7/25/2008 5:55

The Morning Email: 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. HOWEVER, the gold and currency pages are set to 70% or greater. Lastly, If the cell is any other color, just ignore it. Other colors are 'notes' for me. --Thanks, Jim

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

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	Daily Correlations US Cash Treasuries (Yield)				Daily Correlations US Bonds/Notes (CBOT)			
	2yr Yield	5yr Yield	10yr Yield	30yr Yield	ZT	ZF	ZN	ZB
5YR BASIS	(79.9)	(77.7)	(75.6)	(71.9)	54.2	59.8	58.4	62.5
10YR BASIS	(63.8)	(67.1)	(72.5)	(77.2)	42.3	50.5	51.8	64.1
30YR BASIS	(66.2)	(73.7)	(82.3)	(91.8)	53.4	63.5	67.7	81.7
2/10	(65.8)	(50.1)	(32.6)	(12.9)	48.5	43.0	33.3	18.6
2/5	25.2	43.8	58.7	69.1	(43.6)	(50.2)	(58.8)	(68.5)
2/30	(80.8)	(69.0)	(53.7)	(32.2)	69.4	64.1	55.6	39.6
5/10	(94.7)	(88.2)	(77.1)	(60.6)	86.2	84.0	78.1	67.0
5/30	(93.8)	(88.6)	(78.3)	(59.8)	88.9	85.9	80.3	67.3
10/30	(88.4)	(85.0)	(76.2)	(56.0)	88.4	84.5	79.4	64.7
TUF1^	(22.4)	(8.9)	(0.1)	0.5	(12.5)	(9.0)	(13.4)	(10.5)

^ See notes page

	Daily R-Squared US Cash Treasuries (Yield)				Daily R-Squared US Bonds/Notes (CBOT)			
	2yr Yield	5yr Yield	10yr Yield	30yr Yield	ZT	ZF	ZN	ZB
5YR BASIS	0.64	0.60	0.57	0.52	0.29	0.36	0.34	0.39
10YR BASIS	0.41	0.45	0.53	0.60	0.18	0.26	0.27	0.41
30YR BASIS	0.44	0.54	0.68	0.84	0.29	0.40	0.46	0.67
2/10	0.43	0.25	0.11	0.02	0.24	0.18	0.11	0.03
2/5	0.06	0.19	0.34	0.48	0.19	0.25	0.35	0.47
2/30	0.65	0.48	0.29	0.10	0.48	0.41	0.31	0.16
5/10	0.90	0.78	0.60	0.37	0.74	0.70	0.61	0.45
5/30	0.88	0.78	0.61	0.36	0.79	0.74	0.64	0.45
10/30	0.78	0.72	0.58	0.31	0.78	0.71	0.63	0.42
TUF1^	0.05	0.01	0.00	0.00	0.02	0.01	0.02	0.01

^ See notes page

	Daily Correlations US Cash Treasuries (Yield)				Daily Correlations US Bonds/Notes (CBOT)				
	2yr Yield	5yr Yield	10yr Yield	30yr Yield	ZT	ZF	ZN	ZB	Exchange
2yr Yield	100.0	98.0	92.6	81.9	(92.2)	(93.3)	(90.1)	(85.0)	
5yr Yield	98.0	100.0	98.0	90.1	(94.6)	(96.9)	(95.7)	(92.9)	
10yr Yield	92.6	98.0	100.0	96.4	(91.5)	(95.6)	(96.5)	(97.4)	
30yr Yield	81.9	90.1	96.4	100.0	(80.4)	(87.3)	(90.5)	(97.8)	
ZT	(92.2)	(94.6)	(91.5)	(80.4)	100.0	99.1	97.2	89.5	
ZF	(93.3)	(96.9)	(95.6)	(87.3)	99.1	100.0	99.3	94.3	
ZN	(90.1)	(95.7)	(96.5)	(90.5)	97.2	99.3	100.0	96.7	
ZB	(85.0)	(92.9)	(97.4)	(97.8)	89.5	94.3	96.7	100.0	
emini SP	92.0	96.8	97.4	93.9	(92.8)	(96.3)	(96.7)	(97.1)	CME
Dow Futures	89.1	95.9	98.7	96.6	(91.5)	(96.0)	(97.7)	(98.9)	CME/eCbot
USDJPY	92.7	88.8	81.3	71.3	(84.0)	(85.7)	(83.2)	(76.0)	Cash Market
EURUSD	(63.5)	(56.5)	(51.0)	(53.8)	44.1	48.3	46.2	51.0	Cash Market
EURJPY	78.7	79.0	72.7	55.6	(82.7)	(81.2)	(79.1)	(64.8)	Cash Market
Crude	(74.8)	(78.0)	(80.9)	(86.6)	67.2	73.9	75.8	83.9	CME/NYMEX

	Daily R-Squared US Cash Treasuries (Yield)				Daily R-Squared US Bonds/Notes (CBOT)			
	2yr Yield	5yr Yield	10yr Yield	30yr Yield	ZT	ZF	ZN	ZB
2yr Yield		0.96	0.86	0.67	0.85	0.87	0.81	0.72
5yr Yield	0.96		0.96	0.81	0.89	0.94	0.92	0.86
10yr Yield	0.86	0.96		0.93	0.84	0.91	0.93	0.95
30yr Yield	0.67	0.81	0.93		0.65	0.76	0.82	0.96
ZT	0.85	0.89	0.84	0.65		0.98	0.94	0.80
ZF	0.87	0.94	0.91	0.76	0.98		0.99	0.89
ZN	0.81	0.92	0.93	0.82	0.94	0.99		0.94
ZB	0.72	0.86	0.95	0.96	0.80	0.89	0.94	
emini SP	0.85	0.94	0.95	0.88	0.86	0.93	0.94	0.94
Dow Futures	0.79	0.92	0.98	0.93	0.84	0.92	0.95	0.98
USDJPY	0.86	0.79	0.66	0.51	0.71	0.73	0.69	0.58
EURUSD	0.40	0.32	0.26	0.29	0.19	0.23	0.21	0.26
EURJPY	0.62	0.62	0.53	0.31	0.68	0.66	0.63	0.42
Crude	0.56	0.61	0.65	0.75	0.45	0.55	0.58	0.70

		Daily Correlations US Cash Treasuries			Daily Correlations US Bonds/Notes (CBOT)					
	Symbol	2yr	5yr	10yr	ZT	ZF	ZN	Symbol		Exchange
Schatz(2Y)	DG	(77.40)	(82.63)	(82.55)	86.78	85.13	83.22	DG	Schatz(2Y)	EUREX
Bobl(5Y)	DL	(86.60)	(91.44)	(92.10)	92.35	92.53	91.10	DL	Bobl(5Y)	EUREX
Bund(10Y)	DB	(93.13)	(94.89)	(93.51)	93.29	94.07	91.59	DB	Bund(10Y)	EUREX

		Daily R-Squared US Cash Treasuries			Daily R-Squared US Bonds/Notes (CBOT)				
	Symbol	2yr	5yr	10yr	ZT	ZF	ZN	Symbol	
Schatz(2Y)	DG	0.60	0.68	0.68	0.75	0.72	0.69	DG	Schatz(2Y)
Bobl(5Y)	DL	0.75	0.84	0.85	0.85	0.86	0.83	DL	Bobl(5Y)
Bund(10Y)	DB	0.87	0.90	0.87	0.87	0.88	0.84	DB	Bund(10Y)

How does this work on the ROLL? Formula's track the highest volume individual contract. For example, if we are rolling from Dec 2007 to March 2007, for the eCBOT, then, the day up to the 'top step change' Dec07 will be the highest volume traded contract. On the day of the switch, Mch08 will be the highest volume traded contract.

The formula will mix Dec07 and Mch08 until we've reached the 10th day of the change over. We always roll on the last trading day of the month. In this case it would be November 30th. So, by the tenth trading day of December the formula will have tracked the Mch08 contract entirely.

However, it doesn't matter. All that I'm concerned with is the highest volume contract and that's what the formulas track.

Furthermore, it works the same way for the Bund, Bobl, and Schatz; whatever contract is the highest volume contract, that's the contract the formula will take its data from.

Energy & Currencies

Energies
Daily Correlations

	CLA	HOA	RBA	NGA	
CLA	100.0	98.8	99.5	94.2	Crude Oil
HOA	98.8	100.0	99.0	95.5	Heating Oil
RBA	99.5	99.0	100.0	93.2	unleaded Gas
NGA	94.2	95.5	93.2	100.0	Nat Gas
DJIA	(83.8)	(81.9)	(82.9)	(72.2)	Dow Cash
SPC5	(80.6)	(75.1)	(78.1)	(76.5)	S&P 500 Cash
EURUSD	76.7	76.4	73.1	82.0	€ / $
EURJPY	(41.9)	(45.0)	(39.9)	(45.2)	€ / ¥
USDJPY	(75.8)	(77.7)	(72.3)	(81.3)	$ / ¥
GCA	80.7	84.1	78.7	88.3	Gold

Energies
Daily R-Squared

	CLA	HOA	RBA	NGA		Exchange
CLA		0.98	0.99	0.89	Crude Oil	CME / Nymex
HOA	0.98		0.98	0.91	Heating Oil	CME / Nymex
RBA	0.99	0.98		0.87	unleaded Gas	CME / Nymex
NGA	0.89	0.91	0.87		Nat Gas	CME / Nymex
DJIA	0.70	0.67	0.69	0.52	Dow Cash	NYSE (Cash)
SPC5	0.65	0.56	0.61	0.59	S&P 500 Cash	Cash
EURUSD	0.59	0.58	0.53	0.67	€ / $	Cash
EURJPY	0.18	0.20	0.16	0.20	€ / ¥	Cash
USDJPY	0.57	0.60	0.52	0.66	$ / ¥	Cash
GCA	0.65	0.71	0.62	0.78	Gold	Comex

Currencies
Daily Correlations

	EURUSD	EURJPY	USDJPY	GBPEUR	
EURUSD	100.0	(17.4)	(72.4)	(85.7)	€ / $
EURJPY	(17.4)	100.0	80.5	6.9	€ / ¥
USDJPY	(72.4)	80.5	100.0	56.7	$ / ¥
Euro	97.8	(7.6)	(64.4)	(90.6)	€
Yen	65.7	(83.1)	(98.0)	(55.3)	¥
Swiss Fr	92.7	(47.7)	(89.3)	(81.4)	CHF
Canadain $	84.7	(37.4)	(77.7)	(66.9)	C$

Currencies
Daily R-Squared

	EURUSD	EURJPY	USDJPY	GBPEUR		Exchange
EURUSD		0.03	0.52	0.73	€ / $	Cash
EURJPY	0.03		0.65	0.00	€ / ¥	Cash
USDJPY	0.52	0.65		0.32	$ / ¥	Cash
Euro	0.96	0.01	0.41	0.82	€	CME/Globex
Yen	0.43	0.69	0.96	0.31	¥	CME/Globex
Swiss Fr	0.86	0.23	0.80	0.66	CHF	CME/Globex
Canadain $	0.72	0.14	0.60	0.45	C$	CME/Globex

Currencies
Daily Correlations

	Euro	Yen	Swiss Fr	Canadain $	
Euro	100.0	60.3	90.3	80.2	€
Yen	60.3	100.0	87.3	76.8	¥
Swiss Fr	90.3	87.3	100.0	86.5	CHF
Canadain $	78.9	75.4	85.3	100.0	C$

Currencies
Daily R-Squared

	Euro	Yen	Swiss Fr	Canadain $		Exchange
Euro		0.36	0.81	0.64	€	CME/Globex
Yen	0.36		0.76	0.59	¥	CME/Globex
Swiss Fr	0.81	0.76		0.75	CHF	CME/Globex
Canadain $	0.62	0.57	0.73		C$	CME/Globex

Notes:
EURUSD, EURJPY, USDJPY, & USDGBP are all cash market products.
Euro, Yen, Swiss Fr, Canandian $, & BP are all CME products.

1) ALL Correlations are based on 10 day historical
2) CQG quotes prices in 32nds. That means you won't see "*32" on the end of my equations. I don't need to multiply by 32 to see the correct quote.

TUF1 = Cash2yr Yield - 5 Year Futures
CQG Equation = SHARESCALE(BUSP02-(FVA?*.5),INTEGER1)*32?Where FVA? is the 5yr electronic lead month futures contract.

FYT1 = (FV*1.5)-TY)
CQG Equation = ((FVA?*1.5)-TYA?)
Where: FV = 5 yr electronic futures; TY = 10 yr electronic futures

FYT2 = ((5 yr cash - (TY*.7))
CQG Equation ((BUS05P-(TYA*.7))
Where: 5 yr cash = OTR; TY = 10 yr electronic futures

NOB1 = (10 yr cash - (US*.7))
CQG Equation = (BUS10P-(USA*.7))
Where: US = 30 yr electronic futures; 10 yr cash = OTR

NOB2 = (TY-(US*.7))
CQG Equation = (TYA-(USA*.7))
Where: TY = 10 yr electronic futures; US = 30 yr electronic futures

BASIS is conversion factor.
Basis = Cash Price - (Futures Price * Conversion Factor)

FAQ
Q: Why do I have a column titled 'q' in certain places?
A: Those are q formulas I use within CQG. CQG is the engine behind my morning emails. They provide the quotes, I provide the formulas.

Q: Why are certain cells colored?
A: They help me identify what formula's need to be changed by hand and which are automated. There are over 9,000 formula's working behind the scenes to deliver the morning emails. I need some kind of system assist me in identifying certain formula's that need to be adjusted on new issues, rolls etc. I also use a color pattern for the treasuries to help with quick visual interpretation.

US Treasury Basis

Daily Correlations
Treasury Basis^

	5YR BASIS	10YR BASIS	30YR BASIS	q
emini SP	(68.3)	(63.2)	(77.3)	
5$ Dow Futures	(67.4)	(65.5)	(80.6)	
USDJPY	(68.3)	(45.9)	(55.0)	
EURUSD	58.1	45.0	54.3	
EURJPY	(48.9)	(27.9)	(32.0)	
Crude	65.2	64.9	80.4	
TUF1^	49.6	34.3	19.7	4
2/10	49.2	15.4	1.7	45
2/5	(17.4)	(38.4)	(59.8)	47
2/30	57.8	25.9	14.8	46
5/10	69.9	43.4	41.1	48
5/30	66.9	41.6	38.1	49
10/30	59.9	37.3	32.4	44
ZT	54.2	42.3	54.2	
ZF	59.8	50.5	59.8	
ZN	58.4	51.8	58.4	
ZB	62.5	64.1	62.5	

Daily R-Squared
Treasury Basis

	5YR BASIS	10YR BASIS	30YR BASIS	Exchange
emini SP	0.47	0.40	0.60	Globex
5$ Dow Futures	0.45	0.43	0.65	Globex
USDJPY	0.47	0.21	0.30	Cash
EURUSD	0.34	0.20	0.30	Cash
EURJPY	0.24	0.08	0.10	Cash
Crude	0.42	0.42	0.65	CME / NYMEX
TUF1^	0.25	0.12	0.04	CME / NYMEX
2/10	0.24	0.02	0.00	BrokerTec
2/5	0.03	0.15	0.36	BrokerTec
2/30	0.33	0.07	0.02	BrokerTec
5/10	0.49	0.19	0.17	BrokerTec
5/30	0.45	0.17	0.15	BrokerTec
10/30	0.36	0.14	0.11	BrokerTec
ZT	0.29	0.18	0.29	Globex
ZF	0.36	0.26	0.36	Globex
ZN	0.34	0.27	0.34	Globex
ZB	0.39	0.41	0.39	Globex

^See "Notes Page"

Daily Correlations
US Cash Treasuries Spreads (Yield)

Symbol	2/10	2/5	2/30	5/10	5/30	10/30	NOB1^	NOB2^	TUF^	FYT1^	FYT2^
2/10		54.0	95.3	83.4	79.0	69.6	64.5	58.9	55.9	82.8	68.5
2/5	54.0		29.4	(1.4)	(7.2)	(14.3)	24.1	35.2	58.0	10.5	21.7
2/30	95.3	29.4		93.9	93.2	88.2	70.7	64.5	37.4	91.9	68.3
5/10	83.4	(1.4)	93.9		98.5	92.1	60.8	46.8	28.3	91.5	67.1
5/30	79.0	(7.2)	93.2	98.5		97.4	64.7	53.9	17.0	91.9	63.0
10/30	69.6	(14.3)	88.2	92.1	97.4		66.8	60.8	1.5	88.3	54.8
NOB1^	64.5	24.1	70.7	60.8	64.7	66.8					
NOB2^	58.9	35.2	64.5	46.8	53.9	60.8					
TUF^	55.9	58.0	37.4	28.3	17.0	1.5					
FYT1^	82.8	10.5	91.9	91.5	91.9	88.3					
FYT2^	68.5	21.7	68.3	67.1	63.0	54.8					

Daily R-Squared
US Cash Treasuries Spreads (Yield)

Symbol	2/10	2/5	2/30	5/10	5/30	10'30	NOB1^	NOB2^	TUF^	FYT1^	FYT2^
2/10		0.29	0.91	0.70	0.62	0.48	0.42	0.35	0.31	0.69	0.47
2/5	0.29		0.09	0.00	0.01	0.02	0.06	0.12	0.34	0.01	0.05
2/30	0.91	0.09		0.88	0.87	0.78	0.50	0.42	0.14	0.84	0.47
5/10	0.70	0.00	0.88		0.97	0.85	0.37	0.22	0.08	0.84	0.45
5/30	0.62	0.01	0.87	0.97		0.95	0.42	0.29	0.03	0.84	0.40
10/30	0.48	0.02	0.78	0.85	0.95		0.45	0.37	0.00	0.78	0.30
NOB1^	0.42	0.06	0.50	0.37	0.42	0.45					
NOB2^	0.35	0.12	0.42	0.22	0.29	0.37					
TUF^	0.31	0.34	0.14	0.08	0.03	0.00					
FYT1^	0.69	0.01	0.84	0.84	0.84	0.78					
FYT2^	0.47	0.05	0.47	0.45	0.40	0.30					

^ See notes page

Gold

Daily Correlations

Symbol	GC	YG
emini SP	(64.5)	(64.1)
5$ Dow Futures	(57.8)	(57.5)
WTI Crude	80.7	80.6
Brent Crude	82.2	82.1
USDJPY	(81.4)	(81.1)
EURUSD	95.5	95.8
EURJPY	(34.1)	(33.5)
Euro	91.6	92.0
Yen	76.3	76.0
Swiss Fr	95.6	95.5
Canadain $	83.8	83.8
2yr Yield	(73.0)	(72.4)
5yr Yield	(65.8)	(65.1)
10yr Yield	(59.2)	(58.6)
30yr Yield	(58.6)	(58.1)
ZT	54.2	53.3
ZF	57.8	56.9
ZN	54.4	53.6
ZB	57.0	56.3

Daily R-Squared

Symbol	GC	YG	Exchange
emini SP	0.42	0.41	Globex
5$ Dow Futures	0.33	0.33	Globex
WTI Crude	0.65	0.65	Glbx / Nymx
Brent Crude	0.68	0.67	ICE
USDJPY	0.66	0.66	Cash
EURUSD	0.91	0.92	Cash
EURJPY	0.12	0.11	Cash
Euro	0.84	0.85	Globex
Yen	0.58	0.58	Globex
Swiss Fr	0.91	0.91	Globex
Canadain $	0.70	0.70	Globex
2yr Yield	0.53	0.52	Broker Tec
5yr Yield	0.43	0.42	Broker Tec
10yr Yield	0.35	0.34	Broker Tec
30yr Yield	0.34	0.34	Broker Tec
ZT	0.29	0.28	Globex
ZF	0.33	0.32	Globex
ZN	0.30	0.29	Globex
ZB	0.33	0.32	Globex

This matrix is set-up to have the cells automatically highlight themselves if there's an R-Squared greater than 70%.

Note: YG old ecbot gold, now on CME (used to be eCbot). GC is Globex/Nymex Gold.

Currencies

Daily Correlations

Symbol	USDJPY	EURUSD	EURJPY	Euro	Yen	Swiss Fr	Canadian $	Exchange
USDJPY		(72.4)	80.5	(64.4)	(98.0)	(89.3)	(77.7)	Cash
EURUSD	(72.4)		(17.4)	97.8	65.7	92.7	84.7	Cash
EURJPY	80.5	(17.4)		(7.6)	(83.1)	(47.7)	(37.4)	Cash
Euro	(64.4)	97.8	(7.6)		60.3	90.3	78.9	Globex
Yen	(98.0)	65.7	(83.1)	60.3		87.3	75.4	Globex
Swiss Fr	(89.3)	92.7	(47.7)	90.3	87.3		85.3	Globex
Canadain $	(77.7)	84.7	(37.4)	78.9	75.4	85.3		Globex
emini SP	84.6	(56.9)	72.2	(53.5)	(82.6)	(75.8)	(42.7)	Globex
5$ Dow Futures	81.3	(49.8)	73.4	(47.5)	(80.8)	(70.2)	(38.6)	Globex
WTI Crude	(75.8)	76.7	(41.9)	78.9	76.7	86.0	66.0	Glbx / Nymx
Brent Crude	(77.8)	77.7	(77.8)	79.3	78.6	87.1	68.0	ICE
2yr Yield	92.7	(63.5)	78.7	(55.2)	(88.9)	(80.6)	(56.7)	BTEC
5yr Yield	88.8	(56.5)	79.0	(50.2)	(86.1)	(75.6)	(47.7)	BTEC
10yr Yield	81.3	(51.0)	72.7	(47.1)	(79.2)	(69.3)	(38.5)	BTEC
30yr Yield	71.3	(53.8)	55.6	(53.1)	(69.0)	(67.1)	(35.3)	BTEC
ZT	(84.0)	44.1	(82.7)	41.1	85.6	68.9	36.8	Globex
ZF	(85.7)	48.3	(81.2)	45.4	86.5	71.7	39.8	Globex
ZN	(83.2)	46.2	(79.1)	44.4	84.3	69.1	37.9	Globex
ZB	(76.0)	51.0	(64.8)	51.2	76.0	69.2	34.9	Globex

Daily R-Squared

Symbol	USDJPY	EURUSD	EURJPY	Euro	Yen	Swiss Fr	Canadian $
USDJPY		0.52	0.65	0.41	0.96	0.80	0.60
EURUSD	0.52		0.03	0.96	0.43	0.86	0.72
EURJPY	0.65	0.03		0.01	0.69	0.23	0.14
Euro	0.41	0.96	0.01		0.36	0.81	0.62
Yen	0.96	0.43	0.69	0.36		0.76	0.57
Swiss Fr	0.80	0.86	0.23	0.81	0.76		0.73
Canadain $	0.60	0.72	0.14	0.62	0.57	0.73	
emini SP	0.72	0.32	0.52	0.29	0.68	0.58	0.18
5$ Dow Futures	0.66	0.25	0.54	0.23	0.65	0.49	0.15
WTI Crude	0.57	0.59	0.18	0.62	0.59	0.74	0.44
Brent Crude	0.61	0.60	0.61	0.63	0.62	0.76	0.46
2yr Yield	0.86	0.40	0.62	0.30	0.79	0.65	0.32
5yr Yield	0.79	0.32	0.62	0.25	0.74	0.57	0.23
10yr Yield	0.66	0.26	0.53	0.22	0.63	0.48	0.15
30yr Yield	0.51	0.29	0.31	0.28	0.48	0.45	0.12
ZT	0.71	0.19	0.68	0.17	0.73	0.47	0.14
ZF	0.73	0.23	0.66	0.21	0.75	0.51	0.16
ZN	0.69	0.21	0.63	0.20	0.71	0.48	0.14
ZB	0.58	0.26	0.42	0.26	0.58	0.48	0.12

If there's an R-Squared greater than 70%, the cell will automatically highlight to blue.

q	
6	**5YR BASIS**
2	**10YR BASIS**
9	**30YR BASIS**
45	**2/10**
47	**2/5**
46	**2/30**
48	**5/10**
49	**5/30**
44	**10/30**
4	**TUF1^**
50	FYT1^
3	FYT2^
1	NOB1^
33	NOB2^

This page contains notes for me.

US Index Futures

Daily Correlations

	Globex Emini SP	Globex 5$ Dow Futrs	Exchange
USDJPY	84.6	81.3	Cash
EURUSD	(56.9)	(49.8)	Cash
EURJPY	72.2	73.4	Cash
Euro	(53.5)	(47.5)	Globex
Yen	(82.6)	(80.8)	Globex
Swiss Fr	(75.8)	(70.2)	Globex
Canadain $	(42.7)	(38.6)	Globex
WTI Crude	(79.9)	(81.8)	Glbx / Nymx
Brent Crude	(80.2)	(81.9)	ICE
2yr Yield	92.0	89.1	BTEC
5yr Yield	96.8	95.9	BTEC
10yr Yield	97.4	98.7	BTEC
30yr Yield	93.9	96.6	BTEC
ZT	(92.8)	(91.5)	Globex
ZF	(96.3)	(96.0)	Globex
ZN	(96.7)	(97.7)	Globex
ZB	(97.1)	(98.9)	Globex
GC	(64.5)	(57.8)	Glbx / Nymx
YG	(64.1)	(57.5)	Globex

R-Squared

	Globex Emini SP	Globex 5$ Dow Futrs	Exchange
USDJPY	0.72	0.66	Cash
EURUSD	0.32	0.25	Cash
EURJPY	0.52	0.54	Cash
Euro	0.29	0.23	Globex
Yen	0.68	0.65	Globex
Swiss Fr	0.58	0.49	Globex
Canadain $	0.18	0.15	Globex
WTI Crude	0.64	0.67	Glbx / Nymx
Brent Crude	0.64	0.67	ICE
2yr Yield	0.85	0.79	BTEC
5yr Yield	0.94	0.92	BTEC
10yr Yield	0.95	0.98	BTEC
30yr Yield	0.88	0.93	BTEC
ZT	0.86	0.84	Globex
ZF	0.93	0.92	Globex
ZN	0.94	0.95	Globex
ZB	0.94	0.98	Globex
GC	0.42	0.33	Glbx / Nymx
YG	0.41	0.33	Globex