Rapeseed Basis Contracts Trading with corresponding exchange of futures for physicals

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1) A. General

- The rapeseed basis contract (related to an underlying trading month on MATIF/EURONEXT) is the most common way to trade rapeseed in the EU
- The rapeseed basis contract is a commitment on a physical flow, it is not a price risk management tool
- The price or margin risk is managed by buying or selling futures (Hedging)
- The invoice price of the physical rapeseed is determined by the price of the Exchange of futures for Physicals (or AA in Euronext terms or give-up in USA terminology), which must be the same for both parties of the exchanged futures and thus handled outside the Central Order Book

1) B. General

- We will look at examples of the Producer selling rapeseed basis contract ex-harvest to the Trader and the Trader selling Oct (after storage) to the Crusher.
- In all cases, we will look at 3 stages:
- Rapeseed basis contract terms
- As this basis contract does not fix any price, sales/purchase of EURONEXT rapeseed futures to fix the price/margin (hedge)
- Exchange of Futures against Physicals to determine the invoice price (employing the AA, Against Actuals, Euronext terminology)

2) A. Producer (Farmer/Coop) angle to rapeseed basis contracts trading

- Our Producer wants to have a contract for physical delivery of (part of) his rapeseed production ex-harvest without the potential harvest pressure on the prices.

- The (French) Producer sells on 1 July 2015 to the Trader 2,200 tons (88 trucks of 25 tons) of July 2016 rapeseed delivered silo France at even to XRQ16 (EURONEXT rapeseed futures Aug 2016), with Sellers’ right to exchange futures for physicals

2) B. Producer (Farmer/Coop) angle to rapeseed basis contracts trading

- As this basis contract does not fix any price and as the Producer (in our example) wants an average yearly price, he decides to fix his price in selling EURONEXT rapeseed in 11 times: 4 rapeseed contracts Aug 2016 every time at the first of the month (starting 1 July 2015)

- The Producer decides to make on the same day the exchange of futures for physicals (to avoid maintenance margins, margin calls in rising markets and to be able to cash the profit immediately) at the closing price of the day

2) C. Practical example

Producer sells 4 lots XRQ16 on	1/07/2015	at	383 €	Exchange of futures (purchase) at	379 €
				flat price fixing is established for 200 tons at 379 €	
Producer sells 4 lots XRQ16 on	1/08/2015	at	363 €	Exchange of futures (purchase) at	358 €
				flat price fixing is established for 200 tons at 358 €	
Producer sells 4 lots XRQ16 on	1/09/2015	at	348 €	Exchange of futures (purchase) at	346 €
				flat price fixing is established for 200 tons at 346 €	
Producer sells 4 lots XRQ16 on	1/10/2015	at	348 €	Exchange of futures (purchase) at	347 €
				flat price fixing is established for 200 tons at 347 €	
Producer sells 7 X 4 lots XRQ16 on first of the months at			355 €	Exchange of futures (purchase) at	352 €
				flat price fixings are established for 1400 tons at 352 €	

On 1 June 2015 the Producer has sold 44 contracts of XRQ16 at average 357 € (his risk management price)

The original basis contract is executed by 11 flatprice fixings of 200 tons each at average 354 € (invoice price)

Result for the Producer:

Result on futures:

2200 tons sold at average 355 € and 2200 tons bought (through AA) at 352 € = 3 € profit on 2200 tons

Price on physical delivery of the 2200 tons of flat price contract finxings: average 354 €

Total revenue = 3 € profit on futures + 354 € on invoicing of the physical delivery = 357 € on 2200 tons

2) D. Conclusions

- In todays practice, the Exchange of Futures for Physicals is handled outside the Central Order Book and then reported separately for transparency.
- If no longer possible and all AA (Against Actuals) below a certain threshold should be handled through the Central Order Book, it could well be that both parties end up with a slightly different purchase and sales prices. Invoicing on a common price (the main objective of the Exchange For Physicals) would then no longer work.
- In the example, we used an Exchange For Physicals by 4 lots but this may as well happen per single lot (2 trucks) and we therefore strongly argue that, if it is a question of threshold, the lower threshold should be put at 1 lot.

3) A. Crusher angle to rapeseed basis contracts

- We assume that our Crusher wants to have a contract for physical delivery of (part of) his rapeseed consumption to enable him to book an acceptable crush margin by putting physically delivered rapeseed against physical sales of meals and oils without a potential squeeze on the prices.
- The Crusher buys on 1 Sept 2015 from the Trader 2,200 tons (2 trains of 1100 tons) of Oct 2016 rapeseed delivered his (German) crush plant at XRX16 + 10 € (EURONEXT rapeseed futures Nov 2016), with Buyers' right to exchange futures for physicals
- 1 Dec 2015, the crusher has oil and meal demand for Oct 2016 delivery and can book an acceptable margin with 1100 tons rapeseed Oct 2016 delivered at 370 €. He buys 22 contracts of XRX16 at 360 € and makes an AA (sales) to the Trader at the same price.

3) B. Crusher angle to rapeseed basis contracts

- The original rapeseed basis contract is price-fixed for 1100 tons by a price fix at 370 € (360 € AA price + 10 € basis).
- 1 Feb 2016, the crusher has oil and meal demand for Oct 2016 delivery and can book an acceptable margin with 1100 tons rapeseed Oct 2016 delivered at 354 €. He buys 22 ctrs of XRX16 at 344 € and makes an AA (sales) to the Trader at the same price.
- The original rapeseed basis contract is price-fixed for 1100 tons by a price fix at 354 € (344 € AA price + 10 € basis).
- The final invoice prices for the 2200 tons delivery in Oct 2016 will be exactly the prices with which the Crusher has calculated to book his acceptable crush margins.

3) C. Conclusions

- The Crusher has used EURONEXT for price discovery and with his purchased rapeseed basis contract has ensured that his physical delivery for that specific period (to match his product sales) has a fixed price relation with the underlying futures month, enabling him to book a fixed forward physical crush margin.
- Again, as the Against Actuals (AA) also here requires the absolute same prices for Buyers and Sellers, the AA should continue to be handled outside the Central Order Book.
- In the example, we used an AA by 22 lots but crushers may as well purchase per single lot (2 trucks) and we therefore strongly argue that, if it is a question of threshold, the lower threshold should be put at 1 lot.

4) A. Traders' angle to rapeseed basis contracts

- We assume that our Trader wants to have his storage (partly) filled by buying rapeseed ex-harvest July 2016 at even XRQ16 from the Producer and have 2,5 months storage and financing (+ transport to the German Crusher) paid for by selling Oct delivery at XRX16 + 10 € to the German Crusher.
- These basis contracts do not fix any price and as his storage and financing revenue needs to come from the spread between XRQ16 and XRX16, he chooses the moment to book the spread (price/margin risk management).
- As the Trader needs to sell XRQ16 futures to the Producer in that AA and needs to buy XRX16 futures from the Crusher in that AA, he books the spread of 7,50 € on 13 Oct 2015 by Buying 44 ctr XRQ16 futures at 353 € and selling 44 ctr XRX16 futures.

4) B. Traders’ angle to rapeseed basis contracts

			Position Trader									
		Physical Position						Total result of Trader:				
	Purchases July 2016		Sales Oct 2016					Physical position:		8,00 €		
1/07/2015	200 t	379 €	1/12/2015	1100 t	370 €			Futures Aug		1,00 €		
1/08/2015	200 t	358 €	1/02/2016	1100 t	354 €			Futures Nov		8,50 €		
1/09/2015	200 t	346 €								------------		
1/10/2015	200 t	347 €						Total		17,50 €		
1/11/2015	200 t	352 €						Covering storage + financing + freight				
1/12/2015	200 t	352 €										
1/01/2016	200 t	352 €										
1/02/2016	200 t	352 €										
1/03/2016	200 t	352 €										
1/04/2016	200 t	352 €										
1/05/2016	200 t	352 €										
Total	2200 t	354 €	Total	2200 t	362 €							
		Futures Aug 2016							Futures Nov 2016			
	Purchases		Sales					Purchases		Sales		
13/10/2015	2200 t	353 €	1/07/2015	200 t	379 €		1/12/2015	2200 t	360 €	13/10/2015	2200 t	360,50 €
			1/08/2015	200 t	358 €		1/02/2016	2200 t	344 €			
			1/09/2015	200 t	346 €							
			1/10/2015	200 t	347 €							
			1/11/2015	200 t	352 €							
			1/12/2015	200 t	352 €							
			1/01/2016	200 t	352 €							
			1/02/2016	200 t	352 €							
			1/03/2016	200 t	352 €							
			1/04/2016	200 t	352 €							
			1/05/2016	200 t	352 €							
Total	2200 t	353 €	Total	2200 t	354 €		Total	2200 t	352 €	Total	2200 t	360,50 €

4) C. Conclusions

- The Trader has used EURONEXT for price discovery on the value of storage and financing and with his purchased rapeseed basis contract over Aug 2016 has ensured the physical delivery to storage and with his sales rapeseed basis contract over Nov 2016 the physical outflow from storage and the cashing of the storage and financing fee.
- Overall, all parties have used EURONEXT for price discovery and their price/margin risk management (independently from each other and at different times) and have used the rapeseed basis contract to ensure the physical flows at a fixed invoice price (derived from the common price of the AA).
- Again, we insist that the AA should either continue to be handled outside the Central Order Book or, if it is a question of threshold, the lower threshold should be put at 1 lot.