



Mature Economies

Quantitative Market Alert

MarketQuant Research

Monthly – June 2, 2017

Extracts from the original document

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This document provides the outputs of highly complex and extraordinarily powerful data-mining and artificial intelligence tools applied to macroeconomic, financial and market variables.

These outputs are:

- Early Warning Signals (EWS) on large reversal in market prices (upwards as well as downwards) over a short-term horizon (from 1 to 6 months ahead).
- Outlook Signals over a short-term period (3 month and 6 month ahead), which represents the market level for each period (3 month and 6 month ahead) compared to the current market level.

The tools include an estimation of cyclically-influenced Fair Values (i.e. market prices that would be fully consistent with the traditional set of economic and cyclical determinants of fair values).

Results presented here are directly the outputs of the quantitative models and we do not tamper with them.

Written on June 2, 2017 with data up to May 30, 2017.

Key messages – June 2017

Retrospective outlook

- The one-month-ahead QMA provided in May 2017 had good predictive performances with 10 out of the 12 signals correct. The forecasting errors were concentrated on the 10-year bond markets, on which we anticipated rising trends on yields while signals were finally volatile.

Divergence between 3 and 6 month outlooks

- Regarding the 3-month outlook, the key messages were unchanged, suggesting a continuation of the current trends: volatility in equity markets, gradual increase in bond yield and credit spread narrowing. Divergent signals appeared on a 6-month outlook, with a differentiation between US and Euro zone assets.

Higher volatility and potential countries divergence

- On equity markets, our signals remain divided into two periods. From June to August, equities will keep gaining values (compared to the current level) despite higher volatility and potential but temporary *deterioration* periods (especially in July). From September to November, market volatility is likely to extend with potential diverging trends between countries. S&P500 *deterioration* signals would not result into market decline (compared to current level), suggesting rather limited *deteriorations* than prolonged declines. For other markets, the lack of clear 6-month outlook signals (except Nikkei 225) validates a volatile environment (given the the predominant share of *double* signals).

Continuous yield pressures

Euro zone monitoring required

- Signals on government bond yields diverge. While US government 10-year bond yields signals demonstrate a transmission of Fed tightening cycle into higher bond yields (despite *double* signals), Eurozone bond markets distinguish. Combination of *improvement* signals on German and French 10-year bond yields (especially in October) and negative trend on German bond yields suggests a Euro zone specific risk (as the US trend remains positive). Rather related to ECB announcements, resurgence of sovereign risk related to political events or fair-value repricing, this combination must be monitored.

Short term corp. spreads resilience

before EUZ/US divergence

- Rise in corporate spreads must be considered as an early warning signals for US equity and cyclical adjustment. In this context, the outlook provided for US corporate spreads is consistent with other US asset classes and our macroeconomic view: Fed “yield curve control” supporting bond yield *appreciation*, corporate sector strength supporting *improvement/neutral* stance in credit markets, thus supporting the current US equity level. Divergence on a 6-month outlook between US (uncertain trend compared to current level) and Euro zone corporate spreads (higher level on a 6-month basis compared to the current level and *deterioration* signals) may be explained through expectations of reduced corporate assets purchases by the ECB (expected in 2017H2), against extended US corporate strength given expected corporate tax cut. However, the combination between *improvements* signals on German bond yields and Euro corporate spreads widening is rather inconsistent with our current economic view.

Summary of Early Warning Signals

| | Market Level (Last value) | 06.2017 | 07.2017 | 08.2017 | 3-month outlook | 09.2017 | 10.2017 | 11.2017 | 6-month outlook |
|--------------------------------------|------------------------------|---------|---------|---------|--------------------|---------|---------|---------|--------------------|
| Equity Indices | | | | | | | | | |
| S&P 500 | 2 413 | [Red] | | | ↗ | [Red] | | | ↗ |
| CAC 40 | 5 306 | [Red] | | | ↗ | [Teal] | [Grey] | [Red] | - |
| DAX 30 | 12 599 | [Grey] | [Red] | [Grey] | ↘ | [Grey] | [Grey] | [Red] | - |
| FTSE 100 | 7 527 | [Grey] | [Grey] | [Grey] | ↗ | [Grey] | [Grey] | [Grey] | - |
| Nikkei 225 | 19 678 | [Grey] | [Red] | [Grey] | ↗ | [Red] | [Grey] | [Grey] | ↘ |
| 10-Year Government Benchmarks | | | | | | | | | |
| US Treasury 10 Year Yield | 2.21% | [Grey] | | | ↗ | [Grey] | | | ↗ |
| French OAT 10 Year Yield | 0.73% | [Grey] | [Teal] | [Teal] | ↗ | [Red] | [Teal] | [Grey] | - |
| German Bund 10 Year Yield | 0.30% | [Grey] | [Grey] | [Grey] | ↗ | [Grey] | [Teal] | [Teal] | ↘ |
| UK Gilt 10 Year Yield | 1.00% | [Grey] | [Grey] | [Grey] | - | [Grey] | [Grey] | [Teal] | ↗ |
| Japan JGB 10 Year Yield | 0.04% | [Red] | [Red] | [Teal] | ↗ | [Teal] | [Grey] | [Red] | - |
| Corporate Spreads | | | | | | | | | |
| Euro 5-7 Year A | 34 bp | [Teal] | [Red] | [Red] | ↘ | [Red] | | [Red] | ↗ |
| US 5-Year A | 95 bp | [Teal] | [Red] | [Red] | ↘ | | | [Red] | ↘ |

Source: TAC ECONOMICS

Legend:



↗ ↘ Medium term outlook compared to the current market level (first column) / - indicates uncertain outlook

Summary on Market Fair Values

The following table summarizes the estimated fair value for each market. The comparison with the market level during the same month allows evaluating the expected short-term direction assuming that market level oscillates around fair-value.

| | Market Level (Last value) | Fair Value Apr. 17 | Gap to Fair Value | Expected short-term direction | Evolution between Mar.17 and Apr.17 |
|--------------------------------------|------------------------------|-----------------------|----------------------|----------------------------------|---|
| Equity Indices | | | | | |
| S&P 500 | 2 413 | 2 190 | 223 | Decrease | Increase |
| CAC 40 | 5 306 | 4 578 | 728 | Decrease | Increase |
| DAX 30 | 12 599 | 10 549 | 2050 | Decrease | Increase |
| FTSE 100 | 7 527 | 6 812 | 715 | Decrease | Increase |
| Nikkei 225 | 19 678 | 18 031 | 1647 | Decrease | Increase |
| 10-Year Government Benchmarks | | | | | |
| US Treasury 10 Year Yield | 2.21% | 3.64% | -135 bp | Increase | Decrease |
| French OAT 10 Year Yield | 0.73% | 1.93% | - 120 bp | Increase | Decrease |
| German Bund 10 Year Yield | 0.30% | 0.16% | +14 bp | Decrease | Decrease |
| UK Gilt 10 Year Yield | 1.00% | 1.87% | -87 bp | Increase | Decrease |
| Japan JGB 10 Year Yield | 0.04% | -0.03% | +7 bp | Decrease | Decrease |
| Corporate Spreads | | | | | |
| Euro 5-7 Year A | 34 bp | 55 bp | -21 bp | Increase | Decrease |
| US 5-Year A | 95 bp | 32 bp | +63 bp | Decrease | Increase |

Source: TAC ECONOMICS

S&P 500

Early Warning Signals

(red=strong deterioration, blue=strong improvement, grey= double signal and white=no major change)

| | Jun.2017 | Jul.2017 | Aug.2017 | 3-month outlook | Sep.2017 | Oct.2017 | Nov.2017 | 6-month outlook |
|-------------------|-----------|----------|----------|-----------------|-----------|----------|----------|-----------------|
| Signals | [Red Box] | | | ↗ | [Red Box] | | | ↗ |
| Confidence | ** | * | *** | | ** | * | * | |

Source : TAC ECONOMICS

Evolution of S&P 500



Comparison of Actual vs. Fair Value

| | |
|---|--------------|
| Fair Value (April 17) | 2 190 |
| Market Level | 2 413 |
| Gap to Fair Value | 223 |
| Expected short-term direction | Decrease |
| Market evolution between March and April 2017 | Increase |

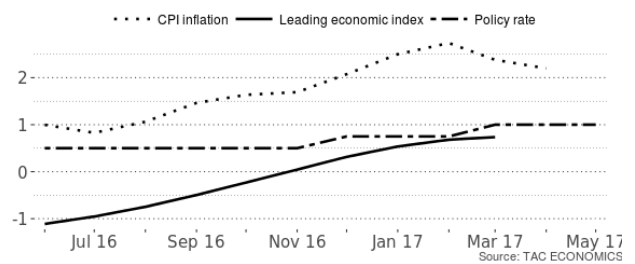
Source : TAC ECONOMICS

Monthly change (in %)

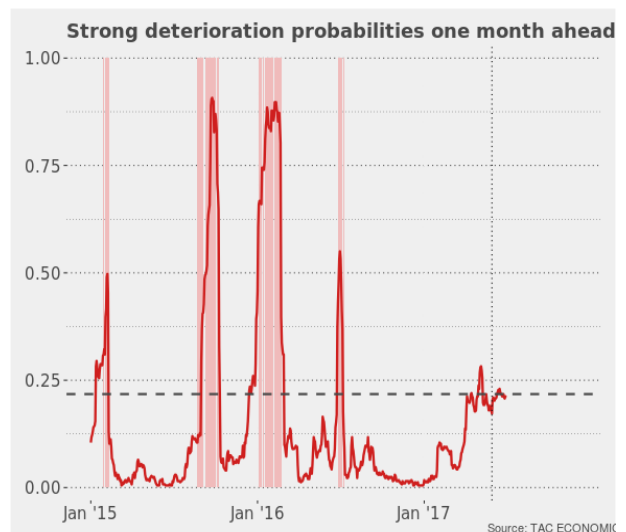
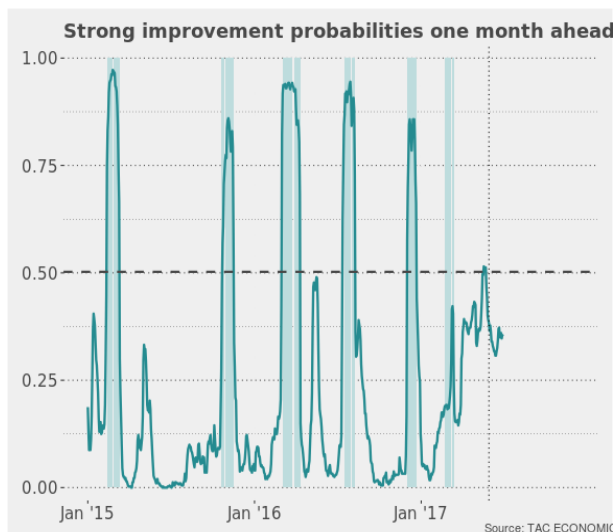


(Dotted lines in red represent EWS thresholds at -3.9bp and 4.3bp)

Fundamental variables (%)



S&P 500 Early Warning Signals (EWS)

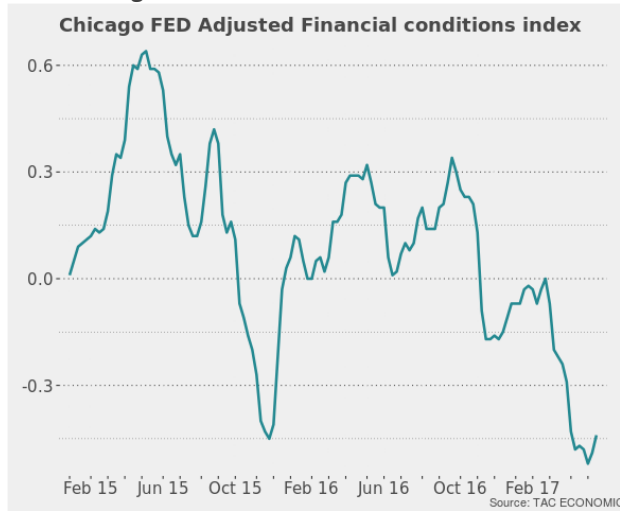


The red/blue line represents the deterioration/improvement probability of a major shock, bars in red/blue the observed signals and the dotted line the EWS threshold

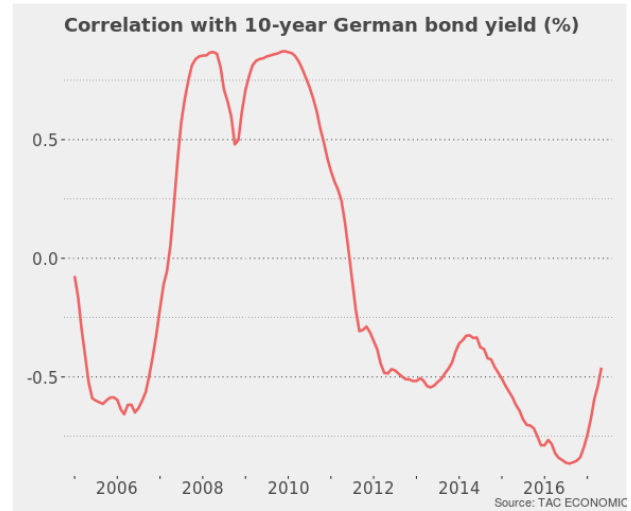
Main drivers for S&P 500 EWS prediction

The following graphs describe the main archetypal determinants to predict strong changes for the next six months. We distinguish macroeconomic indicators (in blue), financial market indicators (in red) from technical market analysis (in brown).

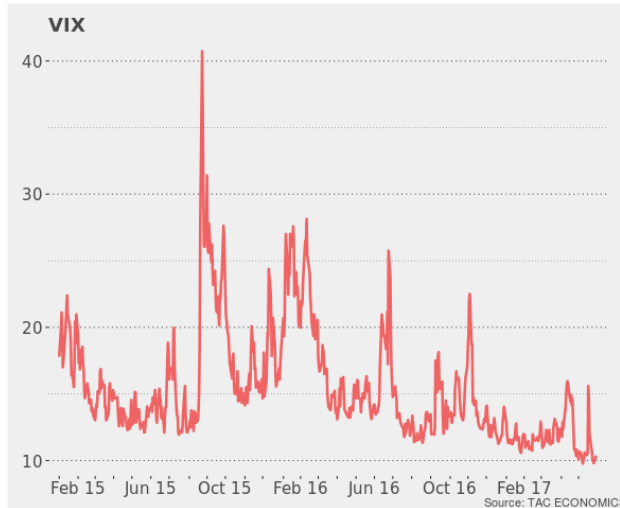
US Financing conditions



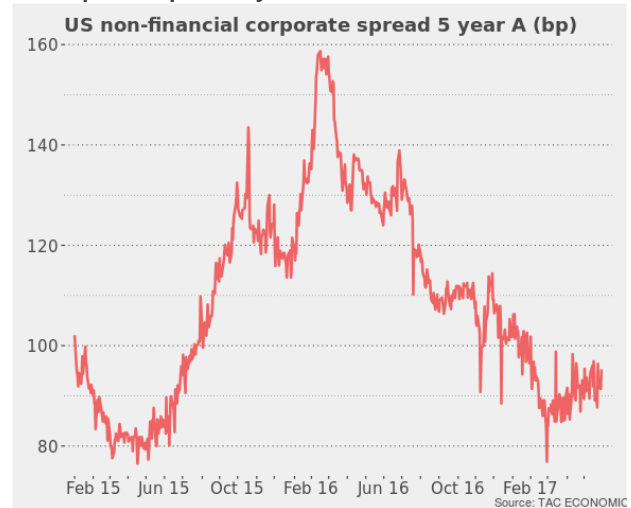
Market correlations



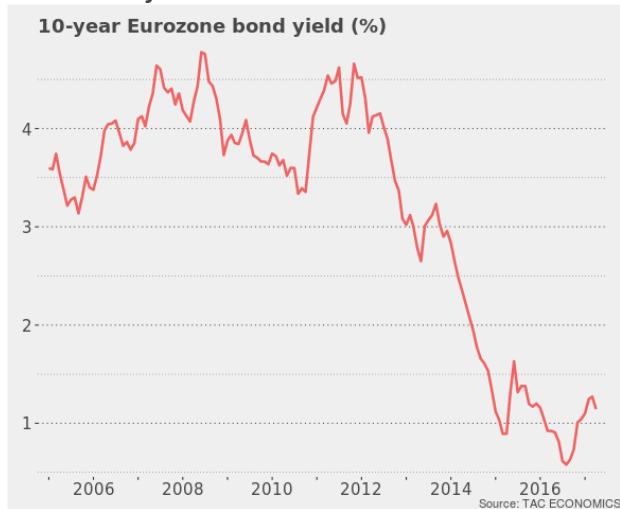
US Financial stress index



US Corporate spread 5-year A



EUZ Monetary conditions



Market analysis

