The FCO Cockpit – Global Bubble Status Report

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Chair of Entrepreneurial Risk
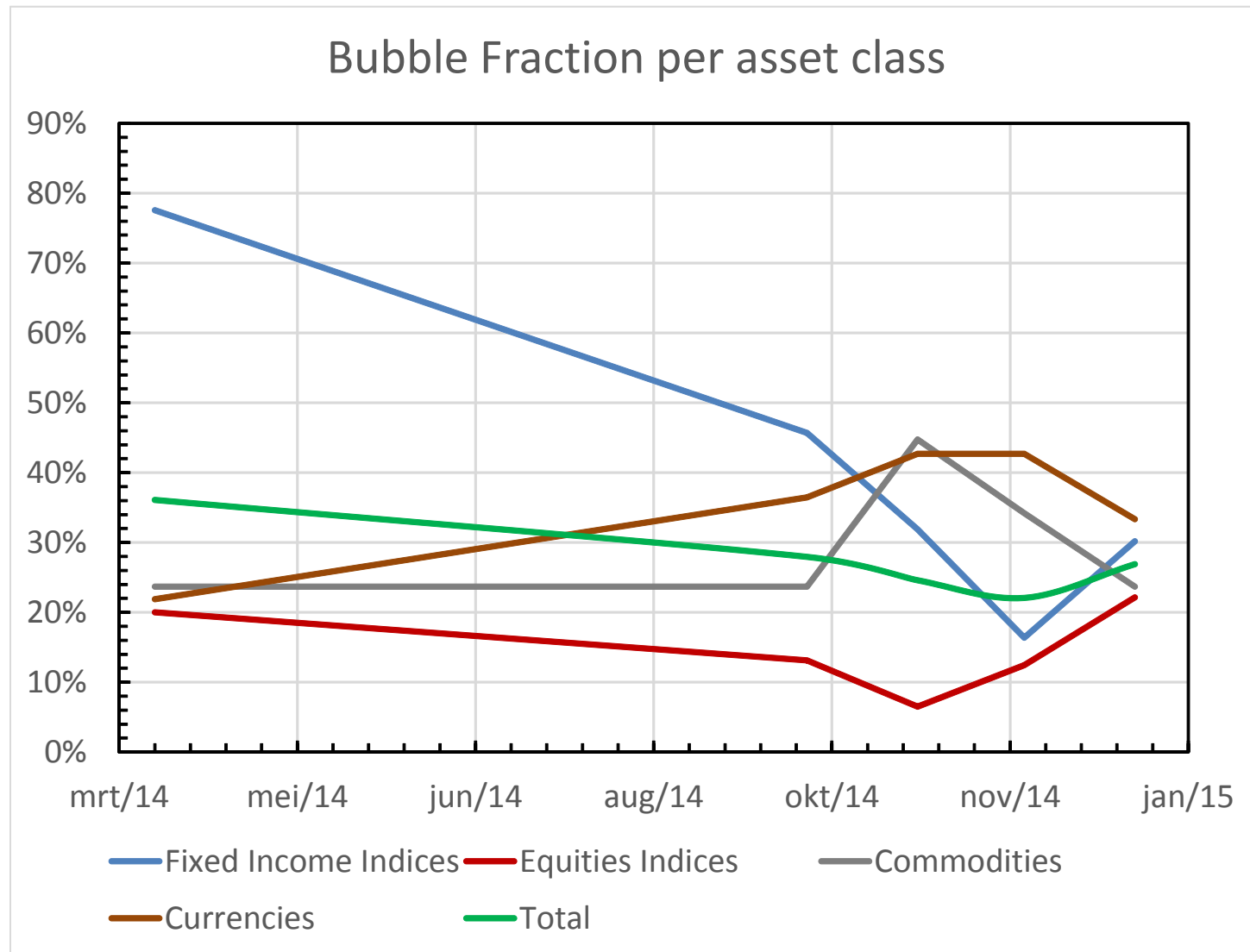
January 1st, 2015

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435 systemic assets are monitored

	# Assets	# Bubbles January 1st	% Bubbles January 1st	% Bubbles December 1st	% Bubbles November	% Bubbles October 1st	% Bubbles April 1st
Fixed Income Indices	**116**	**35**	**30%**	**14%**	**32%**	**46%**	**78%**
Government	33	22	67%	36%	67%	73%	44%
Corporate	83	13	16%	5%	18%	35%	91%
Equities Indices	**185**	**41**	**22%**	**12%**	**6%**	**13%**	**20%**
Country	78	16	21%	10%	6%	21%	18%
US-Sector	63	24	38%	22%	6%	11%	27%
EUR-Sector	32	1	3%	3%	9%	3%	18%
Special	12	0	0%	0%	25%	20%	18%
Commodities	**38**	**9**	**24%**	**34%**	**45%**	**24%**	**24%**
Currencies	**96**	**32**	**33%**	**43%**	**43%**	**36%**	**22%**
Total	**435**	**117**	**27%**	**21%**	**25%**	**28%**	**36%**

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Bubble Fraction per asset class

Legend: Fixed Income Indices, Equities Indices, Commodities, Currencies, Total

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Broad View:

- After the strong decline in warning signals in Fixed Income indices, we see momentum picking up again especially in Asia (India, China and Indonesia), but also in Western Europe (Austria, Germany, Finland, Belgium and the Netherlands);
- For Equities the divide between Europe and the rest of the world deepens. For Europe we see only negative bubble signals° (e.g. in Greece, Cyprus and in energy related stocks). In the US, on the other hand, we see positive bubble signals+. Also the strong momentum in Chinese stocks of the last months clearly shows up in the warning signals;
- 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;
- Also the continued strengthening of the USD keeps showing up in the bubble warning signals.

+ *A positive bubble warning signal is an indication of herding when people start buying because prices go up.*
° *A negative bubble warning signal is an indication of herding when people start selling because prices go down.*

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**Broad View:**
We analyse data with a minimum window of three months and a maximum window of one year. This plot shows the performance of some major equity indices over the past year (the time series are rebased to 100). We see that the Nikkei and the S&P 500 clearly outperformed the Hang Seng and the Euro Stoxx.

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

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Asset Class – Fixed Income

Fixed Income Country Indices	Yearly Return	DS LPPL Trust	DS LPPL Confidence
iBoxx Asia India Government Index	16,5%	53,2%	66,3%
iBoxx Asia China Government Index	11,0%	33,1%	25,8%
iBoxx EUR Austria Index	12,7%	17,4%	22,1%
iBoxx EUR Germany Index	10,4%	15,0%	23,8%
iBoxx Asia Indonesia Government Index	13,4%	14,8%	18,5%
iBoxx EUR Finland Index	10,2%	14,3%	12,3%
iBoxx EUR Belgium Index	14,2%	12,8%	14,9%
iBoxx EUR France Index	12,1%	11,7%	16,2%
iBoxx EUR Netherlands Index	11,4%	10,6%	12,2%

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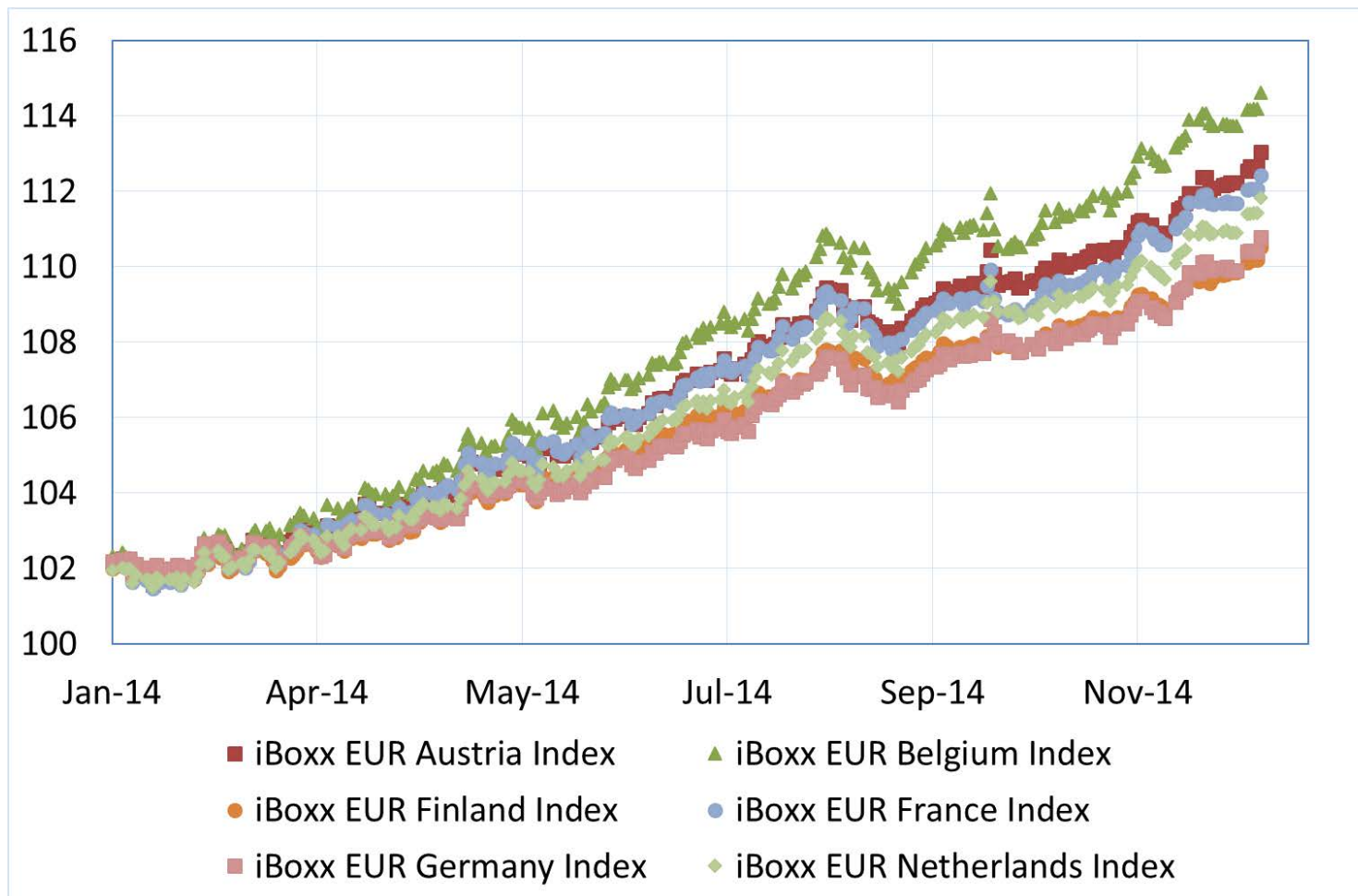
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Asset Class – Fixed Income

Source: Thomson Reuters Eikon, Chair of Entrepreneurial Risk ETH Zurich
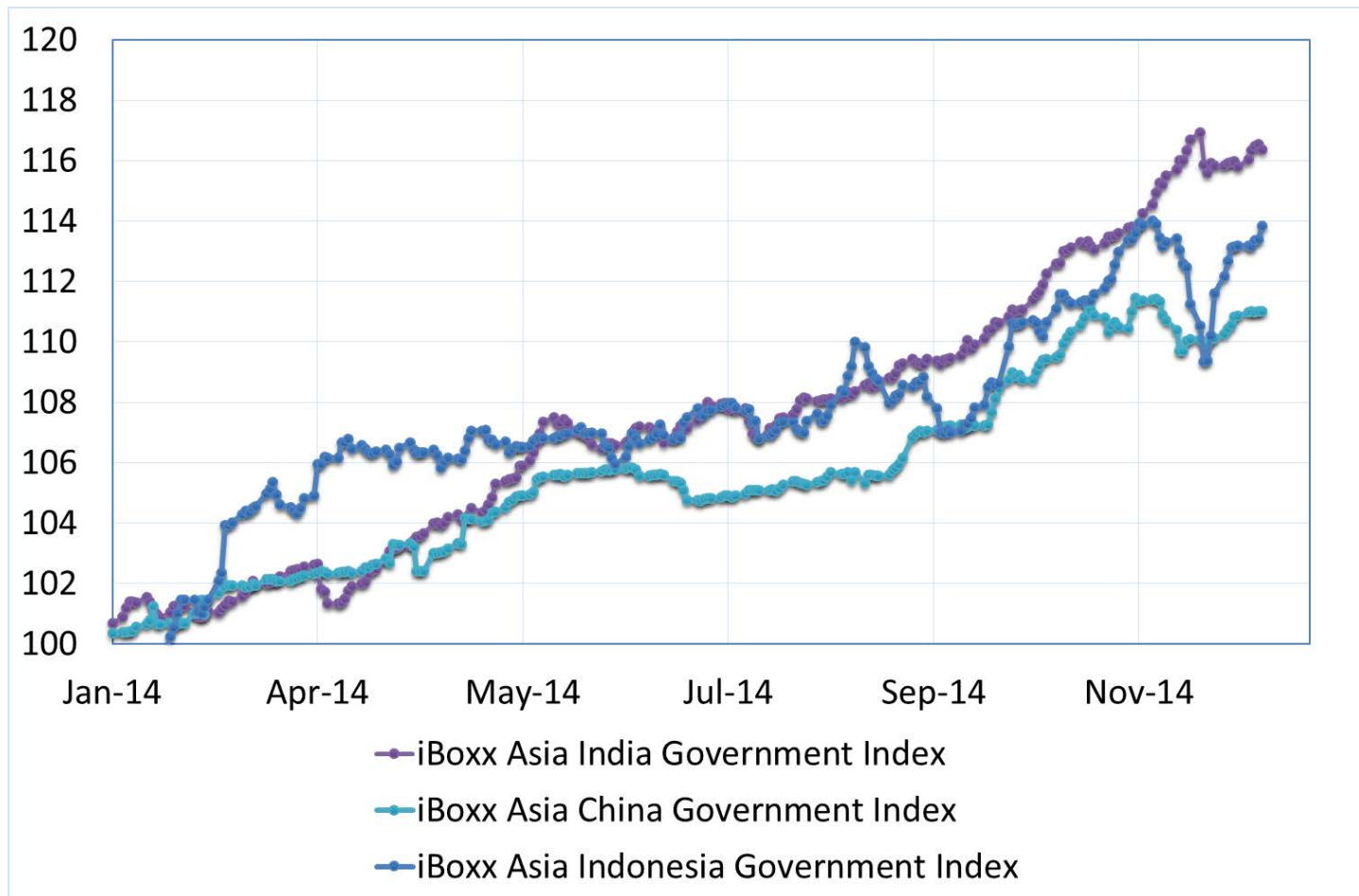
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Asset Class – Fixed Income

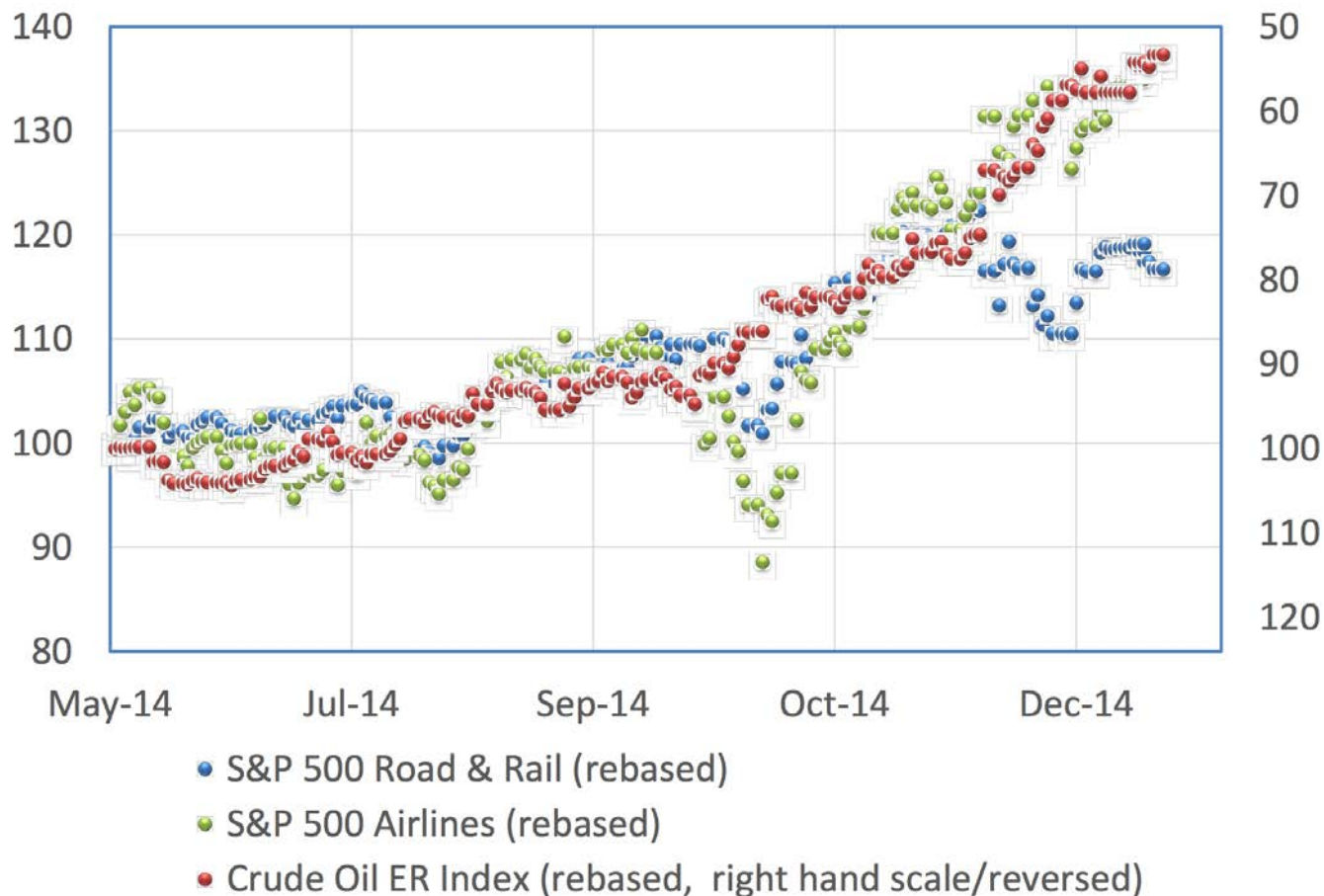# The FCO Cockpit – Global Bubble Status January 1st, 2015

Asset Class – Equities (US and EU sector indices)

Equities US Sector Indices	Yearly Return	DS LPPL Trust	DS LPPL Confidence
S&P 500 Diversf Financi Serv(Ind)	21%	31%	47%
S&P 500 Specialty Retail (Industry)	23%	28%	47%
S&P 500 Computers & Peripherals(Ind)	37%	17%	7%
S&P 500 Road & Rail (Industry)	32%	17%	9%
S&P 500 Health Care Prvdrs&Serv(Ind)	28%	16%	31%
S&P 500 Health Care Equip&Spls(Ind)	25%	16%	22%
S&P 500 Distributors (Industry)	30%	15%	19%
S&P 500 Food&Staples Retailing(Ind)	22%	11%	27%
S&P 500 Airlines (Industry)	94%	8%	13%
S&P 500 Electric Utilities(Industry)	28%	7%	39%
S&P 500 Multi-Utilities (Industry)	27%	7%	41%
S&P 500 - REITs (Industry)	26%	7%	24%
S&P 500 Software (Industry)	21%	6%	27%
S&P 500 - Pharmaceuticals (Industry)	20%	5%	17%

Equities EUR Sector Indices	Yearly Return	DS LPPL Trust	DS LPPL Confidence
STOXX Europe 600 Oil & Gas EUR Price Index	-14%	15%	39%

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Asset Class – Equities (US and EU sector indices)

It is interesting to see that the strong momentum in Airlines and Road & Rail is driven by the decline in oil prices. This creates positive bubble signals.

In the graph on the left, the indices are rebased to 100 and the Oil Index is reversed and should be read from the right hand axis.

- S&P 500 Road & Rail (rebased)
- S&P 500 Airlines (rebased)
- Crude Oil ER Index (rebased, right hand scale/reversed)

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

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Asset Class – Equities (Country Indices)

Equities Country Indices	Yearly Return	DS LPPL Trust	DS LPPL Confidence	Country
Shanghai SE 50 Index	65%	11%	57%	China
SZSE 100 Index	34%	22%	40%	China
New Zealand Se Top50 Free Index	18%	12%	21%	New Zealand
Dow Jones Composite Index	16%	6%	16%	US
RTS Index	-45%	21%	41%	Russia
Athex General Composite Share Price Index	-31%	12%	22%	Greece
CSE General Index	-18%	7%	5%	Cyprus

For Equities the divide between Europe and the rest of the world deepens. For Europe we see only negative bubble signals (e.g. in Greece, Cyprus and in energy related stocks). In the US, on the other hand, we see positive bubble signals. Also the strong momentum in Chinese stocks of the last months clearly shows up in the warning signals.

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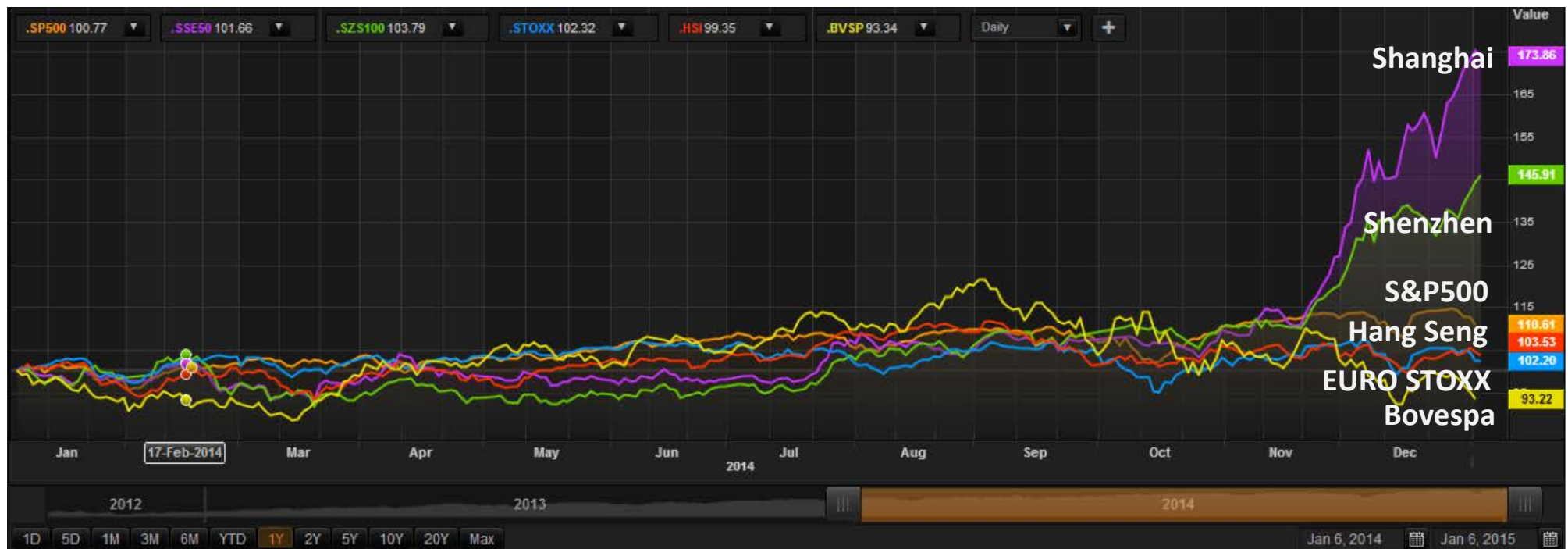
- Over the last two months, Chinese stocks have massively outperformed the US, Europe and Latin America;
- The graph above shows the indices rebased to 100, over a one year history. So, the last marks show the yearly performance.

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

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Asset Class – Equities Indices

The indicators suggest an interesting dynamic that was set in motion last summer.

On the one hand, we see:
- Negative bubble signals appearing in Europe along an old faultline where we see Greece and Portugal declining again;
- Negative bubble signals in European energy related stocks (and in Russia);

On the other hand, we see:
- A continued strong momentum in US stocks;
- A significant strengthening of the US Dollar.

This observation in our sentiment indices is confirmed in the figure on the next slide.

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The big picture:
- Greek and Portuguese stock markets are clearly underperforming the broad European Index;
- In the past months we have seen strong negative bubble signals in EUR/USD, Greece and Portugal;
- It is striking to see the simultaneous decline in EUR/USD and Greece/Portugal. This suggests that the EUR/ USD is driven by market anticipation of ECB intervention, pricing in a future quantitative easing operation.

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The big picture:
- The old classification of core Europe versus periphery seems to have changed somewhat. The GIPSI group (Greece, Italy, Portugal, Spain and Ireland) is divided with mainly Portugal and Greece strongly under-performing;
- The above graph shows the equity indices rebased to 100 over the previous year. So the final mark gives the performance over the previous year. Ireland's remarkable outperformance is striking.

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

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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, 30 of these show bubble signals (3 negative and 27 positive bubbles). <u>The negative bubble signals are in European energy related stocks, the positive bubble signals are in the US and Japan mainly biotech/ healthcare and in consumer goods.</u>

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Single Stocks	Yearly Return	DS LPPL Trust	DS LPPL Confidence	Sector	Country
Altria Group Inc	30%	48%	24%	Cigars & Cigarette Manufacturing	US
Lowe's Companies Inc	39%	34%	47%	Other Home Improvement Products & Services Retailers	US
CVS Health Corp	37%	28%	50%	Other Drug Retailers	US
Berkshire Hathaway Inc	28%	28%	63%	Other Property & Casualty Insurance	US
Shin-Etsu Chemical Co Ltd	28%	25%	40%	Other Commodity Chemicals	JP
Amgen Inc	38%	24%	34%	Biopharmaceuticals	US
Home Depot Inc	28%	20%	16%	Other Home Improvement Products & Services Retailers	US
Lockheed Martin Corp	32%	20%	35%	Other Aerospace & Defense	US
Fuji Heavy Industries Ltd	43%	19%	27%	Other Auto & Truck Manufacturers	JP
Celgene Corp	30%	18%	36%	Biopharmaceuticals	US
UnitedHealth Group Inc	36%	17%	31%	Other Managed Healthcare	US
Union Pacific Corp	43%	17%	26%	Other Ground Freight & Logistics	US
Medtronic Inc	26%	15%	16%	Other Medical Equipment, Supplies & Distribution	US
Novartis AG	30%	14%	22%	Pharmaceuticals	EU
Morgan Stanley	25%	13%	39%	Other Investment Banking & Brokerage Services	US
Komatsu Ltd	26%	13%	36%	Other Heavy Machinery & Vehicles	JP
Actavis PLC	53%	13%	29%	Other Pharmaceuticals	US
Eli Lilly and Co	36%	12%	34%	Other Pharmaceuticals	US
Allergan Inc	93%	11%	21%	Other Pharmaceuticals	US
Sands China Ltd	-40%	11%	10%	Other Casinos & Gaming	HK
BG Group PLC	-33%	17%	35%	Integrated Oil & Gas	EU
BHP Billiton PLC	-25%	12%	35%	General Mining	EU

The single stocks analysis confirms the geographical divide. The only positive bubble signal in Europe is for Novartis (Switzerland). It also shows that Health/Medical/Pharma related stocks show very strong momentum.

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Asset Class – Currencies

FX	Yearly Return	DS LPPL Trust	DS LPPL Confidence
US Dollar/Swedish Krona	20%	38%	57%
US Dollar/Russian Rouble	84%	51%	47%
US Dollar/Romanian New Le	14%	33%	24%
US Dollar/Polish Zloty	17%	9%	10%
US Dollar/Norwegian Krone	22%	52%	68%
US Dollar/Mexican Peso	12%	23%	61%
US Dollar/Japanese Yen	15%	33%	26%
US Dollar/Iceland Krona	11%	40%	27%
US Dollar/Hungarian Forint	21%	5%	20%
US Dollar/Brazilian Real	11%	29%	32%
Russian Rouble/Swiss Franc	-40%	37%	47%
Russian Rouble/Euro	-38%	36%	43%
Argentine Peso/Swiss Franc	-15%	6%	10%
Argentine Peso/Euro	-13%	14%	12%

There is clearly a strong continuation of the strenghtening of the US Dollar and the weakening of the Russian Rouble and the Argentine Peso.

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Asset Class – Currencies

In last month's report, we classified the Rouble (EUR/USD/CHF) crosses as an archetype bubble signal, showing faster-than-exponential growth. As can be seen in the price history, such a process (strong growth rate) is not sustainable and always ends in a correction. The graph above shows the rebased time series.

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

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Asset Class – Currencies

The USD Rules!
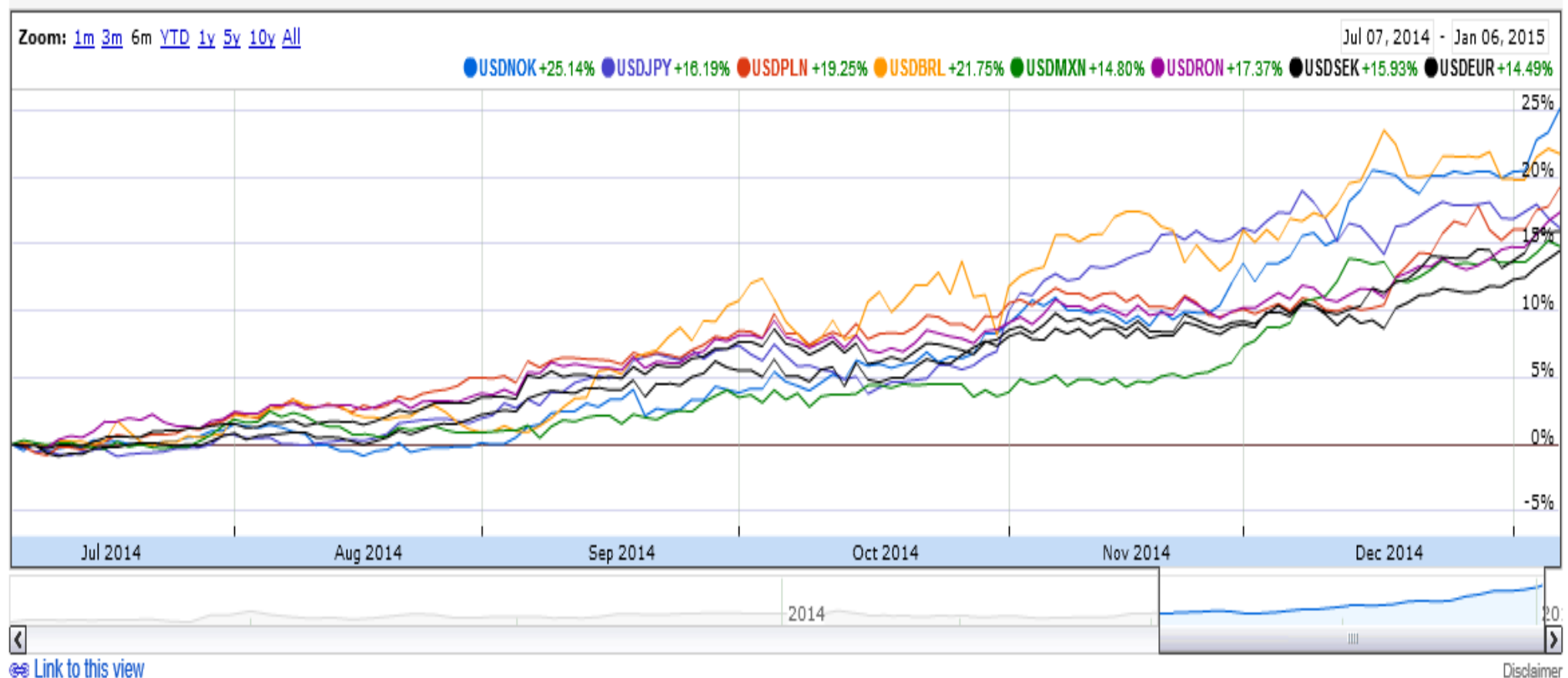
Source: Google Finance

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Asset Class – Commodities

| Commodities	Yearly Return	DS LPPL Trust	DS LPPL Confidence
Gasoil ER Index	-44%	58%	43%
Brent Crude ER Index	-46%	50%	38%
Heating Oil ER Index	-36%	49%	37%
Energy ER Index	-41%	46%	49%
Crude Oil ER Index	-40%	44%	43%
Petroleum ER Index	-42%	43%	41%
Gasoline ER Index	-42%	38%	43%
HG Copper ER Index	-15%	6%	34%

- 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 is a clear indication of a subdued global economic sentiment;
- The massive bubble in Cattle, that we have been following over the preceding months has finally popped.

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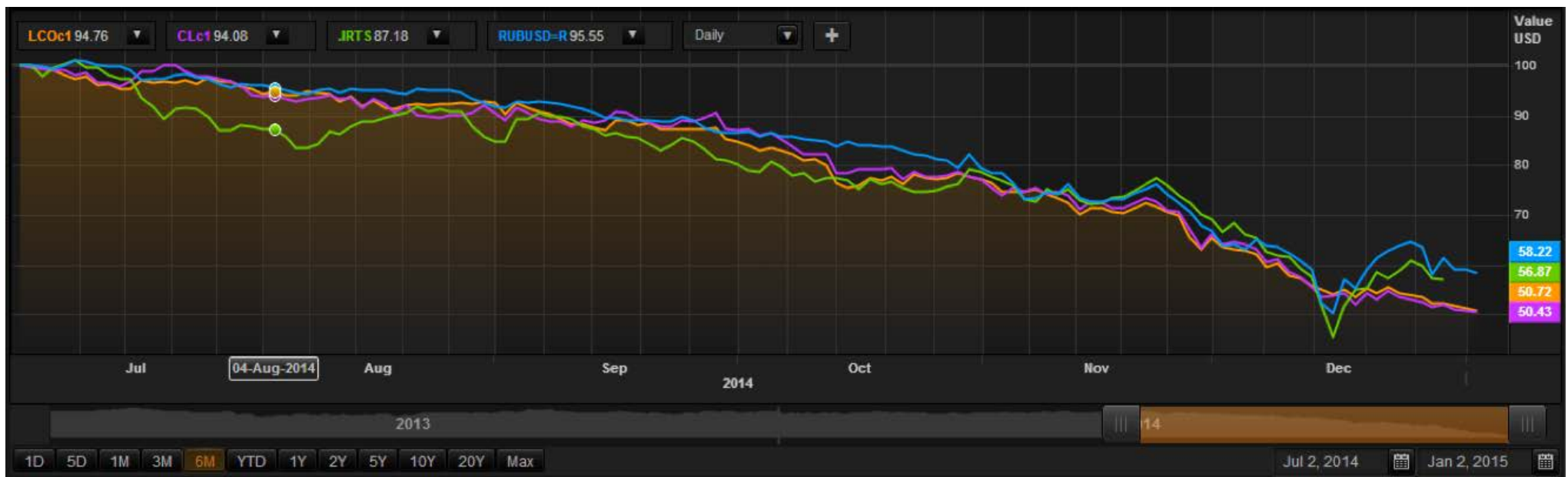
Oil (Brent in orange and WTI in purple), Rouble (in blue) and Russian Stocks (in green) are plunging. There is a very strong negative sentiment leading to strong bubble signals in Russian equities, Rouble exchange rates and Oil.

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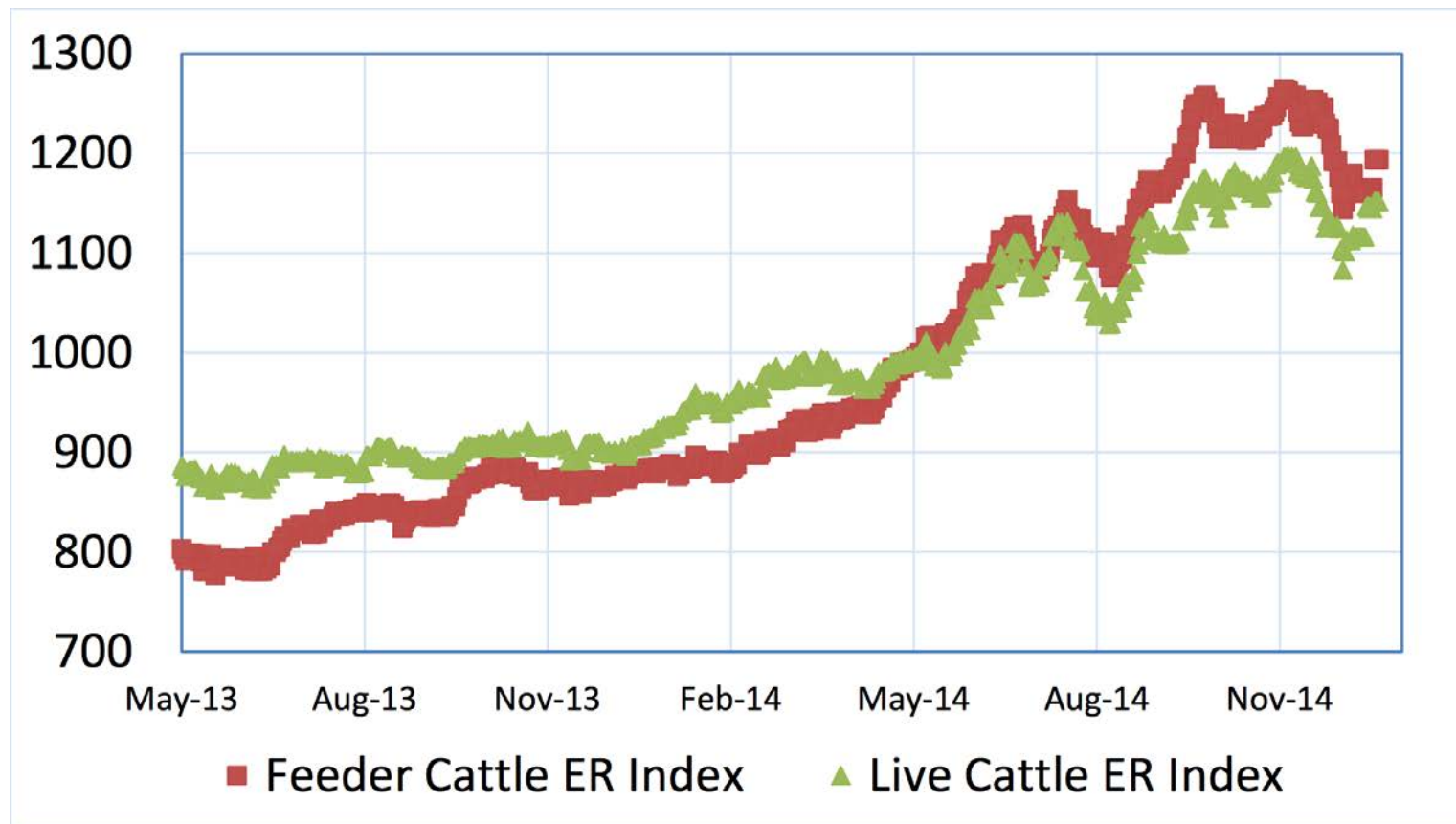
After a massive 18-month rally, the bubble in Cattle has finally popped.

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Conclusion

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Fixed Income:

- After the strong decline in warning signals in Fixed Income indices, we see momentum picking up again especially in <u>Asia</u> (India, China and Indonesia), but also in <u>Western Europa</u> (Austria, Germany, Finland, Belgium and the Netherlands.

Equities:

- For Equities the divide between <u>Europe</u> and the rest of the world deepens;
- For Europe we see only negative bubble signals (e.g. in Greece, Cyprus and in energy related stocks);
- In the <u>US</u>, on the other hand, we see an increase in positive bubble signals especially in health care/pharma and consumer related stocks;
- There is very strong momentum in <u>Chinese stocks.</u>

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Currencies

- USD rules;
- EUR weakens on the back of and expected ECB intervention;
- Russian Rouble has shown an archetype bubble partern of faster-than-exponential growth ending in a sharp correction.

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 is a clear indication of a subdued global economic sentiment;
- The massive bubble in Cattle, that we have been following over the preceding months has finally popped.