Dealing With The Return Of Volatility
Philippe Ferreira – Lyxor AM
Investors find themselves in an increasingly tight position
Economic activity is short of expectations but strong enough for CB normalization
Policy risks are substantial

US Generic Congressional Vote (%)

- FiveThirtyEight, Democrats
- RealClearPolitics (RCP), Democrats

Presidential job approval rate (%)

- FiveThirtyEight
- New York Times

- Bloomberg, Macrobond, Lyxor AM
The 12m probability of a U.S. recession, though small, is rising. The average max drawdown of the S&P 500 around U.S. recessions is 35%.
Prefer Equity to Bonds… Merely; Prepare for more Volatility

- Broad sustained global growth
- Inflation low and grinding higher
- Richly valued assets
- Central banks normalizing

**Risks / Hurdles**
- Sudden US wage acceleration
- Trade war
- USD weakness
- Reflation loosing momentum in EMU or Japan
- China slowdown amid tighter policy

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Equity to Bonds Relative Performance (TR)
MSCI World / JPM Global Bond (100=1Y ago)

- Bloomberg, Macrobond, Lyxor AM
Portfolio diversification is an issue at present

12MF PE Ratio
Last vs. 10Y average, %

AVG 10Y Treasury yields in the 12M preceding a U.S. recession

- I/B/E/S, Macrobond, Lyxor AM
## Risk adjusted performance in late cycles

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</thead>
<tbody>
<tr>
<td>Hedge funds (HFRI FoF)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.2</td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td>US Treasuries</td>
<td>0.9</td>
<td>-0.2</td>
<td>1.3</td>
<td>5.0</td>
<td>2.0</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>Inflation linked bonds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.4</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>US credit</td>
<td>-0.2</td>
<td>-0.9</td>
<td>1.5</td>
<td>3.3</td>
<td>1.1</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>GSCI</td>
<td>2.2</td>
<td>1.9</td>
<td>-0.7</td>
<td>1.1</td>
<td>0.9</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td>MSCI USA</td>
<td>-0.3</td>
<td>1.0</td>
<td>1.2</td>
<td>1.0</td>
<td>-0.6</td>
<td>0.8</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Performance divided by volatility over the 12 months prior to the recession (based on monthly data). Based on the following indices: S&P GSCI Total Return, MSCI USA Net Total Return, Bloomberg Barclays US Corporate & US Treasury Total Return, Bloomberg Barclays Global Inflation Linked Total Return Hedged USD, HFRI Fund of Funds Composite Index.
A tight window of opportunities (1)
A tight window of opportunities (2)

<table>
<thead>
<tr>
<th>Index</th>
<th>12MF/12MT</th>
<th>12MF/12MF</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P 500</td>
<td>14.7</td>
<td>21.3</td>
<td>7.7</td>
<td>0.3</td>
<td>1.7</td>
<td>11.8</td>
<td>22.2</td>
</tr>
<tr>
<td>Eurostoxx 300</td>
<td>8.6</td>
<td>7.8</td>
<td>3.9</td>
<td>9.5</td>
<td>3.6</td>
<td>14.9</td>
<td>7.1</td>
</tr>
<tr>
<td>FTSE 100</td>
<td>7.5</td>
<td>11.1</td>
<td>2.5</td>
<td>-19.8</td>
<td>-1.7</td>
<td>25.7</td>
<td>10.8</td>
</tr>
<tr>
<td>Topix 100</td>
<td>2.0</td>
<td>15.8</td>
<td>43.1</td>
<td>2.5</td>
<td>-3.2</td>
<td>21.6</td>
<td>22.9</td>
</tr>
<tr>
<td>MSCI EM ($)</td>
<td>13.8</td>
<td>15.6</td>
<td>1.4</td>
<td>-6.8</td>
<td>7.8</td>
<td>22.2</td>
<td>15.9</td>
</tr>
<tr>
<td>MSCI World ($)</td>
<td>11.6</td>
<td>18.0</td>
<td>4.7</td>
<td>-3.2</td>
<td>2.2</td>
<td>16.3</td>
<td>15.5</td>
</tr>
</tbody>
</table>

![Graph showing EPS Growth](image)

**FTSE 100**

**S&P 500**

**MSCI EM ($)**

**Topix**

**Euro Stoxx 300**

- I/B/E/S, Lyxor AM
Unfolding capex cycle favors growth and ... productivity
Core & Headline inflations to creep higher – sO/W US Breakevens

**US Core PCE 6M% AR**

**US Core PCE Y/Y %**

Fed Target Inflation Rate

**US CPI Inflation model & Breakeven**

10Y Breakeven Inflation

WTI @ $70

WTI @ $60

WTI @ $50

Macrobond, Lyxor AM
Risk assets: no immediate threat from recession risk or diminishing liquidity
Italian Pandora box to stay open (1)

- 5*-L coalition (PM Conte, Salvini & Di Maio ministers, along Tria & Savona)
  - Sharp rise of the League in polls
  - Tria only moderate in the government

- Program
  - High spending of the far-left + Low taxes of the far-right => high borrowing (€100B per year, 6% of GDP)
  - Likely to challenge Brussels’s rules although €-threat withdrawn

- Italian doldrum economics
  - low living standards, unemployment, fragile banking, hefty public debt (130% GDP)

- [Graph showing Italy Budget Balances (% GDP forecast DG ECFIN)]
  - Primary Balance
  - Interest Expenses
  - Budget Balance
  - Macrobond, Lyxor AM
Italian Pandora box to stay open (2)

3 key independent figures

- Giuseppe Conte, a professor of private law, has no prior experience in government or administrative service…

- Giovanni Tria (Economy & Finances) graduated in Law but then became professor of Economics. He has served as senior advisors in various ministries and is said to be pro-euro.

- Paolo Savona is the Minister of European affairs (minister without portfolio). He is an academic economist with experience at the Bank of Italy. He was President of Confindustria. Reported to be Eurosceptic.

Who are the new political leaders in Italy?

- **6 independents** (incl Prime Minister; Foreign Affairs; Economy & Finance; European affairs)
- **6 Northern League** (incl. Interior – Salvini; Agriculture; Public Administration)
- **8 Five Star** (incl. Economic Development & Labour – Di Maio; Defence; Justice; Infrastructure; Health; Environment)
High political risks vs. improved public finances

Italy's primary balance (General Government) (4 quarters cumulated, EUR bn)

Italy: GG debt by holding sector (EUR bn)
CROSS ASSET RECOMMENDATIONS

**U.S.**
- sU/W US Treasuries
- sO/W US Breakeven
- sU/W US High-yield
- Neutral+ US Equity
- O/W Growth vs. Value
- O/W Banks

**Eurozone UK**
- sU/W Bund
- sU/W BTP vs Bund
- sU/W UK Gilts
- sU/W EU IG
- Neutral EU HY
- Neutral EMU equity
- O/W Disc.
- O/W Construction
- U/W Staples
- O/W France Equity
- Neutral UK Equity

**EM/Comdty**
- Neutral EM
- O/W China, U/W Asia-x
- Neutral Brazil, U/W Mexico
- U/W Turkey, Neutral
- Sth Africa, Neutral Poland
- sU/W Brent
- sO/W Copper
- sO/W Gold as hedge
Alternative VIEWS
FI Arb and L/S Equity outperformed YTD; Q2 saw a rebound in Event-Driven; Macro/ CTA keeps struggling

Source: HFR, Lyxor AM
“There is no “alpha”. There is just beta you understand and beta you don’t understand” (Cochrane, 2011)
## Strong inflows into European alternative UCITs in 2018

### Asset Class

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>May</th>
<th>QTD</th>
<th>YTD</th>
<th>1Y</th>
<th>May-2018</th>
<th>May-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>(8,252)</td>
<td>(377)</td>
<td>41,938</td>
<td>128,069</td>
<td>3,259,838</td>
<td>3.9%</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>(9,983)</td>
<td>(6,037)</td>
<td>1,482</td>
<td>144,403</td>
<td>2,229,095</td>
<td>6.5%</td>
</tr>
<tr>
<td>Diversified</td>
<td>4,322</td>
<td>10,505</td>
<td>44,451</td>
<td>114,655</td>
<td>1,308,928</td>
<td>8.8%</td>
</tr>
<tr>
<td>Money Market</td>
<td>(10,944)</td>
<td>(442)</td>
<td>(4,913)</td>
<td>(5,234)</td>
<td>1,200,565</td>
<td>-0.4%</td>
</tr>
<tr>
<td>Other</td>
<td>4,160</td>
<td>8,149</td>
<td>4,310</td>
<td>51,168</td>
<td>594,413</td>
<td>8.6%</td>
</tr>
<tr>
<td>Convertible</td>
<td>(114)</td>
<td>(376)</td>
<td>(221)</td>
<td>(921)</td>
<td>62,595</td>
<td>-1.5%</td>
</tr>
<tr>
<td>Commodities</td>
<td>277</td>
<td>599</td>
<td>814</td>
<td>1,137</td>
<td>19,098</td>
<td>6.0%</td>
</tr>
<tr>
<td>Alternative</td>
<td>4,371</td>
<td>8,990</td>
<td>19,777</td>
<td>50,481</td>
<td>398,964</td>
<td>12.7%</td>
</tr>
<tr>
<td>Guaranteed</td>
<td>(242)</td>
<td>(499)</td>
<td>141</td>
<td>237</td>
<td>80,262</td>
<td>0.3%</td>
</tr>
<tr>
<td>Other</td>
<td>(132)</td>
<td>(567)</td>
<td>394</td>
<td>233</td>
<td>33,494</td>
<td>0.7%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>(20,697)</strong></td>
<td><strong>11,798</strong></td>
<td><strong>103,863</strong></td>
<td><strong>433,061</strong></td>
<td><strong>8,520,951</strong></td>
<td></td>
</tr>
</tbody>
</table>

As of May 31\textsuperscript{st} 2018. Funds available for sale in Europe.

- Source: Morningstar, Lyxor AM
Fl Arb., L/S Equity & Global Macro attracted substantial inflows

As of May 2018. Funds available for sale in Europe.

Source: Morningstar, Lyxor AM
Strategies expected to perform well in the current context
OW Merger Arbitrage, L/S Equity variable bias, Fixed Income Arbitrage

FOCUS ON GROWTH & CAPITAL PRESERVATION
- Merger Arbitrage
- FI Arbitrage
- L/S Credit low beta
- Global Macro
- L/S Equity variable bias

LOW BETA STRATEGIES
- CTA
- L/S Equity Market Neutral
- Merger Arbitrage

HIGH BETA STRATEGIES
- Equity L/S Long Bias
- Special Situations
- L/S Credit directional
- Distressed

We are here
Inverted Yield Curve

Lyxor AM
L/S Equity: higher stock dispersion to prove supportive – prefer variable biased funds

Dispersion in US stock returns, 3M mov avg (S&P 500, based on daily changes)

Dispersion in EMU stock returns, 3M mov avg (Eurostoxx 300, based on daily changes)

Source: Bloomberg, Macrobond, Lyxor AM
Lower beta and balanced exposures to risk factors is a good mix in our view, prefer variable biased funds.

MSCI World in total return and local currency
Dow Jones thematic U.S. market neutral indices

HFR, MSCI, Dow Jones, Bloomberg, Macrobond, Lyxor AM
Factor rotation remains a key risk
Momentum & quality outperformance (alternatively low beta & value underperformance) has started to reverse
Equity Market Neutral has a significant momentum bias

3M regression of HFRX market neutral equity hedge on Dow Jones Thematic Market Neutral risk factors (based on weekly returns)

R-squared: 53%

3Y regression

- Bloomberg, HFR, Dow Jones, Macrobond, Lyxor AM
M&A is up 55% YTD (yoy)

- Fiscal reform is fostering U.S. corporate activity. The result of the AT&T vs Time Warner lawsuit sets a supportive precedent for M&A and anti trust law.


Source: Dealogic, Lyxor AM
Healthcare, IT (US), Telcos (Europe) are experiencing large-scale consolidation


Source: Dealogic, Lyxor AM
We stay overweight Event-Driven with a preference for merger arb vs. special situations

*Median US M&A deal spreads, annualized (%)*

Deal universe includes mergers with equity value in excess of $400 million and spreads in the 0-30% range

Source: UBS, Bloomberg, Lyxor AM
CTA (N) Trend following conditions remain weak overall

The SG trend index calculates the net daily rate of return (equal-weighted) for a group of 10 trend following CTAs selected from the largest managers open to new investment. The time series is smoothed with a Hodrick Prescott filter.

The Barclays cross asset trend index Light blue stripes denote +/- 1 standard deviation.

Source: Newedge, Barclays, Lyxor AM
Equity trends remain weaker than AVG but have stabilized

Barclays Cross Asset Trend Index - Equity

6M Annualized Risk Adjusted Returns MSCI World (Standardized, 5Y)

Hodrick Prescott filter (factor 3)

- Barclays, MSCI, Macrobond, Lyxor AM
FI trends improving in the ST but in a secular decline

Barclays Cross Asset Trend Index - Bond

6M Annualized Risk Adjusted Returns Global Sovereigns (Standardized, 5Y)

- Barclays, Bloomberg, Macrobond, Lyxor AM
Strong trends in CTY (especially energy), but on a declining path

Barclays Cross Asset Trend Index - Commodity

Hodrick Prescott filter (factor 3)

6M Annualized Risk Adjusted Returns S&P GSCI (Standardized, 5Y)

- Barclays, S&P, Macrobond, Lyxor AM
OW FI Arbitrage – A Good Diversifier When Bond Yields Rise

Performance of HFRX relative value indices

- Q2
- HFRX Global Hedge Fund
- Barclays Global-Agg Bond Index
- Corporate
- Sovereign
- RV Arbitrage
- Asset Backed
- RV Multi-Strategy

USD SWPT NVOL OIS 3M10Y

EUR SWPT NVOL 3M10Y

LYXOR Asset Management

CROSS ASSET RESEARCH >> INVESTMENT STRATEGY JULY 2018
Keep preferring stockpicking/bondpicking strategies
Our strongest convictions: Fixed income Arb, Merger Arb, L/S Variable bias

L/S Equity
- Long bias
- Variable bias
- L/S Equity Neutral

Event-Driven
- Merger Arbitrage
- Special Situations

FI Arbitrage
- L/S Credit
- Multi-strategy

Global Macro
- Diversified
- Sov FI / FX Bias
- EM focus

CTAs
- Mid term
- Long term
Key risks to our outlook

- Rotation in risk factors impacting L/S
- Rebound in CTAs
- Special situations looks attractive (strong corporate activity) but beta is elevated
- Liquidity risks impacting our OW on FI Arb

![Graph showing DJ thematic market neutral risk factors (US, rebased)]
DICSLAIMER (1/2)

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