



Q3 2017 MACRO THEMES



June 30, 2017

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TO BE ANSWERED AT THE END OF THE CALL

Q2 2017 MACRO THEMES

1

USA, USA! #QUAD1

After calling for a positive inflection in both Growth and Inflation in 1Q17 we expect to transition to Quad1 (Growth ↑, Inflation ↓) in 2Q17 as the growth data continues to improve and Reflation's Peak confirms. As it stands, sentiment and survey measures continue to crescendo, the preponderance of hard fundamental macro data is 2nd derivative positive, and employment and income growth are set for some near-term acceleration. We'll contextualize the current fundamental reality domestically, discuss what it means from a GIP and exposure perspective and detail how we plan to navigate recurrent political and policy risk into 2H17.

2

REFLATION'S ROLLOVER

In our Q1 2017 macro themes presentation we made the case for both the reflation trade and headline reported inflation to peak in Q1 on top of the easiest compares of the year. The CRB index, crude oil, breakeven inflation rates, etc. have all put in their respective Q1 peaks and are set-up to continue rolling over from a growth rate perspective through Q2 as the U.S. economy shifts from QUAD 2 to QUAD 1 for the remaining 3 quarters of 2017. Growth accelerating is back in 2017 with QUAD 1 & 2, but we'll outline why the shift between inflation and deflation is key for picking alpha-generating sector exposure.

3

EUROPE/JAPAN #DIVERGENCES

Contrary to our positive outlook for the U.S. economy and generally sanguine expectations for global growth, our GIP Model is forecasting a negative inflection in European and Japanese growth here in Q2 that should trend for at least the next 3-6 months. As such, we expect our policy divergence theme to gather steam in favor of the U.S. dollar, as well as European and Japanese equities – which themselves look set to take advantage of a reflationary tailwind.

Q3 2017 MACRO THEMES

1

REAL GROWTH #ACCELERATING

We remain well above consensus on U.S. economic growth with respect to the intermediate term and are keen to detail the positive impact of disinflation, rising asset prices and elevated confidence readings are likely to have upon the real economy here in the U.S. in the face of receding base effects for GDP. Pro-#Quad1 sectors and style factors should continue to lead the way higher within the domestic equity market.

2

#EUROPE SLOWING?

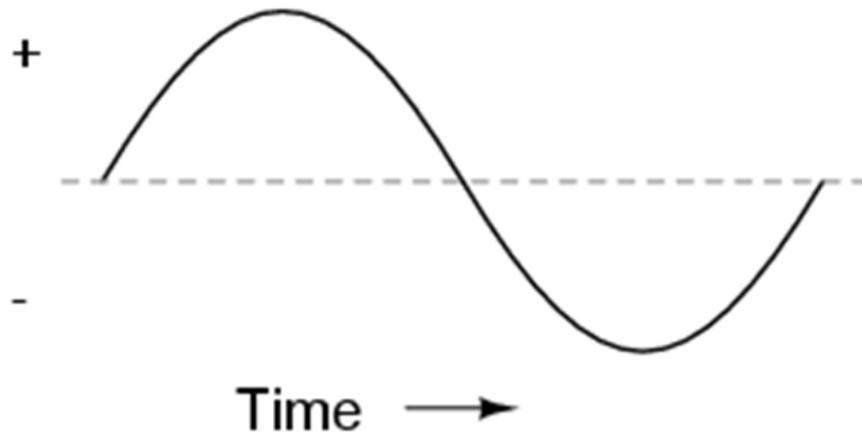
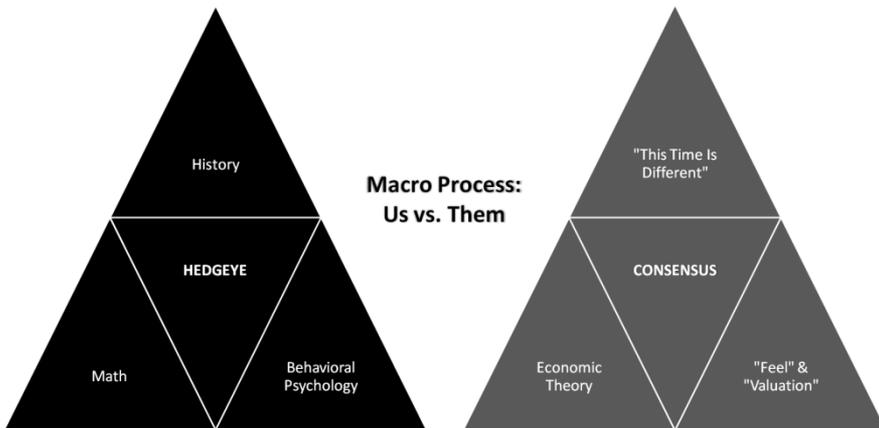
Contrary to our positive outlook in the U.S., our model is prospectively signaling a concomitant deceleration in both economic growth and inflation across the Eurozone economy. This view is very counter to consensus that remains extremely complacent on the long side of the euro and European equities. We think the appropriate play for 2H17 is to be short of the former and rotating into defensive exposures within the latter (i.e. long “R.U.S.T.”/short banks and long Germany/short Spain and Italy).

3

#CHINA SLOWING

We continue to think the nascent inflection in the “Old China” economy is likely to develop into a negative trend throughout 2H17 amid tighter policy, insurmountable base effects and a myriad of structural headwinds that have yet to be meaningfully addressed. This outcome has dire implications for commodity-oriented reflation broadly.

PROCESS: RATE OF CHANGE CENTRIC



DIFFERENTIATED FROM THE HERD

Macroeconomics and Global Macro Risk Management are two very different fields. We specialize in the latter, incorporating key lessons of behavioral finance such as Prospect Theory and Bayesian Inference into our analysis.

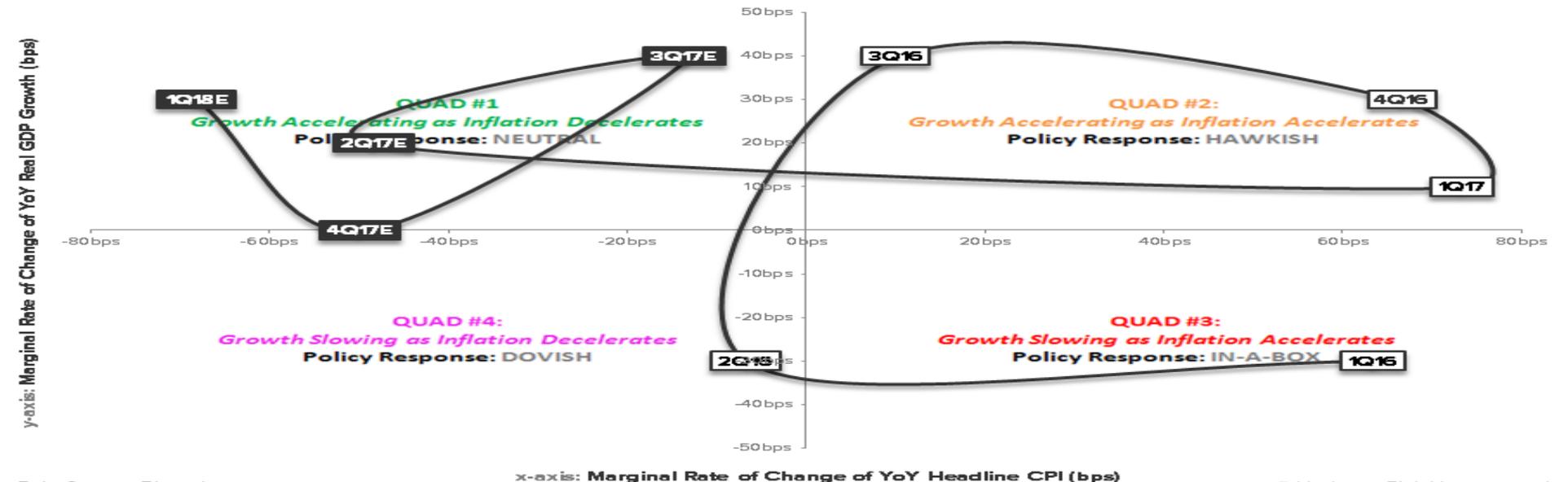
WE FOCUS ON THE SLOPES

Everything that matters in Global Macro occurs on the margin. Our key differentiator is an ever-present focus on rates of change, which helps us front-run changes in sentiment among investor consensus and policymakers – both of whom tend to overweight absolute states in their analysis.

MEASURING AND MAPPING THE CYCLE

SPECIFICALLY, OUR BACKTEST DATA SHOWS THAT A LARGE DEGREE OF INTER AND INTRA ASSET CLASS RETURNS CAN BE EXPLAINED BY CHANGES IN GROWTH, INFLATION AND POLICY EXPECTATIONS. REFER TO THE FOLLOWING SLIDE FOR MORE DETAILS.

| UNITED STATES | 1Q14 | 2Q14 | 3Q14 | 4Q14 | 1Q15 | 2Q15 | 3Q15 | 4Q15 | 1Q16 | 2Q16 | 3Q16 | 4Q16 | 1Q17 | Hedgeye Macro GIP Model | | | |
|-------------------|-------|------|------|------|-------|------|------|------|------|------|------|------|------|---------------------------------------|--|-------|-------|
| Real GDP QoQ SAAR | -1.2% | 4.0% | 5.0% | 2.3% | 2.0% | 2.6% | 2.0% | 0.9% | 0.8% | 1.4% | 3.5% | 2.1% | 1.4% | GIP = Growth/Inflation/Policy | | | |
| Real GDP YoY | 1.6% | 2.4% | 2.9% | 2.5% | 3.3% | 3.0% | 2.2% | 1.9% | 1.6% | 1.3% | 1.7% | 2.0% | 2.1% | Full-year Estimates | | 2016E | 2017E |
| 2Y Average | 1.5% | 1.7% | 2.3% | 2.6% | 2.5% | 2.7% | 2.6% | 2.2% | 2.5% | 2.2% | 2.0% | 2.0% | 1.9% | Hedgeye Predictive Tracking Algorithm | | 1.7% | 2.5% |
| 3Y Average | 1.9% | 2.0% | 2.3% | 2.2% | 2.1% | 2.1% | 2.3% | 2.4% | 2.2% | 2.2% | 2.3% | 2.1% | 2.3% | Bloomberg Consensus Estimate | | 1.8% | 2.2% |
| Percentile (T10Y) | 33% | 59% | 79% | 67% | 95% | 87% | 54% | 49% | 33% | 28% | 44% | 64% | 64% | Central Bank Forecast | | 1.9% | 2.2% |
| CPI YoY | 1.4% | 2.1% | 1.8% | 1.3% | -0.1% | 0.0% | 0.1% | 0.5% | 1.1% | 1.0% | 1.1% | 1.8% | 2.5% | Full-year Estimates | | 2016E | 2017E |
| 2Y Average | 1.6% | 1.8% | 1.7% | 1.3% | 0.7% | 1.0% | 1.0% | 0.9% | 0.5% | 0.5% | 0.6% | 1.1% | 1.8% | Hedgeye Predictive Tracking Algorithm | | 1.3% | 2.0% |
| 3Y Average | 2.0% | 1.8% | 1.7% | 1.5% | 1.0% | 1.2% | 1.2% | 1.0% | 0.8% | 1.0% | 1.0% | 1.2% | 1.2% | Bloomberg Consensus Estimate | | 1.3% | 2.3% |
| Percentile (T10Y) | 15% | 44% | 36% | 13% | 5% | 10% | 13% | 15% | 18% | 18% | 26% | 56% | 77% | Central Bank Forecast | | 1.7% | 1.7% |



Data Source: Bloomberg

x-axis: Marginal Rate of Change of YoY Headline CPI (bps)

© Hedgeye Risk Management

WHY DOES THE 2ND DERIVATIVE MATTER?

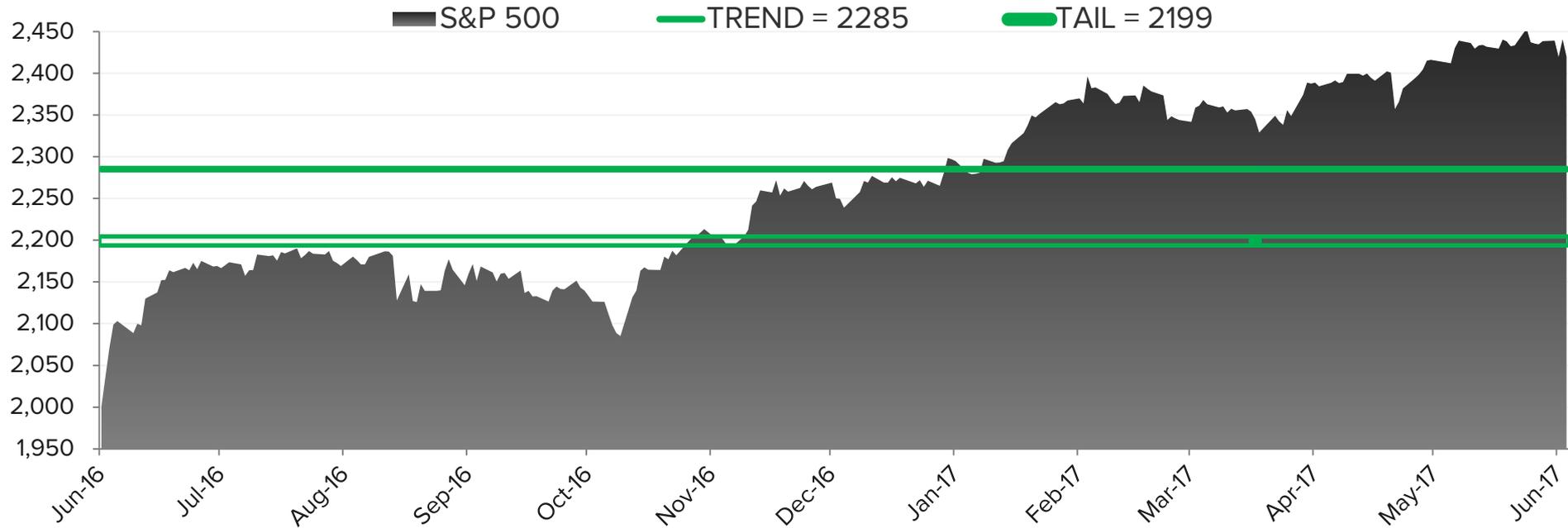
BECAUSE FINANCIAL ASSET RETURNS HAVE HISTORICALLY ANCHORED ON THE MARGINAL RATE OF CHANGE IN BOTH GROWTH AND INFLATION – ESPECIALLY WHEN THESE DELTAS ARE COUNTER TO CONSENSUS EXPECTATIONS.

| Hedgeye Macro U.S. GIP Model Backtest | Weighted Expected Value, by Quadrant | | | | Percentile of Weighted Expected Value, by Asset Class | | | | Percentile of Weighted Expected Value, by Quadrant | | | | Positive Hit Rate (color-coding by Asset Class & Quadrant) | | | | Total Quarterly Performance Observations | | | |
|--|--------------------------------------|-------|-------|-------|---|------|------|------|--|------|------|------|--|-----|-----|-----|--|----|----|----|
| | Exposure | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 |
| S&P 500 Index | 3.2% | 0.7% | -0.3% | -0.8% | 37% | 26% | 26% | 42% | 70% | 41% | 27% | 41% | 81% | 69% | 56% | 63% | 21 | 13 | 27 | 19 |
| S&P 500 Consumer Discretionary Sector Index | 4.4% | 1.0% | -0.4% | 0.0% | 89% | 47% | 16% | 68% | 93% | 52% | 20% | 66% | 76% | 69% | 48% | 53% | 21 | 13 | 27 | 19 |
| S&P 500 Consumer Staples Sector Index | 2.6% | 1.0% | 0.1% | 0.7% | 16% | 42% | 68% | 84% | 61% | 50% | 57% | 84% | 81% | 62% | 59% | 63% | 21 | 13 | 27 | 19 |
| S&P 500 Energy Sector Index | 2.5% | 1.0% | 0.3% | -1.5% | 11% | 37% | 95% | 11% | 59% | 48% | 73% | 18% | 71% | 77% | 63% | 53% | 21 | 13 | 27 | 19 |
| S&P 500 Financials Sector Index | 3.5% | 0.8% | -0.5% | -1.0% | 68% | 32% | 11% | 21% | 84% | 45% | 18% | 30% | 76% | 62% | 56% | 68% | 21 | 13 | 27 | 19 |
| S&P 500 Health Care Sector Index | 2.4% | 1.7% | 0.2% | 0.8% | 5% | 100% | 74% | 95% | 57% | 77% | 61% | 89% | 76% | 62% | 52% | 74% | 21 | 13 | 27 | 19 |
| S&P 500 Industrials Sector Index | 3.5% | 1.6% | 0.1% | -0.9% | 63% | 37% | 63% | 82% | 75% | 65% | 39% | 71% | 69% | 48% | 47% | 57% | 21 | 13 | 27 | 19 |
| S&P 500 Information Technology Sector Index | 4.0% | 1.1% | 0.0% | -0.9% | 84% | 68% | 53% | 32% | 91% | 61% | 45% | 34% | 81% | 77% | 52% | 58% | 21 | 13 | 27 | 19 |
| S&P 500 Materials Sector Index | 3.9% | 0.1% | -0.9% | 0.1% | 79% | 5% | 5% | 74% | 89% | 25% | 7% | 75% | 81% | 69% | 52% | 53% | 21 | 13 | 27 | 19 |
| S&P 500 REITS Index | 3.5% | 1.2% | 0.3% | -2.5% | 58% | 79% | 89% | 0% | 80% | 66% | 70% | 9% | 65% | 50% | 64% | 83% | 17 | 10 | 22 | 12 |
| S&P 500 Utilities Sector Index | 1.5% | -0.7% | 1.7% | -0.6% | 0% | 100% | 53% | 53% | 50% | 9% | 91% | 45% | 67% | 23% | 67% | 58% | 21 | 13 | 27 | 19 |
| S&P 500 Value Index | 3.2% | 0.4% | -0.1% | -1.0% | 42% | 16% | 32% | 26% | 73% | 32% | 34% | 32% | 71% | 69% | 63% | 74% | 21 | 13 | 27 | 19 |
| S&P 500 Growth Index | 3.1% | 1.0% | -0.4% | -0.6% | 32% | 58% | 21% | 47% | 68% | 57% | 25% | 43% | 81% | 69% | 56% | 58% | 21 | 13 | 27 | 19 |
| S&P 500 Dividend Aristocrats Index | 3.3% | 0.5% | 0.0% | 1.0% | 47% | 21% | 58% | 100% | 75% | 36% | 48% | 91% | 54% | 63% | 63% | 21 | 13 | 27 | 19 | |
| S&P 500 Low Beta Minimum Volatility Index | 3.1% | 0.2% | 0.2% | 0.8% | 26% | 11% | 84% | 89% | 66% | 30% | 68% | 86% | 76% | 54% | 52% | 79% | 21 | 13 | 27 | 19 |
| S&P 500 Quality Index | 3.1% | 1.5% | 0.2% | 0.2% | 21% | 84% | 79% | 79% | 64% | 68% | 64% | 77% | 90% | 77% | 56% | 63% | 21 | 13 | 27 | 19 |
| S&P 500 High Beta Index | 4.8% | 1.6% | -0.1% | -1.4% | 100% | 89% | 37% | 16% | 98% | 70% | 36% | 20% | 71% | 62% | 59% | 53% | 21 | 13 | 27 | 19 |
| S&P 500 Momentum Index | 3.4% | 1.0% | -0.1% | -1.9% | 53% | 5% | 42% | 5% | 77% | 55% | 39% | 14% | 90% | 54% | 58% | 21 | 13 | 27 | 19 | |
| Russell 2000 Index | 3.8% | 1.2% | 0.0% | -0.6% | 74% | 74% | 47% | 58% | 82% | 64% | 41% | 48% | 76% | 69% | 59% | 58% | 21 | 13 | 27 | 19 |
| Bloomberg Barclays US Agg Credit Yield To Worst | -1.8% | -0.2% | 0.9% | 0.2% | 36% | 36% | 64% | 9% | 9% | 20% | 89% | 7% | 38% | 46% | 52% | 26% | 21 | 13 | 27 | 19 |
| Bloomberg Barclays US High Yield Average Yield To Worst | -3.0% | -1.7% | 2.1% | -0.2% | 18% | 27% | 73% | 45% | 5% | 7% | 93% | 59% | 29% | 46% | 59% | 42% | 21 | 13 | 27 | 19 |
| Bloomberg Barclays US Corporate Average OAS | -2.2% | -2.3% | 4.7% | -0.1% | 27% | 18% | 100% | 55% | 7% | 5% | 100% | 61% | 33% | 38% | 52% | 37% | 21 | 13 | 27 | 19 |
| Bloomberg Barclays US High Yield Average OAS | -3.8% | -2.4% | 4.2% | 2.8% | 9% | 21% | 73% | 2% | 2% | 2% | 98% | 93% | 24% | 38% | 48% | 47% | 21 | 13 | 27 | 19 |
| Bloomberg Barclays US Composite Convertible Cvt. Yield | -4.1% | -5.2% | 4.1% | 3.2% | 0% | 0% | 82% | 82% | 0% | 0% | 95% | 95% | 44% | 0% | 60% | 42% | 16 | 8 | 20 | 12 |
| US Treasury 3M Bill Yield | 58.7% | 11.0% | -5.9% | 5.3% | 100% | 100% | 0% | 0% | 100% | 100% | 0% | 98% | 43% | 4% | 52% | 53% | 21 | 13 | 27 | 19 |
| US Treasury 2Y Note Yield | 0.7% | 2.5% | 0.4% | -3.3% | 91% | 64% | 45% | 0% | 43% | 89% | 75% | 0% | 52% | 62% | 52% | 32% | 21 | 13 | 27 | 19 |
| US Treasury 10Y Note Yield | -0.3% | 2.9% | -0.8% | -2.1% | 73% | 73% | 18% | 18% | 20% | 81% | 9% | 11% | 43% | 69% | 48% | 32% | 21 | 13 | 27 | 19 |
| US Treasury 30Y Bond Yield | -0.5% | 2.3% | -0.7% | -1.3% | 64% | 55% | 27% | 36% | 16% | 86% | 11% | 23% | 43% | 77% | 52% | 32% | 21 | 13 | 27 | 19 |
| US Treasury 10Y-2Y Spread | -0.6% | 8.1% | -0.1% | 53.3% | 55% | 91% | 36% | 100% | 14% | 98% | 32% | 100% | 24% | 69% | 48% | 47% | 21 | 13 | 27 | 19 |
| Bond Buyer US 40 Municipal Bond YTM | -1.0% | 0.8% | 0.5% | -1.5% | 45% | 45% | 55% | 27% | 11% | 43% | 80% | 16% | 29% | 62% | 48% | 18% | 17 | 13 | 25 | 17 |
| US Treasury 5Y-3Y Forward Breakeven Rate | -0.3% | 3.8% | -1.0% | 0.1% | 82% | 82% | 9% | 64% | 23% | 93% | 5% | 73% | 48% | 69% | 56% | 32% | 21 | 13 | 27 | 19 |
| Thomson Reuters/CoreCommodity CRB Commodity Index | 0.4% | 1.9% | 0.1% | -3.0% | 25% | 25% | 25% | 25% | 34% | 80% | 9% | 5% | 57% | 77% | 63% | 32% | 21 | 13 | 27 | 19 |
| Commodity Research Bureau BL5/US Spot Raw Industrial Index | 1.0% | 2.0% | -0.3% | -0.9% | 50% | 75% | 0% | 75% | 45% | 84% | 30% | 36% | 62% | 77% | 44% | 47% | 21 | 13 | 27 | 19 |
| Commodity Research Bureau BL5/US Spot Foodstuff Index | -0.4% | 1.9% | 0.8% | -1.1% | 0% | 50% | 50% | 50% | 18% | 82% | 82% | 25% | 43% | 62% | 56% | 42% | 21 | 13 | 27 | 19 |
| Front-month Brent Crude Oil | 1.6% | 4.4% | 0.9% | -3.3% | 75% | 100% | 100% | 0% | 52% | 95% | 86% | 2% | 52% | 77% | 52% | 42% | 21 | 13 | 27 | 19 |
| Gold Spot | 1.6% | 1.6% | 0.8% | 0.3% | 100% | 0% | 75% | 100% | 55% | 8% | 84% | 80% | 62% | 69% | 56% | 53% | 21 | 13 | 27 | 19 |
| U.S. Dollar Index | -0.2% | 0.6% | 0.0% | 0.4% | 0% | 100% | 57% | 100% | 25% | 39% | 50% | 82% | 43% | 46% | 52% | 74% | 21 | 13 | 27 | 19 |
| AUD/USD | 1.1% | 0.2% | -0.6% | -0.1% | 100% | 71% | 0% | 57% | 48% | 27% | 14% | 64% | 57% | 69% | 67% | 42% | 21 | 13 | 27 | 19 |
| CAD/USD | 0.0% | 0.4% | 0.0% | -0.5% | 29% | 86% | 43% | 14% | 30% | 34% | 43% | 50% | 43% | 54% | 52% | 42% | 21 | 13 | 27 | 19 |
| CHF/USD | 0.7% | 0.0% | 0.4% | 0.0% | 86% | 57% | 100% | 86% | 41% | 23% | 77% | 70% | 67% | 62% | 59% | 32% | 21 | 13 | 27 | 19 |
| EUR/USD | -0.1% | -0.7% | 0.1% | -0.3% | 14% | 0% | 71% | 43% | 27% | 11% | 59% | 55% | 57% | 46% | 56% | 26% | 21 | 13 | 27 | 19 |
| GBP/USD | 0.3% | -0.3% | -0.5% | -0.4% | 43% | 29% | 14% | 29% | 32% | 16% | 16% | 52% | 52% | 62% | 41% | 37% | 21 | 13 | 27 | 19 |
| JPY/USD | 0.4% | -0.5% | 0.2% | 0.0% | 71% | 14% | 86% | 71% | 39% | 14% | 6% | 68% | 58% | 54% | 56% | 42% | 21 | 13 | 27 | 19 |
| JPMorgan EM FX Index | 0.4% | -0.3% | -0.4% | -1.1% | 57% | 43% | 29% | 0% | 36% | 18% | 23% | 27% | 59% | 45% | 57% | 41% | 17 | 11 | 23 | 17 |

Data Source: Bloomberg. Expected value calculations weighted by cumulative delta into respective quadrant. Trailing 20 years.

QUANTITATIVE RISK MANAGEMENT

HEDGEYE QUANTITATIVE SETUP: US EQUITIES



ALL BACKSTOPPED BY A PROVEN QUANTITATIVE OVERLAY

Multi-factor: Price, Volume and Volatility

Multi-duration: TRADE (3 weeks or less), TREND (3 months or more) and TAIL (3 years or less)

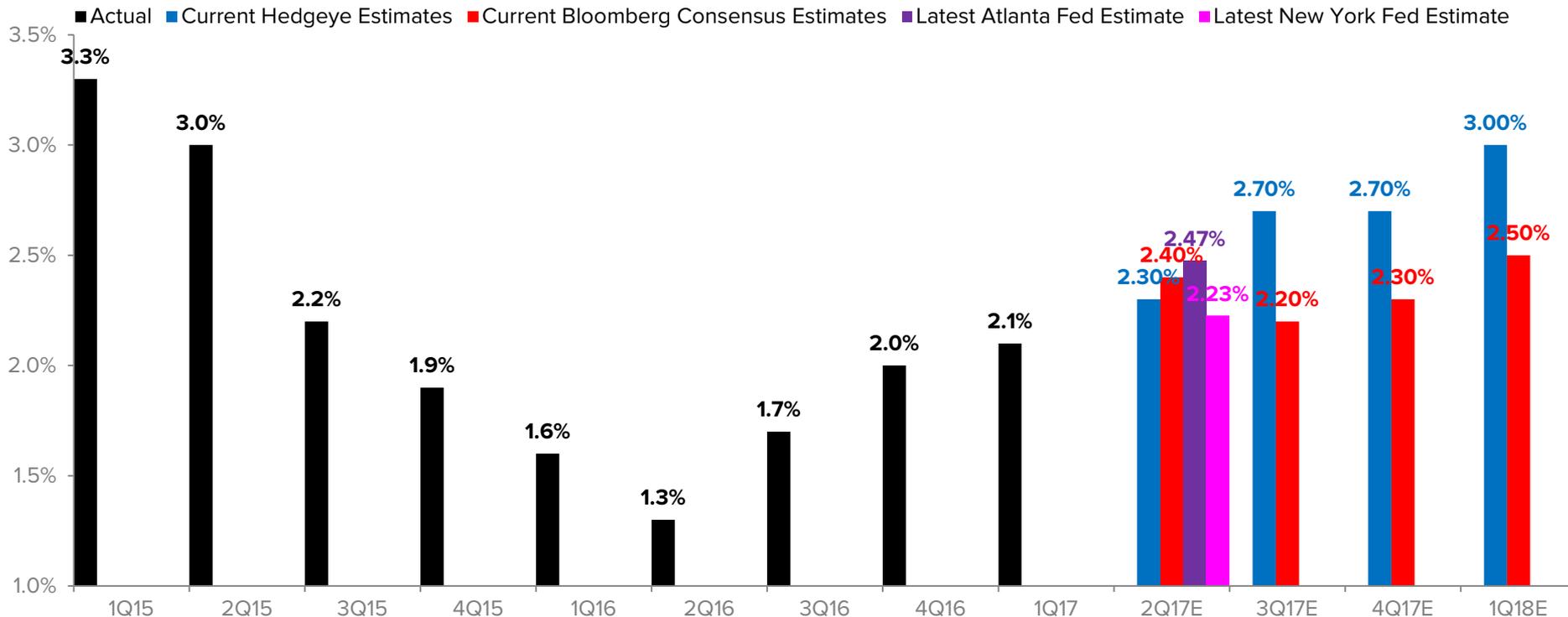


REAL GROWTH #ACCELERATING

GDP GROWTH = ACCELERATING

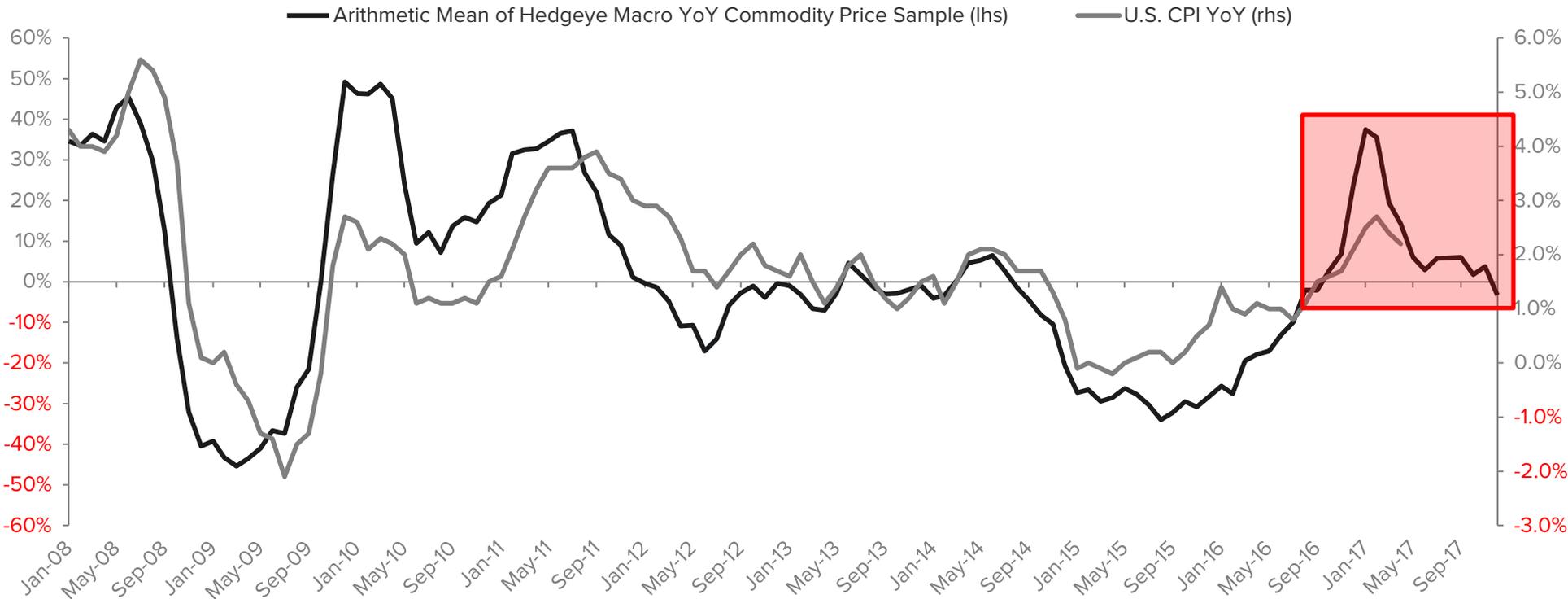
AFTER SLOWING FOR 5 CONSECUTIVE QUARTERS, GROWTH INFLECTED IN 3Q16 AND ACCELERATED FURTHER THRU 1Q17. WE EXPECT THE POSITIVE 2ND DERIVATIVE TREND TO CONTINUE.

UNITED STATES Real GDP - YoY % Change



REFLATION'S ROLLOVER IS NOW REARVIEW

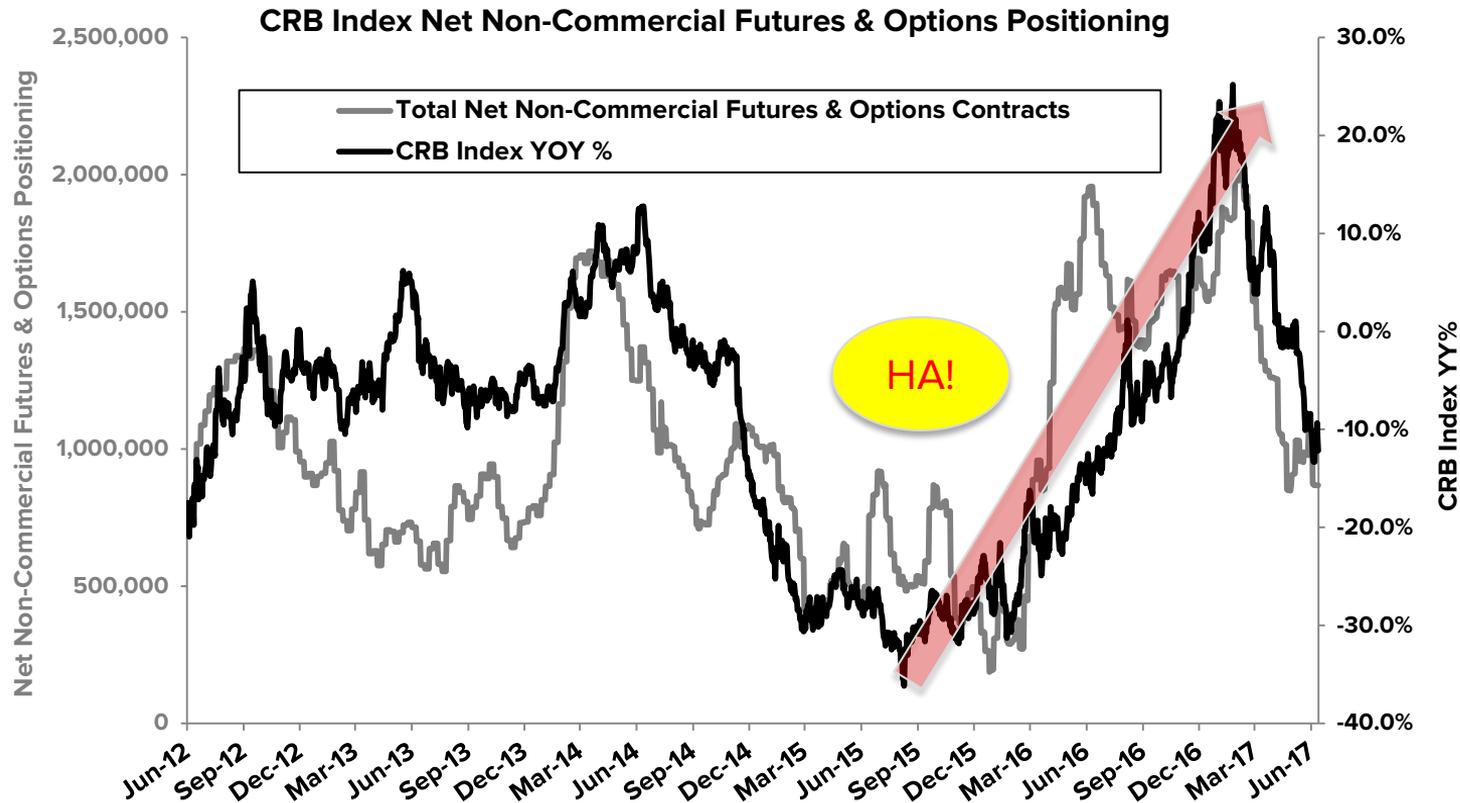
THE Y/Y GROWTH RATE IN OUR COMMODITY PRICE SAMPLE, WHICH HAS BEEN A GOOD PREDICTOR OF CPI, CLEARLY PEAKS ON A SECOND DERIVATIVE BASIS IN Q1 OF 2017 BEFORE EASING THRU 2H17.



The Hedgeye Macro commodity price sample includes the CRB Index, CRB Raw Industrials Index, Brent Crude Oil and the UN Food and Agriculture Price Index. YoY deltas are calculated from monthly averages. Forward estimates assume no change to current monthly averages.

CONSENSUS HAS FINALLY CAUGHT UP

BELOW WE AGGREGATE CRB NET NON-COMMERCIAL FUTURES & OPTIONS POSITIONING INTO ONE SERIES. CONSENSUS WAS MAX LONG OF REFLATION AT EXACTLY THE WRONG TIME.

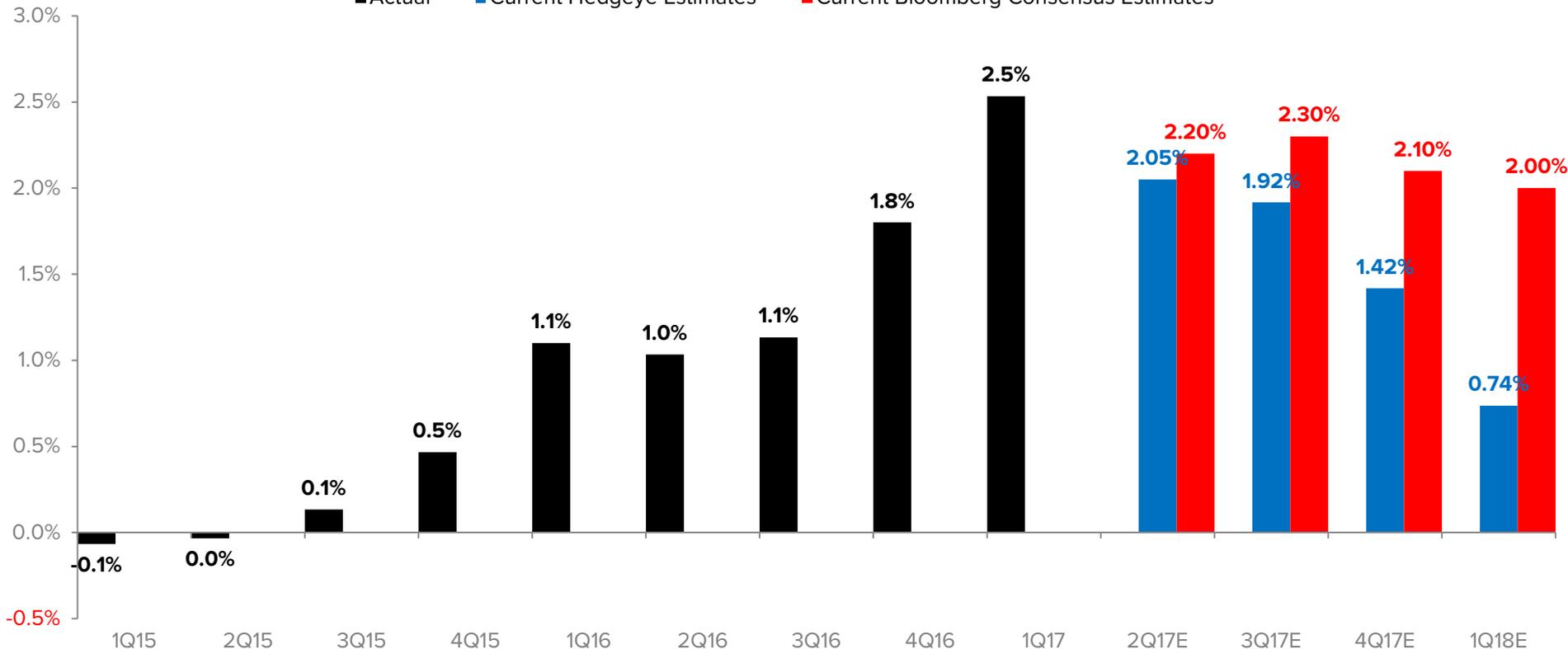


As a starting point for tracking inflation's flow-through to consumption, we start with the decline in a key basket of commodities, the CRB index which is now tracking down double digits Y/Y.

BUT THE DISINFLATIONARY TREND SHOULD PERSIST

UNITED STATES Headline CPI - YoY % Change

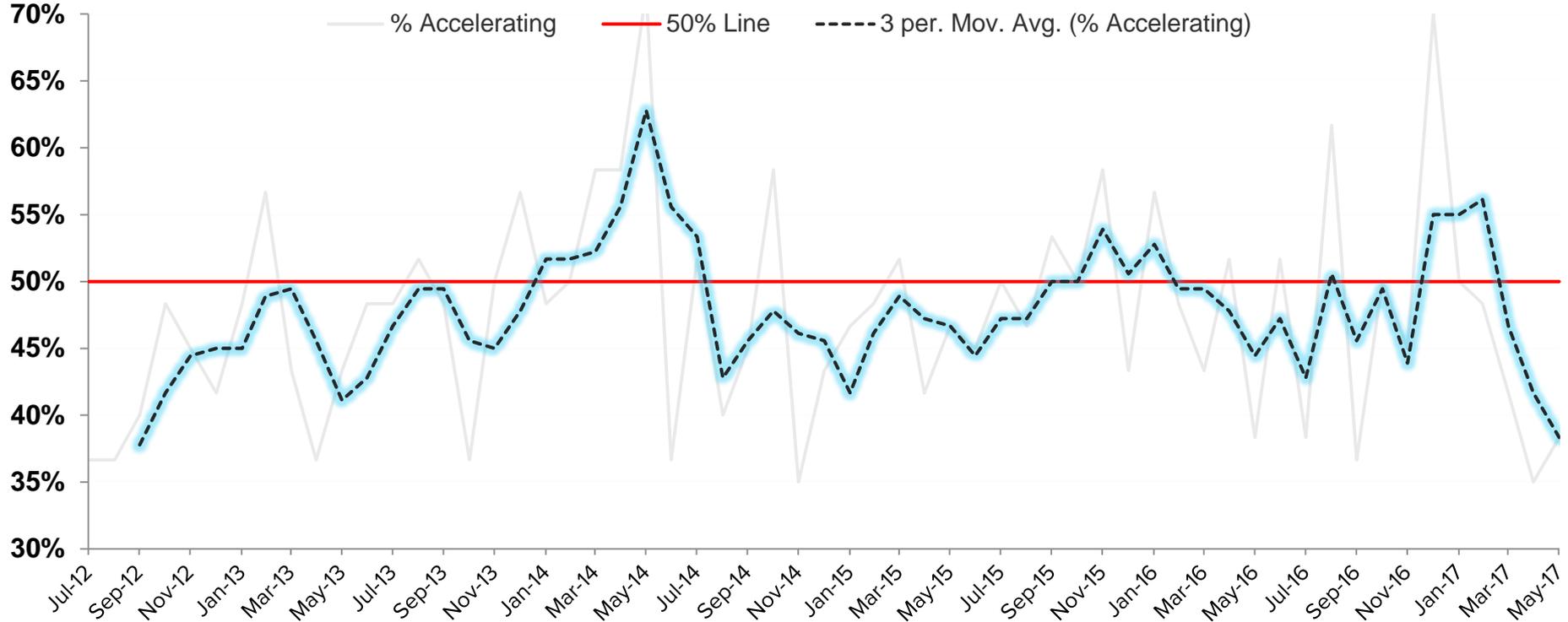
■ Actual ■ Current Hedgeye Estimates ■ Current Bloomberg Consensus Estimates



THE SLOWDOWN HAS BEEN MORE THAN JUST ENERGY

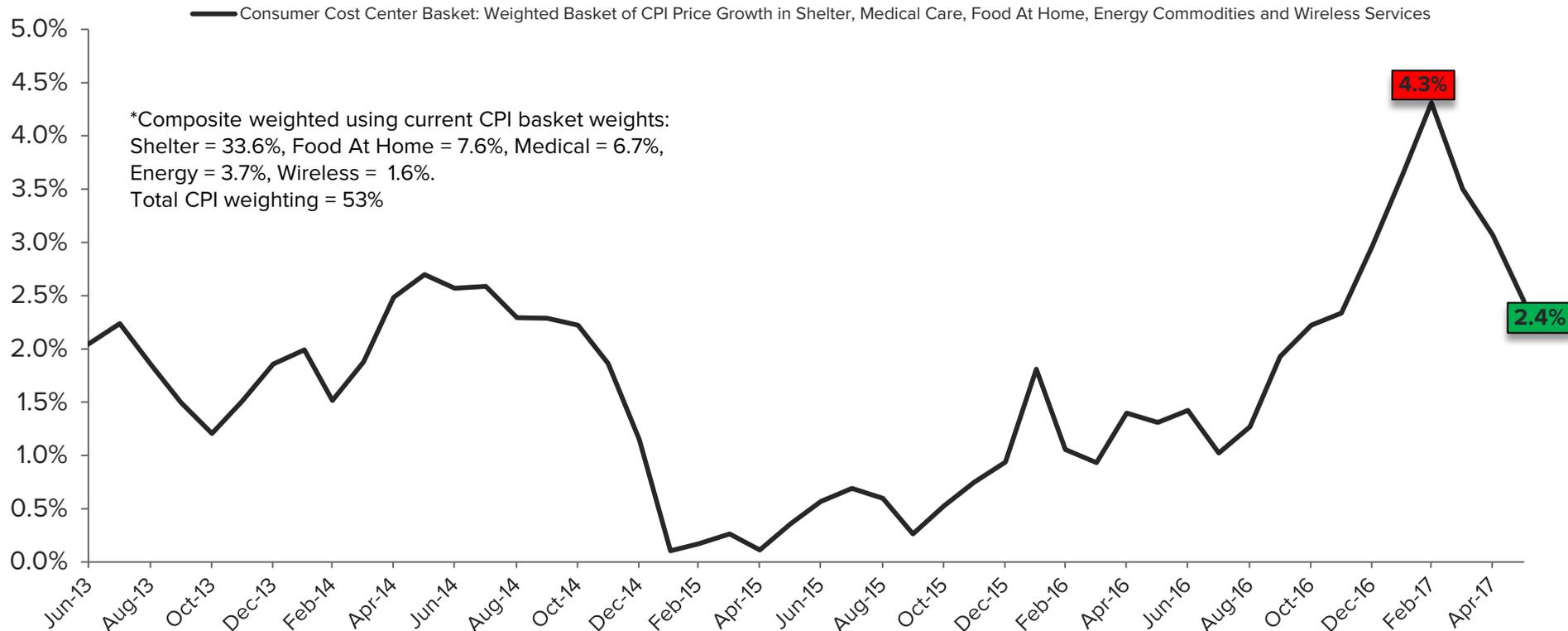
CPI BREADTH

% OF COMPONENTS REGISTERING SEQUENTIAL ACCELERATION



PRONOUNCED DISINFLATION ACROSS KEY COST CENTERS

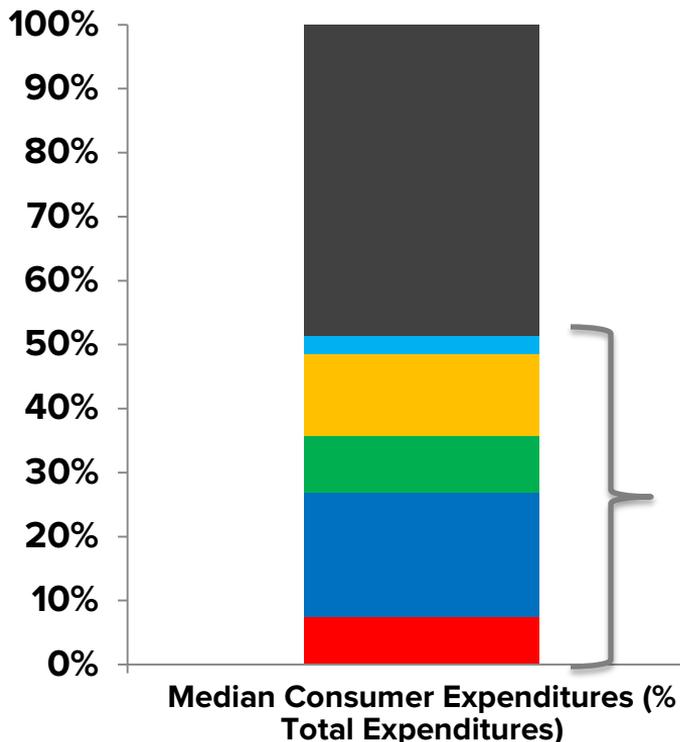
THIS CHART SHOWS THE 2ND DERIVATIVE TREND IN PRICE ACROSS A WEIGHTED COMPOSITE OF KEY CONSUMER COST CENTERS. REFLATION'S ROLLOVER HAS BEEN CONSPICUOUS AND SHOULD REMAIN SUPPORTIVE OF PURCHASING POWER FOR THE MEDIAN HOUSEHOLD.



MEDIAN CONSUMER: PRICE GROWTH ↓, PURCHASING POWER ↑

THE KEY CONSUMER COST CENTERS MAKE-UP ~51% OF THE MEDIAN CONSUMER'S TOTAL EXPENDITURES IN ANY GIVEN YEAR.

■ Food at Home ■ Shelter ■ Medical Care ■ Energy Commodities ■ Telephone Services ■ Other



*The recent deflation of **key consumer cost centers** is a boon for the median consumer as ~51% of total expenditures for the median income quintile are in this key cost center category.

| Median Consumer Income Statement (2015) | | Key Consumer Cost Centers |
|---|--------------------|---------------------------|
| Income | | |
| Pre-Tax Income | \$49,758.70 | |
| After-Tax Income | \$46,824.51 | |
| Expenditures | | |
| Food | \$5,781.07 | 12.3% |
| Food at Home | \$3,444.70 | 7.4% |
| Housing | \$15,821.68 | 33.8% |
| Shelter | \$8,965.39 | 19.1% |
| Utilities, Fuel, & Public Services | \$3,766.72 | 8.0% |
| Telephone Services | \$1,332.99 | 2.8% |
| Apparel & Services | \$1,299.01 | 2.8% |
| Transportation | \$8,831.21 | 18.9% |
| Gasoline & Motor Oil | \$2,109.43 | 4.5% |
| Healthcare | \$3,970.69 | 8.5% |
| Entertainment | \$2,214.62 | 4.7% |
| Other | \$7,942.79 | 17.0% |
| Total Expenditures | \$45,861.07 | |

KINDERGARTEN MACRO

STATIC NOMINAL + DEFLATOR ↓ = REAL GROWTH ↑

All I really need
to know I learned in
kindergarten



All I really need to know about how to live and what to do and how to be I learned in kindergarten. Wisdom was not at the top of the graduate-school mountain, but there in the sandpile at Sunday School. These are the things I learned. ■ Share everything. Play fair. Don't hit people. Put things back where you found them. Clean up your own mess. Don't take things that aren't yours. Say you're sorry when you hurt somebody. Wash your hands before you eat. Flush. Warm cookies and cold milk are good for you. Live a balanced life—learn some and think some and draw and paint and sing and dance and play and work every day some. ■ Take a nap every afternoon. ■ When you go out into the world, watch out for traffic, hold hands, and stick together. ■ Be aware of wonder. Remember the little seed in the Styrofoam cup: The roots go down and the plant goes up and nobody really knows how or why, but we are all like that. ■ Goldfish and hamsters and white mice and even the little seed in the Styrofoam cup—they all die. So do we. ■ And then remember the Dick-and-Jane books and the first word you learned—the biggest word of all—LOOK. ■ Everything you need to know is in there somewhere. The Golden Rule and love and basic sanitation. Ecology and politics and equality and sane living. ■ Take any one of those items and extrapolate it into sophisticated adult terms and apply it to your family life or your work or your government or your world and it holds true and clear and firm. Think what a better world it would be if we all—the whole world—had cookies and milk about three o'clock every afternoon and then lay down with our blankets for a nap. Or if all governments had as a basic policy to always put things back where they found them and to clean up their own mess. ■ And it is still true, no matter how old you are—when you go out into the world, it is best to hold hands and stick together.

By Robert Fulghum

Nominal Growth - Price Growth = Real Growth

$$4 - 2 = 2$$

$$4 - 1 = 3$$

CONSUMERS: (VERY) PLEASED WITH THE PRESENT

WHILE THE POST-ELECTION SPIKE IN EXPECTATIONS HAS MODERATED, CONSUMERS ASSESSMENT OF PRESENT CONDITIONS CONTINUES TO MAKE NEW HIGHS AMIDST SUBDUED INFLATION, CONTINUED LABOR MARKET TIGHTENING, IMPROVING CREDIT AVAILABILITY AND HIGHER ASSET PRICES

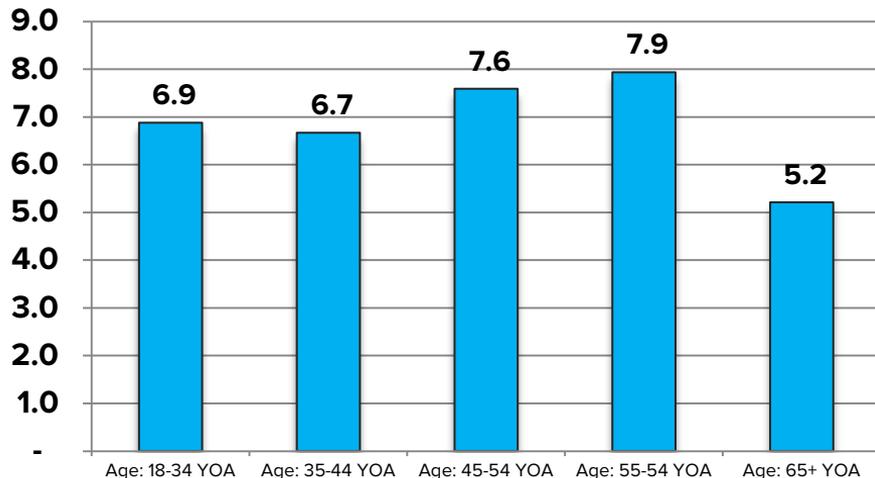
Consumer Confidence: Present Conditions

■ Recession Dates — Conference Board: Present Conditions



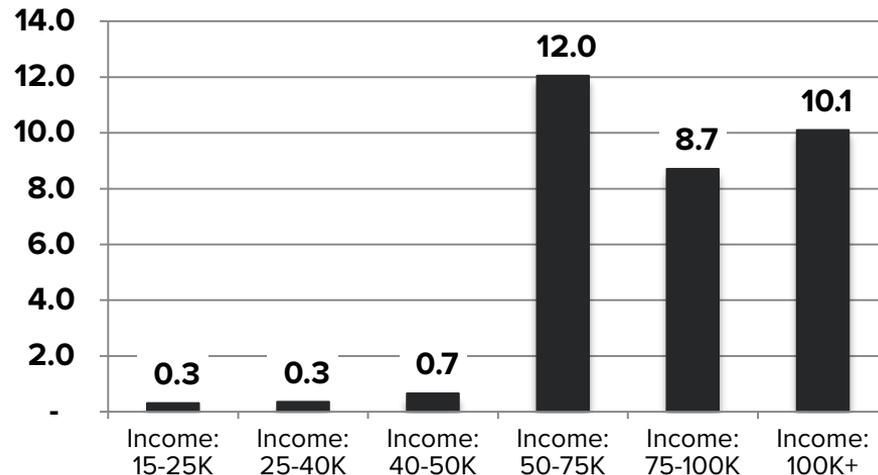
MORE THAN JUST RICH REPUBLICANS?

Consumer Confidence by Age
Change Since October 2016



CONFIDENCE BY AGE

Consumer Confidence by Income
Change Since October 2016

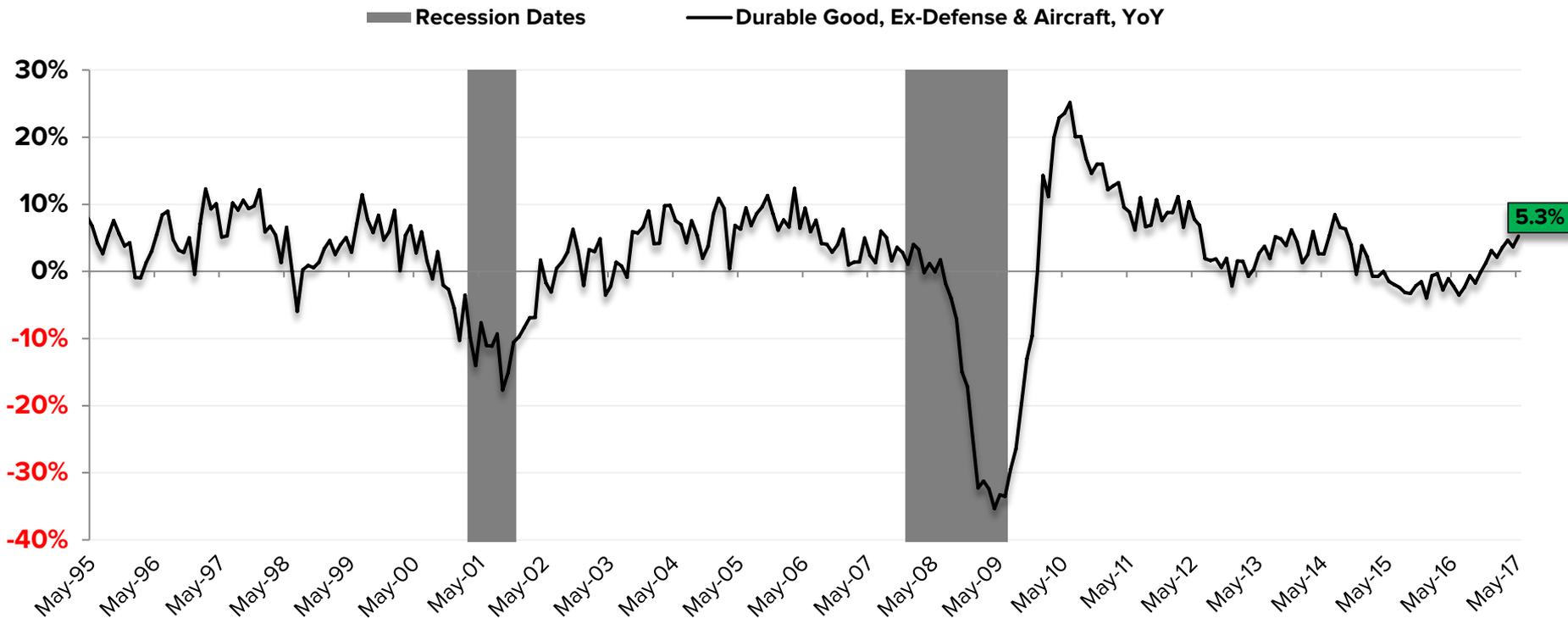


CONFIDENCE BY INCOME

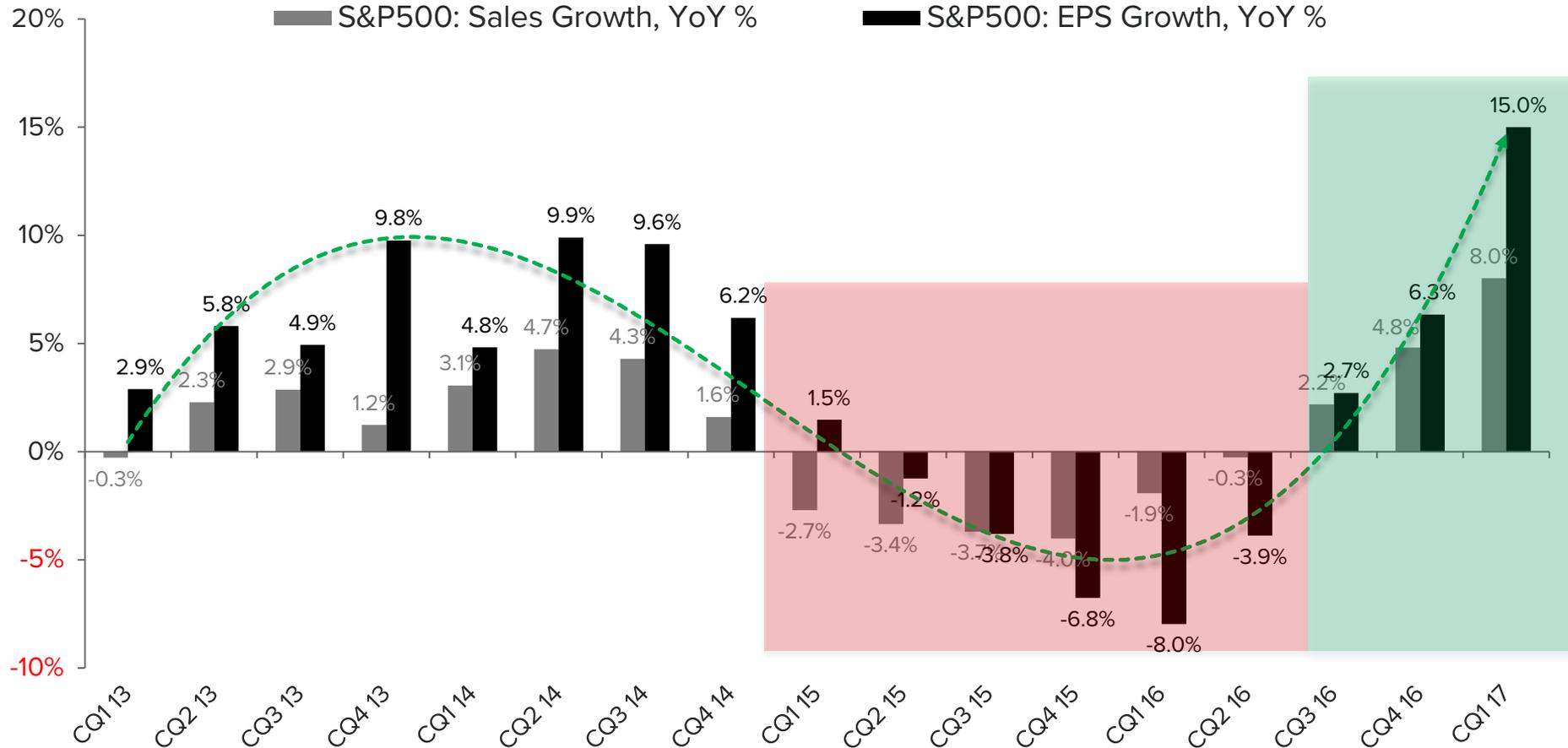
HIGHER TICKET ORDERS & CONSUMPTION ARE ↑

WITH DURABLE GOODS EX-DEFENSE & AIRCRAFT ACCELERATING TO A NEW 33-MONTH HIGH IN MAY, COMPANIES ARE BETTING STRENGTH IN HIGHER TICKET CONSUMPTION CONTINUES. RATE-OF-CHANGE STRENGTH SHOULD PERSIST AT LEAST THROUGH 3Q ALONGSIDE FAVORABLE COMP DYNAMICS.

U.S. DURABLE GOODS

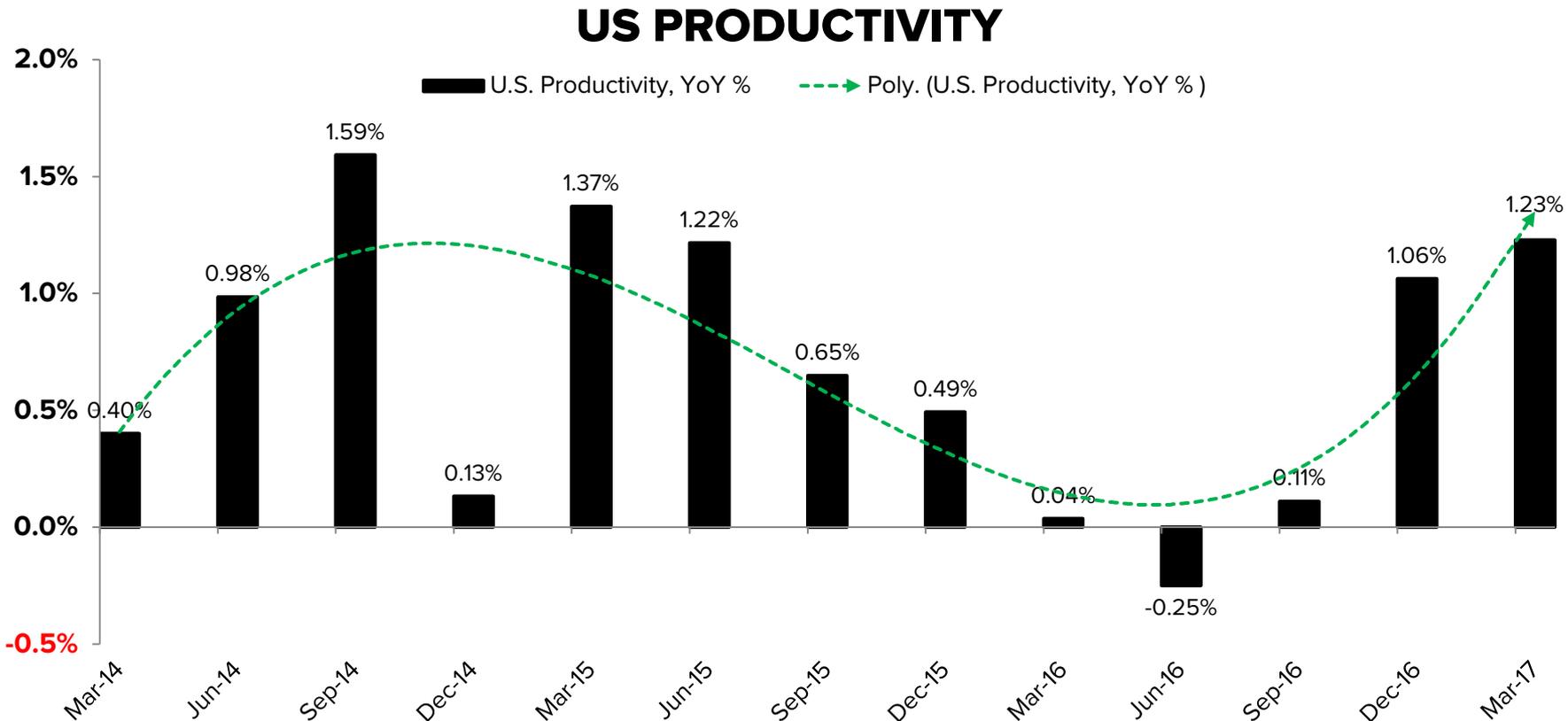


AND WITH PROFITS **ACCELERATING**



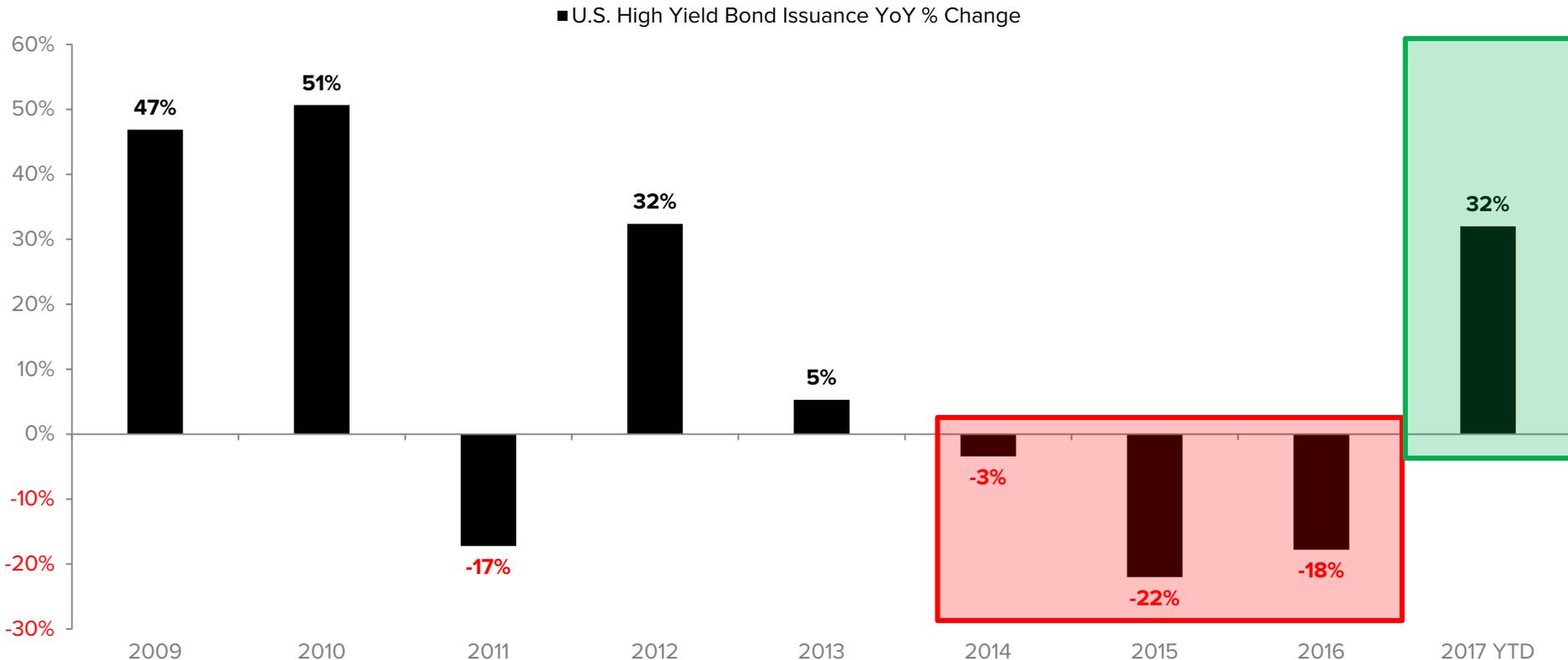
PRODUCTIVITY REBOUNDING

AFTER ITS WORST STRETCH OF GROWTH SINCE 1979, PRODUCTIVITY HAS NOW ACCELERATED FOR 3 QUARTERS



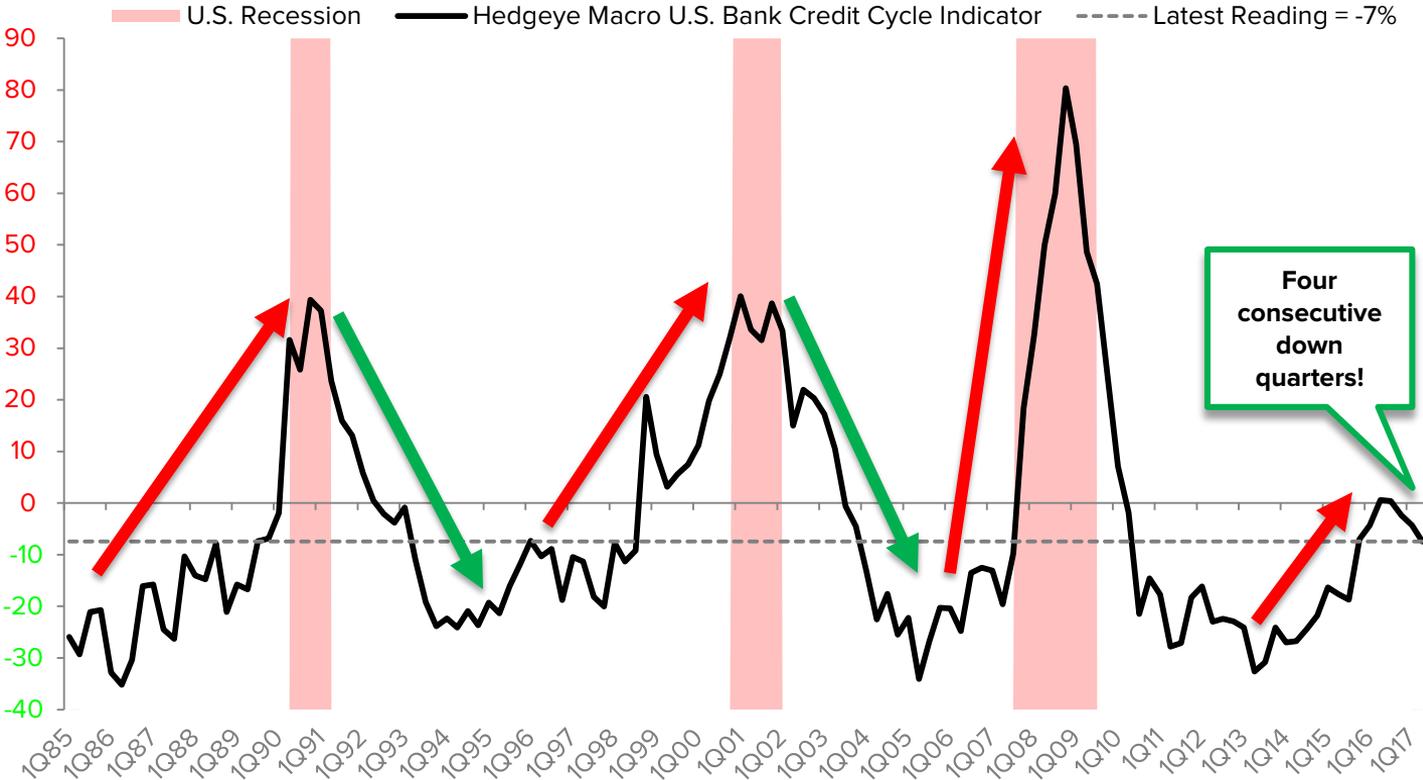
CAPITAL MARKETS RE-OPEN

WHILE DOMESTIC CAPITAL MARKETS ACTIVITY HAD BEEN IN CYCLICAL DECLINE SINCE VOLATILITY BROKE OUT ACROSS ASSET CLASSES IN 2H14, THE REBOUND IN HIGH-YIELD ISSUANCE IN THE YTD IS NOTEWORTHY.



AND CREDIT CONDITIONS IMPROVING

AFTER THREATENING A BREAKOUT ROUGHLY ONE YEAR AGO, OUR PROPRIETARY BANK CREDIT CYCLE INDICATOR CONTINUES TO SIGNAL EASING CREDIT CONDITIONS BROADLY ACROSS THE ECONOMY.



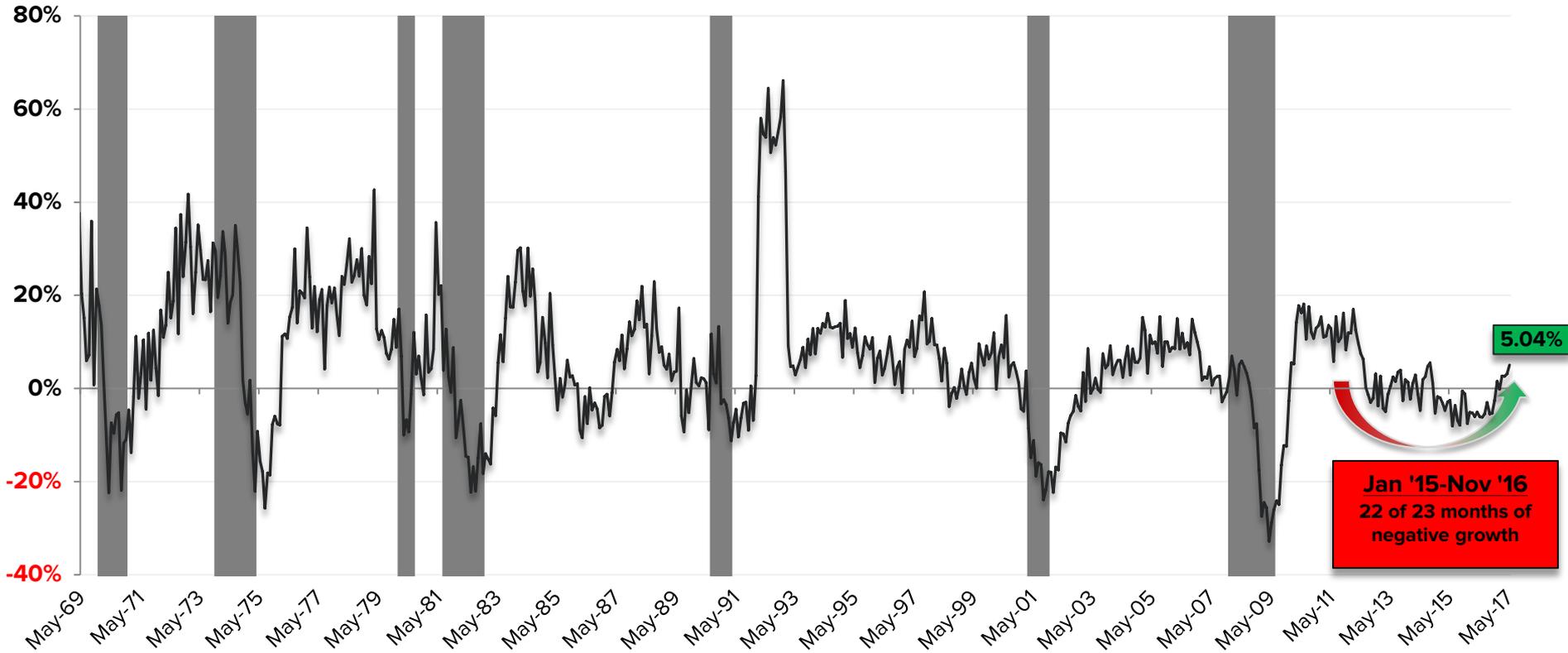
Our proprietary **Bank Credit Cycle Indicator** is an equal-weighted average of the following time series, each derived from the Fed's Senior Loan Officer Survey data:

1. Net % of Domestic Respondents Tightening Lending Standards for C&I Loans (All Firms)
2. Net % of Domestic Respondents Increasing Spreads of Loan Rates Over the Banks' Cost of Financing (All Firms)
3. Net % of Domestic Respondents Increasing the Cost of Credit Lines (All Firms)
4. Net % of Domestic Respondents Tightening Loan Covenants (All Firms)
5. Net % of Domestic Respondents Reporting Increased Willingness to Make Consumer Installment Loans (Inverted)

CAPEX #ACCELERATING = 33 MONTH HIGH!

■ Recession Dates

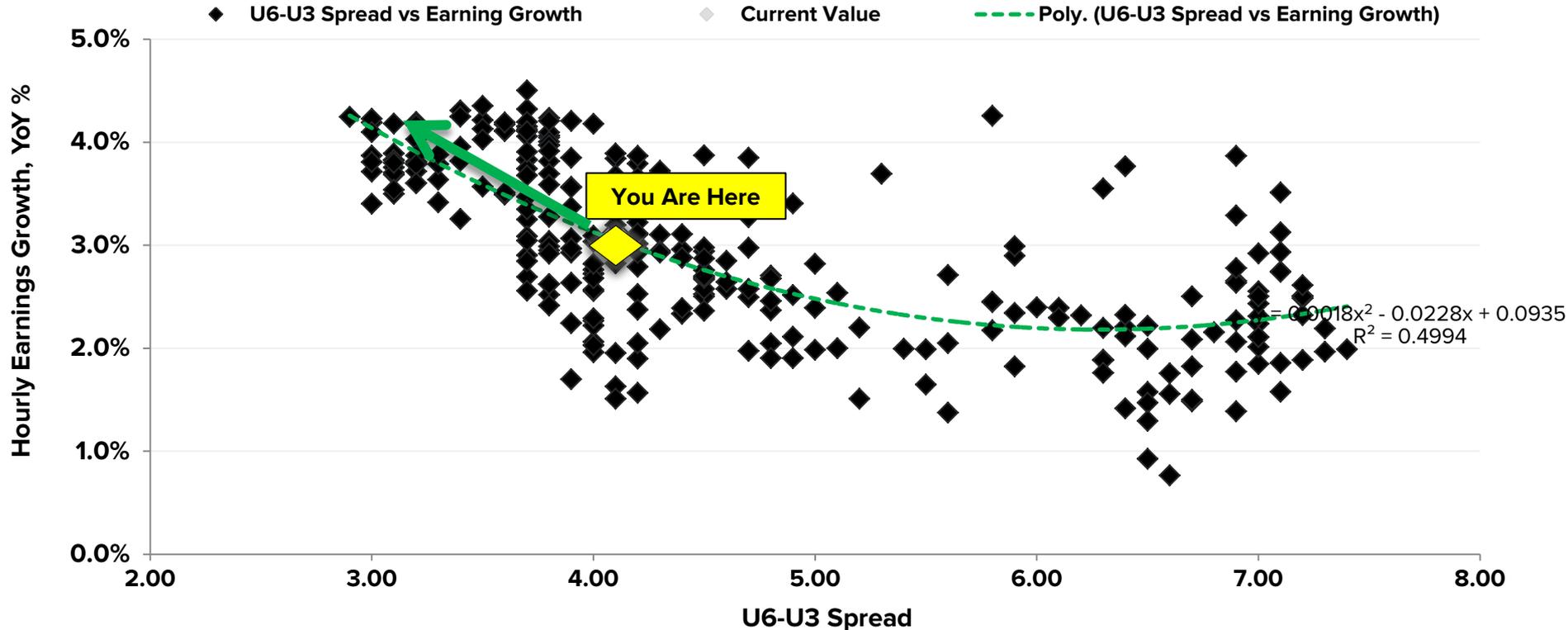
— Core Capital Goods Orders, YoY %



CREATING A (+) BACKDROP FOR FURTHER STRENGTH IN HIRING

IMPROVING PROFIT, PRODUCTIVITY AND INVESTMENT GROWTH SHOULD CONTINUE TO SUPPORT CORPORATE HIRING AND A FURTHER TIGHTENING IN THE LABOR MARKET, INCREASING THE PROBABILITY FOR ACCELERATING WAGE INFLATION.

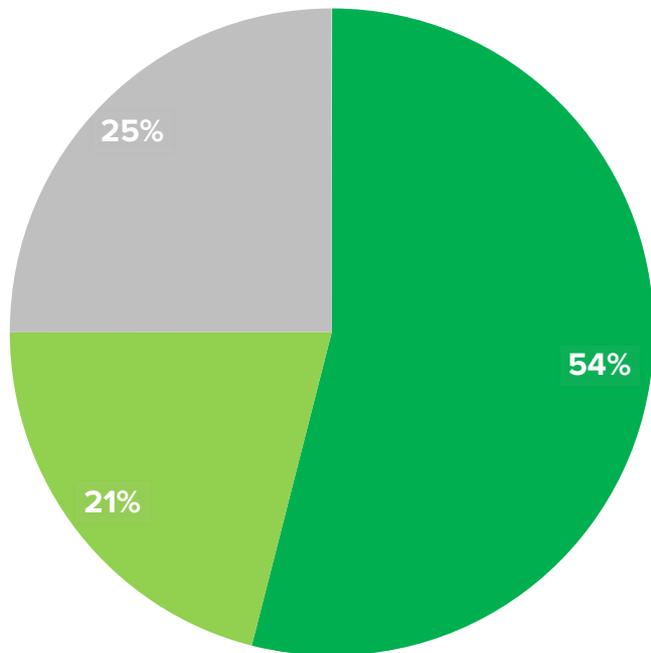
Labor Slack vs Wage Growth



MEANWHILE, ATH'S = YOUGE FOR RICH PEOPLE!

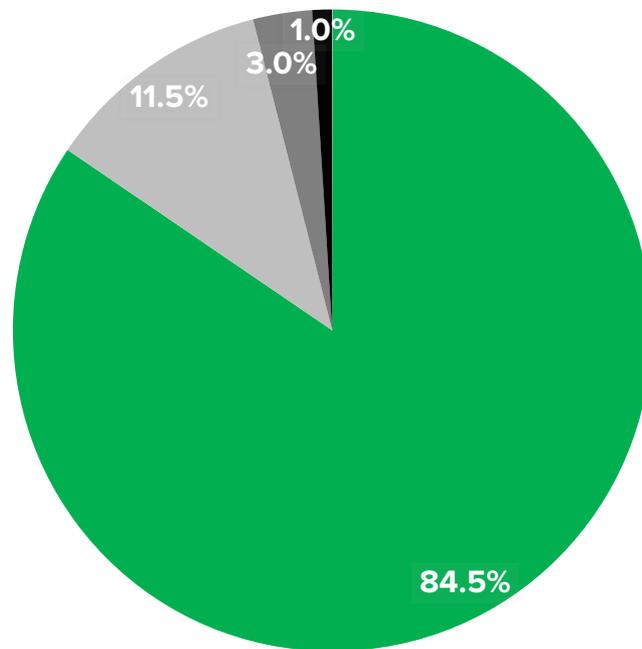
Distribution of U.S. Household Wealth, by Income Percentile

■ Top 3% ■ Next 7% ■ Bottom 90%



Ownership of U.S. Financial Assets, by Household Wealth Distribution

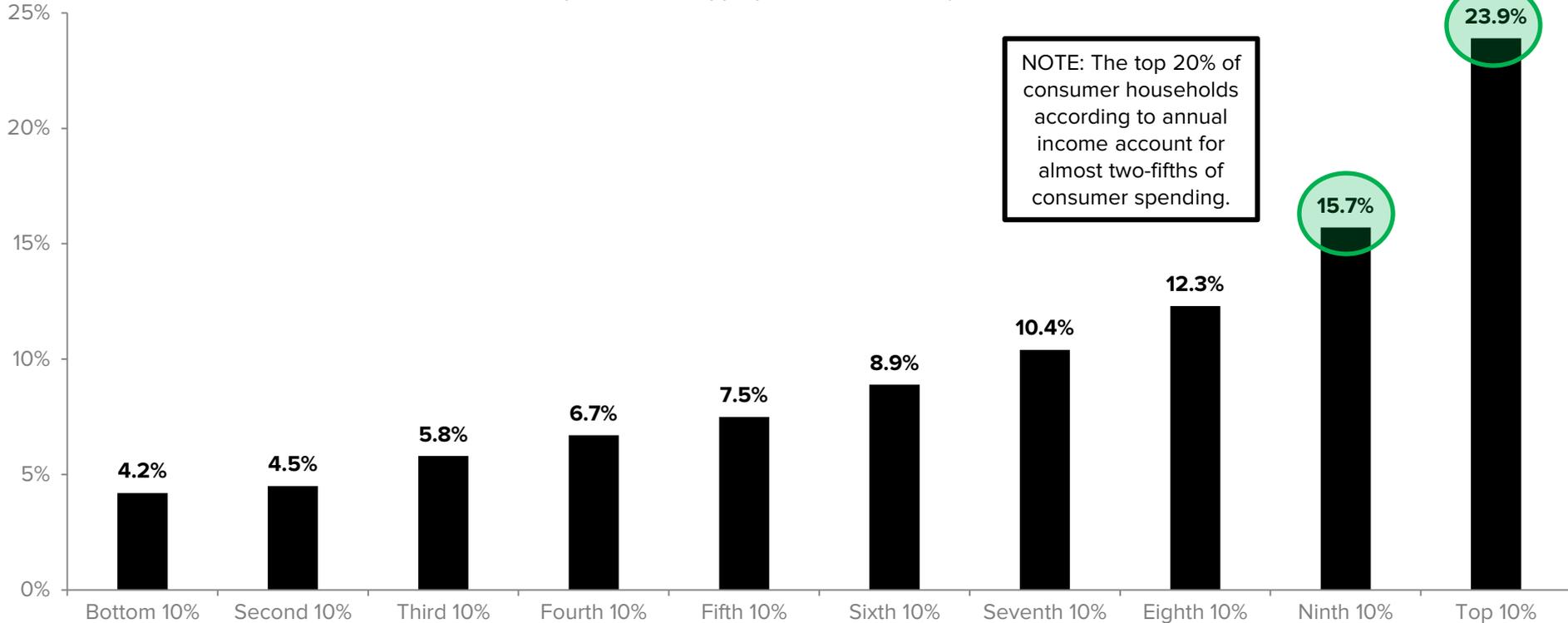
■ Top 10% ■ Next 15% ■ Next 25% ■ Bottom 50%



THE HIGH-END MATTERS

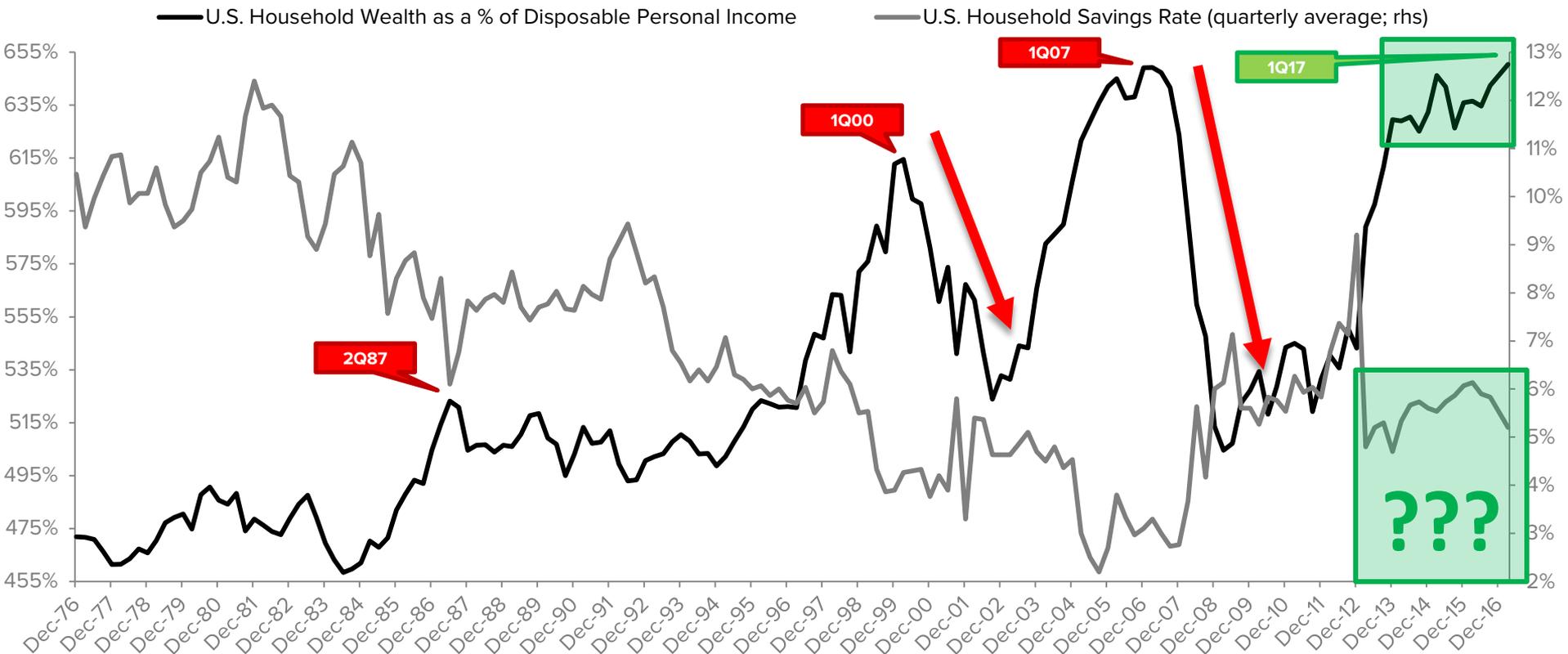
THE TOP 20% OF HOUSEHOLDS ACCORDING TO ANNUAL INCOME ACCOUNT FOR ALMOST TWO-FIFTHS OF CONSUMER SPENDING. THAT'S DOUBLE THE AMOUNT OF SPENDING THEIR UNITS WOULD IMPLY ON A LIKE-FOR-LIKE BASIS.

■ Percentage of Annual Aggregate Expenditures by Decile of Income



THE WEALTH EFFECT REMAINS SUPPORTIVE

ON AN ECONOMY-WIDE BASIS, THE “WEALTH EFFECT” IS POISED TO BREAK OUT > ITS 1Q15 CYCLE PEAK, WHICH IMPLIES THE HOUSEHOLD SAVINGS RATE HAS ROOM TO DECLINE 200-300 BASIS POINTS AND BUOY CONSUMPTION GROWTH THROUGH THE END OF THE CYCLE.

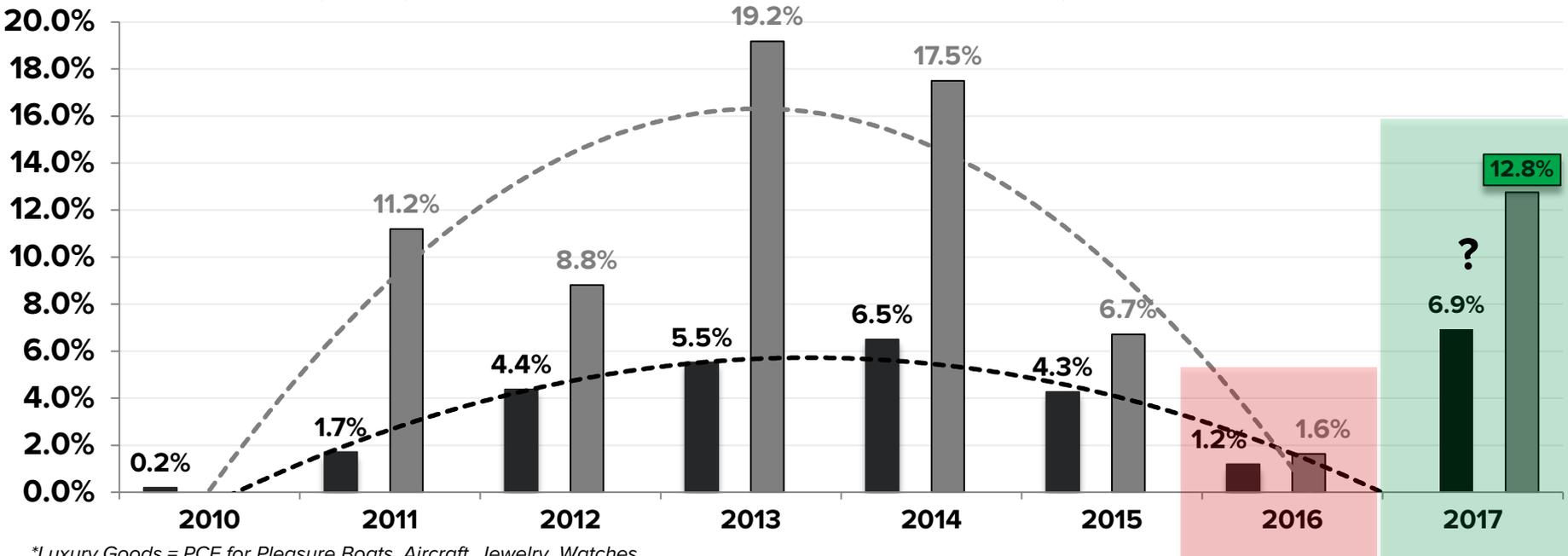


HIGH END CONSUMPTION = ACCELERATING

AFTER COLLAPSING FOR 2 YEARS INTO MID 2016 ALONGSIDE STAGNANT ASSET PRICE GROWTH, HIGH TICKET DISCRETIONARY CONSUMPTION HAS BEGUN TO RE-ACCELERATE ON A SHORT LAG TO RESURGENT EQUITY PRICE REFLATION.

Asset Price Inflation vs Luxury Goods Consumption*

■ Luxury Goods Consumption, YoY % ■ SPX Index, YoY %
- - - Poly. (Luxury Goods Consumption, YoY %) - - - Poly. (SPX Index, YoY %)



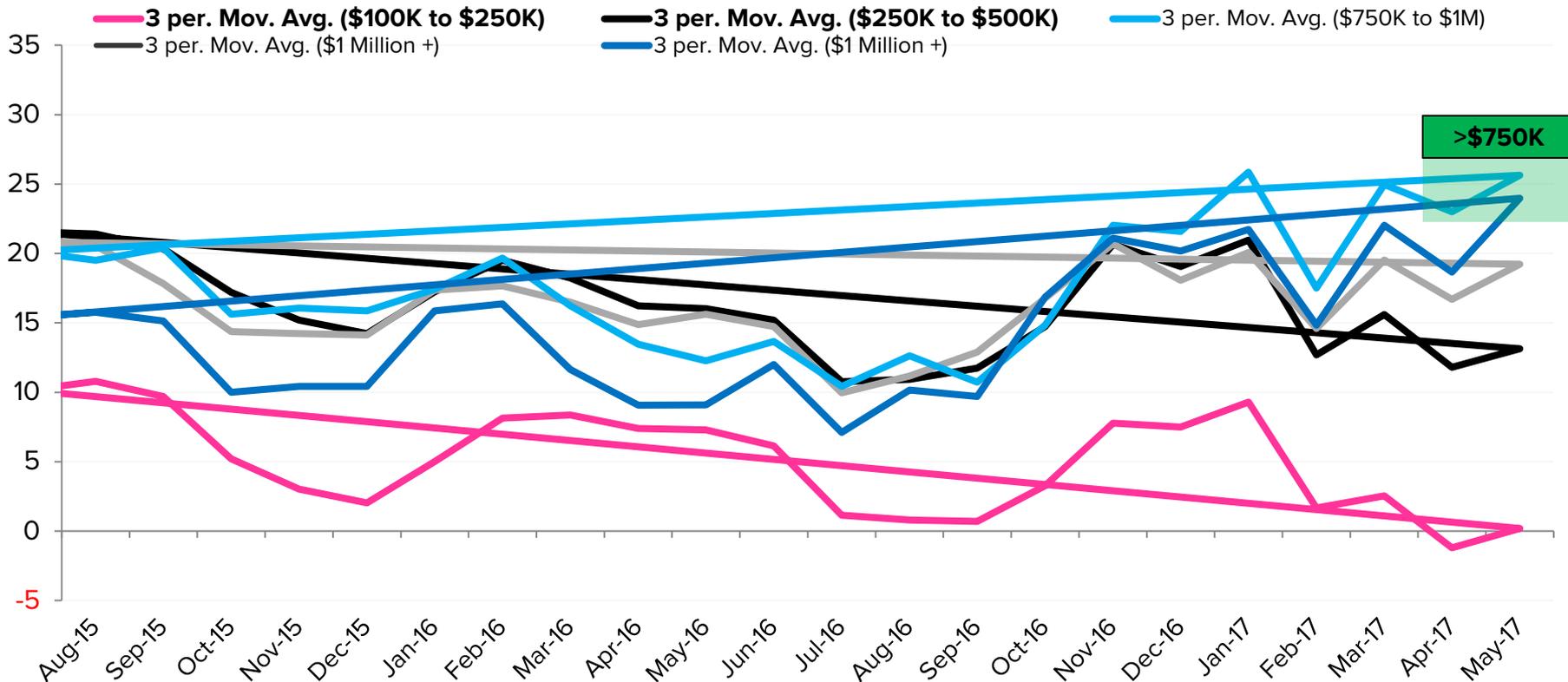
*Luxury Goods = PCE for Pleasure Boats, Aircraft, Jewelry, Watches

**SPX: Performance calculated using average annual price, 2017 = Ave price YTD, prices as of 6/30/17

HIGH END HOUSING = ACCELERATING

SALES GROWTH AT THE HIGH END OF BOTH THE EXISTING AND NEW MARKET IS ACCELERATING

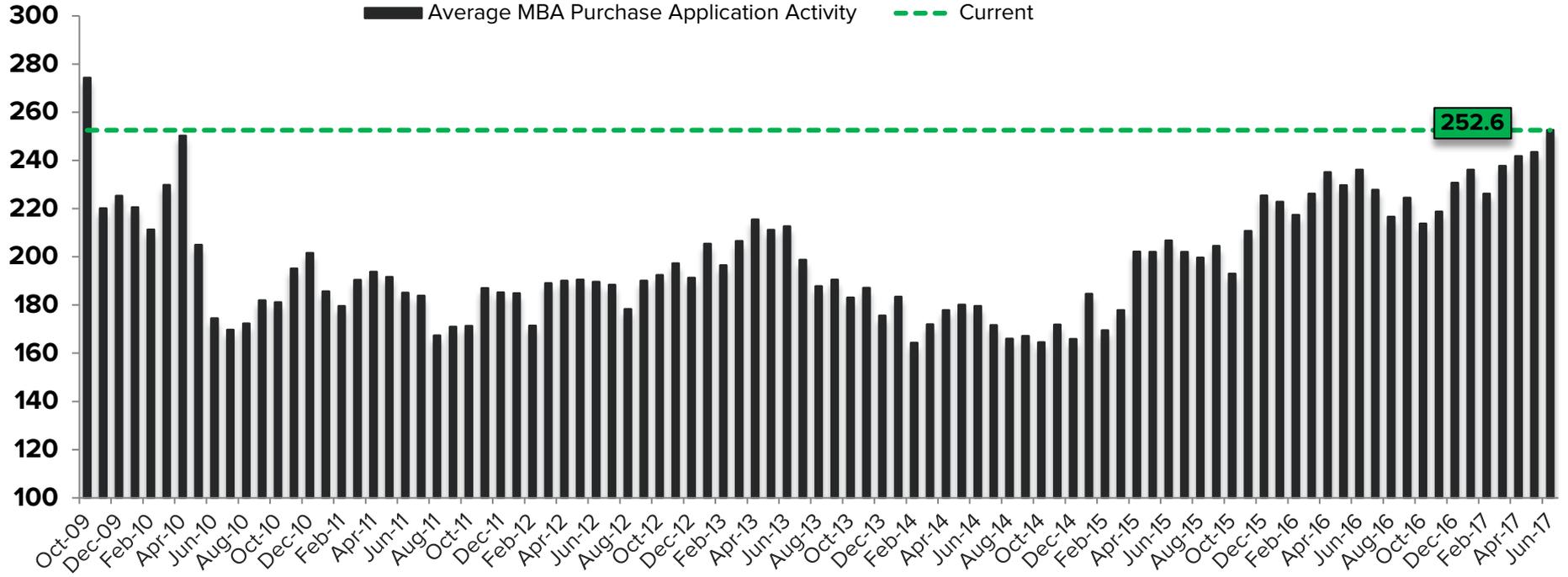
EXISTING HOME SALES BY PRICE TIER, YoY %



SPEAKING OF HOUSING, DEMAND = CYCLE HIGHS

MORTGAGE PURCHASE APPLICATION VOLUME IS TRACKING AT ITS HIGHEST LEVEL OF THE CYCLE HERE IN JUNE

MBA Mortgage Purchase Applications Monthly

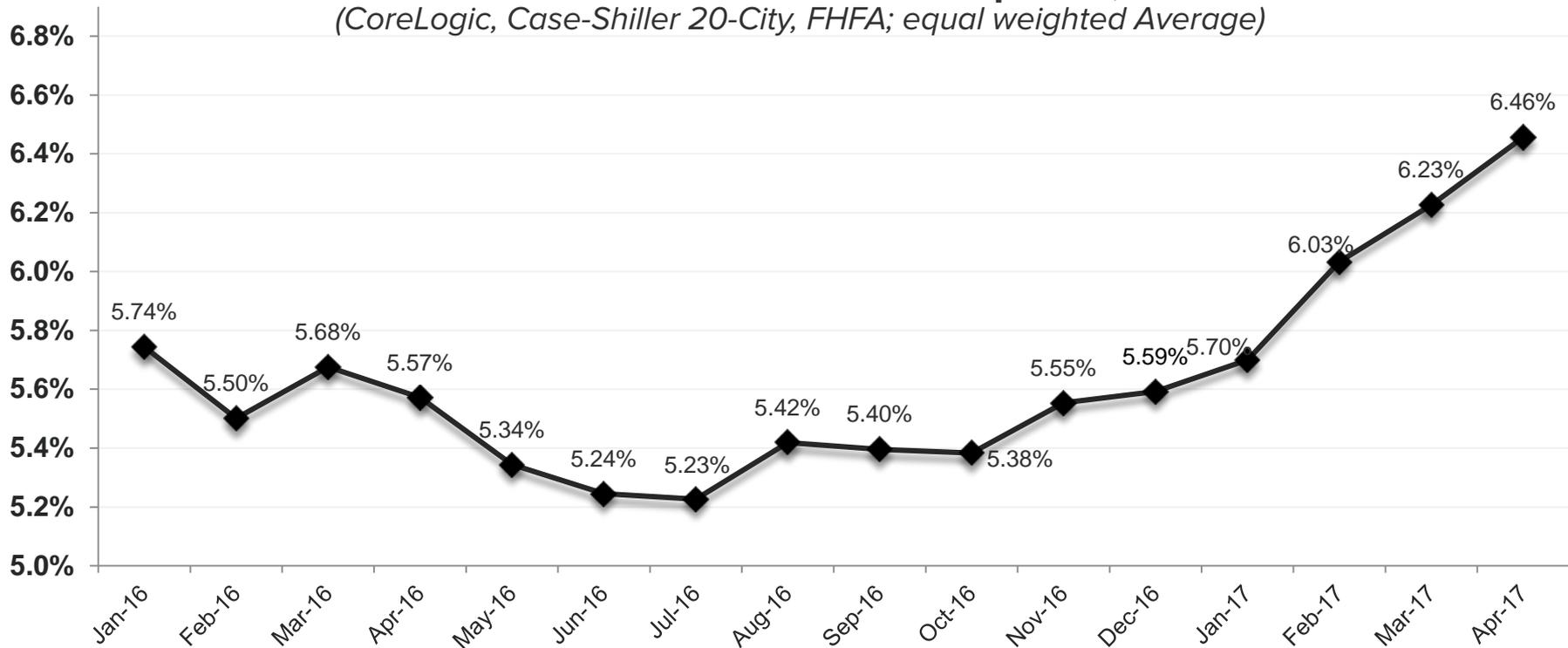


PRICES ARE ACCELERATING

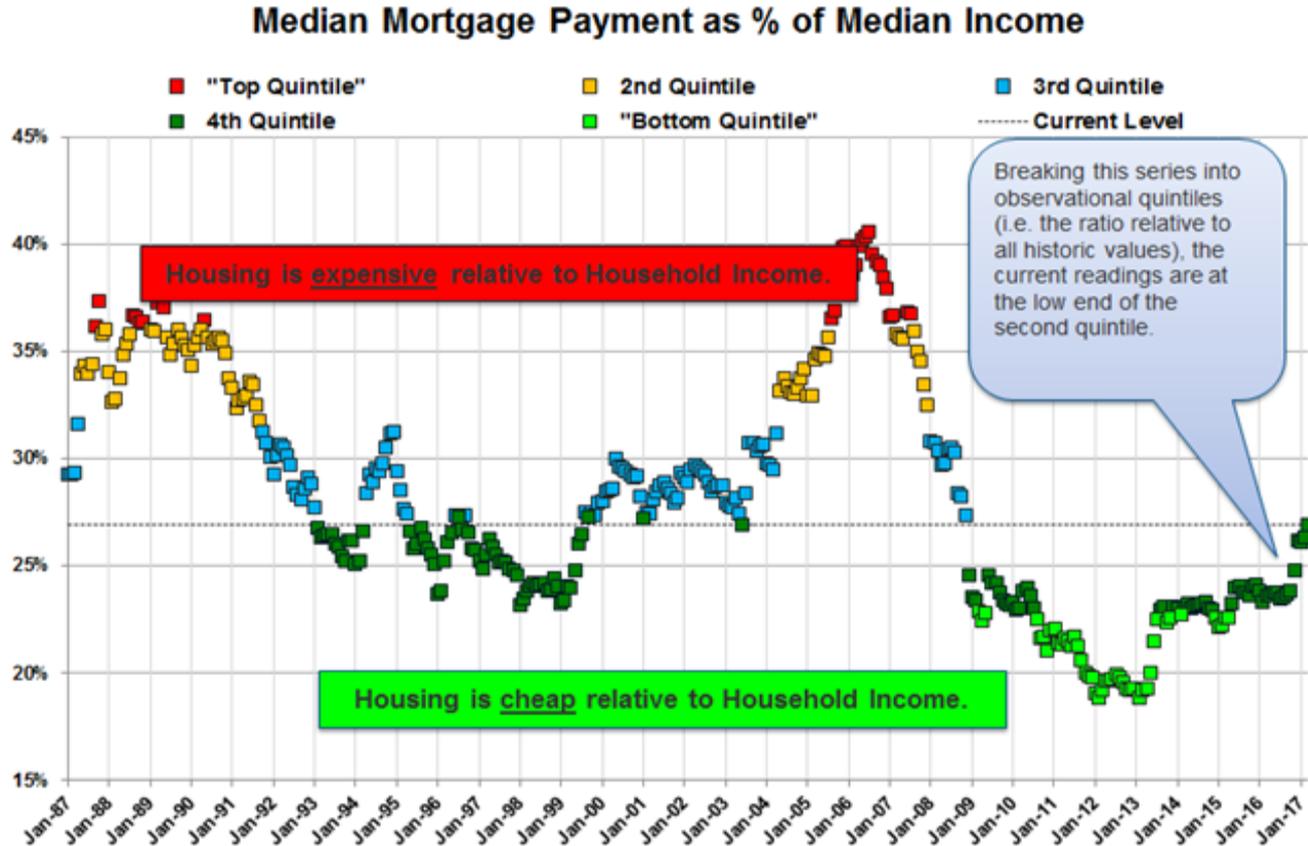
STRONG DEMAND AND TIGHT SUPPLY ARE DRIVING A NOTABLE ACCELERATION IN HOME PRICE GROWTH. HISTORICALLY, HOUSING RELATED EQUITIES TRADE WITH A DIRECT RELATIONSHIP TO THE 2ND DERIVATIVE TREND IN HPI

HOME PRICE GROWTH: HPI Composite, YoY %

(CoreLogic, Case-Shiller 20-City, FHFA; equal weighted Average)



AFFORDABILITY REMAINS FAVORABLE



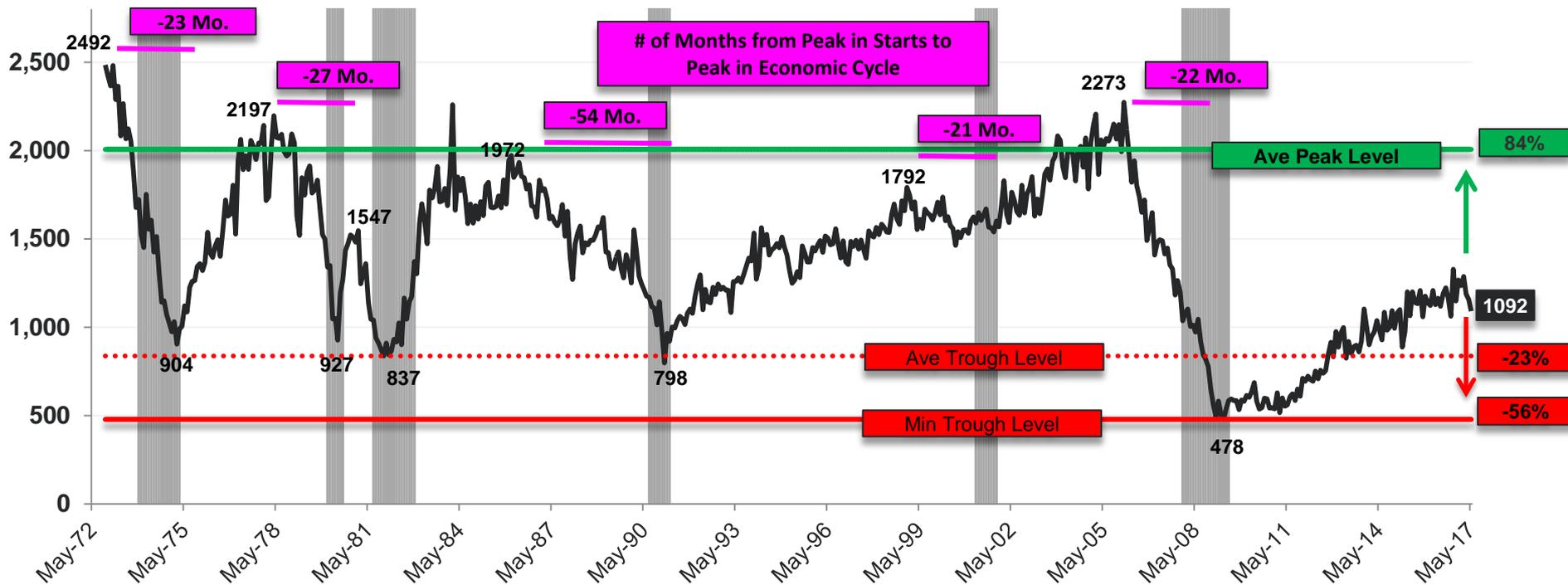
Housing (mortgage payments) is still cheap vs incomes nationally. The green quintile bands indicate early cycle & a go-forward tailwind for Housing, while the red band signals very late cycle & a coming correction/crash.

TREND/TAIL ASYMMETRY!

HISTORICALLY, HOUSING IS A MID-CYCLE PHENOMENON BUT THE HOUSING CYCLE AND BROADER MACRO CYCLE ARE OUT OF PHASE CURRENTLY. THE HOUSING RECOVERY DIDN'T BEGIN UNTIL 2012, LEAVING SIGNIFICANT UPSIDE FROM CURRENT LEVELS.

HOUSING STARTS

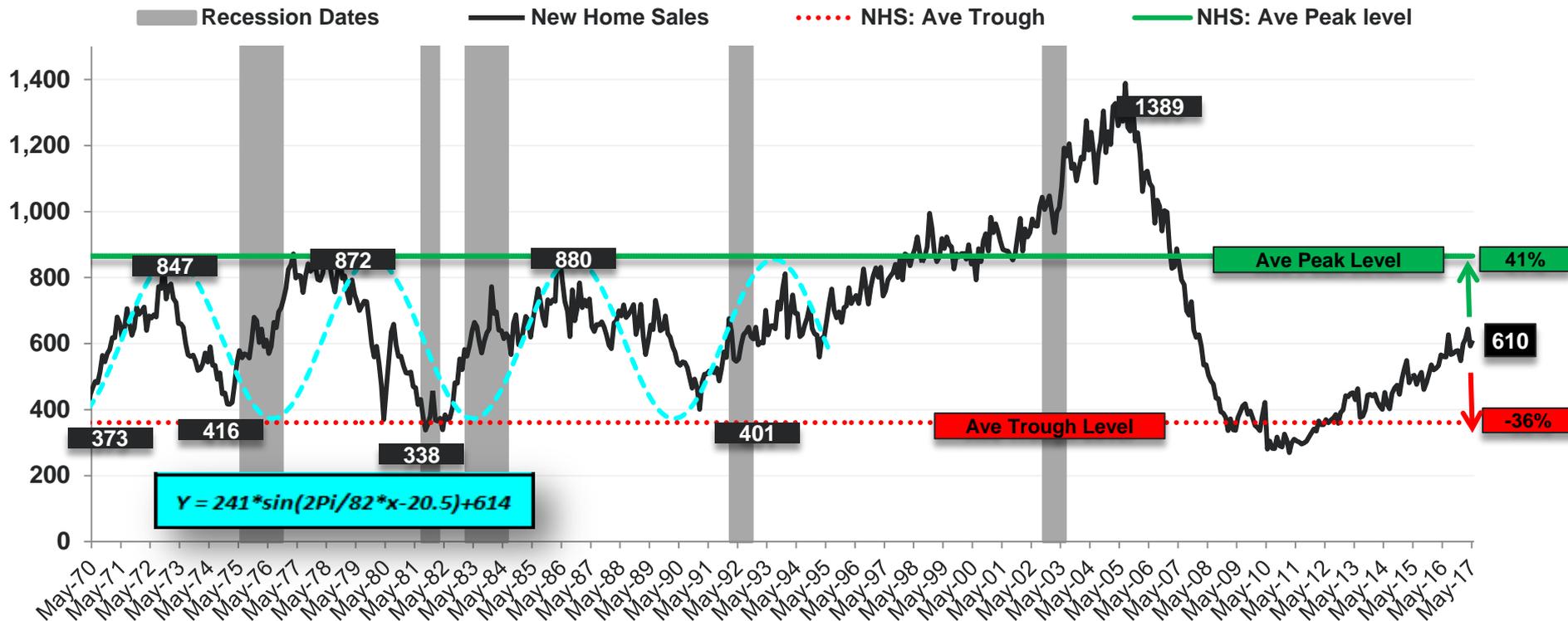
■ Recession Dates
 — Housing Starts (Total)
 ⋯ Starts: Ave Trough Level
 — Starts: Min Trough
 — Starts: Ave Peak



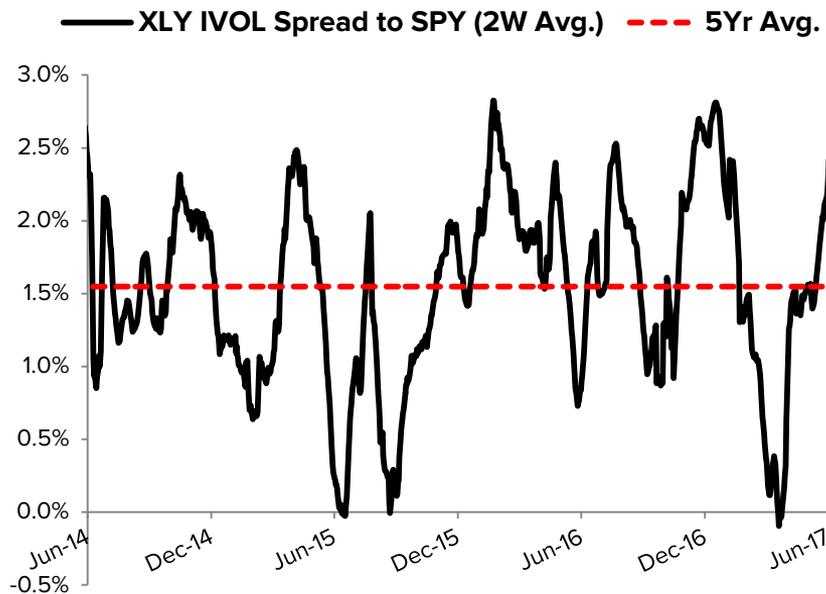
NHS STILL HAVE SIGNIFICANT UPSIDE

LOOKING BACK ACROSS THE LAST ~45 YEARS, THE UPSIDE/DOWNSIDE RATIO FOR NEW HOME SALES REMAINS FAVORABLE AT +41%/-36%.

NEW HOME SALES

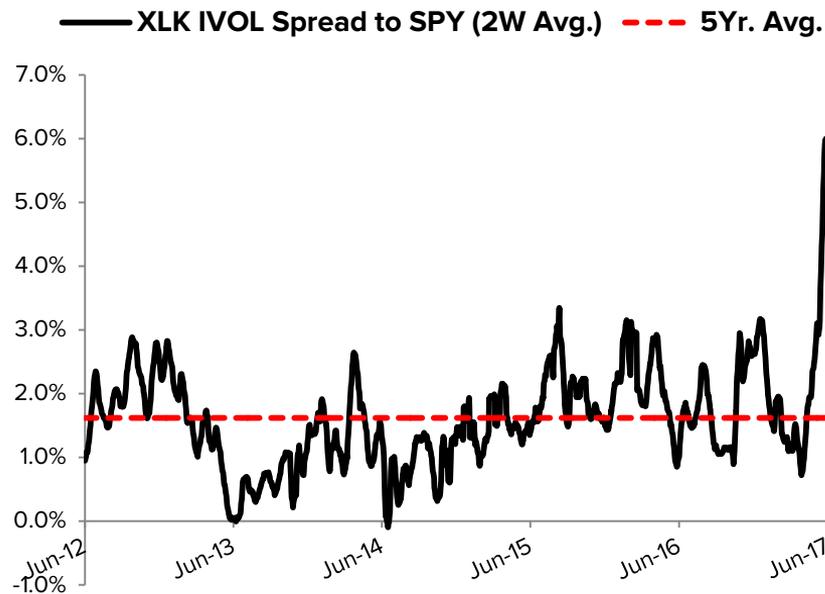


SENTIMENT: LONG REAL GROWTH LOOKS ANYTHING BUT CROWDED



XLY SENTIMENT RELATIVE TO SPY

Recent mean reversion in Consumer Discretionary outperformance has changed investor expectations. The XLY spot contract implied volatility spread to SPY implied volatility is +2.2x extended on a 3yr Z-score basis.

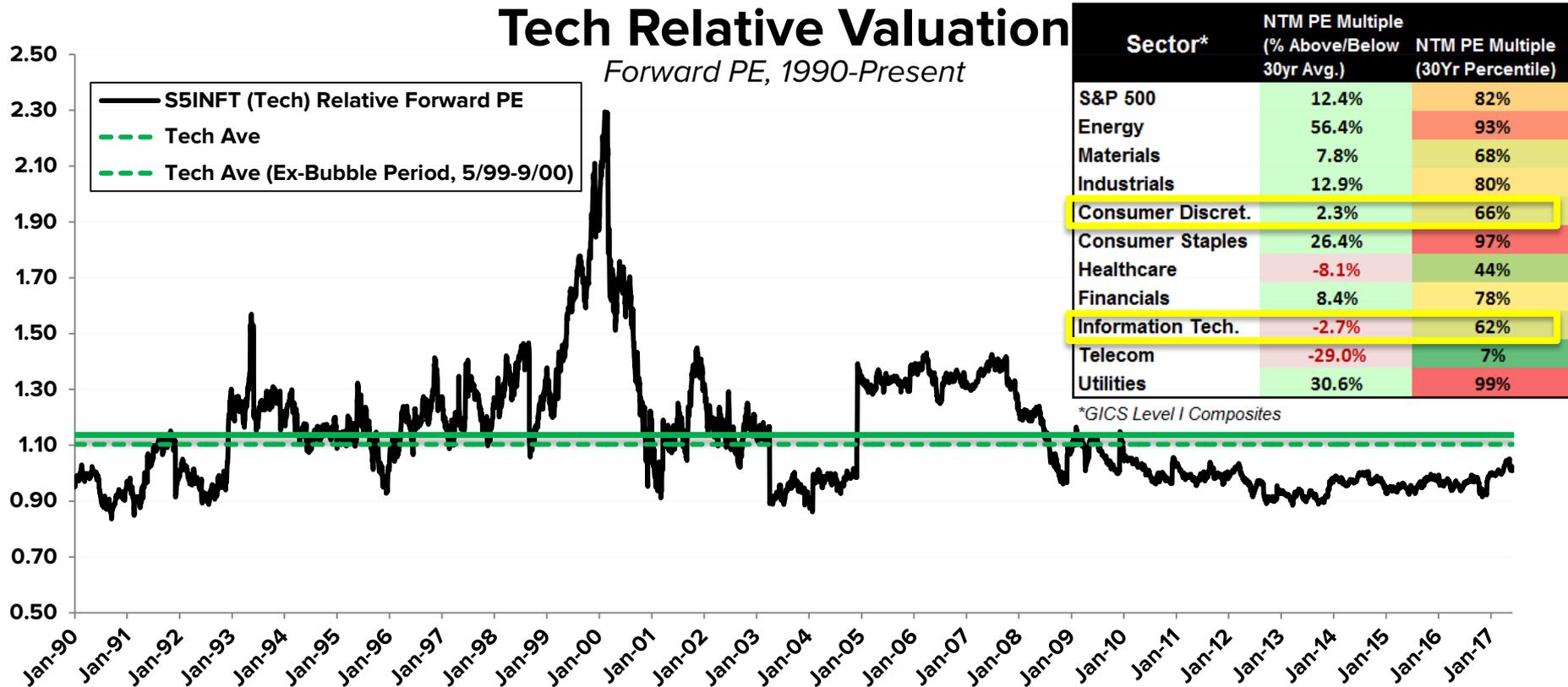


XLK SENTIMENT RELATIVE TO SPY

The Technology sector has generated alpha YTD on the back of unprecedented levels of low volatility (both absolute & relative in March and April, but the recent bout of increasing realized volatility has shifted forward expectations in a big way.

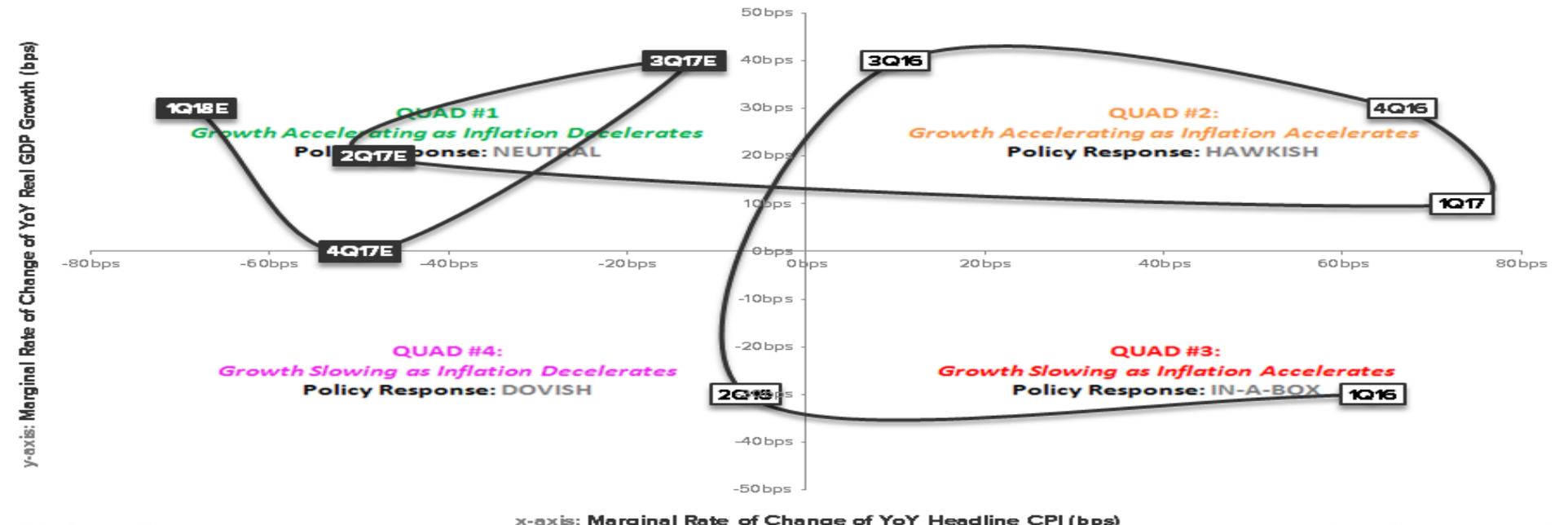
FOR THOSE WHO WANT TO TALK “CHEAP” AND “EXPENSIVE”.....

WE'RE NOT MAGIC MULTIPLE PROPONENTS BUT IF WE WERE, WE'D HAVE TROUBLE ARGUING FOR REAL GROWTH EXPOSURES BEING “EXPENSIVE”, BUT HEY MAYBE WE DON'T GET IT.



CONCLUSION: LONG QUAD 1 REAL GROWTH

| UNITED STATES | 1Q14 | 2Q14 | 3Q14 | 4Q14 | 1Q15 | 2Q15 | 3Q15 | 4Q15 | 1Q16 | 2Q16 | 3Q16 | 4Q16 | 1Q17 | Hedgeye Macro GIP Model | | | |
|-------------------|-------|------|------|------|-------|------|------|------|------|------|------|------|------|---------------------------------------|--|-------|-------|
| Real GDP QoQ SAAR | -1.2% | 4.0% | 5.0% | 2.3% | 2.0% | 2.6% | 2.0% | 0.9% | 0.8% | 1.4% | 3.5% | 2.1% | 1.4% | GIP = Growth/Inflation/Policy | | | |
| Real GDP YoY | 1.6% | 2.4% | 2.9% | 2.5% | 3.3% | 3.0% | 2.2% | 1.9% | 1.6% | 1.3% | 1.7% | 2.0% | 2.1% | Full-year Estimates | | 2016E | 2017E |
| 2Y Average | 1.5% | 1.7% | 2.3% | 2.6% | 2.5% | 2.7% | 2.6% | 2.2% | 2.5% | 2.2% | 2.0% | 2.0% | 1.9% | Hedgeye Predictive Tracking Algorithm | | 1.7% | 2.5% |
| 3Y Average | 1.9% | 2.0% | 2.3% | 2.2% | 2.1% | 2.1% | 2.3% | 2.4% | 2.2% | 2.2% | 2.3% | 2.1% | 2.3% | Bloomberg Consensus Estimate | | 1.6% | 2.2% |
| Percentile (T10Y) | 33% | 59% | 79% | 67% | 95% | 87% | 54% | 49% | 33% | 28% | 44% | 64% | 64% | Central Bank Forecast | | 1.9% | 2.2% |
| CPI YoY | 1.4% | 2.1% | 1.8% | 1.3% | -0.1% | 0.0% | 0.1% | 0.5% | 1.1% | 1.0% | 1.1% | 1.8% | 2.5% | Full-year Estimates | | 2016E | 2017E |
| 2Y Average | 1.6% | 1.8% | 1.7% | 1.3% | 0.7% | 1.0% | 1.0% | 0.9% | 0.5% | 0.5% | 0.6% | 1.1% | 1.8% | Hedgeye Predictive Tracking Algorithm | | 1.3% | 2.0% |
| 3Y Average | 2.0% | 1.8% | 1.7% | 1.5% | 1.0% | 1.2% | 1.2% | 1.0% | 0.8% | 1.0% | 1.0% | 1.2% | 1.2% | Bloomberg Consensus Estimate | | 1.3% | 2.3% |
| Percentile (T10Y) | 15% | 44% | 36% | 13% | 5% | 10% | 13% | 15% | 18% | 18% | 26% | 56% | 77% | Central Bank Forecast | | 1.7% | 1.7% |



Data Source: Bloomberg

© Hedgeye Risk Management

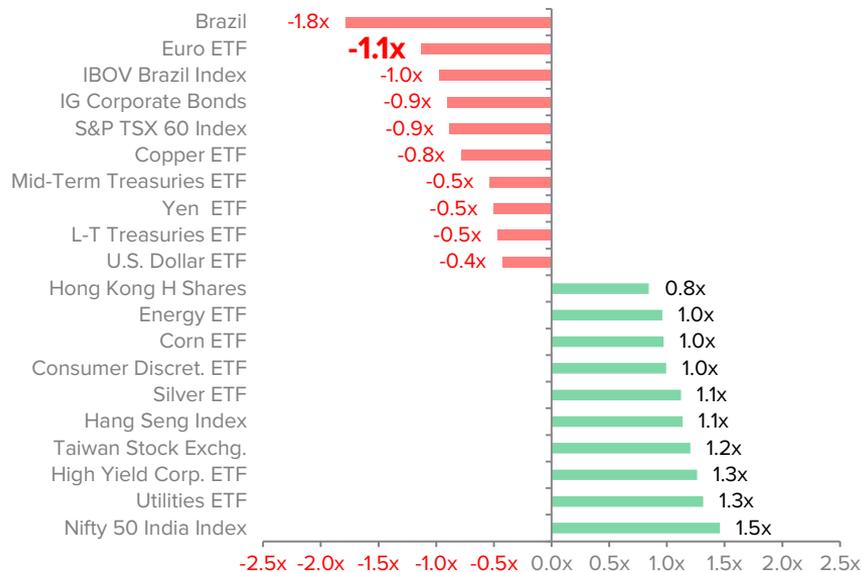
B. Rott
HEDGEYE



#EUROPESLOWING?

EURO: PRICED TO PERFECTION IN RELATIVE VOL. TERMS

MULTI-DURATION IMPLIED VOLATILITY SPREAD RANKER (AVERAGE TTM Z-SCORE)



Average Z-Score: The average Z-Score aggregates the relative implied volatility percentage spreads of 30D, 60D, 3Mth and 6Mth windows for each factor exposure. A low Z-Score indicates implied volatility is trading at a relative discount to realized volatility in each respective ticker over the given windows and vice versa.

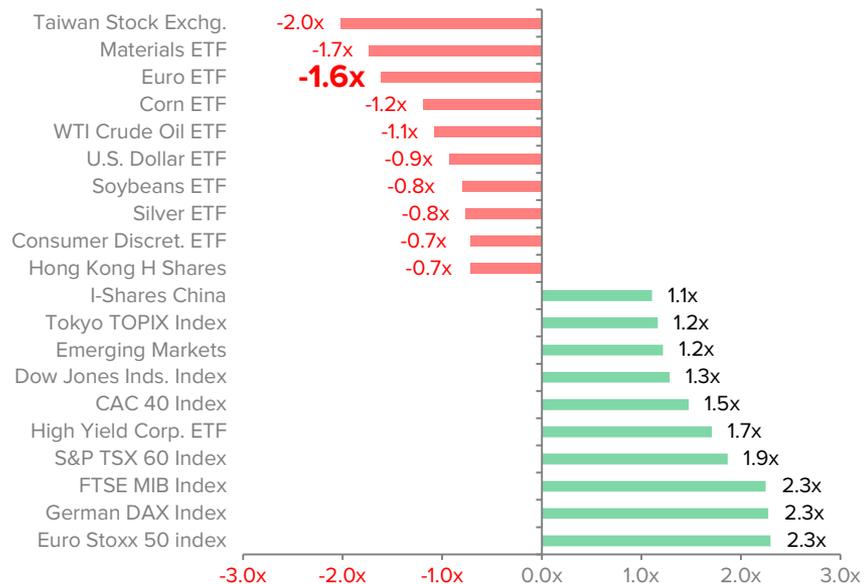
IMPLIED VOLATILITY SPREAD COMPARISON (60D WINDOW)

| Volatility Comparison | | | | |
|-------------------------|---------------|--------|--------|--------|
| Ticker: | FXE US Equity | | | |
| | 30D | 60D | 3Mth | 6Mth |
| Realized Vol % | 7.7 | 7.9 | 7.9 | 8.3 |
| Realized Vol Percentile | 32.2% | 29.9% | 29.1% | 39.2% |
| Implied Vol. % | 6.9 | 6.7 | 6.8 | 7.3 |
| Implied Vol. Percentile | 11.6% | 8.7% | 9.1% | 10.9% |
| Implied Vol. Premium | -10.8% | -15.4% | -13.7% | -12.0% |
| Ticker: | UUP US Equity | | | |
| | 30D | 60D | 3Mth | 6Mth |
| Realized Vol % | 6.2 | 6.3 | 6.5 | 7.0 |
| Realized Vol Percentile | 21.7% | 19.9% | 18.0% | 23.1% |
| Implied Vol. % | 5.9 | 6.6 | 7.1 | 7.2 |
| Implied Vol. Percentile | 5.5% | 11.7% | 18.9% | 19.3% |
| Implied Vol. Premium | -5.1% | 5.9% | 8.2% | 2.6% |

EUR vs. USD Implied Volatility Spread: Implied volatility trades at relatively steep discounts to realized volatility over multiple durations in the EUR, another example consensus has a supremely sanguine bias on the currency.

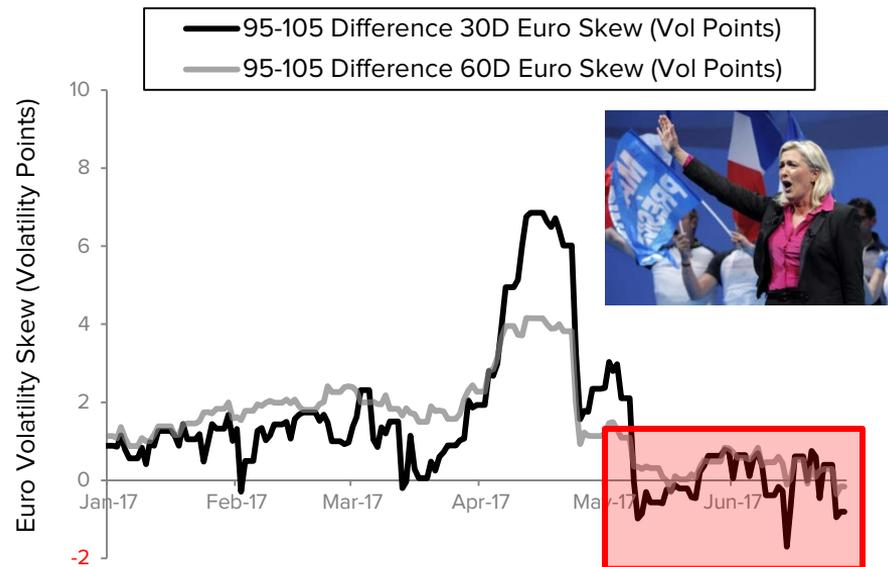
EURO: PRICED TO PERFECTION IN SKEW TERMS

MULTI-DURATION 90%-110% IMPLIED VOLATILITY SKEW RANKER (AVERAGE TTM Z-SCORE)



Average Z-Score: The Z-Score averages the relative volatility of 90% strike put to 110% strike call of 30D, 60D, 3Mth and 6Mth windows for each ticker. A low Z-Score indicates skew that is relatively more compressed in each respective factor exposure over the given windows.

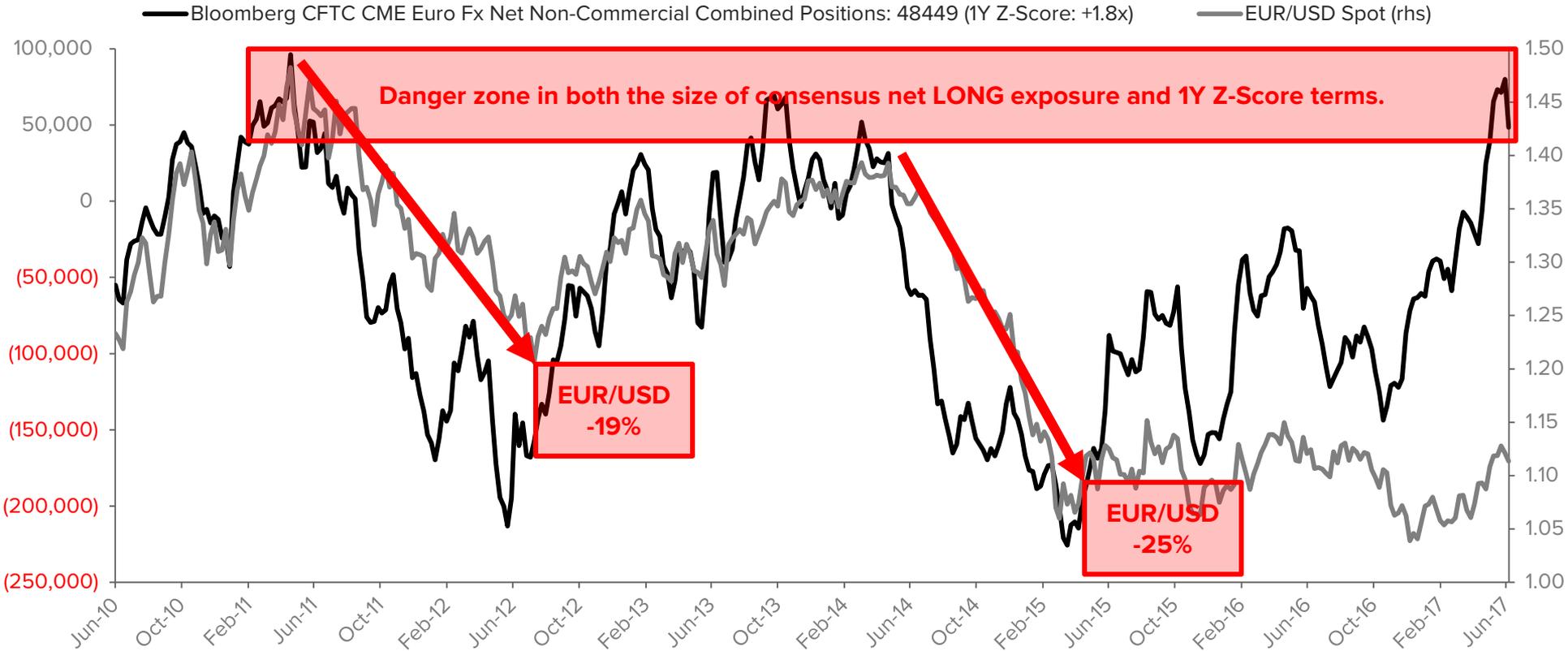
95%-105% STRIKE DIFFERENTIAL EURO (FXE) VOLATILITY SKEW (VOL POINTS)



Euro Volatility Skew: Euro volatility skew is currently hovering near its most complacent point of 2017, implying investors are increasingly betting that Euro downside risk is much less probable on a go-forward basis.

AND CONSENSUS IS LEANING VERY LONG

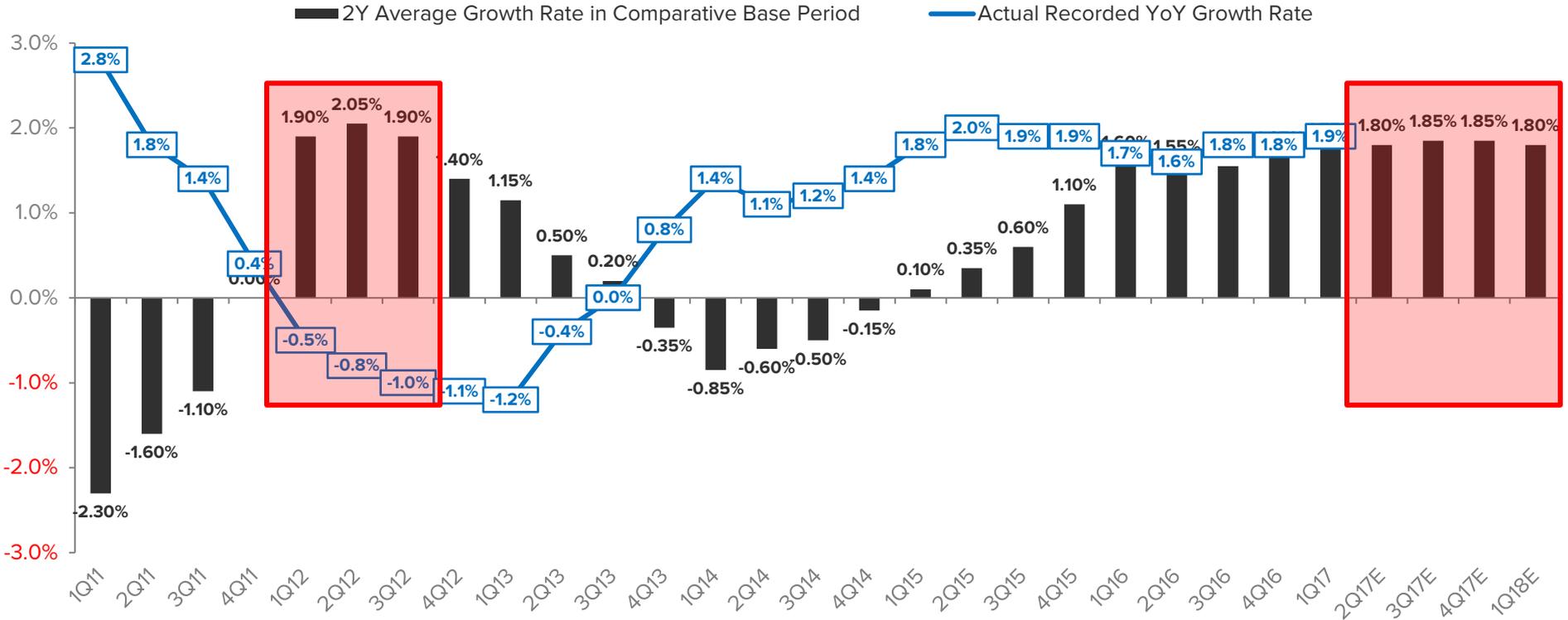
THE LAST TWO INSTANCES SPECULATIVE NET LENGTH IN EURO FUTURES AND OPTIONS CONTRACTS REACHED THESE LEVELS IN EITHER ABSOLUTE OR Z-SCORE TERMS, THE EUR/USD EXCHANGE RATE PLUNGED **-19%** AND **-25%**, RESPECTIVELY.



WHAT COULD GO WRONG? BASE EFFECTS

WHILE EUROZONE GROWTH HAS, TO A LARGE EXTENT, “COMPED THE COMPS” IN RECENT QUARTERS, WE’RE NOT OF THE VIEW THAT SUCH STRENGTH AGAINST ELEVATED BASE EFFECTS IS SUSTAINABLE IN THE CONTEXT OF EUROPE’S SECULAR HEADWINDS (DETAILED LATER).

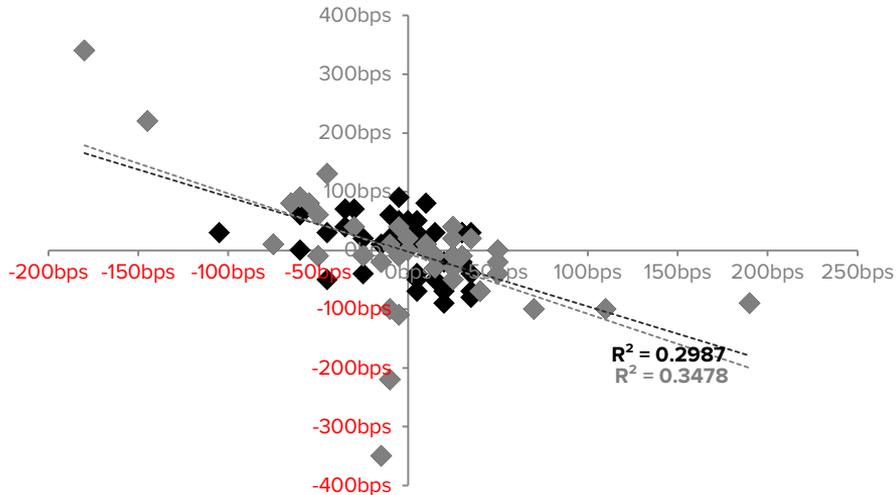
Comparative Base Effect for the Respective Real GDP Reporting Period



A QUICK LESSON IN BASE EFFECTS

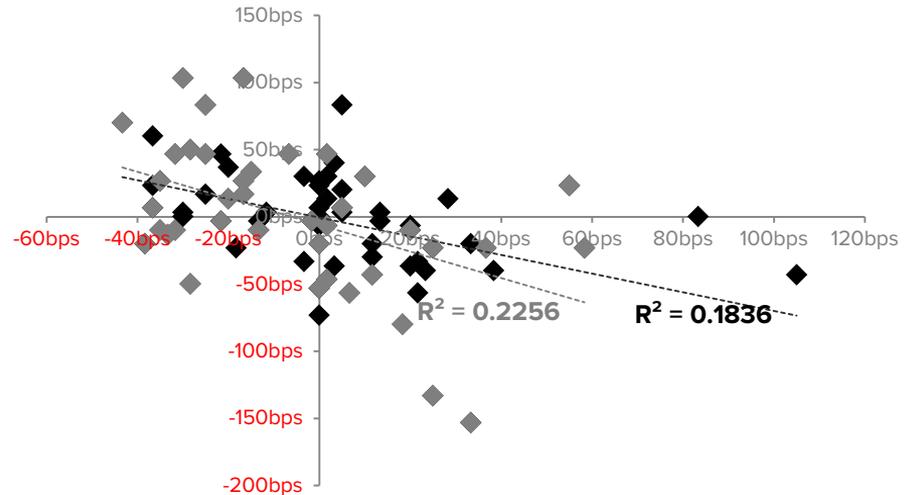
REAL GDP GROWTH Y/Y

- ◆ x-axis: Marginal Rate of Change of 2Y Average Real GDP Growth Rate in Comparative Base Period; y-axis: Marginal Rate of Change of YoY Real GDP Growth Rate in Forecast Period (Trailing 20Y)
- ◆ x-axis: Marginal Rate of Change of 2Y Average Real GDP Growth Rate in Comparative Base Period; y-axis: Marginal Rate of Change of YoY Real GDP Growth Rate in Forecast Period (Trailing 10Y)



HEADLINE CPI Y/Y

- ◆ x-axis: Marginal Rate of Change of 2Y Average Headline CPI Rate in Comparative Base Period; y-axis: Marginal Rate of Change of YoY Headline CPI Rate in Forecast Period (Trailing 20Y)
- ◆ x-axis: Marginal Rate of Change of 2Y Average Headline CPI Rate in Comparative Base Period; y-axis: Marginal Rate of Change of YoY Headline CPI Rate in Forecast Period (Trailing 10Y)

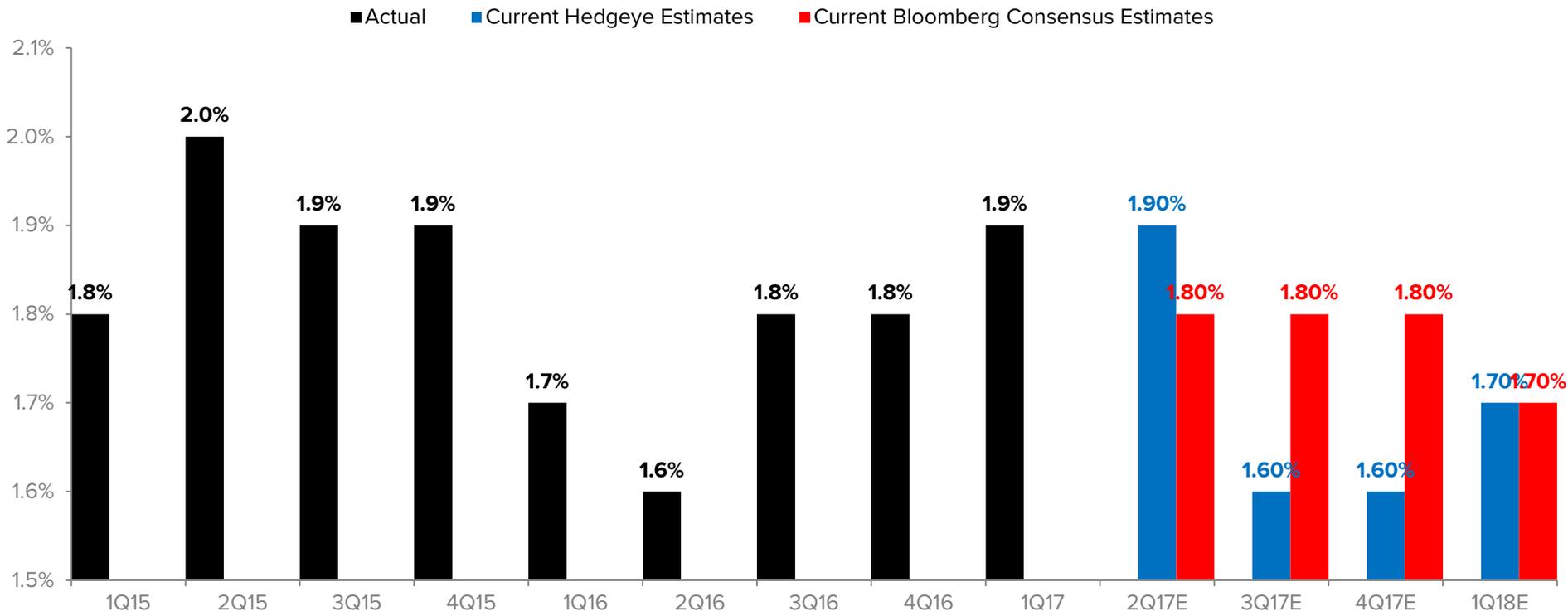


In the **Eurozone** specifically, 65% of the time the marginal rate of change in the 2Y average Real GDP growth rate in the comparative base period carries the **opposite** sign of the growth rate in the forecast period; that same figure is 68% of the time for Headline CPI. Hence, steepening base effects imply **#Quad4** is the highest-probability scenario in the absence of compelling signals to suggest otherwise.

CONSENSUS IS TOO HIGH ON EUROZONE GROWTH IN 2H17

WE'RE NOT CALLING FOR A RAPID DECELERATION IN EUROZONE GROWTH. WE'RE SIMPLY STATING THAT EVEN A MARGINAL DECELERATION MIGHT FEEL LIKE A SHARP SLOWDOWN IN THE CONTEXT OF PEAK COMPLACENCY ON THE LONG SIDE OF THE EURO AND EUROZONE EQUITIES.

EUROZONE Real GDP - YoY % Change

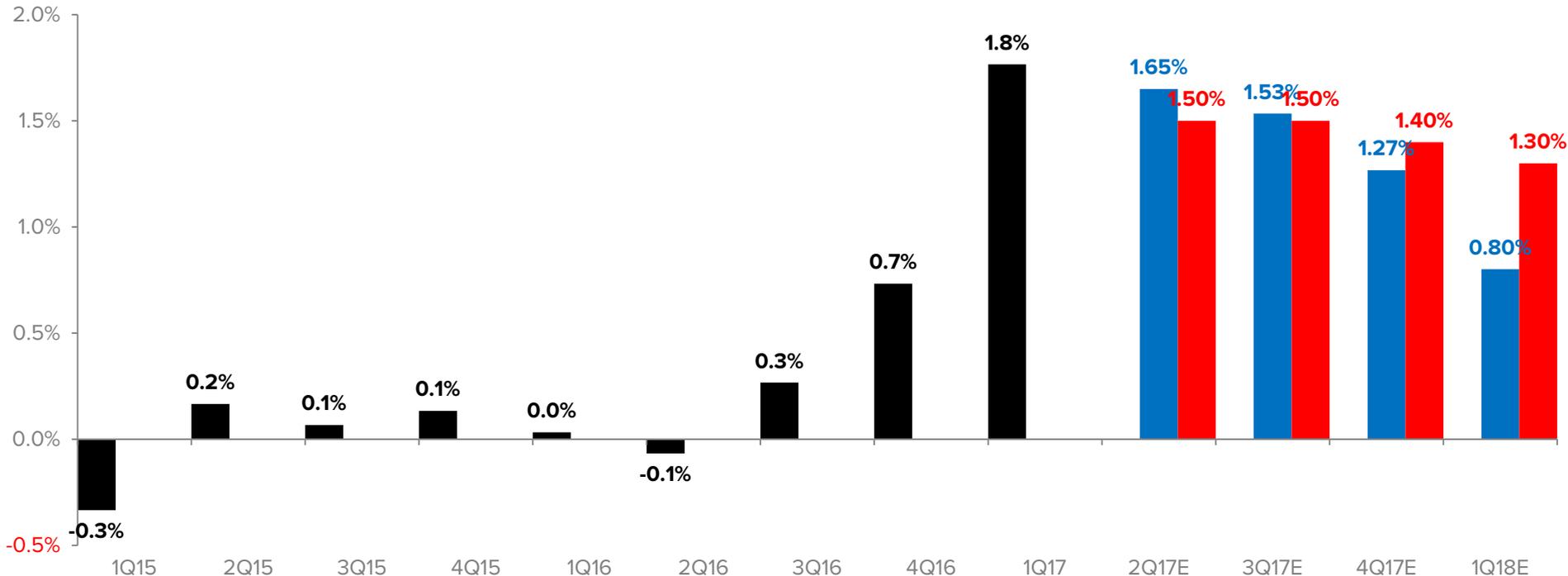


... AND DISINFLATION SHOULD CONTINUE

CONSISTENT WITH OUR #REFLATION'S ROLLOVER THEME, EUROZONE INFLATION SHOULD CONTINUE TO DECELERATE ON A TRENDING BASIS THROUGH AT LEAST 1Q18E.

EUROZONE Headline CPI - YoY % Change

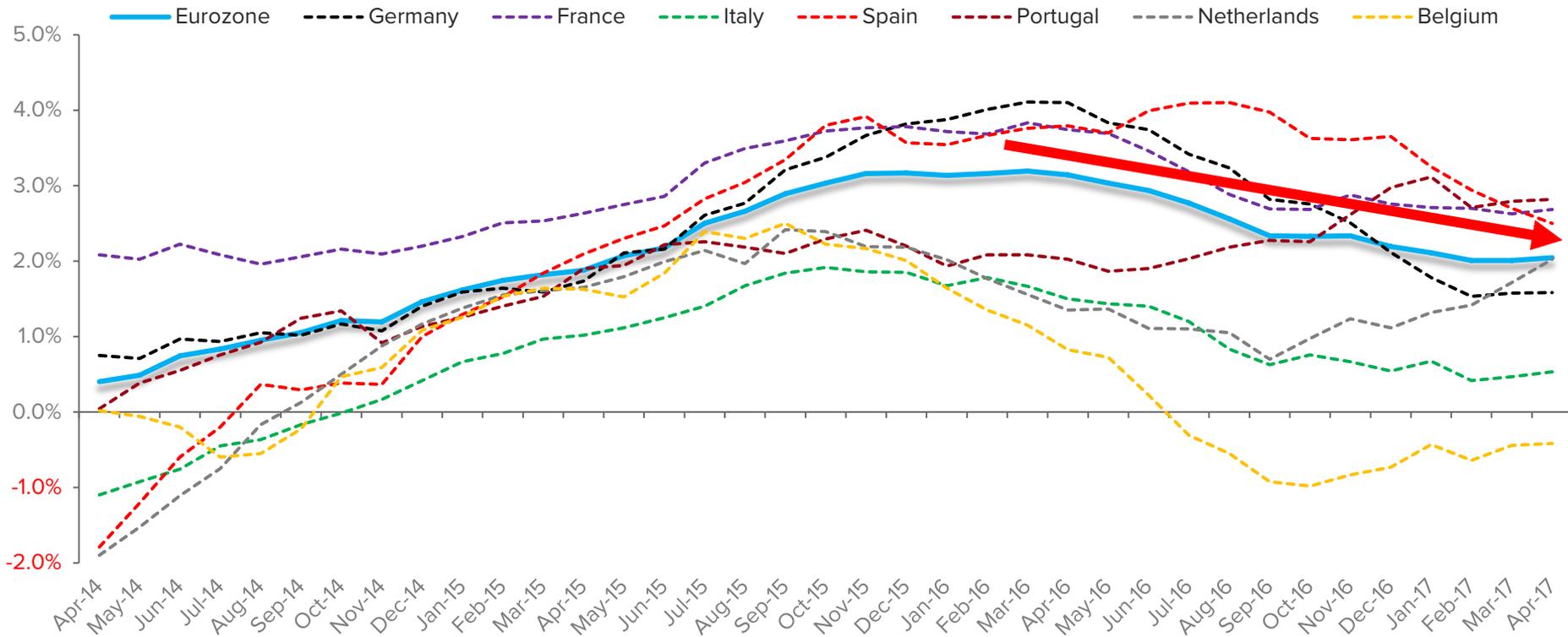
■ Actual ■ Current Hedgeye Estimates ■ Current Bloomberg Consensus Estimates



HARD DATA CHECK: WHAT MAY START TO TREND?

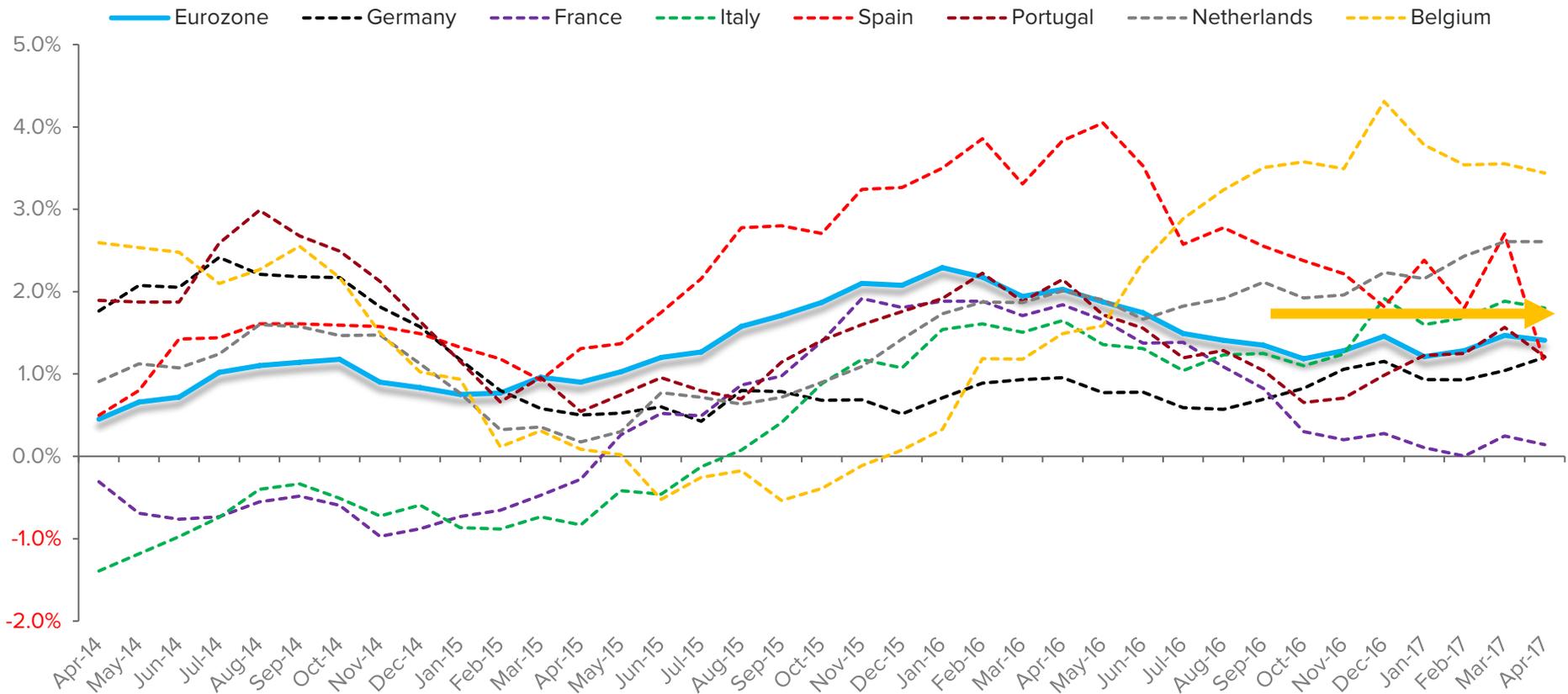
HOUSEHOLD CONSUMPTION MOMENTUM – WHILE SOLID ON AN ABSOLUTE LEVEL – IS WANING.

Real Retail Sales - YoY % Change - SMAVG(12)



MANUFACTURING MOMENTUM: **FLAT**

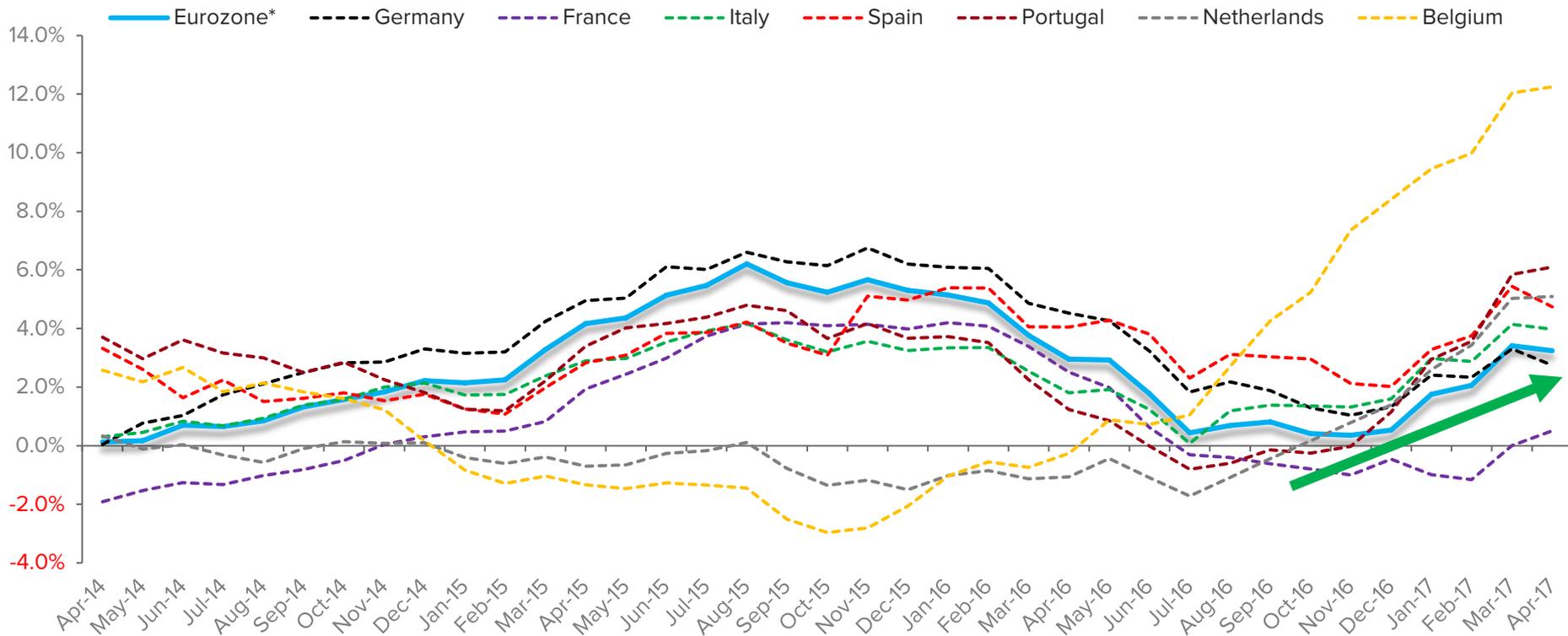
Industrial Production - YoY % Change - SMAVG(12)



EXPORT MOMENTUM: **VERY SOLID**

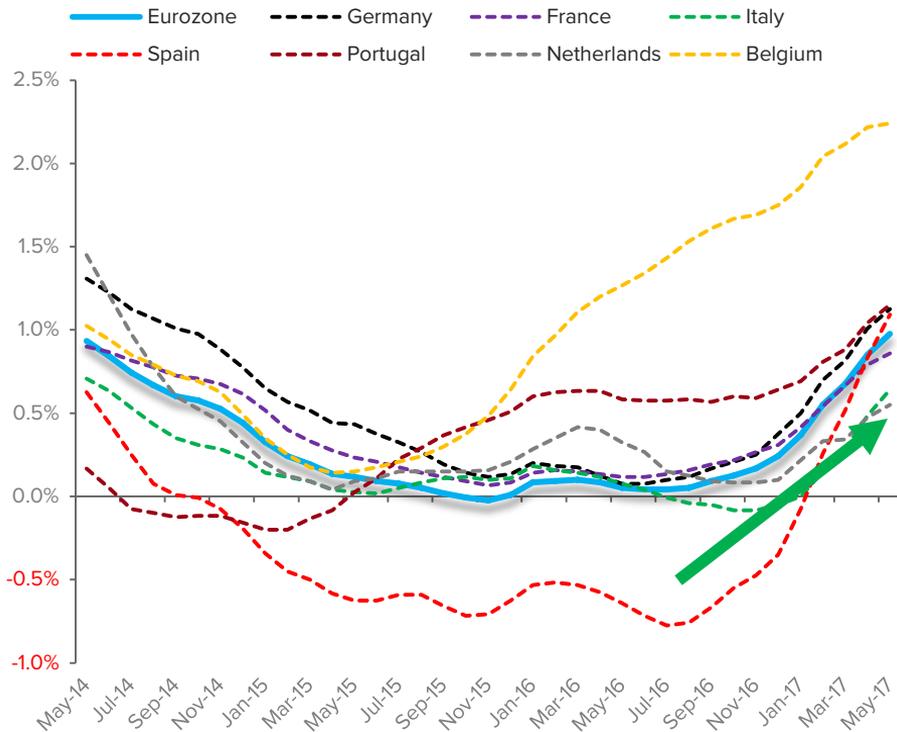
GLOBAL REFLATION – IN PART PERPETUATED BY THE CYCLICAL RECOVERY IN “OLD CHINA” – CLEARLY PLAYED A LARGE PART IN RESUSCITATING EUROZONE EXPORT GROWTH. HOW SUSTAINABLE EXITING TRENDS ARE IN THE CONTEXT OF #REFLATION’S ROLLOVER REMAINS TO BE SEEN.

Exports - YoY % Change - SMAVG(12)

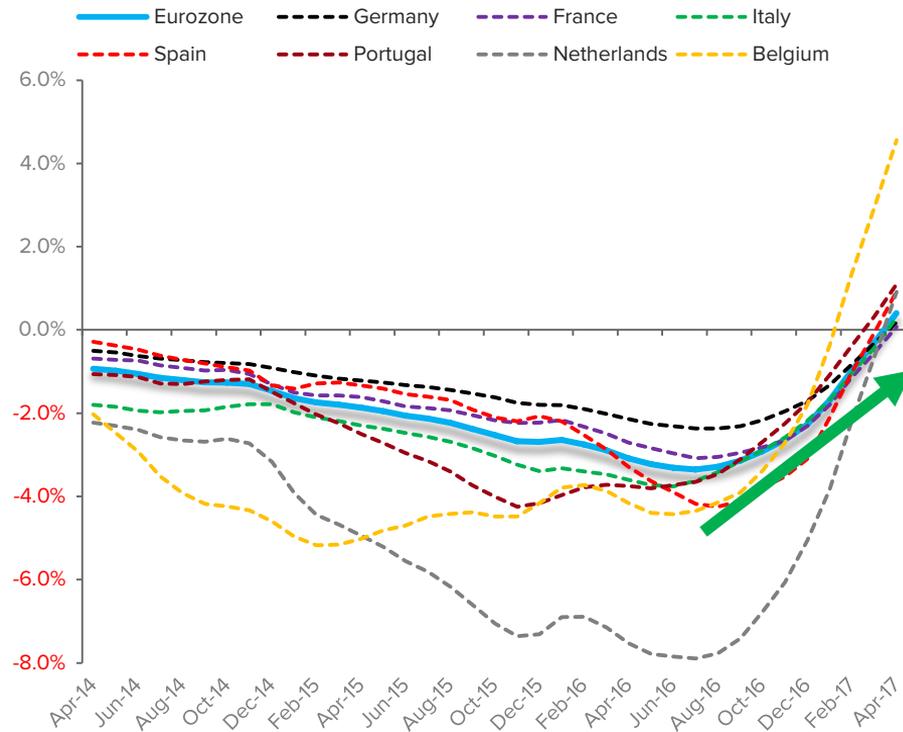


INFLATION MOMENTUM: **EXCELLENT** (IN THE REARVIEW)

CONSUMER PRICE INFLATION Y/Y % CHANGE SMAVG(12)

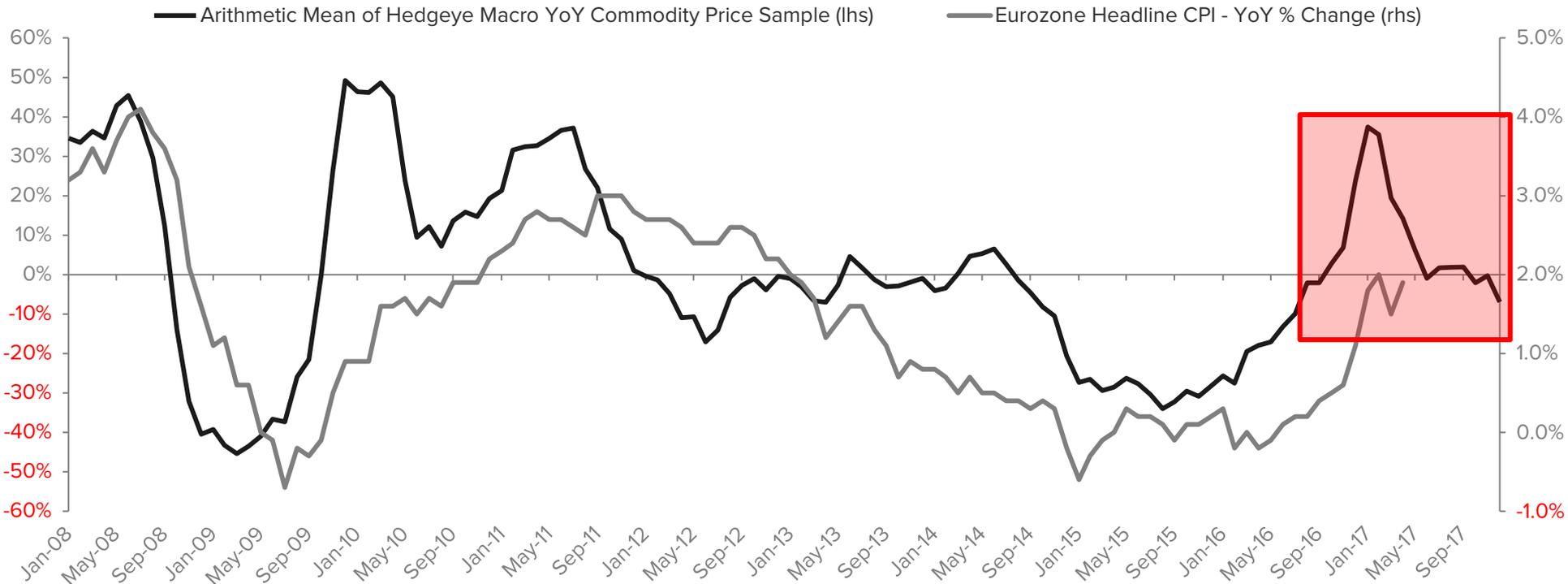


PRODUCER PRICE INFLATION Y/Y % CHANGE SMAVG(12)



BUT CAN IT BE SUSTAINED?

LIKE MUCH OF THE REST OF THE DEVELOPED WORLD, THE RECOVERY IN EUROZONE INFLATION HAS BEEN, IN LARGE PART, PERPETUATED BY THE (FORMER) RECOVERY IN ENERGY PRICES.

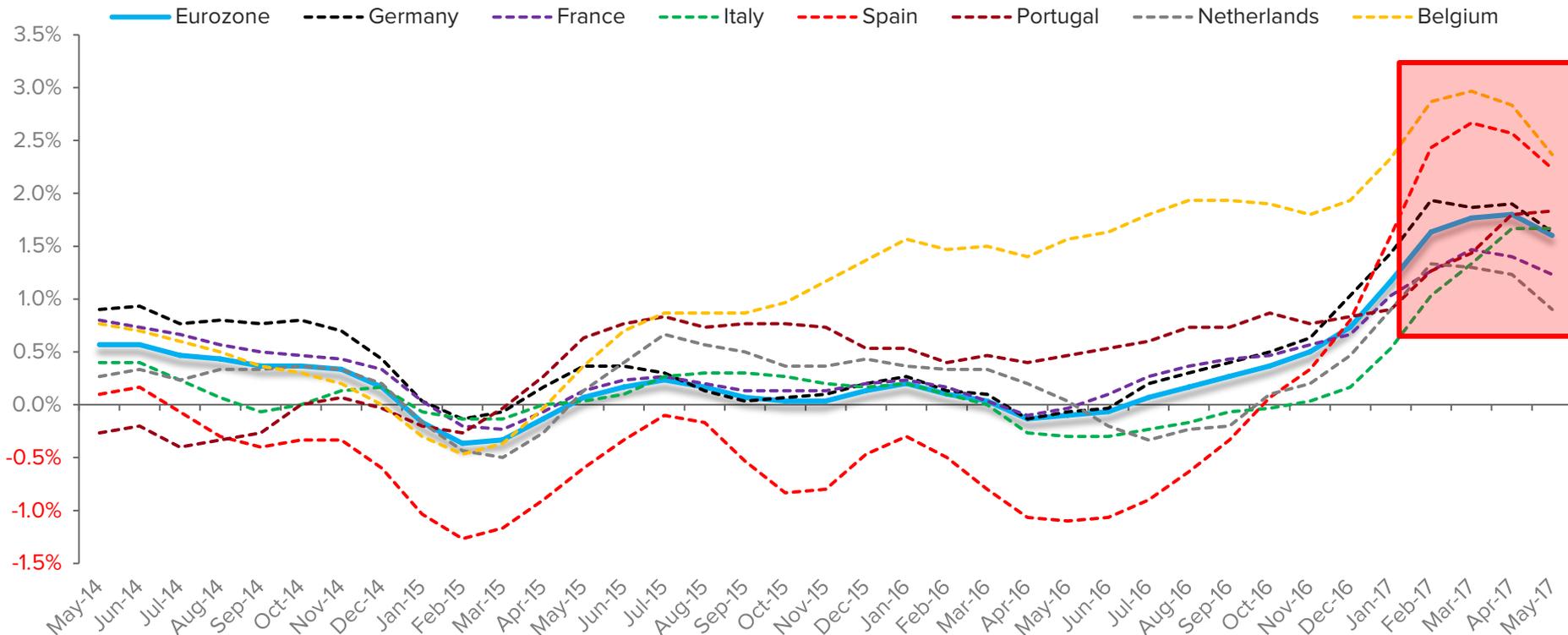


The Hedgeye Macro commodity price sample includes the CRB Index, CRB Raw Industrials Index, Brent Crude Oil and the UN Food and Agriculture Price Index. YoY deltas are calculated from monthly averages. Forward estimates assume no change to current monthly averages.

PROBABLY NOT...

ALSO LIKE MUCH OF THE DEVELOPED WORLD, HEADLINE INFLATION IN THE EUROZONE APPEARS TO BE FIRMLY IN THE PROCESS OF NEGATIVELY INFLECTING AS OF APRIL/MAY TIMEFRAME.

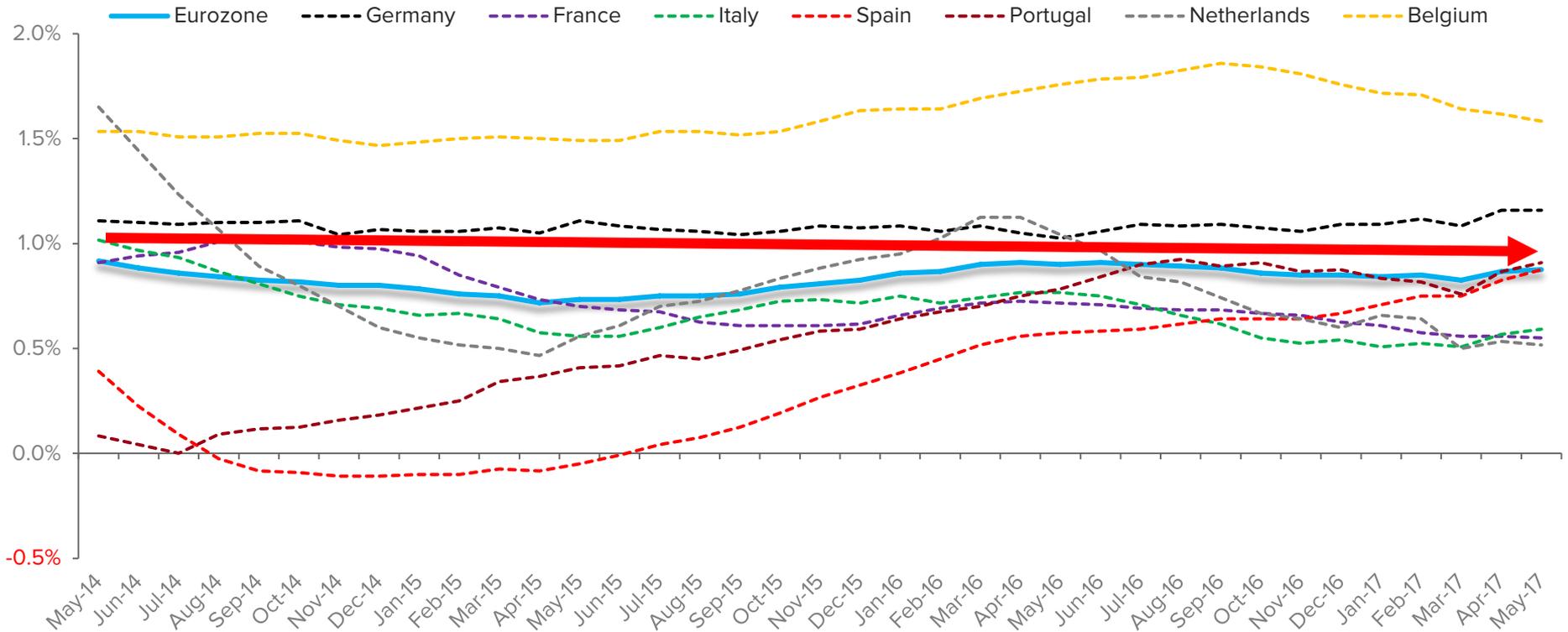
Headline CPI - YoY % Change - SMAVG(3)



CORE INFLATION MOMENTUM: **NONEXISTENT**

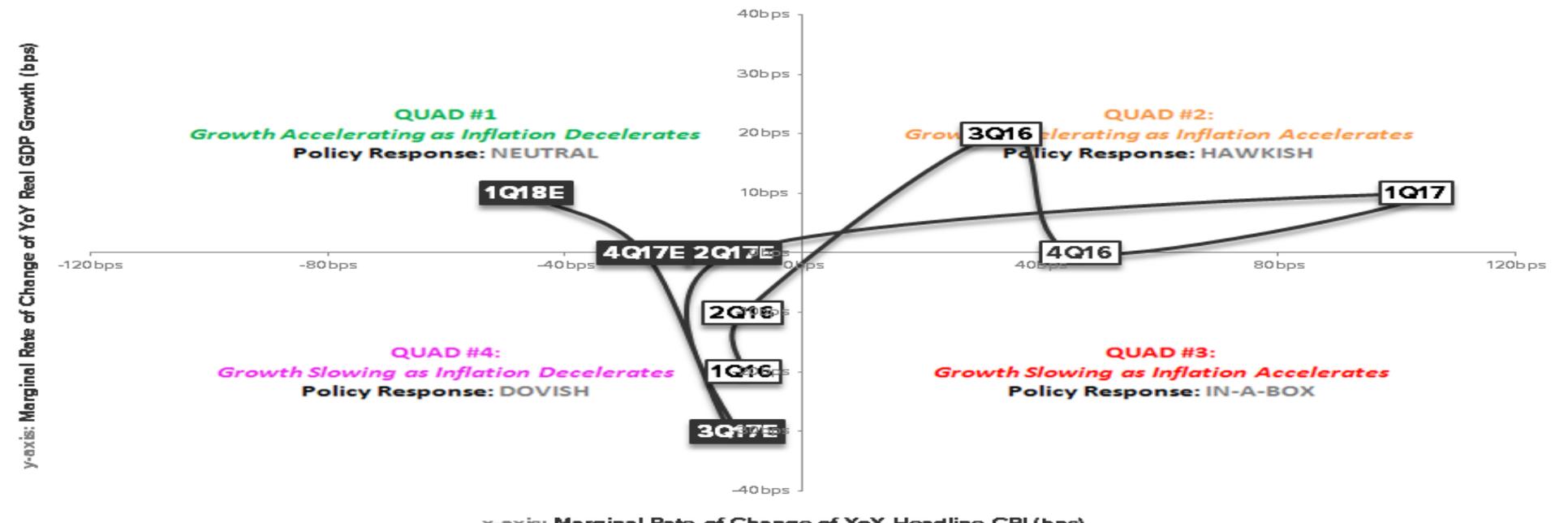
WITH HEADLINE INFLATION IN THE PROCESS OF RETREATING FROM ITS BASE-EFFECT DRIVEN BOUNCE, IT'S IMPORTANT TO HIGHLIGHT THE FACT THAT CORE INFLATION IN THE EUROZONE REMAINS STRUCTURALLY CHALLENGED. DRAGHI IS NO ONE'S DUMMY.

Core CPI - YoY % Change - SMAVG(12)



SLOWING GROWTH + DISINFLATION = #QUAD4

| EUROZONE | 1Q14 | 2Q14 | 3Q14 | 4Q14 | 1Q15 | 2Q15 | 3Q15 | 4Q15 | 1Q16 | 2Q16 | 3Q16 | 4Q16 | 1Q17 | Hedgeye Macro GIP Model | | | |
|-------------------|-------------------------------|------|------|------|-------|------|------|------|-------|-------|------|------|------|---------------------------------------|--|-------|-------|
| | GIP = Growth/Inflation/Policy | | | | | | | | | | | | | | | | |
| Real GDP QoQ | 0.4% | 0.2% | 0.4% | 0.4% | 0.8% | 0.4% | 0.3% | 0.4% | 0.5% | 0.3% | 0.4% | 0.5% | 0.6% | Full-year Estimates | | 2016E | 2017E |
| Real GDP YoY | 1.4% | 1.1% | 1.2% | 1.4% | 1.8% | 2.0% | 1.9% | 1.9% | 1.7% | 1.6% | 1.8% | 1.8% | 1.9% | Hedgeye Predictive Tracking Algorithm | | 1.7% | 1.8% |
| 2Y Average | 0.1% | 0.4% | 0.6% | 1.1% | 1.6% | 1.6% | 1.6% | 1.7% | 1.8% | 1.8% | 1.9% | 1.9% | 1.8% | Bloomberg Consensus Estimate | | 1.7% | 1.8% |
| 3Y Average | -0.1% | 0.0% | 0.1% | 0.4% | 0.7% | 0.9% | 1.0% | 1.4% | 1.6% | 1.6% | 1.6% | 1.7% | 1.8% | Central Bank Forecast | | 1.8% | 1.7% |
| Percentile (T10Y) | 44% | 41% | 44% | 49% | 59% | 64% | 62% | 62% | 56% | 56% | 62% | 62% | 72% | Full-year Estimates | | 2016E | 2017E |
| CPI YoY | 0.7% | 0.6% | 0.4% | 0.2% | -0.3% | 0.2% | 0.1% | 0.1% | 0.0% | -0.1% | 0.3% | 0.7% | 1.8% | Hedgeye Predictive Tracking Algorithm | | 0.2% | 1.6% |
| 2Y Average | 1.3% | 1.0% | 0.9% | 0.5% | 0.2% | 0.4% | 0.2% | 0.2% | -0.2% | 0.1% | 0.2% | 0.4% | 0.9% | Bloomberg Consensus Estimate | | 0.2% | 1.6% |
| 3Y Average | 1.7% | 1.5% | 1.4% | 1.1% | 0.7% | 0.7% | 0.6% | 0.4% | 0.1% | 0.2% | 0.2% | 0.3% | 0.5% | Central Bank Forecast | | 0.2% | 1.6% |
| Percentile (T10Y) | 8% | 8% | 5% | 3% | 3% | 5% | 5% | 8% | 5% | 5% | 23% | 36% | 56% | | | | |



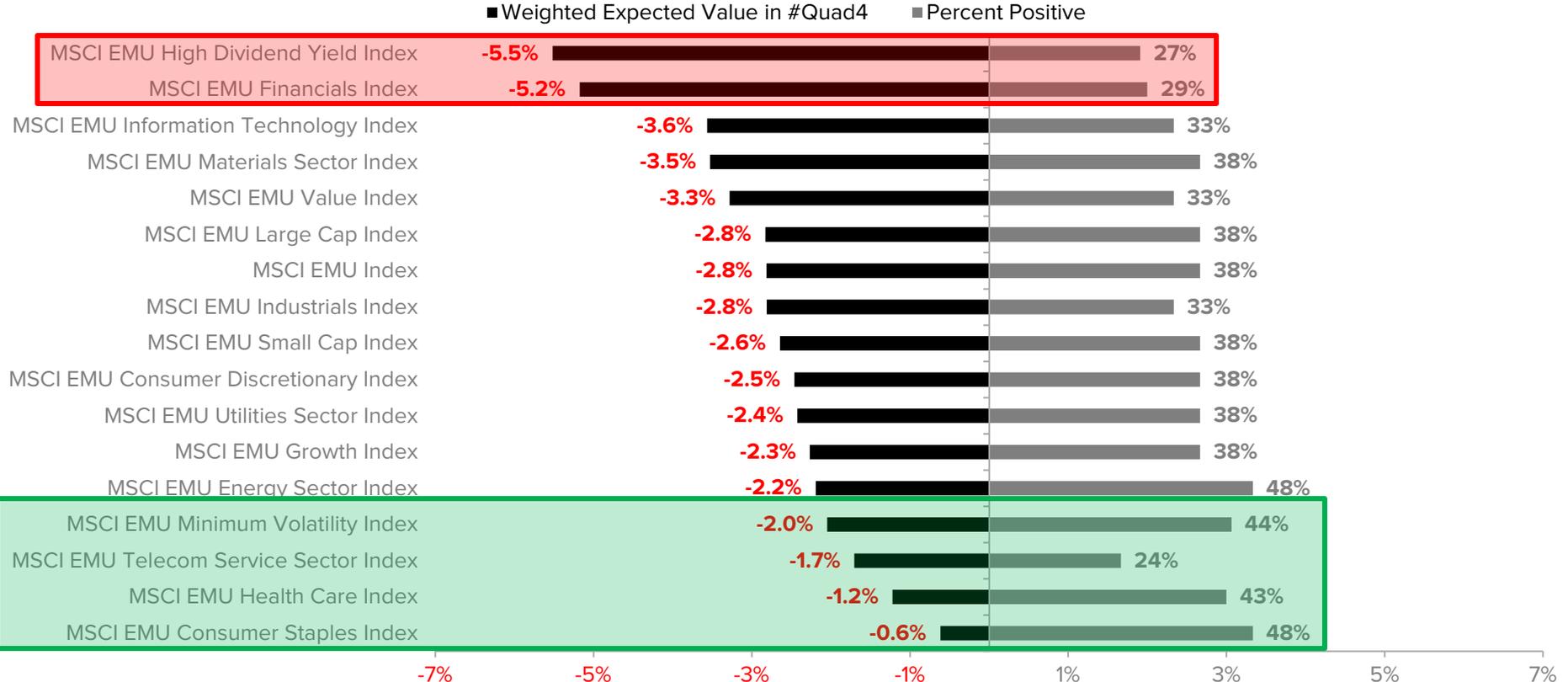
Data Source: Bloomberg

x-axis: Marginal Rate of Change of YoY Headline CPI (bps)

© Hedgeye Risk Management

YOU DON'T HAVE TO BE SHORT EUROPEAN STOCKS

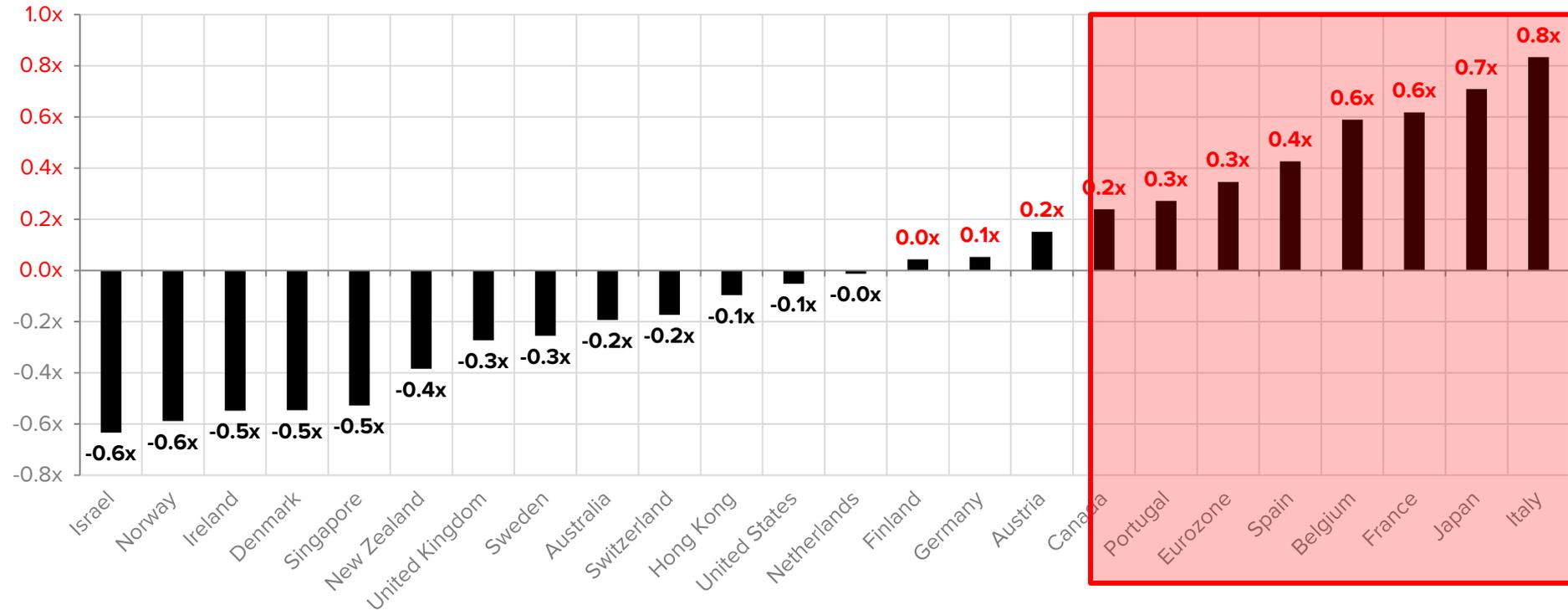
WHILE #QUAD4 IS GENERALLY NEGATIVE FOR EUROZONE EQUITIES BROADLY, LONG-TERM INVESTORS ARE LIKELY TO SEE AN INTERMEDIATE-TERM BENEFIT FROM ROTATING INTO MORE DEFENSIVE EXPOSURES IN LIEU OF THE FINANCIALS.



EUROPE REMAINS STRUCTURALLY CHALLENGED

WEIGHED DOWN BY ITALY, FRANCE, BELGIUM, SPAIN AND PORTUGAL, OUR MODEL SUGGESTS THE STRUCTURAL OUTLOOK FOR TREND RATES OF GDP GROWTH AND CORE CPI IN THE EUROZONE IS AS DOOR AS DRAGHI THINKS IT IS.

■ Hedgeye Macro DM Country Risk Model (Higher Z-Score = More Risky)



REVIEWING OUR PROPRIETARY MODEL

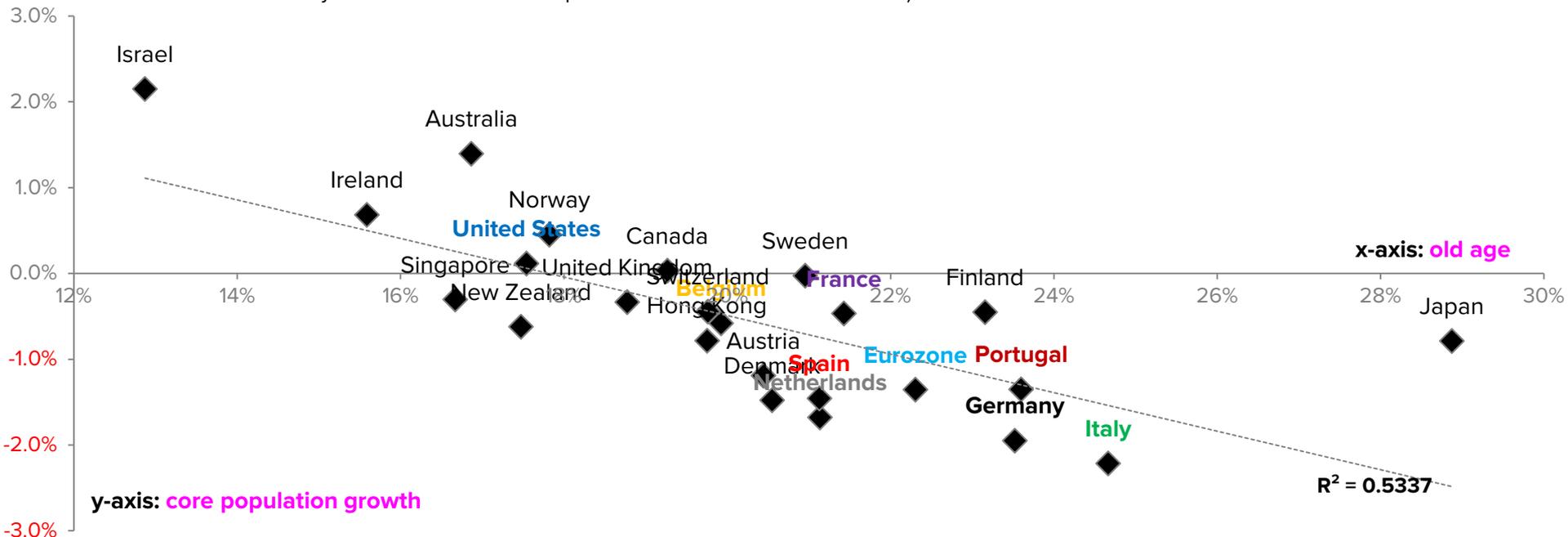
OUR STRUCTURAL COUNTRY RISK MODEL QUANTIFIES ECONOMIC AND POLITICAL RISK ACROSS THE DEVELOPED WORLD USING OUR PROPRIETARY WEIGHTED Z-SCORE METHODOLOGY.

| | Pillar I: Demographic Risk | | Pillar II: Structural Economic Risk | | Pillar III: Cyclical Economic Risk | | Pillar IV: Protectionsim Risk | | Pillar V: Competitiveness Risk | |
|----------------|--|--|-------------------------------------|---|---|--|-------------------------------|--|--|-------------------------------------|
| | 5Y Forward Old-Age Dependency Ratio (65+ Year-Olds as a Ratio of the Working Age Population) | 35-54 Year-Old Population Cohort - 5Y Forward CAGR | Debt as a % of Nominal GDP | Current Account Balance as a % of Nominal GDP | Private Nonfinancial Sector Credit-to-GDP Gap (Z-Score, Trailing 10Y) | Debt Service Ratio Gap (Z-Score, Trailing 10Y) | GINI Coefficient | Misery Index (Unemployment Rate + Headline Inflation Rate) | World Bank Ease of Doing Business Index - Global Ranking (Lower Is Better) | All-In Effective Corporate Tax Rate |
| Canada | 19% | 0.0% | 92% | -3.3% | 1.9 | 2.1 | 33.7 | 8.0% | 22 | 21% |
| United States | 18% | 0.1% | 107% | -2.4% | -0.6 | -0.7 | 41.1 | 6.6% | 8 | 44% |
| Austria | 20% | -1.2% | 84% | 1.7% | -0.2 | - | 30.5 | 7.8% | 19 | 52% |
| Belgium | 20% | -0.6% | 106% | -0.4% | 1.6 | 1.2 | 27.6 | 8.9% | 42 | 59% |
| Denmark | 21% | -1.5% | 40% | 8.1% | -1.7 | -1.5 | 29.1 | 6.7% | 3 | 25% |
| Eurozone | 22% | -1.4% | 92% | 3.4% | 0.0 | -0.8 | 31.6 | 10.8% | 33 | 44% |
| Finland | 23% | -0.5% | 64% | -1.1% | 0.8 | -0.8 | 27.1 | 10.2% | 13 | 38% |
| France | 21% | -0.5% | 97% | -1.2% | 1.4 | 0.5 | 33.1 | 10.5% | 29 | 63% |
| Germany | 24% | -2.0% | 68% | 8.6% | -1.2 | -1.4 | 30.1 | 7.3% | 17 | 49% |
| Ireland | 16% | 0.7% | 76% | 4.7% | -0.2 | - | 32.5 | 6.6% | 18 | 26% |
| Israel | 13% | 2.1% | 62% | 3.9% | -1.6 | - | 42.8 | 5.0% | 52 | 28% |
| Italy | 25% | -2.2% | 133% | 2.6% | -0.9 | -2.2 | 35.2 | 13.2% | 50 | 62% |
| Netherlands | 21% | -1.7% | 63% | 8.5% | -1.2 | 0.2 | 28.0 | 5.8% | 28 | 40% |
| Norway | 18% | 0.4% | 33% | 7.5% | 1.6 | -1.4 | 25.9 | 6.5% | 6 | 40% |
| Portugal | 24% | -1.4% | 130% | 0.8% | -1.9 | -2.3 | 36.0 | 11.8% | 25 | 40% |
| Spain | 21% | -1.5% | 99% | 1.9% | -2.2 | -1.6 | 35.9 | 20.2% | 32 | 49% |
| Sweden | 21% | -0.0% | 42% | 5.0% | 0.4 | -1.2 | 27.3 | 9.0% | 9 | 49% |
| Switzerland | 20% | -0.4% | 45% | 6.8% | 1.6 | -0.4 | 31.6 | 3.8% | 31 | 29% |
| United Kingdom | 19% | -0.3% | 89% | -4.4% | -1.1 | -1.1 | 32.6 | 7.6% | 7 | 31% |
| Australia | 17% | 1.4% | 41% | -2.7% | 1.9 | -0.1 | 34.9 | 7.9% | 15 | 48% |
| Hong Kong | 20% | -0.8% | 38% | 4.6% | 1.6 | 1.7 | - | 5.3% | 4 | 23% |
| Japan | 29% | -0.8% | 239% | 3.8% | -0.9 | -1.0 | 32.1 | 3.3% | 34 | 49% |
| New Zealand | 17% | -0.6% | 30% | -2.8% | -0.4 | - | - | 7.1% | 1 | 34% |
| Singapore | 17% | -0.3% | 112% | 19.0% | 1.6 | - | - | 3.6% | 2 | 19% |
| MEDIAN | 20% | -0.5% | 80% | 3.0% | -0.2 | -0.8 | 32.1 | 7.4% | 19 | 40% |

PILLAR I: DEMOGRAPHIC RISK

LED BY ITALY, GERMANY AND PORTUGAL, TREND RATES OF GROWTH AND INFLATION IN THE EUROZONE FACE A MYRIAD OF DEMOGRAPHIC HEADWINDS.

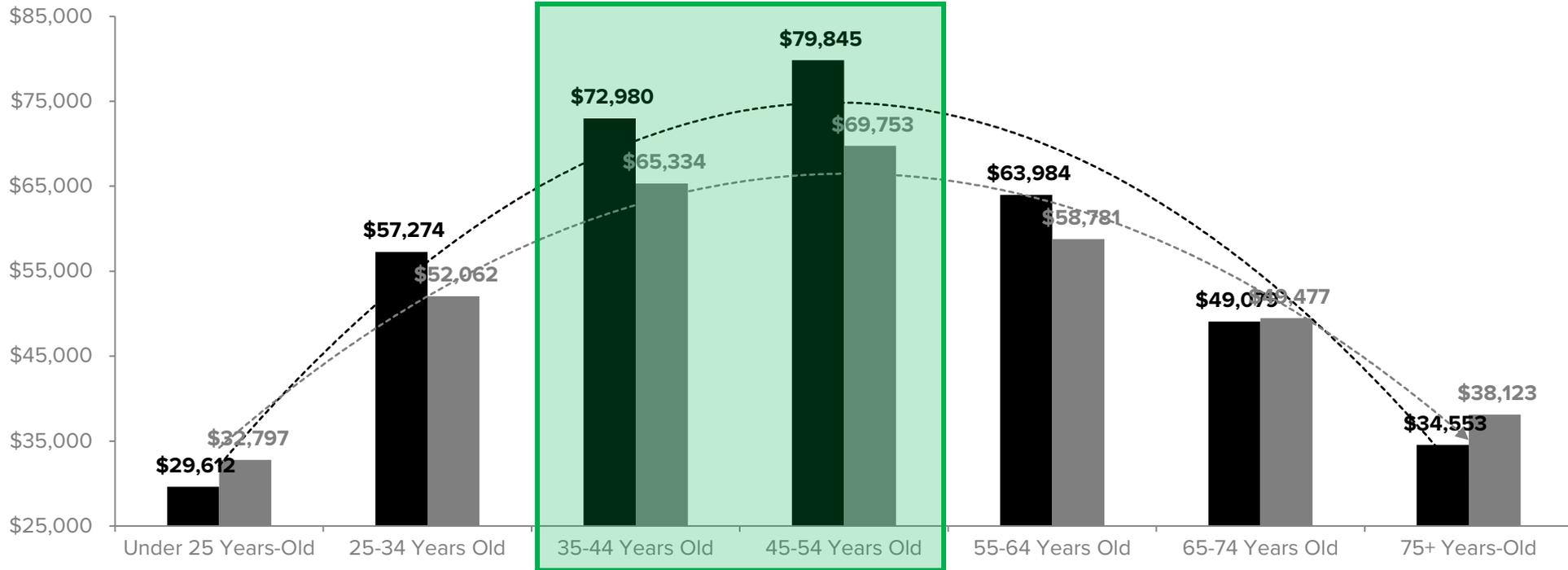
- ◆ x-axis: 5Y Forward Old-Age Dependency Ratio (65+ Year-Olds as a % of Working-Age Population); y-axis: 35-54 Year-Old Population Cohort - 5Y Forward CAGR
- Linear (x-axis: 5Y Forward Old-Age Dependency Ratio (65+ Year-Olds as a % of Working-Age Population); y-axis: 35-54 Year-Old Population Cohort - 5Y Forward CAGR)



WHY DO 35-54 YEAR-OLDS MATTER?

BECAUSE ACCORDING TO BOTH EMPIRICAL EVIDENCE AND LIFE-CYCLE ECONOMICS THEORY, THIS IS THE WORLD'S CORE END CONSUMPTION DEMAND DEMOGRAPHIC.

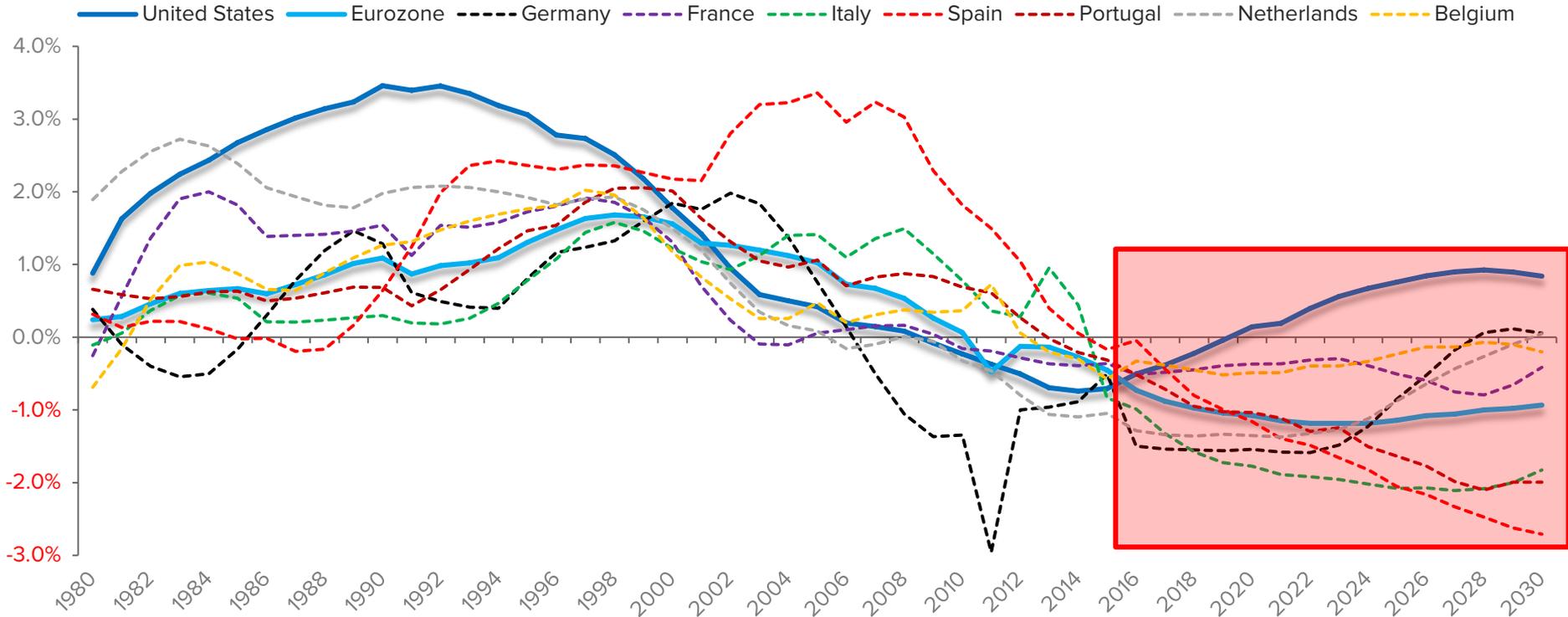
■ U.S. Average Annual Disposable Income by Age Bracket ■ U.S. Average Annual Expenditures by Age Bracket
- - - - -▶ Poly. (U.S. Average Annual Disposable Income by Age Bracket) - - - - -▶ Poly. (U.S. Average Annual Expenditures by Age Bracket)



INTO THE ABYSS GOES EUROZONE POPULATION GROWTH

BOGGED DOWN BY GERMANY, ITALY, SPAIN AND PORTUGAL, THE EUROZONE'S CORE CONSUMPTION DEMOGRAPHIC QUICKLY HEADED INTO PEAK RATES OF DECLINE.

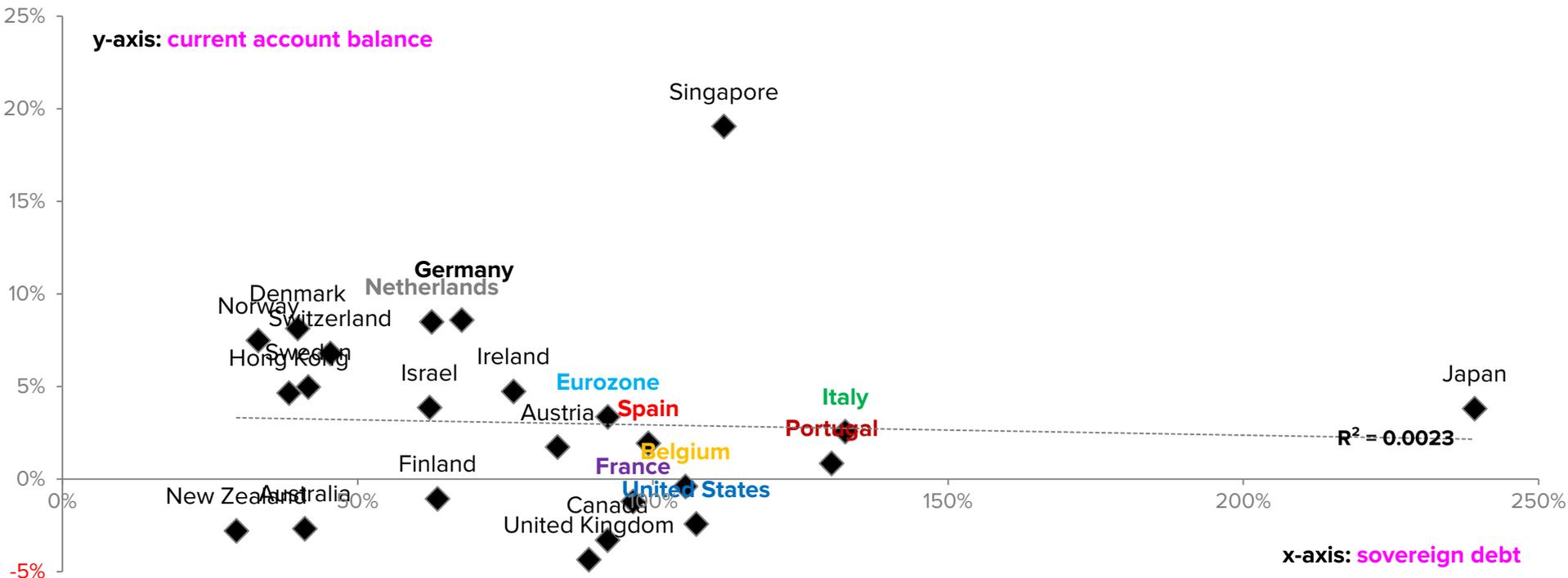
35-54 Year-Old Population Cohort - YoY % Change



PILLAR II: SECULAR ECONOMIC RISK

AS AN ECONOMIC BLOC, THE EUROZONE SCORES WELL FROM THE PERSPECTIVE OF INTERNATIONAL CREDITORS, BUT ITALY AND PORTUGAL REMAIN MEANINGFUL TAIL RISKS – ESPECIALLY GIVEN ALL OF TROUBLE AUTHORITIES HAVE EXPERIENCED WITH GREECE'S DEBT BURDEN.

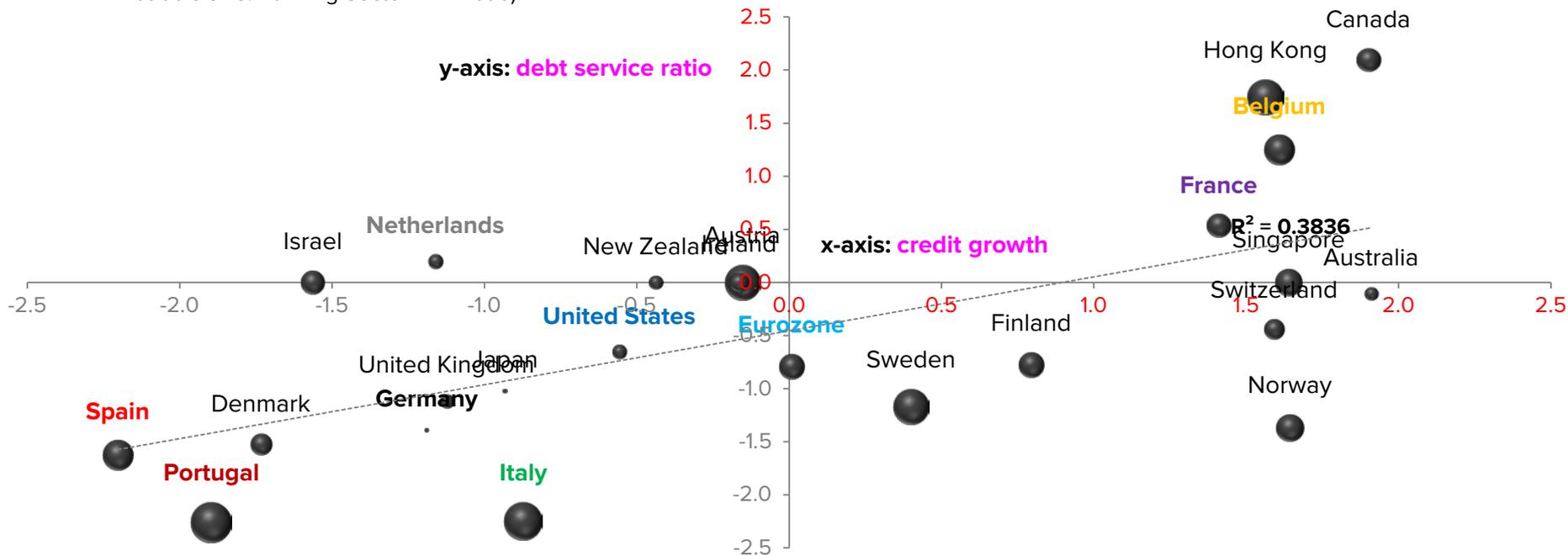
- ◆ x-axis: Debt as a % of Nominal GDP; y-axis: Current Account Balance as a % of Nominal GDP
- Linear (x-axis: Debt as a % of Nominal GDP; y-axis: Current Account Balance as a % of Nominal GDP)



PILLAR III: ECONOMIC CYCLE RISK

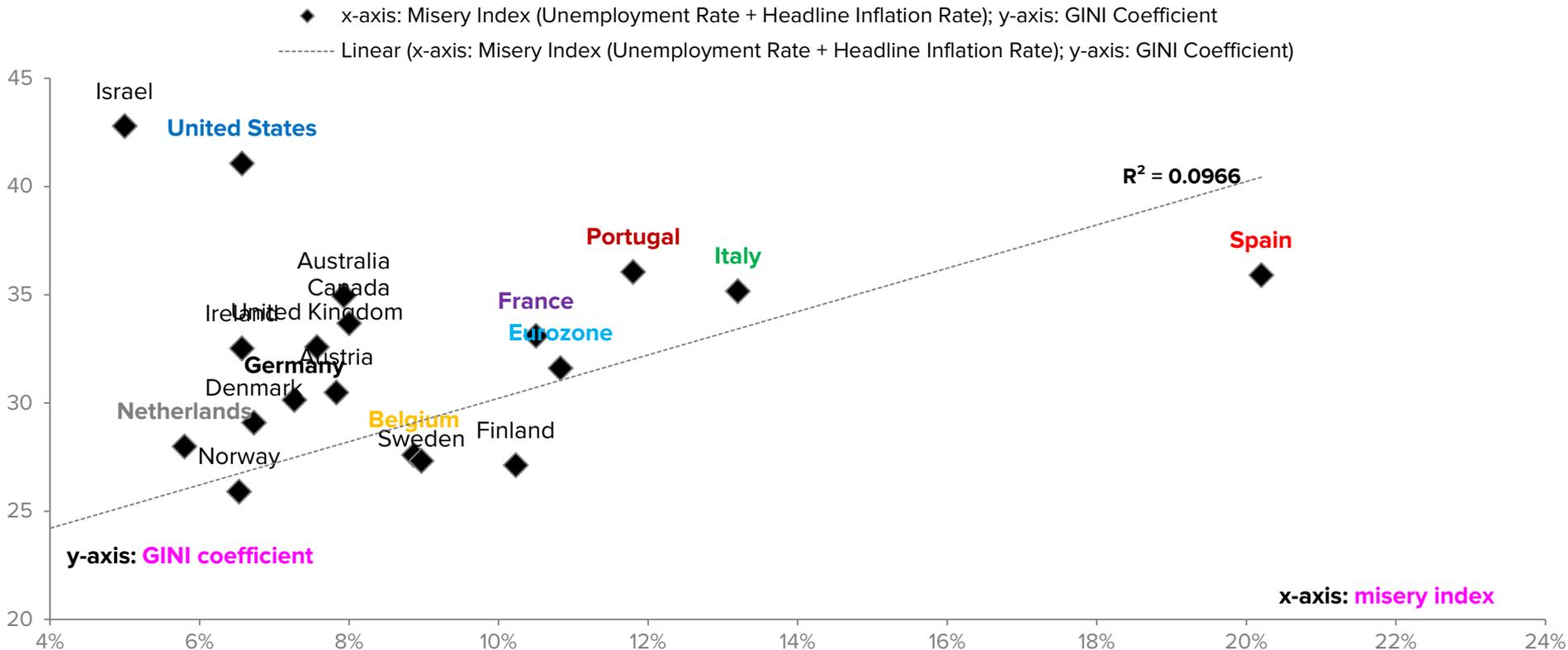
AGAIN, THE EUROZONE AS A WHOLE SCORES OK WITH RESPECT TO THE RISK OF EXPERIENCING A NEAR-TERM CYCLICAL DOWNTURN, BUT FRANCE REMAINS A KEY TAIL RISK.

- x-axis: Private Nonfinancial Sector Credit-to-GDP Gap (Z-Score, Trailing 10Y); y-axis: Debt Service Ratio Gap (Z-Score, Trailing 10Y); bubble size: Banking Sector NPL Ratio
- Linear (x-axis: Private Nonfinancial Sector Credit-to-GDP Gap (Z-Score, Trailing 10Y); y-axis: Debt Service Ratio Gap (Z-Score, Trailing 10Y); bubble size: Banking Sector NPL Ratio)



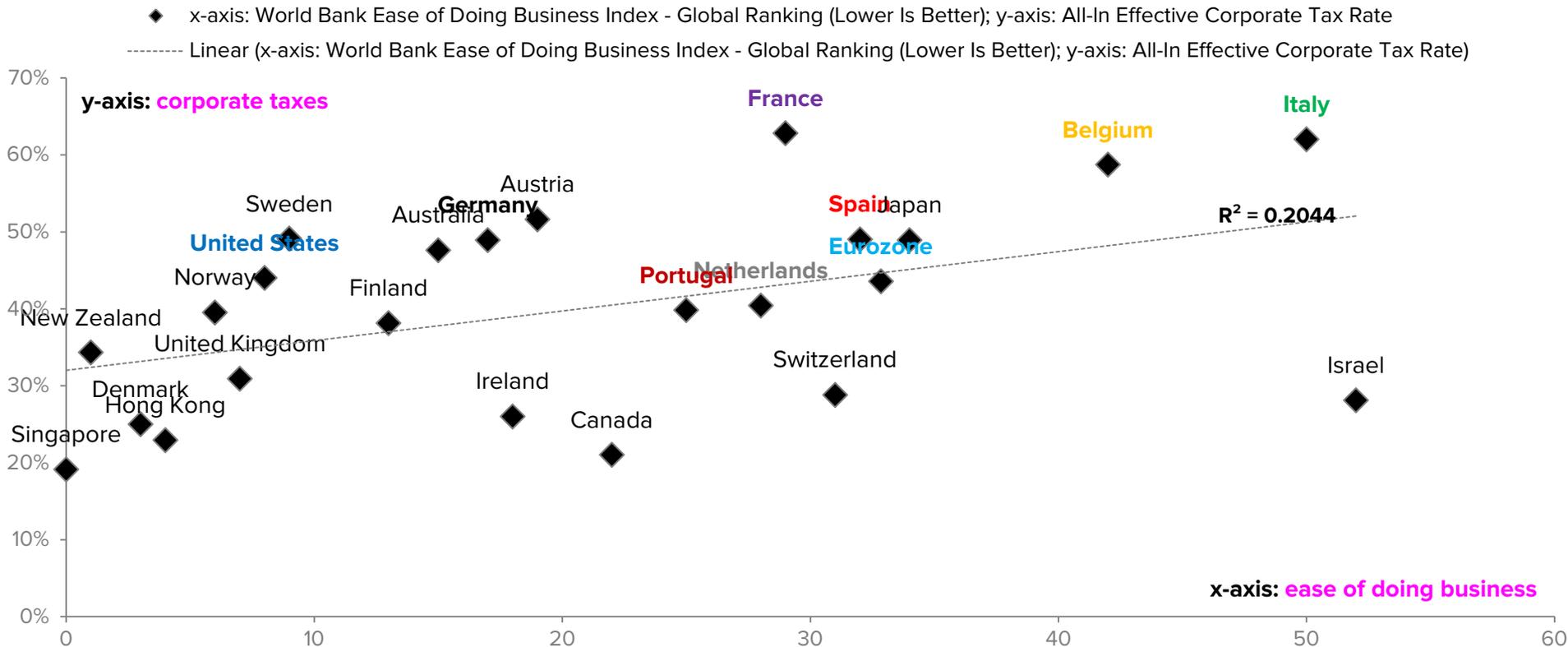
PILLAR IV: PROTECTIONISM RISK

THE EUROPEAN PROJECT DODGED A BULLET WITH THE ELECTION OF EMMANUEL MACRON IN FRANCE, BUT POLITICAL DYSFUNCTION IN SPAIN REMAINS A KEY TAIL RISK FOR THE COMMON CURRENCY.



PILLAR V: COMPETITIVENESS RISK

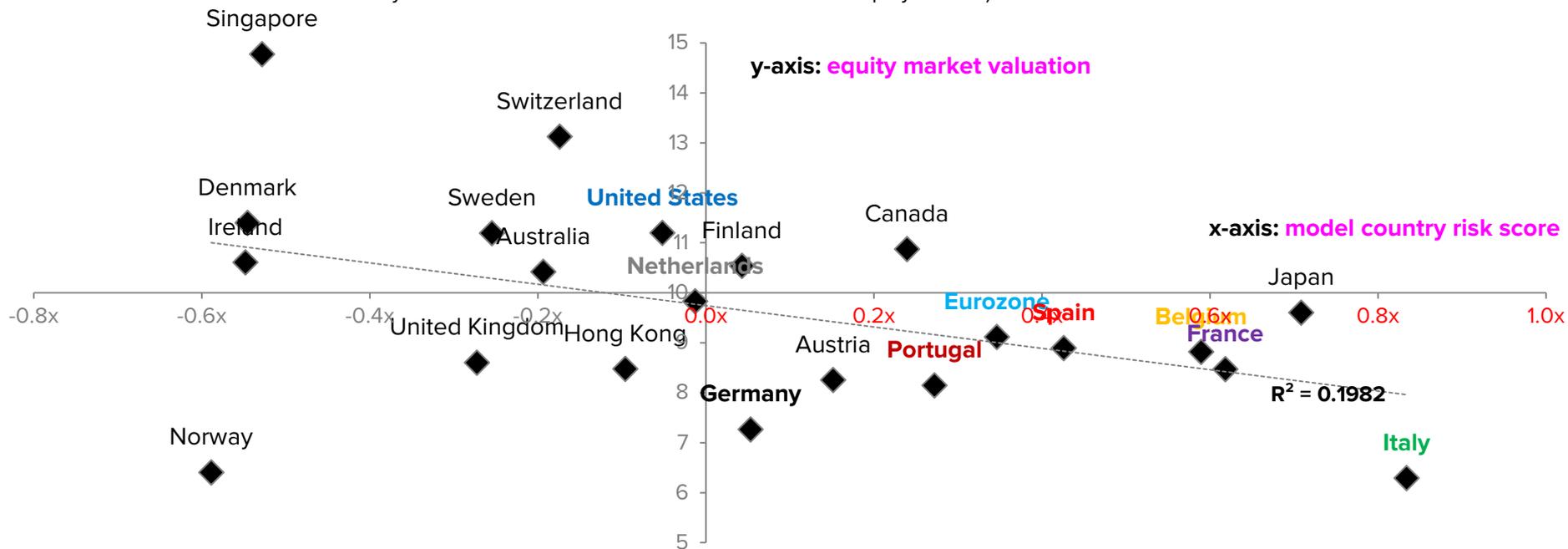
AS AN ECONOMIC BLOC, THE EUROZONE REMAINS TREMENDOUSLY UNCOMPETITIVE WITH FEW – IF ANY – POLITICAL CATALYSTS TO MEANINGFULLY REVERSE THIS OUTCOME.



DOES THE MODEL WORK? YES

INVESTORS HAVE TENDED TO PUNISH COUNTRIES WITH GREATER DEGREES OF STRUCTURAL ECONOMIC AND POLITICAL WITH VALUATION DISCOUNTS AND WE EXPECT THIS RELATIONSHIP TO PERSIST OVER THE LONG TERM. EUROPE IS NOT “CHEAP” IF YOU ACTUALLY DO THE WORK.

- ◆ x-axis: Hedgeye Macro DM Country Risk Model (Higher Z-Score = More Risky);
y-axis: EV-to-NTM-EBITDA Ratio of Benchmark Equity Market
- Linear (x-axis: Hedgeye Macro DM Country Risk Model (Higher Z-Score = More Risky);
y-axis: EV-to-NTM-EBITDA Ratio of Benchmark Equity Market)

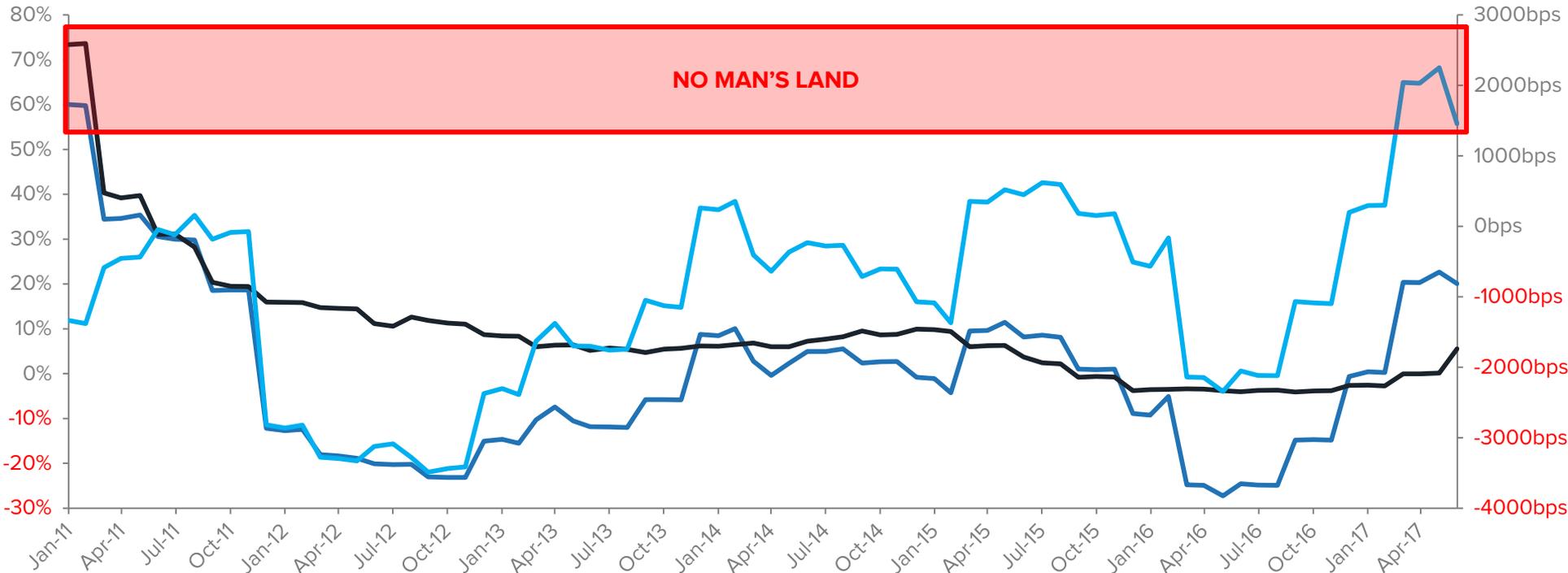


“BUT, KEITH, RELATIVE EARNINGS GROWTH...”

WITH NO HISTORICAL PRECEDENT FOR EUROPEAN EQUITIES SUSTAINING RELATIVE GROWTH RATES LIKE THIS, YOU'D HAVE BELIEVE THAT THE EUROZONE'S ECONOMIC AND POLITICAL OUTLOOKS ARE NOT STRUCTURALLY CHALLENGED IF YOU'RE O/W EUROZONE EQUITIES HERE.

Index TTM EPS - YoY % Growth Rate

— EuroSTOXX 600 Index — S&P 500 Index — bps Spread (rhs)



THE GREAT WALL

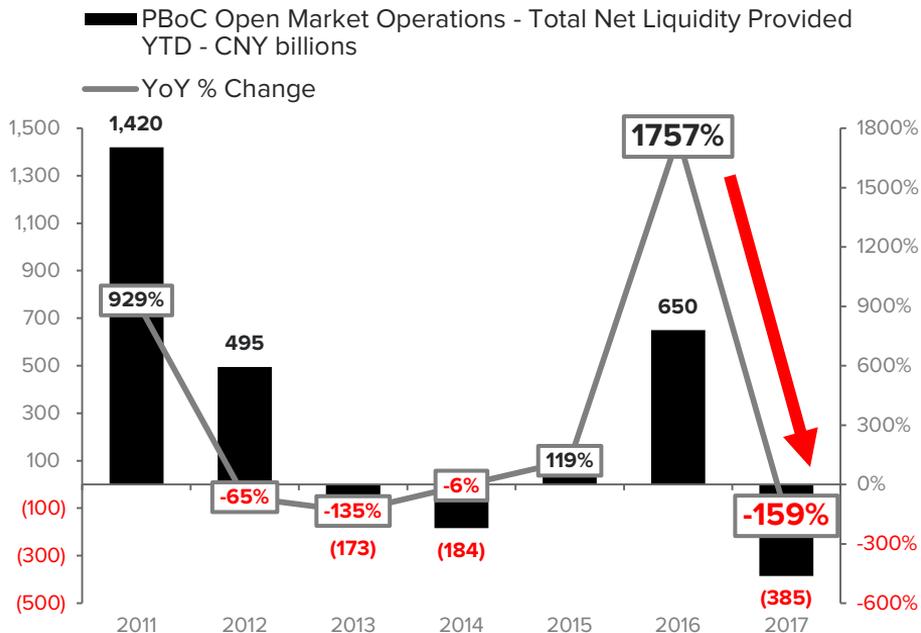


B. Rich
HEDGEYE

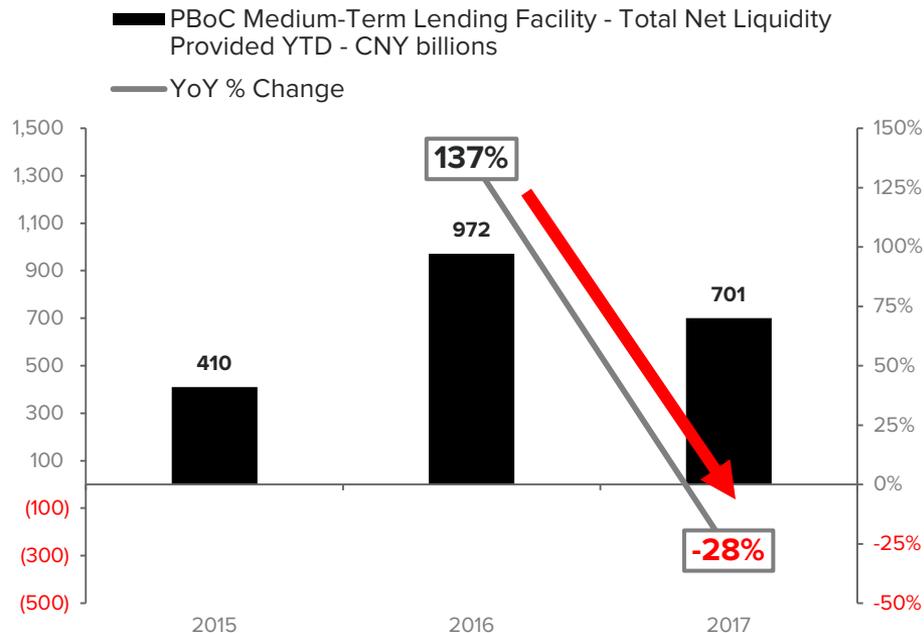
#CHINASLOWING

2016: AN “UNCOMPABLE COMP”

PBOC OPEN MARKET OPERATIONS



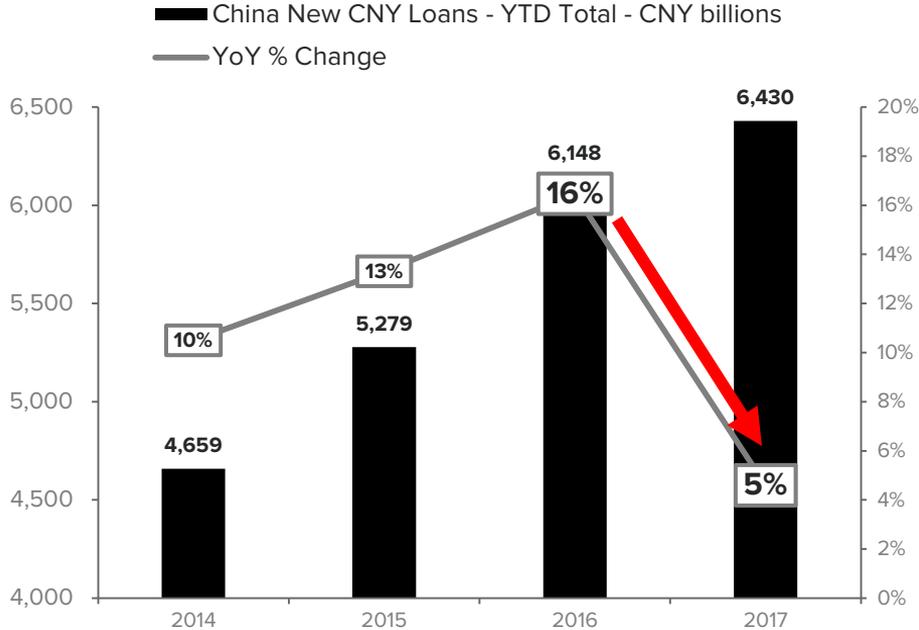
PBOC MEDIUM-TERM LENDING FACILITY



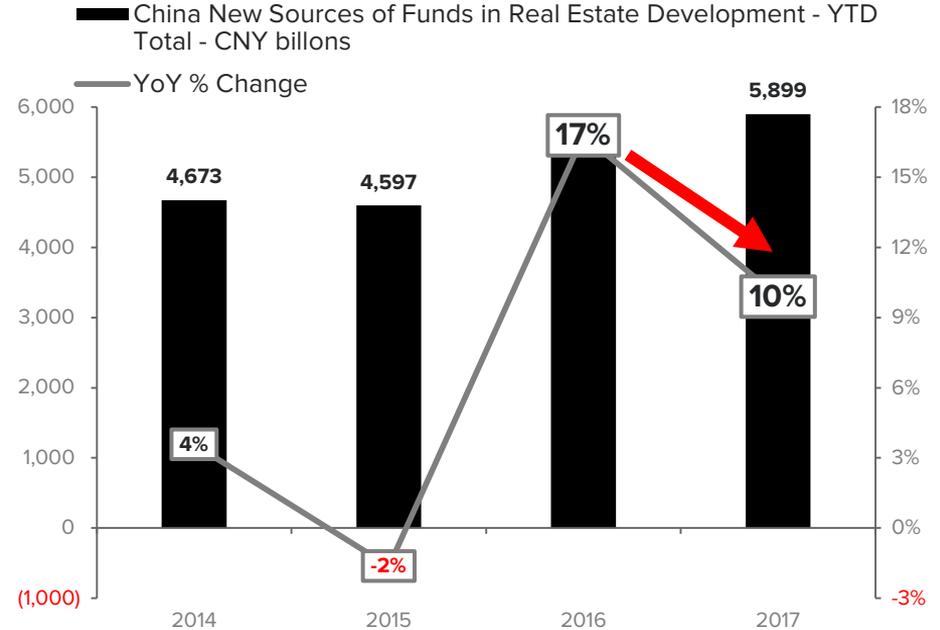
For the full year 2016, the PBoC pumped a net +1.727T CNY into mainland financial markets; that figure was up +5,857% vs. the amount of net liquidity it provided in 2015. With respect to its medium-term lending facility, the PBoC pumped a net +2.792T CNY into mainland financial markets in 2016; that figure was up +13,000% vs. the amount of net liquidity it provided in 2015. That simply won't happen again – not at least in 2017.

2016: AN “UNCOMPABLE COMP”

CNY LOAN GROWTH



NEW FINANCING FOR PROPERTY DEVELOPMENT

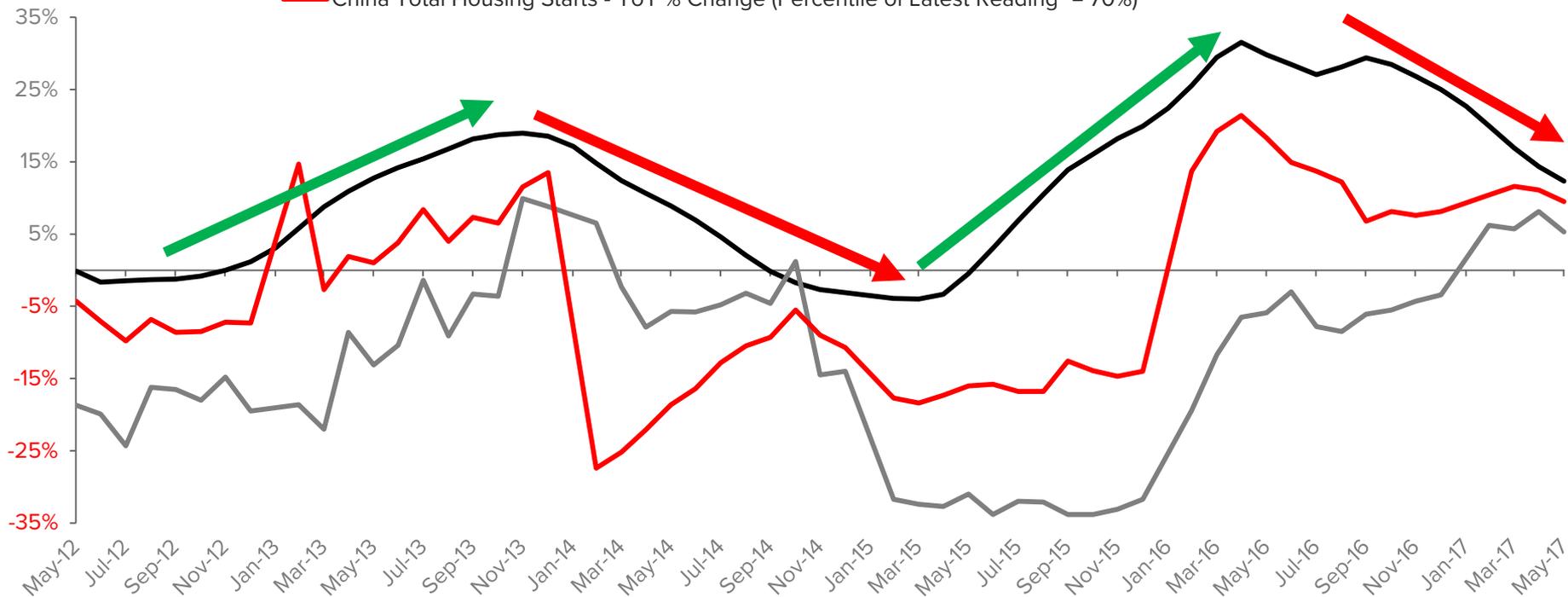


With respect to its administrative control over credit allocation, the PBoC oversaw a whopping \$1.026T in credit expansion at the depths of its financial crisis in the first quarter of 2016, with \$705B of that coming in the form of new loans. Moreover, loan growth averaged +13.9% YoY throughout 2016 (vs. a YTD run-rate of only +12.8%).

TIGHTENING IS WEIGHING ON “OLD CHINA”

THE PRICE CYCLE LEADS THE INVESTMENT CYCLE IN CHINA'S PROPERTY MARKET AND BOTH ARE TRENDING LOWER IN THE FACE OF MONETARY TIGHTENING THROUGHOUT THE YTD.

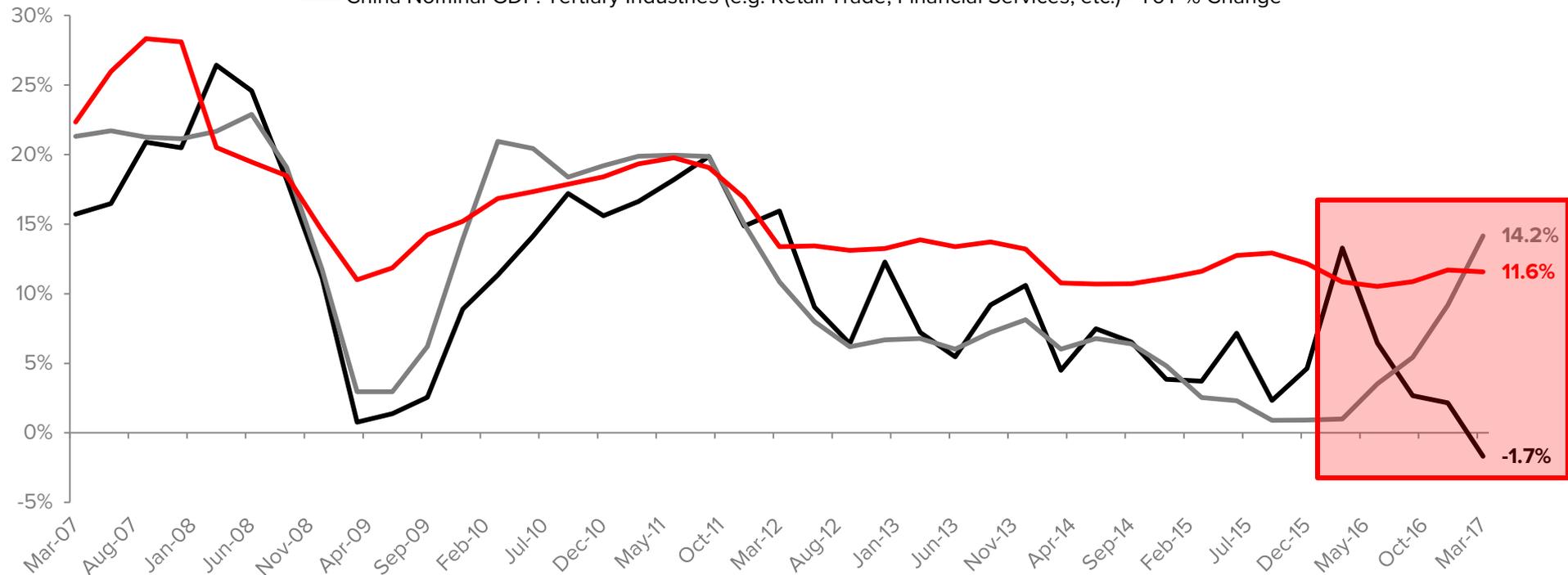
- China Average House Price - First Tier Cities - YoY % Change (Percentile of Latest Reading* = 68%)
- China Total Land Area Purchased - YoY % Change (Percentile of Latest Reading* = 67%)
- China Total Housing Starts - YoY % Change (Percentile of Latest Reading* = 70%)



THE RECOVERY IN “OLD CHINA” IS NOW OLD NEWS

NOMINAL GDP GROWTH IN CHINA’S SECONDARY INDUSTRIES ACCELERATED IN A STRAIGHT LINE FROM A SECULAR TROUGH OF +0.9% YOY IN 4Q15 TO AN UNSUSTAINABLE RATE OF +14.2% YOY IN 1Q17.

- China Nominal GDP: Primary Industries (e.g. Farming, Forestry, etc.) - YoY % Change
- China Nominal GDP: Secondary Industries (e.g. Heavy Industry, Construction, etc.) - YoY % Change
- China Nominal GDP: Tertiary Industries (e.g. Retail Trade, Financial Services, etc.) - YoY % Change



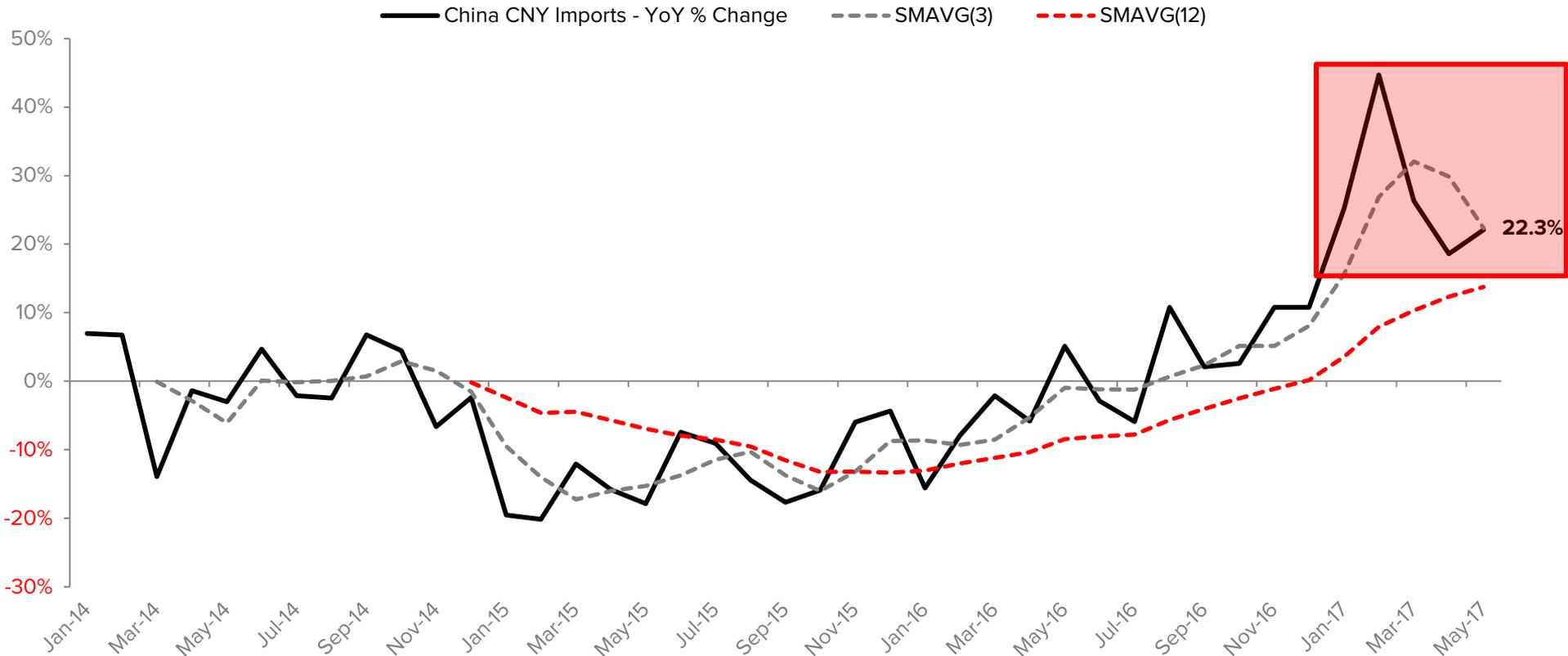
“OLD CHINA” BUMPING UP AGAINST “KEY RESISTANCE”

CHINA'S FIXED INVESTMENT AND MANUFACTURING ECONOMY ACCOUNTED FOR AN EQUALLY UNSUSTAINABLE 45.4% OF CHINA'S NOMINAL GDP GROWTH ON A TRAILING FOUR-QUARTER BASIS – THE HIGHEST RATE SINCE 3Q11.



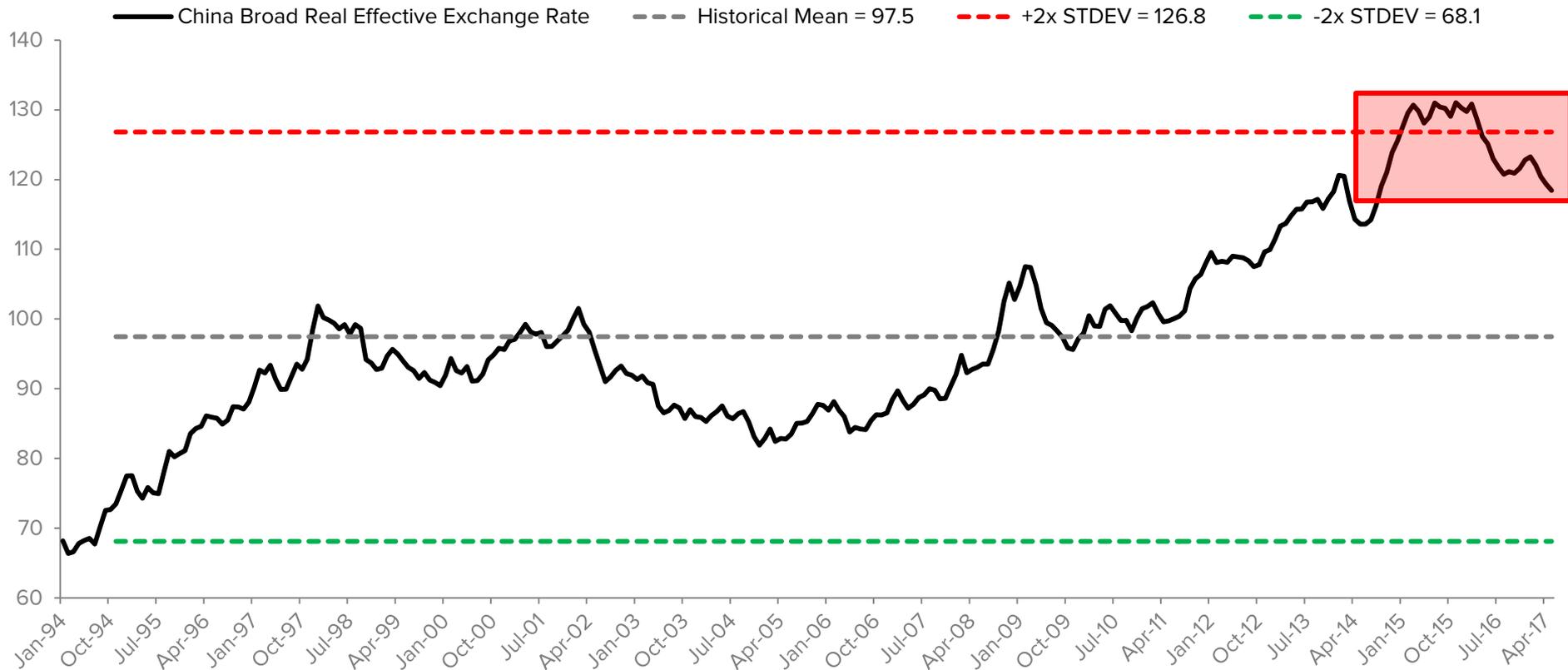
CHINESE DEMAND INFLECTING?

IF NEARLY HALF OF ALL OF NOMINAL GDP GROWTH IN THE PAST YEAR WAS DRIVEN BY CREDIT-SENSITIVE, HEAVY INDUSTRY – WHICH ITSELF HAS RECOVERED TO FORMERLY UNSUSTAINABLE GROWTH RATES – WHAT DOES THAT PORTEND FOR CHINESE DEMAND FOR COMMODITIES?



STRUCTURAL HEADWINDS: INT'L COMPETITIVENESS

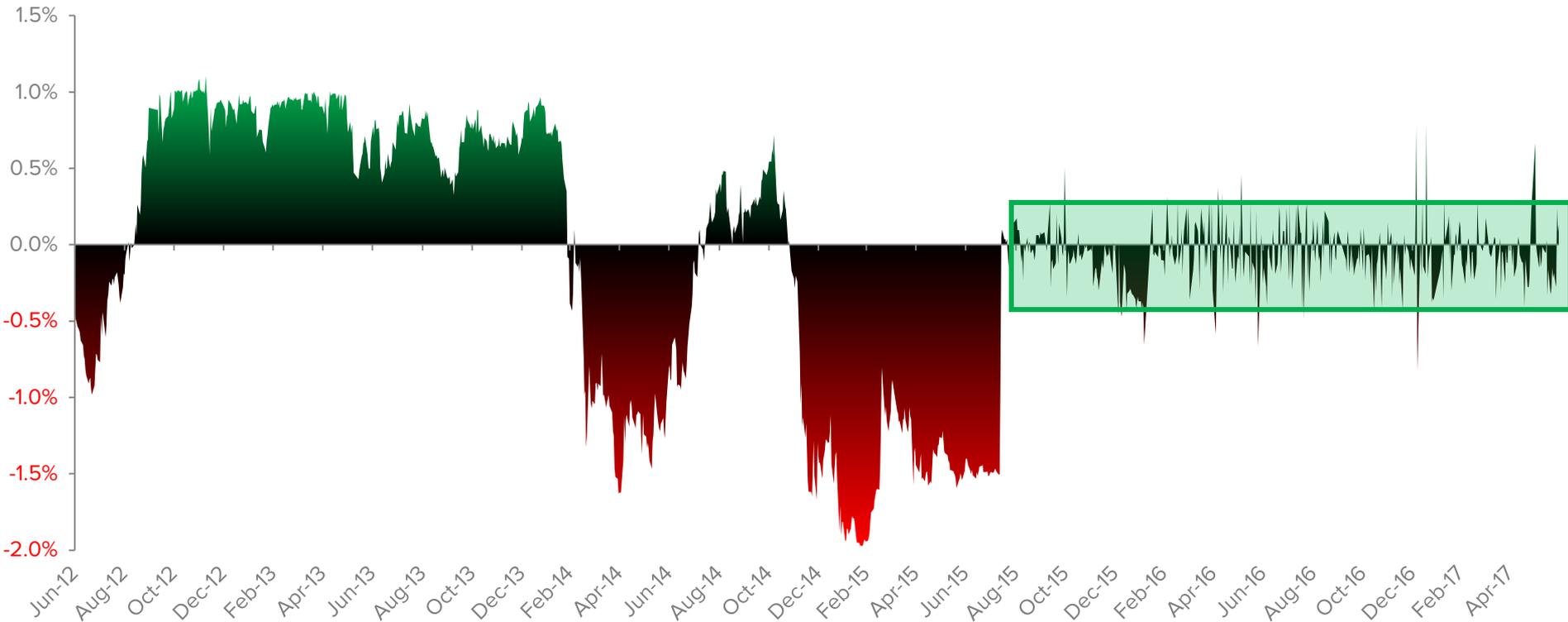
THE CHINESE YUAN HAS APPRECIATED TREMENDOUSLY ON A REER BASIS, CALLING INTO QUESTION THE SUSTAINABILITY OF CHINA'S EXPORT-LED GROWTH MODEL.



UNDERSTAND WHY THEY DID IT

LAST AUGUST'S "SHARP" RMB DEVALUATION WAS NOT INTENDED TO GAIN A COMPETITIVE ADVANTAGE, BUT RATHER TO CORRECT A LARGE IMBALANCE BETWEEN THE REFERENCE RATE AND THE SPOT PRICE.

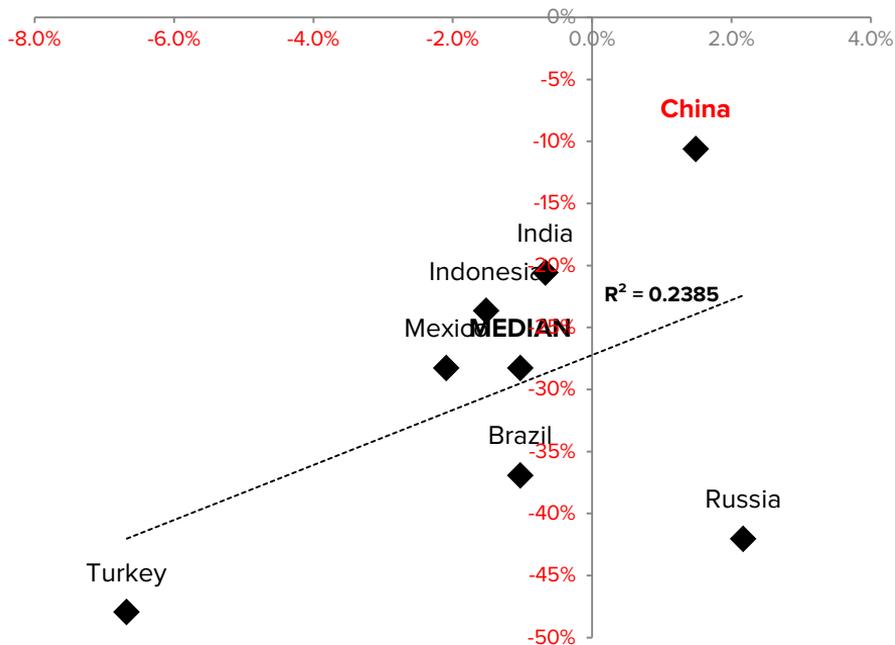
■ Onshore RMB Percentage Point Spread vs. PBoC Reference Rate



CHINA'S CURRENCY CRASH RISK IS MINIMAL

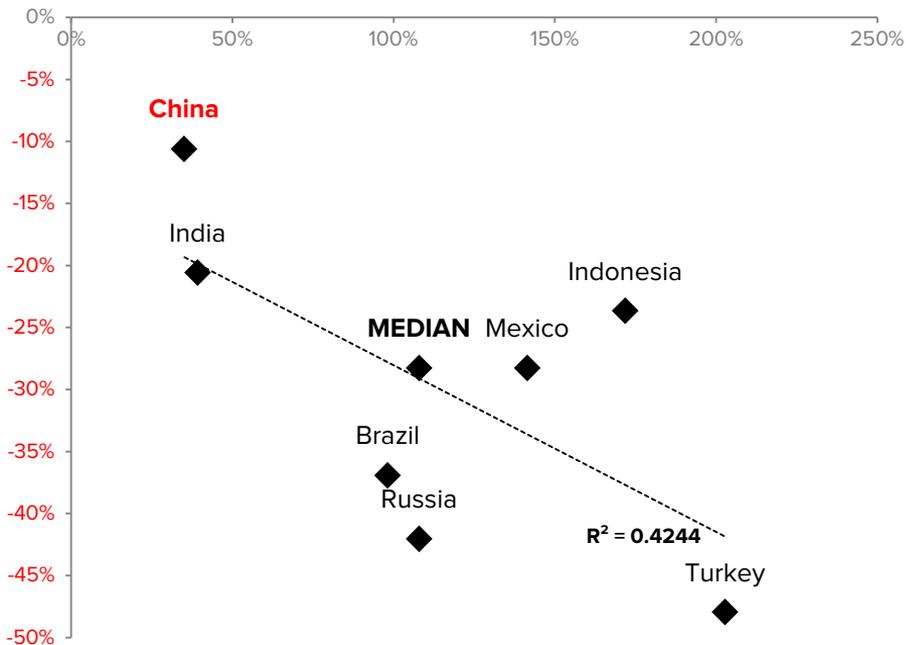
CURRENT ACCOUNT BALANCE

◆ x-axis: Current Account Balance as a % of GDP;
y-axis: Trailing 5Y Peak-to-Present Drawdown of Nominal Effective Exchange Rate



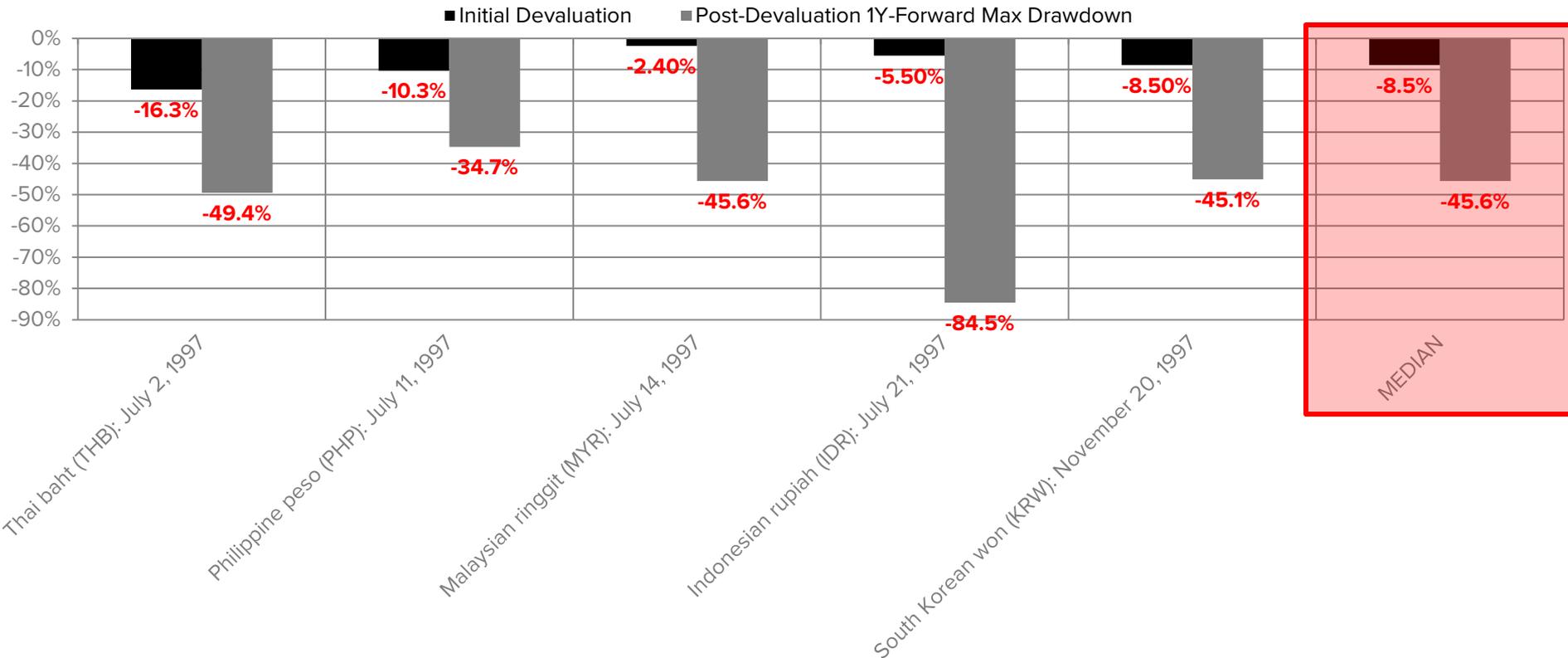
OUTSTANDING U.S. DOLLAR DEBT

◆ x-axis: Total U.S. Dollar Debt as a % of Foreign Exchange Reserves;
y-axis: Trailing 5Y Peak-to-Present Drawdown of Nominal Effective Exchange Rate



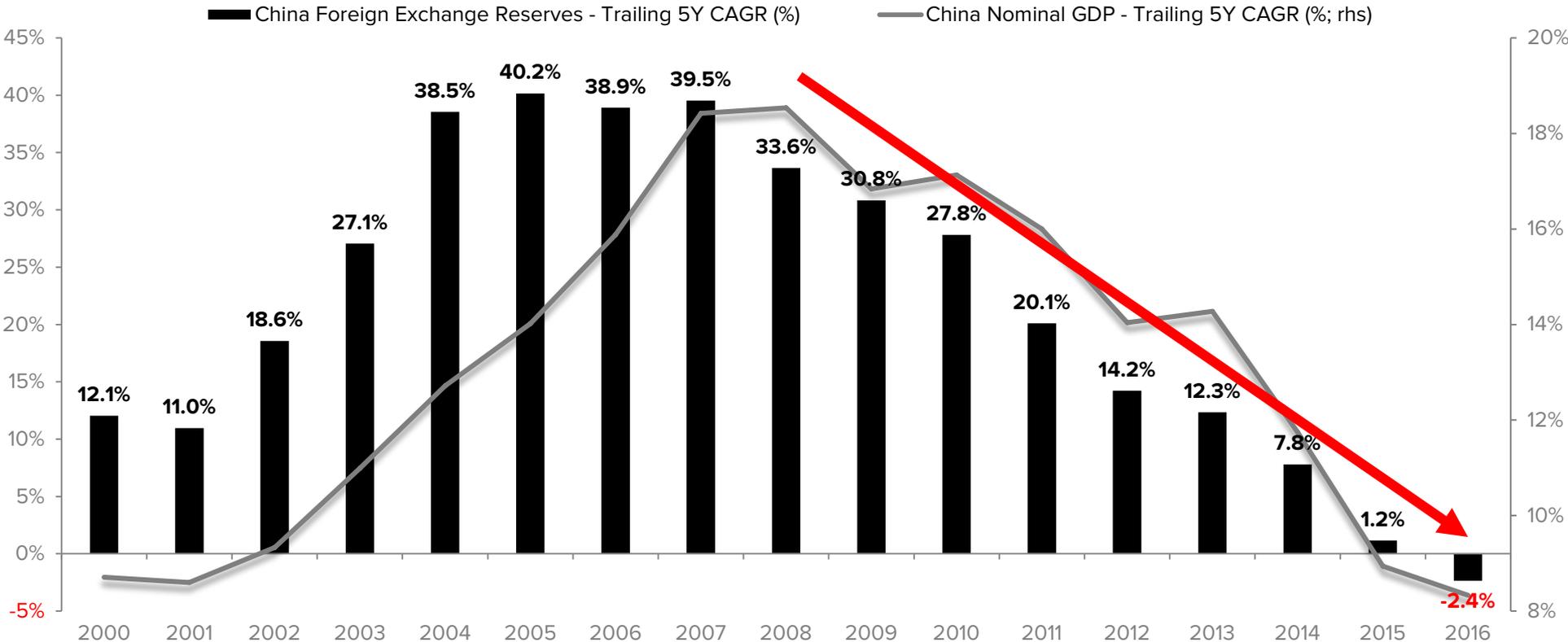
... AND HAS NO INCENTIVE TO DEVALUE

BEIJING HAS LONG FAVORED POLITICAL, ECONOMIC AND FINANCIAL MARKET STABILITY. AND WHILE ITS SUCCESS PROMOTING THE LATTER HAS BEEN DICEY OF LATE, THERE IS ONE THING WE CAN ALL AGREE ON WITH RESPECT TO THE YUAN: THERE'S NO SUCH THING AS A "ONE-OFF" DEVALUATION.



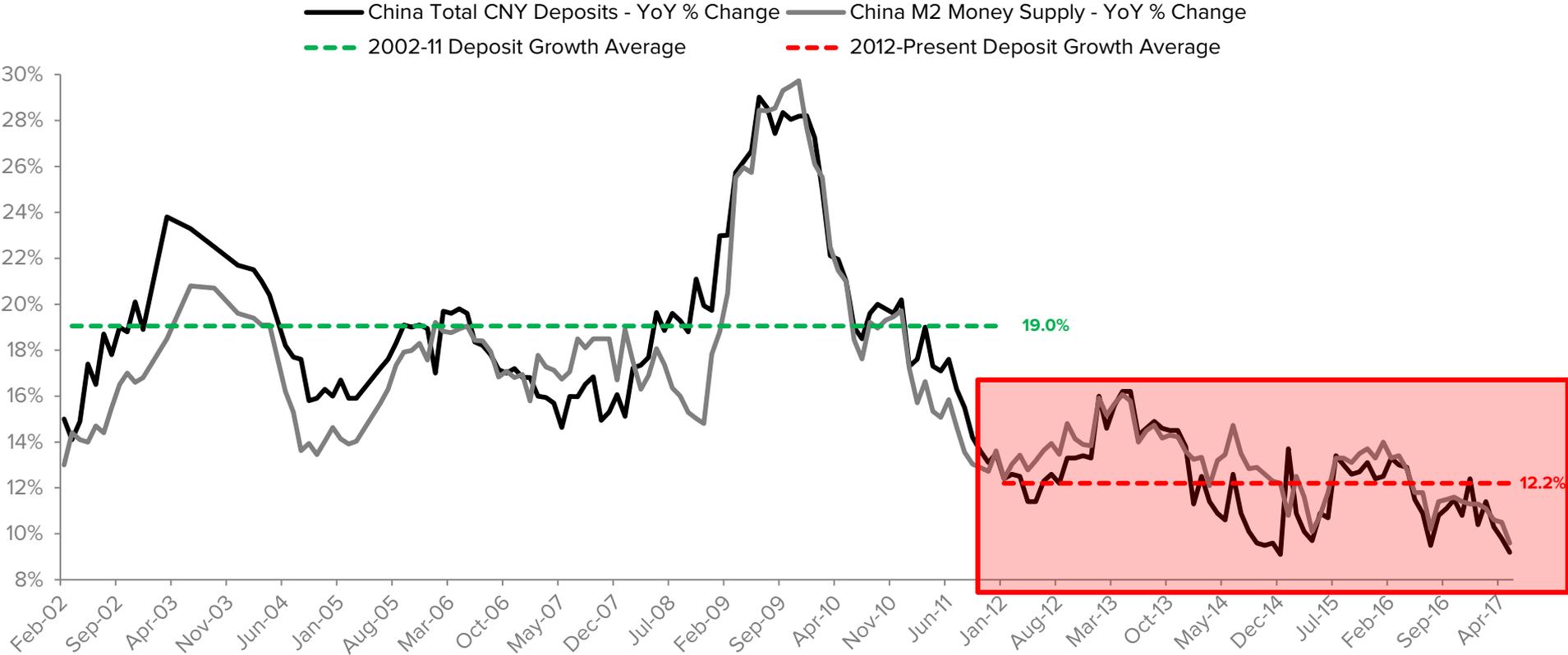
BROKEN: A KEY SOURCE OF LIQUIDITY

THE MOST IMPORTANT ASPECT OF CHINA'S MERCANTILIST GROWTH MODEL WAS NOT THE EXPORT INCOME IT PROVIDED TO MANUFACTURERS, BUT RATHER THE [NOW TEPID] CNY LIQUIDITY IT PROVIDED TO THE BANKING SECTOR AS A RESULT OF THE CLOSED CAPITAL ACCOUNT.



BROKEN: BANK DEPOSIT RECYCLING

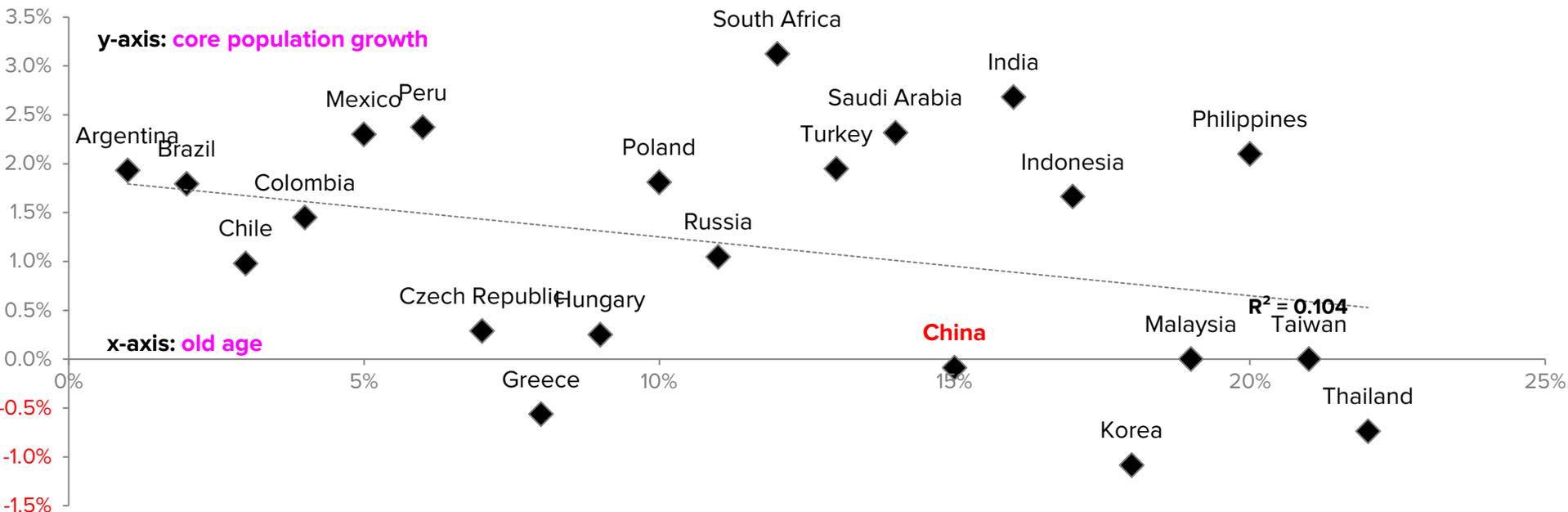
THE NEED TO MATCH BANKING SECTOR LIABILITIES WITH COMMENSURATE ASSETS HELPED PERPETUATE BUBBLES IN CHINESE INDUSTRIAL CAPACITY AND REAL ESTATE.



CHINA'S DEMOGRAPHICS REMAIN CHALLENGED

THE CHINESE POPULATION IS GETTING INCREASINGLY OLD AND ITS CORE CONSUMPTION DEMOGRAPHIC LACKS THE ENTROPY OF MANY EMERGING MARKET PEERS.

- ◆ x-axis: 5Y Forward Old-Age Dependency Ratio (65+ Year-Olds as a Ratio of the Working-Age Population);
y-axis: 35-54 Year-Old Population Cohort - 5Y Forward CAGR
- Linear (x-axis: 5Y Forward Old-Age Dependency Ratio (65+ Year-Olds as a Ratio of the Working-Age Population);
y-axis: 35-54 Year-Old Population Cohort - 5Y Forward CAGR)

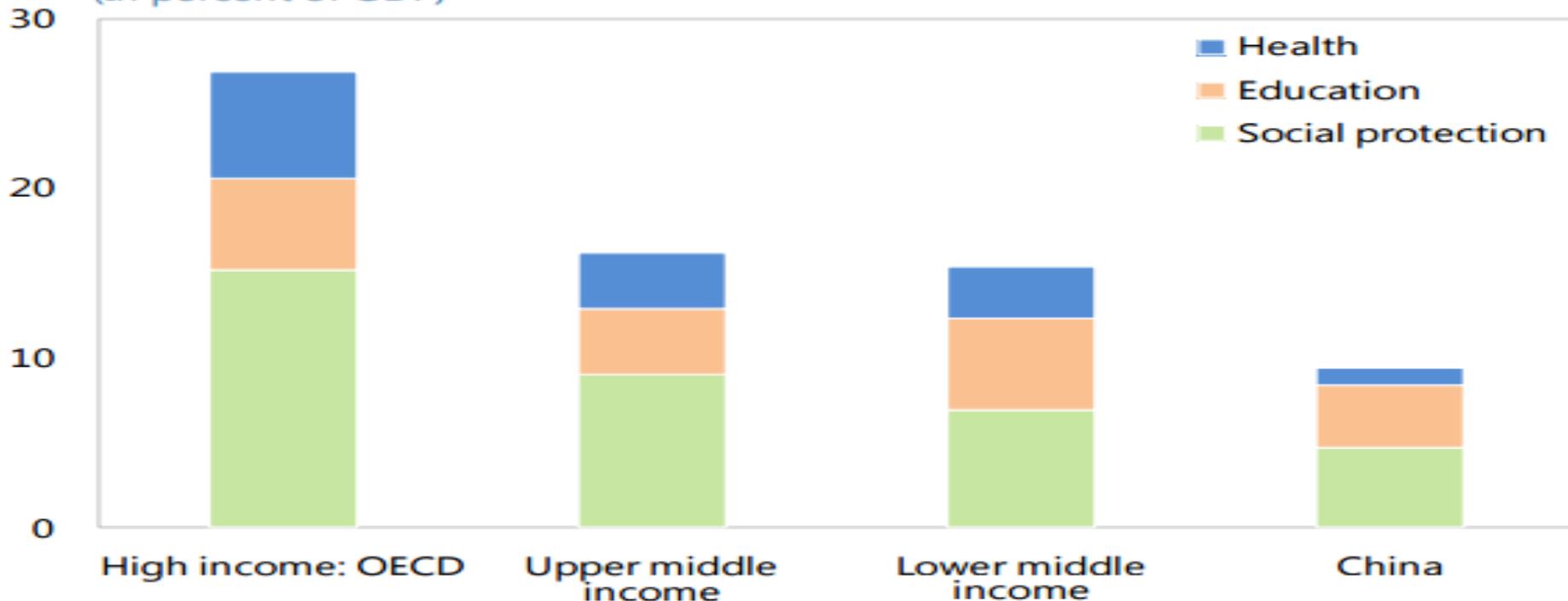


... WITH A LIMITED SOCIAL SAFETY NET?

MUCH ADO HAS BEEN MADE ABOUT CHINA'S IMPRESSIVE HOUSEHOLD SAVINGS (~25% OF GDP), BUT WITHOUT AN ADEQUATE SOCIAL SAFETY NET (THAT WILL TAKE YEARS TO DESIGN AND IMPLEMENT), SUCH "PENNEDED UP DEMAND" FOR CONSUMPTION WILL REMAIN JUST THAT.

Social Spending by Country Group

(In percent of GDP)



Sources: China 2030, World Bank; and IMF staff calculations.

THEMATIC INVESTMENT CONCLUSIONS



TRADE (3 WEEKS OR LESS)

LONGS: British Pound (FXB), Nasdaq (QQQ), S&P 500 (SPY), Russell 2000 Growth (IWO), Tech (XLK), Consumer Discretionary (XLY), Biotech (IBB), Saudi Arabia (KSA), Gold (GLD)

SHORTS: Euro (FXE), S&P Metals & Mining (XME), Energy (XME), Brazil (EWZ)



TREND (3 MONTHS OR MORE)

LONGS: U.S. Dollar (UUP; added 8/5/14), NASDAQ (QQQ; added 1/11/17), S&P 500 (SPY; added 1/11/17), Financials (XLF; added 1/11/17), Gold (GLD; added 6/13/17)

SHORTS: Euro (FXE; added 7/7/15), Japanese Yen (FXY; added 1/11/17), Brazil (EWZ; added 5/30/17); S&P Metals & Mining (XME; added 5/30/17)



TAIL (3 YEARS OR LESS)

LONGS: U.S. Dollar (UUP; added 8/5/14)

SHORTS: Euro (FXE; added 7/7/15)

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