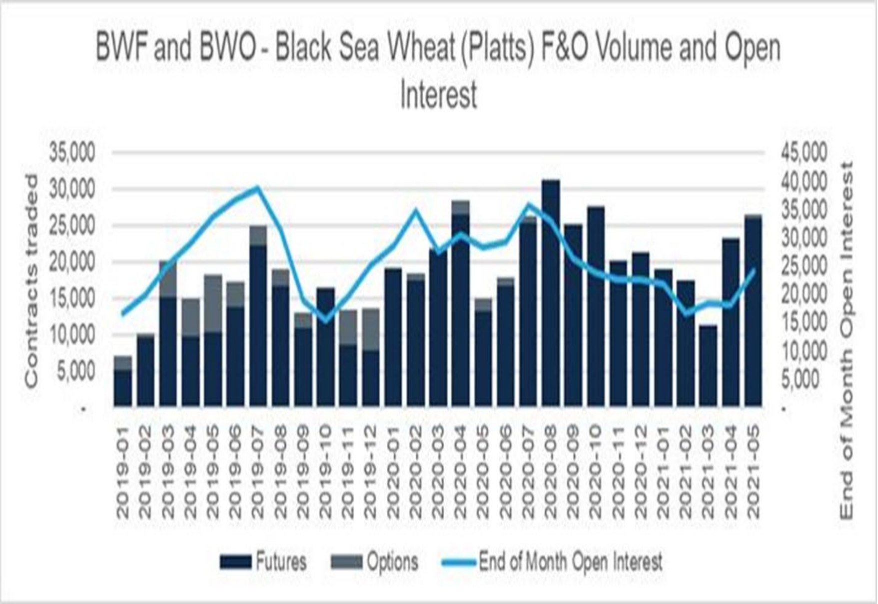
- At expiration, open positions in the contract are settled by cash payment (debits or credits) in lieu of physical delivery of the commodity.
- Contract rules must fully describe the characteristics of the underlying commodity (i.e. grade, quality, weight, class, information source, etc.) as well as how the final settlement price is calculated: what cash data is sampled, which data source is the cash data sampled from, and how is the sampled cash data then used to calculate the final settlement price?

# Why was agriculture slow to embrace the PRA model?

1. Strong exchange tradition in agriculture – physical delivery futures well established and working well
2. More state subsidy or political intervention in agriculture, relative to energy and metals
3. More government data (USDA) available so less need for independent assessments
4. The largest firms are more important in the agricultural markets than in other commodities and these tend to be vertically integrated
5. Agricultural trade is lower value on a per ton basis and so agricultural firms are less willing to pay high PRA subscription rates compared with other commodity producers
6. Greater fragmentation at the primary production level – hundreds of oil producers, but hundreds of thousands of farmers

# So, what has changed?

1. Interest in developing international benchmarks in locations where physical delivery may be more complex
2. The energy transition – biodiesel, ethanol, biomass – brings the agricultural sector into contact with the energy PRAs
3. The energy PRAs are relatively mature and looking for growth in new areas
4. Growing interest from agricultural firms in more granular risk management that gives the ability to manage quality risk or location risk
5. Success of initial launches has proved that cash settlement can work – halo effect




The Black Sea has been a 'poster child' for cash settlement

# Section Two

Use of Cash Settlement in Agricultural Contracts

# Key dates in cash-settled agriculture

- 1986 – CME replaces physical delivery of its feeder cattle futures contract with cash settlement
- 1997 – CME replaces physical delivery of its live hog futures contract with cash settlement
- 2007 – the Minneapolis Grain Exchange (MGEX) launches futures based on DTN cash prices
- 2012 – Platts enters the agricultural sector by acquiring Kingsman, a sugar PRA
- 2016 – Platts Australian wheat contract listed on CME
- 2017 – Platts Black Sea wheat contract listed on CME
- 2020 – Argus expands its position in the agricultural sector by acquiring Agritel
- 2020 – Euromoney buys agricultural PRA AgriCensus
- 2020 – Platts South American soybeans contract listed on CME

# Key considerations in determining settlement method

**Adequate Delivery Infrastructure?**

**Adequate Data For A Cash Index?**

→ **CFTC Requirements** → **Exchange Considerations**

**Is There Adequate Infrastructure For Delivery?**

A. For storable commodities, pre-approved ‘regular’ facilities such as warehouses that meet minimum Exchange requirements are needed.

B. For non-storable commodities, pre-approved facilities such as stockyards or terminal markets that enable the physical transfer of ownership and immediate movement and/or consumption of the commodity have historically been needed.

**Is There Adequate Data For a Cash Index?**

A. Is there a public or private data source that is reflective of the underlying cash market and has enough underlying data to support a futures contract?

B. Is it mandatory or voluntary data? Is it audited and reliable?

**CFTC Minimum Requirements Considerations:**

A. Do one or both of the settlement methods allow for adequate deliverable supply to prevent market manipulation and/or price distortions?

B. Do one or both of the settlement methods accurately reflect the underlying cash market and allow the Exchange to monitor for price convergence?

C. Does the physical settlement process in the contract reflect current cash market practices?

D. Does the cash settlement process reflect a thinly traded cash market / lack of competition amongst participants?

E. Do one or both of the settlement methods meet all of the Commission’s core principles?

**Which Settlement Method Best…:**

A. … allows the exchange to meet CFTC guidelines?

B. … reflects pricing reflective of prevalent underlying cash marketing practices? i.e. does one converge better than the other?

C. … discourages futures market disruptions and potential attempts at price manipulation at contract expiration?

D. … encourages adequate liquidity throughout the entire life cycle of all contract months?

E. ... provides the most long-term room for growth for the Exchange while still meeting all of the above considerations?

# Commonalities in CME cash-settled listings

- Tend to be located outside the U.S. (Brazil, Black Sea, Australia, Thailand, etc)
- Managing physical delivery may be more complex in some of these locations
- Tend to trade as spreads to existing major physical benchmarks (CBOT vs Brazil soybeans; CBOT vs Black Sea Wheat, etc)
- In some smaller markets – Black Sea sunflower oil – the cost of establishing delivery would be prohibitive relative to the likely size of the contract
- Cash settlement is a new concept to agricultural traders so continued education is needed to support growth

# Conclusion

# The future of agricultural cash-settled futures

- Cash settlement has been widely adopted in energy and metals markets
- Cash settlement is gaining acceptance among global agricultural traders
- Since there is no delivery risk, does not require continuous liquidity and allows participants to trader sooner
- Choice of PRA is crucial: must be reputable, reliable and widely accepted
- A strong PRA partner also acts as another marketing channel for the contract
- WILL NOT replace existing physically delivered benchmark contracts
- WILL allow global traders to participate in regional price discovery while maintaining the relevance of physically delivered benchmark contracts

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