

Speculation

Survey of the Evidence

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All opinions expressed are my own and do not necessarily reflect the views of the Commission, other members of the CFTC professional staff, or interpretations of any related CFTC policies.

Early Speculators

- William Davidson organized the first successful shipment of frozen meat between New Zealand and London
- Departed Feb 15, 1882
- **Round-turn trade** takes 98 days
- **Long position:** 4330 mutton and 600 lamb carcasses (frozen)
- No insurance
- Profitable voyage—nets £4,700
- Greatest benefit was that it opened Great Britain to global competition and created significant economic growth in New Zealand's dairy and sheep farming industry

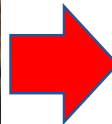
The Dunedin – 1,320 tons, 240 ft.



Re-fitted with a refrigeration unit

Speculators Now

- Side-by-side electronic trading introduced for most AG futures markets in 2006
- FCM population decreases after 2008-09 recession; new business models develop
- Computer algorithms become the new market makers
- What are the issues? Are there benefits?



HFT Market and Quality Surveys

- Biais and Foucault (2014), “HFT and Market Quality,” in *Bankers, Markets & Investors*.
- O’Hara (2015), “High Frequency Market Microstructure,” in *Journal of Financial Economics*.
- Menkveld (2016), “The Economics of High-Frequency Trading: Taking Stock,” in *Annual Review of Financial Economics*.
- Fishe and Smith (2018), “High Frequency Trading of Commodities,” in book, *Commodities: Markets, Performance, and Strategies*, Oxford University press.

Meta-Data Study

- Hasse, Zimmermann, and Zimmermann (2016), “The Impact of Speculation on Commodity Futures – A Review of the Findings of 100 Empirical Studies,” in *Journal of Commodity Markets*.

Meta-Data Study Findings

Tab. 10: Impact of speculation for food commodities: Direct measures of speculation

Focus variable	Wheat			Corn			Soybean			Coffee			Cocoa		
	Impact Direction			Impact Direction			Impact Direction			Impact Direction			Impact Direction		
	1	0	-1	1	0	-1	1	0	-1	1	0	-1	1	0	-1
Price	25%	75%	0%	50%	50%	0%	50%	25%	25%	33%	67%	0%	0%	100%	0%
Return	29%	57%	14%	6%	69%	25%	31%	54%	15%	25%	50%	25%	29%	57%	14%
Risk Premium	0%	50%	50%	0%	0%	100%	0%	0%	100%	-	-	-	-	-	-
Spread	50%	50%	0%	50%	0%	50%	50%	50%	0%	-	-	-	-	-	-
Volatility	10%	40%	50%	27%	55%	18%	33%	33%	33%	20%	60%	20%	40%	20%	40%
Spill-Over	50%	50%	0%	33%	33%	33%	0%	100%	0%	100%	0%	0%	0%	100%	0%
All	24%	53%	24%	22%	54%	24%	33%	43%	23%	31%	54%	15%	27%	53%	20%
Number	8	18	8	8	20	9	10	13	7	4	7	2	4	8	3

Focus variable	Feeder Cattle			Live Cattle			Lean Hogs			Sugar			Total		
	Impact Direction			Impact Direction			Impact Direction			Impact Direction			Impact Direction		
	1	0	-1	1	0	-1	1	0	-1	1	0	-1	1	0	-1
Price	0%	100%	0%	100%	0%	0%	50%	25%	25%	0%	50%	50%	12	15	3
Return	0%	88%	13%	25%	63%	13%	13%	63%	25%	14%	71%	14%	16	54	15
Risk Premium	-	-	-	-	-	-	-	-	-	-	-	-	0	1	3
Spread	-	-	-	-	-	-	-	-	-	-	-	-	3	2	1
Volatility	50%	50%	0%	0%	40%	60%	40%	60%	0%	0%	40%	60%	14	26	19
Spill-Over	0%	100%	0%	0%	100%	0%	0%	100%	0%	100%	0%	0%	4	8	1
All	13%	81%	6%	32%	47%	21%	28%	56%	17%	13%	53%	33%			
Number	2	13	1	6	9	4	5	10	3	2	8	5	49	106	42