Table C.43: Granger causality test between conditional correlation and speculation index

	Pre-financialisation		Financialisation	
Null Hypothesis	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Wheat\ 1}$	0.0385	0.8446	4.0331	0.0449**
$SI \nRightarrow \rho_{S\&P500\text{-}Wheat\ 2}$	0.0038	0.9511	4.7399	0.0298**
$SI \nRightarrow \rho_{S\&P500\text{-}Wheat\ 3}$	1.5224	0.2178	4.5503	0.0332**
$SI \nRightarrow \rho_{S\&P500\text{-}Wheat\ 4}$	2.5751	0.1091	3.2931	0.0699*
$\rho_{S\&P500\text{-}Wheat\ 1} \nRightarrow SI$	0.0202	0.887	0.1139	0.7358
$\rho_{S\&P500\text{-}Wheat\ 2} \nRightarrow SI$	0.0525	0.8188	0.0656	0.7979
$\rho_{S\&P500\text{-}Wheat\ 3} \nRightarrow SI$	0.0397	0.8422	0.0017	0.9671
$\rho_{S\&P500\text{-}Wheat\ 4} \nRightarrow SI$	0.0018	0.9666	0.1036	0.7477

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

* $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.44: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}KC\ Wheat\ 1}$	0.006	0.938	0.8995	0.3432
$SI \nRightarrow \rho_{S\&P500\text{-}KC\ Wheat\ 2}$	0.2646	0.6072	0.5015	0.4791
$SI \nRightarrow \rho_{S\&P500\text{-}KC\ Wheat\ 3}$	0.1092	0.7412	0.4597	0.4979
$SI \nRightarrow \rho_{S\&P500\text{-}KC\ Wheat\ 4}$	0.6272	0.4287	0.7219	0.3958
$\rho_{S\&P500\text{-}KC\ Wheat\ 1} \nRightarrow SI$	0.9814	0.3223	0.6353	0.4256
$\rho_{S\&P500\text{-}KC\ Wheat\ 2} \nRightarrow SI$	0.8977	0.3438	0.9182	0.3382
$\rho_{S\&P500\text{-}KC\ Wheat\ 3} \nRightarrow SI$	0.7132	0.3987	0.6671	0.4143
$\rho_{S\&P500\text{-}KC\ Wheat\ 4} \nRightarrow SI$	0.4531	0.5012	0.3843	0.5355

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

* $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.45: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Corn\ 1}$	0.0985	0.7537	4e-04	0.9833
$SI \nRightarrow \rho_{S\&P500\text{-}Corn\ 2}$	0.1432	0.7053	0.0053	0.9419
$SI \nRightarrow \rho_{S\&P500\text{-}Corn\ 3}$	0.4084	0.5231	0.0513	0.8209
$SI \nRightarrow \rho_{S\&P500\text{-}Corn\ 4}$	0.0971	0.7555	0.0687	0.7933
$\rho_{S\&P500\text{-}Corn\ 1} \nRightarrow SI$	0	0.9945	0.6379	0.4247
$\rho_{S\&P500\text{-}Corn\ 2} \nRightarrow SI$	0.0429	0.8359	0.6537	0.419
$\rho_{S\&P500\text{-}Corn\ 3} \nRightarrow SI$	0.076	0.7829	0.264	0.6075
$\rho_{S\&P500\text{-}Corn\ 4} \nRightarrow SI$	0.1671	0.6829	0.5579	0.4553

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

[*] $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.46: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Soybean\ 1}$	2.4289	0.1197	1.166	0.2805
$SI \nRightarrow \rho_{S\&P500\text{-}Soybean\ 2}$	4.9677	0.0262**	0.0886	0.7661
$SI \nRightarrow \rho_{S\&P500\text{-}Soybean\ 3}$	6.2792	0.0125**	0.0087	0.9259
$SI \nRightarrow \rho_{S\&P500\text{-}Soybean\ 4}$	9.5717	0.0021***	0.0412	0.8393
$\rho_{S\&P500\text{-}Soybean\ 1} \nRightarrow SI$	1.6839	0.1949	0.202	0.6532
$\rho_{S\&P500\text{-}Soybean\ 2} \nRightarrow SI$	0.6743	0.4119	0.0128	0.91
$\rho_{S\&P500\text{-}Soybean\ 3} \nRightarrow SI$	1.1047	0.2937	0.0132	0.9084
$\rho_{S\&P500\text{-}Soybean\ 4} \nRightarrow SI$	1.2644	0.2613	0.09	0.7642

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

* $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.47: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Soybean\ Oil\ 1}$	0.3263	0.568	0.0043	0.9479
$SI \nRightarrow \rho_{S\&P500\text{-}Soybean\ Oil\ 2}$	0.4795	0.4889	2e-04	0.9879
$SI \nRightarrow \rho_{S\&P500\text{-}Soybean\ Oil\ 3}$	0.28	0.5969	2e-04	0.9882
$SI \nRightarrow \rho_{S\&P500\text{-}Soybean\ Oil\ 4}$	0.7057	0.4012	0.0016	0.9678
$\rho_{S\&P500\text{-}Soybean\ Oil\ 1} \nRightarrow SI$	2.429	0.1197	0.1098	0.7404
$\rho_{S\&P500\text{-}Soybean\ Oil\ 2} \nRightarrow SI$	1.9922	0.1587	0.086	0.7693
$\rho_{S\&P500\text{-}Soybean\ Oil\ 3} \nRightarrow SI$	1.2915	0.2563	0.0608	0.8053
$\rho_{S\&P500\text{-}Soybean\ Oil\ 4} \nRightarrow SI$	1.7777	0.183	0.0554	0.814

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

* $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.48: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Oats\ 1}$	0.7183	0.3971	2.8055	0.0943*
$SI \nRightarrow \rho_{S\&P500\text{-}Oats\ 2}$	1.071	0.3012	6.5046	0.0109**
$SI \nRightarrow \rho_{S\&P500\text{-}Oats\ 3}$	0.4851	0.4864	5.3197	0.0213**
$\rho_{S\&P500\text{-}Oats\ 1} \nRightarrow SI$	0.3505	0.5541	0.2541	0.6143
$\rho_{S\&P500\text{-}Oats\ 2} \nRightarrow SI$	0.5831	0.4454	0.1657	0.6841
$\rho_{S\&P500\text{-}Oats\ 3} \nRightarrow SI$	1.1231	0.2897	0.0022	0.9622

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

* $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.49: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}MPLS\ Wheat\ 1}$	0.0538	0.8166	0.0175	0.8948
$SI \nRightarrow \rho_{S\&P500\text{-}MPLS\ Wheat\ 2}$	0.0182	0.8927	0.0071	0.9331
$SI \nRightarrow \rho_{S\&P500\text{-}MPLS\ Wheat\ 3}$	0.0474	0.8277	0.0336	0.8545
$SI \nRightarrow \rho_{S\&P500\text{-}MPLS\ Wheat\ 4}$	0.1669	0.6831	0.142	0.7064
$\rho_{S\&P500\text{-}MPLS\ Wheat\ 1} \nRightarrow SI$	2.1231	0.1458	0.359	0.5492
$\rho_{S\&P500\text{-}MPLS\ Wheat\ 2} \nRightarrow SI$	0.9298	0.3354	0.1467	0.7018
$\rho_{S\&P500\text{-}MPLS\ Wheat\ 3} \nRightarrow SI$	1.1871	0.2765	0.1992	0.6555
$\rho_{S\&P500\text{-}MPLS\ Wheat\ 4} \nRightarrow SI$	0.2696	0.6038	0.0441	0.8337

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

[*] $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.50: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Soybean\ Meal\ 1}$	3.2605	0.0715*	0.2886	0.5913
$SI \nRightarrow \rho_{S\&P500\text{-}Soybean\ Meal\ 2}$	3.2538	0.0718*	0.7313	0.3927
$SI \nRightarrow \rho_{S\&P500\text{-}Soybean\ Meal\ 3}$	4.2871	0.0389**	1.258	0.2624
$SI \nRightarrow \rho_{S\&P500\text{-}Soybean\ Meal\ 4}$	5.103	0.0243**	0.918	0.3383
$\rho_{S\&P500\text{-}Soybean\ Meal\ 1} \nRightarrow SI$	3.5322	0.0607*	0.0085	0.9264
$\rho_{S\&P500\text{-}Soybean\ Meal\ 2} \nRightarrow SI$	0.9838	0.3217	0.3112	0.5771
$\rho_{S\&P500\text{-}Soybean\ Meal\ 3} \nRightarrow SI$	0.4485	0.5033	0.3402	0.5599
$\rho_{S\&P500\text{-}Soybean\ Meal\ 4} \nRightarrow SI$	0.2797	0.5971	0.3038	0.5817

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

[*] $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.51: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Rough\ Rice\ 1}$	7.6548	0.0059***	0.0605	0.8057
$SI \nRightarrow \rho_{S\&P500\text{-}Rough\ Rice\ 2}$	8.5577	0.0036***	0.4528	0.5012
$SI \nRightarrow \rho_{S\&P500\text{-}Rough\ Rice\ 3}$	4.8054	0.0289**	0.1417	0.7067
$\rho_{S\&P500\text{-}Rough\ Rice\ 1} \nRightarrow SI$	1.4044	0.2366	0.9743	0.3239
$\rho_{S\&P500\text{-}Rough\ Rice\ 2} \nRightarrow SI$	0.5924	0.4419	1.1452	0.2849
$\rho_{S\&P500\text{-}Rough\ Rice\ 3} \nRightarrow SI$	1.0788	0.2995	1.5761	0.2097

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

[*] $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.52: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Coffee\ 1}$	3.3465	0.0679*	1.0274	0.3111
$SI \nRightarrow \rho_{S\&P500\text{-}Coffee\ 2}$	3.9959	0.0461**	1.1982	0.274
$SI \nRightarrow \rho_{S\&P500\text{-}Coffee\ 3}$	4.0167	0.0455**	1.4496	0.2289
$SI \nRightarrow \rho_{S\&P500\text{-}Coffee\ 4}$	3.1032	0.0787*	1.3924	0.2383
$\rho_{S\&P500\text{-}Coffee\ 1} \nRightarrow SI$	0.0191	0.8902	0.6313	0.4271
$\rho_{S\&P500\text{-}Coffee\ 2} \nRightarrow SI$	0.0035	0.9527	1.3407	0.2472
$\rho_{S\&P500\text{-}Coffee\ 3} \nRightarrow SI$	0.0114	0.9149	1.6316	0.2018
$\rho_{S\&P500\text{-}Coffee\ 4} \nRightarrow SI$	0.0339	0.854	1.5199	0.218

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

* $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.53: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Sugar\ 1}$	0.3596	0.549	2.169	0.1412
$SI \nRightarrow \rho_{S\&P500\text{-}Sugar\ 3}$	0.4907	0.4839	3.2839	0.0703*
$SI \nRightarrow \rho_{S\&P500\text{-}Sugar\ 4}$	0.2625	0.6086	2.304	0.1294
$\rho_{S\&P500\text{-}Sugar\ 1} \nRightarrow SI$	0.9729	0.3244	0.0144	0.9044
$\rho_{S\&P500\text{-}Sugar\ 3} \nRightarrow SI$	0.1921	0.6613	0.0632	0.8016
$\rho_{S\&P500\text{-}Sugar\ 4} \nRightarrow SI$	0.5632	0.4533	0.0214	0.8837

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

* $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.54: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Cocoa\ 1}$	6.4225	0.0115**	3.5702	0.0592*
$SI \nRightarrow \rho_{S\&P500\text{-}Cocoa\ 2}$	6.6847	0.01***	2.7651	0.0967*
$SI \nRightarrow \rho_{S\&P500\text{-}Cocoa\ 3}$	6.4135	0.0116**	2.9566	0.0859*
$SI \nRightarrow \rho_{S\&P500\text{-}Cocoa\ 4}$	7.2843	0.0072***	3.2304	0.0726*
$\rho_{S\&P500\text{-}Cocoa\ 1} \nRightarrow SI$	0.0163	0.8986	2.8501	0.0917*
$\rho_{S\&P500\text{-}Cocoa\ 2} \nRightarrow SI$	0.0732	0.7868	2.0442	0.1532
$\rho_{S\&P500\text{-}Cocoa\ 3} \nRightarrow SI$	0.0749	0.7844	1.8563	0.1734
$\rho_{S\&P500\text{-}Cocoa\ 4} \nRightarrow SI$	0.1217	0.7273	1.6908	0.1939

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

[*] $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.55: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \not\Rightarrow \rho_{S\&P500\text{-}Cotton\ 1}$	1.6817	0.1952	1.0055	0.3163
$SI \not\Rightarrow \rho_{S\&P500\text{-}Cotton\ 2}$	5.6837	0.0175**	1.2674	0.2606
$SI \not\Rightarrow \rho_{S\&P500\text{-}Cotton\ 3}$	5.6372	0.0179**	0.5933	0.4414
$SI \not\Rightarrow \rho_{S\&P500\text{-}Cotton\ 4}$	4.5695	0.033**	0.0071	0.9328
$\rho_{S\&P500\text{-}Cotton\ 1} \not\Rightarrow SI$	0.9158	0.339	1.2626	0.2615
$\rho_{S\&P500\text{-}Cotton\ 2} \not\Rightarrow SI$	5e-04	0.9819	0.3098	0.5779
$\rho_{S\&P500\text{-}Cotton\ 3} \not\Rightarrow SI$	0.0013	0.9714	0.5241	0.4693
$\rho_{S\&P500\text{-}Cotton\ 4} \not\Rightarrow SI$	0.0018	0.9662	0.5759	0.4481

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

[*] $\not\Rightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.56: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Orange\ Juice\ 2}$	0.0512	0.8211	1.541	0.2148
$SI \nRightarrow \rho_{S\&P500\text{-}Orange\ Juice\ 3}$	0.0081	0.9284	2.1899	0.1393
$SI \nRightarrow \rho_{S\&P500\text{-}Orange\ Juice\ 4}$	2e-04	0.9881	1.0493	0.306
$SI \nRightarrow \rho_{S\&P500\text{-}Orange\ Juice\ 5}$	0.2086	0.648	1.0229	0.3121
$\rho_{S\&P500\text{-}Orange\ Juice\ 2} \nRightarrow SI$	0.2126	0.6449	0.097	0.7556
$\rho_{S\&P500\text{-}Orange\ Juice\ 3} \nRightarrow SI$	0.0276	0.8682	0.7003	0.4029
$\rho_{S\&P500\text{-}Orange\ Juice\ 4} \nRightarrow SI$	0.1297	0.7189	0.1839	0.6682
$\rho_{S\&P500\text{-}Orange\ Juice\ 5} \nRightarrow SI$	0.0278	0.8676	0.3748	0.5405

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

* $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.57: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Lumber\ 1}$	1.1665	0.2806	0.0129	0.9095
$SI \nRightarrow \rho_{S\&P500\text{-}Lumber\ 2}$	1.1591	0.2821	0.1431	0.7054
$\rho_{S\&P500\text{-}Lumber\ 1} \nRightarrow SI$	1.1209	0.2902	2.0756	0.1501
$\rho_{S\&P500\text{-}Lumber\ 2} \nRightarrow SI$	0.3734	0.5414	2.4997	0.1142

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

* $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.58: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Live\ Cattle\ 1}$	6.5428	0.0108**	0.1311	0.7174
$SI \nRightarrow \rho_{S\&P500\text{-}Live\ Cattle\ 2}$	3.1262	0.0776*	0.0616	0.8041
$SI \nRightarrow \rho_{S\&P500\text{-}Live\ Cattle\ 3}$	0.1303	0.7183	0.0472	0.8281
$SI \nRightarrow \rho_{S\&P500\text{-}Live\ Cattle\ 4}$	5.9959	0.0146**	1.3298	0.2492
$\rho_{S\&P500\text{-}Live\ Cattle\ 1} \nRightarrow SI$	0.1115	0.7386	0.2651	0.6068
$\rho_{S\&P500\text{-}Live\ Cattle\ 2} \nRightarrow SI$	2.6083	0.1069	0.1165	0.733
$\rho_{S\&P500\text{-}Live\ Cattle\ 3} \nRightarrow SI$	1.3259	0.25	0.086	0.7694
$\rho_{S\&P500\text{-}Live\ Cattle\ 4} \nRightarrow SI$	0.0343	0.8531	0.3666	0.545

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and *OI* represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

* $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.59: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Feeder\ Cattle\ 1}$	0.6838	0.4086	0.1398	0.7086
$SI \nRightarrow \rho_{S\&P500\text{-}Feeder\ Cattle\ 2}$	0.575	0.4486	0.0665	0.7965
$SI \nRightarrow \rho_{S\&P500\text{-}Feeder\ Cattle\ 3}$	1.2356	0.2668	0.018	0.8932
$SI \nRightarrow \rho_{S\&P500\text{-}Feeder\ Cattle\ 4}$	3.9968	0.0461**	0.0979	0.7545
$\rho_{S\&P500\text{-}Feeder\ Cattle\ 1} \nRightarrow SI$	0.0233	0.8786	0.5414	0.4621
$\rho_{S\&P500\text{-}Feeder\ Cattle\ 2} \nRightarrow SI$	0.0499	0.8234	2.6765	0.1022
$\rho_{S\&P500\text{-}Feeder\ Cattle\ 3} \nRightarrow SI$	0.0401	0.8414	1.4721	0.2254
$\rho_{S\&P500\text{-}Feeder\ Cattle\ 4} \nRightarrow SI$	0.1733	0.6773	1.3162	0.2516

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

* $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.60: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Heating\ Oil\ 1}$	0.0666	0.7964	0.317	0.5736
$SI \nRightarrow \rho_{S\&P500\text{-}Heating\ Oil\ 2}$	0.0481	0.8266	0.187	0.6655
$SI \nRightarrow \rho_{S\&P500\text{-}Heating\ Oil\ 3}$	0.0256	0.8729	0.1354	0.713
$SI \nRightarrow \rho_{S\&P500\text{-}Heating\ Oil\ 4}$	0.0171	0.8961	0.1336	0.7148
$\rho_{S\&P500\text{-}Heating\ Oil\ 1} \nRightarrow SI$	0.0016	0.9677	0.9107	0.3402
$\rho_{S\&P500\text{-}Heating\ Oil\ 2} \nRightarrow SI$	0.0156	0.9006	1.0104	0.3151
$\rho_{S\&P500\text{-}Heating\ Oil\ 3} \nRightarrow SI$	0.0142	0.905	1.4401	0.2305
$\rho_{S\&P500\text{-}Heating\ Oil\ 4} \nRightarrow SI$	0.0011	0.9732	1.6085	0.2051

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

[*] $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.61: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Natural\ Gas\ 1}$	10.797	0.0011***	2.4309	0.1193
$SI \nRightarrow \rho_{S\&P500\text{-}Natural\ Gas\ 2}$	14.6078	1e-04***	0.807	0.3693
$SI \nRightarrow \rho_{S\&P500\text{-}Natural\ Gas\ 3}$	17.0355	0***	0.2413	0.6234
$SI \nRightarrow \rho_{S\&P500\text{-}Natural\ Gas\ 4}$	16.1927	1e-04***	0.0689	0.793
$\rho_{S\&P500\text{-}Natural\ Gas\ 1} \nRightarrow SI$	0.1788	0.6726	0	0.9967
$\rho_{S\&P500\text{-}Natural\ Gas\ 2} \nRightarrow SI$	0.9422	0.3321	0.0291	0.8646
$\rho_{S\&P500\text{-}Natural\ Gas\ 3} \nRightarrow SI$	0.8785	0.349	0.0704	0.7908
$\rho_{S\&P500\text{-}Natural\ Gas\ 4} \nRightarrow SI$	0.1091	0.7413	0.3928	0.531

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

[*] $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.62: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Gold\ 1}$	1.0704	0.3013	3.5007	0.0617*
$SI \nRightarrow \rho_{S\&P500\text{-}Gold\ 2}$	0.7411	0.3897	3.5012	0.0617*
$SI \nRightarrow \rho_{S\&P500\text{-}Gold\ 3}$	0.7244	0.3951	4.0695	0.044**
$SI \nRightarrow \rho_{S\&P500\text{-}Gold\ 4}$	1.3327	0.2488	2.8869	0.0897*
$\rho_{S\&P500\text{-}Gold\ 1} \nRightarrow SI$	0.0552	0.8143	0.1291	0.7194
$\rho_{S\&P500\text{-}Gold\ 2} \nRightarrow SI$	0.0805	0.7767	0.4384	0.5081
$\rho_{S\&P500\text{-}Gold\ 3} \nRightarrow SI$	0.084	0.7721	0.3992	0.5277
$\rho_{S\&P500\text{-}Gold\ 4} \nRightarrow SI$	0.0669	0.796	0.3359	0.5623

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

[*] $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.

Table C.63: Granger causality test between conditional correlation and speculation index

Null Hypothesis	Pre-financialisation		Financialisation	
	F Statistic	p-value	F Statistic	p-value
$SI \nRightarrow \rho_{S\&P500\text{-}Copper\ 1}$	0.007	0.9336	0.9262	0.3361
$SI \nRightarrow \rho_{S\&P500\text{-}Copper\ 2}$	0.081	0.7761	1.0395	0.3082
$SI \nRightarrow \rho_{S\&P500\text{-}Copper\ 3}$	0.1814	0.6703	0.812	0.3678
$SI \nRightarrow \rho_{S\&P500\text{-}Copper\ 4}$	0.1946	0.6593	0.95	0.33
$\rho_{S\&P500\text{-}Copper\ 1} \nRightarrow SI$	0.5587	0.4551	2.5776	0.1088
$\rho_{S\&P500\text{-}Copper\ 2} \nRightarrow SI$	0.378	0.5389	1.7095	0.1914
$\rho_{S\&P500\text{-}Copper\ 3} \nRightarrow SI$	0.4337	0.5105	1.6332	0.2016
$\rho_{S\&P500\text{-}Copper\ 4} \nRightarrow SI$	0.3135	0.5758	2.2053	0.1379

Note:

The table reports the results of the Granger causality test between the first differences of conditional correlation and the first differences of speculation index during pre-financialisation period and financialisation period. ρ and OI represent conditional correlation and speculation index respectively. Speculation index is measured by $\frac{Non\text{-}commercial\ Long\ Position - Non\text{-}commercial\ Short\ Position}{Total\ Open\ Interest}$.

[*] $\nRightarrow$ means "does not Granger-cause". ***, **, and * denote statistical significance at 1%, 5%, and 10% level.