# **Portfolio**Analyst





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### Introduction



Name: Interactive Brokers LLC

Account: Consolidated

Alias: Interactive Brokers LLC

Base Currency: USD

Analysis Period: May 23, 2018 to June 6, 2018 (Daily)

Performance Measure: TWR

### Breakdown of **Accounts**

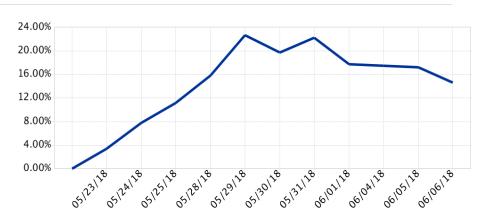


Account	Beginning NAV	Ending NAV	Return	Deposits	Withdrawals	Dividends	Interest	Fees
XBJXXXXXX	185,355.34	186,832.58	0.80%	0.00	0.00	0.00	0.00	0.00
Health Savings Account- XXXXXXX	2,000.00	2,000.08	0.00%	0.00	0.00	-	0.08	0.00
XXXX	-350.29	-1,615.23	-	-	-	-	0.00	0.00
XXXX	-393,057.81	-391,402.17	-0.42%	-	-	-	-	-
UXXXXXXX	363,316.01	384,430.39	5.81%	0.00	0.00	335.79	-1,429.87	-570.48
Total	157,263.25	180,245.65	14.61%	0.00	0.00	335.79	-1,429.79	-570.48

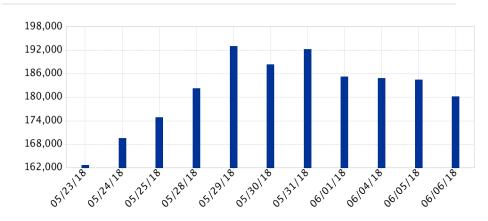
### Account Overview



### **Cumulative Return**



### Net Asset Value



### **Key Statistics**

Beginning NAV: 157,263.25

Ending NAV: 180,245.65

Cumulative Return: 14.61%

5 Day Return: -4.32% (05/31/18 - 06/06/18)

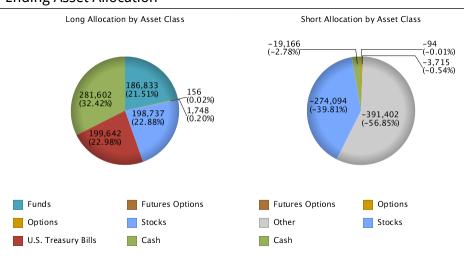
10 Day Return: 10.85% (05/24/18 - 06/06/18)

Best Return: 5.90% (05/29/18)

Worst Return: -3.64% (06/01/18)

Deposits/Withdrawals: 0.00

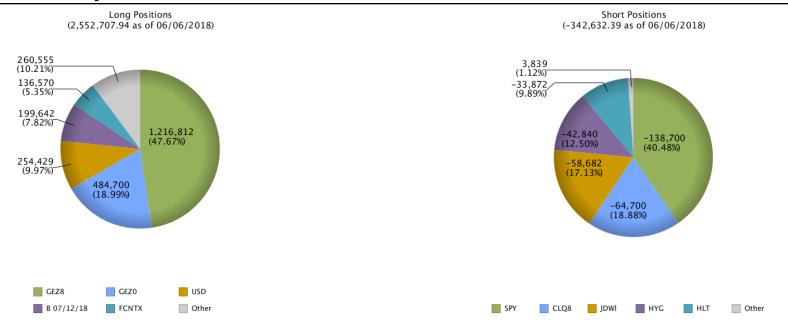
### **Ending Asset Allocation**





### Open Position Summary





Symbol	Description	Sector	Quantity Cl	lose Price	Value	Cost Basis	Unrealized P&L	Base Value
Funds								
USD								
FCNTX	Fidelity Contrafund	Unclassified	1,023.15	133.48	136,570.06	24,417.35	112,152.71	136,570.06
FLATX	FIDELITY LATIN AMERICA	Unclassified	948.168	21.94	20,802.80	4,496.15	16,306.65	20,802.80
FSEAX	FIDELITY EMERGING ASIA FUND	Unclassified	647.182	45.52	29,459.72	6,229.22	23,230.50	29,459.72
Total					186,832.58	35,142.72	151,689.86	186,832.58
Futures								
USD								
CLQ8	CL AUG18	Unclassified	-1	64.70	-64,700.00	-66,847.63	2,147.63	-64,700.00
GEZ0	GE 14DEC20	Unclassified	2	96.94	484,700.00	485,354.24	-654.24	484,700.00
GEZ8	GE 17DEC18	Unclassified	5	97.34	1,216,812.50	1,218,760.60	-1,948.10	1,216,812.50
Total					1,636,812.50	1,637,267.21	-454.71	1,636,812.50
Futures Options								
USD								
GEH9 C9875	GE 18MAR19 98.75 C	Unclassified	10	0.00	62.50	892.50	-830.00	62.50



## Open Position **Summary** (Cont.)



Symbol	Description	Sector	Quantity	Close Price	Value	Cost Basis	Unrealized P&L	Base Value
GEZ8 C9875	GE 17DEC18 98.75 C	Unclassified	15	0.00	93.75	1,713.75	-1,620.00	93.75
GEZ8 C9937	GE 17DEC18 99.375 C	Unclassified	-15	0.00	-93.75	-161.25	67.50	-93.75
Total					62.50	2,445.00	-2,382.50	62.50
Options								
USD								
NG 180921C00005000	NG 21SEP18 5.0 C	Basic Materials	30	0.25	747.90	992.93	-245.03	747.90
SLV 190118C00020000	SLV 18JAN19 20.0 C	Basic Materials	65	0.15	999.70	1,543.71	-544.01	999.70
SLV 190118P00016000	SLV 18JAN19 16.0 P	Basic Materials	-10	0.91	-910.10	-1,077.08	166.98	-910.10
SPY 180608C00272000	SPY 08JUN18 272.0 C	Unclassified	-5	5.61	-2,804.80	-1,147.89	-1,656.91	-2,804.80
Total					-1,967.30	311.68	-2,278.98	-1,967.30
Stocks								
GBP								
IWGI	IWG PLC	Consumer Non-Cyclicals	10,000	3.14	31,370.00	25,022.24	6,347.76	42,076.58
JDWI	WETHERSPOON (J.D.) PLC	Consumer Cyclicals	-3,500	12.50	-43,750.00	-34,844.73	-8,905.27	-58,681.88
Total					-12,380.00	-9,822.49	-2,557.51	
Total in USD					-16,605.29	-13,174.90	-3,430.39	-16,605.29
USD								
GDX	VANECK VECTORS GOLD MINERS E	Basic Materials	2,000	22.58	45,160.00	42,811.49	2,348.51	45,160.00
GG	GOLDCORP INC	Basic Materials	1,000	14.17	14,170.00	12,202.50	1,967.50	14,170.00
HLT	HILTON INC	Consumer Cyclicals	-400	84.68	-33,872.00	-33,318.18	-553.82	-33,872.00
HYG	ISHARES IBOXX USD HIGH YIELD	Unclassified	-500	85.68	-42,840.00	-43,112.07	272.07	-42,840.00
NG	NOVAGOLD RESOURCES INC	Basic Materials	10,000	4.54	45,400.00	41,880.11	3,519.89	45,400.00
NGD	NEW GOLD INC	Basic Materials	9,000	2.19	19,710.00	28,491.60	-8,781.60	19,710.00
SPY	SPDR S&P 500 ETF TRUST	Unclassified	-500	277.40	-138,700.00	-136,655.46	-2,044.54	-138,700.00
VXX	IPATH S&P 500 VIX S/T FU ETN	Unclassified	1,000	32.22	32,220.00	33,273.04	-1,053.04	32,220.00
Total					-58,752.00	-54,426.98	-4,325.02	-58,752.00
Total Stocks in USD					-75,357.29	-67,601.88	-7,755.42	-75,357.29
U.S. Treasury Bills								
USD								



## Open Position **Summary** (Cont.)

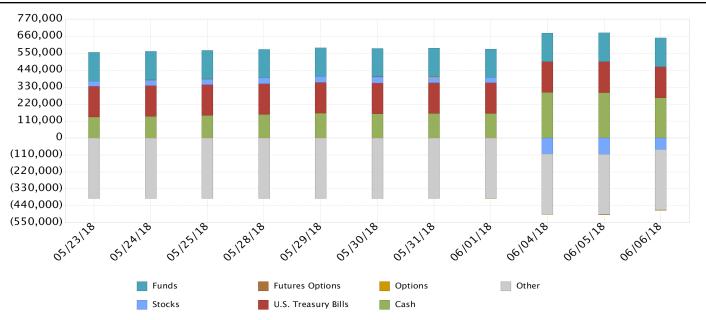


Symbol	Description	Sector	Quantity	Close Price	Value	Cost Basis	Unrealized P&L	Base Value
B 07/12/18	B 07/12/18	Unclassified	200,000	99.82	199,641.50	199,412.00	229.50	199,641.50
Total					199,641.50	199,412.00	229.50	199,641.50
Cash								
EUR	Euro		5,598.81	1.18	6,592.04			6,592.04
GBP	Great British Pound		86.32	1.34	115.78			115.78
NOK	Norwegian Krone		19,102.38	0.12	2,363.92			2,363.92
SEK	Swedish Krona		-260.86	0.11	-29.87			-29.87
USD	United States Dollar		254,429.27	1.00	254,429.27			254,429.27
ZAR	South African Rand		7,370.90	0.08	579.93			579.93
Total Cash in USD					264,051.06			264,051.06



### Allocation by **Asset Class**



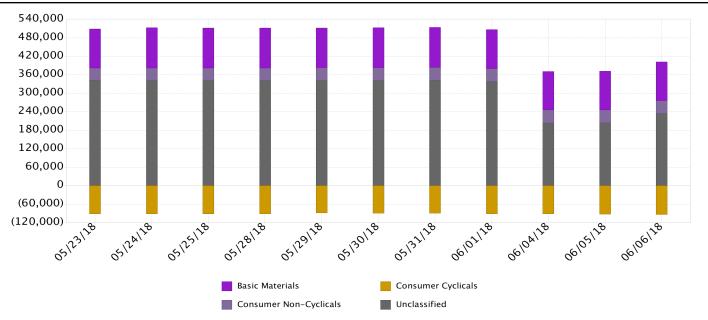


Date	Funds	Futures Options	Options	Other	Stocks	U.S. Treasury Bills	Cash	NAV
05/23/18	185,584.23	62.50	1,021.45	-393,057.81	32,649.56	199,511.11	136,836.69	162,607.73
05/24/18	184,867.17	62.50	1,282.20	-393,057.81	36,420.32	199,526.33	140,489.44	169,590.15
05/25/18	184,867.17	62.50	1,157.25	-393,057.81	35,651.70	199,532.00	146,681.13	174,893.94
05/28/18	184,657.29	62.50	1,157.25	-393,057.81	35,635.97	199,532.00	154,253.44	182,240.64
05/29/18	184,657.29	125.00	1,066.80	-393,057.81	39,544.21	199,567.33	161,098.98	193,001.80
05/30/18	183,937.96	62.50	1,900.20	-393,057.81	38,363.32	199,582.54	157,589.28	188,377.98
05/31/18	183,937.96	62.50	3,357.00	-391,402.17	37,613.80	199,591.67	159,082.51	192,243.27
06/01/18	183,936.68	62.50	-1,191.15	-391,402.17	34,112.40	199,601.96	160,129.02	185,249.25
06/04/18	185,715.34	62.50	-958.05	-391,402.17	-104,248.37	199,625.81	296,015.81	184,810.87
06/05/18	187,072.13	62.50	-1,208.15	-391,402.17	-105,284.52	199,632.57	295,573.82	184,446.18
06/06/18	186,832.58	62.50	-1,967.30	-391,402.17	-75,357.29	199,641.50	262,435.83	180,245.65



## Allocation by **Sector**



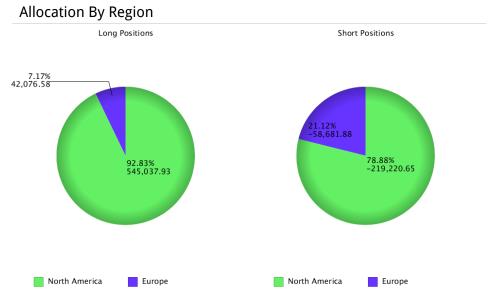


Date	Basic Materials	Consumer Cyclicals	Consumer Non-Cyclicals	Unclassified	Total
05/23/18	126,561.45	-90,446.17	40,380.72	342,332.84	418,828.85
05/24/18	130,492.20	-90,510.87	40,571.19	341,606.00	422,158.52
05/25/18	129,757.25	-90,640.20	40,471.90	341,681.67	421,270.62
05/28/18	129,757.25	-90,692.45	40,508.42	341,471.79	421,045.01
05/29/18	129,366.80	-87,524.64	41,368.85	341,749.62	424,960.63
05/30/18	130,206.65	-89,173.70	41,307.02	341,506.55	423,846.52
05/31/18	129,127.00	-89,053.65	41,347.45	343,142.13	424,562.93
06/01/18	126,789.60	-90,680.56	41,457.96	338,955.39	416,522.39
06/04/18	124,640.65	-90,681.66	42,588.29	203,649.95	280,197.23
06/05/18	125,328.40	-91,652.32	41,972.80	204,625.65	280,274.53
06/06/18	125,277.50	-92,553.88	42,076.58	234,411.78	309,211.99



## Allocation by **Region**



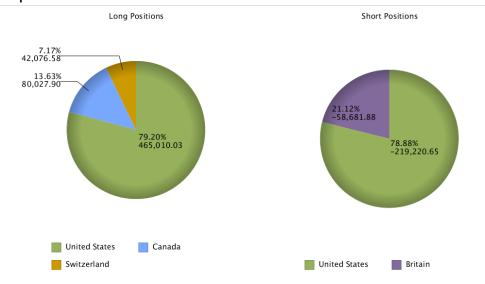


Long Position		Short I	Positions
7.17% 42,076.58 92.83 545,0	% 37.93	21.12% -58,681.88	78.88% -219,220.65
North America Eu	urope	North America	Europe

Region	Long Weight (%)	Region
North America	92.83	North America
Europe	7.17	Europe
Total	100.00	Total

Region	Short Weight (%)
North America	78.88
Europe	21.12
Total	100.00

### **Top 5 Countries**



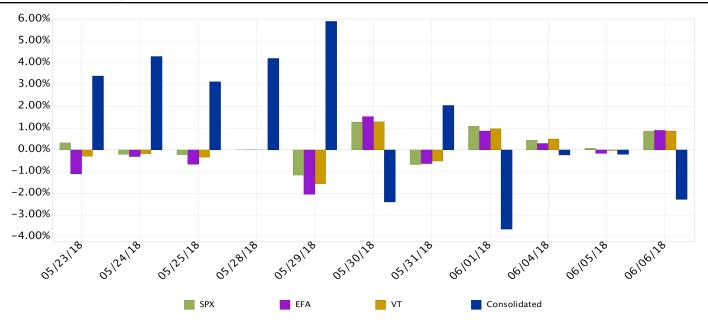
Long Weight (%)
79.20
13.63
7.17
100.00

Short Weight (%)
78.88
21.12
100.00



### Time Period **Benchmark Comparison**

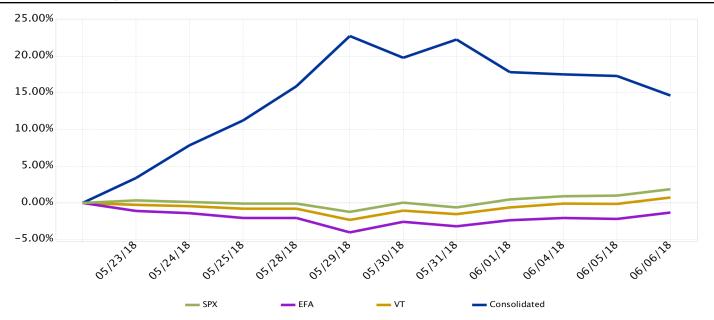




Date	SPX	EFA	VT	Consolidated
05/23/18	0.33%	-1.10%	-0.29%	3.40%
05/24/18	-0.20%	-0.31%	-0.17%	4.29%
05/25/18	-0.22%	-0.65%	-0.33%	3.13%
05/28/18	0.00%	0.00%	0.00%	4.20%
05/29/18	-1.15%	-2.04%	-1.55%	5.90%
05/30/18	1.29%	1.53%	1.30%	-2.40%
05/31/18	-0.67%	-0.63%	-0.51%	2.05%
06/01/18	1.09%	0.86%	0.97%	-3.64%
06/04/18	0.45%	0.30%	0.51%	-0.24%
06/05/18	0.08%	-0.16%	-0.03%	-0.20%
06/06/18	0.86%	0.90%	0.87%	-2.28%
Average	0.17%	-0.12%	0.07%	1.29%

## **Cumulative Benchmark Comparison**

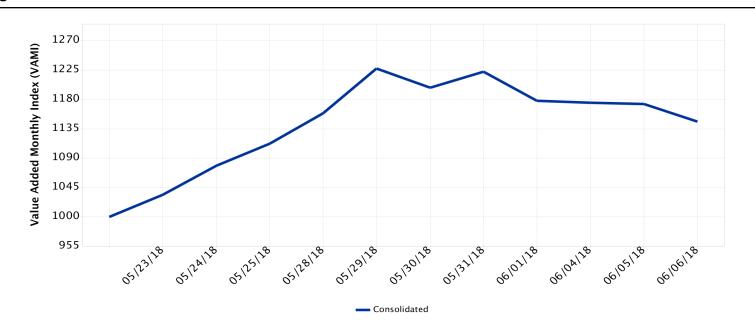




Date	SPX	EFA	VT	Consolidated
05/23/18	0.33%	-1.10%	-0.29%	3.40%
05/24/18	0.13%	-1.41%	-0.46%	7.84%
05/25/18	-0.10%	-2.05%	-0.79%	11.21%
05/28/18	-0.10%	-2.05%	-0.79%	15.88%
05/29/18	-1.25%	-4.05%	-2.33%	22.73%
05/30/18	0.02%	-2.58%	-1.06%	19.79%
05/31/18	-0.64%	-3.19%	-1.56%	22.24%
06/01/18	0.45%	-2.36%	-0.61%	17.80%
06/04/18	0.90%	-2.06%	-0.11%	17.52%
06/05/18	0.98%	-2.22%	-0.13%	17.28%
06/06/18	1.84%	-1.34%	0.74%	14.61%
05/23/18 to 06/06/18	1.84%	-1.34%	0.74%	14.61%



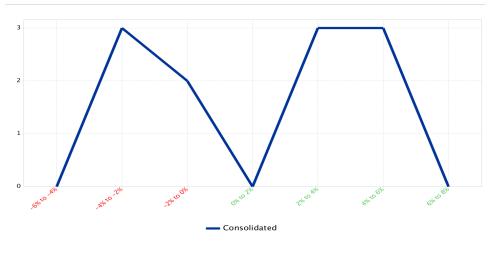




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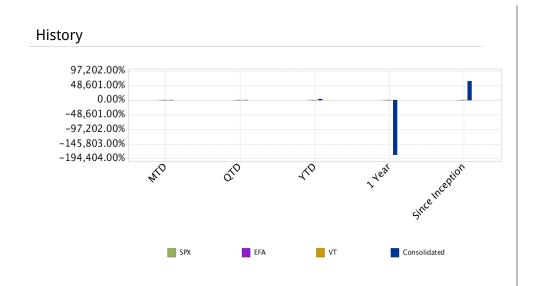
	Consolidated
Ending VAMI	1,146.14
Max Drawdown:	6.61%
Peak-To-Valley:	05/29/18 - 06/06/18
Recovery:	Ongoing
Sharpe Ratio:	8.02
Sortino Ratio:	16.16
Calmar Ratio:	1,382.69
Standard Deviation:	3.05%
Downside Deviation:	1.50%
Mean Return:	1.29%
Positive Periods:	6 (54.55%)
Negative Periods:	5 (45.45%)

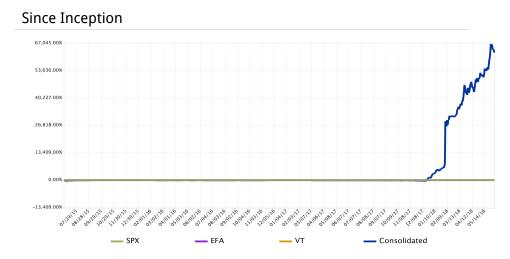
### Distribution of Returns



## Historical Performance **Benchmark Comparison**







	MTD	QTD	YTD	1 Year	Since Inception
SPX	2.50%	5.37%	4.57%	16.04%	43.21%
EFA	1.92%	1.51%	0.60%	8.67%	18.59%
VT	2.34%	3.35%	2.84%	13.85%	31.95%
Consolidated	-5.91%	49.83%	3,377.03%	-	-



## Historical Performance **Benchmark Comparison** (Cont.)



### Monthly

	2017					2016				2015			
%	SPX	EFA	VT	Con	SPX	EFA	VT	Con	SPX	EFA	VT	Con	
Jan	1.90	3.29	3.00	10.14	-4.96	-5.52	-5.87	25.23	N/A	N/A	N/A	N/A	
Feb	3.97	1.19	2.69	-1.21	-0.13	-3.33	-1.11	-57.96	N/A	N/A	N/A	N/A	
Mar	0.12	3.23	1.48	-144.82	6.78	6.58	7.98	26.72	N/A	N/A	N/A	N/A	
Apr	1.03	2.42	1.63	-26.26	0.39	2.22	1.01	0.79	N/A	N/A	N/A	N/A	
May	1.41	3.54	1.95	56.26	1.80	-0.09	0.65	-4.86	N/A	N/A	N/A	N/A	
Jun	0.62	0.31	0.63	19.66	0.26	-2.42	-0.18	-35.89	N/A	N/A	N/A	N/A	
Jul	2.06	2.65	2.65	-36.93	3.69	3.97	4.15	37.99	2.10	2.03	0.50	-78.17	
Aug	0.31	-0.04	0.42	82.26	0.14	0.54	0.35	7.84	-6.03	-7.43	-6.63	-172.37	
Sep	2.06	2.36	2.11	-15.69	0.02	1.34	0.79	-13.84	-2.47	-4.42	-3.71	224.36	
Oct	2.33	1.68	2.11	-19.49	-1.82	-2.22	-1.97	4.55	8.44	6.61	7.29	-12.67	
Nov	3.07	0.69	1.90	449.50	3.70	-1.78	1.19	29.46	0.30	-0.75	-0.08	6.03	
Dec	1.10	1.35	1.60	-995.94	1.97	2.71	1.81	22.61	-1.59	-2.34	-2.19	-17.52	



## Historical Performance **Benchmark Comparison** (Cont.)



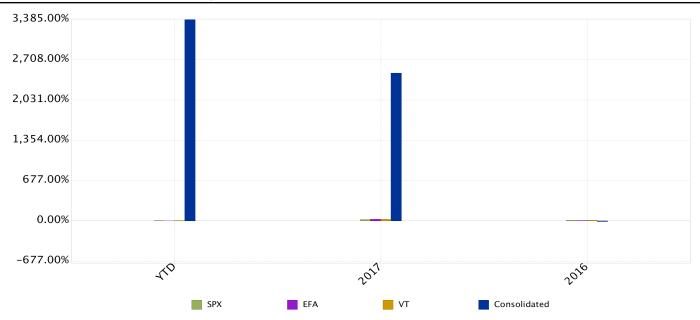
### Quarterly

	2017				2016			2015				
%	SPX	EFA	VT	Con	SPX	EFA	VT	Con	SPX	EFA	VT	Con
Q1	6.07	7.90	7.33	-148.77	1.35	-2.66	0.52	-33.29	N/A	N/A	N/A	N/A
Q2	3.09	6.38	4.25	37.88	2.46	-0.34	1.48	-38.53	N/A	N/A	N/A	N/A
Q3	4.48	5.03	5.25	-3.08	3.85	5.93	5.34	28.21	-6.44	-9.72	-9.64	-151.26
Q4	6.64	3.76	5.70	4,063.48	3.82	-1.36	0.99	65.96	7.03	3.34	4.85	-23.63



## Historical Performance **Benchmark Comparison** (Cont.)





	YTD	2017	2016
SPX	4.57%	21.82%	11.95%
EFA	0.60%	25.10%	1.37%
VT	2.84%	24.49%	8.51%
Consolidated	3,377.03%	2,482.97%	-12.74%



## Trade **Summary**



				Bought			Sold	
Symbol	Description	Sector	Quantity	Average Price	Proceeds	Quantity	Average Price	Proceed
Forex								
NOK								
USD.NOK	USD.NOK	Cash	3,378,000	8.15	-27,539,346.78	-3,379,853	8.15	27,558,449.3
Total					-27,539,346.78			27,558,449.3
Total in USD					-3,368,540.66			3,377,818.6
USD					_			
GBP.USD	GBP.USD	Cash	42,405	1.34	-56,636.54	0	0.00	0.0
Total					-56,636.54			0.0
ZAR								
USD.ZAR	USD.ZAR	Cash	3,381,317	12.48	-42,203,080.87	-3,378,000	12.50	42,227,531.4
Total					-42,203,080.87			42,227,531.4
Total in USD					-3,378,664.64			3,358,240.4
Total Forex in USD					-6,803,841.84			6,736,059.1
Futures								
EUR								
FBTP SEP 18	BTP 06SEP18	Unclassified	2	127.50	-255,000.00	0	0.00	0.0
FGBL SEP 18	GBL 06SEP18	Unclassified	0	0.00	0.00	-2	161.35	322,700.0
Total					-255,000.00			322,700.0
Total in USD					-296,412.00			375,106.4
USD								
CLQ8	CL AUG18	Unclassified	0	0.00	0.00	-1	66.85	66,850.0
ESM8	ES 15JUN18	Unclassified	4	2,710.25	-542,050.00	-2	2,751.50	275,150.0
FV JUN 18	ZF 29JUN18	Unclassified	0	0.00	0.00	-36	113.53	4,087,125.0
GEZ0	GE 14DEC20	Unclassified	2	97.07	-485,350.00	0	0.00	0.0
ZB JUN 18	ZB 20JUN18	Unclassified	0	0.00	0.00	-6	143.02	858,093.7
ZN JUN 18	ZN 20JUN18	Unclassified	34	119.63	-4,067,515.62	0	0.00	0.0
Total					-5,094,915.62			5,287,218.7
Total Futures in USD					-5,391,327.62			5,662,325.2



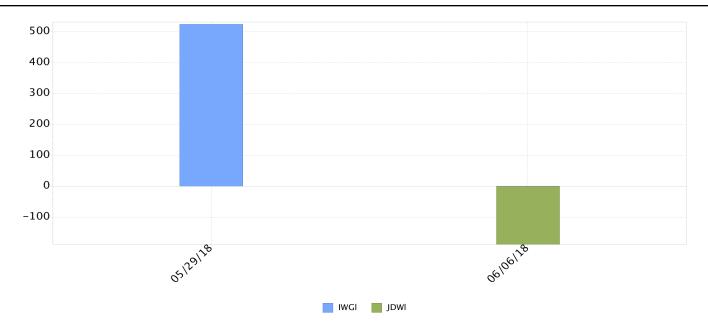
## Trade **Summary** (Cont.)



				Bought			Sold	
Symbol	Description	Sector	Quantity	Average Price	Proceeds	Quantity	Average Price	Proceeds
Options								
USD								
SPY 180601C00272000	SPY 01JUN18 272.0 C	Unclassified	5	0.00	0.00	-5	1.32	660.00
SPY 180601P00270000	SPY 01JUN18 270.0 P	Unclassified	50	0.38	-1,900.00	-50	0.00	0.00
SPY 180608C00272000	SPY 08JUN18 272.0 C	Unclassified	0	0.00	0.00	-5	2.30	1,150.00
Total					-1,900.00			1,810.00
Stocks								
USD								
BA	BOEING CO/THE	Industrials	200	352.93	-70,586.00	-200	358.26	71,652.00
SPY	SPDR S&P 500 ETF TRUST	Unclassified	0	0.00	0.00	-500	272.00	136,000.00
VXX	IPATH S&P 500 VIX S/T FU ETN	Unclassified	4,000	34.94	-139,742.90	-3,000	35.39	106,158.00
Total					-210,328.90			313,810.00
Total (All Assets) in USD					-12,407,398.37			12,714,004.36







Pay Date	Ex-Date	Account	Symbol	Note	Quantity	Dividend Per Share	Estimated Forward Dividend Yield %	Estimated Annual Dividend	Amount
05/25/18	04/26/18	UXXXXXX	IWGI	Dividend Payment	10,000	0.05	6.23	2,094.29	523.57
05/31/18	05/03/18	UXXXXXX	JDWI	Payment In Lieu	-3,500	0.05	0.70	-375.56	-187.78
Total									335.79

### Interest **Details**



Date	Account	Description	Amount
06/01/18	Health Savings Account- XXXXXXX	Interest for May-18	0.08
06/05/18	UXXXXXXX	NOK Debit Interest Paid for May 2018	-0.02
06/05/18	UXXXXXXX	USD Credit Interest Received for May 2018	93.62
06/05/18	UXXXXXXX	USD Debit Interest Paid for May 2018	-215.22
06/05/18	UXXXXXXX	USD Net Stock Interest Paid for May 2018	-122.63
06/05/18	UXXXXXXX	SEK Debit Interest Paid for May 2018	-29.81
06/05/18	UXXXXXXX	EUR Credit Interest Paid for May 2018	-21.35
06/05/18	UXXXXXXX	EUR Debit Interest Paid for May 2018	-13.14
06/05/18	UXXXXXXX	GBP Debit Interest Paid for May 2018	-177.40
06/05/18	UXXXXXXX	GBP Net Stock Interest Paid for May 2018	-27.54
06/05/18	UXXXXXXX	ZAR Debit Interest Paid for May 2018	-925.20
06/05/18	UXXXXXXX	EUR Debit Interest Paid for May 2018	-0.01
06/05/18	UXXXXXXX	USD Credit Interest Received for May 2018	8.85
Total			-1,429.79

## Fee **Summary**



Date	Account	Description	Amount
06/05/2018	UXXXXXX	Amex	-23.00
06/05/2018	UXXXXXX	Cboe Streaming Market Indexes	-2.25
06/05/2018	UXXXXXX	Cbot	-112.50
06/05/2018	UXXXXXX	Cfe Enhanced	-7.50
06/05/2018	UXXXXXX	Cme	-112.50
06/05/2018	UXXXXXX	Comex	-112.50
06/05/2018	UXXXXXX	Cusip	-2.00
06/05/2018	UXXXXXX	Eurex Core	-65.48
06/05/2018	UXXXXXX	NASDAQ Level I For May 2018	-25.00
06/05/2018	UXXXXXX	NYSE	-45.00
06/05/2018	UXXXXXX	Quote Booster Packs Professional For May 2018	-30.00
06/05/2018	UXXXXXX	US Options Bundle For May 2018	-32.75
Total			-570.48

### **Notes**



- 1. The Net Asset Value (NAV) consists of all positions by asset class (stock, securities options, warrants, bonds, cash, etc.). All non-base currency amounts are converted to the base currency at the close of period rate.
- 2. The deposit/withdrawal amount displayed in the Account Overview report includes internal transfers along with cash and position transfers.
- 3. The gain or loss for future contracts settle into cash each night. The notional value is used when computing the contribution to return.
- 4. Dividend accruals, interest accruals and insured deposits are included in cash amounts throughout the report.
- 5. Price valuations are obtained from outside parties. Interactive Brokers shall have no responsibility for the accuracy or timeliness of any such price valuation.
- 6. The Allocation by Sector report includes only the following asset classes; stocks (except ETFs) and options. All other asset classes are included in Unclassified sector.
- 7. Amounts are formatted to two decimal places. If amounts are greater than two decimal places, Interactive Brokers uses "half-even" rounding. This means that Interactive Brokers rounds such amounts up to the nearest even number.
- 8. As of December 31, 2015 the historical annual return including dividends since inception of the S&P 500 was 7.14%. This rate is used to calculate the downside deviation and the Sortino ratio.
- 9. As of December 31, 2017 the US 3 Month Treasury Bill was 1.37%. This was the risk free rate used to calculate the Sharpe ratio.
- 10. The mean return is the average TWR for the period.
- 11. Historical SPX dividend data in the Performance Attribution report may be modeled from sector compositions that are subject to change.
- 12. Frongello is the method used for mathematical smoothing in the Performance Attribution report. It has been developed by Andrew Scott Bay Frongello.
- 13. For accounts opened and funded before 2009, reports with a time period of Since Inception will include data going back to January 1, 2009. This includes some default reports and both Historical Performance reports.
- 14. The Modified Dietz method is used to calculate MWR. This method only values the portfolio at the start and end of the period and weights the cash flows. When large flows occur, its accuracy can diminish.
- 15. The Estimated Annual Dividend in the Dividends report and Estimated Annual Income in the Projected Income report assume dividend and bond payments remain constant throughout the year. These positions and interest rates are based on the previous business day.

### Glossary



#### Allocation Effect

The percent effectiveness of an account's asset allocation to various sectors. The allocation effect determines whether the overweighting or underweighting of sectors relative to a benchmark contributes negatively or positively to an account's overall return.

#### Asset Class

A category of investment products in your portfolio. Cash, stocks, options, futures, etc. are examples.

#### **Attribution Effect**

The percent effectiveness of asset allocation and selection of securities on the portfolio's performance when compared to the performance of a benchmark over a specified time period.

#### Benchmark

A standard against which the performance of your portfolio can be measured.

#### Calmar Ratio

A ratio used to determine return versus drawdown risk.

#### Contribution To Return

The percent contribution of certain portfolio constituents (symbols, sectors) to the account's overall return.

#### Correlation

A statistical figure that measures the interdependence between the range of returns for a specified benchmark(s) and your portfolio. A positive correlation exemplifies a strong relationship whereas a negative correlation exemplifies a weak relationship.

#### Cumulative Return

Geometric linking of single period returns. Cumulative return is presented as a percentage.

#### **Downside Deviation**

The standard deviation for all negative returns in your portfolio in the specific time period.

#### Max Drawdown

The largest cumulative percentage decline in the Net Asset Value of your portfolio from the highest or peak value to the lowest or trough value after the peak.

#### Mean Return

The average time weighted return of your portfolio for a specified time period.

#### Money Weighted Return (MWR)

Money Weighted Return (MWR) is used to measure performance during the specified report period. MWR is influenced by the time of decisions to contribute or to withdraw funds, as well as the decisions made by the portfolio manager of the fund.

#### **Negative Periods**

The number of occurrences of negative performance returns. For example, if you select a monthly report with 12 months, each month with a negative return would be a negative occurrence.

#### Net Asset Value (NAV)

The total value of your account.

#### Peak-to-Valley

The time period during which the Max Drawdown (largest cumulative percentage decline in the NAV) occurred.

#### Period Return

A performance measure that calculates the return you have received over a period of time.

#### Positive Periods

The number of occurrences of positive performance returns. For example, if you select a monthly report with 12 months, each month with a positive return would be a positive occurrence.

#### Recovery

The time it took for the NAV of your account to recover from the valley (lowest NAV) back to the peak (highest NAV).

#### Sector

A firm's general area of business. Financials, Communications and Energy are all examples of sectors.

#### Selection Effect

A percentage that measures the ability to select securities within a sector relative to a benchmark.

### Glossary (Cont.)



### Sharpe Ratio

A ratio that measures the excess return per unit of risk. The ratio is used to characterize how well the return compensates the account holder for the risk taken.

#### Sortino Ratio

The ratio measures the risk adjusted return of the account. The ratio penalizes only those returns that fall below the required rate of return.

#### Standard Deviation

Standard deviation is a statistical measurement of variability. It shows how much variation or dispersion there is from the average.

#### Time Period Return

The return your portfolio has gained or lost for the specific time period. Time period performance is presented as a percentage.

### Time-Weighted Return (TWR)

TWR measures the percent return produced over time independent of contributions or withdrawals. TWR eliminates the impact of the timing of inflows and outflows and isolates the portion of a portfolio's return that is attributable solely to the account's actions.

### Disclaimer



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