Table C.1: Regression Results

				$De_{2}$	pendent var	iable:				
		Pi	re-financialisation Per	iod		fin	ancialisation perio	$_{ m od}$		
	$h_{S\&P500}$	$h_{Wheat\ 1}$	$h_{Wheat\ 2}$	$h_{Wheat \beta}$	h Wheat 4	$h_{S\&P500}$	$h_{Wheat\ 1}$	$h_{Wheat\ 2}$	$h_{Wheat 3}$	$h_{Wheat 4}$
$\zeta_1 SI$	0.0004	-0.0000	0.003	0.001	0.002	0.001	0.01	0.004	0.005	0.01
	(0.002)	(0.0000)	(0.004)	(0.001)	(0.004)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)
$\zeta_2 DOI$	-0.004	-0.0000	0.01	0.01*	0.02*	-0.003	-0.002	-0.0003	0.003	0.004
	(0.004)	(0.0000)	(0.01)	(0.003)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
$\zeta_0$	-0.0000	-0.0000***	0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000
	(0.0001)	(0.0000)	(0.0002)	(0.0001)	(0.0002)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Observations	572	572	572	572	572	833	833	833	833	833
$\mathbb{R}^2$	0.001	0.0001	0.002	0.01	0.01	0.001	0.002	0.001	0.002	0.003
Adjusted R <sup>2</sup>	-0.002	-0.003	-0.001	0.004	0.002	-0.002	0.0000	-0.001	-0.001	0.0004

The table reports estimated results from the regression:  $h_{ij,t} = \zeta_0 + \zeta_1 SI_i + \zeta_2 DOI_i + e_{ij,t}$  that examines the impact of speculative activity and open interests on conditional volatility of equities and commodities during pre-financialisation and financialisation period. Standard errors  $e_{ij,t}$ in parentheses.  $h, \zeta_0, \zeta, SI$ , and DOI represent conditional volatility, constant term, coefficient, speculation index, and detrended open interest respectively. Speculation index is measured by  $\frac{Non-commercial\ Long\ Position-Non-commercial\ Short\ Position}{Total\ Open\ Interest}$  following Hedegaard (2011). \*\*\*, \*\*, and \*

Table C.2: Regression Results

				-	Dependent v	ariable:				
		Pre	e-financialisation Per	iod		fir	nancialisation peri	od		
	$h_{S\&P500}$ $h$	KC Wheat 1	$h_{\ KC\ Wheat\ 2}$	$h_{KC\ Wheat\ 3}\ h$	KC Wheat 4	$h_{S\&P500}$	h <sub>KC Wheat 1</sub>	$h_{\ KC\ Wheat\ 2}\ h$	KC Wheat 3 h	KC Wheat 4
$\zeta_1 SI$	-0.003	0.01	0.004	0.002	0.004	0.002	0.004**	0.01**	0.005	0.01
	(0.003)	(0.005)	(0.003)	(0.003)	(0.004)	(0.002)	(0.002)	(0.003)	(0.003)	(0.004)
$\zeta_2 DOI$	-0.003	-0.01	-0.02	-0.01	-0.01	-0.01	-0.01	-0.02	-0.02	-0.02
	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
$\zeta_0$	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
	(0.0001)	(0.0002)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Observations	572	572	572	572	572	833	833	833	833	833
$\mathbb{R}^2$	0.002	0.003	0.01	0.002	0.004	0.003	0.01	0.01	0.01	0.01
Adjusted R <sup>2</sup>	-0.001	-0.0001	0.003	-0.001	0.001	0.0002	0.01	0.01	0.004	0.003

Table C.3: Regression Results

				D	ependent variab	ole:				
		Pre-	financialisation Period			fina	ancialisation perio	od		
	$h_{S\&P500}$	$h_{\ Corn\ 1}$	$h_{Corn\ 2}$	$h_{Corn\ 3}$	$h_{\ Corn\ 4}$	$h_{S\&P500}$	$h_{Corn\ 1}$	$h_{\ Corn\ 2}$	$h$ $_{Corn\ 3}$	$h_{Corn~4}$
$\zeta_1 SI$	-0.002	0.001	0.004	0.0000*	0.0000	0.004	0.003	0.01	$0.01^{*}$	0.004
	(0.002)	(0.01)	(0.003)	(0.0000)	(0.0000)	(0.003)	(0.01)	(0.01)	(0.004)	(0.003)
$\zeta_2 DOI$	0.001	-0.0001	-0.001	0.00	0.0000	-0.005**	-0.0004	-0.003	-0.001	-0.004*
	(0.001)	(0.003)	(0.002)	(0.0000)	(0.0000)	(0.002)	(0.004)	(0.003)	(0.003)	(0.002)
ζ0	-0.0000	-0.0000	-0.0000	0.0000***	-0.0000***	0.0000	-0.0000	-0.0000	-0.0000	-0.0000
	(0.0001)	(0.0002)	(0.0001)	(0.0000)	(0.0000)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001
Observations	572	572	572	572	572	833	833	833	833	833
$\mathbb{R}^2$	0.001	0.0000	0.002	0.01	0.01	0.01	0.0004	0.004	0.004	0.004
Adjusted R <sup>2</sup>	-0.002	-0.003	-0.001	0.002	0.002	0.004	-0.002	0.001	0.002	0.002

The table reports estimated results from the regression:  $h_{ij,t} = \zeta_0 + \zeta_1 SI_i + \zeta_2 DOI_i + e_{ij,t}$  that examines the impact of speculative activity and open interests on conditional volatility of equities and commodities during pre-financialisation and financialisation period. Standard errors  $e_{ij,t}$  in parentheses.  $h, \zeta_0, \zeta, SI$ , and DOI represent conditional volatility, constant term, coefficient, speculation index, and detrended open interest respectively. Speculation index is measured by  $\frac{Non-commercial\ Long\ Position-Non-commercial\ Short\ Position}{Total\ Open\ Interest}$  following Hedegaard (2011). \*\*\*, \*\*, and \*

Table C.4: Regression Results

				1	Dependent varial	ole:				
		F	Pre-financialisation Period			fir	ancialisation perio	od		
	$h_{S\&P500}$ $h$	h Soybean 1	$h_{Soybean\ 2}$	h Soybean 3	h Soybean 4	$h_{S&P500}$	$h_{Soybean\ 1}$	h Soybean 2	h <sub>Soybean 3</sub> I	h <sub>Soybean 4</sub>
$\zeta_1 SI$	-0.0004	-0.003	-0.0005	-0.0000	-0.0000	-0.001	0.004	0.01	0.01***	0.01***
	(0.002)	(0.004)	(0.003)	(0.0000)	(0.0000)	(0.003)	(0.01)	(0.004)	(0.004)	(0.003)
$\zeta_2 DOI$	-0.001	0.01*	-0.0003	-0.0000	-0.0000	-0.005	-0.01	-0.004	-0.01	-0.01*
	(0.003)	(0.005)	(0.003)	(0.0000)	(0.0000)	(0.003)	(0.01)	(0.01)	(0.01)	(0.004)
$\zeta_0$	-0.0000	0.0000	0.0000	0.0000***	0.0000***	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000
	(0.0001)	(0.0002)	(0.0001)	(0.0000)	(0.0000)	(0.0001)	(0.0002)	(0.0001)	(0.0001)	(0.0001)
Observations	572	572	572	572	572	833	833	833	833	833
$\mathbb{R}^2$	0.0002	0.01	0.0001	0.001	0.002	0.002	0.001	0.003	0.01	0.01
Adjusted R <sup>2</sup>	-0.003	0.002	-0.003	-0.003	-0.002	-0.0002	-0.001	0.001	0.01	0.01

Table C.5: Regression Results

					$Dependent\ var$	riable:				
		P	re-financialisation Period			1	financialisation perio	od		
	$h_{S\&P500}$	h Soybean oil 1	$h_{Soybean\ oil\ 2}$	h Soybean oil 3	h Soybean oil 4	$h_{S\&P500}$	$h_{Soybean\ oil\ 1}$	h Soybean oil 2	$h_{Soybean\ oil\ 3}$	$h_{Soybean\ oil\ 4}$
$\zeta_1 SI$	0.001	-0.0000	-0.0000	-0.0000	-0.001	-0.001	0.004***	0.004***	0.004***	0.004***
	(0.002)	(0.0000)	(0.0000)	(0.0000)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
$\zeta_2 DOI$	-0.01	-0.0000	0.0000	0.0000	0.02	-0.002	0.001	0.002	0.002	0.002
	(0.02)	(0.0000)	(0.0000)	(0.0000)	(0.02)	(0.01)	(0.004)	(0.004)	(0.004)	(0.004)
$\zeta_0$	-0.0000	0.0000***	0.0000***	0.0000***	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000
	(0.0001)	(0.00)	(0.0000)	(0.0000)	(0.0001)	(0.0001)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Observations	572	572	572	572	572	833	833	833	833	833
$\mathbb{R}^2$	0.001	0.002	0.001	0.001	0.003	0.0002	0.01	0.01	0.01	0.01
Adjusted R <sup>2</sup>	-0.003	-0.002	-0.002	-0.002	-0.0004	-0.002	0.01	0.01	0.01	0.01

The table reports estimated results from the regression:  $h_{ij,t} = \zeta_0 + \zeta_1 SI_i + \zeta_2 DOI_i + e_{ij,t}$  that examines the impact of speculative activity and open interests on conditional volatility of equities and commodities during pre-financialisation and financialisation period. Standard errors  $e_{ij,t}$ in parentheses.  $h, \zeta_0, \zeta, SI$ , and DOI represent conditional volatility, constant term, coefficient, speculation index, and detrended open interest respectively. Speculation index is measured by  $\frac{Non-commercial\ Long\ Position-Non-commercial\ Short\ Position}{Total\ Open\ Interest}$  following Hedegaard (2011). \*\*\*, \*\*, and \*

Table C.6: Regression Results

				Depende	nt variable:			
			Pre-financialisation Period			fin	ancialisation period	
	$h_{S\&P500}$	$h_{Oats\ 1}$	$h_{\ Oats\ 2}$	$h_{Oats\ 3}$	$h_{S\&P500}$	h Oats 1	$h_{Oats~2}$	$h_{Oats\ 3}$
$\zeta_1 SI$	0.0000	0.002	0.003	0.004	-0.0004	-0.0001	-0.001	-0.001
	(0.002)	(0.004)	(0.01)	(0.004)	(0.002)	(0.0003)	(0.001)	(0.001)
$\zeta_2 DOI$	-0.01	-0.03	0.001	-0.01	-0.09	0.01	0.01	-0.01
	(0.02)	(0.05)	(0.07)	(0.05)	(0.12)	(0.02)	(0.05)	(0.05)
$\zeta_0$	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000
	(0.0001)	(0.0002)	(0.0002)	(0.0001)	(0.0001)	(0.0000)	(0.0000)	(0.0000)
Observations	572	572	572	572	833	833	833	833
$\mathbb{R}^2$	0.001	0.001	0.001	0.002	0.001	0.001	0.003	0.003
Adjusted R <sup>2</sup>	-0.003	-0.003	-0.003	-0.001	-0.002	-0.002	0.0002	0.0001

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Table C.7: Regression Results

					$Dependent \ v$	ariable:				
		Pı	e-financialisation Per	iod		fi	nancialisation perio	od		
	$h_{SP500}$	h <sub>MPLS</sub> Wheat 1	$h_{MPLS\ Wheat\ 2}$	h <sub>MPLS Wheat 3</sub> h	MPLS Wheat 4	$h_{SP500}$	$h_{MPLS\ Wheat\ 1}$	h <sub>MPLS Wheat 2</sub> h	MPLS Wheat 3 h	MPLS Wheat
$\zeta_1 SI$	-0.005	0.002	0.002	0.002	0.002	-0.002	-0.003	-0.003	-0.002	-0.0002
	(0.004)	(0.01)	(0.01)	(0.005)	(0.004)	(0.002)	(0.01)	(0.01)	(0.01)	(0.01)
$\zeta_2 DOI$	0.003	-0.03	-0.06*	-0.06**	-0.05**	-0.05*	0.10	0.10	0.07	0.08
	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.07)	(0.07)	(0.07)	(0.07)
$\zeta_0$	-0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000
	(0.0001)	(0.0002)	(0.0002)	(0.0002)	(0.0001)	(0.0001)	(0.0002)	(0.0002)	(0.0002)	(0.0002)
Observations	463	463	463	463	463	749	749	749	749	749
$\mathbb{R}^2$	0.003	0.002	0.01	0.01	0.01	0.004	0.003	0.003	0.001	0.002
Adjusted R <sup>2</sup>	-0.001	-0.002	0.004	0.005	0.01	0.002	0.001	0.0002	-0.001	-0.001

The table reports estimated results from the regression:  $h_{ij,t} = \zeta_0 + \zeta_1 SI_i + \zeta_2 DOI_i + e_{ij,t}$  that examines the impact of speculative activity and open interests on conditional volatility of equities and commodities during pre-financialisation and financialisation period. Standard errors  $e_{ij,t}$  in parentheses.  $h, \zeta_0, \zeta, SI$ , and DOI represent conditional volatility, constant term, coefficient, speculation index, and detrended open interest respectively. Speculation index is measured by  $\frac{Non-commercial\ Long\ Position-Non-commercial\ Short\ Position}{Total\ Open\ Interest}$  following Hedegaard (2011). \*\*\*, \*\*, and \*

Table C.8: Regression Results

_					Dependent u	variable:				
		Pı	e-financialisation Per	iod		fi	nancialisation perio	od		
	$h_{S\&P500}$	h Soybean meal 1	h Soybean meal 2	h Soybean meal 3	h <sub>Soybean meal 4</sub>	$h_{S\&P500}$	h Soybean meal 1	h Soybean meal 2 h	Soybean meal 3 h	Soybean meal 4
$\zeta_1 SI$	-0.003	-0.01	-0.001	-0.0000	0.001	-0.002	0.003	0.003	0.001	0.001
	(0.002)	(0.004)	(0.002)	(0.002)	(0.002)	(0.003)	(0.01)	(0.002)	(0.001)	(0.001)
$\zeta_2 DOI$	-0.03*	0.11***	0.03	0.02	0.02	-0.01	0.003	-0.001	-0.001	-0.002
	(0.02)	(0.04)	(0.02)	(0.02)	(0.02)	(0.01)	(0.02)	(0.01)	(0.004)	(0.004)
$\zeta_0$	-0.0000	0.0000	0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000
	(0.0001)	(0.0002)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0002)	(0.0001)	(0.0000)	(0.0000)
Observations	572	572	572	572	572	833	833	833	833	833
$\mathbb{R}^2$	0.01	0.02	0.003	0.001	0.002	0.001	0.0003	0.002	0.001	0.002
Adjusted $\mathbb{R}^2$	0.01	0.01	-0.0003	-0.002	-0.002	-0.001	-0.002	-0.001	-0.001	-0.001

Table C.9: Regression Results

				$De_{I}$	pendent var	riable:		
		Pre	e-financialisation Per	riod		fiı	nancialisation period	
	$h_{SP500}$	h Rough rice 1	$h$ $_{Rough\ rice\ 2}$	$h_{Rough\ rice\ 3}$	$h_{SP500}$	h Rough rice 1	$h$ $_{Rough\ rice\ 2}$	$h_{Rough\ rice\ 3}$
$\zeta_1 SI$	0.002	0.01	0.001	0.0002	-0.002	-0.005**	-0.001	-0.001
	(0.003)	(0.01)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)
$\zeta_2 DOI$	-0.09	-0.91	-0.08	0.02	-0.26*	-0.03	-0.07	-0.03
	(0.31)	(0.97)	(0.07)	(0.06)	(0.13)	(0.12)	(0.10)	(0.10)
$\zeta_0$	-0.0000	-0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000
	(0.0001)	(0.0004)	(0.0000)	(0.0000)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Observations	481	481	481	481	833	833	833	833
$\mathbb{R}^2$	0.001	0.003	0.004	0.001	0.01	0.01	0.002	0.001
Adjusted R <sup>2</sup>	-0.003	-0.001	-0.0004	-0.004	0.004	0.01	-0.001	-0.002

The table reports estimated results from the regression:  $h_{ij,t} = \zeta_0 + \zeta_1 SI_i + \zeta_2 DOI_i + e_{ij,t}$  that examines the impact of speculative activity and open interests on conditional volatility of equities and commodities during pre-financialisation and financialisation period. Standard errors  $e_{ij,t}$ in parentheses. h,  $\zeta_0$ ,  $\zeta$ , SI, and DOI represent conditional volatility, constant term, coefficient, speculation index, and detrended open interest respectively. Speculation index is measured by  $\frac{Non-commercial\ Long\ Position-Non-commercial\ Short\ Position}{Total\ Open\ Interest}$  following Hedegaard (2011). \*\*\*, \*\*, and \*

Table C.10: Regression Results

_					Dependent v	variable:				
			Pre-financialisation Period				financialisation period			
	$h_{S\&P500}$	h Coffee 1	$h_{Coffee\ 2}$	$h_{Coffee\ 3}$	h Coffee 4	$h_{S\&P500}$	$h_{Coffee\ 1}$	$h_{Coffee\ 2}$	$h_{Coffee\ 3}$	$h_{Coffee\ 4}$
$\zeta_1 SI$	0.001	0.01	0.01	0.01	0.01	-0.003	0.002**	0.003**	0.003**	0.003**
	(0.001)	(0.01)	(0.01)	(0.01)	(0.01)	(0.003)	(0.001)	(0.001)	(0.001)	(0.001)
$\zeta_2 DOI$	0.02	$-0.27^{*}$	-0.21	-0.17	-0.12	-0.01	0.0005	0.001	0.001	0.001
	(0.04)	(0.15)	(0.15)	(0.15)	(0.13)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
$\zeta_0$	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
<u> </u>	(0.0001)	(0.0004)	(0.0004)	(0.0004)	(0.0003)	(0.0001)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Observations	572	572	572	572	572	833	833	833	833	833
$\mathbb{R}^2$	0.001	0.01	0.01	0.01	0.005	0.002	0.005	0.01	0.01	0.01
Adjusted R <sup>2</sup>	-0.003	0.01	0.003	0.002	0.001	0.0001	0.003	0.004	0.005	0.004

The table reports estimated results from the regression:  $h_{ij,t} = \zeta_0 + \zeta_1 S I_i + \zeta_2 DO I_i + e_{ij,t}$  that examines the impact of speculative activity and open interests on conditional volatility of equities and commodities during pre-financialisation and financialisation period. Standard errors  $e_{ij,t}$  in parentheses. h,  $\zeta_0$ ,  $\zeta$ , SI, and DOI represent conditional volatility, constant term, coefficient, speculation index, and detrended open interest respectively. Speculation index is measured by  $\frac{Non-commercial\ Long\ Position-Non-commercial\ Short\ Position}{Total\ Open\ Interest}$  following Hedegaard (2011). \*\*\*, \*\*, and \* denote statistical significance at 1%, 5%, and 10% level.

Note:

Online Appendix

Table C.11: Regression Results

_				I	Dependent vo	riable:		
		Pr	e-financialisation Peri	od		fir	nancialisation period	
	$h_{S\&P500}$	$h_{Sugar\ 1}$	$h_{Sugar\ 3}$	$h_{Sugar\ 4}$	$h_{S\&P500}$	$h_{Sugar\ 1}$	$h_{Sugar\ 3}$	$h_{\ Sugar\ 4}$
$\zeta_1 SI$	0.0001	-0.01***	-0.002	-0.001	0.001	0.002	0.001	0.001
	(0.002)	(0.002)	(0.002)	(0.001)	(0.003)	(0.004)	(0.004)	(0.004)
$\zeta_2 DOI$	0.002	0.01	0.01	0.002	0.0002	-0.01**	-0.002	-0.005
	(0.01)	(0.01)	(0.01)	(0.01)	(0.004)	(0.005)	(0.004)	(0.004)
$\zeta_0$	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000
	(0.0001)	(0.0001)	(0.0001)	(0.0000)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Observations	572	572	572	572	833	833	833	833
$\mathbb{R}^2$	0.0001	0.01	0.004	0.002	0.0000	0.01	0.0005	0.002
Adjusted R <sup>2</sup>	-0.003	0.01	0.001	-0.002	-0.002	0.003	-0.002	-0.001

The table reports estimated results from the regression:  $h_{ij,t} = \zeta_0 + \zeta_1 SI_i + \zeta_2 DOI_i + e_{ij,t}$  that examines the impact of speculative activity and open interests on conditional volatility of equities and commodities during pre-financialisation and financialisation period. Standard errors  $e_{ij,t}$ in parentheses. h,  $\zeta_0$ ,  $\zeta$ , SI, and DOI represent conditional volatility, constant term, coefficient, speculation index, and detrended open interest respectively. Speculation index is measured by  $\frac{Non-commercial\ Long\ Position-Non-commercial\ Short\ Position}{Total\ Open\ Interest}$  following Hedegaard (2011). \*\*\*, \*\*, and \*

Table C.12: Regression Results

					Dependent v	ariable:				
			Pre-financialisation Period			i	financialisation period			
	$h_{S\&P500}$	$h_{Cocoa\ 1}$	$h_{Cocoa\ 2}$	$h_{Cocoa\ 3}$	$h_{Cocoa~4}$	$h_{S\&P500}$	$h_{Cocoa\ 1}$	$h_{Cocoa\ 2}$	$h_{Cocoa\ 3}$	$h_{Cocoa\ 4}$
$\zeta_1 SI$	-0.005*	0.01**	0.01**	0.01**	0.005**	0.002	-0.001	-0.001	-0.001	-0.0002
	(0.002)	(0.003)	(0.003)	(0.002)	(0.002)	(0.003)	(0.001)	(0.001)	(0.001)	(0.001)
$\zeta_2 DOI$	-0.01	-0.03	-0.04	-0.04	-0.04	-0.004	0.01	0.01	0.01	0.002
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
$\zeta_0$	-0.0000	0.0000	0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Observations	572	572	572	572	572	833	833	833	833	833
$\mathbb{R}^2$	0.01	0.01	0.01	0.01	0.01	0.0005	0.002	0.003	0.003	0.0002
Adjusted R <sup>2</sup>	0.003	0.01	0.01	0.01	0.01	-0.002	0.0000	0.001	0.0004	-0.002

Table C.13: Regression Results

					Dependent v	ariable:				
		]	Pre-financialisation Period			1	financialisation period			
	$h_{S\&P500}$	$h_{Cotton\ 1}$	$h_{\ Cotton\ 2}$	$h_{Cotton\ 3}$	$h_{Cotton~4}$	$h_{S\&P500}$	$h_{Cotton\ 1}$	$h_{Cotton\ 2}$	$h_{Cotton\ 3}$	$h_{Cotton~4}$
$\zeta_1 SI$	0.001	-0.001	0.0001	0.002	0.001	-0.001	-0.002	-0.004	-0.004*	-0.01*
	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.004)	(0.003)	(0.003)	(0.003)
$\zeta_2 DOI$	-0.05*	0.01	0.01	0.01	0.02	-0.02**	-0.02	0.004	0.01	0.003
	(0.03)	(0.04)	(0.03)	(0.03)	(0.03)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)
$\zeta_0$	-0.0000	0.0000	0.0000	0.0000	0.0001	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0002)	(0.0001)	(0.0001)	(0.0001)
Observations	572	572	572	572	572	833	833	833	833	833
$\mathbb{R}^2$	0.01	0.001	0.0001	0.002	0.001	0.01	0.002	0.003	0.003	0.003
Adjusted R <sup>2</sup>	0.003	-0.003	-0.003	-0.001	-0.002	0.004	-0.001	0.0004	0.001	0.001

The table reports estimated results from the regression:  $h_{ij,t} = \zeta_0 + \zeta_1 SI_i + \zeta_2 DOI_i + e_{ij,t}$  that examines the impact of speculative activity and open interests on conditional volatility of equities and commodities during pre-financialisation and financialisation period. Standard errors  $e_{ij,t}$ 

in parentheses.  $h, \zeta_0, \zeta, SI$ , and DOI represent conditional volatility, constant term, coefficient, speculation index, and detrended open interest respectively. Speculation index is measured by  $\frac{Non-commercial\ Long\ Position-Non-commercial\ Short\ Position}{Total\ Open\ Interest}$  following Hedegaard (2011). \*\*\*, \*\*, and \*

Table C.14: Regression Results

					Dependent u	variable:				
		Pr	e-financialisation Per	riod		fi	nancialisation peri	od		
	$h_{S\&P500}$	h Orange juice 2	h Orange juice 3	h Orange juice 4	$h_{Orange\ juice\ 5}$	$h_{S\&P500}$	h Orange juice 2	h Orange juice 3 h	Orange juice 4	h Orange juice 5
$\zeta_1 SI$	0.001	0.0003	0.0003	0.001	0.001	-0.002	-0.002	-0.001	-0.001	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
$\zeta_2 DOI$	-0.04**	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.002	-0.003	-0.004
	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
$\zeta_0$	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000
	(0.0001)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Observations	572	572	572	572	572	833	833	833	833	833
$\mathbb{R}^2$	0.01	0.002	0.002	0.002	0.002	0.003	0.002	0.001	0.001	0.001
Adjusted $\mathbb{R}^2$	0.01	-0.002	-0.001	-0.001	-0.001	0.0002	-0.0005	-0.001	-0.001	-0.001

Table C.15: Regression Results

				D	ependent variable:		
		Pre-	financialisation Per	iod			
	$h_{S\&P500}$	$h_{Lumber\ 1}$	$h_{Lumber\ 2}$	$h_{S\&P500}$ $h$	h Lumber 1	$h_{\ Lumber\ 2}$	
$\zeta_1 SI$	-0.0002	-0.002*	-0.001	-0.001	0.003**	0.002**	
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
$\zeta_2 DOI$	0.06	0.06	0.04	-0.06	-0.02	0.01	
	(0.06)	(0.06)	(0.04)	(0.05)	(0.05)	(0.04)	
$\zeta_0$	-0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	
Observations	572	572	572	833	833	833	
$\mathbb{R}^2$	0.002	0.01	0.01	0.003	0.01	0.01	
Adjusted R <sup>2</sup>	-0.002	0.004	0.002	0.0002	0.003	0.003	

The table reports estimated results from the regression:  $h_{ij,t} = \zeta_0 + \zeta_1 SI_i + \zeta_2 DOI_i + e_{ij,t}$  that examines the impact of speculative activity and open interests on conditional volatility of equities and commodities during pre-financialisation and financialisation period. Standard errors  $e_{ij,t}$ in parentheses. h,  $\zeta_0$ ,  $\zeta$ , SI, and DOI represent conditional volatility, constant term, coefficient, speculation index, and detrended open interest respectively. Speculation index is measured by  $\frac{Non-commercial\ Long\ Position-Non-commercial\ Short\ Position}{Total\ Open\ Interest}$  following Hedegaard (2011). \*\*\*, \*\*, and \*

Table C.16: Regression Results

					Dependent v	ariable:				
		Pre	e-financialisation Per	riod		fir	nancialisation peri	od		
	$h_{S\&P500}$ $h$	Live cattle 1	$h_{\ Live\ cattle\ 2}$	h Live cattle 3 h	Live cattle 4	$h_{S\&P500}$	h Live cattle 1	h Live cattle 2 h	Live cattle 3 h	Live cattle 4
$\zeta_1 SI$	0.004*	-0.001	-0.002	-0.0001	-0.0003	-0.01	-0.002	-0.001	-0.001	-0.001
	(0.002)	(0.001)	(0.001)	(0.0005)	(0.0003)	(0.004)	(0.001)	(0.002)	(0.001)	(0.001)
$\zeta_2 DOI$	-0.03	0.02*	0.03***	0.01**	0.01***	0.01	0.01	0.0004	0.003	-0.003
	(0.02)	(0.01)	(0.01)	(0.005)	(0.003)	(0.01)	(0.004)	(0.004)	(0.003)	(0.002)
$\zeta_0$	-0.0000	0.0000	0.0000	0.0000	0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000
	(0.0001)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0001)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Observations	572	572	572	572	572	833	833	833	833	833
$\mathbb{R}^2$	0.01	0.01	0.01	0.01	0.02	0.003	0.005	0.0002	0.001	0.01
Adjusted R <sup>2</sup>	0.003	0.003	0.01	0.01	0.01	0.001	0.002	-0.002	-0.001	0.003

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Table C.17: Regression Results

_					Dependent v	variable:				
		Pr	e-financialisation Per	riod		fi	nancialisation peri	od		
	$h_{S\&P500}$	h Feeder cattle 1	$h_{Feeder\ cattle\ 2}$	h Feeder cattle 3	$h_{Feeder\ cattle\ 4}$	$h_{S\&P500}$	$h_{Feeder\ cattle\ 1}$	h Feeder cattle 2 h	Feeder cattle 3 h	Feeder cattle 4
$\zeta_1 SI$	-0.001	-0.0001	-0.001	-0.001	-0.002*	-0.002	-0.003*	-0.01**	-0.003	-0.003*
	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)
$\zeta_2 DOI$	-0.04	0.13***	-0.14*	-0.13**	-0.09*	-0.15***	0.002	-0.05	-0.05	-0.04
	(0.09)	(0.04)	(0.07)	(0.06)	(0.05)	(0.05)	(0.03)	(0.04)	(0.03)	(0.03)
$\zeta_0$	-0.0000	0.0000	0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	0.0000
	(0.0001)	(0.0000)	(0.0001)	(0.0001)	(0.0000)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Observations	572	572	572	572	572	833	833	833	833	833
$\mathbb{R}^2$	0.001	0.01	0.01	0.01	0.01	0.01	0.004	0.01	0.01	0.01
Adjusted R <sup>2</sup>	-0.002	0.01	0.003	0.01	0.01	0.01	0.002	0.01	0.004	0.003

Note: The table reports estimated results from the regression:  $h_{ij,t} = \zeta_0 + \zeta_1 S I_i + \zeta_2 D O I_i + e_{ij,t}$  that examines the impact of speculative activity and open interests on conditional volatility of equities and commodities during pre-financialisation and financialisation period. Standard errors  $e_{ij,t}$  in parentheses.  $h, \zeta_0, \zeta, SI$ , and DOI represent conditional volatility, constant term, coefficient, speculation index, and detrended open interest respectively. Speculation index is measured by  $\frac{Non-commercial\ Long\ Position-Non-commercial\ Short\ Position}{Total\ Open\ Interest}$  following Hedegaard (2011). \*\*\*\*, \*\*\*, and \*

Table C.18: Regression Results

					$Dependent \ v$	ariable:				
		Р	re-financialisation Per	iod		fir	nancialisation peri	od		
	$h_{S\&P500}$	h Heating oil 1	$h_{Heating\ oil\ 2}$	h Heating oil 3 h	Heating oil 4	$h_{S\&P500}$	$h_{Heating\ oil\ 1}$	h Heating oil 2 h	Heating oil 3 h	Heating oil 2
$\zeta_1 SI$	0.002	-0.01	-0.001	-0.001	-0.001	-0.01*	-0.002	-0.003	-0.003	-0.004
	(0.003)	(0.01)	(0.001)	(0.001)	(0.001)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
$\zeta_2 DOI$	-0.01	-0.03	-0.01	-0.01	-0.01	-0.003	-0.0003	-0.003	-0.002	-0.003
	(0.01)	(0.03)	(0.005)	(0.004)	(0.004)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
$\zeta_0$	-0.0000	-0.0000	0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000
	(0.0001)	(0.0002)	(0.0000)	(0.0000)	(0.0000)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Observations	572	572	572	572	572	833	833	833	833	833
$\mathbb{R}^2$	0.003	0.004	0.01	0.01	0.01	0.005	0.0004	0.001	0.001	0.002
Adjusted R <sup>2</sup>	-0.001	0.0001	0.003	0.002	0.002	0.002	-0.002	-0.001	-0.001	-0.001

The table reports estimated results from the regression:  $h_{ij,t} = \zeta_0 + \zeta_1 S I_i + \zeta_2 DOI_i + e_{ij,t}$  that examines the impact of speculative activity and open interests on conditional volatility of equities and commodities during pre-financialisation and financialisation period. Standard errors  $e_{ij,t}$  in parentheses.  $h, \zeta_0, \zeta, SI$ , and DOI represent conditional volatility, constant term, coefficient, speculation index, and detrended open interest respectively. Speculation index is measured by  $\frac{Non-commercial\ Long\ Position-Non-commercial\ Short\ Position}{Total\ Open\ Interest}$  following Hedegaard (2011). \*\*\*, \*\*, and \* denote statistical significance at 1%, 5%, and 10% level.

Note:

Table C.19: Regression Results

					Dependent u	variable:				
		Pr	e-financialisation Per	riod		fiı	nancialisation peri	od		
	$h_{S\&P500}$	$h_{\ Natural\ gas\ 1}$	$h_{\ Natural\ gas\ 2}$	$h_{Natural\ gas\ 3}\ h$	Natural gas 4	$h_{S\&P500}$	$h_{Natural\ gas\ 1}$	h <sub>Natural gas 2</sub> h	Natural gas 3 1	Natural gas 4
$\zeta_1 SI$	0.001	0.004	-0.004	-0.003	-0.005	-0.003	0.003	-0.002	-0.003	0.0001
	(0.003)	(0.01)	(0.003)	(0.003)	(0.003)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)
$\zeta_2 DOI$	-0.002	-0.04*	-0.01	0.003	0.01	-0.003	-0.01	-0.01	-0.01	-0.01
	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.003)	(0.01)	(0.01)	(0.01)	(0.01)
$\zeta_0$	-0.0000	0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000
	(0.0001)	(0.0003)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0003)	(0.0002)	(0.0002)	(0.0002)
Observations	572	572	572	572	572	833	833	833	833	833
$\mathbb{R}^2$	0.0002	0.01	0.004	0.002	0.01	0.001	0.0004	0.002	0.001	0.002
Adjusted R <sup>2</sup>	-0.003	0.002	0.001	-0.001	0.002	-0.001	-0.002	-0.001	-0.001	-0.0005

The table reports estimated results from the regression:  $h_{ij,t} = \zeta_0 + \zeta_1 SI_i + \zeta_2 DOI_i + e_{ij,t}$  that examines the impact of speculative activity and open interests on conditional volatility of equities and commodities during pre-financialisation and financialisation period. Standard errors  $e_{ij,t}$ Note:in parentheses. h,  $\zeta_0$ ,  $\zeta$ , SI, and DOI represent conditional volatility, constant term, coefficient, speculation index, and detrended open interest respectively. Speculation index is measured by  $\frac{Non-commercial\ Long\ Position-Non-commercial\ Short\ Position}{Total\ Open\ Interest}$  following Hedegaard (2011). \*\*\*, \*\*, and \*

Table C.20: Regression Results

				D	ependent va	riable:				
			Pre-financialisation Period				financialisation period			
	$h_{S\&P500}$	$h_{Gold\ 1}$	$h_{\ Gold\ 2}$	$h_{Gold 3}$	$h_{Gold\ 4}$	$h_{S\&P500}$	$h_{Gold\ 1}$	$h_{Gold\ 2}$	$h_{Gold 3}$	$h_{Gold\ 4}$
$\zeta_1 SI$	-0.004***	-0.001	-0.001	-0.001	-0.001	-0.001	-0.003**	-0.002	-0.002*	-0.002*
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
$\zeta_2 DOI$	-0.02***	-0.01	-0.01	-0.01	-0.01	-0.003	-0.004	-0.004*	-0.004*	-0.005**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.004)	(0.002)	(0.003)	(0.003)	(0.003)
$\zeta_0$	-0.0000	0.0000	0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Observations	572	572	572	572	572	833	833	833	833	833
$\mathbb{R}^2$	0.03	0.01	0.005	0.004	0.004	0.002	0.01	0.01	0.01	0.01
Adjusted R <sup>2</sup>	0.02	0.002	0.001	0.001	0.001	-0.001	0.01	0.01	0.01	0.01

The table reports estimated results from the regression:  $h_{ij,t} = \zeta_0 + \zeta_1 S I_i + \zeta_2 DOI_i + e_{ij,t}$  that examines the impact of speculative activity and open interests on conditional volatility of equities and commodities during pre-financialisation and financialisation period. Standard errors  $e_{ij,t}$  in parentheses.  $h, \zeta_0, \zeta, SI$ , and DOI represent conditional volatility, constant term, coefficient, speculation index, and detrended open interest respectively. Speculation index is measured by  $\frac{Non-commercial\ Long\ Position-Non-commercial\ Short\ Position}{Total\ Open\ Interest}$  following Hedegaard (2011). \*\*\*, \*\*, and \* denote statistical significance at 1%, 5%, and 10% level.

Note:

Online Appendix

Table C.21: Regression Results

					Dependent v	ariable:				
		P	re-financialisation Period	l			financialisation period			
	$h_{S\&P500}$	$h_{Copper\ 1}$	$h_{Copper\ 2}$	$h_{Copper 3}$	$h_{Copper 4}$	$h_{S\&P500}$	$h_{Copper\ 1}$	$h_{Copper\ 2}$	$h_{Copper\ 3}$	$h_{Copper 4}$
$\zeta_1 SI$	-0.002	-0.0001	-0.0003	-0.0003	-0.0002	-0.001	-0.001	-0.002	-0.002	-0.001
	(0.002)	(0.0003)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
$\zeta_2 DOI$	0.01	0.004	0.01	0.01	0.01	-0.01	0.001	0.001	0.001	0.001
	(0.02)	(0.004)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
$\zeta_0$	-0.0000	0.0000	0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000
	(0.0001)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Observations	572	572	572	572	572	833	833	833	833	833
$\mathbb{R}^2$	0.004	0.002	0.003	0.002	0.002	0.001	0.0002	0.001	0.001	0.0002
Adjusted R <sup>2</sup>	0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.002	-0.002	-0.002	-0.002

The table reports estimated results from the regression:  $h_{ij,t} = \zeta_0 + \zeta_1 SI_i + \zeta_2 DOI_i + e_{ij,t}$  that examines the impact of speculative activity and open interests on conditional volatility of equities and commodities during pre-financialisation and financialisation period. Standard errors  $e_{ij,t}$ in parentheses.  $h, \zeta_0, \zeta, SI$ , and DOI represent conditional volatility, constant term, coefficient, speculation index, and detrended open interest respectively. Speculation index is measured by  $\frac{Non-commercial\ Long\ Position-Non-commercial\ Short\ Position}{Total\ Open\ Interest}$  following Hedegaard (2011). \*\*\*, \*\*, and \*