

April 2014

When will the credit cycle turn?

Long on borrowed time

Hans Lorenzen

Credit Products Strategist

hans.lorenzen@citi.com

+44 207 986 3568

European Credit Outlook

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures

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The leverage clock is ticking

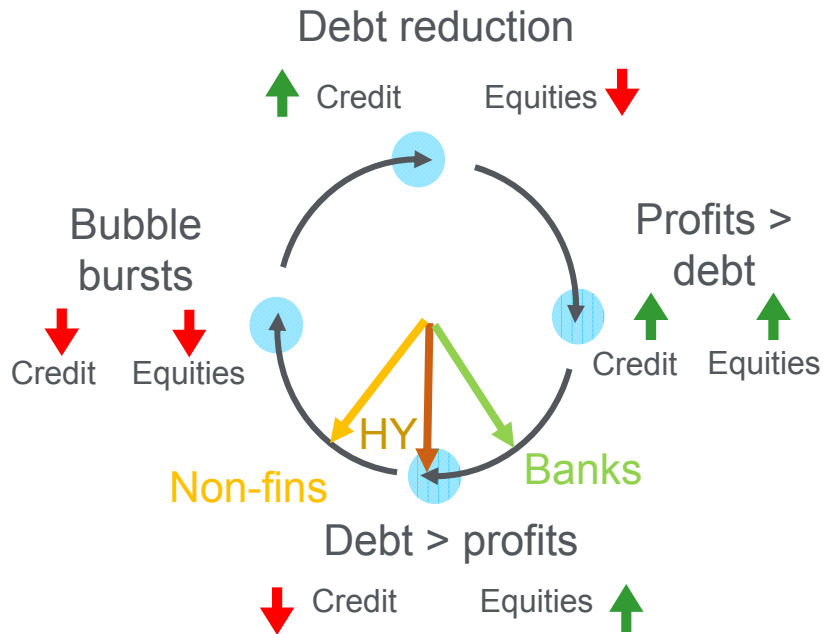
But credit isn't keen to get out of bed

How to lie in without getting caught napping

Past its prime

The leverage clock

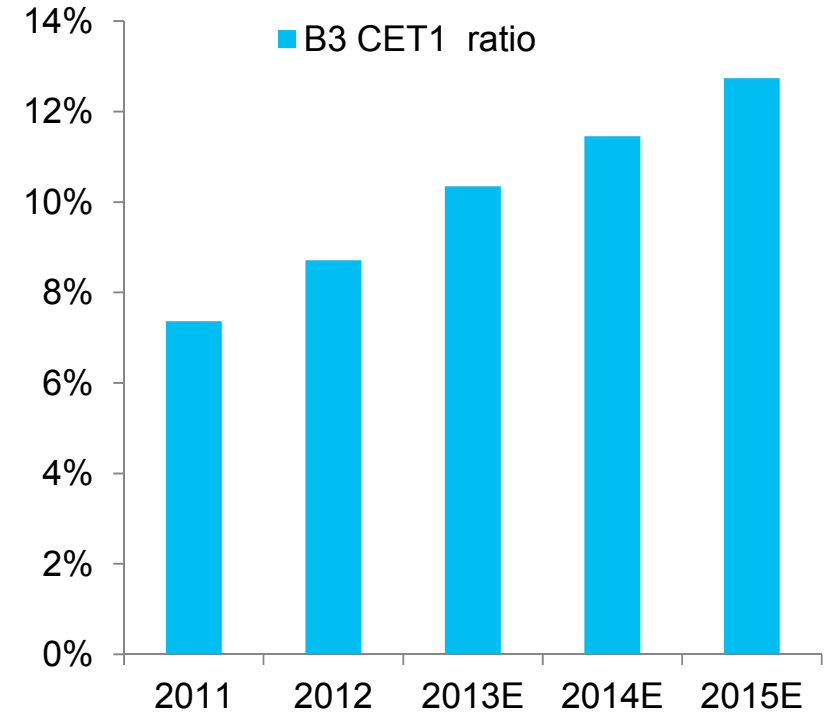
Citi's stylised view of the position in the credit cycle



Source: Citi Research.

Banks still building capital

European bank CET1 ratio w. Citi forecast



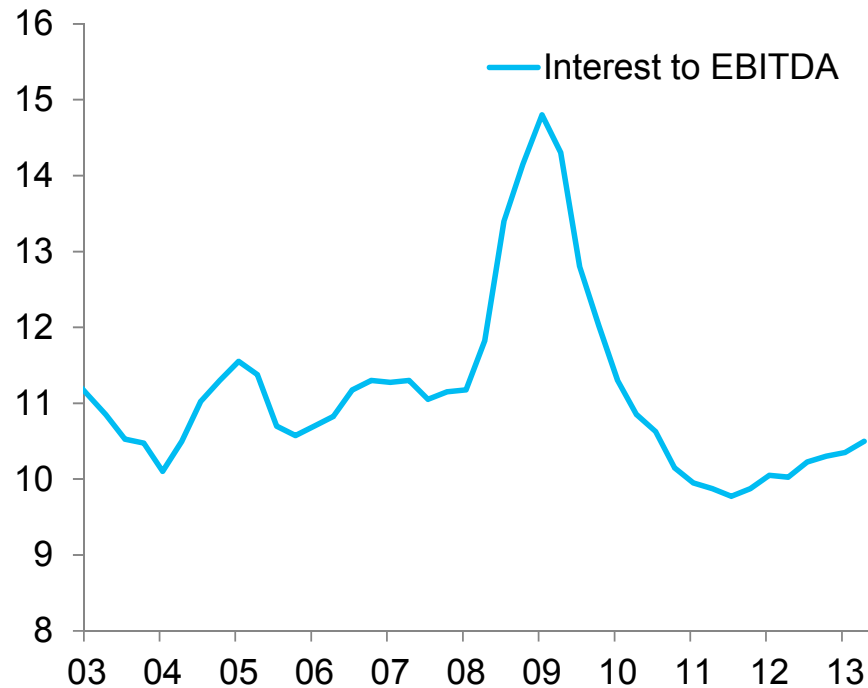
Source: Citi Research.

For non-financial credit at least, fundamentals have turned

“Surely, there’s still plenty of time...”

The low debt service burden ...

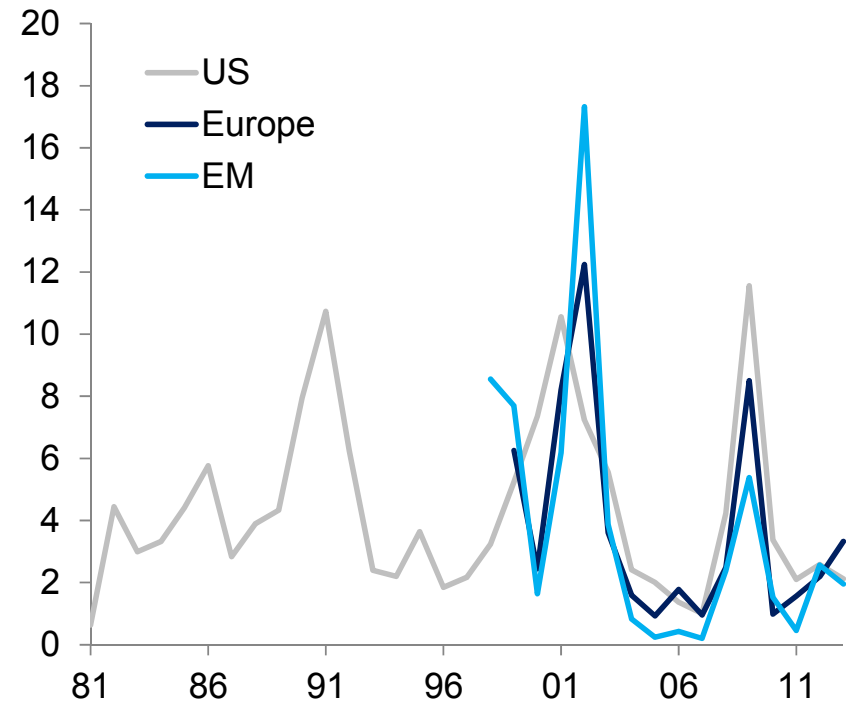
EuroStoxx non-financial interest expense, % of EBITDA*



Source: Citi Research, Bloomberg. *: Based on a sample of 329 companies.

...is helping to keep default rates down

S&P speculative grade default rate by region, %



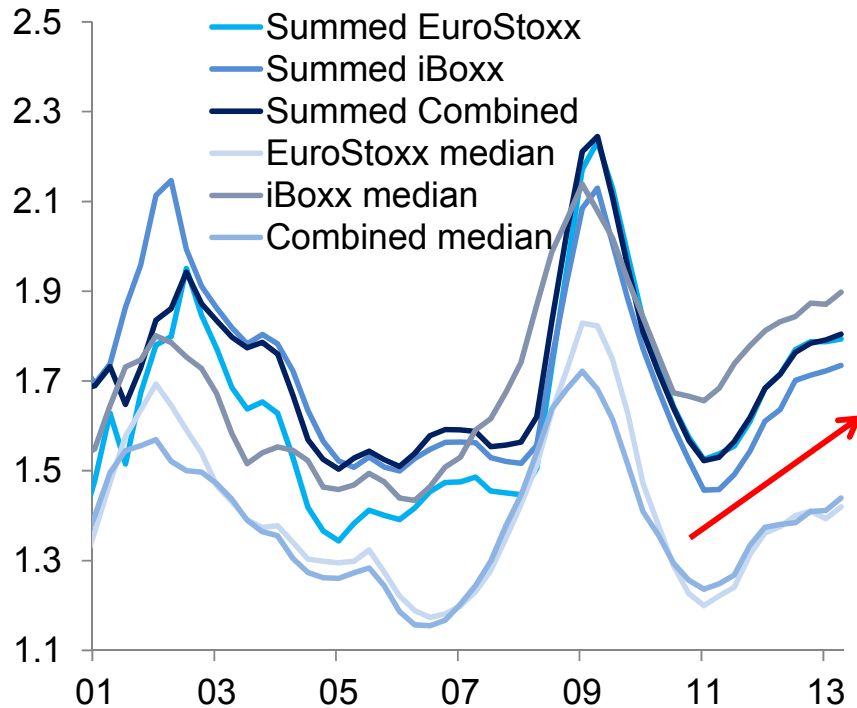
Source: Citi Research, S&P.

With interest rates this low, few corporates stumble

But releveraging tends to sneak up on you

Levels vary, but trend is unequivocally up!

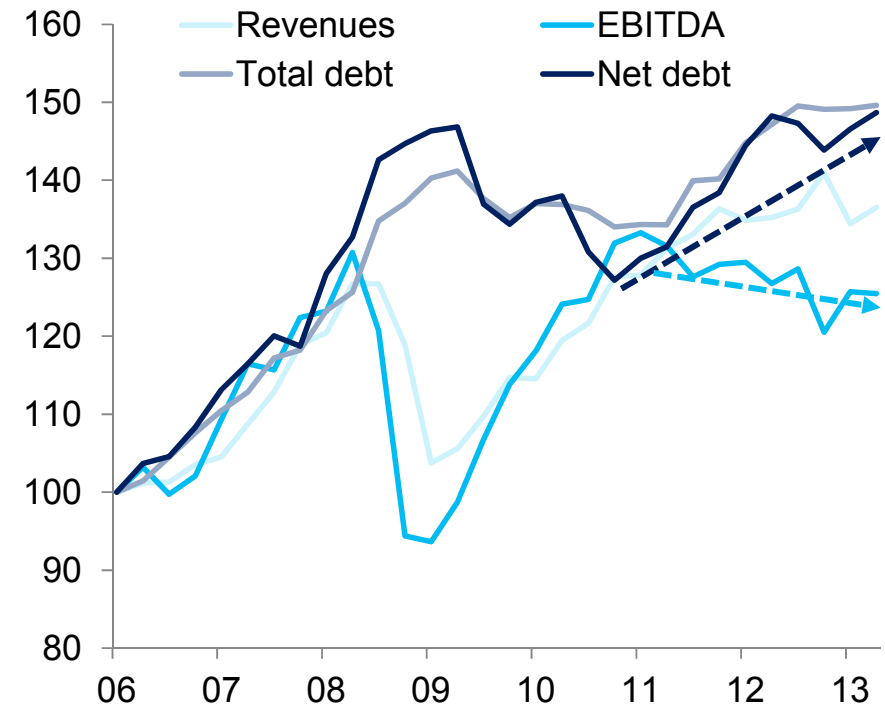
European corporate net debt to EBITDA, 6 calculations*



Source: Citi Research, Bloomberg. *: See [‘Corporate leverage – should you be worried?’](#), H. Lorenzen, 24 Feb 2014, for detailed calculations

More due to debt than lower earnings

European non-fin earnings, EBITDA & net debt, Q1 2006=100*



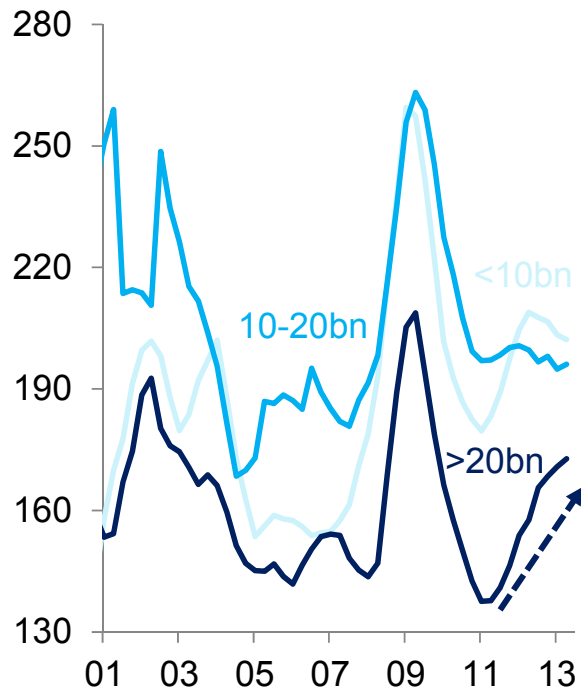
Source: Citi Research, Bloomberg.

Leverage is as high as we've seen it outside recession

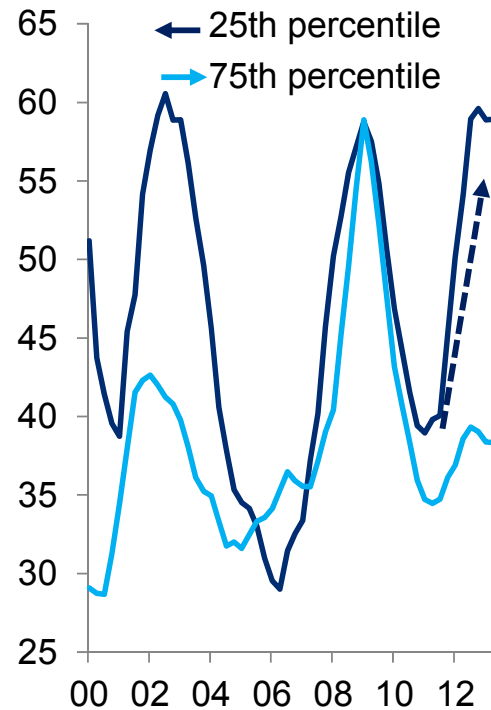
Admittedly, the deterioration is in the “right” places

Mega-caps & low-leveraged corporates are leading the way

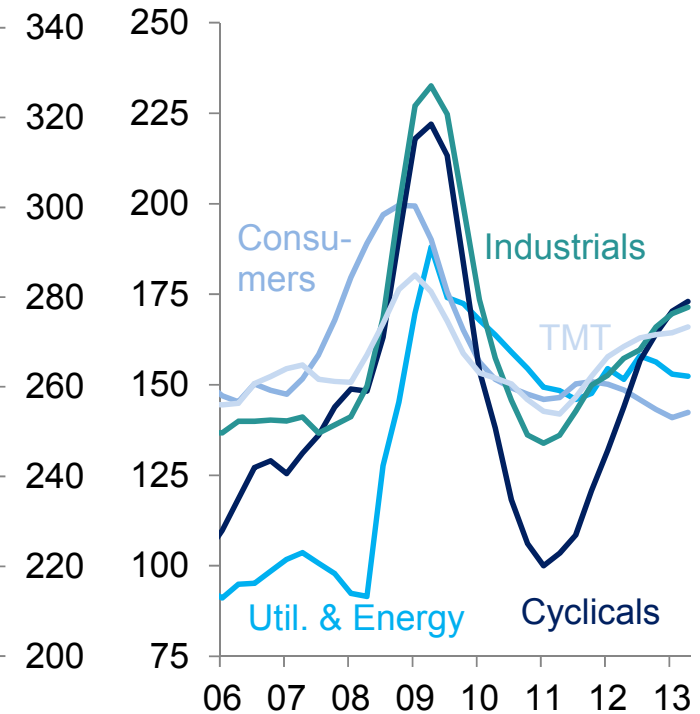
Net debt / EBITDA by market capitalisation



Net debt / EBITDA by percentile



Net debt / EBITDA by sector



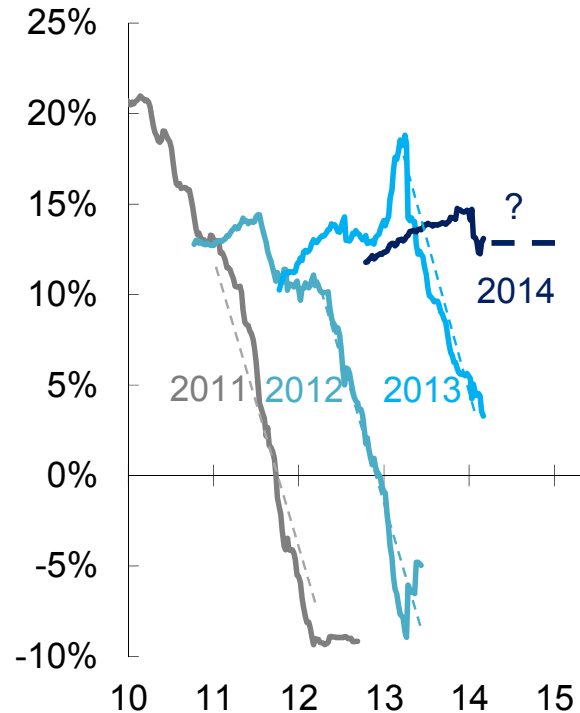
Source: Citi Research, Bloomberg. Note: All three charts based on a sample of 329 non-financial companies in either iBoxx or in EuroStoxx 600

Low-leveraged mega-caps are behind the rise in leverage

But even with higher earnings, the trend is set to continue

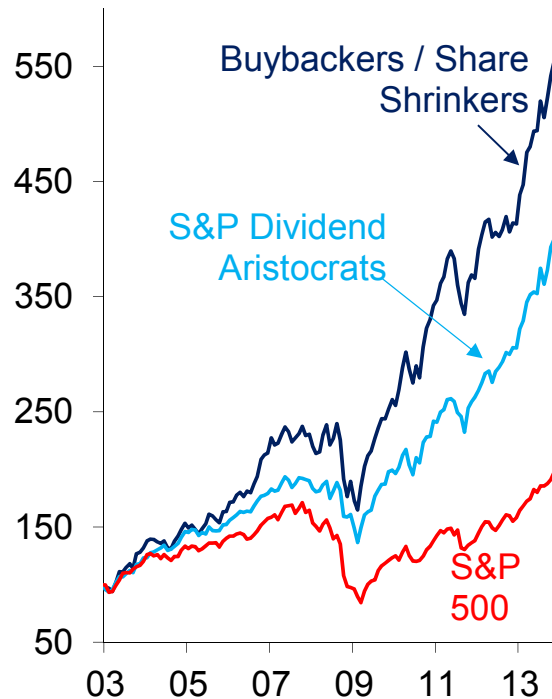
Analysts overestimate earnings, but markets forgive CEOs who return cash...

Euro-ex.UK EPS forecast by year



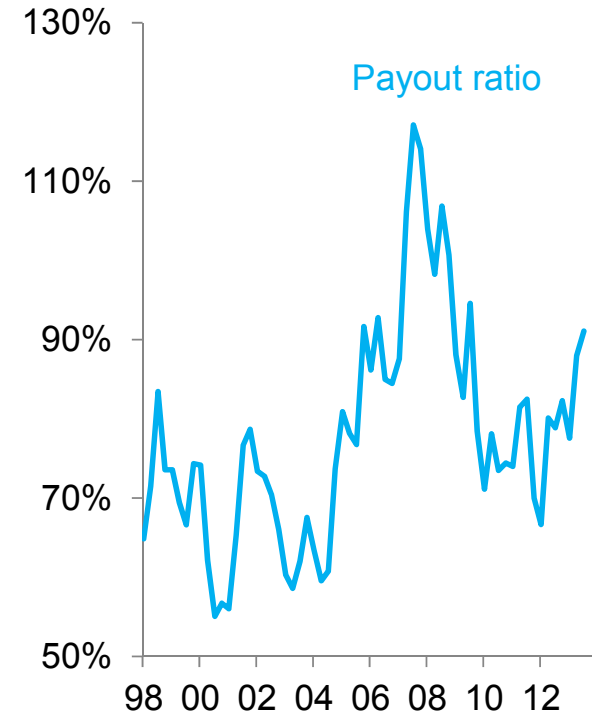
Source: Citi Research, FactSet.

US equity market perf. by type, 2004=100



Source: Citi Research, Bloomberg.

S&P dividends & buybacks, % of earnings



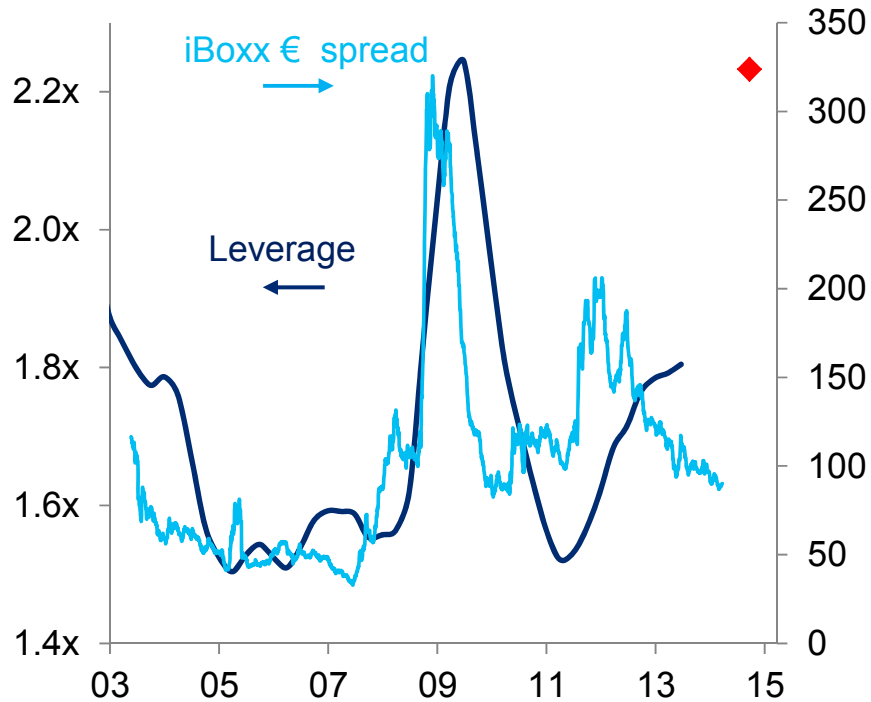
Source: Citi Research, S&P, Haver.

The message from shareholders is clear

Leverage is not a problem today...

Credit not priced for any disappointment

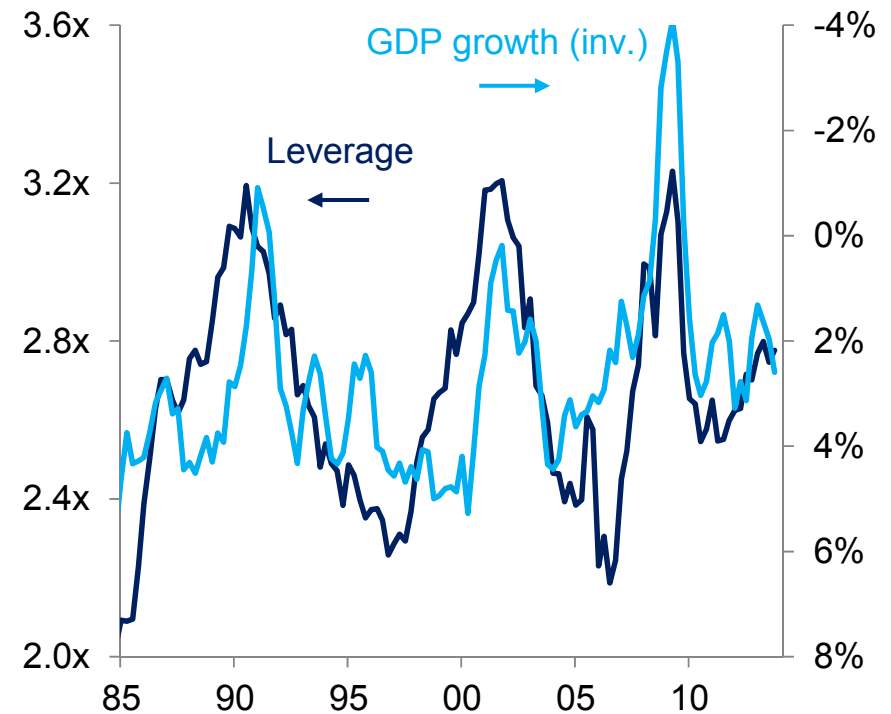
Net debt / EBITDA vs. credit spreads, bp



Source: Citi Research. Note: Red dot assumes the average peak-to-through drop in EBITDA over the last two cycles with unchanged net debt.

Leverage jumps when growth slumps

US non-financial leverage vs US GDP growth, % YoY



Source: Citi Research, Fed Flow of Funds, Haver.

... but spreads leave no room for downside surprises

The leverage clock is ticking

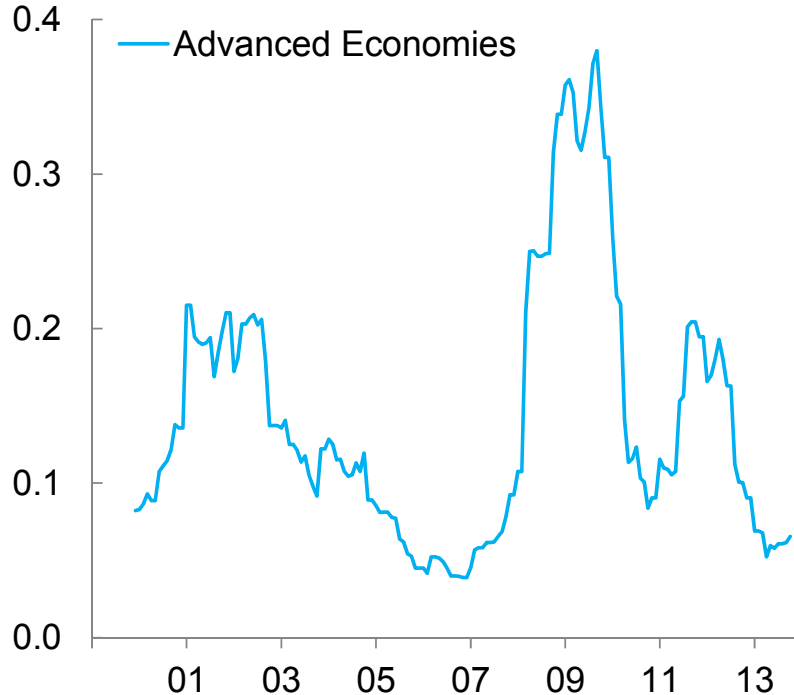
But credit isn't keen to get out of bed

How to lie in without getting caught napping

The natural sleep cycle in credit?

Higher confidence in forecasts ...

St. dev. of revisions to Citi growth forecasts



Source: Citi Research.

... help to moderate the range

iTraxx Main, 2012-14, bp



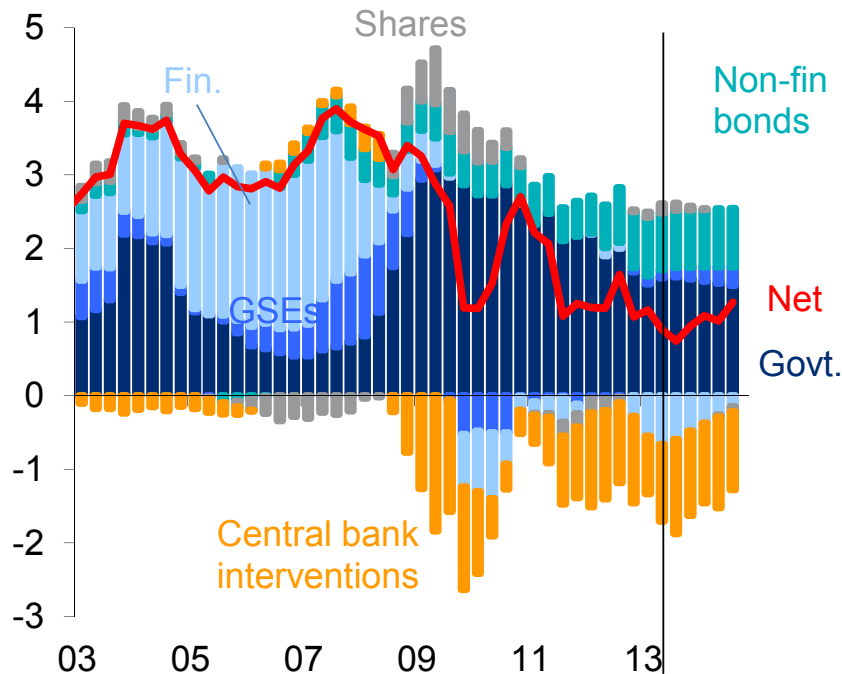
Source: Citi Research, MarkIt. See [‘The 5 questions that weigh on the outlook for credit’](#), J. Shoup, 20 March, for a US equivalent.

Vol ↓ => Risk limits ↑ => Demand ↑ => Valuations ↑ => Vol ↓

Sweet dreams are made of this!

CBs still constraining net securities supply

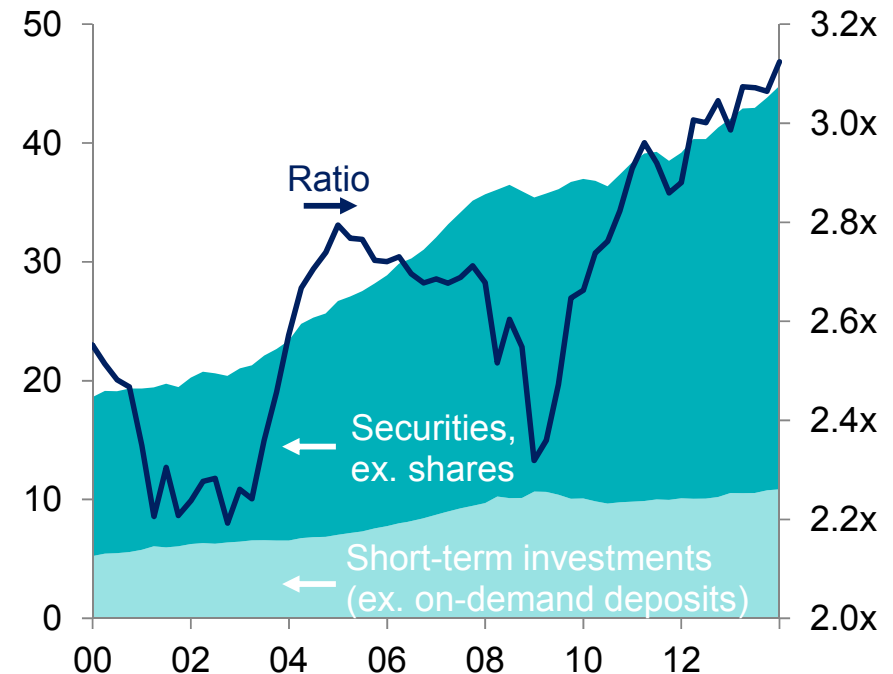
Net iss. of new securities vs CB* interventions, 12m rolling, \$ tr



Source: Citi Research, Haver. *: Federal Reserve, Bank of Japan, ECB.

Demand is being pushed into securities

US short-term investments vs non-equity outstandings, \$ tr*



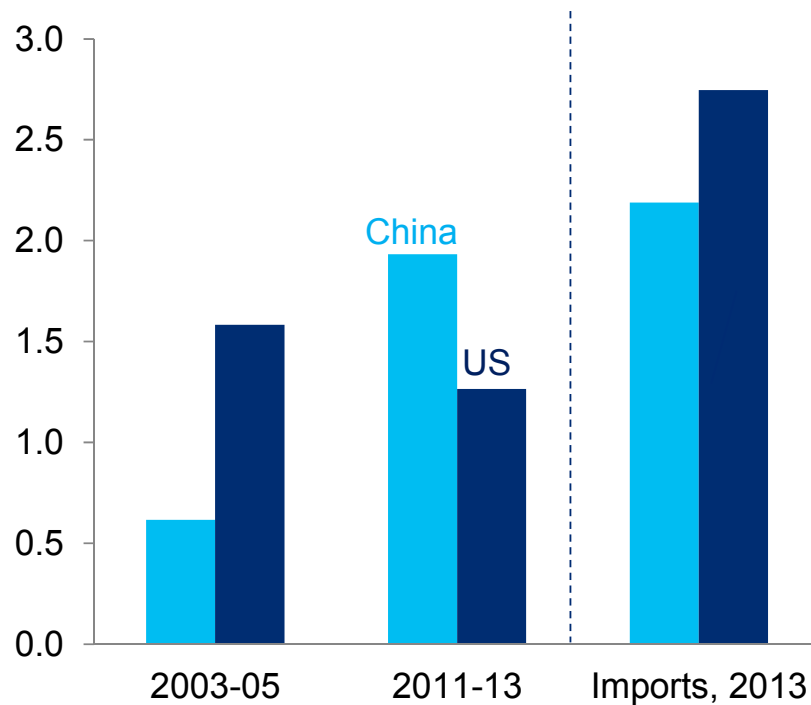
Source: Citi Research, Fed Flow of Funds, Haver. *: Household, foreign & retirement investments. Short-term investments exclude on-demand deposits.

Central bank policies supportive in '14 despite tapering

EM – a rude awakening?

China's importance hard to overstate

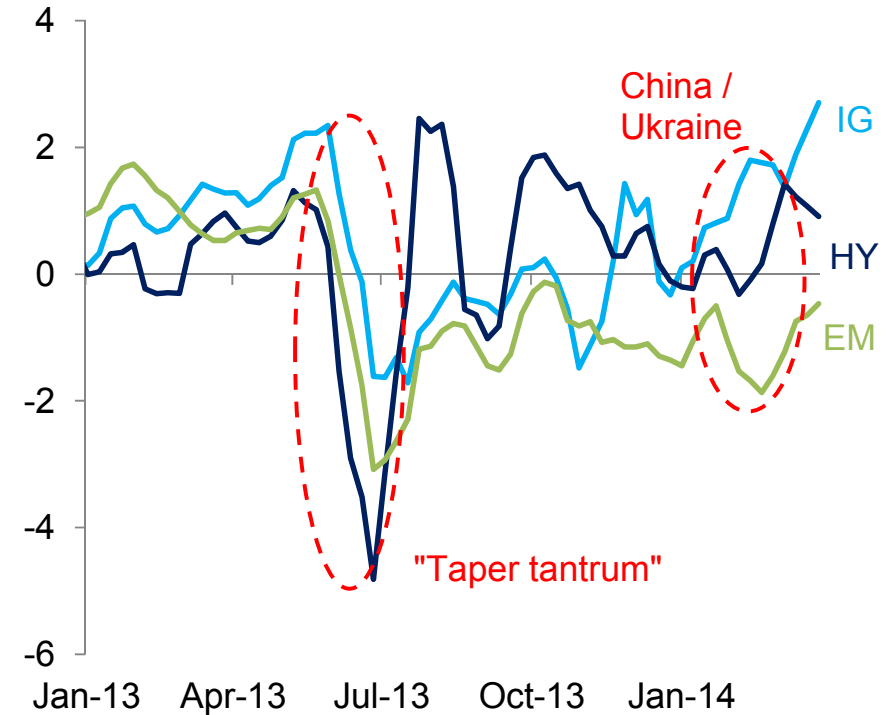
2yr increase in GDP & imports, \$tn, China vs. US



Source: Citi Research, Haver.

Credit flows less sensitive to EM vol now?

US weekly mutual fund inflows by type, 4wk mov avg, \$bn



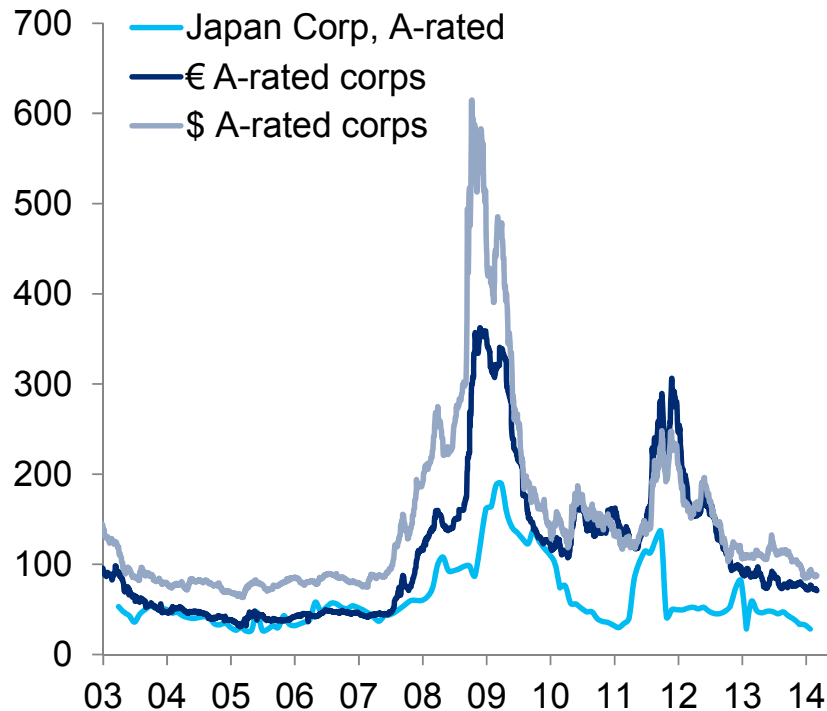
Source: Citi Research, EPFR.

Yes, if China growth collapses, but until then it seems:
EM outflows = credit inflows

Deflation in Europe? Not worth losing sleep over in credit

Deflation: Tight spreads on the “survivors”

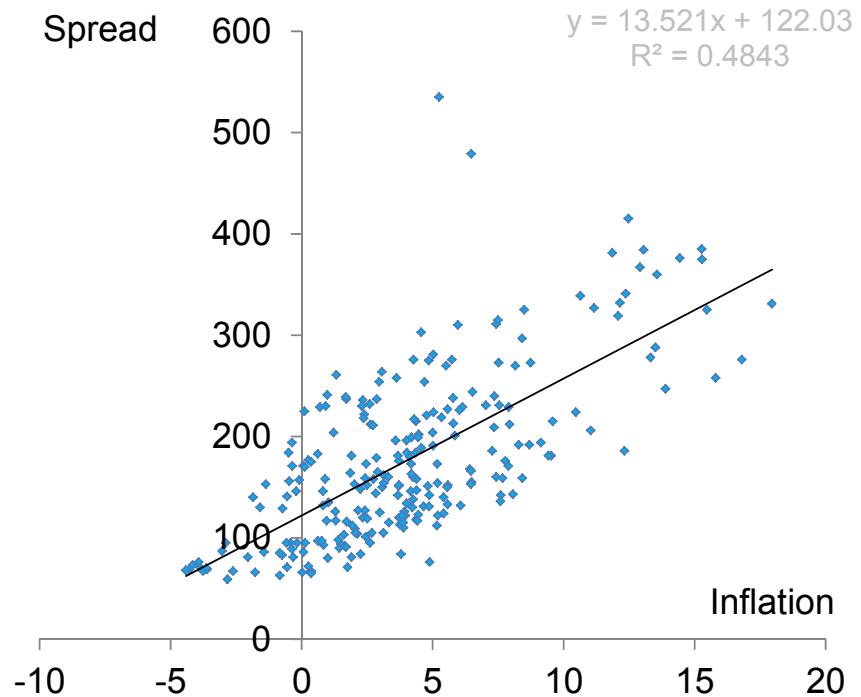
Japanese, € & \$ A-rated corporate spreads, bp



Source: Citi Research, YieldBook, ADB.

Inflation: No one likes inflation

\$ Baa-Aaa spread, bp, vs. US cycl. adj. inflation, %, 1950-2014



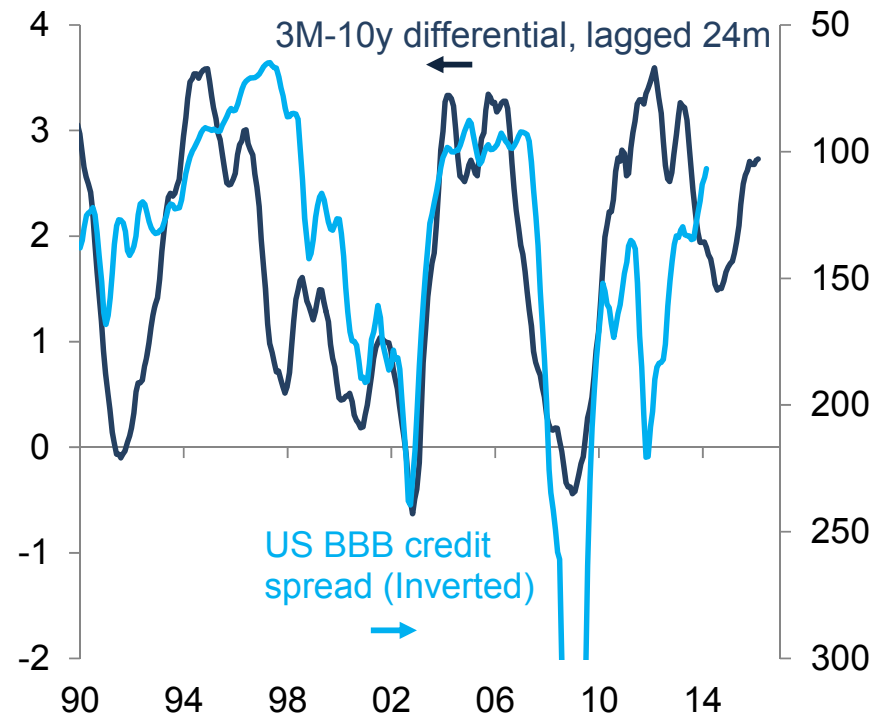
Source: Citi Research, Moody's, Haver.

Loose mon. policy, low yields, conservative corporates, rotation from equities – what's not to like? (Aside from lower earnings & weaker sovereigns)

So what's to stop credit from snoozing?

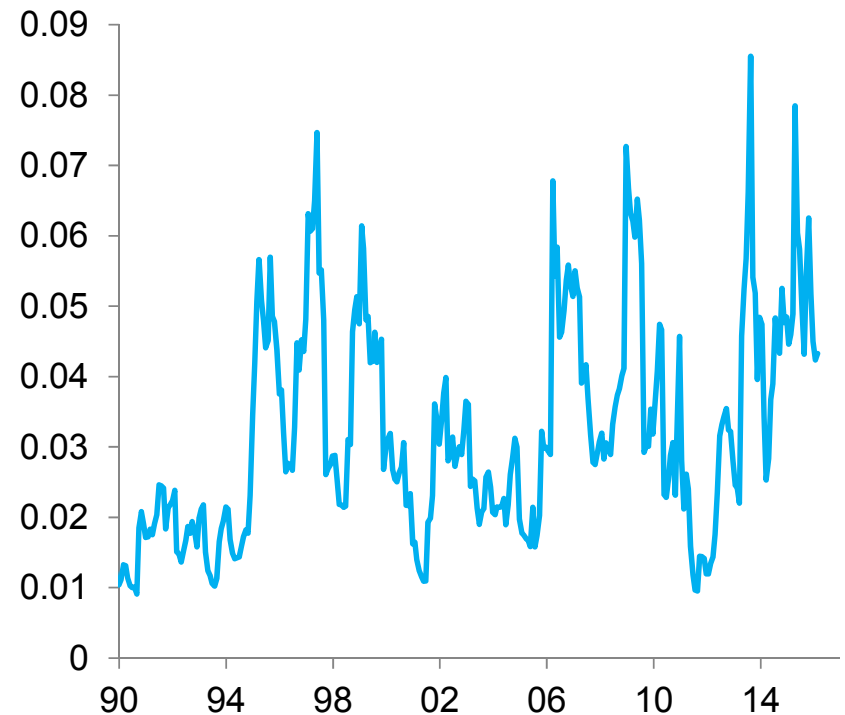
Steep curves and low yields: the investment rationale for credit

US 3m-10yr yield curve, %, vs. US BBB credit spread, bp



Source: Citi Research, Yield Book, Bloomberg.

Vol-adjusted US BBB spread to yield ratio, 1990-14



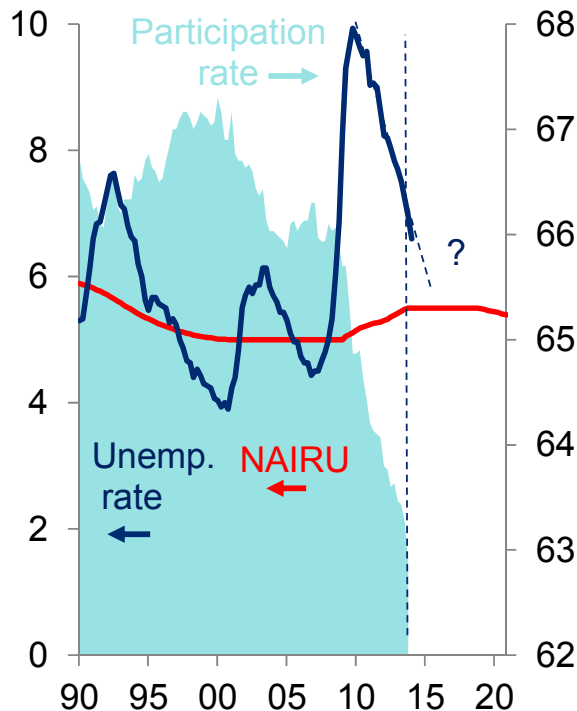
Source: Citi Research, YieldBook, Bloomberg.

Beyond rising yields, worry about bear flattening

A wake-up call in 2014? The US labour market #1 candidate

Will leavers return?

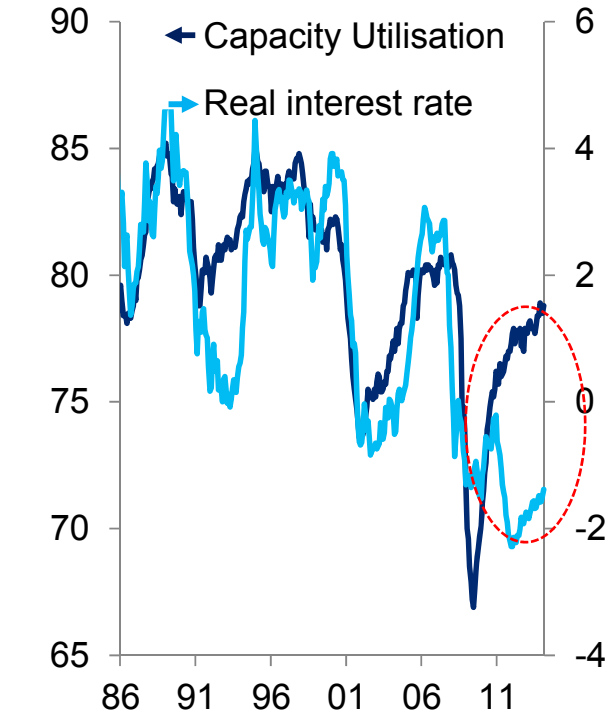
US unemployment & participation rate
vs CBO estimate of NAIRU*, %



Source: Citi Research, Haver Analytics.

Real interest rates too low?

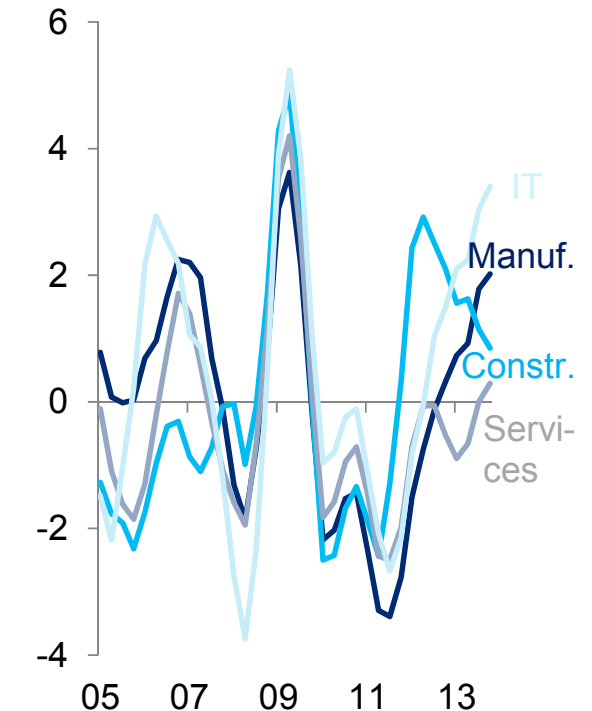
US cap. utilisation vs real interest rate, %



Source: Citi Research, Haver Analytics.

Wages are key to the Fed!

US real wage increase by sector, % YoY



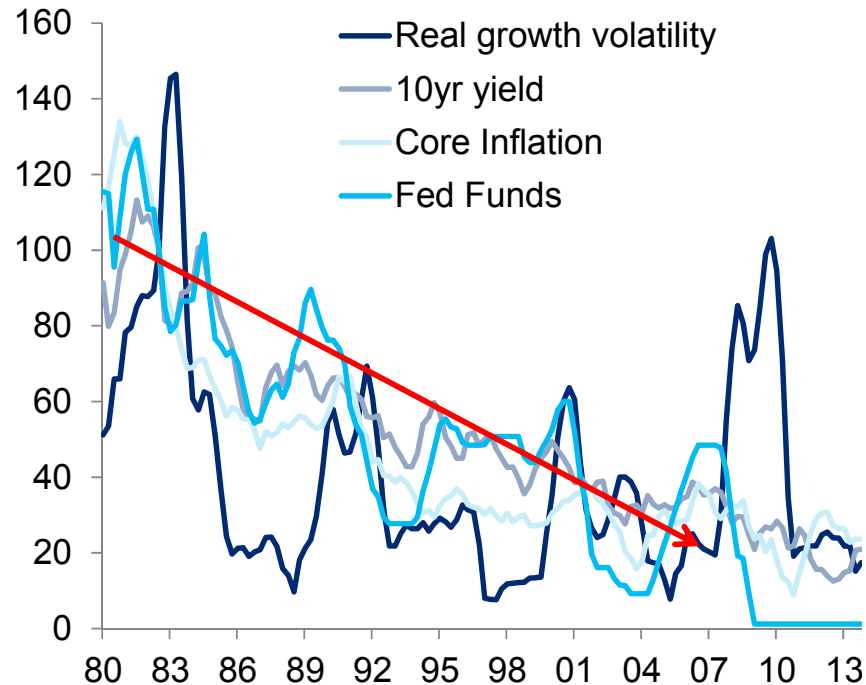
Source: Citi Research, BLS, Haver Analytics.

The risk of a policy error seems to be rising

A wake-up call longer term? The end of disinflation

The Great Moderation, or Disinflation?

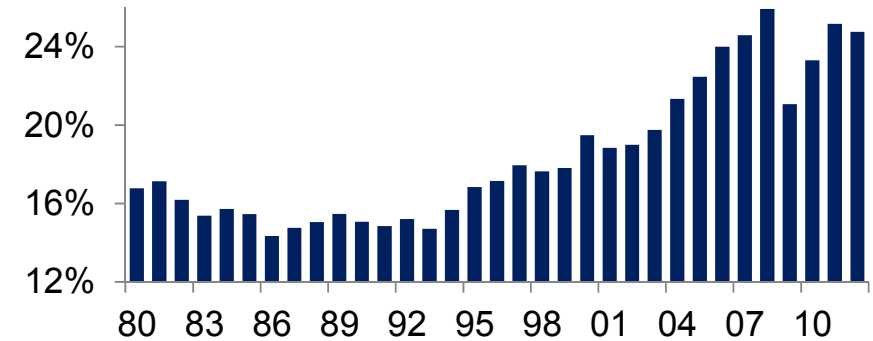
Select US indicators, Sep 1982 = 100



Source: Citi Research, Haver Analytics. Note: Growth volatility is calculated as the 2-yr standard deviation in quarterly growth

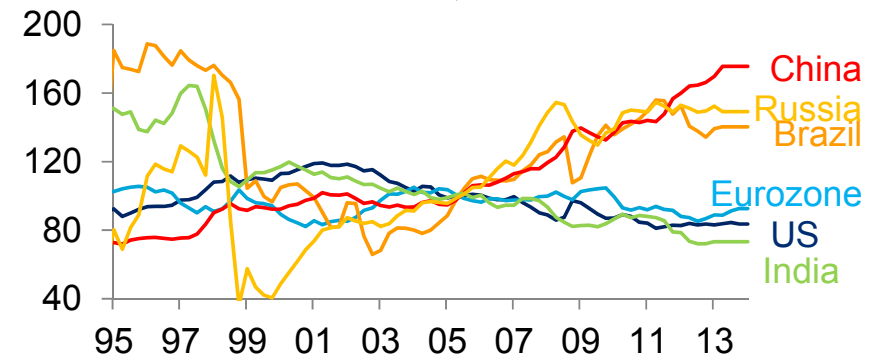
Globalisation is stalling

World exports, % of World GDP



EM is no longer cheap!

Real effective unit labour costs, 2005=100



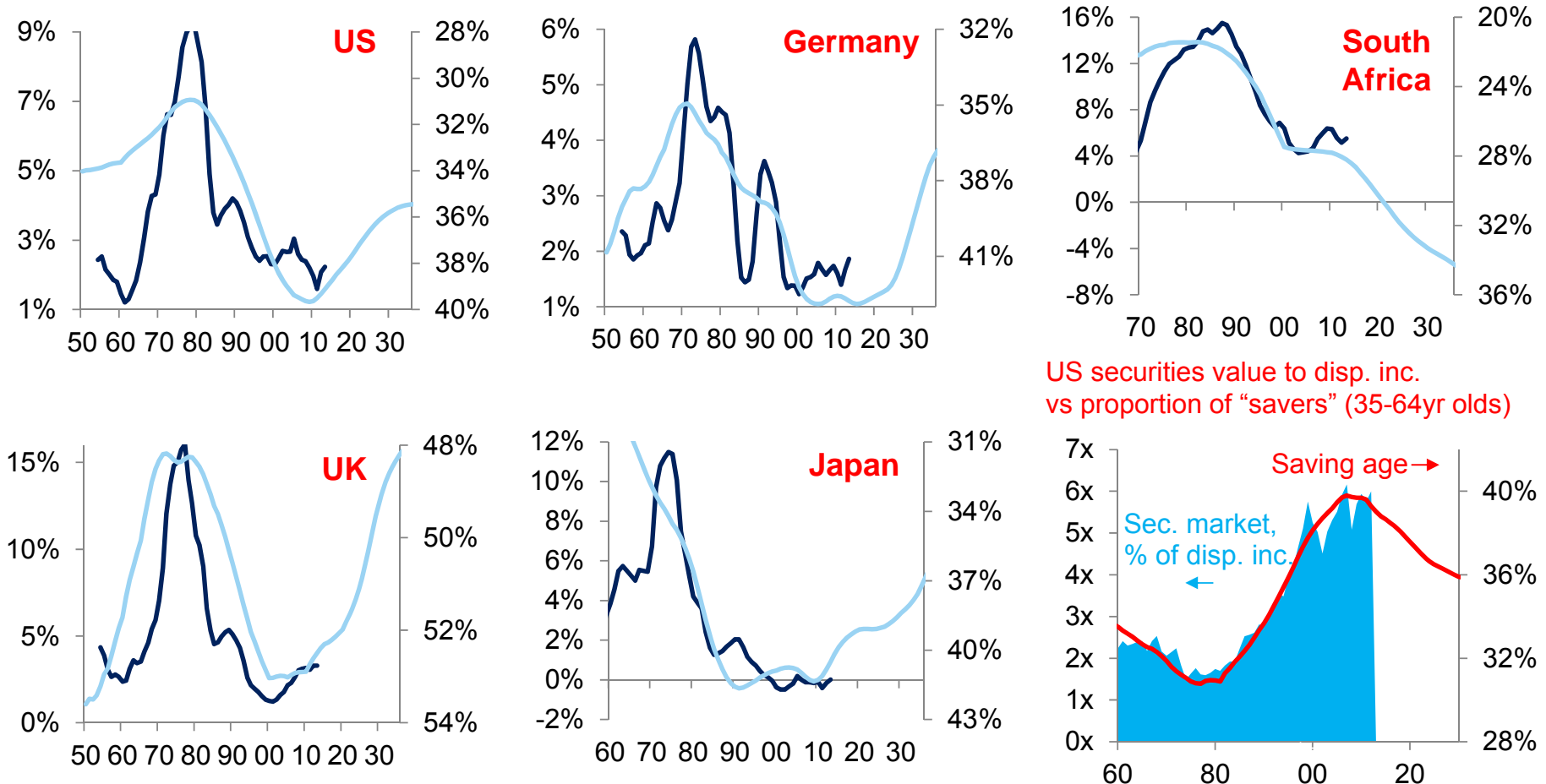
Source (both charts above): Citi Research, Haver.

Many drivers of disinflation are slowing or reversing

A wake-up call longer term? The end of disinflation (ii)

A closer link between demographics, inflation & valuations than the market assumes?

— CPI, % YoY (5yr moving average) vs. — Proportion of “savers” (35-64yr* olds), RHS (Inverted)



Source (all charts): Citi Research, Haver. *: For the UK, 25-64yr olds.

Twin mandate may be less easy to manage down the road

The leverage clock is ticking

But credit isn't keen to get out of bed

How to lie in without getting caught napping

Still positioned for slumber...

Modal forecast is ~10% tightening in '14F

Citi spread & return forecasts for the remainder of 2014

	Current	14F target	Excess return	Total return
iBoxx € Corp	105bp	90bp	1.5%	1.5%
iBoxx € HY	310bp	290bp	1.5%	1.5%
iTraxx Main	66bp	60bp	0.8%	-
iTraxx Xover	280bp	240bp	2.0%	-

Source: Citi Research.

We remain strategically long

Select Citi recommendations

- Subordination > cred. risk > Duration
- Long duration in CDS; Short in cash
- CDS > cash
- Europe > US
- Financials > non-financials
- Leveraged > releveraging credits
- Long T2-host CoCos
- CDS Flatteners
- Sell straddles; no delta
- Long risk junior tranches
- Long equities over credit

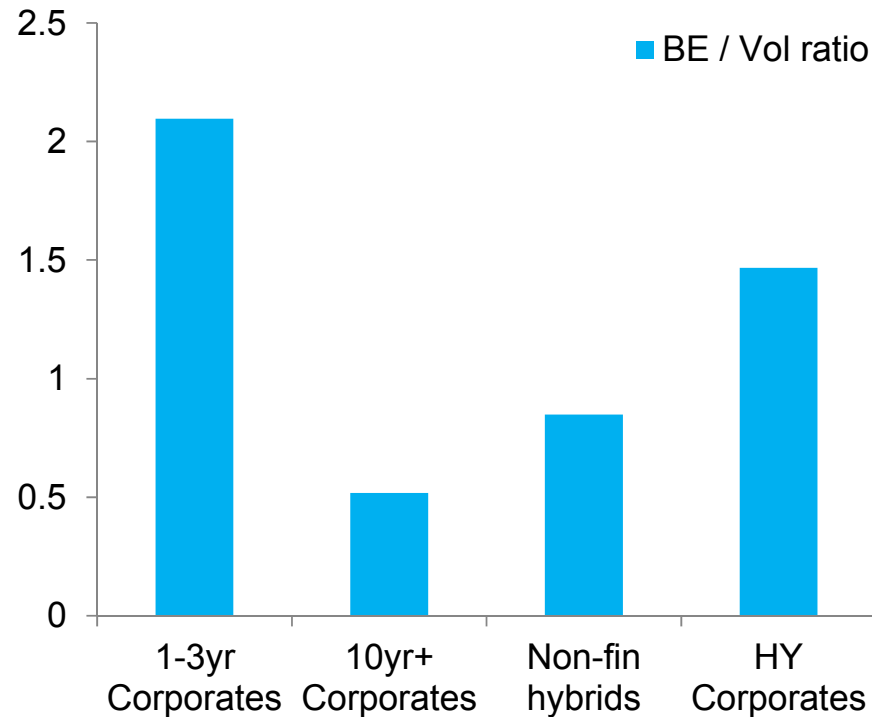
Source: Citi Research.

... but with half an eye on the time

Pick the least uncomfortable position in cash credit for now

Carry poorly protected at the long end

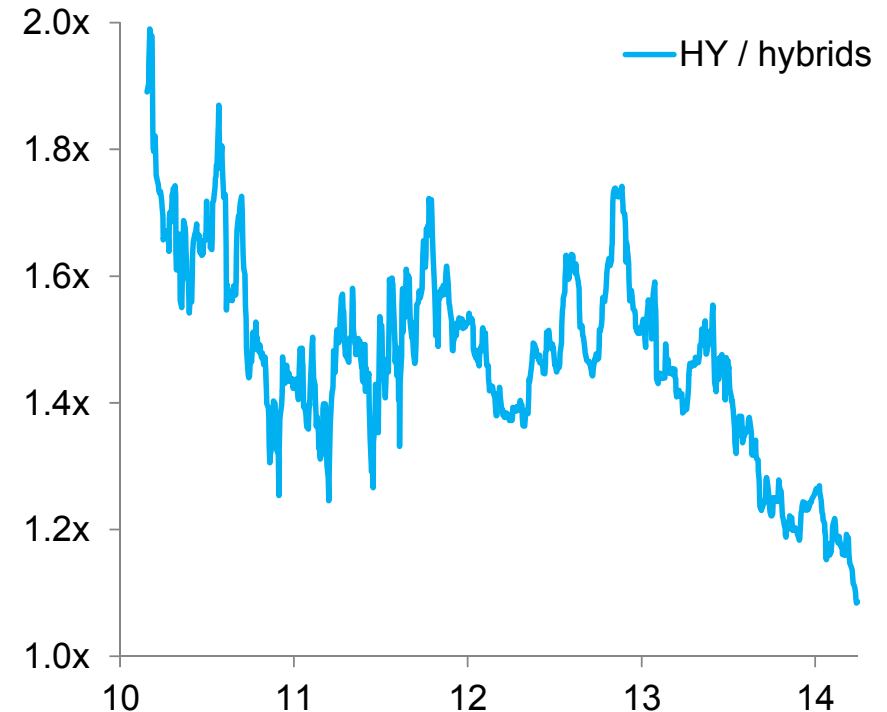
12m BE/Vol ratio for select investments



Source: Citi Research, MarkIt.

Hybrids lagging lower credit quality

iBoxx HY vs. non-financials hybrids, spread ratio



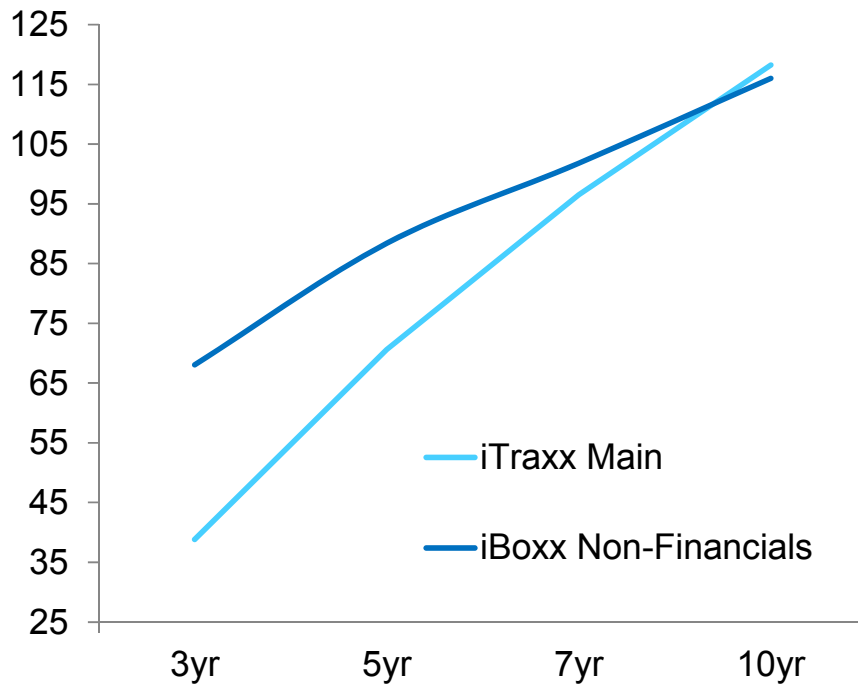
Source: Citi Research, MarkIt.

Subordination > Lower credit quality > Duration

Use derivatives to add some cushion

Curve much steeper in CDS than in cash

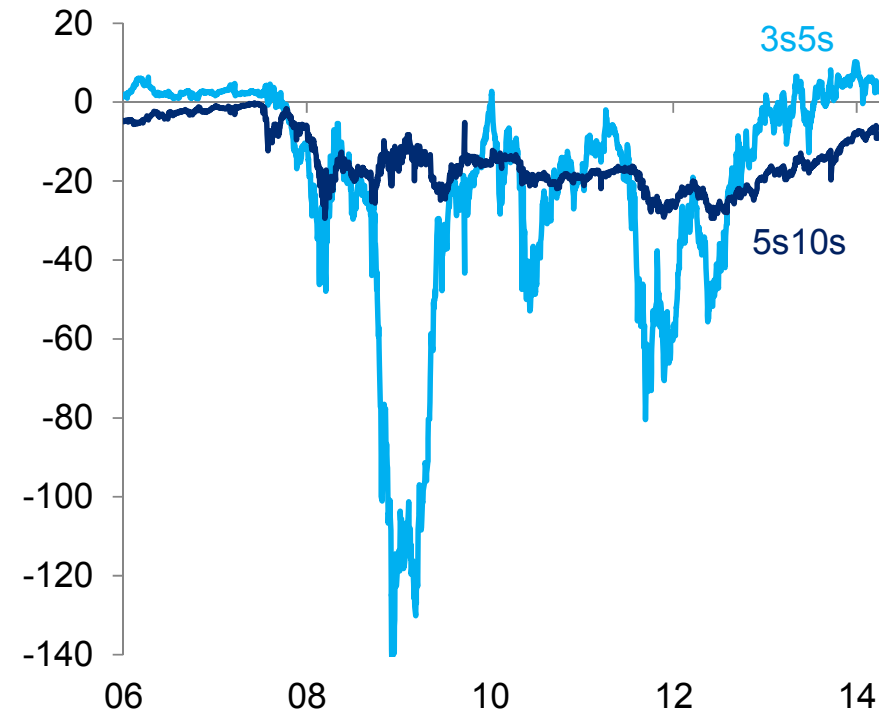
Estimated iBoxx non-fin cash curves vs iTraxx Main, bp



Source: Citi Research, MarkIt.

Flatteners just don't come much cheaper

iTraxx Main, DV01-neutral flatteners, 3m carry & roll (€ 1000s)*



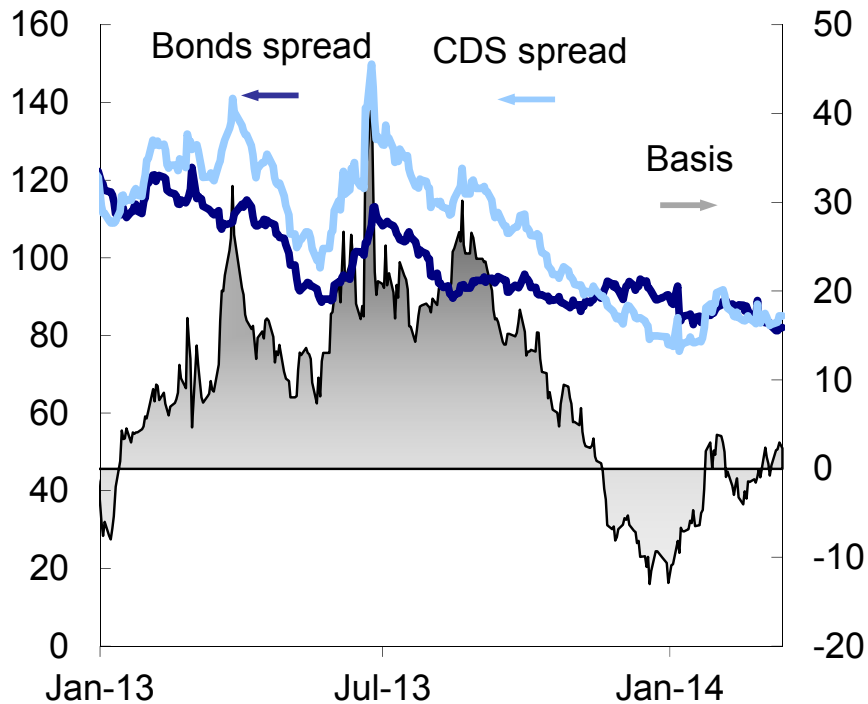
Source: Citi Research, MarkIt. *: Assumes 10mn notional of the 5yr leg.

Take duration in CDS; avoid duration in cash

Use derivatives to add some cushion (ii)

Basis is back in positive territory!

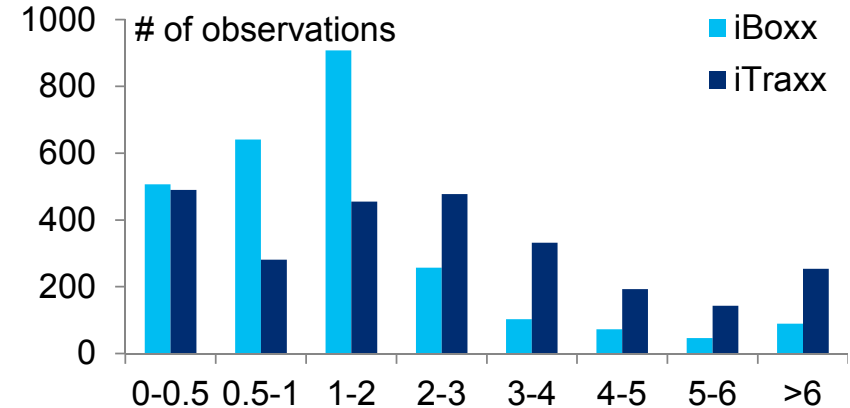
Citi aggregate bond-CDS basis, €, bp



Source (all charts): Citi Research, Markit.

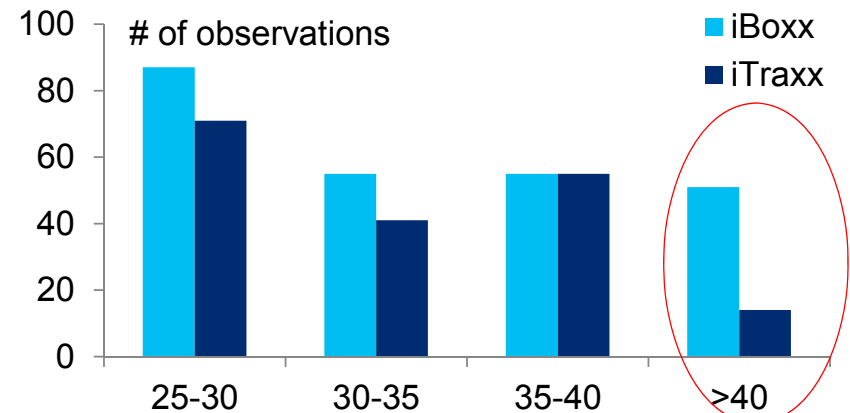
Yes daily CDS vol is higher...

iTraxx vs iBoxx, 10d spread volatility 2004-14, bp



.... but cash sees more extreme moves

iTraxx vs iBoxx, 10d spread changes > 25bp, 2004-14, bp



Reach for yield + leverage constraints => Negative basis

Better a sleepy than a caffeine-driven recovery

Risks seem higher in the US going forward

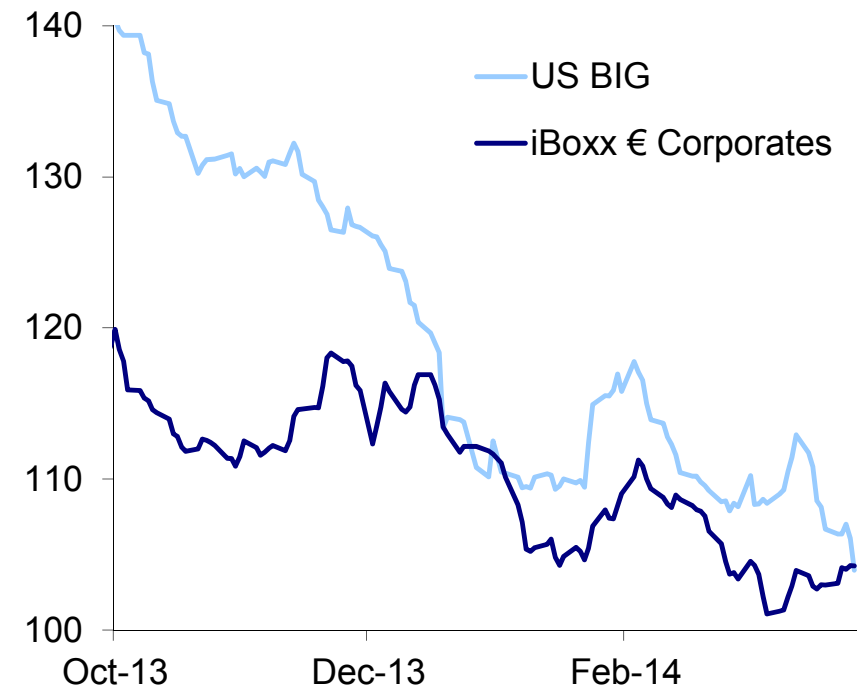
The case for being long € over \$ credit

Theme	Europe	US
Corporate releveraging?	✓	✓✓
Financial releveraging?	xx	x
Inflation risk?	x	✓
Mon. pol. tightening risk?	x	✓
Yield-sensitive demand?	✓	✓✓
Net supply?	-	✓
Sovereign risk?	✓	x
Current account deficit?	x	✓

Source: Citi Research.

Why then are \$ spreads outperforming?

US vs European corporate credit spreads, bp



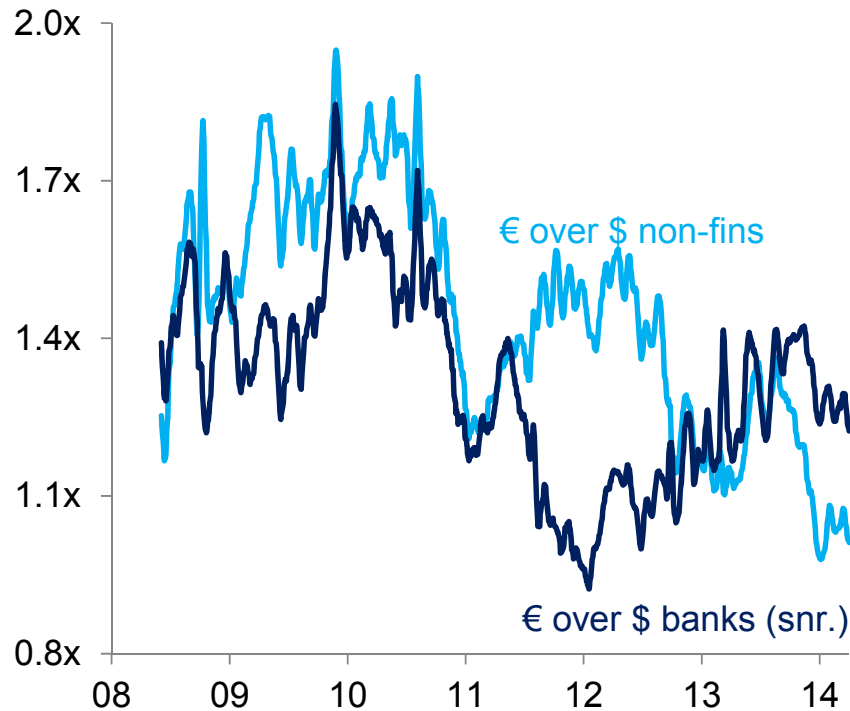
Source: Citi Research, MarkIt.

Credit cycle is more advanced in the US than Europe

Better the laggards than the leaders

€ banks lagging in the retracement?

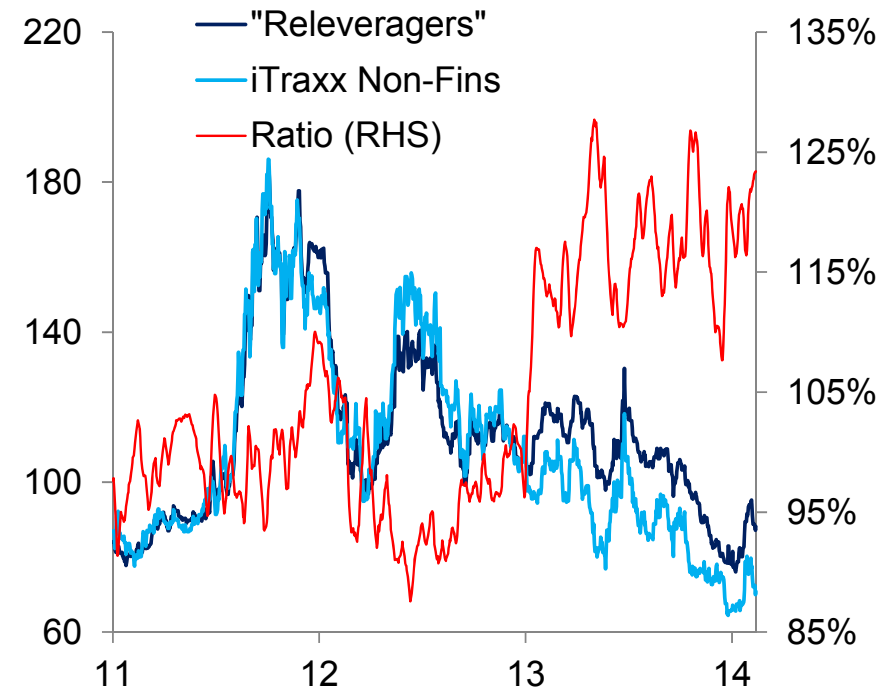
Ratio of \$ bank to € bank spreads vs. \$ to € non-fin spreads, iBoxx



Source: Citi Research, MarkIt.

Get out of low-beta large-caps

Performance of top-10 "releveraging" credits vs index, bp

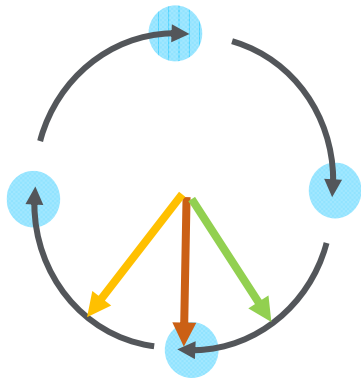


Source: Citi Research, Bloomberg. See [‘Corporate leverage – should you be worried?’](#), H. Lorenzen, 24 Feb 2014.

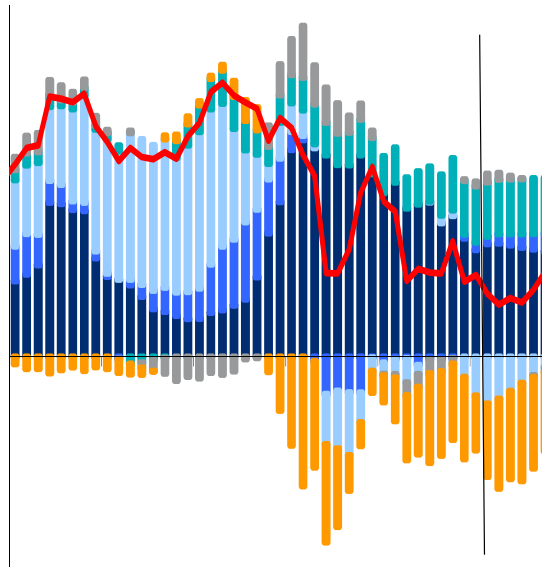
Prefer leveraged over releveraging credits

Conclusion: When snoozing on borrowed time...

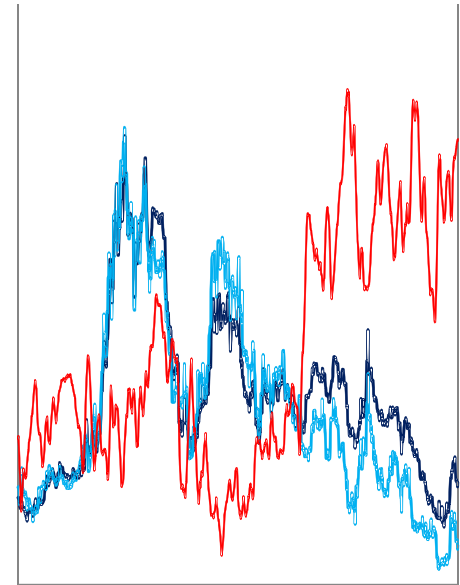
On fundamentals,
time's almost up...



... yet the incentive
to snooze is strong



Buy time where
you can!



... find ways to turn back the credit clock!

Appendix A-1

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