

The Morning Email: Correlations & R-Squared

Table of Contents

- Pg 1 US Treasuries
 - Pg 2 US Treasuries & US Treasury Futures
 - Pg 3 US Treasuries, US Treasury Futures, & German Futures
 - Pg 4 Energy & Currencies

 - Pg 5 Notes
 - Pg 6 US Treasury Basis
 - Pg 7 US Treasury Spreads
 - Pg 8 Gold
 - Pg 9 Currencies

 - Pg 10 US Index Futures
- 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

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.

	Daily Correlations				Daily Correlations			
	US Cash Treasuries (Yield)			US Bonds/Notes (CBOT)				
	2yr Yield	5yr Yield	10yr Yield	30yr Yield	ZT	ZF	ZN	ZB
5YR BASIS	(37.4)	3.6	20.6	5.5	(37.7)	(35.5)	(38.7)	(40.9)
10YR BASIS	(29.6)	0.4	4.7	1.9	(26.4)	(24.9)	(29.4)	(29.1)
30YR BASIS	(6.6)	38.5	53.5	21.7	(46.6)	(59.7)	(64.5)	(67.2)
2/10	33.2	76.5	89.1	71.7	(69.0)	(88.4)	(91.6)	(93.5)
2/5	42.2	83.8	91.8	78.5	(73.5)	(92.5)	(95.7)	(96.7)
2/30	(43.1)	2.3	19.2	17.8	(5.7)	(24.7)	(31.3)	(35.1)
5/10	14.9	57.4	75.7	53.9	(54.9)	(72.7)	(75.8)	(78.9)
5/30	(78.9)	(93.4)	(90.8)	(76.5)	79.3	88.0	86.7	85.0
10/30	(58.9)	(88.8)	(95.8)	(76.0)	78.4	92.6	93.1	93.7
TUF1^	23.5	68.8	80.1	65.9	(74.0)	(87.1)	(90.2)	(91.8)

^ See notes page

	Daily R-Squared				Daily R-Squared			
	US Cash Treasuries (Yield)			US Bonds/Notes (CBOT)				
	2yr Yield	5yr Yield	10yr Yield	30yr Yield	ZT	ZF	ZN	ZB
5YR BASIS	0.14	0.00	0.04	0.00	0.14	0.13	0.15	0.17
10YR BASIS	0.09	0.00	0.00	0.00	0.07	0.06	0.09	0.08
30YR BASIS	0.00	0.15	0.29	0.05	0.22	0.36	0.42	0.45
2/10	0.11	0.59	0.79	0.51	0.48	0.78	0.84	0.87
2/5	0.18	0.70	0.84	0.62	0.54	0.86	0.92	0.93
2/30	0.19	0.00	0.04	0.03	0.00	0.06	0.10	0.12
5/10	0.02	0.33	0.57	0.29	0.30	0.53	0.57	0.62
5/30	0.62	0.87	0.82	0.59	0.63	0.78	0.75	0.72
10/30	0.35	0.79	0.92	0.58	0.61	0.86	0.87	0.88
TUF1^	0.06	0.47	0.64	0.43	0.55	0.76	0.81	0.84

^ 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	85.2	72.0	81.1	(70.0)	(67.8)	(62.1)	(58.7)	
5yr Yield	85.2	100.0	97.0	94.4	(84.9)	(94.6)	(92.9)	(91.5)	
10yr Yield	72.5	97.0	100.0	91.5	(84.2)	(97.3)	(96.8)	(96.6)	
30yr Yield	81.1	94.4	91.5	100.0	(80.1)	(89.7)	(88.1)	(86.8)	
ZT	(70.1)	(84.9)	(84.2)	(80.1)	100.0	91.6	83.4	80.7	
ZF	(67.5)	(94.6)	(97.3)	(89.7)	91.6	100.0	98.3	97.3	
ZN	(62.1)	(92.9)	(96.8)	(88.1)	83.4	98.3	100.0	99.8	
ZB	(58.7)	(91.5)	(96.6)	(86.8)	80.7	97.3	99.8	100.0	
emini SP	2.2	(42.8)	(62.4)	(32.6)	25.7	49.5	60.5	62.3	CME
Dow Futures	(2.5)	(47.0)	(65.7)	(36.1)	30.9	54.6	65.2	66.7	CME/eCbot
USDJPY	20.3	(18.0)	(35.8)	(2.0)	4.9	22.5	33.0	34.8	Cash Market
EURUSD	18.6	(19.1)	(38.7)	(10.2)	(7.2)	18.4	27.0	29.0	Cash Market
EURJPY	20.9	(19.5)	(39.0)	(4.7)	1.2	23.4	34.4	36.6	Cash Market
Crude	(34.3)	(72.8)	(84.5)	(67.1)	43.5	73.6	81.1	83.0	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		0.73	0.52	0.66	0.49	0.46	0.39	0.35	
5yr Yield	0.73		0.94	0.89	0.72	0.90	0.86	0.84	
10yr Yield	0.52	0.94		0.84	0.71	0.95	0.94	0.93	
30yr Yield	0.66	0.89	0.84		0.64	0.80	0.78	0.75	
ZT	0.49	0.72	0.71	0.64		0.84	0.69	0.65	
ZF	0.46	0.90	0.95	0.80	0.84		0.97	0.95	
ZN	0.39	0.86	0.94	0.78	0.69	0.97		1.00	
ZB	0.35	0.84	0.93	0.75	0.65	0.95	1.00		
emini SP	0.00	0.18	0.39	0.11	0.07	0.24	0.37	0.39	
Dow Futures	0.00	0.22	0.43	0.13	0.10	0.30	0.43	0.45	
USDJPY	0.04	0.03	0.13	0.00	0.00	0.05	0.11	0.12	
EURUSD	0.03	0.04	0.15	0.01	0.01	0.03	0.07	0.08	
EURJPY	0.04	0.04	0.15	0.00	0.00	0.05	0.12	0.13	
Crude	0.12	0.53	0.71	0.45	0.19	0.54	0.66	0.69	



Symbol	Daily Correlations US Cash Treasuries			Daily Correlations US Bonds/Notes (CBOT)			Symbol	Exchange
	2yr	5yr	10yr	ZT	ZF	ZN		
Schatz(2Y)	DG	(71.52)	(36.60)	(15.97)	47.76	38.05	26.59	DG
Bobl(5Y)	DL	(86.48)	(94.07)	(87.23)	76.33	87.19	83.85	DL
Bund(10Y)	DB	(71.12)	(94.16)	(94.07)	70.82	90.35	91.52	DB

Symbol	Daily R-Squared US Cash Treasuries			Daily R-Squared US Bonds/Notes (CBOT)			Symbol	Exchange
	2yr	5yr	10yr	ZT	ZF	ZN		
Schatz(2Y)	DG	0.51	0.13	0.03	0.23	0.14	0.07	DG
Bobl(5Y)	DL	0.75	0.88	0.76	0.58	0.76	0.70	DL
Bund(10Y)	DB	0.51	0.89	0.88	0.50	0.82	0.84	DB

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.

Energies Daily Correlations				
	CLA	HOA	RBA	NGA
CLA	100.0	98.9	98.2	80.3
HOA	98.9	100.0	99.0	86.2
RBA	98.2	99.0	100.0	89.1
NGA	80.3	86.2	89.1	100.0
DJIA	73.8	80.0	80.2	80.0
SPC5	72.0	78.2	78.8	79.5
EURUSD	72.2	77.4	78.1	83.7
EURJPY	58.4	66.4	69.8	88.6
USDJPY	44.1	52.1	56.3	78.0
GCA	48.2	37.6	33.3	(7.0)
				Gold

Energies Daily R-Squared					Exchange
	CLA	HOA	RBA	NGA	
CLA		0.98	0.97	0.64	Crude Oil
HOA	0.98		0.98	0.74	Heating Oil
RBA	0.97	0.98		0.79	unleaded Gas
NGA	0.64	0.74	0.79		Nat Gas
DJIA	0.55	0.64	0.64	0.64	Dow Cash
SPC5	0.52	0.61	0.62	0.63	S&P 500 Cash
EURUSD	0.52	0.60	0.61	0.70	€/\$
EURJPY	0.34	0.44	0.49	0.79	€/¥
USDJPY	0.19	0.27	0.32	0.61	\$/¥
GCA	0.23	0.14	0.11	0.00	Gold

Currencies Daily Correlations				
	EURUSD	EURJPY	USDJPY	GBPEUR
EURUSD	100.0	76.3	54.9	1.8
EURJPY	76.3	100.0	95.9	46.5
USDJPY	54.9	95.9	100.0	59.5
Euro	92.8	62.5	40.2	(20.2)
Yen	(78.2)	(96.1)	(90.0)	(47.0)
Swiss Fr	43.0	7.2	(9.8)	(61.7)
Canadain \$	71.9	67.7	56.2	37.0
				CHF

Currencies Daily R-Squared					Exchange
	EURUSD	EURJPY	USDJPY	GBPEUR	
EURUSD		0.58	0.30	0.00	€/\$
EURJPY	0.58		0.92	0.22	€/¥
USDJPY	0.30	0.92		0.35	\$/¥
Euro	0.86	0.39	0.16	0.04	€
Yen	0.61	0.92	0.81	0.22	¥
Swiss Fr	0.18	0.01	0.01	0.38	CHF
Canadain \$	0.52	0.46	0.32	0.14	C\$

Currencies Daily Correlations				
	Euro	Yen	Swiss Fr	Canadain \$
Euro	100.0	(65.3)	66.4	72.6
Yen	(65.3)	100.0	(12.8)	(74.3)
Swiss Fr	66.4	(12.8)	100.0	(7.6)
Canadain \$	65.3	(62.2)	6.6	100.0
				CHF

Currencies Daily R-Squared					Exchange
	Euro	Yen	Swiss Fr	Canadain \$	
Euro		0.43	0.44	0.53	€
Yen	0.43		0.02	0.55	¥
Swiss Fr	0.44	0.02		0.01	CHF
Canadain \$	0.43	0.39	0.00		C\$

Notes:

EURUSD, EURJPY, USDJPY, & USDGBP are all cash market products.
 Euro, Yen, Swiss Fr, Canadain \$, & 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 treasures to help with quick visual interpretation.

US Treasury Basis

Daily Correlations			
	Treasury Basis^		
	5YR BASIS	10YR BASIS	30YR BASIS
emini SP	(67.9)	(30.4)	(89.6)
5\$ Dow Futures	(66.8)	(30.7)	(90.4)
USDJPY	(58.6)	(31.7)	(86.0)
EURUSD	(27.5)	14.5	(59.7)
EURJPY	(52.3)	(18.5)	(83.0)
Crude	(25.8)	(0.2)	(65.3)
TUF1^	71.5	55.0	82.5
2/10	52.8	26.4	77.4
2/5	45.2	31.6	73.4
2/30	71.4	52.8	44.5
5/10	59.2	14.7	75.7
5/30	(1.0)	1.2	(51.9)
10/30	(29.1)	(6.3)	(70.5)
ZT	(37.7)	(26.4)	(37.7)
ZF	(35.5)	(24.9)	(35.5)
ZN	(38.7)	(29.4)	(38.7)
ZB	(40.9)	(29.1)	(40.9)

q

Daily R-Squared			
	Treasury Basis		
	5YR BASIS	10YR BASIS	30YR BASIS
emini SP	0.46	0.09	0.80
5\$ Dow Futures	0.45	0.09	0.82
USDJPY	0.34	0.10	0.74
EURUSD	0.08	0.02	0.36
EURJPY	0.27	0.03	0.69
Crude	0.07	0.00	0.43
TUF1^	0.51	0.30	0.68
2/10	0.28	0.07	0.60
2/5	0.20	0.10	0.54
2/30	0.51	0.28	0.20
5/10	0.35	0.02	0.57
5/30	0.00	0.00	0.27
10/30	0.08	0.00	0.50
ZT	0.14	0.07	0.14
ZF	0.13	0.06	0.13
ZN	0.15	0.09	0.15
ZB	0.17	0.08	0.17

^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		97.4	54.7	93.7	(72.0)	(92.3)	45.9	(61.4)	94.2	94.4	93.8
2/5	97.4		49.0	83.4	(79.0)	(91.9)	47.8	(70.7)	94.2	97.9	94.2
2/30	54.7	49.0		58.0	14.8	(18.2)	67.3	0.1	62.1	44.7	57.0
5/10	93.7	83.4	58.0		(54.2)	(83.4)	37.5	(40.4)	84.4	79.2	83.6
5/30	(72.0)	(79.0)	14.8	(54.2)		91.4	(6.9)	80.5	(63.2)	(79.6)	(66.8)
10/30	(92.3)	(91.9)	(18.2)	(83.4)	91.4		(22.5)	72.2	(82.0)	(90.3)	(84.0)
NOB1^	45.9	47.8	67.3	37.5	(6.9)	(22.5)					
NOB2^	(61.4)	(70.7)	0.1	(40.4)	80.5	72.2					
TUF^	94.2	94.2	62.1	84.4	(63.2)	(82.0)					
FYT1^	94.4	97.9	44.7	79.2	(79.6)	(90.3)					
FYT2^	93.8	94.2	57.0	83.6	(66.8)	(84.0)					

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		0.95	0.30	0.88	0.52	0.85	0.21	0.38	0.89	0.89	0.88
2/5	0.95		0.24	0.70	0.62	0.84	0.23	0.50	0.89	0.96	0.89
2/30	0.30	0.24		0.34	0.02	0.03	0.45	0.00	0.39	0.20	0.32
5/10	0.88	0.70	0.34		0.29	0.70	0.14	0.16	0.71	0.63	0.70
5/30	0.52	0.62	0.02	0.29		0.84	0.00	0.65	0.40	0.63	0.45
10/30	0.85	0.84	0.03	0.70	0.84		0.05	0.52	0.67	0.81	0.71
NOB1^	0.21	0.23	0.45	0.14	0.00	0.05					
NOB2^	0.38	0.50	0.00	0.16	0.65	0.52					
TUF^	0.89	0.89	0.39	0.71	0.40	0.67					
FYT1^	0.89	0.96	0.20	0.63	0.63	0.81					
FYT2^	0.88	0.89	0.32	0.70	0.45	0.71					

^ See notes page

Daily Correlations			Daily R-Squared		
Symbol	GC	Exchange	Symbol	GC	Exchange
emini SP	(13.5)	Globex	emini SP	0.02	Globex
5\$ Dow Futures	(10.1)	Globex	5\$ Dow Futures	0.01	Globex
WTI Crude	48.2	Glbx / Nymx	WTI Crude	0.23	Glbx / Nymx
Brent Crude	44.3	ICE	Brent Crude	0.20	ICE
USDJPY	(54.8)	Cash	USDJPY	0.30	Cash
EURUSD	7.9	Cash	EURUSD	0.01	Cash
EURJPY	(39.9)	Cash	EURJPY	0.16	Cash
Euro	24.8	Globex	Euro	0.06	Globex
Yen	45.2	Globex	Yen	0.20	Globex
Swiss Fr	29.9	Globex	Swiss Fr	0.09	Globex
Canadian \$	31.9	Globex	Canadian \$	0.10	Globex
2yr Yield	(50.3)	Broker Tec	2yr Yield	0.25	Broker Tec
5yr Yield	(50.6)	Broker Tec	5yr Yield	0.26	Broker Tec
10yr Yield	(42.3)	Broker Tec	10yr Yield	0.18	Broker Tec
30yr Yield	(63.6)	Broker Tec	30yr Yield	0.40	Broker Tec
ZT	35.5	Globex	ZT	0.13	Globex
ZF	46.9	Globex	ZF	0.22	Globex
ZN	44.4	Globex	ZN	0.20	Globex
ZB	44.9	Globex	ZB	0.20	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.

Symbol	Daily Correlations							Exchange
	USDJPY	EURUSD	EURJPY	Euro	Yen	Swiss Fr	Canadian \$	
USDJPY		54.9		95.9	40.2	(90.0)	(9.8)	56.2
EURUSD	54.9			76.3	92.8	(78.2)	43.0	71.9
EURJPY	95.9	76.3			62.5	(96.1)	7.2	67.7
Euro	40.2	92.8	62.5			(65.3)	66.4	65.3
Yen	(90.0)	(78.2)	(96.1)	(65.3)			(12.8)	(62.2)
Swiss Fr	(9.8)	43.0	7.2	66.4	(12.8)			6.6
Canadian \$	56.2	71.9	67.7	65.3	(62.2)	6.6		Globex
esmini SP	80.8	69.5	85.9	47.5	(77.4)	(19.4)	83.2	Globex
5\$ Dow Futures	79.2	67.3	83.9	45.8	(75.5)	(22.4)	85.4	Globex
WTI Crude	44.1	72.2	58.4	72.0	(51.0)	21.3	96.0	Gibx / Nymex
Brent Crude	48.7	65.1	48.7	64.7	(47.7)	17.7	92.8	ICE
2yr Yield	20.0	18.6	20.9	18.5	(21.3)	22.5	(29.6)	BTEC
5yr Yield	(18.0)	(19.1)	(19.6)	(17.8)	14.1	21.6	(70.4)	BTEC
10yr Yield	(35.7)	(38.7)	(39.0)	(34.2)	32.9	19.0	(84.4)	BTEC
30yr Yield	(2.0)	(10.2)	(4.7)	(11.3)	(3.1)	9.3	(61.1)	BTEC
ZT	4.9	(7.2)	1.2	(1.4)	(1.7)	(15.7)	53.1	Globex
ZF	22.5	18.4	23.4	21.3	(18.1)	(12.6)	78.8	Globex
ZN	33.0	26.9	34.4	26.7	(26.1)	(15.7)	85.5	Globex
ZB	34.8	29.0	36.6	28.7	(27.0)	(14.2)	86.5	Globex

Daily R-Squared

Symbol	USDJPY	EURUSD	EURJPY	Euro	Yen	Swiss Fr	Canadian \$
USDJPY		0.30	0.92	0.16	0.81	0.01	0.32
EURUSD	0.30		0.58	0.86	0.61	0.18	0.52
EURJPY	0.92	0.58		0.39	0.92	0.01	0.46
Euro	0.16	0.86	0.39		0.43	0.44	0.43
Yen	0.81	0.61	0.92	0.43		0.02	0.39
Swiss Fr	0.01	0.18	0.01	0.44	0.02		0.00
Canadian \$	0.32	0.52	0.46	0.43	0.39	0.00	
esmini SP	0.65	0.48	0.74	0.23	0.60	0.04	0.69
5\$ Dow Futures	0.63	0.45	0.70	0.21	0.57	0.05	0.73
WTI Crude	0.19	0.52	0.34	0.52	0.26	0.05	0.92
Brent Crude	0.24	0.42	0.24	0.42	0.23	0.03	0.86
2yr Yield	0.04	0.03	0.04	0.03	0.05	0.05	0.09
5yr Yield	0.03	0.04	0.04	0.03	0.02	0.05	0.50
10yr Yield	0.13	0.15	0.15	0.12	0.11	0.04	0.71
30yr Yield	0.00	0.01	0.00	0.01	0.00	0.01	0.37
ZT	0.00	0.01	0.00	0.00	0.00	0.02	0.28
ZF	0.05	0.03	0.05	0.05	0.03	0.02	0.62
ZN	0.11	0.07	0.12	0.07	0.07	0.02	0.73
ZB	0.12	0.08	0.13	0.08	0.07	0.02	0.75

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 This page contains notes for me.
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^

Daily Correlations

	Globex Emini SP	Globex 5\$ Dow Futrs	Exchange
USDJPY	80.8	79.2	Cash
EURUSD	69.5	67.3	Cash
EURJPY	85.9	83.9	Cash
Euro	47.5	45.8	Globex
Yen	(77.4)	(75.5)	Globex
Swiss Fr	(19.4)	(22.4)	Globex
Canadain \$	83.2	85.3	Globex
WTI Crude	70.9	72.9	Glbx / Nymx
Brent Crude	72.4	74.1	ICE
2yr Yield	2.5	(2.5)	BTEC
5yr Yield	(42.8)	(47.0)	BTEC
10yr Yield	(62.4)	(65.7)	BTEC
30yr Yield	(32.6)	(36.1)	BTEC
ZT	25.7	30.9	Globex
ZF	49.5	54.6	Globex
ZN	60.5	65.2	Globex
ZB	62.3	66.7	Globex
GC	(13.5)	(10.1)	Glbx / Comex

R-Squared

	Globex Emini SP	Globex 5\$ Dow Futrs	Exchange
USDJPY	0.65	0.63	Cash
EURUSD	0.48	0.45	Cash
EURJPY	0.74	0.70	Cash
Euro	0.23	0.21	Globex
Yen	0.60	0.57	Globex
Swiss Fr	0.04	0.05	Globex
Canadain \$	0.69	0.73	Globex
WTI Crude	0.50	0.53	Glbx / Nymx
Brent Crude	0.52	0.55	ICE
2yr Yield	0.00	0.00	BTEC
5yr Yield	0.18	0.22	BTEC
10yr Yield	0.39	0.43	BTEC
30yr Yield	0.11	0.13	BTEC
ZT	0.07	0.10	Globex
ZF	0.24	0.30	Globex
ZN	0.37	0.43	Globex
ZB	0.39	0.45	Globex
GC	0.02	0.01	Glbx / Comex