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The Morning Email: Eurodollar Correlations & R-Squared

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One contract may be correlating with another but does that mean there's causation. You must ask, "is one causing the other?"

That's what the R-Squared is for. Read R-Squared as follows: let's say, CLA and DJIA have an R-Squared of 0.44. That means there's a 44% chance that one is causing the market movement of the other.

You will always see a positive number for the R-Squared. If a correlation is a (negative) number, for example, (87.9) that means the two commodities are mirroring each other, not correlating. For example, today (which is 06/06/2007) the RBA and DJIA have a (87.9)% correlation. The R-Squared is 0.77. Therefore the two instruments are mirroring each other 88% of the time, and there's a 77% chance that one is causing the other.

Conditionally formatted cells:

If there's an R-Squared equal to or greater than 80%, then, the cell will turn BLUE. That tells us that there's an 80% chance that one of the instruments is causing the other to move. --Thanks, Jim

Want something added? Let me know: jgoulding@ghco.com

Disclaimer: All information within this newsletter is meant for internal use at GH Trader's LLC, only. All information has been recorded to the best of my ability. This material is based upon information that I consider reliable, but I do not represent that it is accurate or complete.

	TU	Z3N	FV	TY	ZB	2Y Yld	3Y Yld	5Y Yld	7Y Yld	10Y Yld	30Y Yld		
EDAU09	-43	-42	-14	13	57	65	42	38	11	-30	-54	Correlations	Whites
EDAZ09	40	41	62	74	77	-15	-40	-40	-55	-66	-61		
EDAH10	94	94	94	82	44	-81	-91	-88	-80	-56	-25		
EDAM10	99	99	93	76	30	-90	-96	-92	-79	-48	-13		
EDAU10	99	99	92	73	25	-93	-96	-93	-77	-44	-8		Reds
EDAZ10	100	99	89	69	20	-94	-95	-91	-74	-39	-3		
EDAH11	99	99	91	73	26	-91	-95	-91	-76	-43	-8		
EDAM11	96	97	95	81	39	-85	-93	-92	-82	-54	-21		
EDAU11	89	92	97	91	58	-74	-89	-90	-88	-69	-41		Greens
EDAZ11	80	83	96	96	72	-62	-83	-86	-91	-81	-57		
EDAH12	71	76	93	98	81	-51	-76	-82	-91	-88	-68		
EDAM12	63	68	89	99	88	-42	-70	-77	-91	-92	-76		
EDAU12	56	61	85	98	92	-34	-64	-72	-89	-95	-82		Blues
EDAZ12	50	56	82	96	94	-28	-59	-69	-87	-96	-86		
EDAH13	46	52	79	95	95	-23	-55	-65	-86	-97	-88		
EDAM13	41	48	76	94	97	-19	-51	-62	-84	-97	-90		
EDAU13	37	44	74	92	98	-15	-48	-59	-82	-97	-92	Golds	
EDAZ13	35	42	72	91	98	-12	-45	-57	-81	-97	-93		
EDAH14	32	38	69	89	98	-9	-42	-54	-79	-97	-93		
EDAM14	31	38	69	89	98	-8	-41	-53	-79	-97	-94		
EDAU09	19	17	2	2	32	42	18	14	1	9	30	R - Squared	Whites
EDAZ09	16	17	38	54	59	2	16	16	30	44	37		
EDAH10	88	88	88	67	19	65	83	78	64	31	6		
EDAM10	97	97	86	58	9	82	92	85	62	23	2		
EDAU10	99	98	84	53	6	86	93	86	60	19	1		Reds
EDAZ10	99	98	80	48	4	88	91	83	55	15	0		
EDAH11	98	97	83	53	7	83	90	83	58	19	1		
EDAM11	93	94	89	66	15	73	87	84	67	29	4		
EDAU11	80	84	94	82	33	54	79	81	77	48	17		Greens
EDAZ11	64	70	92	93	52	38	68	74	83	65	33		
EDAH12	51	57	87	97	66	26	58	67	83	77	47		
EDAM12	40	46	80	97	77	18	49	59	82	86	58		
EDAU12	31	38	73	95	84	12	40	52	79	90	67		Blues
EDAZ12	25	32	68	93	88	8	35	47	76	93	73		
EDAH13	21	27	63	90	91	5	30	42	73	94	77		
EDAM13	17	23	58	88	93	4	26	39	71	95	81		
EDAU13	14	19	54	85	95	2	23	35	67	95	84	Golds	
EDAZ13	12	17	51	83	96	2	21	32	65	94	86		
EDAH14	10	15	48	80	97	1	18	29	62	93	87		
EDAM14	9	14	47	79	97	1	17	29	62	94	88		

	Mini			Nymex	Gold
	S&Ps	Dow (5\$)	Nasdaq	Crude	Futures
EDAU09	72	75	68	51	-11
EDAZ09	15	21	3	47	38
EDAH10	-52	-48	-64	8	57
EDAM10	-65	-62	-76	-4	57
EDAU10	-69	-67	-79	-8	56
EDAZ10	-71	-69	-80	-12	53
EDAH11	-69	-66	-77	-77	51
EDAM11	-63	-60	-73	-5	49
EDAU11	-53	-48	-64	2	46
EDAZ11	-43	-38	-55	9	43
EDAH12	-35	-29	-48	13	40
EDAM12	-29	-23	-42	15	35
EDAU12	-24	-18	-37	15	30
EDAZ12	-21	-15	-33	14	26
EDAH13	-18	-11	-30	15	22
EDAM13	-15	-9	-27	15	20

Eurex		
Bund	Bobl	Schatz
64	56	24
68	66	59
26	30	50
12	18	43
7	13	40
1	7	35
7	12	38
21	26	48
41	45	63
57	61	74
68	72	82
76	79	86
82	84	89
85	88	90
88	90	91
90	92	91

Correlations	Whites
	Reds
	Greens
	Blues

	Mini			Nymex	Gold
	S&Ps	Dow (5\$)	Nasdaq	Crude	
EDAU09	52	57	47	26	1
EDAZ09	2	4	0	22	14
EDAH10	27	23	40	1	33
EDAM10	43	39	57	0	33
EDAU10	48	44	62	1	31
EDAZ10	51	47	64	1	28
EDAH11	47	43	60	60	26
EDAM11	40	36	53	0	24
EDAU11	28	23	41	0	21
EDAZ11	19	14	31	1	19
EDAH12	12	8	23	2	16
EDAM12	9	5	18	2	12
EDAU12	6	3	14	2	9
EDAZ12	5	2	11	2	7
EDAH13	3	1	9	2	5
EDAM13	2	1	7	2	4

Eurex		
Bund	Bobl	Schatz
41	31	6
46	43	35
7	9	25
1	3	19
0	2	16
0	1	12
0	2	15
4	7	23
17	20	40
33	37	55
46	51	67
58	63	75
67	71	79
72	77	81
77	81	82
80	84	83

R - Squared	Whites
	Reds
	Greens
	Blues

	EURUSD	EURJPY	USDJPY	ZT	ZF	ZN	ZB	2Y Yld	5Y Yld	10Y Yld	30Y Yld	Spread Ratio
ZF - ED7	40.5	-18.0	-54.5	41.8	76.8	89.0	90.9	-27.6	-69.6	97.4	86.2	10:12
5yr - ED7	13.2	-44.5	-57.5	49.6	70.8	54.3	72.7	-49.0	-77.4	75.8	57.2	1:12
5yr - RedPk	19.6	4.0	-14.1	-5.1	21.3	45.3	30.2	90.5	-9.6	39.1	37.0	1:4 or 5

Do not use this page unless you know the spread equation I used. This is a specialty page. These spreads are designed specifically for individual traders.

Always feel free to send me a spread you'd like to follow and I'll enter it on this page.

Correlations

	EURUSD	EURJPY	USDJPY	ZT	ZF	ZN	ZB	2Y Yld	5Y Yld	10Y Yld	30Y Yld
ZF - ED7	16.4	3.2	29.7	17.5	59.0	79.3	82.6	7.6	48.4	94.8	74.3
5yr - ED7	1.7	19.8	33.0	24.6	50.1	29.5	52.9	24.0	60.0	57.4	32.8
5yr - RedPk	3.8	0.2	2.0	0.3	4.5	20.5	9.1	82.0	0.9	15.3	13.7

R - Squared

	Cash Markets						US \$ Index	Futures					Correlations
	EURUSD	EURJPY	EURGBP	EURCHF	USDJPY	GBPUSD		US Dollar	Euro	Yen	Swiss	Canadian	
EDAU09	28	57	-75	53	33	75	-43	-38	13	-32	-11	58	
EDAZ09	80	31	-25	-25	-38	70	-74	-66	59	40	55	7	
EDAH10	76	-17	40	-84	-83	19	-53	-47	62	84	81	-48	
EDAM10	67	-28	53	-92	-86	3	-41	-37	57	86	80	-59	
EDAU10	63	-33	58	-94	-87	-3	-37	-33	54	88	78	-62	
EDAZ10	59	-36	63	-94	-87	-9	-33	-29	51	88	76	-64	
EDAH11	62	-34	60	-92	-88	-5	-36	-31	52	89	76	-62	
EDAM11	66	-31	50	-89	-89	5	-41	-35	53	90	76	-59	
EDAU11	70	-26	32	-81	-87	21	-48	-41	53	87	73	-53	
EDAZ11	71	-20	14	-73	-82	35	-52	-45	52	82	68	-46	
EDAH12	69	-16	0	-65	-77	44	-53	-47	50	77	64	-40	
EDAM12	66	-14	-10	-57	-72	50	-52	-46	46	71	57	-36	
EDAU12	61	-13	-18	-51	-67	53	-49	-44	41	66	51	-33	
EDAZ12	58	-13	-24	-46	-64	55	-47	-41	37	62	46	-31	
EDAH13	55	-12	-28	-41	-61	56	-45	-40	34	59	41	-29	
EDAM13	52	-11	-32	-38	-58	57	-44	-39	32	56	38	-27	

	Cash Markets						US \$ Index	Futures					R - Squared
	EURUSD	EURJPY	EURGBP	EURCHF	USDJPY	GBPUSD		US Dollar	Euro	Yen	Swiss	Canadian	
EDAU09	8	33	56	28	11	56	18	15	2	10	1	33	
EDAZ09	64	9	6	6	15	50	55	44	35	16	31	1	
EDAH10	57	3	16	71	69	4	28	22	39	70	66	23	
EDAM10	44	8	28	84	74	0	17	14	32	75	63	35	
EDAU10	39	11	33	88	76	0	14	11	29	77	61	38	
EDAZ10	35	13	40	88	76	1	11	8	26	78	58	41	
EDAH11	38	12	36	85	78	0	13	10	27	80	58	39	
EDAM11	44	10	25	79	79	0	17	13	28	81	58	35	
EDAU11	49	7	10	66	76	4	23	17	28	77	53	28	
EDAZ11	50	4	2	53	68	12	27	20	27	68	47	21	
EDAH12	48	3	0	42	60	20	28	22	25	59	40	16	
EDAM12	43	2	1	33	52	25	27	21	21	50	33	13	
EDAU12	38	2	3	26	45	28	24	19	17	43	26	11	
EDAZ12	33	2	6	21	41	30	22	17	14	39	21	10	
EDAH13	30	1	8	17	37	31	20	16	12	35	17	8	
EDAM13	27	1	10	14	33	33	19	15	10	31	15	7	

Read the last page

	Packs				Bundles				
	Wht Pak	Red Pak	Green Pak	Blue Pak	2yr	3yr	4yr	5yr - 1	5yr -2
EDAU09	7	-33	-14	-37	-23	-8	8	20	32
EDAZ09	80	49	-80	-80	58	70	77	81	85
EDAH10	99	97	-91	-68	99	99	93	99	82
EDAM10	93	100	-84	-58	100	96	88	78	72
EDAU10	90	100	-81	-53	99	95	85	75	68
EDAZ10	88	100	-78	-49	98	93	82	72	64
EDAH11	91	100	-82	-54	99	95	86	76	68
EDAM11	95	99	-89	-65	100	98	92	84	77
EDAU11	97	94	-97	-80	96	100	98	94	89
EDAZ11	95	86	-100	-90	90	97	100	99	96
EDAH12	91	78	-100	-95	82	93	99	100	99
EDAM12	86	70	-98	-98	75	88	96	99	100
EDAU12	80	63	-96	-100	68	83	93	98	98
EDAZ12	76	58	-93	-100	63	79	91	96	97
EDAH13	73	53	-91	-100	59	75	88	95	95
EDAM13	69	49	-89	-100	55	72	86	93	94

Correlations

	Packs				Bundles				
	Wht Pak	Red Pak	Green Pak	Blue Pak	2yr	3yr	4yr	5yr - 1	5yr -2
EDAU09	1	11	2	14	5	1	1	4	10
EDAZ09	64	24	64	65	34	48	60	65	72
EDAH10	97	94	82	46	98	97	87	98	67
EDAM10	87	99	70	33	99	93	77	61	52
EDAU10	82	100	65	29	98	89	72	56	46
EDAZ10	78	99	61	24	97	86	68	51	41
EDAH11	83	100	67	29	99	90	74	57	47
EDAM11	90	98	79	43	99	97	85	71	59
EDAU11	94	88	93	64	93	99	96	88	79
EDAZ11	90	74	100	81	80	94	100	97	93
EDAH12	82	60	99	91	68	86	97	100	99
EDAM12	73	49	96	96	56	77	93	99	99
EDAU12	65	39	91	99	47	68	87	96	96
EDAZ12	58	33	87	100	40	62	82	93	94
EDAH13	53	28	83	100	35	56	78	90	91
EDAM13	48	24	80	99	30	51	73	87	88

R - Squared

	WR1	WR2	WR3	WR4	WG1	WG2	WG3	WG4	RG1	RG2	RG3	RG4	Correlations
EDAU09	52	-33	-14	-37	26	7	-6	-70	-85	-84	-78	-73	
EDAZ09	-30	49	-80	-80	-55	-66	-71	-64	-49	-44	-45	-46	
EDAH10	-90	97	-91	-68	-96	-93	-86	-14	18	24	18	13	
EDAM10	-97	100	-84	-58	-98	-90	-82	1	36	40	34	28	
EDAU10	-98	100	-81	-53	-97	-89	-79	6	41	45	39	33	
EDAZ10	-99	100	-78	-49	-97	-87	-76	11	44	50	44	38	
EDAH11	-98	100	-82	-54	-98	-89	-80	5	38	44	38	33	
EDAM11	-94	99	-89	-65	-99	-94	-87	-10	23	30	25	19	
EDAU11	-85	94	-97	-80	-98	-98	-94	-31	3	9	3	-2	
EDAZ11	-75	86	-100	-90	-93	-98	-98	-48	-14	-10	-16	-21	
EDAH12	-66	78	-100	-95	-87	-96	-99	-60	-27	-23	-30	-36	
EDAM12	-57	70	-98	-98	-81	-93	-98	-69	-36	-34	-41	-46	
EDAU12	-49	63	-96	-100	-75	-89	-96	-76	-44	-42	-49	-54	
EDAZ12	-44	58	-93	-100	-71	-87	-94	-80	-49	-48	-54	-60	
EDAH13	-39	53	-91	-100	-67	-84	-92	-83	-54	-52	-59	-64	
EDAM13	-35	49	-89	-100	-63	-81	-90	-85	-57	-56	-62	-67	

	WR1	WR2	WR3	WR4	WG1	WG2	WG3	WG4	RG1	RG2	RG3	RG4	R - Squared
EDAU09	27	11	2	14	7	1	0	48	73	70	62	54	
EDAZ09	9	24	64	65	30	43	51	40	24	20	20	21	
EDAH10	81	94	82	46	93	86	75	2	3	6	3	2	
EDAM10	94	99	70	33	95	81	67	0	13	16	11	8	
EDAU10	97	100	65	29	95	79	63	0	17	21	15	11	
EDAZ10	98	99	61	24	93	75	58	1	19	25	19	14	
EDAH11	95	100	67	29	95	79	63	0	14	19	15	11	
EDAM11	88	98	79	43	98	89	75	1	5	9	6	4	
EDAU11	73	88	93	64	95	96	89	10	0	1	0	0	
EDAZ11	56	74	100	81	86	96	96	23	2	1	2	5	
EDAH12	43	60	99	91	75	92	97	36	7	5	9	13	
EDAM12	33	49	96	96	65	86	95	48	13	12	17	21	
EDAU12	24	39	91	99	56	80	92	57	20	18	24	29	
EDAZ12	19	33	87	100	50	75	88	63	24	23	30	35	
EDAH13	15	28	83	100	45	70	85	69	29	28	34	40	
EDAM13	12	24	80	99	40	66	82	73	32	32	39	45	

	Packs				Bundles				
	Wht Pak	Red Pak	Green Pak	Blue Pak	2yr	3yr	4yr	5yr - 1	5yr -2
WR1	-81	-98	71	42	-95	-88	-76	-65	-54
WR2	-76	-96	65	34	-92	-84	-71	-58	-48
WR3	-81	-98	71	41	-95	-88	-76	-65	-55
WR4	-83	-78	89	78	-81	-87	-89	-87	-80
WG1	-83	-98	90	69	-98	-98	-93	-86	-77
WG2	-92	-90	98	85	-92	-97	-99	-96	-90
WG3	-88	-81	99	93	-84	-93	-98	-99	-96
WG4	-26	3	54	81	-4	-26	-47	-26	-65
RG1	4	37	20	51	29	9	-12	9	-32
RG2	10	43	16	50	35	14	-8	-24	-30
RG3	5	37	22	56	29	8	-15	-31	-37
RG4	0	31	28	61	24	2	-20	-37	-42

Correlations

	Packs				Bundles				
	Wht Pak	Red Pak	Green Pak	Blue Pak	2yr	3yr	4yr	5yr - 1	5yr -2
WR1	66	95	51	17	90	77	58	42	30
WR2	58	92	42	12	85	70	50	34	23
WR3	66	96	51	17	91	78	58	42	30
WR4	69	62	79	61	65	76	79	76	64
WG1	69	96	82	48	96	96	87	74	60
WG2	84	81	95	73	84	95	97	92	82
WG3	77	65	97	87	70	87	97	98	93
WG4	7	0	29	66	0	7	22	7	42
RG1	0	14	4	26	9	1	1	1	10
RG2	1	18	2	25	12	2	1	6	9
RG3	0	14	5	32	9	1	2	10	13
RG4	0	10	8	38	6	0	4	13	17

R - Squared

	Packs				Bundles				
	Wht Pak	Red Pak	Green Pak	Blue Pak	2yr	3yr	4yr	5yr - 1	5yr -2
FCAL1	-92	-100	84	59	-99	-96	-88	-79	-71
FCAL2	-92	-100	85	60	-99	-97	-97	-80	-72
FCAL3	-95	-95	96	78	-97	-100	-97	-93	-88
FCAL4	-85	-68	98	87	-92	-98	-100	-97	-94
FCAL21	-85	-68	98	98	-74	-87	-96	-99	-99
FCAL22	-74	-52	91	100	-58	-74	-88	-94	-96
FCAL23	-68	-45	87	99	87	-69	-84	87	-93
FCAL24	-86	-70	98	98	-75	-88	-96	-75	-100

Correlations

	Packs				Bundles				
	Wht Pak	Red Pak	Green Pak	Blue Pak	2yr	3yr	4yr	5yr - 1	5yr -2
FCAL1	84	100	71	35	99	93	78	63	51
FCAL2	84	99	73	36	99	93	93	64	52
FCAL3	91	91	91	61	94	99	95	86	78
FCAL4	73	47	95	76	84	96	99	95	88
FCAL21	73	47	95	96	54	75	91	98	98
FCAL22	54	27	83	99	34	55	77	89	92
FCAL23	46	20	76	98	76	47	70	76	87
FCAL24	73	49	96	96	56	77	93	56	99

R - Squared

Concerning Packs: Formula for packs = $((EDAA9+EDAA10+EDAA11+EDAA12)/4)$

Where the number in the equation, ie EDAA9, represents the 9th Eurodollar contract **not** including serials. The 9th contract is always GREEN 1. EDAA12 represent GREEN 4 or the 12th Eurodollar contract, etc.

BUNDLES are priced the same way. HOWEVER, there are two-types of 5y bundles. I've labeled them 5y -1 and 5y-2. The first is priced like all the other bundles. The 2nd is the 5yr bundle futures contract that expires quarterly (symbol = Y5 on CQG). This 2nd contract trades more than the regular 5yr bundles.

CALENDAR SPREADS:

WR1 = White 1 contract and the RED 1 contract.

WG1 = White 1 contract and the Green 1 contract

RG1 = GREEN 1 contract and the RED 1 contract

The formula used to determine the yield is 100-longer duration minus 100-shorter duration

CALENDAR FLYs

FCAL1 = White 1, Red 1, Green 1

FCAL2 = White 2, Red 2, Green 2

FCAL3 = White 3, Red 3, Green 3

FCAL4 = White 4, Red 4, Green 4

FCAL21 = RED 1, Green 1, Blue 1

FCAL22 = RED 2, Green 2, Blue 2

FCAL23 = RED 3, Green 3, Blue 3

FCAL24 = RED 4, Green 4, Blue 4

IMPORTANT!! Example for the formula used to determine the calendar fly is : $(SEP11)+((SEP10)*2)-(SEP09)$

Why is this important? Because if you switch the order, say, SEP09 and SEP11, then the "+" and "-" operators, it changes the correlation equation.

I set all the spreads from highest duration to lowest duration, then, added the bullet to the highest duration, then, subtracted the lowest duration wing.

