

The FCO Cockpit – Global Bubble Status Report

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Main theme of this report:

The ECB's QE announcement of Jan 22 has had a very significant impact on Global Markets. Since then, we see a massive formation of bubbles with unprecedented warning signals showing up in European Equities and Global Fixed Income:

- 56% of all the European Stoxx Equities Sector Indices give clear warning signals. A month ago, that was 0%. We have never seen an increase in warning signals on such a grand scale and on such a short time period before;
- 85% of all Fixed Income indices, globally, show clear warning signals. There we saw the big jump already last month;
- Interestingly, even though all our risk indicators are flashing red, the implied volatility, a socalled fear gauge for global markts, has dropped very significantly over the past months;

It is difficult to anticipate market movements in these global markets that are guided by central banks' extraordinary measures. In any case, as all our risk indicators are in the red, investors should not have a false sense of security from the low implied volatility.

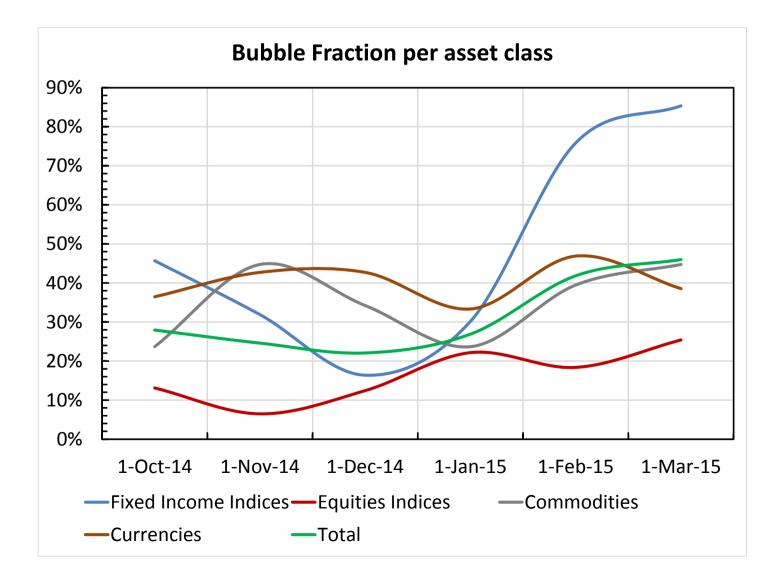


435 systemic assets are monitored

		# Bubbles	% Bubbles	% Bubbles	% Bubbles	% Bubbles	% Bubbles	% Bubbles
		March 1st	March 1st	February 1st	January 1st	December 1st	November 1st	October 1st
	# Assets	2015	2015	2015	2015	2014	2014	2014
Fixed Income	116	99	85%	76%	30%	14%	32%	46%
Government	34	30	88%	82%	67%	36%	67%	73%
Corporate	82	69	84%	73%	16%	5%	18%	35%
Equities	185	47	25%	18%	22%	12%	6%	13%
Country	78	16	21%	21%	21%	10%	6%	21%
US-Sector	63	13	21%	27%	38%	22%	6%	11%
EUR-Sector	32	18	56%	3%	3%	3%	9%	3%
Special	12	0	0%	0%	0%	0%	25%	20%
Commodities	38	17	45%	39%	24%	34%	45%	24%
Currencies	96	37	39%	47%	33%	43%	43%	36%
Total	435	200	46%	42%	27%	21%	25%	28%







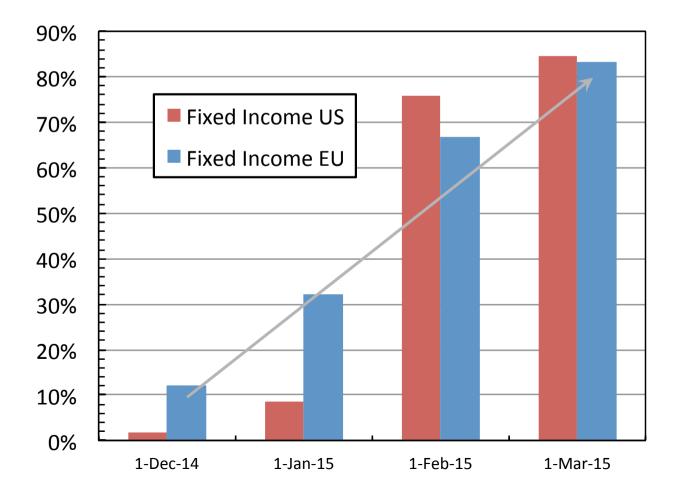




Fixed Income



Asset Class – Fixed Income



General Observation:

In Europe as well as in the US more than 80% of all analysed Fixed Income indices show warning signals.

We have seen a big rise in warning signals after the January 22 announcement of the ECB.



Asset Class – Fixed Income Country Indices

Fixed Income Country Indices	Yearly Return	DS LPPL Trust	DS LPPL Confidence
iBoxx EUR Belgium Index	15,6%	68,5%	69,2%
iBoxx EUR France Index	12,7%	60,4%	71,1%
iBoxx EUR Germany Index	10,3%	57,6%	63,1%
iBoxx EUR Austria Index	12,9%	48,7%	40,7%
iBoxx EUR Netherlands Index	11,8%	46,5%	44,8%
iBoxx EUR Finland Index	10,1%	45,6%	44,9%
iBoxx EUR Luxembourg Index	10,6%	38,2%	23,8%
iBoxx EUR Italy Index	16,2%	32,7%	58,2%
iBoxx EUR Spain Index	14,8%	31,3%	55,0%
iBoxx EUR Ireland Index	12,9%	26,2%	29,7%
iBoxx EUR Slovakia Index	10,3%	22,3%	51,3%
iBoxx Asia India Government Index	18,4%	47,5%	52,8%
iBoxx Asia Philippines Government Index	11,0%	33,1%	51,3%
iBoxx Asia Indonesia Government Index	21,3%	22,6%	54,4%
iBoxx Asia China Government Index	12,1%	20,7%	16,0%



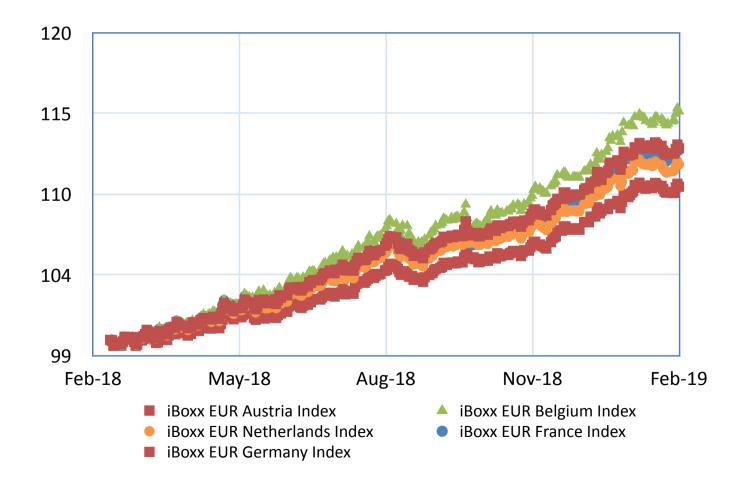
Asset Class – Fixed Income Country Indices

We see a massive increase in warning signals in European Fixed Income indices This is the direct consequence of the sheer size of the QE announcement of the ECB. It is estimated that in the next 12 months, the ECB will buy an equivalent of 220% of the total net issuance planned by the Eurozone member states over that period. The portfolio rebalancing effects that are to be expected of that exercise can be clearly seen in the steep rise of European Equities over the past month.

Furthermore, the strong trend in Asian Fixed Income indices continues.



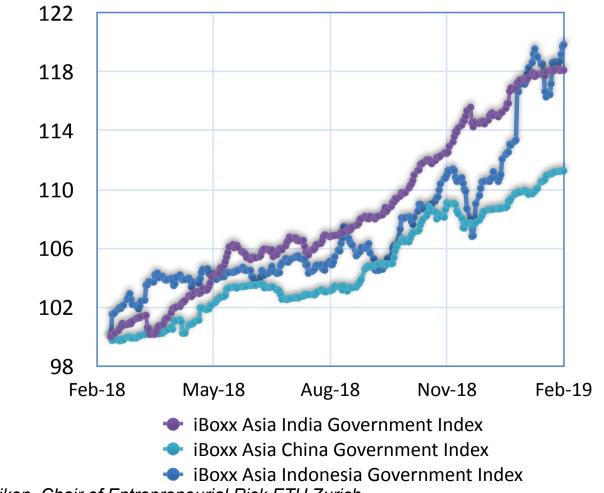
European Countries Fixed Income Indices



Source: Thomson Reuters Eikon, Chair of Entrepreneurial Risk ETH Zurich



Asian Countries Fixed Income Indices



Source: Thomson Reuters Eikon, Chair of Entrepreneurial Risk ETH Zurich



Asset Class – Fixed Income Sector Indices

Fixed Income Sector Indices	Yearly Return	DS LPPL Trust	DS LPPL Confidence
iBoxx EUR Financial Services Subordinated Inc	12,6%	56,7%	72,9%
iBoxx EUR Insurance Index	11,1%	46,2%	78,2%
iBoxx EUR Technology Index	13,3%	41,0%	39,3%
iBoxx EUR Insurance Subordinated Index	12,9%	29,8%	65,7%
iBoxx USD Electricity Index	11,0%	23,8%	29,5%
iBoxx USD Insurance Subordinated Index	10,6%	23,1%	42,7%





Equities



Asset Class – Equities Country Indices

Equities Country Indices	Yearly Return	DS LPPL Trust	DS LPPL Confidence	Country
Positive Bubbles				
SZSE 100 Index	61%	52%	8%	China
CNX Nifty Index	42%	7%	25%	India
S&P BSE Sensex Index	39%	6%	19%	India
Karachi SE 100 Index	32%	23%	38%	Pakistan
OMX Stockholm 30 Index	24%	6%	27%	Sweden
Philippine SE Composite Index	22%	7%	28%	Philippines
BEL 20 Index	21%	5%	33%	Belgium
SAX Index	21%	13%	41%	slovakia
New Zealand Se Top50 Free Index	18%	29%	33%	New Zealand
ISEQ Overall Price Index	16%	9%	30%	Ireland
Negative Bubbles				
Colombia SE General Index	-14%	18%	10%	Colombia
Lima SE Selective Index	-16%	26%	18%	Peru
RTS Index	-29%	28%	10%	Russia
Athex General Composite Share Price Index	-32%	15%	16%	Greece
CSE General Index	-42%	15%	14%	Cyprus



Asset Class – European Equities Sector Indices

Equities EUR Sector Indices	Yearly Return	DS LPPL Trust	DS LPPL Confidence
Positive Bubbles			
STOXX Europe 600 Media	23%	12%	45%
STOXX Europe 600 Real Estate Cap	33%	12%	34%
STOXX Europe 600 Travel & Leisure	23%	12%	20%
STOXX Europe 600 Real Estate	33%	11%	35%
STOXX Europe 600 Insurance	24%	10%	36%
STOXX Europe 600 Automobiles & Parts	23%	7%	24%
STOXX Europe 600 Optimised Consumer Discr	23%	7%	39%
STOXX Europe 600 Optimised Automobiles &	23%	7%	23%
STOXX Europe 600 Technology	23%	6%	26%
STOXX Europe 600 Food & Beverage	29%	6%	22%
STOXX Europe 600 Personal & Household Goo	27%	6%	29%
STOXX Europe 600 Telecommunications	22%	6%	27%
STOXX Europe 600 Consumer Goods	27%	6%	27%
STOXX Europe 600 Financial Services	29%	6%	28%
STOXX Europe 600 Chemicals	22%	5%	23%
STOXX Europe 600 Health Care EUR	27%	5%	24%



Asset Class – US Equities Sector Indices

Equities US Sector Indices	Yearly Return	DS LPPL Trust	DS LPPL Confidence
Positive Bubbles			
S&P 500 Computers & Peripherals	56%	6%	7%
S&P 500 Health Care Prvdrs&Serv	36%	34%	27%
S&P 500 Specialty Retail	31%	30%	11%
S&P 500 Multiline Retail	25%	22%	6%
S&P 500 Household Durables	23%	11%	18%
S&P 500 - REITs	21%	24%	14%
S&P 500 - Commercial Serv& Sup	20%	6%	9%
S&P 500 - Health Care Technolog	19%	9%	13%
Negative Bubbles			
S&P 500 Indp Pwr Prdcr&EngTrdrs	-11%	11%	29%
S&P 500 Metals & Mining	-11%	13%	12%
S&P 500 Construction& Eng	-24%	17%	17%





Broad View:

This plot shows the performance of some major equity indices over the past two years (the time series are rebased to 100). We see that European equities have caught up with US equities in two months.



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Broad View:

This plot shows the performance of some major equity indices year-to-date (the time series are rebased to 100). We see that the broad European equities index has increased 15% in two months.

Source: Thomson Reuters Eikon, Chair of Entrepreneurial Risk ETH Zurich



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- Even though Eurostoxx has increased 15% year-to-date, Chinese stocks still massively outperform the US, Europe and Latin America;
- The graph above shows the indices rebased to 100, over a half a year of history. So, the last marks show the half-yearly performance (45%-60% for Shanghai/Shenzhen);
- We see global equities markets at three different speeds: China ahead, in the middle, we have the US, Europe, HK and Japan, and finally, Latin America is lagging.

Source: Thomson Reuters Eikon, Chair of Entrepreneurial Risk ETH Zurich



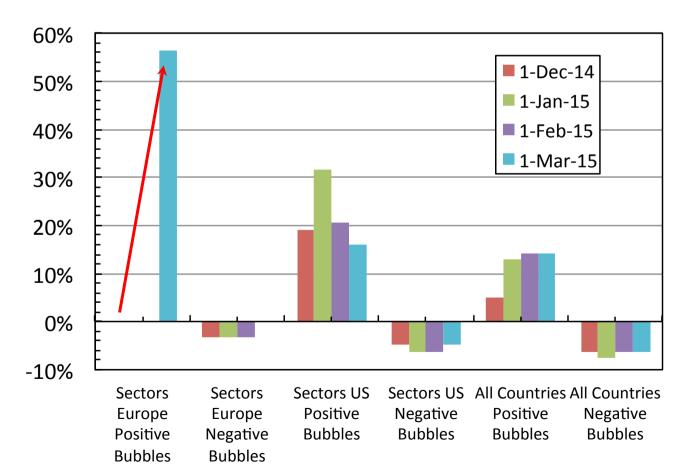
#### **Asset Class – European Equities Sector Indices**



The rise in European stocks has been across all sectors. That is why, out of the blue, warning signals have popped up in 56% of the indices that were analysed.



**Equities** 

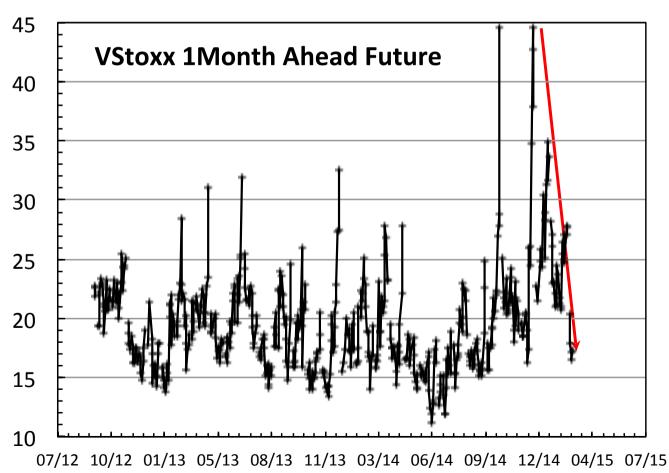


After this 15% rise in 2 months, warning signals for European Stoxx Sector indices have jumped from 0% in December, January and February to 56% in March.

56% of all European sector indices show clear warning signals. European equities are in clear bubble territory.



## **Equities**



56% of all European sector indices show clear warning signals. European equities are in clear bubble territory.

Surprisingly, however, the European Implied Vol, a fear gauge, or an implied measure of risk perception in the market, has dropped massively over the preceding months.

Source: Stoxx Indices, Chair of Entrepreneurial Risk ETH Zurich



#### **Asset Class – Equities Single Stocks**

Next to the 185 global sector and country <u>equities Indices</u>, we do a bubble analysis on <u>single stocks</u> taking all S&P 500 and Stoxx Europe 600 constituents with a market cap higher than \$ 50 bn, and all Hang Seng and Nikkei constituents with a market cap higher than \$ 15 bn.

In total, we analyzed 223 stocks, 49 of these show bubble signals (8 negative and 41 positive bubbles).



Single Stocks	Yearly Return	DS LPPL Trust	DS LPPL Confidence	Sector	Country
Positive Bubbles					
Home Depot Inc	41%	33%	25%	Other Home Improvement Products & Services Retailers	US
CVS Health Corp	44%	39%	19%	Other Drug Retailers	US
Altria Group Inc	58%	26%	32%	Cigars & Cigarette Manufacturing	US
UnitedHealth Group Inc	50%	43%	45%	Other Managed Healthcare	US
Celgene Corp	51%	33%	20%	Biopharmaceuticals	US
Actavis PLC	28%	19%	16%	Other Pharmaceuticals	US
Costco Wholesale Corp	30%	38%	20%	Other Discount Stores	US
Lowe's Companies Inc	46%	45%	19%	Other Home Improvement Products & Services Retailers	US
Simon Property Group Inc	27%	21%	39%	Retail REITs	US
Anheuser-Busch InBev SA	50%	19%	40%	No Sector scheme returned	EU
H & M Hennes & Mauritz AB	26%	11%	26%	Apparel Retailers	EU
East Japan Railway Co	27%	13%	27%	Other Passenger Transportation, Ground & Sea	JP
Central Japan Railway Co	88%	16%	35%	Other Passenger Transportation, Ground & Sea	JP
Sony Corp	94%	18%	24%	Other Household Electronics	JP
China Life Insurance Co Ltd	47%	18%	13%	Life Insurance	НК
MTR Corp Ltd	27%	12%	43%	Other Passenger Transportation, Ground & Sea	НК





# Currencies



#### **Asset Class – Currencies**

FX	Yearly Return	DS LPPL Trust	DS LPPL Confidence
US Dollar/Turkish Lira	13%	11%	47%
US Dollar/Swedish Krona	28%	53%	31%
US Dollar/Romanian New Leu	21%	44%	13%
US Dollar/Polish Zloty	22%	21%	5%
US Dollar/Norwegian Krone	27%	39%	13%
US Dollar/Mexican Peso	13%	24%	8%
US Dollar/Indonesian Rupiah	11%	14%	17%
US Dollar/Iceland Krona	18%	41%	21%
US Dollar/Danish Krone	23%	51%	29%
US Dollar/Czech Koruna	23%	36%	16%
US Dollar/Canadian Dollar	12%	37%	33%
US Dollar/Bulgarian Lev	22%	48%	36%
US Dollar/Australian Dollar	13%	29%	38%

US Dollar strenghtening is global and warning signals show up in a wide range of currency pairs.



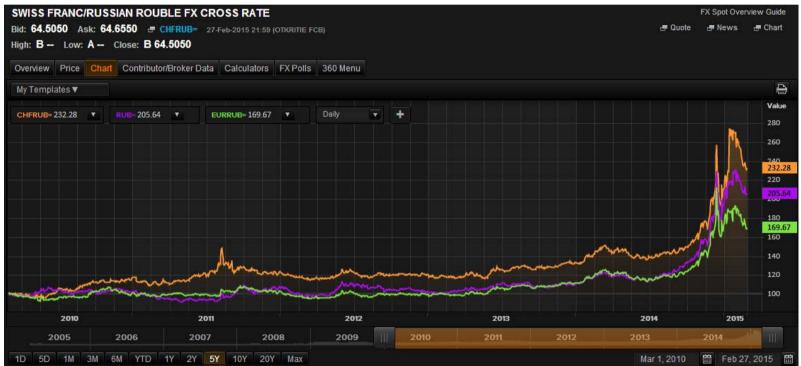
#### **Asset Class – Currencies**

Euro/UK Pound Sterling	-13%	6%	28%
Euro/Taiwan Dollar	-18%	11%	27%
Euro/Singapore Dollar	-14%	11%	18%
Euro/Saudi Arabian Riyal	-22%	48%	29%
Euro/Qatar Rial	-22%	49%	28%
Euro/Indian Rupee	-23%	14%	23%
Euro/Hong Kong Dollar	-23%	49%	30%
Euro/US Dollar	-18%	46%	29%
Euro/Chinese Renminbi	-20%	32%	17%
Russian Rouble/US Dollar	-72%	35%	9%
Russian Rouble/Swiss Franc	-38%	46%	29%

Continued strong momentum in the drop of the Euro and collapse of Russian Rouble



#### **Asset Class – Currencies**



Three months ago, we classified the Rouble (EUR/USD/CHF) crosses as an archetype bubble signal, showing faster-than-exponential growth. After that, we saw a steep correction.

Source: Thomson Reuters Eikon, Chair of Entrepreneurial Risk ETH Zurich





# Commodities

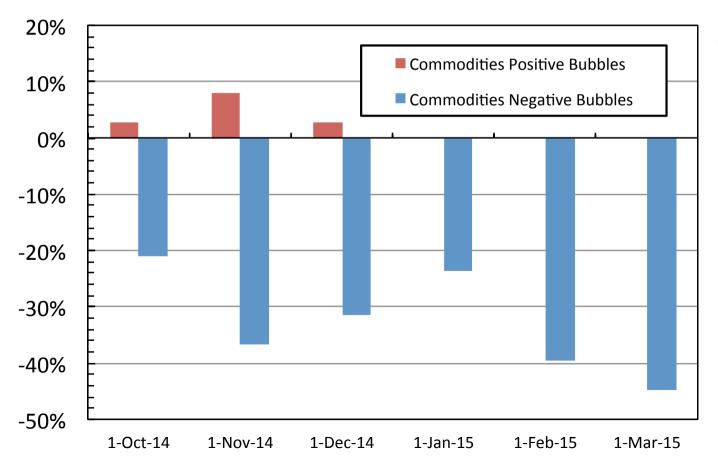


#### **Asset Class – Commodities**

Commodities	Yearly Return	DS LPPL Trust	DS LPPL Confidence
Energy Related Products			
Brent Crude ER Index	-48%	47%	14%
Gasoil ER Index	-40%	35%	8%
Petroleum ER Index	-46%	35%	9%
Heating Oil ER Index	-35%	33%	10%
Crude Oil ER Index	-51%	33%	6%
Gasoline ER Index	-38%	26%	7%
Natural Gas ER Index	-44%	10%	15%
Other			
Lead ER Index	-20%	21%	18%
HG Copper ER Index	-16%	17%	23%
Copper ER Index	-14%	14%	23%
Tin ER Index	-24%	6%	16%
Softs ER Index	-25%	13%	18%
Lean Hogs ER Index	-30%	23%	44%



#### Commodities



Commodities show clear negative bubble signals, mainly in Energy, Softs and Industrial Metals.

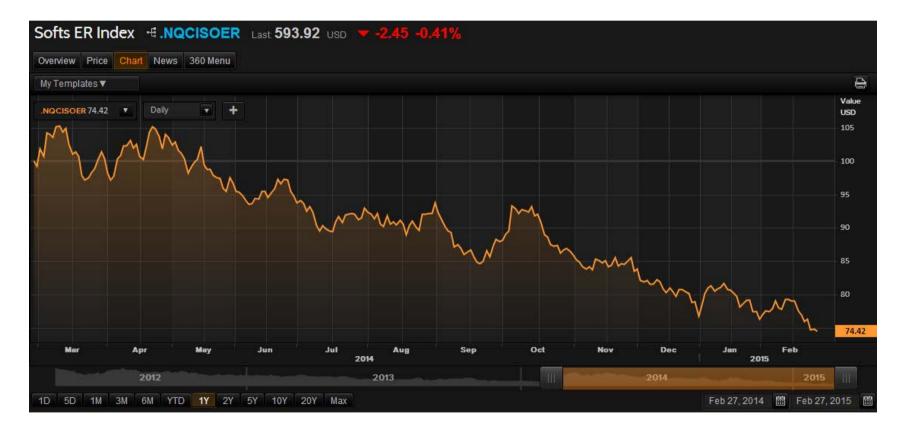


**Asset Class – Commodities** 

- Oil and related products continue their long-term slow crash. The negative bubble warning signals are very strong and confirm the long term trend in negative sentiment;
- The negative signal on Copper now shows up in other base metals like lead and Tin;
- Softs have taken up their downward trend again;

The big question is whether the negative momentum in softs, energy and base metals is because of the financialization and the increased correlation in the asset class or whether this is a sign of a glut in global demand.





Soft Commodities rebased, previous year performance.

Source: Thomson Reuters Eikon, Chair of Entrepreneurial Risk ETH Zurich





Lead, Tin and Copper rebased, previous year performance.

Source: Thomson Reuters Eikon, Chair of Entrepreneurial Risk ETH Zurich





# Conclusion



#### Fixed Income:

- We see a massive increase in warning signals in European Fixed Income indices. This is the direct consequence of the sheer size of the QE announcement of the ECB. It is estimated that in the next 12 months, the ECB will buy an equivalent of 220% of the total net issuance planned by the Eurozone member states over that period. The portfolio rebalancing effects that are to be expected of that exercise can be clearly seen in the steep rise of European Equities over the past month;
- Furthermore, the strong trend in Asian Fixed Income indices continues;
- In Europe as well as in the US more than 80% of all analysed Fixed Income indices show bubble signals.



#### <u>Equities:</u>

- After a 15% rise in 2 months, 56% of all European sector indices show clear warning signals. European equities are in clear bubble territory;
- Surprisingly, however, the European Implied Vol, a fear gauge, or an implied measure of risk perception in the market, has dropped massively over the preceding months;
- It is difficult to anticipate market movements in these global markets that are guided by central banks' extraordinary measures. In any case, as all our risk indicators are in the red, investors should not have a false sense of security from the low implied volatility.



#### <u>Commodities</u>

- Oil and related products continue their long-term slow crash. The negative bubble warning signals are very strong and confirm the long term trend in negative sentiment;
- The negative signal on Copper now shows up in other base metals like lead and Tin;
- Softs have taken up their downward trend again;
- The big question is whether the negative momentum in softs, energy and base metals is because of the financialization and the increased correlation in the asset class or whether this is a sign of a glut in global demand.



#### <u>Currencies:</u>

- US Dollar strengthening is global and bubble warning signals show up in a wide range of currency pairs. This represents a very significant global repricing;
- Continued strong momentum in weakening of the Euro;