

Tactical Asset Allocation Over the Cycle

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Conclusions

- Successful tactical allocation can add significantly to returns
- The economy moves through phases, and asset returns vary with these phases
- Risk-on assets have outperformed over the last few years as the cycle has turned up
- However, the cycle may be moving to slowing
- Sentiment is still high
- Defensive assets outperformed over the last month
- There are chinks in the armour of housing

Great last 12-months for risk-on assets

Risk-on assets have significantly outperformed over the last year

12-Month Return through 6/30/2018		
Risk-on asset	Risk-off asset	Difference
Russell 3000	Bloom Barclays US Agg Gov	
14.8%	-0.6%	15.4%
Russell 3000 Growth	Russell 3000 Value	
22.5%	7.3%	15.2%
Russell 2000	Russell 200	
17.6%	15.4%	2.1%
Bloom Barclays US Agg HY	Bloom Barclays US Agg Gov	
2.6%	-0.6%	3.2%
Cyclical Stocks	Defensive Stocks	
14.6%	-0.9%	15.6%
Russell 3000	FTSE NAREIT	
14.8%	4.8%	10.0%
MSCI EM	MSCI World	
11.4%	7.1%	4.3%
GSCI	Gold	
30.9%	0.9%	30.0%

Source: Source: Spellman, FactSet, Barclays, CRB, Federal Reserve, FTSE NAREIT, MSCI, Russell, S&P, S&P GSCI, cyclical includes consumer discretionary, energy, financials, information technology, industrials, and materials, whereas defensive includes consumer staples, health care, telecommunications services, and utilities..

Asset return leadership changes frequently

Commodities best in 2018

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	06/18
Russell 2000 TR	WTI	WTI	FTSE NAREIT REITs TR	WTI	BB US Agg Gov TR	WTI	Gold	Gold	FTSE NAREIT REITs TR	Russell 2000 TR	FTSE NAREIT REITs TR	Nom TW Dollar, Major	WTI	Russell 200 TR	WTI
47%	34%	40%	34%	57%	12%	78%	30%	10%	20%	39%	27%	16%	45%	23%	23%
FTSE NAREIT REITs TR	FTSE NAREIT REITs TR	GSCI	Gold	GSCI	Gold	BB US Agg High Yield TR	FTSE NAREIT REITs TR	WTI	Russell 1000 TR	Russell 3000 TR	Russell 200 TR	Russell 200 TR	GSCI	Russell 1000 TR	GSCI
38%	30%	39%	23%	41%	6%	58%	28%	10%	16%	34%	13%	2%	28%	22%	10%
Russell 3000 TR	GSCI	Gold	Russell 2000 TR	Gold	Nom TW Dollar, Major	GSCI	Russell 2000 TR	BB US Agg Gov TR	Russell 3000 TR	Russell 1000 TR	Russell 1000 TR	FTSE NAREIT REITs TR	Russell 2000 TR	Russell 3000 TR	Russell 2000 TR
31%	19%	18%	18%	31%	-4%	50%	27%	9%	16%	33%	13%	2%	21%	21%	8%
Russell 1000 TR	Russell 2000 TR	FTSE NAREIT REITs TR	Russell 3000 TR	BB US Agg Gov TR	BB US Agg High Yield TR	Russell 1000 TR	GSCI	FTSE NAREIT REITs TR	Russell 2000 TR	Russell 200 TR	Russell 3000 TR	Russell 1000 TR	BB US Agg High Yield TR	Russell 2000 TR	Russell 3000 TR
30%	18%	8%	16%	9%	-26%	28%	20%	7%	16%	32%	13%	1%	17%	15%	3%
BB US Agg High Yield TR	Russell 3000 TR	Russell 1000 TR	Russell 200 TR	Russell 200 TR	Russell 2000 TR	Russell 3000 TR	Russell 3000 TR	Russell 3000 TR	Russell 200 TR	BB US Agg High Yield TR	BB US Agg Gov TR	BB US Agg Gov TR	Russell 3000 TR	Gold	Russell 200 TR
29%	12%	6%	16%	6%	-34%	28%	17%	5%	16%	7%	5%	1%	13%	14%	3%
Russell 200 TR	Russell 1000 TR	Russell 3000 TR	Russell 1000 TR	Russell 1000 TR	Russell 200 TR	FTSE NAREIT REITs TR	Russell 1000 TR	Russell 200 TR	BB US Agg High Yield TR	WTI	Russell 2000 TR	Russell 3000 TR	Russell 1000 TR	WTI	Russell 1000 TR
27%	11%	6%	15%	6%	-36%	27%	16%	3%	16%	7%	5%	0%	12%	12%	3%
Gold	BB US Agg High Yield TR	Russell 2000 TR	BB US Agg High Yield TR	Russell 3000 TR	Russell 3000 TR	Russell 2000 TR	BB US Agg High Yield TR	GSCI	Gold	FTSE NAREIT REITs TR	Nom TW Dollar, Major	Russell 2000 TR	Russell 200 TR	GSCI	FTSE NAREIT REITs TR
20%	11%	5%	12%	5%	-37%	27%	15%	2%	7%	3%	3%	-4%	11%	11%	1%
GSCI	Russell 200 TR	Russell 200 TR	BB US Agg Gov TR	BB US Agg High Yield TR	FTSE NAREIT REITs TR	Russell 200 TR	WTI	Russell 1000 TR	Nom TW Dollar, Major	Nom TW Dollar, Major	BB US Agg High Yield TR	BB US Agg High Yield TR	FTSE NAREIT REITs TR	FTSE NAREIT REITs TR	BB US Agg High Yield TR
11%	8%	4%	3%	2%	-37%	24%	13%	2%	4%	3%	2%	-4%	9%	9%	0%
WTI	Gold	BB US Agg High Yield TR	GSCI	Russell 2000 TR	Russell 1000 TR	Gold	Russell 200 TR	Russell 3000 TR	BB US Agg Gov TR	GSCI	Gold	Gold	Gold	BB US Agg High Yield TR	BB US Agg Gov TR
4%	5%	3%	0%	-2%	-38%	24%	12%	1%	2%	-2%	-1%	-10%	8%	8%	-1%
BB US Agg Gov TR	BB US Agg Gov TR	BB US Agg Gov TR	WTI	Nom TW Dollar, Major	GSCI	Nom TW Dollar, Major	BB US Agg Gov TR	Russell 2000 TR	GSCI	BB US Agg Gov TR	GSCI	GSCI	BB US Agg Gov TR	BB US Agg Gov TR	Nom TW Dollar, Major
2%	3%	3%	0%	-6%	-43%	4%	6%	-4%	0%	-3%	-34%	-25%	1%	2%	-1%
Nom TW Dollar, Major	Nom TW Dollar, Major	Nom TW Dollar, Major	Nom TW Dollar, Major	FTSE NAREIT REITs TR	WTI	BB US Agg Gov TR	Nom TW Dollar, Major	Nom TW Dollar, Major	WTI	Gold	WTI	WTI	Nom TW Dollar, Major	Nom TW Dollar, Major	Gold
-12%	-8%	-2%	-2%	-18%	-54%	-2%	-3%	-6%	-7%	-28%	-46%	-31%	1%	-1%	-4%

Source: Spellman, FactSet, Barclays, CRB, Federal Reserve, FTSE NAREIT, Russell, S&P GSCI.

Sector return leadership changes frequently

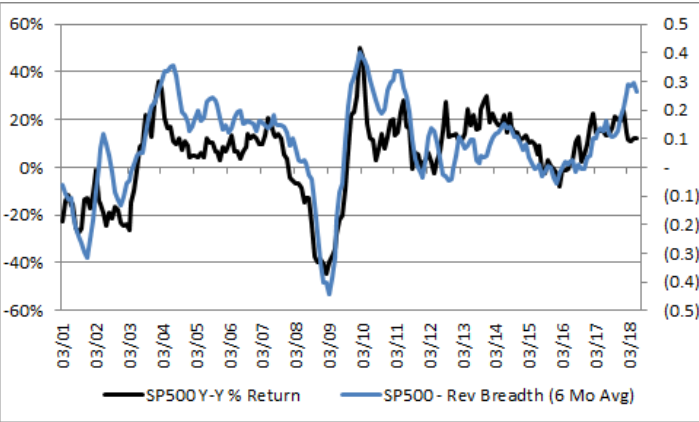
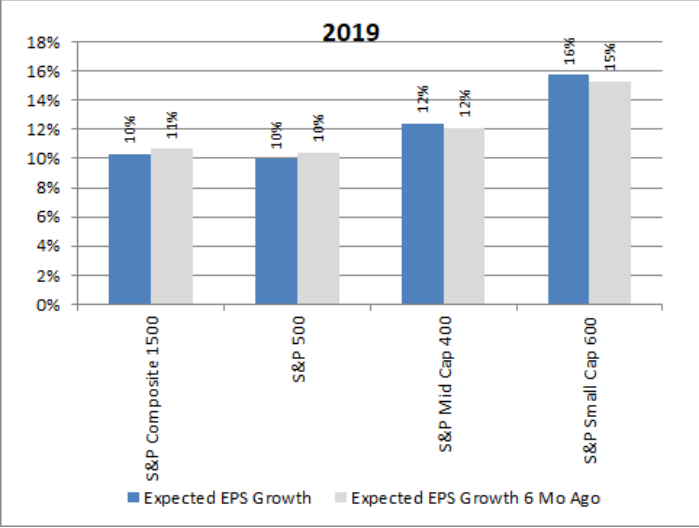
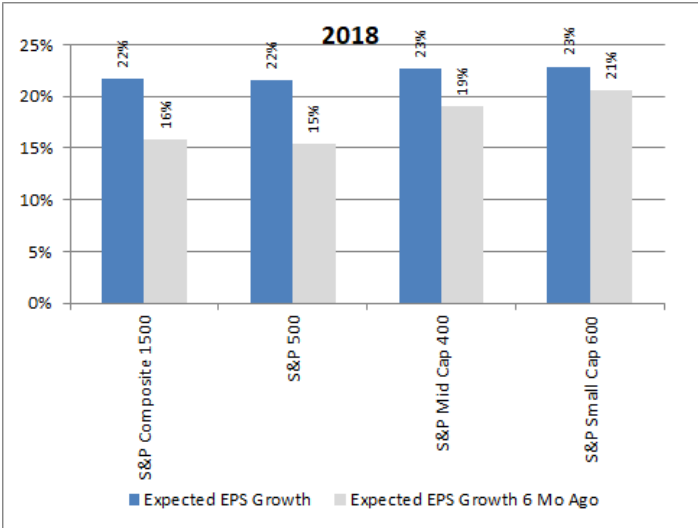
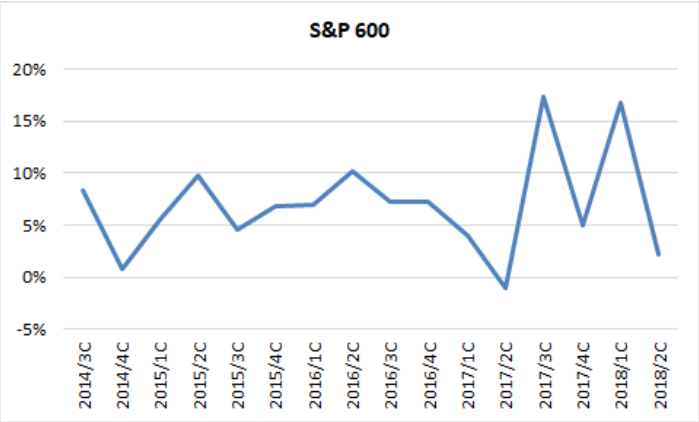
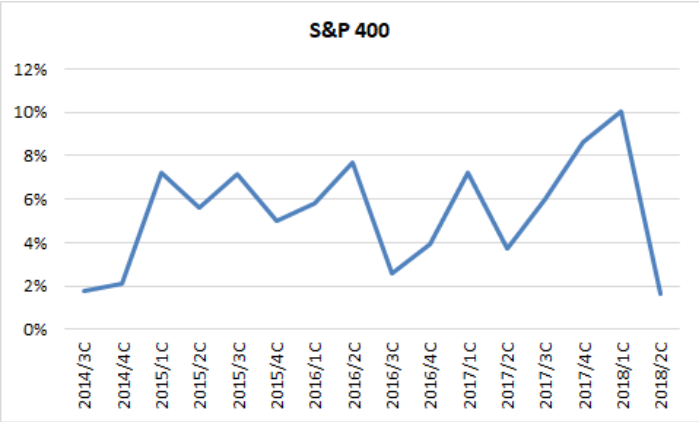
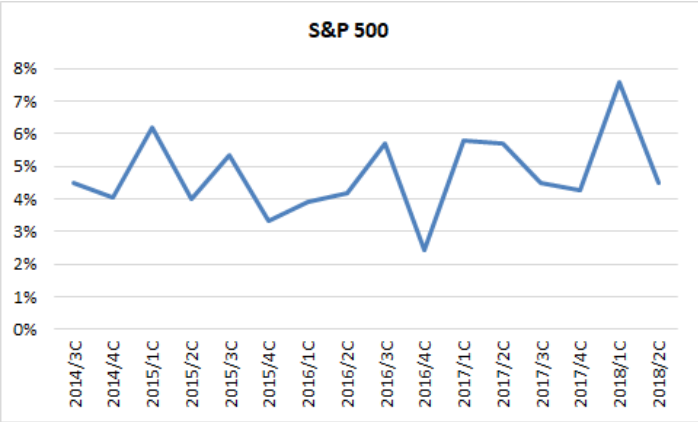
Technology #1 or #2 in 2017 and 2018, and consumer discretionary #1 or #2 in four of last seven years

2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	06/18
CS	IT	E	E	RE	E	CS	IT	RE	U	F	CD	RE	CD	E	IT	CD
-4%	47%	32%	31%	41%	34%	-15%	62%	32%	20%	29%	43%	30%	10%	27%	39%	12%
M	M	RE	U	TS	M	HC	M	CD	CS	CD	HC	U	HC	TS	M	IT
-5%	38%	29%	17%	37%	23%	-23%	49%	28%	14%	24%	41%	29%	7%	23%	24%	11%
RE	CD	U	RE	E	U	DEF_CSHCTS U	CD	I	HC	RE	I	HC	CS	F	CD	E
-10%	37%	24%	13%	24%	19%	-26%	41%	27%	13%	20%	41%	25%	7%	23%	23%	7%
E	CYC_CDEFIIT M	TS	F	U	IT	U	CYC_CDEFIIT M	M	RE	TS	F	IT	IT	I	F	CYC_CDEFIIT M
-11%	33%	20%	6%	21%	16%	-29%	33%	22%	11%	18%	36%	20%	6%	19%	22%	2%
F	I	I	HC	F	CS	TS	RE	E	DEF_CSHCTS U	HC	CYC_CDEFIIT M	CS	RE	M	HC	HC
-15%	32%	18%	6%	19%	14%	-30%	27%	20%	9%	18%	31%	16%	5%	17%	22%	2%
HC	F	CD	CYC_CDEFIIT M	CD	I	CD	I	TS	TS	I	IT	F	TS	U	I	RE
-19%	31%	13%	5%	19%	12%	-33%	21%	19%	6%	15%	28%	15%	3%	16%	21%	1%
CYC_CDEFIIT M	RE	M	M	M	TS	E	HC	CYC_CDEFIIT M	CD	M	CS	DEF_CSHCTS U	DEF_CSHCTS U	CYC_CDEFIIT M	CYC_CDEFIIT M	U
-21%	29%	13%	4%	19%	12%	-35%	20%	18%	6%	15%	26%	15%	0%	15%	19%	0%
DEF_CSHCTS U	U	CYC_CDEFIIT M	CS	DEF_CSHCTS U	DEF_CSHCTS U	I	F	CS	E	IT	M	I	F	IT	CS	M
-23%	26%	13%	4%	17%	11%	-40%	17%	14%	5%	15%	26%	10%	-2%	14%	13%	-3%
CD	E	F	DEF_CSHCTS U	CYC_CDEFIIT M	HC	CYC_CDEFIIT M	CS	F	IT	CYC_CDEFIIT M	E	CD	I	DEF_CSHCTS U	U	F
-24%	26%	11%	2%	15%	7%	-42%	15%	12%	2%	15%	25%	10%	-3%	7%	12%	-4%
I	HC	DEF_CSHCTS U	I	CS	CYC_CDEFIIT M	RE	E	IT	I	CS	DEF_CSHCTS U	M	U	CD	RE	I
-26%	15%	11%	2%	14%	6%	-42%	14%	10%	-1%	11%	19%	7%	-5%	6%	11%	-5%
U	DEF_CSHCTS U	CS	IT	I	CD	IT	U	DEF_CSHCTS U	CYC_CDEFIIT M	DEF_CSHCTS U	U	CYC_CDEFIIT M	CYC_CDEFIIT M	CS	DEF_CSHCTS U	DEF_CSHCTS U
-30%	12%	8%	1%	13%	-13%	-43%	12%	6%	-4%	8%	13%	7%	-5%	5%	8%	-5%
TS	CS	IT	TS	IT	RE	M	DEF_CSHCTS U	U	M	E	TS	TS	M	RE	E	TS
-34%	12%	3%	-6%	8%	-18%	-46%	10%	5%	-10%	5%	11%	3%	-8%	3%	-1%	-8%
IT	TS	HC	CD	HC	F	F	TS	HC	F	U	RE	E	E	HC	TS	CS
-37%	7%	2%	-6%	8%	-19%	-55%	9%	3%	-17%	1%	2%	-8%	-21%	-3%	-1%	-9%

Source: Spellman, FactSet, S&P 500 sectors, CD = consumer discretionary, CS = consumer staples, E = energy, F = financials, HC = health care, I = industrials, IT = information technology, M = materials, RE = real estate, TS = telecommunication services, U = utilities.

Market deserves to be up, and small-cap leading way based on fundamentals?

Strong growth for all markets, but small cap better growth and better surprise, but slightly lower revisions

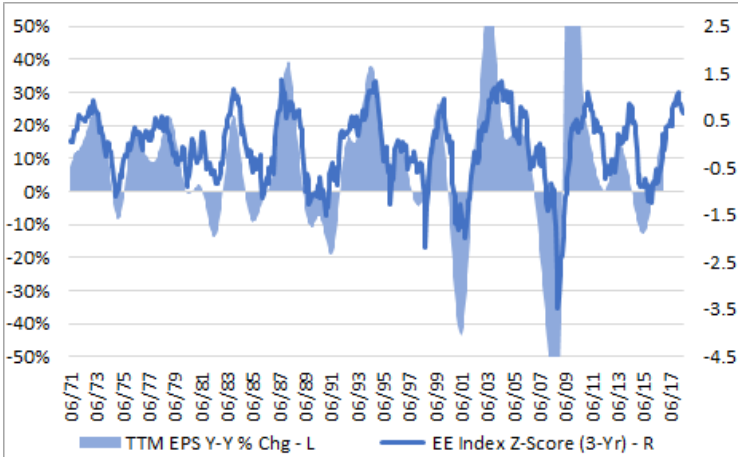


Small-cap more exposure to domestic markets, and is helped (vs large stocks) by stronger dollar, trade war, and tax policy

Source: Spellman, FactSet.

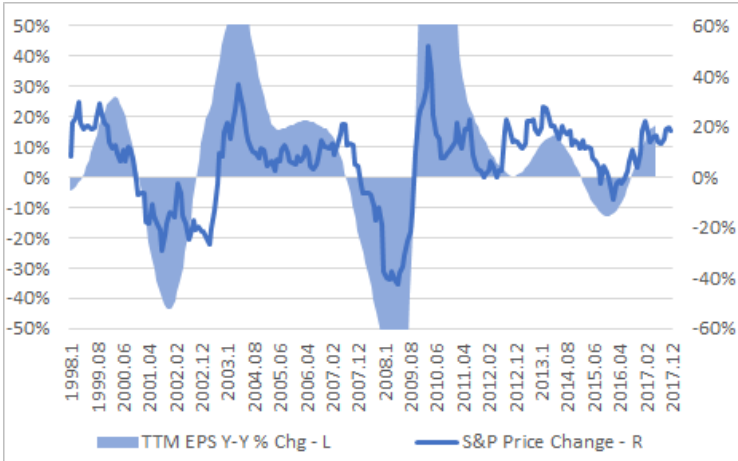
... But the earnings model is peaking, which leads earnings, which leads stocks

Earnings model is peaking, and leads earnings by 12 months



Earnings Expectations (EE) Model (12-Month Leading Indicator)
Yield Curve
Credit Spreads
Manufacturing Outlook Diffusion Index
Capacity Utilization
Change in Unemployment Rate
Capital Expenditure Outlook
Inventory/Sales Ratio
Charge-Offs Consumer Loans
Dollar
CPI Growth

And S&P leads earnings by six months, so returns should be lower going forward

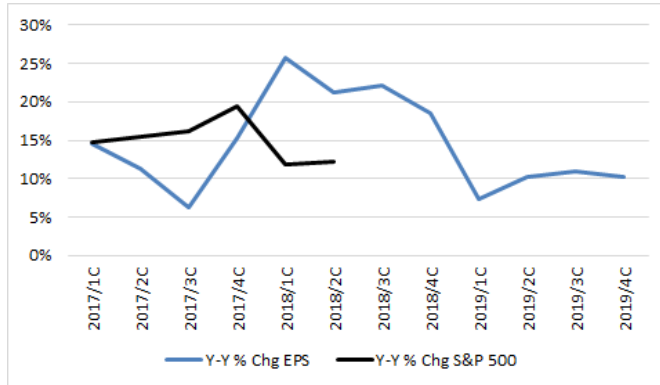


Consensus: S&P 500 quarterly Y-Y growth over 20% from 1Q-3Q 2017, before drop to 7% in 1Q 2018 and about 10% rest of year

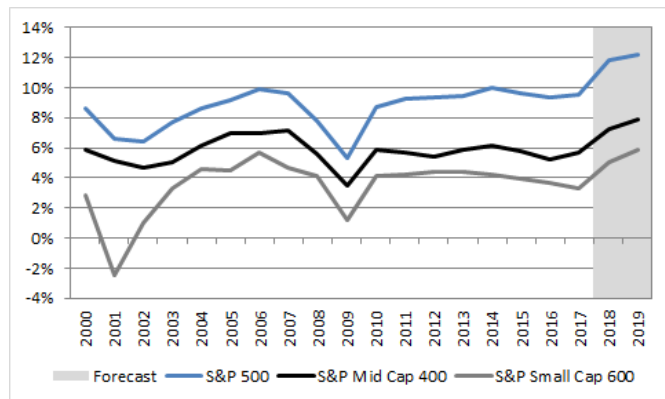
Source: Spellman, FactSet, Shiller data, see <https://coachinvesting.com/2018/01/31/positioning-the-cycle/> for description of the earnings model.

Market set to experience positive but decelerating EPS growth

EPS growth is peaking



...And expectations call for further margin gains in 2019 from record levels



Positive, but slowing, growth happens about 1/5 (58 of 219, or 360 of 1743 months) of the time

	LTM EPS Growth Positive	LTM EPS Growth Zero or Negative	Accelerating LTM EPS Growth	Decelerating LTM EPS Growth	LTM EPS Growth Positive and Accelerating	LTM EPS Growth Positive and Decelerating	LTM EPS Growth Negative and Accelerating	LTM EPS Growth Negative and Decelerating	Total Count
Since 1873 Percent of Months	1061 61%	682 39%	844 48%	899 52%	701 83%	360 40%	143 17%	539 60%	1743
Since 1970 Percent of Months	379 65%	200 35%	281 49%	298 51%	250 89%	129 43%	31 11%	169 57%	579
Since 1980 Percent of Months	290 63%	169 37%	216 47%	243 53%	188 87%	102 42%	28 13%	141 58%	459
Since 1990 Percent of Months	220 65%	119 35%	156 46%	183 54%	139 89%	81 44%	17 11%	102 56%	339
Since 2000 Percent of Months	147 67%	72 33%	96 44%	123 56%	89 93%	58 47%	7 7%	65 53%	219

Percent of months
Percent of months
Percent of months accelerating or decelerating

Source: Spellman, FactSet, Shiller data, annual returns and growth rates, data through March 2018.

Positive and slowing EPS growth historically not harbinger of negative returns

Markets up about 2/3 of time (first column); but odds even better during positive and decelerating EPS environment

	Price Return Positive	Price Return Negative	LTM EPS Growth Positive and Positive	LTM EPS Growth Negative and Positive	LTM EPS Growth Positive and Negative	LTM EPS Growth Negative and Negative	Accelerating LTM EPS Growth Positive	Decelerating LTM EPS Growth Positive	Accelerating LTM EPS Growth Negative	Decelerating LTM EPS Growth Negative	LTM EPS Growth Positive and Accelerating	LTM EPS Growth Positive and Decelerating	LTM EPS Growth Negative and Accelerating	LTM EPS Growth Negative and Decelerating	LTM EPS Growth Positive and Accelerating	LTM EPS Growth Positive and Decelerating	LTM EPS Growth Negative and Accelerating	LTM EPS Growth Negative and Decelerating	Total Count
Since 1873 Percent of Months	1099 63%	644 37%	776 71%	323 29%	285 44%	359 56%	634 58%	465 42%	210 33%	434 67%	544 49%	232 21%	90 8%	233 21%	157 24%	128 20%	53 8%	306 48%	1743
Since 1970 Percent of Months	426 74%	153 26%	299 70%	127 30%	80 52%	73 48%	222 52%	204 48%	59 39%	94 61%	196 46%	103 24%	26 6%	101 24%	54 35%	26 17%	5 3%	68 44%	579
Since 1980 Percent of Months	358 78%	101 22%	249 70%	109 30%	41 41%	60 59%	172 48%	186 52%	44 44%	57 56%	149 42%	100 28%	23 6%	86 24%	39 39%	2 2%	5 5%	55 54%	459
Since 1990 Percent of Months	268 79%	71 21%	204 76%	64 24%	16 23%	55 77%	138 51%	130 49%	18 25%	53 75%	125 47%	79 29%	13 5%	51 19%	14 20%	2 3%	4 6%	51 72%	339
Since 2000 Percent of Months	158 72%	61 28%	135 85%	23 15%	12 20%	49 80%	83 53%	75 47%	13 21%	48 79%	79 50%	56 35%	4 3%	19 12%	10 16%	2 3%	3 5%	46 75%	219

Percent of months positive or negative return

Percent of months positive or negative return during growth regime (positive or negative)

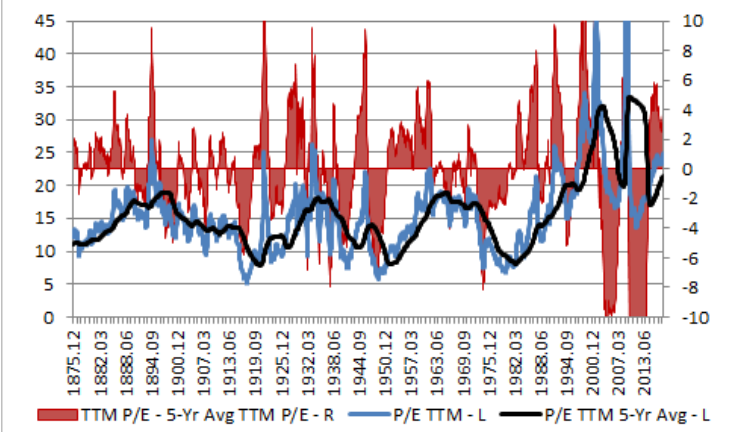
Percent of months positive or negative return during acceleration or deceleration regime

Percent of months positive or negative return during EPS regimes

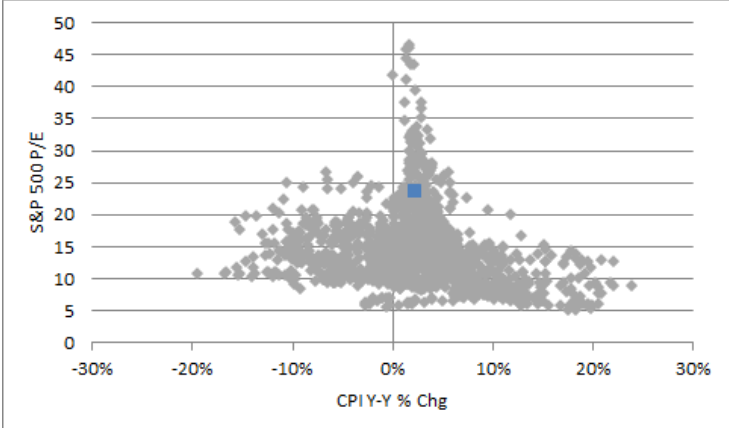
Source: Spellman, Shiller data, annual returns and growth rates, data through March 2018.

High P/E may be justified by discount rate, but it drives down future returns

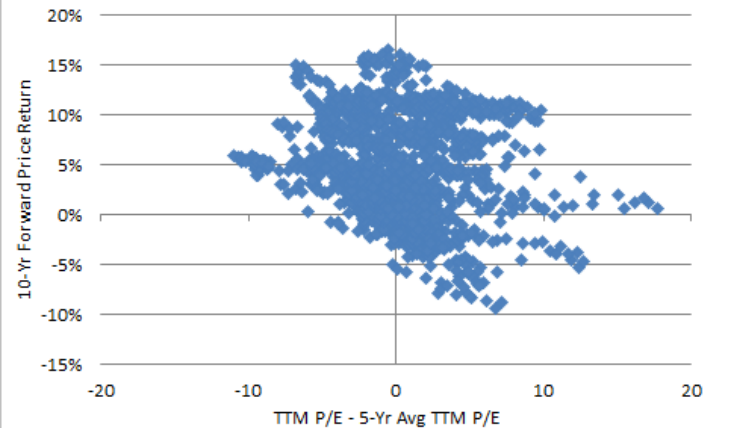
S&P 500 has elevated P/E



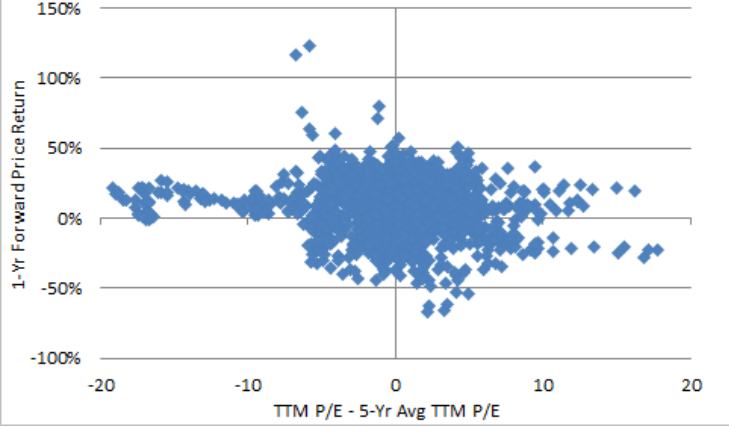
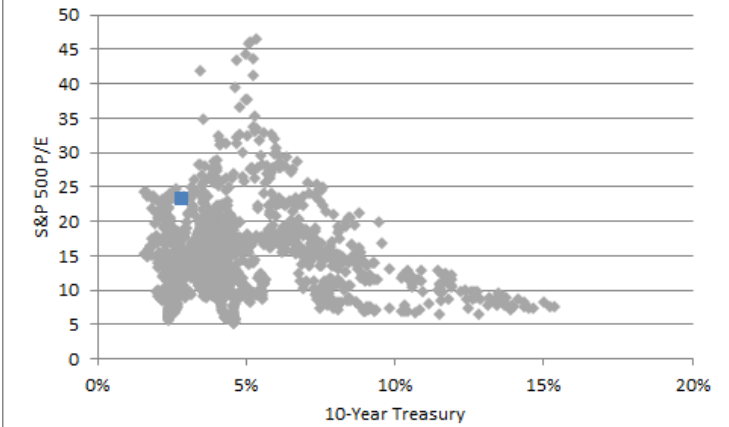
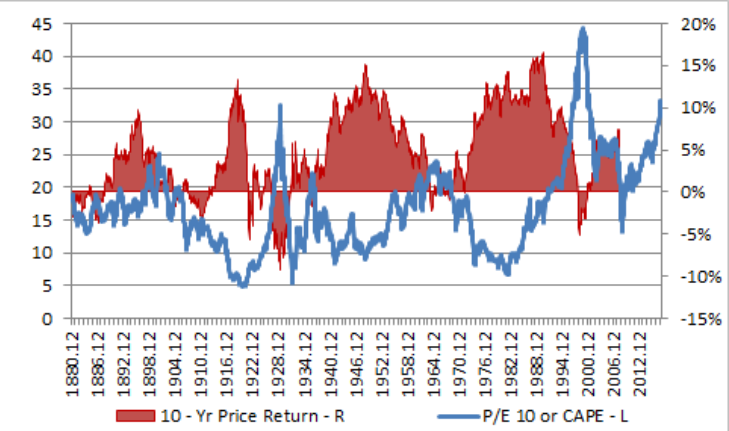
Although, CPI is sweet spot for P/E



Above average P/E => poor returns



Shiller CAPE high leads to low returns



Source: Spellman, Shiller data, annual returns and growth rates, data through March 2018 except returns through June 2018.

If returns are negative, it is more likely that P/E was above average

P/E above average about 50% of time

Below/above average P/E more associated with positive/negative returns

Positive growth slightly more associated with above average P/E

	P/E -1 Above 5-Yr Avg		P/E -1 Below 5-Yr Avg		P/E -1 Above 5-Yr Avg		P/E -1 Below 5-Yr Avg		LTM EPS Growth Positive Above 5 yr Avg	LTM EPS Growth Negative Above 5 yr Avg	LTM EPS Growth Positive Below 5 yr Avg	LTM EPS Growth Negative Below 5 yr Avg	Price Return Positive for P/E-1 Series	Price Return Negative for P/E-1 Series
Since 1873	876	819	503	589	373	230	541	335	497	322	1092	603		
Percent of Months	52%	48%	46%	54%	62%	38%	62%	38%	61%	39%	64%	36%		
Since 1970	275	304	179	247	96	57	167	108	212	92	426	153		
Percent of Months	47%	53%	42%	58%	63%	37%	61%	39%	70%	30%	74%	26%		
Since 1980	247	212	162	196	85	16	142	105	148	64	358	101		
Percent of Months	54%	46%	45%	55%	84%	16%	57%	43%	70%	30%	78%	22%		
Since 1990	174	165	114	154	60	11	95	79	125	40	268	71		
Percent of Months	51%	49%	43%	57%	85%	15%	55%	45%	76%	24%	79%	21%		
Since 2000	100	119	50	108	50	11	56	44	91	28	158	61		
Percent of Months	46%	54%	32%	68%	82%	18%	56%	44%	76%	24%	72%	28%		

Percent of months P/E above or below average

Percent of months positive or negative return during P/E regime (above/below average)

Percent of months P/E above/below average during growth regime (positive or negative)

Percent of months positive or negative return

Source: Spellman, Shiller data, annual returns and growth rates, data through March 2018.

P/E normally below average when growth is positive and decelerating

P/E above average about 50% of time

Below (versus above) average P/E is 3X to 10X more likely with positive but slowing growth

	P/E -1		LTM EPS Growth Positive/ Accel-erating	LTM EPS Growth Positive/ Decel-erating	LTM EPS Growth Negative / Accel-erating	LTM EPS Growth Negative / Decel-erating	LTM EPS Growth Positive/ Accel-erating	LTM EPS Growth Positive/ Decel-erating	LTM EPS Growth Negative / Accel-erating	LTM EPS Growth Negative / Decel-erating	Total
	Above 5-Yr Avg	Below 5-Yr Avg	P/E-1 Above 5-yr Avg	P/E-1 Above 5-yr Avg	P/E-1 Above 5-yr Avg	P/E-1 Above 5-yr Avg	P/E-1 Below 5-yr Avg	P/E-1 Below 5-yr Avg	P/E-1 Below 5-yr Avg	P/E-1 Below 5-yr Avg	
Since 1873	876	819	460	81	101	234	230	267	42	280	1695
Percent of Months	52%	48%	53%	9%	12%	27%	28%	33%	5%	34%	
Since 1970	275	304	155	12	27	81	95	117	4	88	579
Percent of Months	47%	53%	56%	4%	10%	29%	31%	38%	1%	29%	
Since 1980	247	212	130	12	27	78	58	90	1	63	459
Percent of Months	54%	46%	53%	5%	11%	32%	27%	42%	0%	30%	
Since 1990	174	165	87	8	17	62	52	73	0	40	339
Percent of Months	51%	49%	50%	5%	10%	36%	32%	44%	0%	24%	
Since 2000	100	119	52	4	7	37	37	54	0	28	219
Percent of Months	46%	54%	52%	4%	7%	37%	31%	45%	0%	24%	

Percent of months P/E above or below average

Percent of months in earnings growth regime during P/E regime (above/below average)

Source: Spellman, Shiller data, annual returns and growth rates, data through March 2018.

Above average P/E with positive but slowing growth not best situation for returns

Regime exhibits slightly higher percent of total negative returns than positive returns since 1873 and 50:50 since 2000, but was more likely to produce positive returns since 1970

	Price Return for P/E-1 Series	Price Return Negative and for P/E-1 Series	LTM EPS Growth Positive/Accelerating P/E-1 Above 5 yr Avg and Return Positive	LTM EPS Growth Positive/Accelerating P/E-1 Below 5 yr Avg and Return Positive	LTM EPS Growth Positive/Decelerating P/E-1 Above 5 yr Avg and Return Positive	LTM EPS Growth Positive/Decelerating P/E-1 Below 5 yr Avg and Return Positive	LTM EPS Growth Negative/Accelerating P/E-1 Above 5 yr Avg and Return Positive	LTM EPS Growth Negative/Accelerating P/E-1 Below 5 yr Avg and Return Positive	LTM EPS Growth Negative/Decelerating P/E-1 Above 5 yr Avg and Return Positive	LTM EPS Growth Negative/Decelerating P/E-1 Below 5 yr Avg and Return Positive	LTM EPS Growth Positive/Accelerating P/E-1 Above 5 yr Avg and Return Negative	LTM EPS Growth Positive/Accelerating P/E-1 Below 5 yr Avg and Return Negative	LTM EPS Growth Positive/Decelerating P/E-1 Above 5 yr Avg and Return Negative	LTM EPS Growth Positive/Decelerating P/E-1 Below 5 yr Avg and Return Negative	LTM EPS Growth Negative/Accelerating P/E-1 Above 5 yr Avg and Return Negative	LTM EPS Growth Negative/Accelerating P/E-1 Below 5 yr Avg and Return Negative	LTM EPS Growth Negative/Decelerating P/E-1 Above 5 yr Avg and Return Negative	LTM EPS Growth Negative/Decelerating P/E-1 Below 5 yr Avg and Return Negative	Total
Since 1873 Percent of Months	1092 64%	603 36%	334 31%	207 19%	38 3%	192 18%	53 5%	37 3%	78 7%	153 14%	126 21%	23 4%	43 7%	75 12%	48 8%	5 1%	156 26%	127 21%	1695
Since 1970 Percent of Months	426 74%	153 26%	111 26%	85 20%	10 2%	93 22%	22 5%	4 1%	36 8%	65 15%	44 29%	10 7%	2 1%	24 16%	5 3%	0 0%	45 29%	23 15%	579
Since 1980 Percent of Months	358 78%	101 22%	94 26%	55 15%	10 3%	90 25%	22 6%	1 0%	36 10%	50 14%	36 36%	3 3%	2 2%	0 0%	5 5%	0 0%	42 42%	13 13%	459
Since 1990 Percent of Months	268 79%	71 21%	73 27%	52 19%	6 2%	73 27%	13 5%	0 0%	22 8%	29 11%	14 20%	0 0%	2 3%	0 0%	4 6%	0 0%	40 56%	11 15%	339
Since 2000 Percent of Months	158 72%	61 28%	42 27%	37 23%	2 1%	54 34%	4 3%	0 0%	2 1%	17 11%	10 16%	0 0%	2 3%	0 0%	3 5%	0 0%	35 57%	11 18%	219

Percent of months positive or negative return

Percent of months positive or negative return during EPS and P/E regime

Source: Spellman, Shiller data, annual returns and growth rates, data through March 2018.

Technology normally outperforms in rising markets

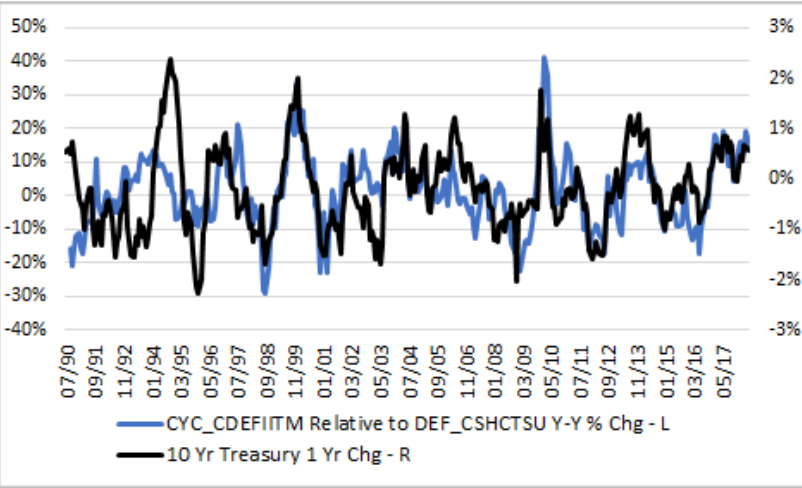
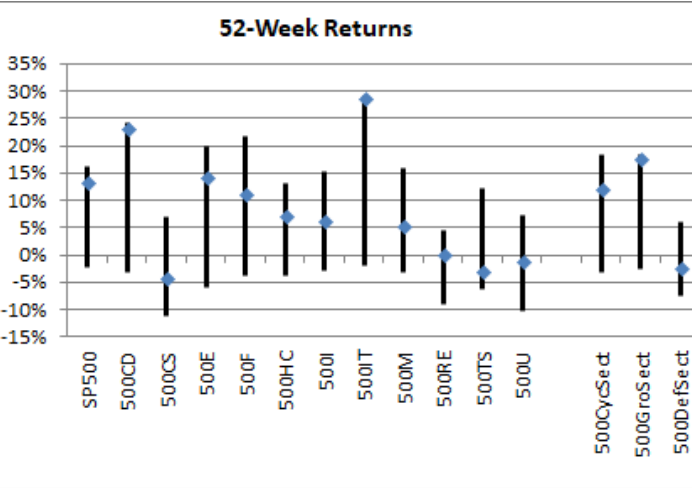
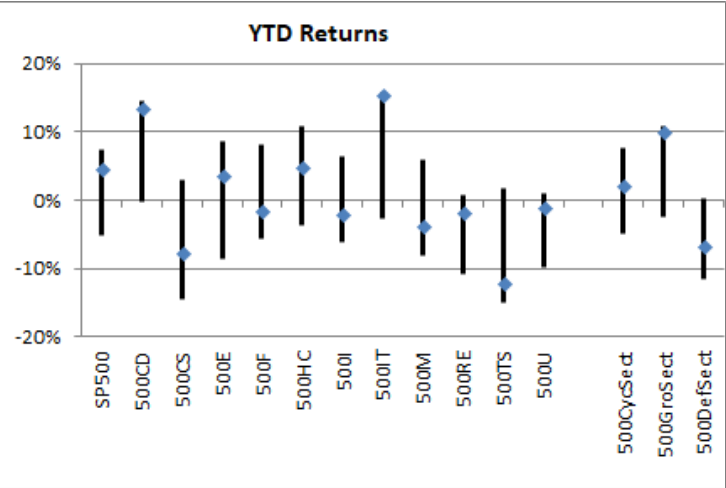
Tech normally outperforms in rising markets, and consumer staples and utilities normally lag

	Sector									
	CD	CS	E	F	HC	I	IT	M	TS	U
% Annual Outperformance	61%	44%	51%	48%	52%	52%	63%	54%	37%	43%
% Outperformance if S&P 500 Up	59%	24%	43%	47%	40%	54%	70%	52%	38%	38%
% Outperformance if S&P 500 Down	66%	95%	72%	52%	83%	45%	45%	58%	33%	56%
Difference	-6.5%	-71.5%	-29.2%	-4.6%	-43.2%	9.0%	24.8%	-5.4%	5.6%	-17.8%
S&P 500										
% Annual Periods Up	72%									

Source: Spellman, FactSet; last 19 years, annual returns measured monthly.

So recent performance is not surprising

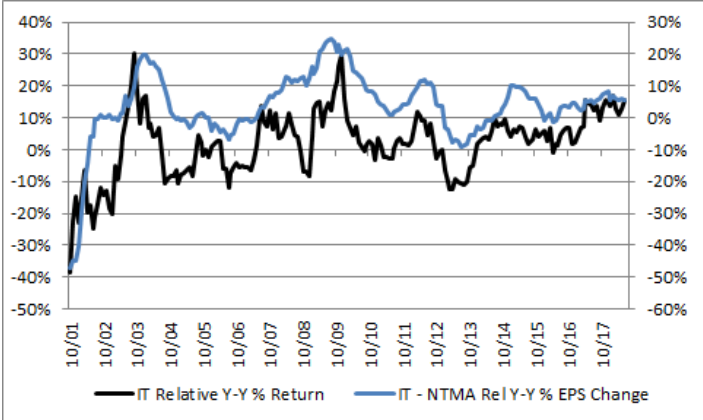
Defensives generally have higher dividend yield so hurt by higher rates



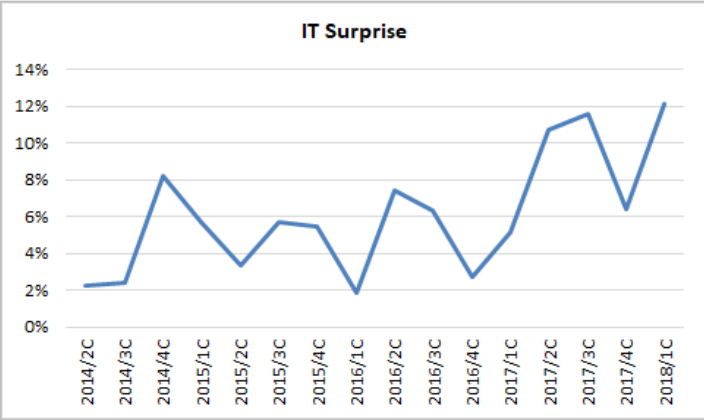
Source: Spellman, FactSet, through June 18, CD = Consumer Discretionary, CS = Consumer Staples, E = Energy, F = Financials, I = Industrials, IT = Information Technology, M = Materials, RE = Real Estate, TS = Telecommunication Services, U = Utilities, table data is for last 19 years with annual returns measured monthly, data is for S&P 500 sectors, defensives = CS, HC, TS, and U, and cyclicals = CD, E, F, I, IT, and M.

And tech past outperformance may be deserved based on fundamentals

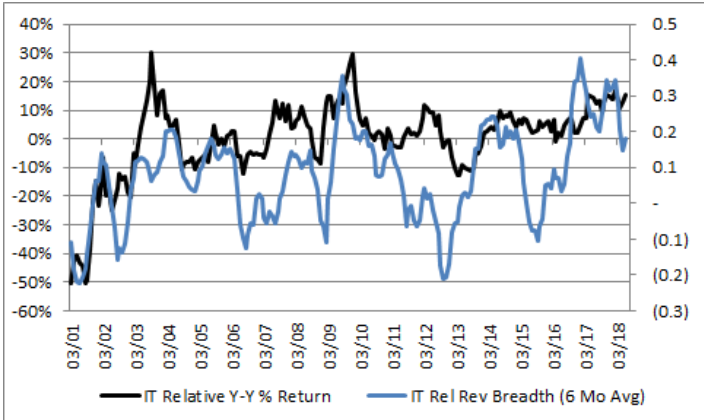
Tech EPS rising faster than market



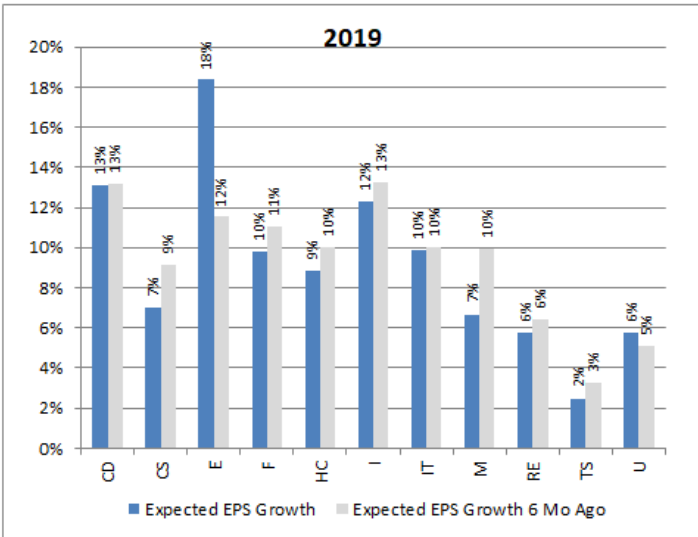
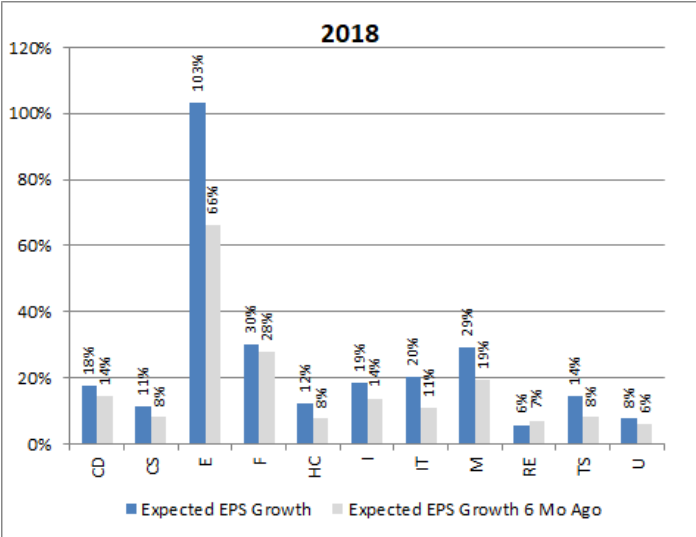
Surprises are strong



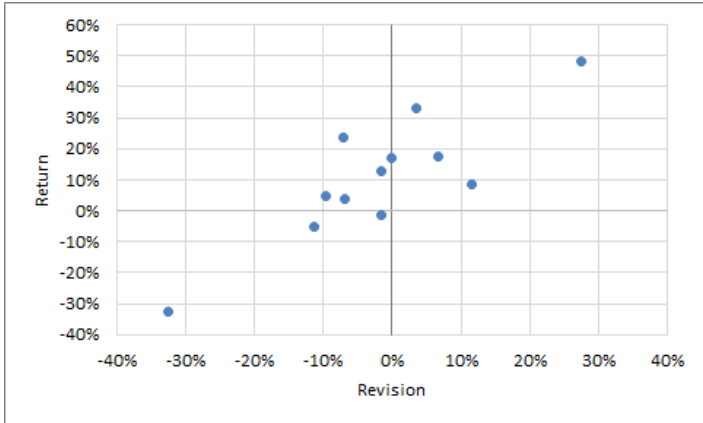
Revision breadth > market, but declining



Tech revisions strong, only Energy better, and in 2019 most sectors down



...and revisions are related to returns

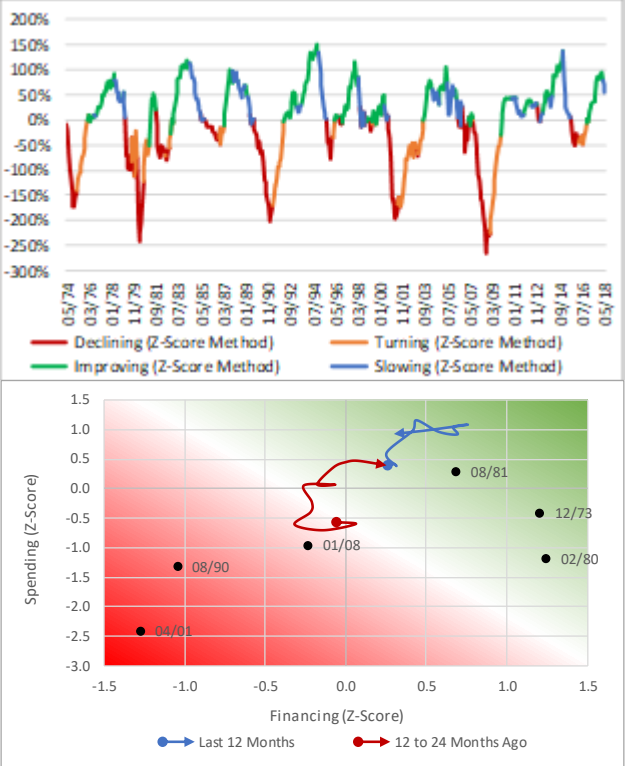


Warning: FAANG stocks pricing in high expectations – difficult for investors to bet against them as they are leading market and large part of indices, so optimists are moving the stocks

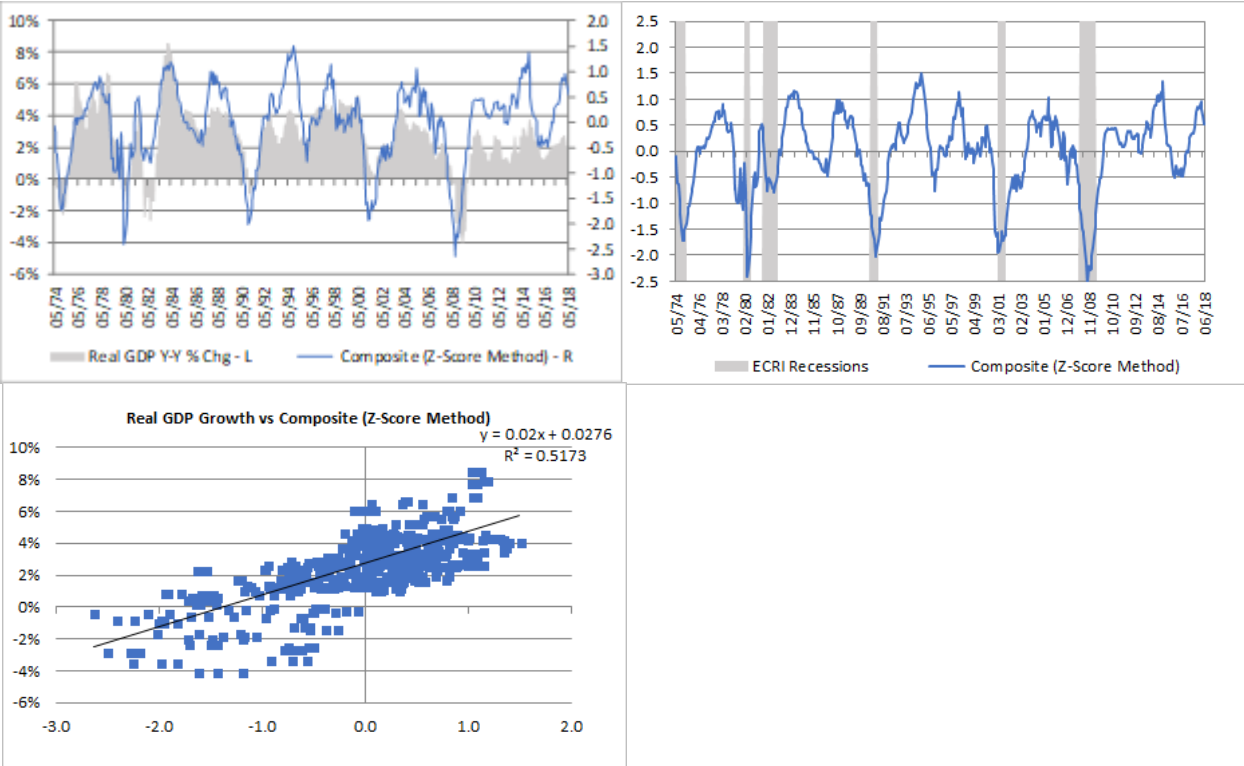
Source: Spellman, FactSet.

... But is cycle now getting late? Moving to slowing (now or soon)?

Cycle moving to peak / slowing



Model highly correlated with GDP

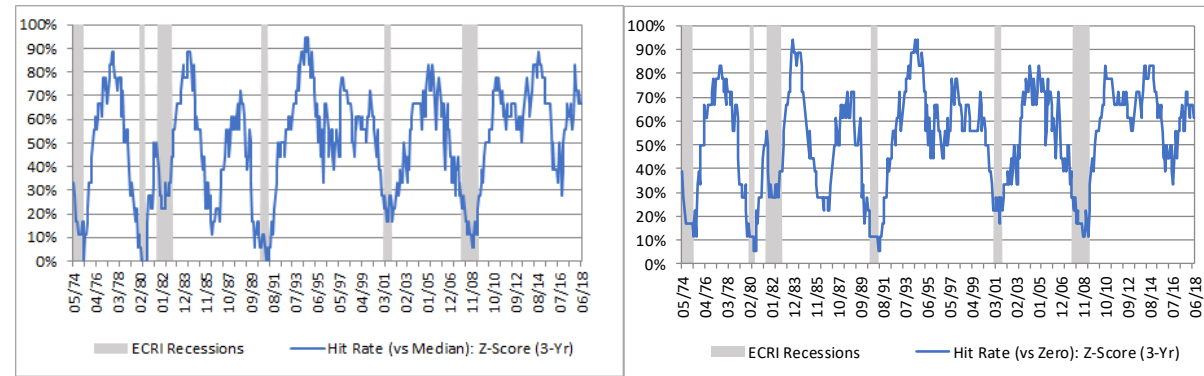


Source: Spellman, FactSet, Barclays, see [Positioning the Cycle](#).

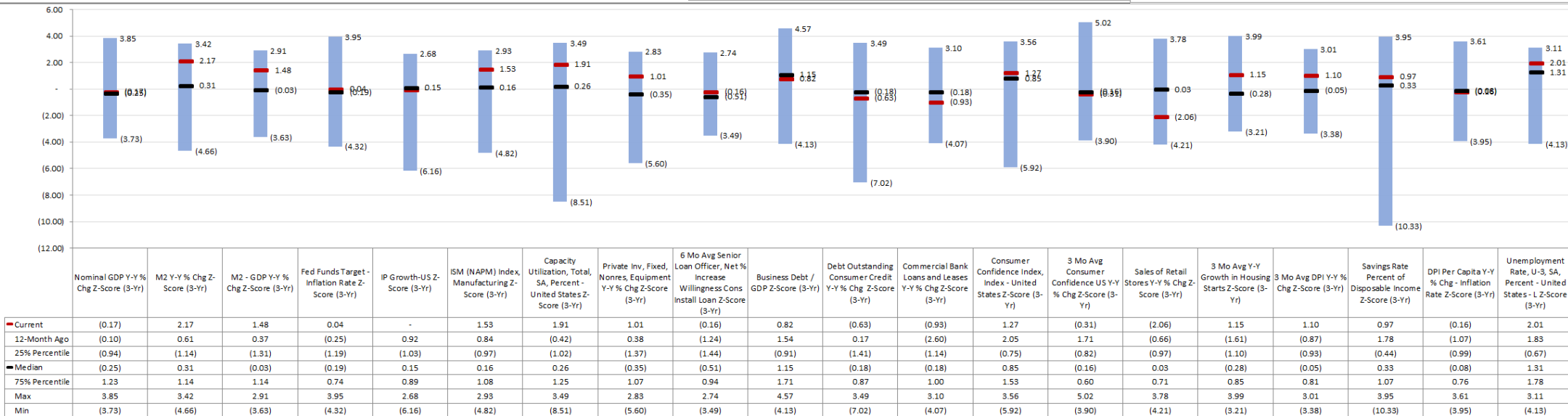
18 variables in model - eleven well positive, four close to neutral, three negative

- Indicating economic strength
 - M2 growth - GDP growth
 - ISM
 - Capacity utilization
 - Private investment
 - 3-mo housing starts
 - 3-mo DPI
 - Industrial production (expected)
- Indicating economic weakness
 - Commercial loans/leases
 - Retail sales

Model peaks with hit rate at 70-85%, current = 67%



Since 11/86

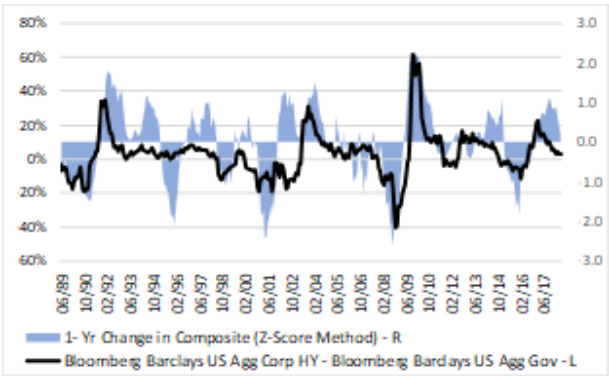
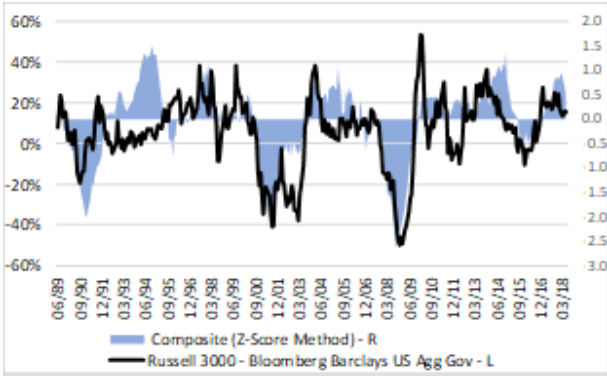
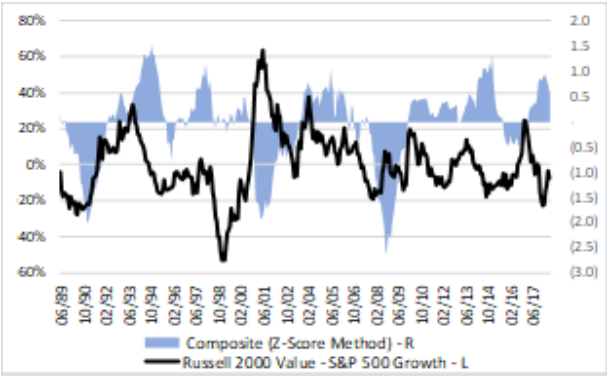


Cycle correlates with asset returns

Monthly Returns 12/90-6/18															
Phase	Russell 3000	Russell 2000	Russell 200	Russell 3000 Growth	Russell 3000 Value	Russell 2000 Value	S&P 500 Growth	FTSE NAREIT	MSCI EM	Dollar	GSCI	Gold	WTI	Bloom Barclays US Agg HY	Bloom Barclays US Agg Gov
Declining															
Average	0.18%	0.37%	0.16%	-0.08%	0.43%	0.69%	0.09%	0.33%	0.46%	0.23%	-0.51%	0.50%	-0.11%	0.46%	0.64%
Median	1.01%	1.67%	0.65%	0.29%	0.90%	1.51%	0.24%	1.19%	0.73%	0.13%	-0.29%	0.10%	0.57%	0.68%	0.51%
Turning															
Average	1.49%	2.17%	1.26%	1.51%	1.46%	2.20%	1.37%	1.92%	3.74%	-0.13%	1.78%	1.03%	2.12%	1.67%	0.34%
Median	2.08%	2.89%	1.48%	2.33%	1.73%	2.56%	1.78%	2.04%	4.24%	-0.29%	1.55%	1.11%	2.20%	1.45%	0.43%
Improving															
Average	1.18%	1.14%	1.18%	1.34%	0.99%	1.06%	1.33%	1.04%	1.84%	0.08%	0.57%	0.16%	1.01%	0.64%	0.37%
Median	1.40%	1.33%	1.38%	1.64%	1.39%	1.43%	1.40%	1.19%	1.97%	0.06%	1.28%	-0.34%	1.86%	0.86%	0.38%
Slowing															
Average	0.70%	0.55%	0.67%	0.56%	0.85%	0.66%	0.63%	0.96%	0.38%	0.03%	-0.17%	0.57%	-0.41%	0.55%	0.50%
Median	0.94%	0.79%	0.97%	1.21%	1.22%	0.98%	0.77%	1.30%	0.18%	0.20%	-0.57%	-0.01%	-1.72%	0.82%	0.57%



Past 1-2 year rally in commodities and dollar, outperformance of stocks (over bonds), growth (over value), and high-yield (over governments) “on schedule”



Source: Spellman, FactSet, Barclays, CRB, Federal Reserve, FTSE NAREIT, MSCI, Russell, S&P, S&P GSCI, phase probability 8/88-6/18.

... although, there is substantial historic variation

The equity market tends to perform better (than government bonds) during turning, improving and slowing phases, but this is not always the case

There is also significant variation in results for growth (versus value), high-yield (versus government), and cyclical (versus defensive) sector returns

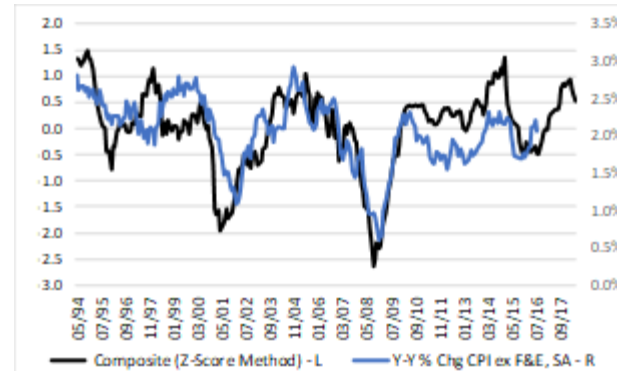
The economy is one of three major factors impacting asset class and sector returns; the other two are overall market returns and expectations as implied in valuations of the assets and sectors



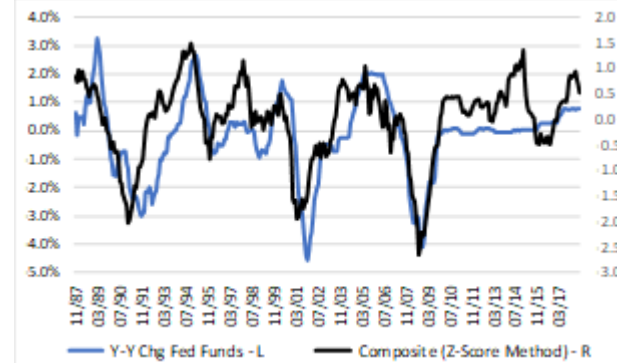
Source: Spellman, FactSet, Barclays, Russell.

Model leads inflation, inflation drives Fed policy, and cycle is inverse with spreads

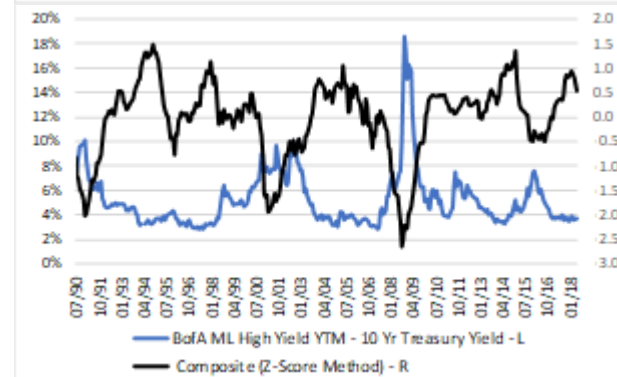
Model suggests inflation will accelerate
(and it is rising)



This leads to restrictive Fed Policy
(and the Fed is raising rates)



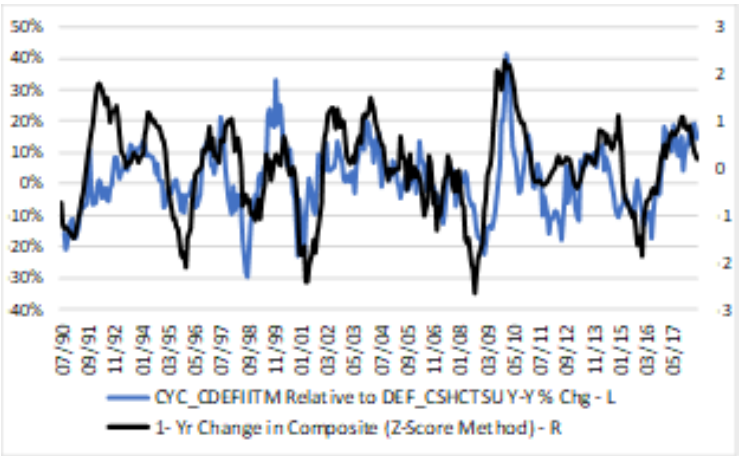
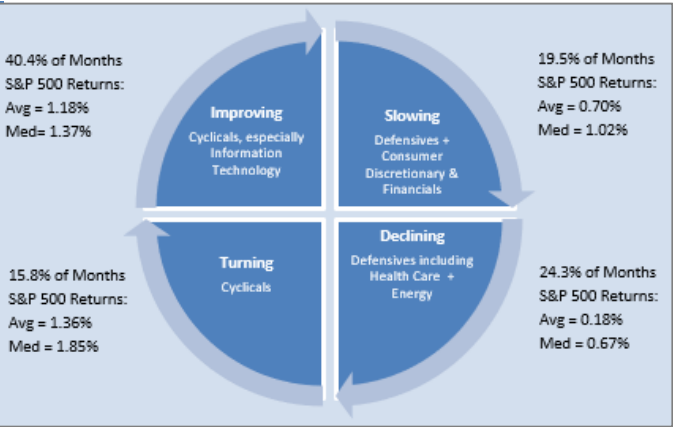
Which leads to widening spreads
(which are tight)



Source: Spellman, FactSet, Federal Reserve System, Merrill Lynch, US Department of Labor.

Cycle correlates with sector returns

Monthly Returns																
Phase	Consumer Discretionary (CD)	Consumer Staples (CS)	Energy (E)	Financials (F)	Health Care (HC)	Industrials (I)	Information Technology (IT)	Materials (M)	Telecommunication Services (TS)	Utilities (U)	Cyclical-CD, E, F, I & M	Defensive-CS, TS & U	Growth-HC, IT	Cyclical-CD, E, F, I, M & IT	Cyclical-E, I & M	Defensive-CS, TS, U & HC
Declining																
Average	0.11%	0.87%	0.95%	-0.31%	0.93%	0.22%	-0.17%	0.56%	0.44%	0.63%	-0.47%	0.10%	-0.25%	-0.52%	-0.09%	0.15%
Median	0.38%	1.26%	0.68%	0.62%	1.28%	1.07%	0.87%	0.76%	1.94%	1.14%	0.49%	1.40%	-0.12%	0.55%	0.11%	1.05%
Turning																
Average	1.81%	1.35%	0.44%	2.34%	0.89%	1.51%	2.07%	2.16%	0.30%	0.25%	1.67%	0.24%	1.43%	1.76%	1.38%	0.34%
Median	2.24%	1.03%	0.42%	2.11%	1.03%	1.94%	2.80%	2.03%	0.40%	1.26%	2.19%	0.89%	2.23%	2.13%	2.11%	0.91%
Improving																
Average	1.19%	0.74%	1.25%	1.10%	1.22%	1.22%	1.90%	0.71%	0.73%	0.83%	0.84%	0.28%	1.35%	1.01%	0.87%	0.43%
Median	1.29%	0.70%	1.26%	1.85%	1.32%	1.21%	1.78%	0.94%	0.82%	1.12%	1.35%	0.24%	1.69%	1.14%	0.85%	0.24%
Slowing																
Average	1.15%	0.88%	0.55%	1.09%	0.70%	0.78%	0.57%	0.47%	0.99%	1.20%	0.29%	0.41%	-0.03%	0.18%	0.06%	0.38%
Median	1.33%	0.84%	1.06%	1.13%	1.05%	0.94%	1.05%	0.63%	1.42%	1.49%	0.55%	0.83%	0.30%	-0.04%	-0.10%	0.74%



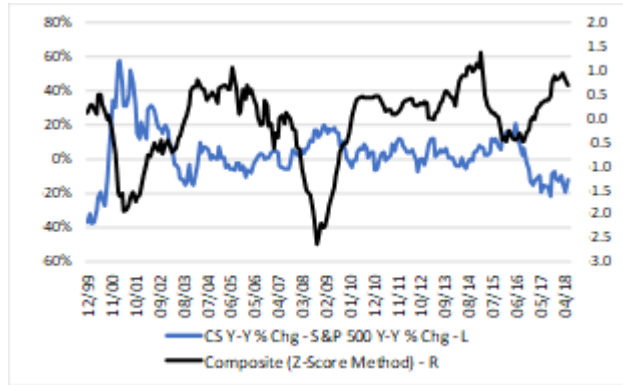
Cyclicals have been on fire as is normal during the turning and improving phases; however, it appears cycle may slow and defensives were up 2.6% and cyclicals were down 0.3% in June

Annual Correlation	
Sector	Cycle Model
Consumer Discretionary	0.50
Consumer Staples	0.17
Energy	0.38
Financials	0.44
HealthCare	0.33
Industrials	0.52
Information Technology	0.55
Materials	0.39
Telecommunication Services	0.45
Utilities	0.33

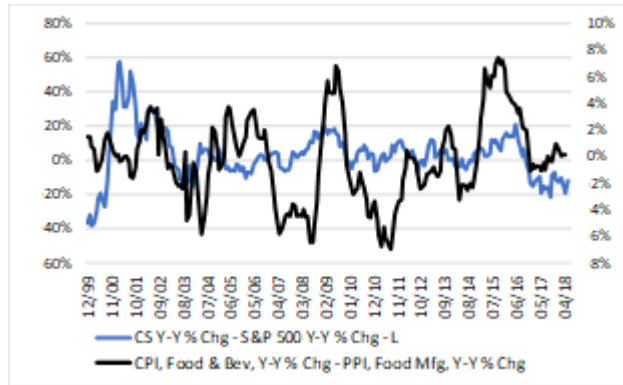
Source: Spellman, FactSet, S&P, S&P 500 sectors, monthly returns for sectors 12/90-6/18, monthly returns for composites 5/98-6/18.

Consumer Staples was hammered over last couple years, but best (+4.5%) in June

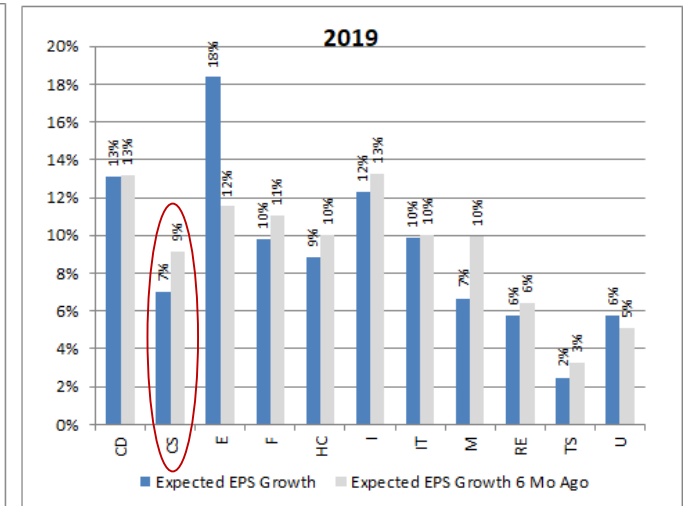
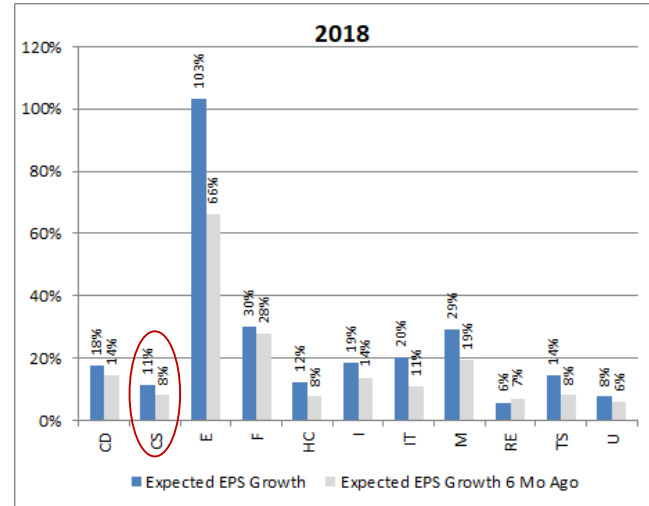
Consumer staples performs poorly as cycle rebounds



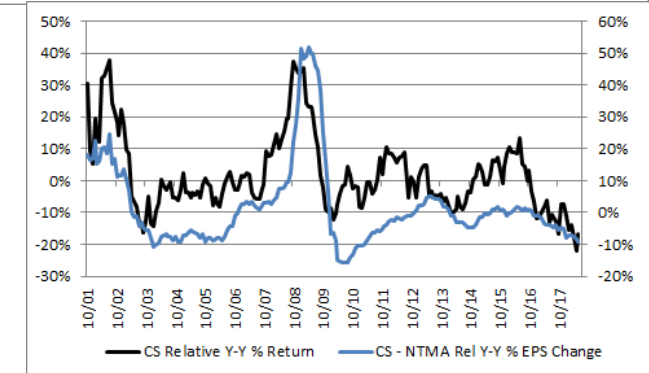
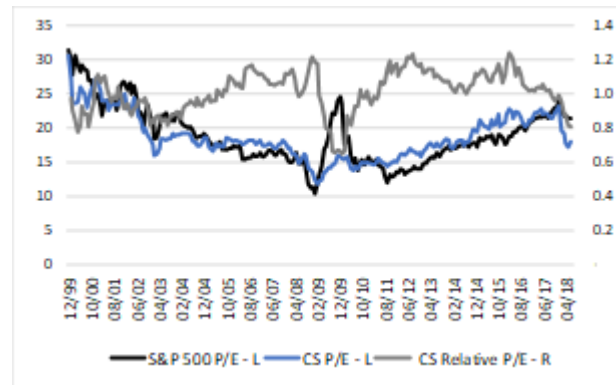
And has been faced with changes in consumer preferences (e.g., away from carbonated beverages) and declining pricing power relative to costs



Staples has moderate growth versus other sectors



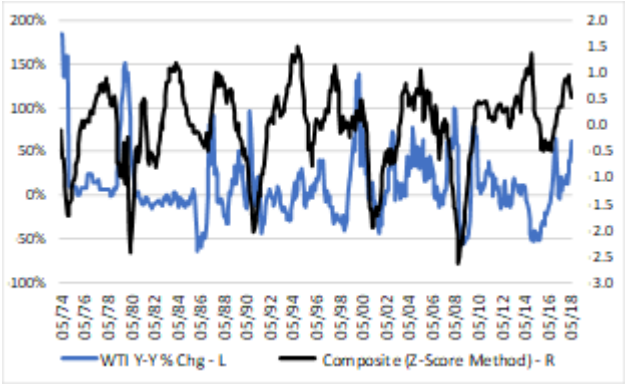
... And now the sector is cheap



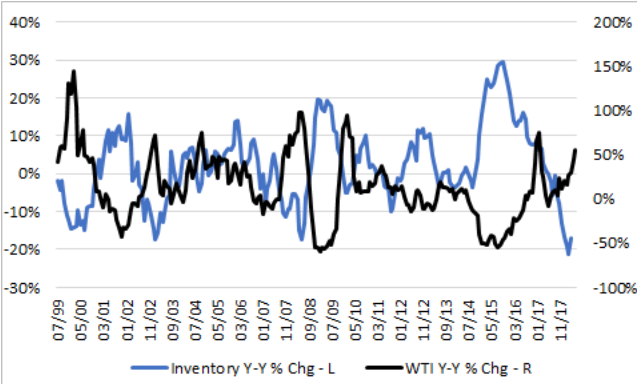
Source: Spellman, FactSet, US Department of Labor.

Energy may be counter-cyclical?

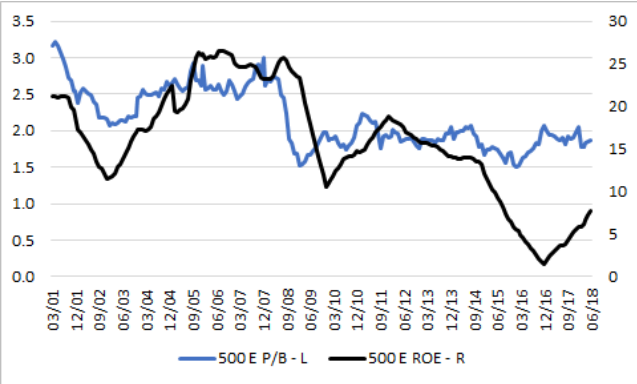
WTI not necessarily tied to cycle
(annual correlation is only 0.11)



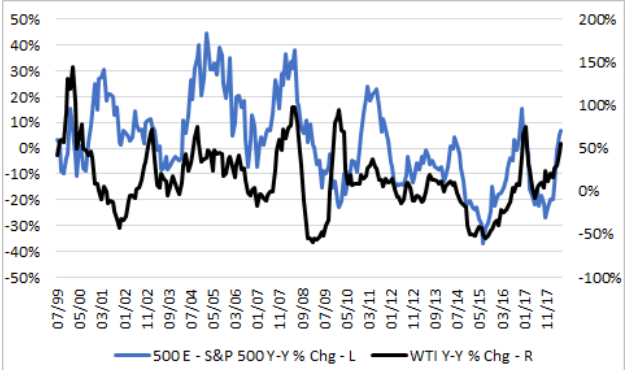
Inventories improved



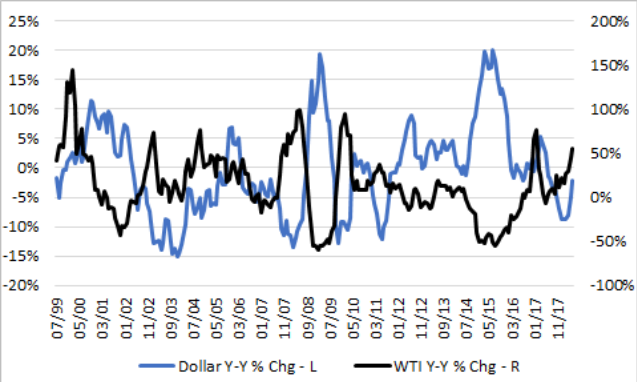
Sector cheap as ROE rebounds?



Energy sector return correlation with cycle is only 0.38, but highly correlated with WTI



But stronger dollar not necessarily good for WTI

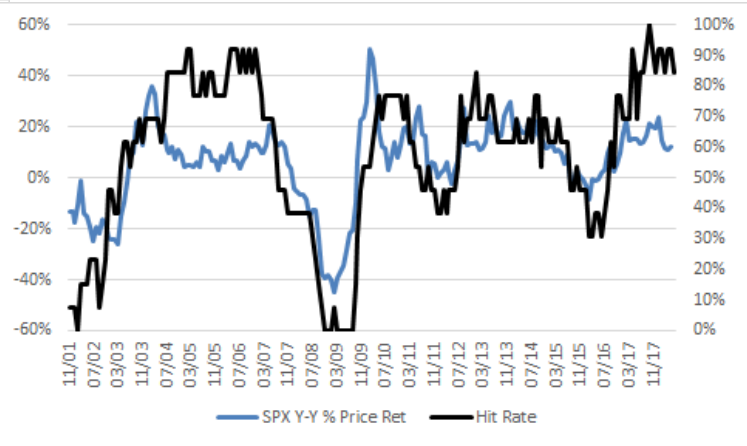
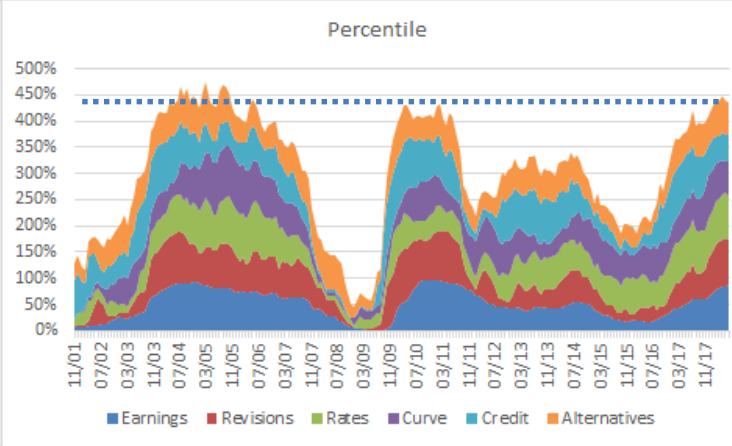
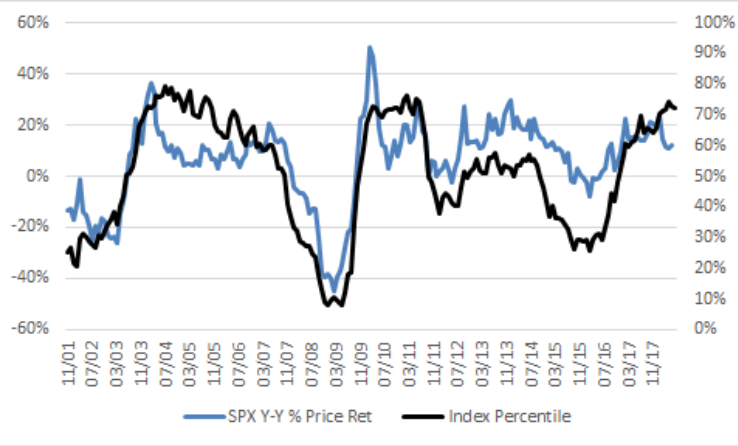


Source: Spellman, FactSet, Federal Reserve System, Commodity Research Bureau, US Department of Energy, World Bank.

Market breather in 1H was reasonable given extremes

- S&P positively or negatively correlated with 13 variables
 - 11 of 13 pointing in same “up” direction
 - Only dollar and gold are outliers
 - Overall composite level *very* lofty
 - Positively correlated with returns
 - Correction earlier in year was on schedule
 - In Nov. '17, all 13 were pointing up

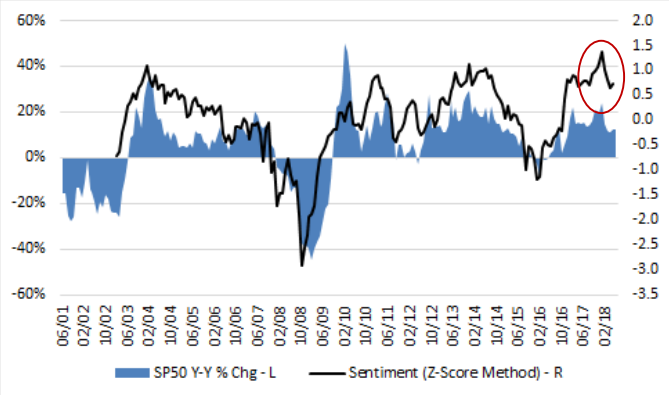
Components of composite		Correlation to SPX Y-Y % change	
100.0% Total		Since January 2001	SPX Y-Y % Price Ret
13.3%	SPX Y-Y % LTM EPS Growth	SPX Y-Y % Price Ret	1.00
13.3%	SPX Y-Y % NTM EPS Growth	SPX Y-Y % LTM EPS Growth	0.51
13.3%	SPX (Up-Down)/(Up+Down) 6 Mo Avg	SPX Y-Y % NTM EPS Growth	0.71
3.3%	Y-Y Chg 10-Yr Treasury	SPX (Up-Down)/(Up+Down) 6 Mo Avg	0.77
3.3%	Y-Y Chg 2-Yr Treasury	Y-Y Chg 10-Yr Treasury	0.60
3.3%	Y-Y Chg Fed Funds	Y-Y Chg 2-Yr Treasury	0.63
3.3%	Y-Y Chg in 10-Yr-Fed Funds	Y-Y Chg Fed Funds	0.62
3.3%	Y-Y Chg in 10-2 Yr Treasury	Y-Y Chg in 10-Yr - Fed Funds	(0.36)
3.3%	Y-Y Chg in Fed Funds - Core CPI	Y-Y Chg in 10-2 Yr Treasury	(0.33)
20.0%	Y-Y Chg in HY - 10-Yr Treasury	Y-Y Chg in Fed Funds - Core CPI	0.62
6.7%	Dollar Broad Y-Y % Chg	Y-Y Chg in HY - 10-Yr Treasury	(0.71)
6.7%	GSCI Price Y-Y % Chg	Dollar Broad Y-Y % Chg	(0.42)
6.7%	Gold Y-Y % Chg	GSCI Price Y-Y % Chg	0.35
		Gold Y-Y % Chg	(0.01)



Source: Spellman, FactSet, Federal Reserve System, Merrill Lynch Fixed Income, S&P GSCI, U.S. Department of Labor.

January sentiment was extreme, now it is just high

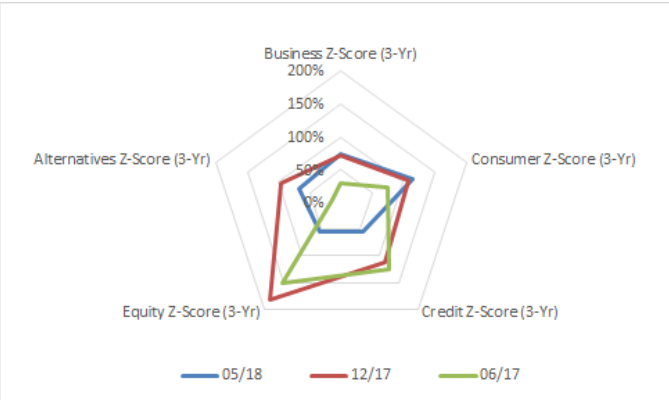
Sentiment off highs, but still lofty



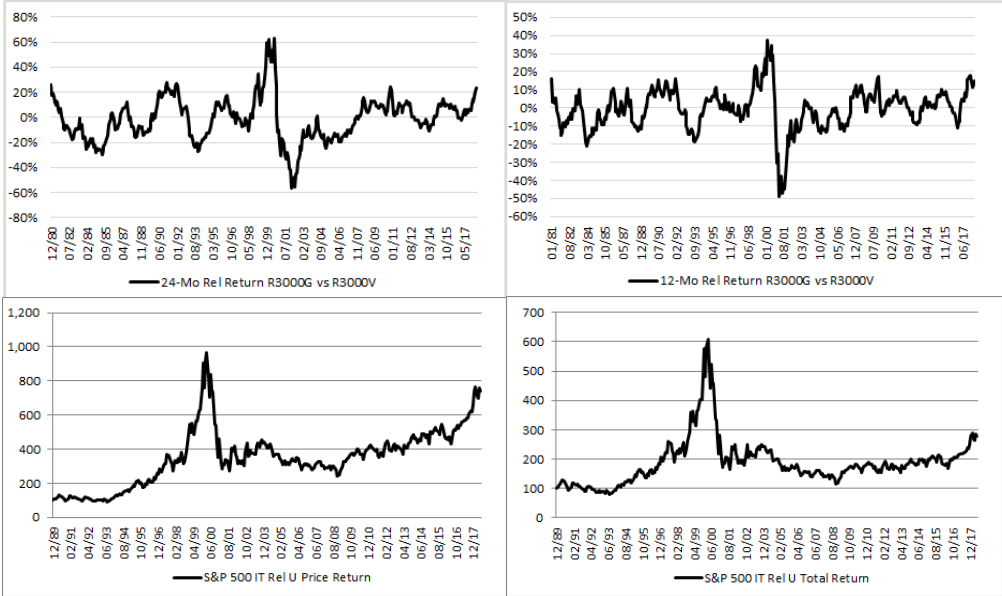
Sentiment indicator includes fundamental and market variables

Fundamentals		
Business	Consumer	
Business Surveys	Consumer Confidence Surveys	
Fixed Investment	AAll Surveys	
Commercial Loan Growth	Stock-Bond Flows	
Financial Markets		
Credit	Equity	Alternatives
Real risk free rate	Valuation (Multiples)	Currency
Inflation expectations	Revisions	Commodities
Yield curve	Advance-Decline	Volatility Index
Credit spreads	Price Bands	Safety/Risk Ratios

Drop attributable to equity variable



A current extreme – growth vs value

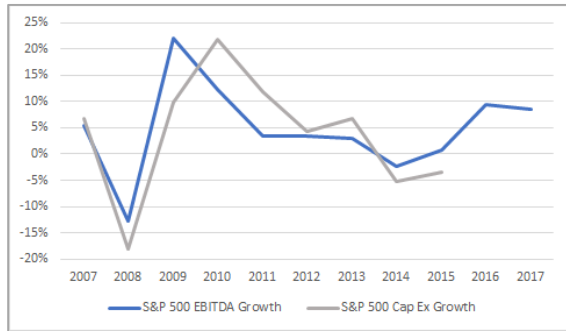


Source: Spellman, FactSet, see paper [Sentiment Rises: Modestly Cautious Readings](#) (on Coach Investing) for more information on sentiment model.

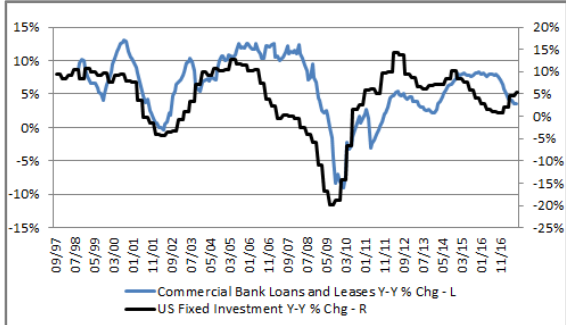
Markets are excited and corporations are as well

- Growth in cap ex, M&A, and IPO activity, but lending slowing

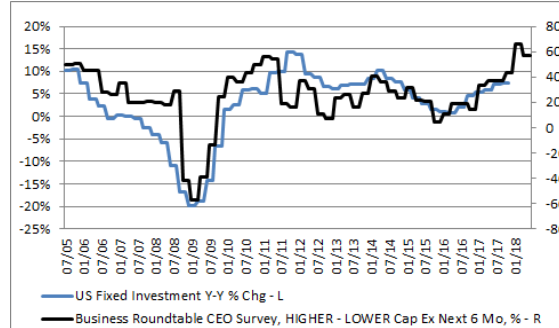
Cap ex picks up after cash flow (which is up)



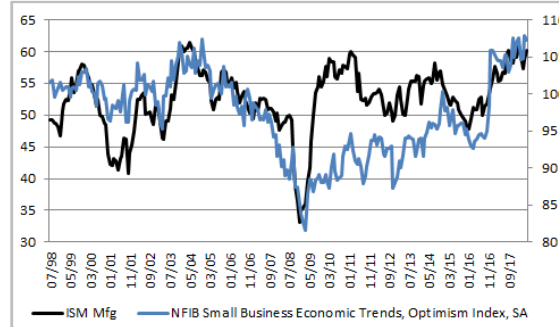
Subdued cap ex and loan growth



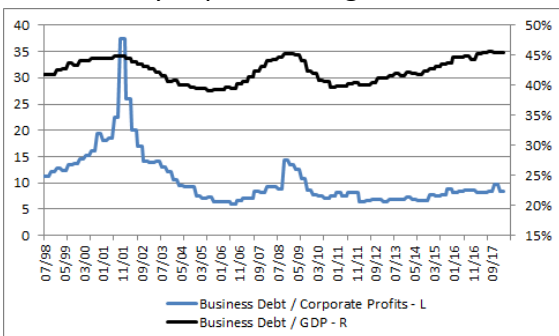
Optimism leads investment



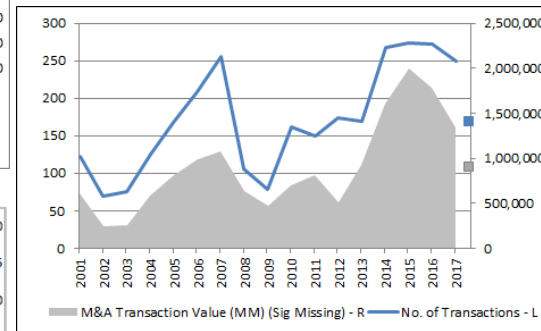
Company optimism is high



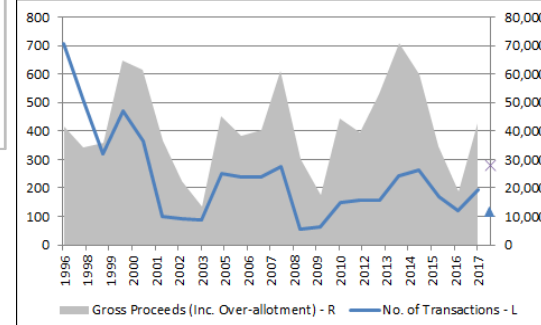
Which may explain willingness to borrow



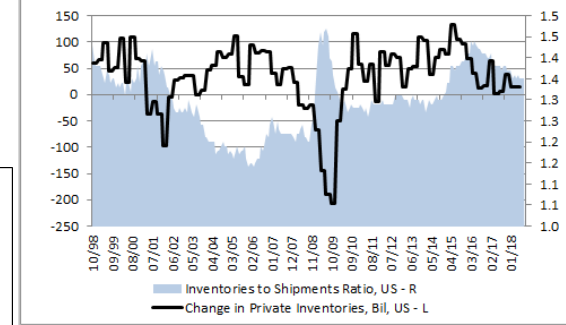
Large M&A on pace for close to record despite ample PE funding for private companies and drop in number of public firms



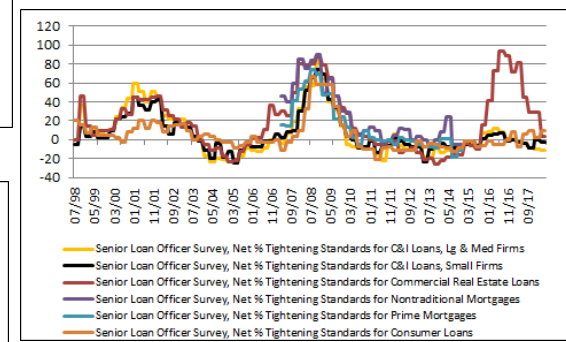
IPO activity coming back



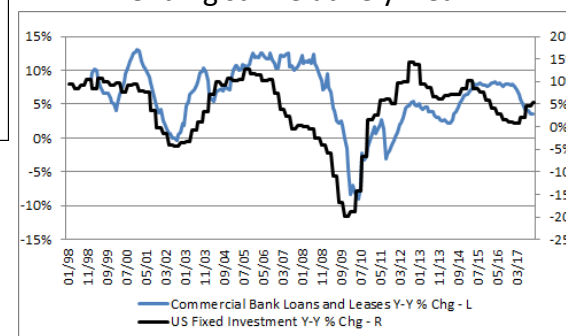
Inventory growth slow (improving I/S)



Lenders bullish (blip was CRE)



Lending still relatively weak



Source: Spellman, FactSet, BEA, Business Roundtable, Federal Reserve System, ISM, NFIB - National Federation of Independent Business, US Census Bureau.

Chink in the armour – housing?

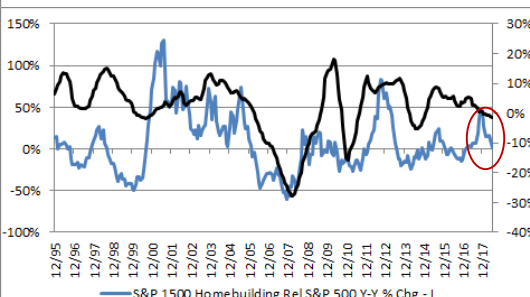
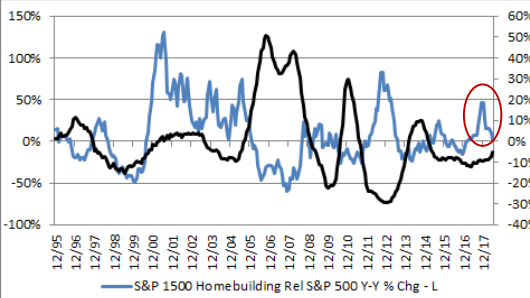
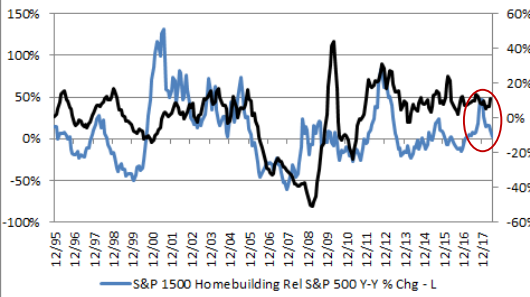
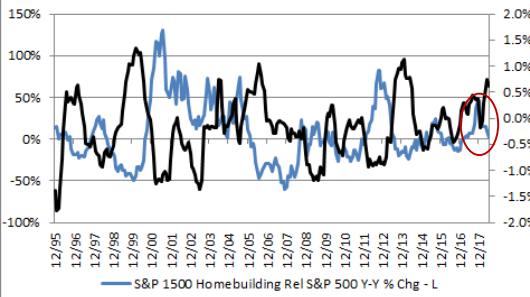
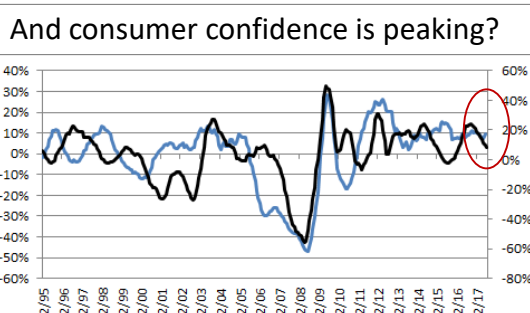
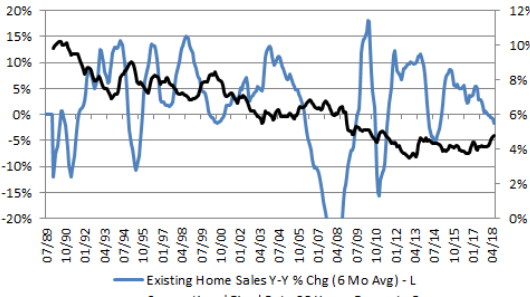
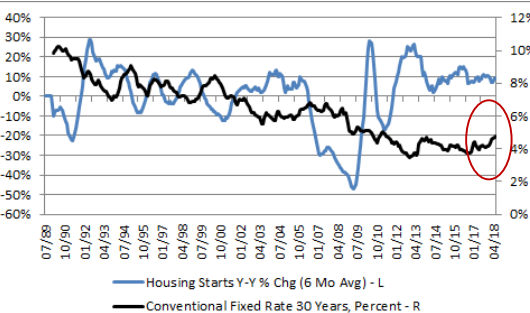
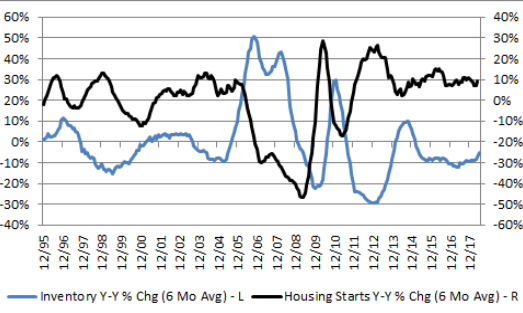
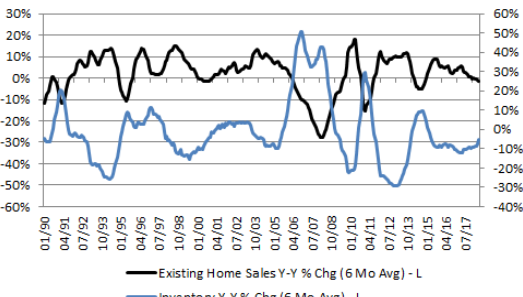
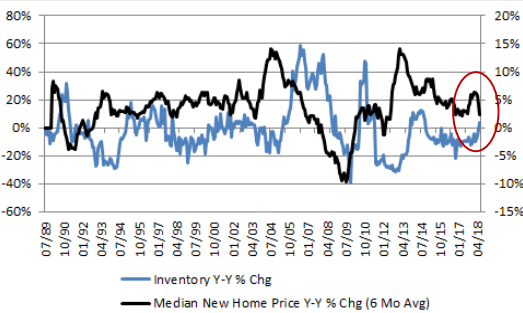
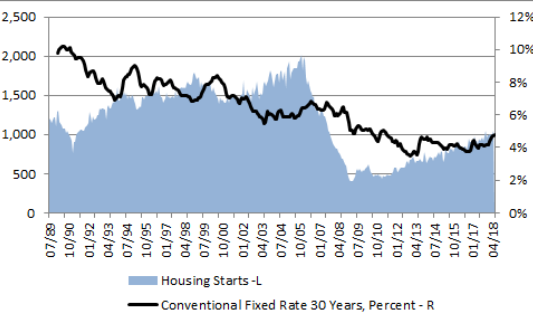
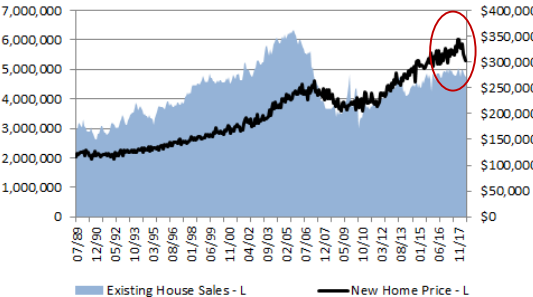
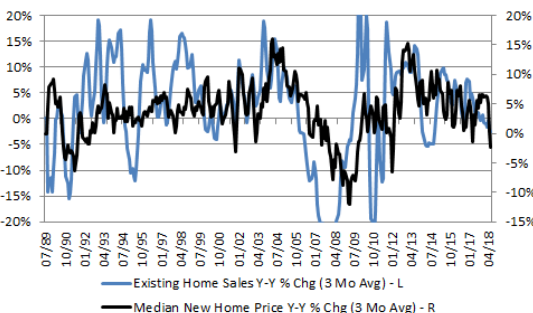
Existing home sales and prices of new homes are down (existing home prices still rising), but sales/starts still off highs and home ownership low (64% vs 69% at peak)

Home sales growth slowing, and inventory rising => leading to price weakness?

Homebuilder stocks faltering

Higher interest rates do not help

And consumer confidence is peaking?



Source: Spellman, FactSet, Conference Board, National Association of Realtors, S&P, US Census Bureau, US Federal Housing Finance Agency.

Conclusion

- Be careful, risk is rising
- Hopeful for recession during next couple years
 - Recessions remove excesses
 - Lacking a recession, expect leverage to build in system which would lead to a sharper correction later on

Appendix

- Asset correlations
- Sector correlations
- A word on inflation

Asset class correlations vary with cycle

Large stocks and growth are most positively correlated with Cycle Model, and government bonds, gold, dollar, and WTI are negatively correlated

	Cycle Model	GSCI	Russell 3000	Russell 2000	Russell 200	Russell 2000 Value	S&P 500 Growth	Russell 3000 Value	Russell 3000 Growth	FTSE NAREIT All REITs	MSCI EM	B Barclays US Agg Gov	B Barclays US Agg Corp HY	WTI	Gold	Dollar
Cycle Model	1.00															
GSCI	0.13	1.00														
Russell 3000	0.59	0.22	1.00													
Russell 2000	0.48	0.29	0.87	1.00												
Russell 200	0.59	0.15	0.98	0.77	1.00											
Russell 2000 Value	0.37	0.19	0.73	0.90	0.62	1.00										
S&P 500 Growth	0.57	0.14	0.95	0.71	0.98	0.51	1.00									
Russell 3000 Value	0.53	0.17	0.93	0.86	0.88	0.87	0.79	1.00								
Russell 3000 Growth	0.58	0.23	0.96	0.79	0.96	0.54	0.98	0.78	1.00							
FTSE NAREIT All REITs	0.33	0.24	0.56	0.68	0.46	0.82	0.36	0.72	0.38	1.00						
MSCI EM	0.39	0.16	0.32	0.46	0.25	0.39	0.22	0.31	0.30	0.27	1.00					
B Barclays US Agg Gov	(0.45)	(0.22)	(0.18)	(0.21)	(0.17)	(0.05)	(0.19)	(0.08)	(0.24)	0.01	(0.09)	1.00				
B Barclays US Agg Cor HY	0.27	0.20	0.65	0.71	0.57	0.70	0.54	0.68	0.57	0.66	0.46	0.08	1.00			
WTI	0.11	0.94	0.18	0.23	0.14	0.09	0.14	0.10	0.22	0.12	0.13	(0.30)	0.12	1.00		
Gold	(0.13)	0.49	(0.18)	(0.04)	(0.24)	(0.10)	(0.22)	(0.19)	(0.16)	0.13	0.12	(0.02)	0.12	0.36	1.00	
Dollar	(0.12)	(0.61)	(0.15)	(0.17)	(0.12)	(0.09)	(0.12)	(0.11)	(0.17)	(0.13)	(0.21)	0.08	(0.34)	(0.54)	(0.54)	1.00

Source: Spellman, FactSet, Barclays, CRB, Federal Reserve, FTSE NAREIT, MSCI, Russell, S&P GSCI, annual changes, 7/91-6/18.

Sector correlations vary with cycle

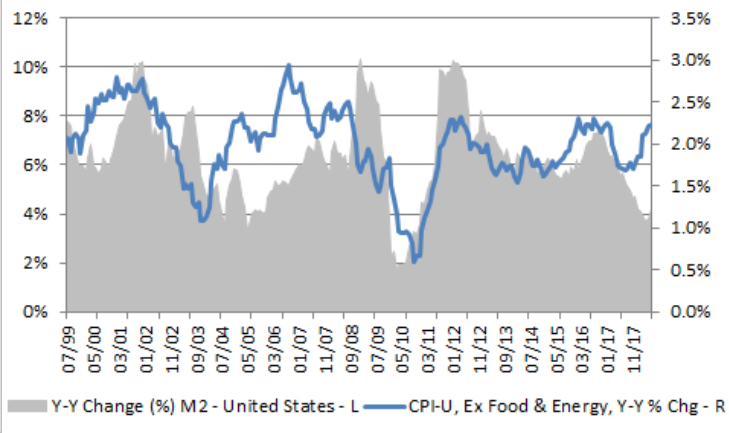
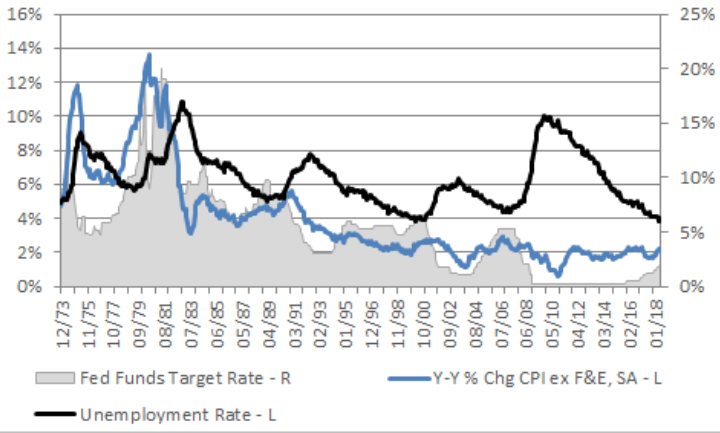
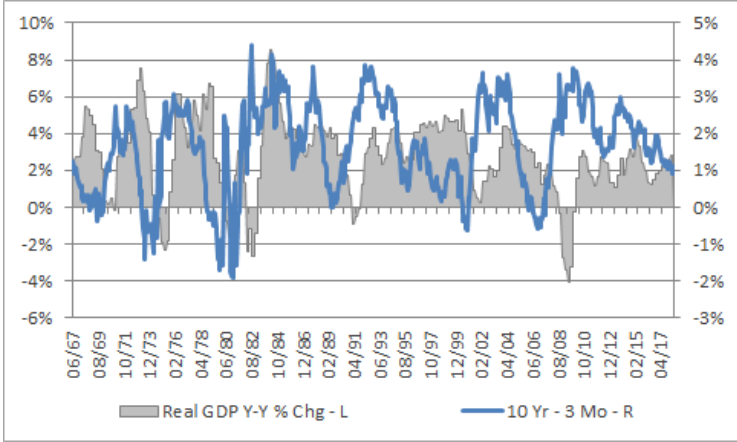
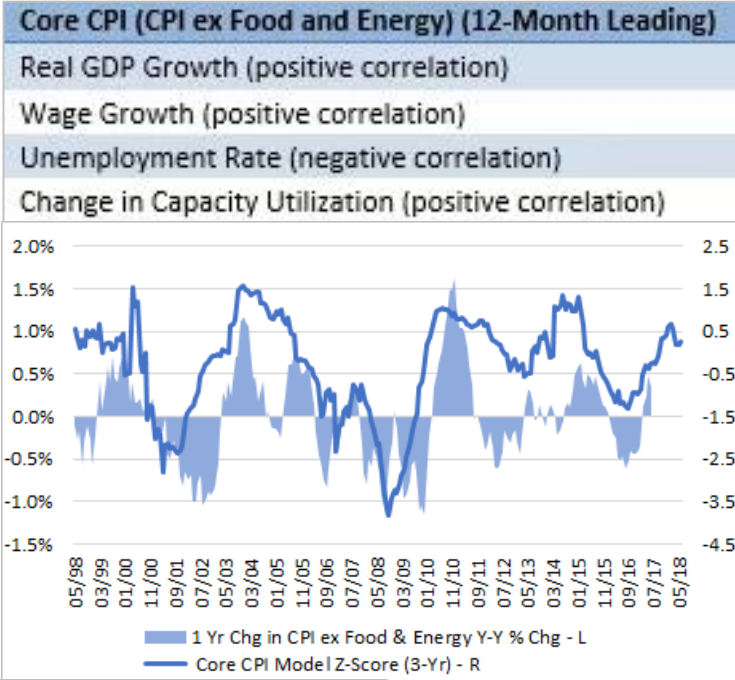
Information Technology, Industrials, and Consumer Discretionary are most correlated with the cycle model and Consumer Staples, Utilities, Energy, and Health Care are least correlated

	Cycle Model	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Information Technology	Materials	Telecommunication Services	Utilities
Cycle Model	1.00										
Consumer Discretionary	0.50	1.00									
Consumer Staples	0.17	0.52	1.00								
Energy	0.38	0.38	0.39	1.00							
Financials	0.44	0.77	0.66	0.51	1.00						
HealthCare	0.33	0.61	0.78	0.34	0.68	1.00					
Industrials	0.52	0.80	0.62	0.70	0.86	0.64	1.00				
Information Technology	0.55	0.65	0.26	0.41	0.52	0.53	0.66	1.00			
Materials	0.39	0.63	0.54	0.66	0.65	0.41	0.80	0.42	1.00		
Telecommunication Services	0.45	0.69	0.34	0.45	0.48	0.43	0.59	0.63	0.39	1.00	
Utilities	0.33	0.69	0.34	0.45	0.48	0.43	0.59	0.63	0.39	0.57	1.00

Source: Spellman, FactSet, S&P 500 sectors, annual changes, 7/91-6/18.

Wages are tied to end of expansion

- Productivity set to rise
- So wages are set to rise
- So inflation is set to rise
- So Fed may get more aggressive
- So end of expansion



Source: Spellman, FactSet, Federal Reserve, US Department of Labor, see also [Positioning the Cycle](#) and [Thinking About Technology](#) (for information on productivity and wages) on www.coachinvesting.com.