

Schedule PKC-1

Credit Ratings			
Company	Ticker Symbol	Moody's	S&P
Alliant	LNT	Baa1	A-
Ameren Corporation	AEE	Baa1	BBB+
AEP Company	AEP	Baa1	BBB+
Avista	AVA	Baa1	BBB
Consolidated Edison	ED	A3	A-
Eversource	ES	Baa1	A
IDACORP, Inc.	IDA	Baa1	BBB
NorthWestern Corporation	NWE	A3	BBB
OGE Energy Corporation	OGE	A3	A-
Pinnacle West Capital Corporation	PNW	A3	A-
PNM Resources, Inc.	PNM	Baa3	BBB+
Portland General Electric Company	POR	A3	BBB
Xcel Energy Inc.	XEL	A3	A-

Ratings downloaded from SNL data on Nov. 8, 2016.

Common Equity Ratios

Common Equity Ratios										
Company	2011	2012	2013	2014	2015	Average (2011-15)	2016	2017	2019-21	Average (2016-21)
Alliant Energy Corporation	50.9	48.4	50.8	47.5	51.4	49.8	49.5	49.5	49.5	49.5
Ameren Corporation	53.7	49.4	53.7	51.7	49.7	51.64	50.5	50.5	50	50.2
AEP Company	49.3	49.4	48.9	51	50.2	49.76	51	50.5	51	50.9
Avista	48.6	49.2	48.6	49	50	49.08	49	52	50	50.2
Consolidated Edison	52.5	54.1	53.9	52	52.1	52.92	50.5	54	54.5	53.6
Eversource	45.3	55.4	54.8	53.2	53.6	52.46	53	52.5	53	52.9
IDACORP, Inc.	54.4	54.5	53.4	54.7	54.4	54.28	54	53.5	53	53.3
NorthWestern Corporation	47.8	46.2	46.5	46.6	46.9	46.8	46	47	49.5	48.3
OGE Energy Corporation	48.4	49.3	56.9	54.1	55.7	52.88	56.5	53.5	49	51.4
Pinnacle West Capital Corporation	55.9	55.4	60	59	57	57.46	54	53.5	55	54.5
PNM Resources, Inc.	48.1	48.7	49.7	51.9	45.5	48.78	46	45.5	46.5	46.2
Portland General Electric Company	50.4	52.9	48.7	47.3	52.2	50.3	52	52	52	52
Xcel Energy Inc.	48.9	46.7	46.7	47	45.9	47.04	45	46	47.5	46.7
Source: Value Line One-pagers (latest as of Nov. 1, 2016)				Average	51.12	51.02	50.54	50.77	50.81	50.75

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STOCK PRICES													
Date	LNT	AEE	AEP	AVA	ED	ES	IDA	NWE	OGE	PNW	PNM	POR	XEL
10/31/2016	38.05	49.95	64.84	41.4	75.55	55.06	78.39	57.55	31.04	76.13	32.85	43.64	41.55
10/28/2016	37.23	48.87	63.41	40.37	73.99	54.20	76.67	56.39	30.69	74.60	31.95	42.94	40.68
10/27/2016	37.02	48.74	63.19	40.2	73.47	53.91	75.83	56.31	30.64	74.22	31.70	41.86	40.44
10/26/2016	37.19	49.1	63.53	40.14	73.88	54.31	75.98	56.57	30.71	74.50	31.68	41.65	40.60
10/25/2016	37.10	49.03	63.46	40.23	73.65	54.30	75.75	56.83	30.69	74.54	31.68	41.75	40.48
10/24/2016	37.03	48.65	63.03	39.97	73.17	54.13	75.53	56.37	30.62	74.10	31.73	41.69	40.20
10/21/2016	36.78	48.47	62.48	39.84	73.17	54.00	75.26	56.09	30.55	73.43	31.68	41.32	39.95
10/20/2016	37.03	48.62	62.91	40.47	73.62	54.12	75.99	55.83	30.82	74.10	31.98	41.92	40.39
10/19/2016	37.00	48.7	63.19	40.32	73.44	53.97	75.98	56.03	30.74	74.30	32.23	41.93	40.32
10/18/2016	37.09	48.91	63.37	40.37	73.24	54.13	75.79	56.10	30.68	74.46	32.08	41.77	40.54
10/17/2016	36.92	48.18	62.97	39.89	73	53.75	75.21	55.79	30.45	73.59	31.88	41.55	40.34
10/14/2016	36.68	48.03	62.3	39.7	72.49	53.18	74.86	55.11	30.29	73.02	31.59	41.50	40.05
10/13/2016	36.94	48.04	62.53	39.81	72.94	53.30	74.90	55.39	30.35	73.66	31.77	41.69	40.34
10/12/2016	36.63	47.59	62	39.53	72.07	52.58	74.09	54.63	30.08	72.97	31.33	40.87	39.72
10/11/2016	36.08	46.88	61.34	39.11	71.66	51.98	73.49	54.09	29.89	72.26	31.01	40.32	39.45
10/10/2016	36.59	47.7	62.21	39.73	72.2	52.76	74.51	54.99	30.35	73.13	31.50	40.94	39.89
10/7/2016	36.25	47.43	61.79	39.14	72.03	52.44	73.37	54.09	29.62	72.05	30.95	40.59	39.61
10/6/2016	36.40	47.59	62.25	39.53	72.33	52.72	74.30	54.47	29.99	72.33	31.21	40.88	39.62
10/5/2016	36.49	47.71	62.18	39.45	72.5	52.56	73.98	54.56	30.07	72.17	31.23	40.82	39.51
10/4/2016	36.64	47.38	62.18	39.73	72.77	52.61	74.51	55.03	30.18	72.36	31.38	40.73	39.59
10/3/2016	37.50	48.63	63.51	41.14	74.24	53.54	76.94	56.54	31.03	74.32	32.06	41.92	40.58
Average	36.89	48.30	62.79	40.00	73.11	53.50	75.30	55.66	30.45	73.63	31.69	41.54	40.18

Source: Yahoo Finance

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Dividend Yield Estimate for the Next Period			
Company	Average Stock Price	2017 Dividend	Div. Yield(1)
Alliant Energy Corporation	36.89	1.25	3.39%
Ameren Corporation	48.30	1.78	3.69%
AEP Company	62.79	2.39	3.81%
Avista	40.00	1.42	3.55%
Consolidated Edison	73.11	2.76	3.77%
Eversource	53.50	1.9	3.55%
IDACORP, Inc.	75.30	2.24	2.97%
NorthWestern Corporation	55.66	2.08	3.74%
OGE Energy Corporation	30.45	1.28	4.20%
Pinnacle West Capital Corporation	73.63	2.68	3.64%
PNM Resources, Inc.	31.69	0.96	3.03%
Portland General Electric Company	41.54	1.34	3.23%
Xcel Energy Inc.	40.18	1.44	3.58%
Average			3.55%

DY data from Value Line (latest one-pagers as of Nov. 1, 2016)

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Growth Components												
Company		Value Line 5-yearly projections			Consensus EPS	Zacks EPS	SNL Median LTG	Average EPS	Average of Average EPS, DPS and BPS	Internal growth	External Growth	Internal plus External growth
		EPS growth rate	DPS growth rate	BPS growth rate								
Alliant Energy Corporation	LNT	6	4.50	4.00	6.60	6.10	7.90	6.65	5.05%	4.66%	0.00%	4.66%
Ameren Corporation	AEE	6	4.00	3.50	5.60	6.10	7.00	6.18	4.56%	3.42%	0.00%	3.42%
AEP Company	AEP	4	5.00	4.00	1.89	5.40	2.00	3.32	4.11%	3.48%	0.24%	3.72%
Avista	AVA	5	4.00	3.50	5.65	5.30	5.30	5.31	4.27%	3.02%	0.47%	3.49%
Consolidated Edison	ED	2.5	3.00	3.50	2.12	2.80	2.30	2.43	2.98%	2.93%	0.27%	3.20%
Eversource	ES	6	6.00	4.00	5.82	6.10	6.00	5.98	5.33%	3.84%	0.00%	3.84%
IDACORP, Inc.	IDA	3	7.50	4.00	4.10	4.30	4.40	3.95	5.15%	3.71%	0.08%	3.79%
NorthWestern Corporation	NWE	6.5	5.50	4.50	4.50	5.00	5.00	5.25	5.08%	4.09%	0.35%	4.44%
OGE Energy Corporation	OGE	3	9.50	3.50	4.00	5.20	5.40	4.40	5.80%	3.17%	0.21%	3.38%
Pinnacle West Capital Corpor	PNW	4	5.00	3.50	4.45	4.50	5.00	4.49	4.33%	3.55%	0.37%	3.92%
PNM Resources, Inc.	PNM	9	10.00	3.50	6.85	6.80	7.10	7.44	6.98%	4.16%	0.00%	4.16%
Portland General Electric Com	POR	5.5	6.00	3.50	6.20	6.20	5.50	5.85	5.12%	3.74%	0.15%	3.89%
Xcel Energy Inc.	XEL	5.5	6.00	4.00	5.72	5.40	4.90	5.38	5.13%	4.13%	0.00%	4.13%
Average		5.08	5.85	3.77	4.88	5.32	5.22	5.13	4.91%	3.68%	0.17%	3.85%

Value Line One-pagers' data downloaded on Oct. 31, 2016. Zacks, SNL and Consensus data from Nov. 15 downloads.

"External Component" of COE						
		current market to book ratio	# of shares 2017	# of shares 2020	growth rate in # of shares	sv
Alliant Energy Corporation	LNT	2.27	230	230	0.00%	0.00%
Ameren Corporation	AEE	1.74	242.63	242.63	0.00%	0.00%
AEP Company	AEP	1.72	495	500	0.34%	0.24%
Avista	AVA	1.62	65	66.5	0.76%	0.47%
Consolidated Edison	ED	1.63	306	310	0.43%	0.27%
Eversource	ES	1.65	317.19	317.19	0.00%	0.00%
IDACORP, Inc.	IDA	1.83	50.6	50.75	0.10%	0.08%
NorthWestern Corporation	NWE	1.68	48.75	49.5	0.51%	0.35%
OGE Energy Corporation	OGE	1.85	200	201.5	0.25%	0.21%
Pinnacle West Capital Corporation	PNW	1.84	112	113.5	0.44%	0.37%
PNM Resources, Inc.	PNM	1.54	80	80	0.00%	0.00%
Portland General Electric Company	POR	1.67	89.2	89.8	0.22%	0.15%
Xcel Energy Inc.	XEL	1.91	508	508	0.00%	0.00%

Source: Value Line

Market to book ratio (mrq) based on yahoo finance data from Nov. 1, 2016.

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Expected Return on Equity				
EXPECTED ROE		2017	2019-2021	2017-21
Alliant Energy Corporation	LNT	11.00%	12.50%	12.13%
Ameren Corporation	AEE	9.00%	9.50%	9.38%
AEP Company	AEP	10.00%	9.50%	9.63%
Avista	AVA	8.50%	8.50%	8.50%
Consolidated Edison	ED	9.00%	8.50%	8.63%
Eversource	ES	9.00%	9.50%	9.38%
IDACORP, Inc.	IDA	9.00%	9.00%	9.00%
NorthWestern Corporation	NWE	9.50%	10.00%	9.88%
OGE Energy Corporation	OGE	10.50%	11.50%	11.25%
Pinnacle West Capital Corp	PNW	10.00%	10.00%	10.00%
PNM Resources, Inc.	PNM	8.00%	9.50%	9.13%
Portland General Electric Co	POR	8.50%	9.00%	8.88%
Xcel Energy Inc.	XEL	10.50%	11.00%	10.88%
Average				9.81%

Retention Ratio (b)								
		2017			2019-21			Average Retention ratio (b)
		earnings pershare	dividends pershare	b	earnings pershare	dividends pershare	b	
Alliant Energy Corporation	LNT	2.00	1.25	0.38	2.45	1.50	0.39	0.38
Ameren Corporation	AEE	2.75	1.78	0.35	3.25	2.05	0.37	0.37
AEP Company	AEP	3.90	2.39	0.39	4.25	2.75	0.35	0.36
Avista	AVA	2.15	1.42	0.34	2.50	1.60	0.36	0.35
Consolidated Edison	ED	4.30	2.76	0.36	4.50	3.00	0.33	0.34
Eversource	ES	3.15	1.90	0.40	3.75	2.20	0.41	0.41
IDACORP, Inc.	IDA	4.05	2.24	0.45	4.50	2.70	0.40	0.41
NorthWestern Corporation	NWE	3.45	2.08	0.40	4.00	2.32	0.42	0.41
OGE Energy Corporation	OGE	1.90	1.28	0.33	2.25	1.65	0.27	0.28
Pinnacle West Capital Corp	PNW	4.30	2.68	0.38	4.75	3.10	0.35	0.35
PNM Resources, Inc.	PNM	1.85	0.96	0.48	2.35	1.30	0.45	0.46
Portland General Electric Corp	POR	2.35	1.34	0.43	2.75	1.60	0.42	0.42
Xcel Energy Inc.	XEL	2.30	1.44	0.37	2.75	1.70	0.38	0.38

Source: Value Line one-pagers (latest data as of Nov. 1, 2016)

DCF ROE Estimates

Company		Average of EPS, DPS, and BVPS growth rates	br and sv	EPS growth rates
Alliant Energy Corporation	LNT	8.44%	8.05%	10.04%
Ameren Corporation	AEE	8.24%	7.11%	9.86%
AEP Company	AEP	7.91%	7.53%	7.13%
Avista	AVA	7.82%	7.04%	8.86%
Consolidated Edison	ED	6.75%	6.98%	6.20%
Eversource	ES	8.88%	7.39%	9.53%
IDACORP, Inc.	IDA	8.12%	6.76%	6.92%
NorthWestern Corporation	NWE	8.82%	8.18%	8.99%
OGE Energy Corporation	OGE	10.00%	7.58%	8.60%
Pinnacle West Capital Corporation	PNW	7.97%	7.56%	8.13%
PNM Resources, Inc.	PNM	10.01%	7.18%	10.47%
Portland General Electric Company	POR	8.34%	7.11%	9.08%
Xcel Energy Inc.	XEL	8.71%	7.71%	8.96%
Average		8.46%	7.40%	8.68%
Average plus 2*SD		10.21%	8.24%	11.22%
Average minus 2*SD		6.71%	6.56%	6.13%
Cost of Equity estimate		8.46%	7.40%	8.68%

The cells that are statistically outliers, if there are any, are shaded red.

CAPM Method 1	8.75%
CAPM Method 2	8.66%
CAPM Average	8.71%

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PROXY BETA

Company		VL Betas	Bloomberg Beta
Alliant Energy Corporation	LNT	0.75	0.63
Ameren Corporation	AEE	0.70	0.64
AEP Company	AEP	0.65	0.59
Avista	AVA	0.75	0.64
Consolidated Edison	ED	0.55	0.47
Eversource	ES	0.70	0.60
IDACORP, Inc.	IDA	0.75	0.73
NorthWestern Corporation	NWE	0.70	0.62
OGE Energy Corporation	OGE	0.90	0.69
Pinnacle West Capital Corp.	PNW	0.70	0.63
PNM Resources, Inc.	PNM	0.80	0.65
Portland General Electric	POR	0.75	0.63
Xcel Energy Inc.	XEL	0.65	0.51
Proxy Average		0.72	0.62

Source: Value Line and Company response to OCA on Bloomberg Betas

Schedule PKC-10

10y US T-

Pricing Date	Note
11/14/2016	2.23
11/11/2016	2.15
11/10/2016	2.15
11/9/2016	2.07
11/8/2016	1.88
11/7/2016	1.83
11/4/2016	1.79
11/3/2016	1.82
11/2/2016	1.81
11/1/2016	1.83
10/31/2016	1.84
10/28/2016	1.86
10/27/2016	1.85
10/26/2016	1.79
10/25/2016	1.77
10/24/2016	1.77
10/21/2016	1.74
10/20/2016	1.76
10/19/2016	1.76
10/18/2016	1.75
10/17/2016	1.77
Average	1.87

Data source for yields is SNL

CAPM Method 1	
S&P 500	
Return on B-cap-weighted	13.02
market risk premium	11.15
CAPM Method 1 cost-of-equity estimate	8.75

CAPM Method 2	
Value Line using S&P 500 constituents	
VL portfolio beta	0.98
Return on Value Line portfolio	11.15
market risk premium	9.45
CAPM Method 2 cost-of-equity estimate	8.66

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Data Downloaded from Value Line on November 1, 2016

Ticker	DPS LTP	EPS LTP	BVPS LTP	beta	MC Weights	DPS DCF	EPS DCF	BVPS DCF	DPS W-DCF	EPS W-DCF	BVPS W-DCF	W-beta
AA	0.025	0.105	0.035	1.5	0.000771	3.75%	11.79%	4.75%	2.88854E-05	9.0963E-05	3.66451E-05	0.001157
AAP	0.165	0.115	0.12	0.9	0.000658	16.67%	11.67%	12.17%	0.000109747	7.68092E-05	8.01029E-05	0.000592
AAPL	0.14	0.115	0.095	0.95	0.037059	16.23%	13.70%	11.68%	0.006013108	0.005076988	0.004328092	0.035206
ABC	0.095	0.11	0.15	0.8	0.001076	11.21%	12.72%	16.75%	0.000120553	0.00013682	0.000180196	0.000861
ACN	0.065	0.065	0.145	1	0.004393	8.63%	8.63%	16.71%	0.000378999	0.000378999	0.000734075	0.004393
ADBE	0	0.355	0.135	1.15	0.003228	0.00%	35.50%	13.50%	0	0.001146042	0.000435819	0.003713
ADI	0.04	0.11	0.065	1.1	0.001174	6.69%	13.79%	9.23%	7.85621E-05	0.000161815	0.000108295	0.001291
ADM	0.06	0.06	0.045	1.1	0.001502	8.87%	8.87%	7.35%	0.000133301	0.000133301	0.000110454	0.001652
ADP	0.085	0.095	0.005	0.95	0.002446	11.15%	12.16%	3.05%	0.000272696	0.000297468	7.45183E-05	0.002324
ADS	0	0.105	0.215	1.05	0.000766	0.00%	10.50%	21.50%	0	8.04372E-05	0.000164705	0.000804
AEE	0.04	0.06	0.035	0.7	0.000748	7.49%	9.52%	6.98%	5.59914E-05	7.12013E-05	5.2189E-05	0.000523
AEP	0.05	0.04	0.04	0.65	0.001963	8.63%	7.61%	7.61%	0.000169384	0.000149405	0.000149405	0.001276
AES	0.11	0.085	-0.005	1.15	0.000521	14.52%	11.98%	2.83%	7.56837E-05	6.24385E-05	1.47559E-05	0.000599
AET	0.11	0.095	0.1	0.9	0.002459	11.91%	10.40%	10.90%	0.000292815	0.000255769	0.000268118	0.002213
AFL	0.05	0.045	0.12	1.1	0.001808	7.37%	6.86%	14.45%	0.00013318	0.000124038	0.000261175	0.001988
AGN	0	0.135	0.15	0.9	0.005776	0.00%	13.50%	15.00%	0	0.00077979	0.000866434	0.005199
AIG	0.215	0.1	0.085	1.15	0.003829	23.90%	12.28%	10.76%	0.000915237	0.000470134	0.000412077	0.004403
AIZ	0.17	0.035	0.08	0.9	0.000332	19.38%	5.73%	10.28%	6.42681E-05	1.90001E-05	3.40894E-05	0.000299
AJG	0.025	0.135	0.085	0.9	0.000542	5.52%	16.68%	11.61%	2.99165E-05	9.04512E-05	6.29354E-05	0.000488
AKAM	0	0.13	0.11	1.35	0.00055	0.00%	13.00%	11.00%	0	7.15531E-05	6.05449E-05	0.000743
ALB	0.045	0.075	0.09	1.35	0.000547	6.03%	9.06%	10.57%	3.30118E-05	4.95485E-05	5.78168E-05	0.000739
ALK	0.17	0.095	0.175	1.15	0.000487	18.81%	11.25%	19.32%	9.1669E-05	5.4817E-05	9.41258E-05	0.00056
ALL	0.07	0.065	0.085	0.85	0.001533	8.99%	8.48%	10.50%	0.000137805	0.000130064	0.000161026	0.001303
ALXN	0	0.275	0.12	1.1	0.001797	0.00%	27.50%	12.00%	0	0.000494206	0.000215653	0.001977
AMAT	0.04	0.18	0.08	1.2	0.001963	5.35%	19.44%	9.37%	0.00010495	0.000381583	0.000183988	0.002356
AME	0.14	0.085	0.085	1.1	0.00067	14.80%	9.28%	9.28%	9.92285E-05	6.2221E-05	6.2221E-05	0.000737
AMG	0	0.085	0.06	1.4	0.000493	0.00%	8.50%	6.00%	0	4.18813E-05	2.95633E-05	0.00069
AMGN	0.135	0.09	0.135	0.95	0.007885	16.12%	11.56%	16.12%	0.001270669	0.000911505	0.001270669	0.007491
AMP	0.06	0.105	0.11	1.3	0.000981	9.06%	13.63%	14.13%	8.88977E-05	0.000133712	0.000138692	0.001276
AMT	0.17	0.125	0.11	0.9	0.002863	19.32%	14.77%	13.26%	0.000553098	0.000422905	0.000379507	0.002576
AN	0	0.09	0.075	1	0.000296	0.00%	9.00%	7.50%	0	2.66101E-05	2.21751E-05	0.000296
ANTM	0.08	0.075	0.095	0.8	0.002026	10.11%	9.61%	11.63%	0.000204852	0.000194619	0.00023555	0.001621
AON	0.155	0.12	0.105	0.95	0.001806	16.75%	13.23%	11.72%	0.000302567	0.000238977	0.000211724	0.001716
APA	0.04	0.06	-0.115	1.5	0.001387	5.67%	7.69%	-9.95%	7.86993E-05	0.000106673	-0.000138097	0.002081
APD	0.07	0.11	0.08	1.05	0.001923	9.46%	13.51%	10.48%	0.000182011	0.000259859	0.000201473	0.002019
APH	0.08	0.08	0.085	1.05	0.001216	8.88%	8.88%	9.39%	0.000107996	0.000107996	0.0001141	0.001276
ATVI	0.105	0.08	0.105	1	0.001978	11.16%	8.66%	11.16%	0.000220807	0.000171201	0.000220807	0.001978
AVGO	0.2	0.23	0.33	1.2	0.004013	21.33%	24.35%	34.41%	0.000855971	0.000977084	0.001380792	0.004815
AVY	0.055	0.095	0.065	1.05	0.00042	7.72%	11.76%	8.73%	3.24457E-05	4.94399E-05	3.66943E-05	0.000441
AWK	0.105	0.08	0.04	0.65	0.000825	12.59%	10.07%	6.03%	0.000103912	8.308E-05	4.97493E-05	0.000536
AXP	0.095	0.03	0.04	1.05	0.003584	11.57%	5.01%	6.02%	0.000414816	0.000179548	0.000215743	0.003763
AYI	0.075	0.195	0.17	1.3	0.000687	7.71%	19.72%	17.22%	5.29177E-05	0.000135389	0.000118207	0.000893
BA	0.14	0.105	0.015	1.05	0.004948	17.81%	14.25%	5.09%	0.000881171	0.000704914	0.000251682	0.005195
BAC	0.25	0.155	0.065	1.45	0.009555	27.24%	17.64%	8.55%	0.002602675	0.001685914	0.000817403	0.013855
BBT	0.085	0.075	0.055	1.05	0.001862	11.78%	10.77%	8.74%	0.000219459	0.000200542	0.000162708	0.001955
BBY	0.09	0.08	0.065	1.15	0.000731	12.04%	11.03%	9.50%	8.80311E-05	8.06138E-05	6.94878E-05	0.000841
BCR	0.075	0.095	0.17	0.8	0.001019	7.97%	9.97%	17.49%	8.11658E-05	0.000101587	0.000178169	0.000815
BDX	0.075	0.095	0.065	0.8	0.002317	9.16%	11.18%	8.15%	0.000212283	0.000259003	0.000188922	0.001854
BEN	0.17	0.045	0.05	1.3	0.001247	19.44%	6.80%	7.31%	0.000242412	8.47967E-05	9.11013E-05	0.001621
BIIB	0	0.115	0.105	1	0.004135	0.00%	11.50%	10.50%	0	0.000475581	0.000434226	0.004135
BK	0.11	0.105	0.06	1.2	0.002583	12.98%	12.48%	7.94%	0.000335324	0.000322289	0.000204974	0.003099
BLK	0.1	0.08	0.05	1.2	0.003651	12.57%	10.55%	7.51%	0.00045898	0.000385072	0.00027421	0.004381
BLL	0.085	0.11	0.265	0.9	0.000672	9.18%	11.69%	27.24%	6.17025E-05	7.8565E-05	0.000183112	0.000605
BMJ	0.03	0.195	0.045	0.8	0.005625	5.73%	22.45%	7.25%	0.00032233	0.001262931	0.000407839	0.0045
BSX	0	0.195	0.17	1	0.001933	0.00%	19.50%	17.00%	0	0.00037692	0.000328597	0.001933
C	0.565	0.12	0.025	1.5	0.008206	58.24%	13.44%	3.88%	0.004779275	0.001102961	0.00031813	0.012308
CA	0.01	0.065	0.02	1.1	0.000813	4.13%	9.71%	5.14%	3.35546E-05	7.89838E-05	4.18145E-05	0.000895
CAG	0.07	0.06	0.055	0.7	0.00114	9.37%	8.36%	7.85%	0.000106863	9.53278E-05	8.95602E-05	0.000798
CAH	0.14	0.14	0.115	0.85	0.001516	16.57%	16.57%	14.04%	0.000251142	0.000251142	0.000212792	0.001288
CAT	0.03	0.04	0.04	1.2	0.002925	6.75%	7.76%	7.76%	0.000197274	0.000227059	0.000227059	0.00351
CB	0.055	0.08	0.085	0.9	0.003553	7.73%	10.26%	10.76%	0.000274637	0.000364427	0.000382384	0.003198
CBG	0	0.1	0.21	1.35	0.00059	0.00%	10.00%	21.00%	0	5.89657E-05	0.000123828	0.000796
CBS	0.11	0.13	0.07	1.2	0.001339	12.52%	14.53%	8.49%	0.000167604	0.000194572	0.000113667	0.001607
CCI	0.325	0.21	0.065	0.85	0.001919	37.14%	25.41%	10.62%	0.000712716	0.000487619	0.0002038	0.001631
CCL	0.04	0.11	0.04	1	0.002092	7.05%	14.15%	7.05%	0.000147484	0.000296115	0.000147484	0.002092
CELG	0	0.275	0.12	1.1	0.005137	0.00%	27.50%	12.00%	0	0.001412752	0.000616474	0.005651
CERN	0	0.135	0.135	1	0.001274	0.00%	13.50%	13.50%	0	0.000172042	0.000172042	0.001274
CHD	0.04	0.075	0.075	0.7	0.000753	5.49%	9.01%	9.01%	4.13212E-05	6.78606E-05	6.78606E-05	0.000527
CHRW	0.07	0.075	0.075	0.85	0.000593	9.57%	10.07%	10.07%	5.67296E-05	5.97312E-05	5.97312E-05	0.000504
CI	0.04	0.125	0.105	0.85	0.00203	4.03%	12.53%	10.53%	8.18359E-05	0.000254443	0.000213829	0.001726
CINF	0.035	0.065	0.03	0.85	0.000751	6.06%	9.10%	5.56%	4.55164E-05	6.83178E-05	4.17162E-05	0.000638
CL	0.07	0.14	0.05	0.75	0.00393	9.28%	16.35%	7.26%	0.000364573	0.000642689	0.000285111	0.002947
CLX	0.07	0.095	0.105	0.65	0.000982	9.64%	12.17%	13.18%	9.46131E-05	0.000119464	0.000129405	0.000638
CMA	0.055	0.065	0.04	1.25	0.000487	7.52%	8.53%	6.01%	3.66677E-05	4.1589E-05	2.92857E-05	0.000609

CMCSA	0.09	0.08	0.04	0.95	0.009731	10.70%	9.70%	5.66%	0.001041537	0.000943435	0.000551025	0.009244
CME	0.065	0.095	0.025	0.8	0.002453	8.78%	11.81%	4.74%	0.000215451	0.000289866	0.000116232	0.001963
CMG	0	0.125	0.14	1	0.000717	0.00%	12.50%	14.00%	0	8.95975E-05	0.000100349	0.000717
CMI	0.07	0.05	0.065	1.25	0.001233	10.48%	8.44%	9.97%	0.000129195	0.00010412	0.000122926	0.001541
CMS	0.065	0.06	0.06	0.65	0.000733	9.57%	9.06%	9.06%	7.00965E-05	6.63785E-05	6.63785E-05	0.000476
CNC	0	0.245	0.265	0.95	0.000706	0.00%	24.50%	26.50%	0	0.000172951	0.00018707	0.000671
CNP	0.045	0.02	-0.01	0.8	0.000623	9.00%	6.44%	3.38%	5.60198E-05	4.01146E-05	2.10284E-05	0.000498
COF	0.13	0.035	0.08	1.15	0.002188	15.36%	5.76%	10.31%	0.000336178	0.000126006	0.000225561	0.002516
COG	0.055	0.39	0.075	1.1	0.000713	5.82%	39.37%	7.82%	4.14886E-05	0.000280728	5.57716E-05	0.000784
COH	0.07	0.04	0.08	1.1	0.00061	10.82%	7.76%	11.84%	6.60076E-05	4.73669E-05	7.22212E-05	0.000671
COL	0.055	0.08	0.11	1	0.000662	7.09%	9.61%	12.64%	4.69604E-05	6.36412E-05	8.36582E-05	0.000662
COO	0	0.145	0.115	0.85	0.000539	0.03%	14.53%	11.53%	1.61739E-07	7.83474E-05	6.2171E-05	0.000458
COP	-0.11	0.07	-0.06	1.35	0.003046	-8.69%	9.53%	-3.63%	-0.000264799	0.000290115	-0.000110656	0.004112
COST	0.085	0.09	0.065	0.75	0.004025	9.73%	10.23%	7.72%	0.000391624	0.000411867	0.000310652	0.003019
CPB	0.055	0.055	0.17	0.65	0.001026	8.10%	8.10%	19.75%	8.31086E-05	8.31086E-05	0.000202601	0.000667
CSCO	0.105	0.06	0.05	1.1	0.009555	14.23%	9.65%	8.63%	0.001359241	0.000921668	0.000824429	0.01051
CSX	0.095	0.08	0.095	1.2	0.001677	12.06%	10.54%	12.06%	0.000202177	0.000176715	0.000202177	0.002012
CTAS	0.095	0.1	0.135	0.95	0.000719	10.45%	10.96%	14.47%	7.51695E-05	7.87814E-05	0.000104065	0.000683
CTL	0	0.095	0.02	0.95	0.000904	7.82%	17.69%	9.90%	7.06642E-05	0.000159866	8.94435E-05	0.000858
CTSH	0	0.125	0.175	1.05	0.001974	0.00%	12.50%	17.50%	0	0.00024671	0.000345394	0.002072
CTXS	0	0.11	0.08	1.25	0.000792	0.00%	11.00%	8.00%	0	8.7087E-05	6.3336E-05	0.00099
CVS	0.16	0.12	0.06	0.85	0.005783	18.03%	13.99%	7.94%	0.001042638	0.000809157	0.000458935	0.004915
CVX	0.025	0.035	0.01	1.15	0.011308	6.83%	7.85%	5.30%	0.000772702	0.000888197	0.000599459	0.013004
CXO	0	0.165	0.02	1.5	0.001009	0.00%	16.50%	2.00%	0	0.000166465	2.01775E-05	0.001513
D	0.08	0.09	0.06	0.7	0.002753	12.01%	13.03%	9.98%	0.000330719	0.000358777	0.000274602	0.001927
DAL	0.265	0.12	0.155	1.25	0.001729	28.88%	14.23%	17.76%	0.000499177	0.000245904	0.000307039	0.002161
DD	0.02	0.065	0.08	1.1	0.003504	4.44%	9.00%	10.52%	0.000155707	0.000315277	0.000368467	0.003854
DE	0.025	-0.02	-0.005	1	0.001586	5.39%	0.82%	2.34%	8.54378E-05	1.30323E-05	3.71675E-05	0.001586
DFS	0.11	0.05	0.16	1.05	0.001409	13.19%	7.13%	18.25%	0.000185869	0.000100468	0.000257036	0.001479
DG	0.355	0.12	0.085	0.75	0.001214	37.22%	13.55%	10.02%	0.000451943	0.000164505	0.000121695	0.000911
DGX	0.085	0.1	0.08	0.9	0.000714	10.45%	11.96%	9.94%	7.46511E-05	8.54673E-05	7.10457E-05	0.000643
DHI	0.14	0.13	0.125	1.4	0.000683	15.12%	14.12%	13.62%	0.000103289	9.64233E-05	9.29905E-05	0.000956
DHR	0.21	0.08	0.025	1.05	0.003215	21.71%	8.67%	3.15%	0.000697935	0.000278618	0.000101215	0.003376
DIS	0.1	0.1	0.055	1	0.00952	11.60%	11.60%	7.06%	0.001103938	0.001103938	0.000672283	0.00952
DISCA	0	0.155	0.05	1.15	0.00061	0.00%	15.50%	5.00%	0	9.45931E-05	3.05139E-05	0.000702
DLPH	0.1	0.155	0.23	1.25	0.001148	11.86%	17.41%	24.97%	0.000136187	0.00019991	0.000286804	0.001436
DLTR	0	0.21	0.27	0.75	0.001131	0.00%	21.00%	27.00%	0	0.000237598	0.000305483	0.000849
DOV	0.03	0.035	0.075	1.2	0.000666	5.50%	6.00%	10.05%	3.65981E-05	3.9968E-05	6.69274E-05	0.000799
DOW	0.09	0.1	0.125	1.4	0.003551	12.90%	13.92%	16.46%	0.000457957	0.000494126	0.000584548	0.004971
DPS	0.07	0.09	0.085	0.7	0.001023	9.43%	11.46%	10.95%	9.64526E-05	0.000117145	0.000111972	0.000716
DRI	0.005	0.15	0.065	0.85	0.000469	4.12%	18.88%	10.23%	1.93183E-05	8.85512E-05	4.79664E-05	0.000399
DTE	0.055	0.06	0.045	0.7	0.001034	8.84%	9.35%	7.82%	9.1436E-05	9.66921E-05	8.09238E-05	0.000724
DUK	0.035	0.04	0.015	0.6	0.003408	7.75%	8.26%	5.71%	0.00026424	0.000281637	0.000194652	0.002045
DVA	0	0.11	0.07	0.9	0.000828	0.00%	11.00%	7.00%	0	9.10357E-05	5.79318E-05	0.000745
DVN	-0.16	0.01	-0.12	1.55	0.001316	-15.48%	1.57%	-11.46%	-0.000203601	2.06928E-05	-0.000150826	0.002039
EA	0	0.14	0.165	1.15	0.001501	0.00%	14.00%	16.50%	0	0.000210114	0.000247635	0.001726
ECL	0.09	0.085	0.095	0.95	0.002083	10.23%	9.73%	10.74%	0.000213131	0.000202656	0.000223606	0.001979
ED	0.03	0.025	0.035	0.55	0.001328	6.53%	6.02%	7.04%	8.67684E-05	8.00112E-05	9.35256E-05	0.000731
EFX	0.07	0.11	0.13	1	0.000956	8.02%	12.04%	14.05%	7.67118E-05	0.000115139	0.000134353	0.000956
EIX	0.095	0.035	0.055	0.65	0.001475	12.32%	6.24%	8.26%	0.000181676	9.1991E-05	0.000121886	0.000959
EL	0.075	0.08	0.035	0.95	0.001964	8.90%	9.40%	4.87%	0.000174809	0.000184695	9.57182E-05	0.001866
EMN	0.105	0.08	0.06	1.3	0.000582	13.45%	10.91%	8.88%	7.82913E-05	6.3532E-05	5.17245E-05	0.000757
EMR	0.03	0.095	0.005	1.1	0.002037	6.65%	13.27%	4.11%	0.000135517	0.000270281	8.36849E-05	0.00224
EQIX	0.235	0.195	0.1	1.05	0.001536	25.67%	21.63%	12.04%	0.000394151	0.000332132	0.000184837	0.001612
EQT	0.05	0.12	0.065	1.05	0.00077	5.16%	12.17%	6.67%	3.9757E-05	9.36922E-05	5.13145E-05	0.000808
ES	0.06	0.06	0.04	0.7	0.001062	9.45%	9.45%	7.42%	0.000100319	0.000100319	7.87326E-05	0.000743
ESRX	0	0.16	0.03	1	0.002684	0.00%	16.00%	3.00%	0	0.000429373	8.05074E-05	0.002684
ETFC	0	0.175	0.07	1.5	0.000468	0.00%	17.50%	7.00%	0	8.18306E-05	3.27322E-05	0.000701
ETN	0.085	0.09	0.075	1.2	0.001747	12.21%	12.72%	11.19%	0.000213339	0.00022223	0.000195558	0.002096
ETR	0.03	0.02	0.03	0.65	0.000877	7.32%	6.30%	7.32%	6.41976E-05	5.52454E-05	6.41976E-05	0.00057
EW	0	0.18	0.12	0.85	0.001541	0.00%	18.00%	12.00%	0	0.00027743	0.000184953	0.00131
EXC	0.025	0.07	0.05	0.7	0.001875	6.18%	10.76%	8.72%	0.000115787	0.000201692	0.000163512	0.001312
EXPD	0.075	0.11	0.12	1	0.000552	9.13%	12.66%	13.66%	5.03763E-05	6.98421E-05	7.54038E-05	0.000552
EXPE	0.18	0.23	0.15	1.25	0.000976	19.05%	24.07%	16.03%	0.000185826	0.000234843	0.000156416	0.00122
F	0.09	0.055	0.1	1.25	0.00285	14.15%	10.57%	15.18%	0.00040326	0.000301068	0.000432458	0.003562
FAST	0.085	0.07	0.09	1	0.000702	11.59%	10.06%	12.09%	8.13819E-05	7.06895E-05	8.4946E-05	0.000702
FB	0	0.365	0.23	0.9	0.022381	0.00%	36.50%	23.00%	0	0.008169198	0.005147714	0.020143
FBHS	0.135	0.145	0.075	1.25	0.000537	14.67%	15.68%	8.64%	7.87984E-05	8.41978E-05	4.64021E-05	0.000671
FDX	0.205	0.135	0.115	1.1	0.002767	21.51%	14.48%	12.47%	0.000595263	0.000400695	0.000345103	0.003044
FE	0.01	0.07	0.015	0.65	0.000888	5.15%	11.27%	5.66%	4.57431E-05	0.00010013	5.02753E-05	0.000577
FFIV	0	0.09	0.135	1.15	0.000481	0.00%	9.00%	13.50%	0	4.33115E-05	6.49672E-05	0.000553
FIS	0.055	0.07	0.05	0.95	0.00152	6.88%	8.39%	6.37%	0.000104507	0.000127455	9.68576E-05	0.001444
FISV	0	0.095	0.035	0.9	0.001353	0.00%	9.50%	3.50%	0	0.000128566	4.73664E-05	0.001218
FITB	0.055	0.03	0.07	1.15	0.000956	8.26%	5.73%	9.78%	7.89717E-05	5.476E-05	9.34987E-05	0.001099
FL	0.05	0.09	0.14	0.9	0.000535	6.68%	10.71%	15.75%	3.57596E-05	5.7345E-05	8.43266E-05	0.000482
FLIR	0.08	0.08	0.1	0.95	0.000259	9.68%	9.68%	11.70%	2.51127E-05	2.51127E-05	3.03407E-05	0.000246
FLR	0.045	0.015	0.07	1.35	0.000419	6.21%	3.18%	8.73%	2.60134E-05	1.33366E-05	3.65773E-05	0.000566
FLS	0.075	0.025	0.075	1.3	0.000375	9.14%	4.10%	9.14%	3.42385E-05	1.5359E-05	3.42385E-05	0.000487
FMC	0.09	0.04	0.14	1.25	0.000392	10.47%	5.44%	15.51%	4.10845E-05	2.13326E-05	6.08364E-05	0.00049
FOXA	0.125	0.12	0.04	1.1	0.00276	14.07%	13.57%	5.51%	0.000388336	0.000374437	0.00015204	0.003035
FSLR	0	0.085	0.07	1.55	0.000217	0.00%	8.50%	7.00%	0	1.84735E-05	1.52135E-05	0.000337
FTI	0	-0.01	0.07	1.25	0.000379	0.00%	-1.00%	7.00%	0	-3.78561E-06	2.64993E-05	0.000473

FTR	0.005	0.135	0.07	1.15	0.000303	10.22%	23.85%	17.04%	3.10049E-05	7.23393E-05	5.16721E-05	0.000349
GD	0.065	0.07	0.02	0.95	0.002834	8.52%	9.03%	3.98%	0.000241579	0.000255888	0.00011279	0.002692
GE	0.11	0.12	0.02	1.1	0.016891	14.23%	15.24%	5.09%	0.002403349	0.002574847	0.00085987	0.01858
GILD	0.38	0.1	0.075	0.95	0.006505	40.75%	12.43%	9.90%	0.002650649	0.000808258	0.000643759	0.00618
GIS	0.05	0.07	0.065	0.7	0.002319	8.02%	10.05%	9.55%	0.000186085	0.000233152	0.000221385	0.001623
GLW	0.11	0.065	0.055	1.2	0.001437	13.47%	8.92%	7.90%	0.000193508	0.000128099	0.000113564	0.001724
GM	0.125	0.09	0.08	1.25	0.003033	17.48%	13.90%	12.88%	0.000530253	0.000421611	0.00039057	0.003791
GPC	0.065	0.07	0.065	0.95	0.000906	9.17%	9.68%	9.17%	8.31064E-05	8.76944E-05	8.31064E-05	0.000861
GPN	0.085	0.145	0.195	1.1	0.000704	8.55%	14.55%	19.55%	6.02107E-05	0.000102464	0.000137675	0.000774
GPS	0.04	-0.005	0.03	1	0.000539	8.20%	3.61%	7.18%	4.41918E-05	1.94479E-05	3.86932E-05	0.000539
GRMN	0.025	0.015	0.02	1	0.000551	6.80%	5.78%	6.29%	3.75001E-05	3.18708E-05	3.46854E-05	0.000551
GS	0.04	0.13	0.065	1.3	0.004096	5.58%	14.65%	8.10%	0.000228573	0.00060003	0.000331755	0.005324
GT	0.175	0.085	0.09	1.45	0.000509	18.84%	9.78%	10.29%	9.59256E-05	4.98136E-05	5.23754E-05	0.000738
GWV	0.1	0.06	0.01	0.9	0.000799	12.32%	8.28%	3.22%	9.84086E-05	6.6106E-05	2.57278E-05	0.000719
HAL	0.025	0.08	-0.015	1.5	0.002199	4.21%	9.76%	0.18%	9.25997E-05	0.000214563	3.89925E-06	0.003298
HAR	0.105	0.17	0.15	1.55	0.000354	12.26%	18.81%	16.80%	4.33914E-05	6.65931E-05	5.94541E-05	0.000549
HAS	0.065	0.12	0.08	0.9	0.000597	9.15%	14.72%	10.67%	5.46623E-05	8.79288E-05	6.37349E-05	0.000537
HBAN	0.125	0.09	0.075	1.15	0.000473	15.94%	12.39%	10.86%	7.54637E-05	5.86281E-05	5.14128E-05	0.000544
HBI	0.205	0.155	0.26	1.05	0.000592	22.35%	17.31%	27.90%	0.000132384	0.000102522	0.000165233	0.000622
HD	0.13	0.125	0	0.95	0.009537	15.53%	15.03%	2.38%	0.001481537	0.001433285	0.00022693	0.00906
HIG	0.095	0.115	0.1	1.3	0.001003	11.54%	13.56%	12.05%	0.000115775	0.000136031	0.000120839	0.001304
HOG	0.07	0.09	0.055	1.15	0.000557	9.79%	11.82%	8.27%	5.45409E-05	6.58282E-05	4.60753E-05	0.00064
HOLX	0	0.21	0.1	1.1	0.000644	0.00%	21.00%	10.00%	0	0.000135274	6.44161E-05	0.000709
HON	0.1	0.09	0.095	1.05	0.005329	12.14%	11.13%	11.64%	0.000647071	0.000593236	0.000620153	0.005596
HP	-0.055	-0.06	0.015	1.5	0.000386	-0.93%	-1.44%	6.24%	-3.58922E-06	-5.56585E-06	2.40836E-05	0.000579
HRB	0.04	0.1	0.03	0.85	0.000303	7.90%	14.01%	6.88%	2.39173E-05	4.24377E-05	2.08305E-05	0.000257
HRL	0.125	0.14	0.125	0.75	0.001198	14.24%	15.75%	14.24%	0.000170554	0.000188664	0.000170554	0.000898
HRS	0.065	0.075	0.06	1.05	0.000679	8.94%	9.95%	8.43%	6.06419E-05	6.75077E-05	5.7209E-05	0.000713
HSIC	0	0.09	0.075	0.95	0.000082	0.00%	9.00%	7.50%	0	7.38446E-05	6.15372E-05	0.000779
HSY	0.075	0.055	0.13	0.7	0.001227	10.17%	8.14%	15.74%	0.000124715	9.98653E-05	0.000193053	0.000859
HUM	0.11	0.095	0.11	0.8	0.001573	11.70%	10.19%	11.70%	0.000183955	0.000160286	0.000183955	0.001258
IBM	0.065	0.005	0.16	0.9	0.008946	10.27%	4.16%	19.94%	0.000918595	0.000372061	0.001783941	0.008051
ICE	0.11	0.135	0.085	0.8	0.002003	12.28%	14.79%	9.76%	0.000245862	0.000296232	0.000195491	0.001602
IFF	0.1	0.07	0.015	0.9	0.000677	11.89%	8.86%	3.31%	8.05498E-05	6.00431E-05	2.24476E-05	0.00061
ILMN	0	0.215	0.145	0.85	0.001576	0.00%	21.50%	14.50%	0	0.000338878	0.000228546	0.00134
INTC	0.04	0.095	0.045	1.05	0.010643	6.83%	12.40%	7.33%	0.000726457	0.001319953	0.000780411	0.011176
INTU	0.12	0.13	0.095	1.1	0.001702	13.14%	14.15%	10.63%	0.000223784	0.0002409	0.000180993	0.001873
IP	0.075	0.15	0	1.15	0.001181	11.31%	18.95%	3.67%	0.000133546	0.000223749	4.33438E-05	0.001358
IPG	0.17	0.13	0.08	1.15	0.000553	20.18%	16.12%	11.05%	0.000111626	8.91751E-05	6.11109E-05	0.000636
IR	0.1	0.1	0.095	1.2	0.001022	12.04%	12.04%	11.53%	0.000122971	0.000122971	0.000117813	0.001226
ISRG	0	0.115	0.145	0.85	0.001658	0.00%	11.50%	14.50%	0	0.000190633	0.000240363	0.001409
ITW	0.11	0.105	0.025	1.05	0.002547	13.29%	12.78%	4.70%	0.000338482	0.000325608	0.000119636	0.002674
IVZ	0.105	0.07	0.01	1.4	0.000764	14.29%	10.73%	4.62%	0.000109207	8.19761E-05	3.52942E-05	0.00107
JBHT	0.13	0.125	0.225	0.9	0.000537	14.18%	13.68%	23.73%	7.62215E-05	7.35194E-05	0.000127562	0.000484
JCI	0.09	0.12	0.07	1.3	0.001719	11.70%	14.73%	9.67%	0.000201052	0.000253287	0.00016623	0.002235
JEC	0	0.04	0.055	1.25	0.000374	0.00%	4.00%	5.50%	0	1.49456E-05	2.05502E-05	0.000467
JNJ	0.085	0.085	0.1	0.75	0.019606	11.38%	11.38%	12.90%	0.002230666	0.002230666	0.002528818	0.014705
JPM	0.06	0.06	0.065	1.25	0.014593	8.97%	8.97%	9.47%	0.001308438	0.001308438	0.001382453	0.018241
K	0.055	0.055	0.1	0.65	0.001637	8.23%	8.23%	12.79%	0.000134742	0.000134742	0.000209368	0.001064
KEY	0.12	0.075	0.075	1.15	0.000623	15.01%	10.45%	10.45%	9.35785E-05	6.51261E-05	6.51261E-05	0.000717
KLAC	0.045	0.1	0.08	1.15	0.000649	7.56%	13.14%	11.11%	4.90363E-05	8.52572E-05	7.20859E-05	0.000746
KMB	0.04	0.1	0.06	0.65	0.002743	6.95%	13.03%	8.98%	0.000190587	0.000357554	0.000246243	0.001783
KMI	-0.085	0.13	0.065	1.2	0.002955	-6.34%	15.41%	8.83%	-0.00018723	0.000455274	0.000261028	0.003546
KO	0.07	0.04	-0.05	0.7	0.011113	10.47%	7.42%	-1.73%	0.001163247	0.000824266	-0.000192675	0.007779
KORS	0	0.06	0.21	1	0.000508	0.00%	6.00%	21.00%	0	3.04613E-05	0.000106615	0.000508
KR	0.125	0.1	0.15	0.8	0.00174	14.16%	11.64%	16.68%	0.000246376	0.000202253	0.000290221	0.001392
KSS	0.1	0.08	0.06	0.95	0.000468	15.02%	12.97%	10.92%	7.0358E-05	6.07649E-05	5.11718E-05	0.000445
KSU	0.105	0.09	0.095	1.15	0.000582	12.05%	10.54%	11.04%	7.01676E-05	6.13668E-05	6.43004E-05	0.00067
L	0	0.125	0.05	0.95	0.000832	0.61%	13.15%	5.63%	5.07295E-06	0.000109344	4.67813E-05	0.00079
LEG	0.065	0.11	0.005	1.1	0.000396	9.35%	13.91%	3.27%	3.69834E-05	5.50292E-05	1.29225E-05	0.000435
LEN	0.1	0.125	0.135	1.4	0.000573	10.39%	12.89%	13.89%	5.95096E-05	7.38571E-05	7.95961E-05	0.000802
LH	0	0.1	0.15	0.85	0.000844	0.00%	10.00%	15.00%	0	8.44478E-05	0.000126672	0.000718
LLL	0.06	0.065	0.035	1	0.000694	7.93%	8.43%	5.40%	5.50468E-05	5.85517E-05	3.75219E-05	0.000694
LLTC	0.03	0.055	0.105	1	0.000846	5.20%	7.73%	12.78%	4.40378E-05	6.54291E-05	0.000108212	0.000846
LLY	0.02	0.095	0.065	0.75	0.005379	4.54%	12.13%	9.09%	0.000243964	0.000652487	0.000489077	0.004035
LM	0.13	0.095	0	1.4	0.000215	15.71%	12.16%	2.54%	3.37676E-05	2.61467E-05	5.46127E-06	0.000301
LMT	0.085	0.08	0.025	0.8	0.004478	11.48%	10.97%	5.40%	0.000514199	0.000491486	0.000241647	0.003583
LNC	0.17	0.07	0.075	1.55	0.000651	19.52%	9.40%	9.91%	0.000127063	6.12046E-05	6.44975E-05	0.001009
LNT	0.045	0.06	0.04	0.75	0.000545	7.52%	9.04%	7.01%	4.09552E-05	4.9249E-05	3.81907E-05	0.000409
LOW	0.145	0.15	-0.025	1	0.003807	16.58%	17.09%	-0.58%	0.000631228	0.000650448	-2.22425E-05	0.003807
LRCX	0.235	0.16	0.075	1.15	0.000885	24.95%	17.40%	8.85%	0.000220909	0.000154079	7.83387E-05	0.001018
LUV	0.31	0.17	0.085	1.15	0.001388	32.24%	18.16%	9.62%	0.000447452	0.000252084	0.000133468	0.001596
LVL	0	0.37	0.145	1.25	0.001017	0.00%	37.00%	14.50%	0	0.000376448	0.000147527	0.001272
LYB	0.06	0.065	-0.01	1.4	0.001966	10.48%	10.99%	3.33%	0.000206007	0.000216049	6.54207E-05	0.002752
MA	0.135	0.11	0.26	1.05	0.006716	14.29%	11.78%	26.84%	0.000959715	0.000791193	0.001802322	0.007052
MAT	0.01	0.055	-0.015	0.85	0.000656	5.75%	10.36%	3.19%	3.77244E-05	6.7927E-05	2.09452E-05	0.000557
MCD	0.05	0.06	-0.06	0.75	0.006004	8.22%	9.23%	-2.95%	0.000493411	0.00055439	-0.00017736	0.004503
MCHP	0.02	0.08	0.07	1.1	0.000789	4.37%	10.44%	9.43%	3.44932E-05	8.23705E-05	7.43909E-05	0.000868
MCK	0.115	0.15	0.135	0.95	0.002278	12.21%	15.72%	14.22%	0.00027809	0.000358081	0.000323799	0.002164
MDLZ	0.085	0.115	0.065	1.05	0.004043	10.32%	13.35%	8.31%	0.00041744	0.000539798	0.000335867	0.004245
MDT	0.095	0.065	0.06	0.95	0.007276	11.55%	8.52%	8.02%	0.00084057	0.00062016	0.000583425	0.006912
MET	0.09	0.065	0.05	1.4	0.002938	12.82%	10.28%	8.75%	0.000376784	0.000301991	0.000257115	0.004113

MHK	0	0.13	0.165	1.25	0.000919	0.00%	13.00%	16.50%	0	0.000119443	0.0001516	0.001148
MKC	0.07	0.075	0.08	0.75	0.000738	8.83%	9.34%	9.84%	6.51817E-05	6.89045E-05	7.26272E-05	0.000554
MLM	0.02	0.245	0.11	1.15	0.000692	2.93%	25.53%	11.97%	2.02643E-05	0.000176636	8.28131E-05	0.000796
MMC	0.08	0.09	0.075	0.9	0.002123	10.07%	11.08%	9.56%	0.000213728	0.000235165	0.00020301	0.00191
MMM	0.1	0.085	0.01	0.95	0.006517	12.59%	11.07%	3.48%	0.000820683	0.000721725	0.000226935	0.006191
MNST	0	0.145	0.24	0.9	0.0017	0.00%	14.50%	24.00%	0	0.000246437	0.000407896	0.00153
MO	0.065	0.105	0.15	0.6	0.007511	10.43%	14.51%	19.10%	0.000783713	0.001089888	0.001434334	0.004507
MON	0.085	0.095	0.17	1	0.002733	10.90%	11.91%	19.50%	0.000297853	0.000325499	0.000532844	0.002733
MOS	0.09	0.005	0.06	1.35	0.000536	14.03%	5.32%	10.95%	7.51812E-05	2.85258E-05	5.87146E-05	0.000724
MPC	0.135	0.055	0.125	1.4	0.001351	17.20%	9.07%	16.19%	0.000232482	0.000122502	0.000218734	0.001892
MRK	0.02	0.06	0.01	0.8	0.010449	4.95%	9.01%	3.93%	0.000517132	0.000941185	0.000411118	0.008359
MRO	-0.14	0.145	-0.01	1.7	0.000756	-12.74%	15.95%	0.34%	-9.63438E-05	0.00012056	2.59485E-06	0.001285
MS	0.3	0.245	0.09	1.6	0.003695	32.85%	27.28%	11.59%	0.001213934	0.00100818	0.000428328	0.005912
MSFT	0.11	0.07	-0.01	1	0.02728	13.85%	9.79%	1.69%	0.003777893	0.002671955	0.00046008	0.02728
MSI	0.095	0.09	-0.19	0.9	0.000761	11.97%	11.47%	-16.86%	9.11587E-05	8.73066E-05	-0.000128408	0.000685
MTB	0.005	0.05	0.085	0.95	0.001103	2.91%	7.46%	11.00%	3.2065E-05	8.23141E-05	0.000121397	0.001048
MTD	0	0.1	0.11	1.15	0.000653	0.00%	10.00%	11.00%	0	6.52976E-05	7.18274E-05	0.000751
MU	0	-0.035	0.075	1.7	0.001097	0.00%	-3.50%	7.50%	0	-3.8385E-05	8.22535E-05	0.001864
MYL	0	0.205	0.17	1.15	0.001298	0.00%	20.50%	17.00%	0	0.000266121	0.000220686	0.001493
NDAQ	0.145	0.1	0.06	1	0.000699	16.45%	11.91%	7.87%	0.000115011	8.32664E-05	5.50491E-05	0.000699
NEE	0.11	0.06	0.05	0.65	0.003546	14.05%	8.98%	7.96%	0.000498186	0.00031832	0.000228347	0.002305
NEM	-0.145	0.09	0.045	0.85	0.001297	-14.27%	9.26%	4.76%	-0.00018504	0.000120107	6.16745E-05	0.001102
NFLX	0	0.35	0.18	0.95	0.002463	0.00%	35.00%	18.00%	0	0.00086207	0.00044335	0.00234
NFX	0	0.115	-0.065	1.7	0.000516	0.00%	11.50%	-6.50%	0	5.92849E-05	-3.35088E-05	0.000876
NI	-0.025	0.015	-0.045	0.85	0.000488	0.08%	4.13%	-1.95%	3.77452E-07	2.01449E-05	-9.50629E-06	0.000415
NKE	0.17	0.185	0.13	0.85	0.005587	18.26%	19.77%	14.24%	0.001020178	0.001104474	0.000795386	0.004749
NLSN	0.06	0.09	0.085	0.95	0.001129	8.42%	11.46%	10.95%	9.51035E-05	0.000129384	0.000123671	0.001073
NOC	0.075	0.075	0.025	0.9	0.002323	9.22%	9.22%	4.18%	0.000214199	0.000214199	9.71035E-05	0.00209
NOV	-0.195	-0.09	0.01	1.25	0.000778	-18.98%	-8.45%	1.58%	-0.000147701	-6.57391E-05	1.23203E-05	0.000973
NSC	0.04	0.065	0.055	1.1	0.001653	6.56%	9.09%	8.08%	0.000108419	0.000150254	0.00013352	0.001818
NTAP	0.055	0.035	0.005	1.1	0.000599	7.67%	5.65%	2.62%	4.5956E-05	3.38431E-05	1.56739E-05	0.000659
NTRS	0.06	0.075	0.055	1.1	0.000943	8.26%	9.77%	7.75%	7.78305E-05	9.21266E-05	7.30652E-05	0.001037
NUE	0.05	0.245	0.075	1.25	0.000914	8.21%	28.01%	10.75%	7.49931E-05	0.000255939	9.81913E-05	0.001142
NVDA	0.09	0.155	0.115	1.1	0.002085	9.74%	16.27%	12.25%	0.000203161	0.000339195	0.000255482	0.002294
NWL	0.07	0.14	0.345	1.1	0.001514	8.50%	15.55%	36.20%	0.00012867	0.000235393	0.000547937	0.001665
OI	0	0.06	0.23	1.5	0.000176	0.00%	6.00%	23.00%	0	1.05759E-05	4.0541E-05	0.000264
OKE	0.07	0.125	0.055	1.3	0.000626	12.30%	17.94%	10.76%	7.70172E-05	0.00011234	6.73838E-05	0.000814
OMC	0.095	0.09	0.015	1	0.00121	12.32%	11.81%	4.21%	0.000149101	0.000142968	5.09624E-05	0.00121
ORCL	0.075	0.06	0.035	1.05	0.009726	9.18%	7.67%	5.15%	0.000892891	0.000745824	0.000500712	0.010212
ORLY	0	0.13	0.215	0.75	0.001613	0.00%	13.00%	21.50%	0	0.000209707	0.000346823	0.00121
PAYX	0.085	0.09	0.04	0.9	0.001303	11.73%	12.24%	7.16%	0.000152907	0.000159525	9.33465E-05	0.001173
PBCT	0.015	0.105	0.025	0.9	0.000295	5.82%	15.02%	6.84%	1.7189E-05	4.43299E-05	2.02046E-05	0.000266
PCAR	0.065	0.1	0.08	1.15	0.001228	10.92%	14.49%	12.45%	0.000134108	0.000178014	0.000152925	0.001412
PCG	0.07	0.12	0.045	0.65	0.001912	10.23%	15.31%	7.69%	0.000195571	0.000292657	0.000147028	0.001243
PCLN	0	0.155	0.255	1.25	0.004348	0.00%	15.50%	25.50%	0	0.000673959	0.001108771	0.005435
PDCO	0.15	0.115	0.08	0.9	0.00028	17.28%	13.74%	10.20%	4.84201E-05	3.85082E-05	2.85964E-05	0.000252
PEG	0.05	0.03	0.05	0.7	0.001322	8.95%	6.91%	8.95%	0.00011828	9.13283E-05	0.00011828	0.000925
PEP	0.045	0.07	0.015	0.75	0.009314	7.36%	9.90%	4.32%	0.000685823	0.000921945	0.000402478	0.006986
PFE	0.065	0.12	0.02	0.85	0.012418	10.12%	15.72%	5.55%	0.001257238	0.001952232	0.000688607	0.010556
PFGE	0.08	0.05	0.075	1.35	0.000861	11.42%	8.37%	10.91%	9.83649E-05	7.21033E-05	9.39879E-05	0.001163
PG	0.05	0.09	0.05	0.65	0.014234	8.09%	12.15%	8.09%	0.00115087	0.001728807	0.00115087	0.009252
PGR	0.145	0.085	0.06	0.8	0.001091	17.56%	11.47%	8.94%	0.000191519	0.000125134	9.74741E-05	0.000873
PH	0.075	0.065	0.035	1.25	0.001001	9.61%	8.60%	5.57%	9.61458E-05	8.60354E-05	5.57042E-05	0.001251
PHM	0.17	0.13	0.08	1.7	0.000409	19.13%	15.09%	10.04%	7.82509E-05	6.17257E-05	4.10692E-05	0.000696
PKI	0.025	0.085	0.115	1.1	0.000365	3.01%	9.02%	12.03%	1.09639E-05	3.29009E-05	4.38693E-05	0.000401
PNC	0.07	0.04	0.055	1.05	0.00266	9.53%	6.49%	8.01%	0.000253377	0.000172603	0.00021299	0.002793
PNR	0.085	0.1	0.055	1.15	0.000676	10.78%	12.30%	7.75%	7.28749E-05	8.31233E-05	5.23781E-05	0.000777
PNW	0.05	0.04	0.035	0.7	0.000527	8.36%	7.35%	6.84%	4.40787E-05	3.8721E-05	3.60421E-05	0.000369
PPG	0.07	0.095	0.045	1.15	0.001647	8.60%	11.12%	6.08%	0.000141669	0.000183151	0.000100188	0.001893
PPL	0.03	0.01	0.01	0.7	0.001455	7.45%	5.40%	5.40%	0.000108334	7.85972E-05	7.85972E-05	0.001018
PRGO	0.11	0.085	0.115	0.8	0.000834	11.65%	9.15%	12.16%	9.71683E-05	7.62594E-05	0.00010135	0.000667
PRU	0.095	0.1	0.07	1.35	0.002108	13.16%	13.66%	10.61%	0.00027731	0.000288034	0.000223693	0.002846
PSX	0.11	0.025	0.04	1.3	0.002509	14.45%	5.81%	7.34%	0.000362482	0.000145769	0.000184012	0.003261
PVH	0	0.06	0.08	1.2	0.000524	0.14%	6.14%	8.15%	7.33625E-07	3.21967E-05	4.26844E-05	0.000629
PWR	0	0.085	0.05	1.3	0.000224	0.00%	8.50%	5.00%	0	1.90603E-05	1.12119E-05	0.000292
PX	0.08	0.065	0.055	0.95	0.002024	10.77%	9.25%	8.23%	0.000217924	0.000187158	0.000166648	0.001923
PXD	0.21	0.365	0.05	1.45	0.001821	21.06%	36.56%	5.05%	0.000383319	0.000665572	9.19599E-05	0.00264
QCOM	0.12	0.045	0.025	0.95	0.005609	15.71%	8.08%	6.04%	0.000881218	0.00045316	0.000339011	0.005329
R	0.05	0.12	0.105	1.35	0.000207	7.80%	14.89%	13.37%	1.6141E-05	3.08275E-05	2.76804E-05	0.000279
RAI	0.1	0.125	0.065	0.65	0.004174	13.96%	16.51%	10.39%	0.000582643	0.000688963	0.000433795	0.002713
RCL	0.205	0.19	0.04	1.3	0.000916	23.49%	21.97%	6.76%	0.000215171	0.000201244	6.19668E-05	0.001191
RF	0.135	0.065	0.06	1.4	0.000737	16.45%	9.35%	8.84%	0.00012128	6.89473E-05	6.52093E-05	0.001032
RHI	0.065	0.09	0.15	1.15	0.000296	8.95%	11.48%	17.55%	2.64904E-05	3.39802E-05	5.19555E-05	0.00034
RHT	0	0.165	0.1	1.2	0.000869	0.00%	16.50%	10.00%	0	0.00014334	8.6873E-05	0.001042
RL	0.05	0.035	0.035	1.15	0.000488	7.12%	5.61%	5.61%	3.47764E-05	2.73759E-05	2.73759E-05	0.000562
ROK	0.1	0.03	0.055	1.15	0.00092	12.82%	5.73%	8.26%	0.000117972	5.27134E-05	7.60202E-05	0.001058
ROP	0.125	0.07	0.1	1	0.001107	13.20%	7.68%	10.69%	0.000146074	8.50145E-05	0.000118319	0.001107
ROST	0.12	0.09	0.15	0.85	0.001521	12.96%	9.95%	15.98%	0.00019721	0.000151368	0.000243052	0.001293
RRC	0	0.135	0.07	1.2	0.000391	0.21%	13.72%	7.22%	8.20527E-07	5.36241E-05	2.82002E-05	0.000469
RSG	0.07	0.085	0.06	0.75	0.001052	9.59%	11.11%	8.58%	0.000100871	0.00011685	9.02188E-05	0.000789
RTN	0.055	0.09	0.065	0.85	0.002467	7.66%	11.19%	8.67%	0.000188885	0.000276122	0.00021381	0.002097
SBUX	0.145	0.16	0.165	0.95	0.004782	16.40%	17.91%	18.42%	0.000784088	0.000856446	0.000880565	0.004542

SCG	0.05	0.045	0.05	0.7	0.000639	8.29%	7.78%	8.29%	5.29391E-05	4.9695E-05	5.29391E-05	0.000447
SCHW	0.04	0.12	0.1	1.3	0.002478	4.92%	12.95%	10.95%	0.000121846	0.000320942	0.000271168	0.003221
SE	0.08	0.115	0.135	1.05	0.001785	11.96%	15.53%	17.57%	0.000213588	0.000277271	0.000313661	0.001875
SEE	0.035	0.16	-0.03	1.05	0.000546	4.90%	17.49%	-1.64%	2.67554E-05	9.54219E-05	-8.95112E-06	0.000573
SHW	0.12	0.11	0.295	0.95	0.001546	13.37%	12.36%	30.98%	0.000206654	0.000191095	0.000478941	0.001469
SIG	0.15	0.13	0.125	1.05	0.00035	16.51%	14.49%	13.99%	5.78019E-05	5.07487E-05	4.89854E-05	0.000368
SJM	0.055	0.075	0.06	0.7	0.000962	7.74%	9.76%	8.25%	7.44789E-05	9.3934E-05	7.93427E-05	0.000674
SLB	0.07	0.1	0.045	1.3	0.006421	9.69%	12.73%	7.16%	0.000622216	0.000817337	0.000459615	0.008347
SNA	0.055	0.095	0.04	1.1	0.000532	7.14%	11.18%	5.63%	3.80096E-05	5.94618E-05	2.9965E-05	0.000585
SNI	0.09	0.09	0.11	1	0.000476	10.70%	10.70%	12.72%	5.09237E-05	5.09237E-05	6.05167E-05	0.000476
SO	0.035	0.04	0.065	0.55	0.003018	7.83%	8.35%	10.90%	0.000236419	0.000251828	0.000328876	0.00166
SPGI	0.12	0.115	0.205	1.15	0.002007	13.25%	12.75%	21.80%	0.000265988	0.000255892	0.000437618	0.002308
SRCL	0	0.065	0.1	0.85	0.000404	0.00%	6.50%	10.00%	0	2.62423E-05	4.03728E-05	0.000343
SRE	0.07	0.08	0.03	0.8	0.001657	9.95%	10.96%	5.89%	0.000164901	0.00018171	9.76627E-05	0.001326
STI	0.175	0.07	0.045	1.25	0.001327	20.11%	9.48%	6.95%	0.00026689	0.000125867	9.22899E-05	0.001659
STJ	0.065	0.055	0.045	1.05	0.001358	8.16%	7.15%	6.15%	0.000110868	9.71757E-05	8.34835E-05	0.001426
STT	0.105	0.055	0.055	1.2	0.001659	12.82%	7.76%	7.76%	0.00021267	0.000128784	0.000128784	0.001991
STX	0.055	-0.005	-0.005	1.4	0.000652	12.61%	6.40%	6.40%	8.21618E-05	4.17165E-05	4.17165E-05	0.000912
STZ	0.3	0.155	0.13	0.95	0.001996	31.14%	16.57%	14.05%	0.000621396	0.000330604	0.000280467	0.001896
SWK	0.045	0.1	0.09	1.05	0.001111	6.42%	11.97%	10.96%	7.13535E-05	0.000133034	0.00012182	0.001167
SWKS	0.285	0.165	0.19	1.4	0.000864	30.17%	18.08%	20.60%	0.000260777	0.00015629	0.000178058	0.00121
SYK	0.075	0.185	0.03	0.95	0.002656	8.83%	19.90%	4.30%	0.000234437	0.000528424	0.00011417	0.002523
SYMC	-0.05	0.05	0.02	1.1	0.000926	-3.83%	6.23%	3.21%	-3.54495E-05	5.76634E-05	2.97295E-05	0.001018
SYI	0.03	0.115	-0.11	0.75	0.001694	5.58%	14.19%	-8.60%	9.45008E-05	0.000240332	-0.000145691	0.001271
T	0.045	0.065	0.075	0.7	0.015162	9.35%	11.39%	12.42%	0.001417105	0.001727525	0.001882735	0.010613
TDC	0	0.035	0.075	1.2	0.000237	0.00%	3.50%	7.50%	0	8.30396E-06	1.77942E-05	0.000285
TEL	0.145	0.085	0.055	1.2	0.001376	16.97%	10.90%	7.86%	0.0002335	0.000149977	0.000108216	0.001651
TGNA	0.04	0.11	0.04	1.4	0.000273	6.69%	13.79%	6.69%	1.82738E-05	3.76387E-05	1.82738E-05	0.000382
TGT	0.085	0.1	0.04	0.8	0.002363	12.15%	13.68%	7.57%	0.000287021	0.00032308	0.000178846	0.00189
TIF	0.055	0.075	0.075	1.1	0.000545	8.07%	10.09%	10.09%	4.399E-05	5.50301E-05	5.50301E-05	0.0006
TJX	0.18	0.11	0.14	0.85	0.003012	19.48%	12.43%	15.46%	0.000586717	0.000374477	0.000465437	0.00256
TMK	0.095	0.075	0.1	0.95	0.000466	10.40%	8.39%	10.90%	4.84718E-05	3.9111E-05	5.0812E-05	0.000443
TMO	0.09	0.13	0.04	1.05	0.003727	9.40%	13.40%	4.39%	0.000350183	0.000499527	0.000163504	0.003913
TRIP	0	0.165	0.175	1.15	0.000536	0.00%	16.50%	17.50%	0	8.83917E-05	9.37488E-05	0.000616
TROW	0.08	0.075	0.01	1.1	0.000995	11.45%	10.94%	4.34%	0.000114401	0.00010895	4.31698E-05	0.001095
TRV	0.055	0.015	0.07	0.85	0.002018	7.86%	3.82%	9.38%	0.000158644	7.70144E-05	0.000189255	0.001715
TSCO	0.16	0.12	0.11	0.95	0.000547	17.52%	13.49%	12.49%	9.58609E-05	7.38241E-05	6.83149E-05	0.00052
TSN	0.16	0.125	0.095	0.75	0.001691	16.93%	13.41%	10.40%	0.000286261	0.000226822	0.000175875	0.001268
TSO	0.13	0.085	0.085	1.35	0.000591	15.82%	11.26%	11.26%	9.34663E-05	6.65314E-05	6.65314E-05	0.000797
TSS	0	0.12	0.145	0.95	0.000524	0.84%	12.89%	15.40%	4.40273E-06	6.7563E-05	8.07214E-05	0.000498
TWX	0.09	0.11	0.03	1.05	0.003615	11.17%	13.19%	5.11%	0.000403941	0.000476995	0.000184777	0.003796
TXN	0.05	0.08	0.08	1.05	0.004196	7.23%	10.27%	10.27%	0.000303571	0.000430828	0.000430828	0.000406
TXT	0.2	0.155	0.08	1.3	0.000641	20.22%	15.72%	8.21%	0.000129686	0.000100795	5.26439E-05	0.000834
UAL	0	0.055	0.205	1.25	0.000988	0.00%	5.50%	20.50%	0	5.43474E-05	0.000202567	0.001235
UHS	0.2	0.12	0.1	1.1	0.000725	20.35%	12.34%	10.34%	0.000147626	8.95041E-05	7.49736E-05	0.000798
ULTA	0	0.23	0.16	0.95	0.000892	0.00%	23.00%	16.00%	0	0.000205112	0.000142686	0.000847
UNH	0.17	0.14	0.1	0.9	0.008041	18.92%	15.89%	11.86%	0.001521417	0.001278048	0.000953557	0.007237
UNM	0.1	0.105	0.065	1.1	0.0005	12.36%	12.87%	8.82%	6.18499E-05	6.43796E-05	4.41423E-05	0.00055
UNP	0.095	0.07	0.05	1.05	0.004754	11.92%	9.39%	7.37%	0.000566698	0.000446468	0.000350284	0.004992
UPS	0.085	0.095	0.145	0.85	0.005779	11.61%	12.62%	17.70%	0.000670776	0.00072943	0.001022697	0.004912
URBN	0	0.135	0.105	0.9	0.000251	0.00%	13.50%	10.50%	0	3.38731E-05	2.63458E-05	0.000226
USB	0.06	0.045	0.08	0.95	0.004448	8.67%	7.15%	10.69%	0.000385561	0.000317973	0.000475678	0.004226
UTX	0.065	0.07	0.08	1	0.005168	9.14%	9.65%	10.66%	0.000472517	0.000498687	0.000551028	0.005168
V	0.155	0.12	0.075	0.95	0.01076	16.30%	12.78%	8.27%	0.001753529	0.00137555	0.000889576	0.010222
VAR	0	0.075	0.13	1	0.000557	0.00%	7.50%	13.00%	0	4.17668E-05	7.23957E-05	0.000557
VFC	0.125	0.125	0.085	1	0.001416	15.26%	15.26%	11.21%	0.000216171	0.000126171	0.00015878	0.001416
VIAB	0.085	0.1	0.16	1.1	0.000852	10.82%	12.34%	18.41%	9.22381E-05	0.000105162	0.000156858	0.000937
VLO	0.165	0.055	0.06	1.3	0.001541	21.18%	9.94%	10.45%	0.000326325	0.000153155	0.000161027	0.002003
VMC	0.39	0.335	0.035	1.2	0.0009	39.85%	34.33%	4.22%	0.000358662	0.000308983	3.80046E-05	0.00108
VNO	0.045	0.225	0.055	1	0.001173	7.06%	25.28%	8.07%	8.27861E-05	0.000296607	9.4665E-05	0.001173
VRSK	0	0.11	0.345	0.8	0.00082	0.00%	11.00%	34.50%	0	9.01786E-05	0.000282833	0.000656
VZ	0.02	0.03	0.055	0.7	0.012793	6.45%	7.48%	10.03%	0.000825682	0.000956434	0.001283315	0.008955
WAT	0	0.07	0.18	1	0.000762	0.00%	7.00%	18.00%	0	5.33396E-05	0.000137159	0.000762
WBA	0.13	0.13	0.075	0.9	0.005343	14.94%	14.94%	9.39%	0.000798114	0.000798114	0.000501589	0.004808
WDC	0.115	-0.005	0.075	1.4	0.000955	15.28%	3.06%	11.20%	0.000145825	2.92225E-05	0.000106958	0.001337
WEC	0.07	0.06	0.07	0.65	0.001188	10.39%	9.38%	10.39%	0.000123539	0.000111459	0.000123539	0.000773
WFC	0.07	0.05	0.04	1.05	0.013838	10.49%	8.45%	7.44%	0.001451285	0.001169869	0.001029161	0.01453
WFM	0.095	5.04	-0.03	0.9	0.000548	11.58%	511.00%	-1.04%	6.34773E-05	0.002800047	-5.69785E-06	0.000493
WHR	0.07	0.105	0.105	1.3	0.000739	9.52%	13.06%	13.06%	7.03131E-05	9.64912E-05	9.64912E-05	0.000961
WM	0.045	0.085	0.025	0.75	0.001695	7.19%	11.24%	5.16%	0.000121868	0.000190566	8.7519E-05	0.001271
WMB	-0.08	0.165	-0.11	1.7	0.001379	-5.49%	19.33%	-8.53%	-7.57439E-05	0.000266412	-0.000117641	0.002344
WMT	0.025	0.02	0.035	0.65	0.013418	5.30%	4.80%	6.32%	0.000711784	0.000643764	0.000847824	0.008722
WU	0.135	0.05	0.24	1	0.000594	16.86%	8.23%	27.53%	0.000100245	4.89183E-05	0.000163649	0.000594
WY	0.045	0.085	0.06	1.15	0.00141	8.46%	12.53%	9.99%	0.000119223	0.000176703	0.000140778	0.001621
WYN	0.06	0.055	0.16	1.1	0.000452	9.00%	8.49%	19.14%	4.06702E-05	3.83771E-05	8.65305E-05	0.000497
WYNN	-0.005	0.065	0.52	1.5	0.000624	1.46%	8.52%	54.47%	9.083E-06	5.32065E-05	0.000340009	0.000936
XEC	-0.05	0.165	0.02	1.45	0.000729	-4.76%	16.77%	2.25%	-3.46629E-05	0.000122222	1.64159E-05	0.001057
XEL	0.06	0.055	0.04	0.6	0.001306	9.36%	8.85%	7.33%	0.00012225	0.000115611	9.56961E-05	0.000784
XL	0.09	0.09	0.08	0.95	0.000613	11.41%	11.41%	10.40%	6.9965E-05	6.9965E-05	6.37645E-05	0.000582
XLNX	0.1	0.085	0.035	1.05	0.000812	12.59%	11.07%	6.01%	0.000102271	8.99395E-05	4.88332E-05	0.000853
XOM	0.04	0.05	0.045	0.95	0.020769	7.69%	8.71%	8.20%	0.00159766	0.001809113	0.001703386	0.019731
XRAY	0.095	0.08	0.17	1	0.000838	10.04%	8.54%	17.56%	8.41997E-05	7.15933E-05	0.000147232	0.000838

XRX	0.105	0.045	0.03	1.25	0.000608	13.76%	7.67%	6.15%	8.36899E-05	4.6639E-05	3.73762E-05	0.00076
XYL	0.085	0.095	0.085	1.05	0.000565	9.73%	10.74%	9.73%	5.5005E-05	6.06914E-05	5.5005E-05	0.000594
YUM	0.09	0.1	0	0.95	0.002164	11.31%	12.32%	2.21%	0.000244745	0.000266624	4.7826E-05	0.002056
ZBH	0.07	0.15	0.05	1	0.001543	7.81%	15.84%	5.80%	0.000120455	0.000244364	8.94777E-05	0.001543
ZION	0.195	0.11	0.04	1.3	0.000372	20.70%	12.15%	5.11%	7.70578E-05	4.52375E-05	1.90326E-05	0.000484
ZTS	0.135	0.11	0.28	1	0.001533	14.29%	11.78%	28.84%	0.000219116	0.00018064	0.000442275	0.001533
				1					10.95%	12.84%	9.65%	0.982301

Capitalization weighted DCF Mkt-return using DPS growth projections	Capitalization weighted DCF Mkt-return using EPS growth projections	Capitalization weighted DCF Mkt-return using BVPS growth projections	Capitalizat ion weighted beta of the VL sample
10.95%	12.84%	9.65%	0.98