When FED pulls the plug

Financing the Future – International conference in honour of Niels Thygesen

Jesper Berg, Member of Executive Board, Nykredit Bank

05-12-2014

”If you put two economists in a room, you get two opinions, unless one of them is Lord Keynes, in which case you get three opinions.”
Sir Winston Churchill on John Keynes

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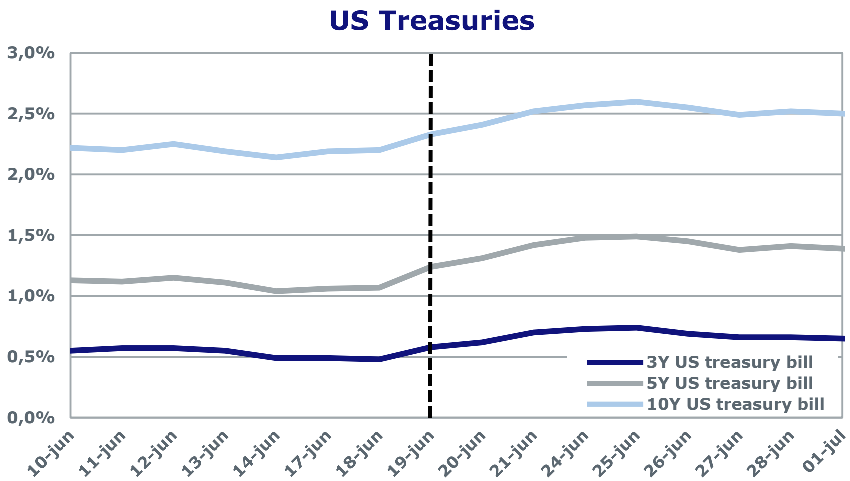
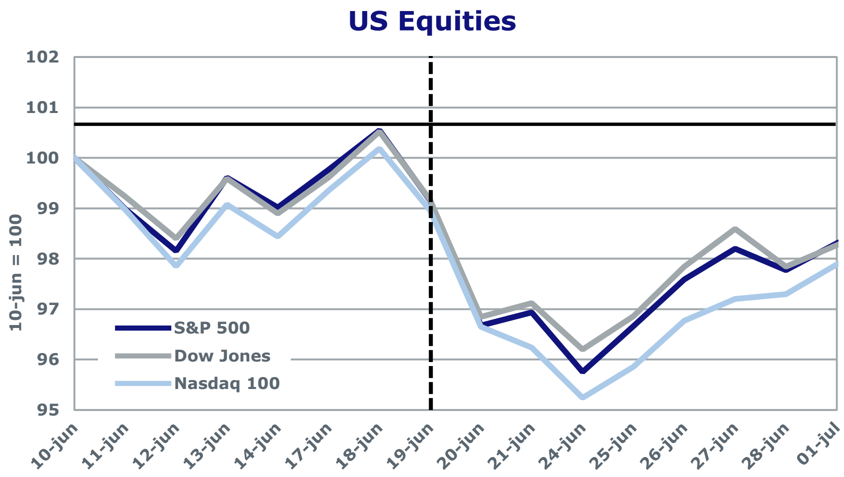
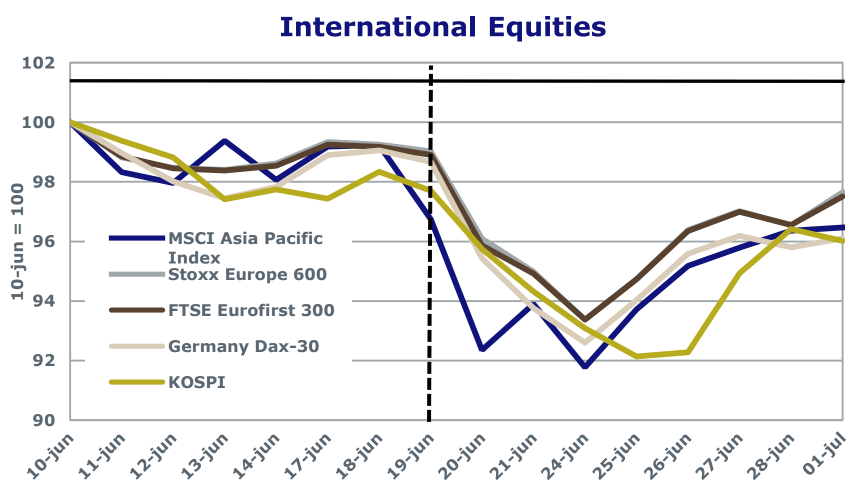
Agenda

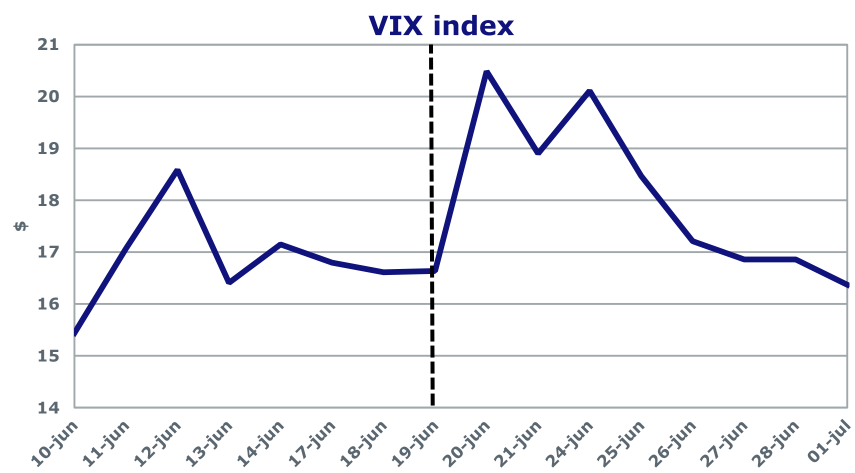
- Taper Tantrum (10th of June 2013 – 1st of July 2013)
- The Greenspan Conundrum (2002-2006)
- US Inflation Scares
- The Long Run
- A Comparison of the US/EU and Japanese financial crisis

Taper Tantrum









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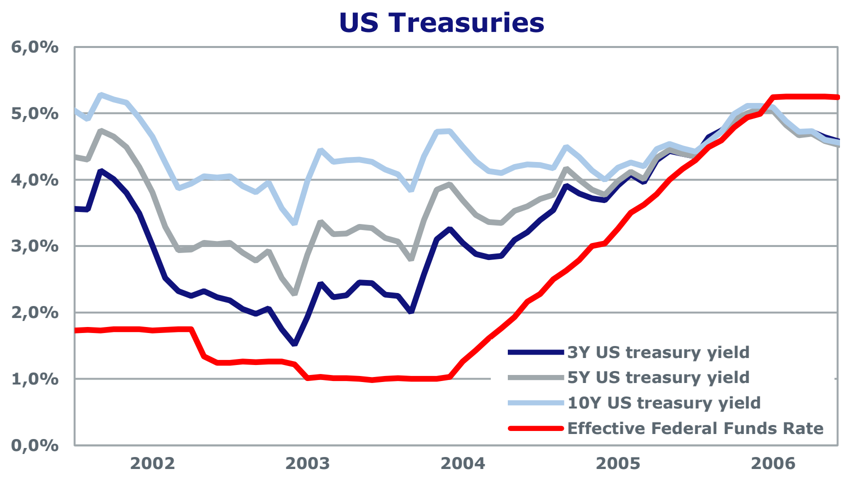
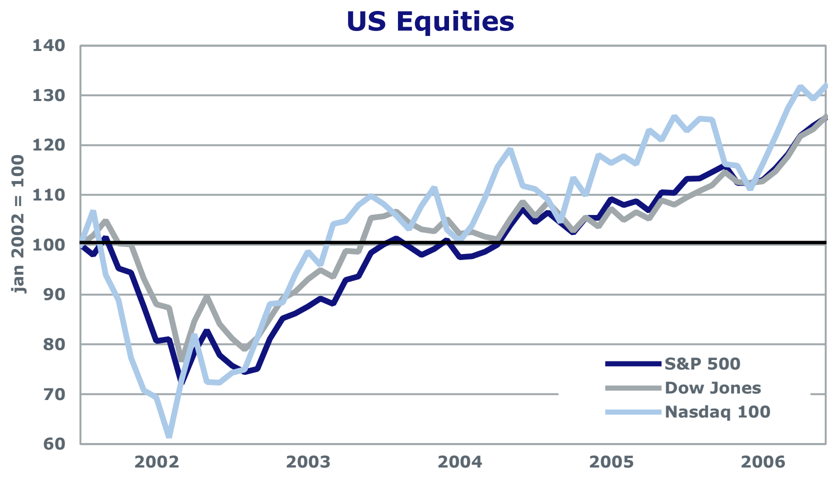
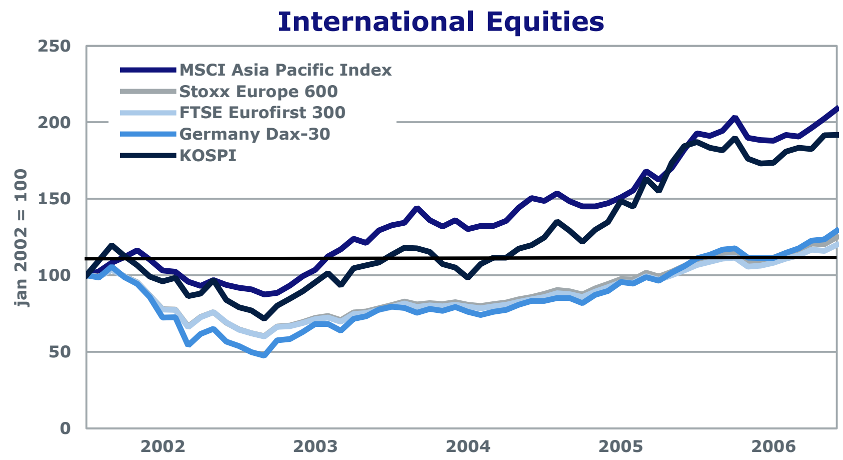
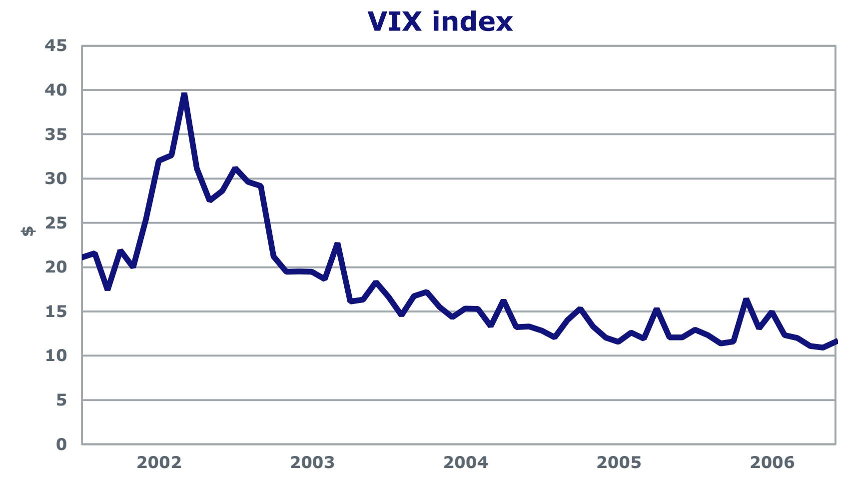
The Greenspan Conundrum









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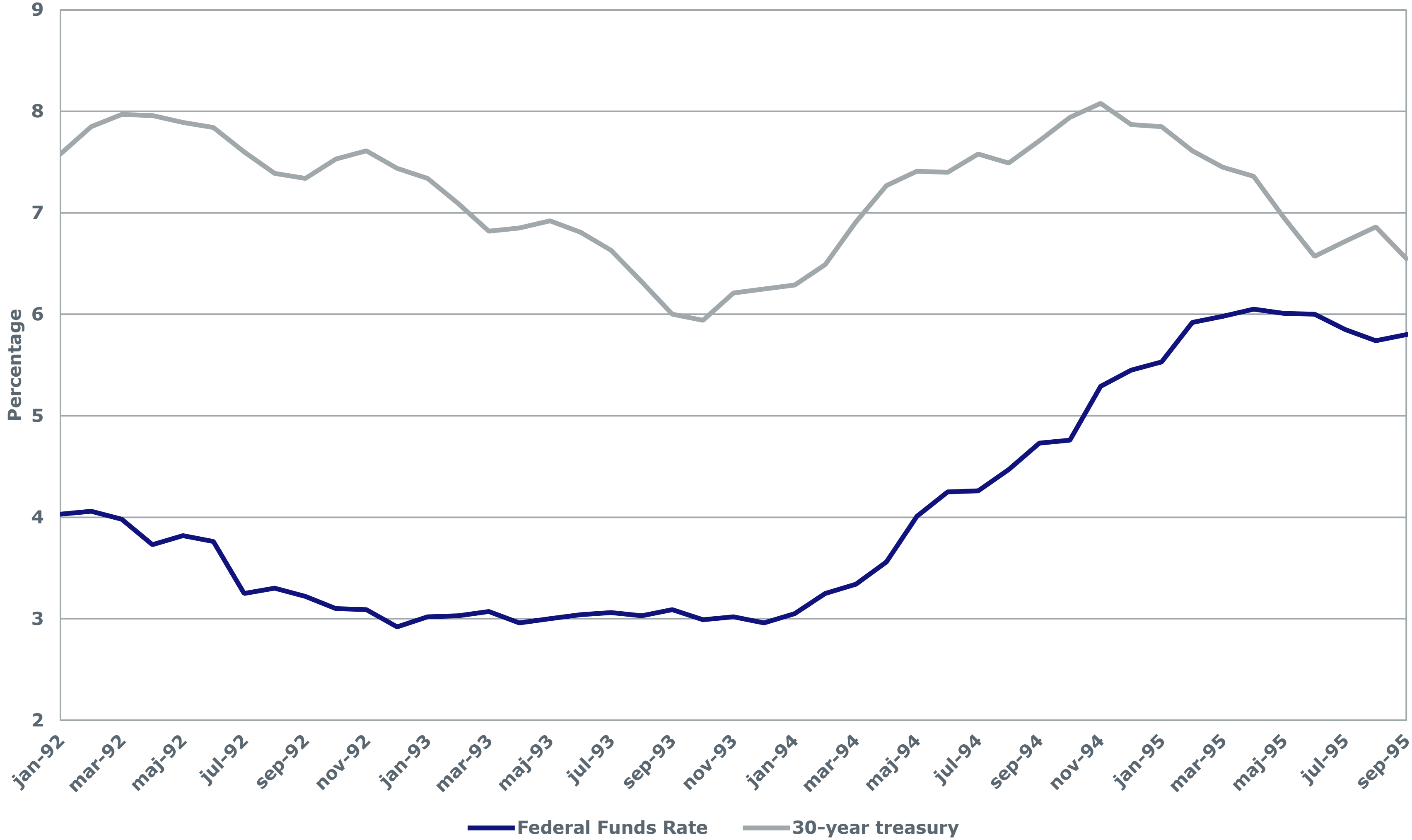
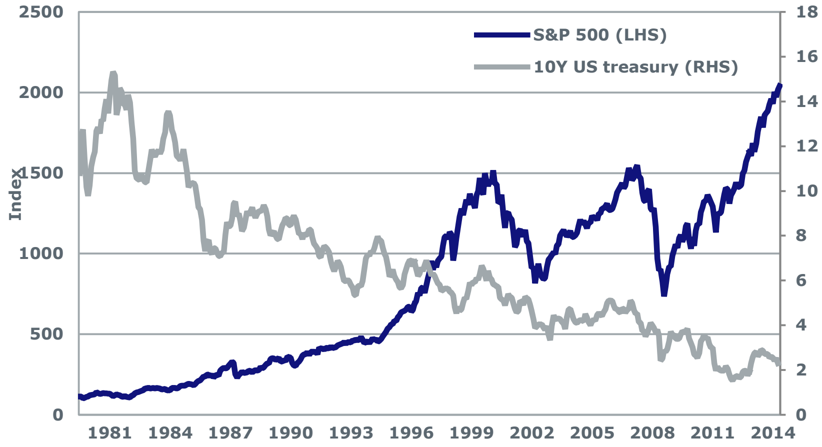
The US Inflation scare (Jan. 92 – Sep. 95)

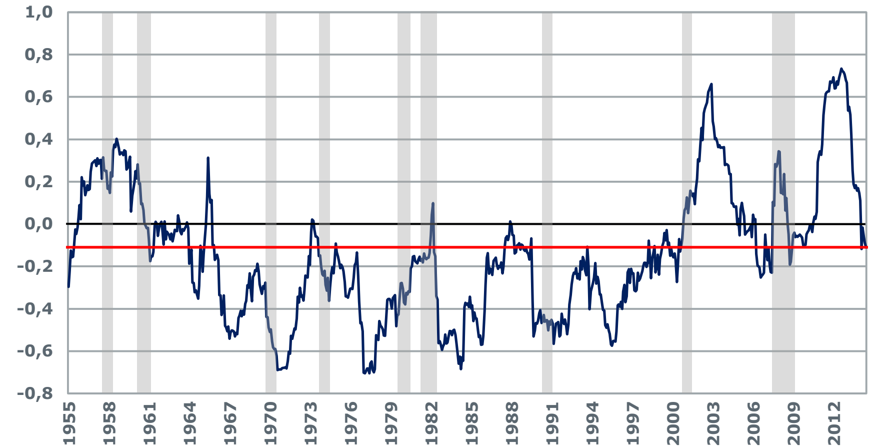


The Long Run
- Correlation between stocks and bonds

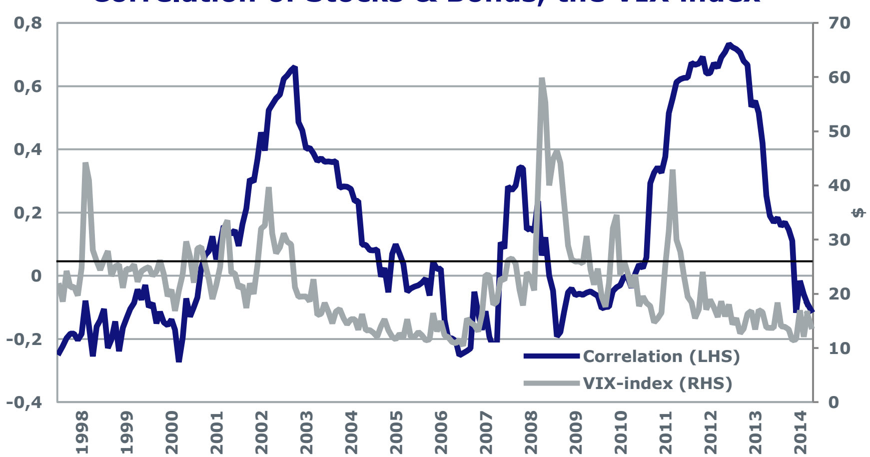
10Y Treasury & Equity



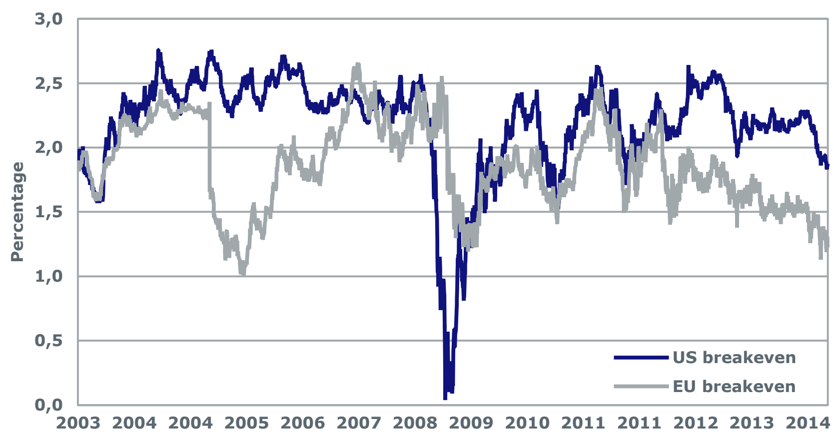
Correlation of Stocks & Bonds



Correlation of Stocks & Bonds, the VIX index



Break-even inflation



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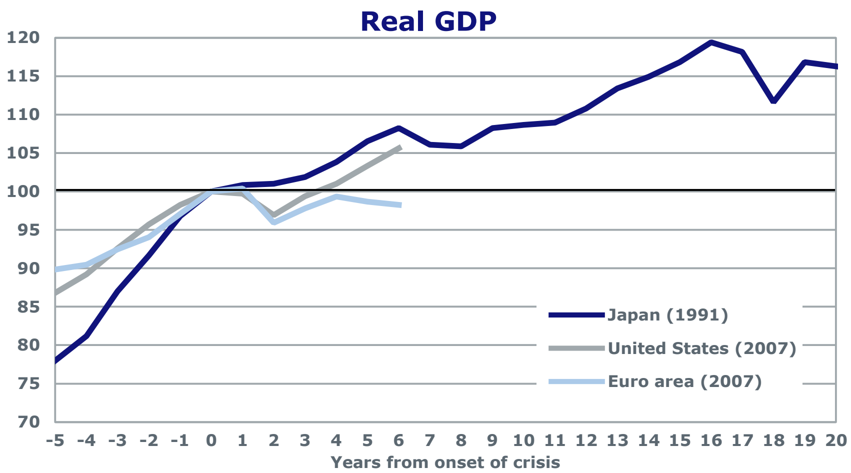
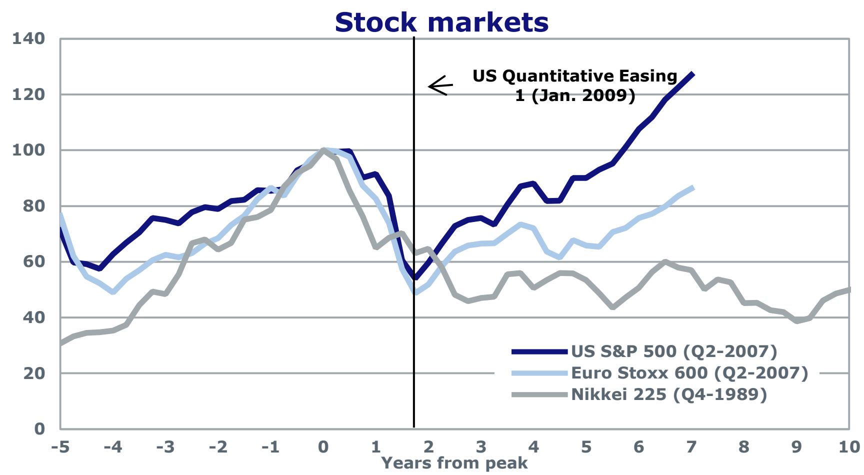
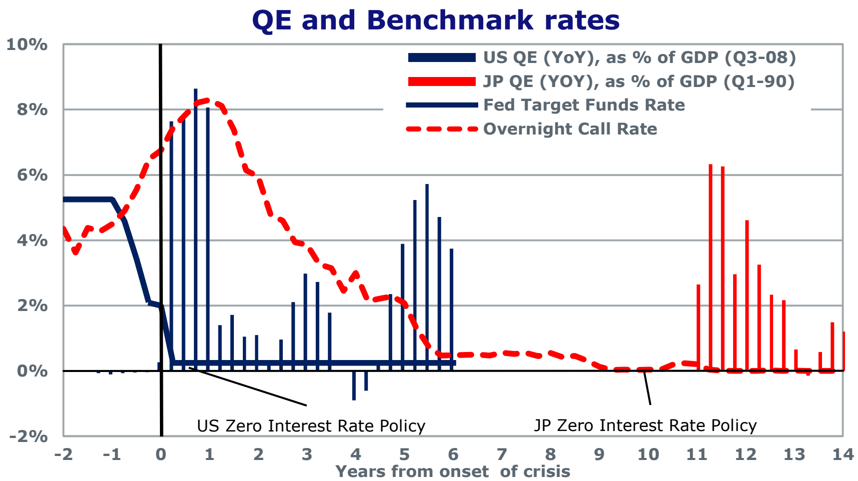
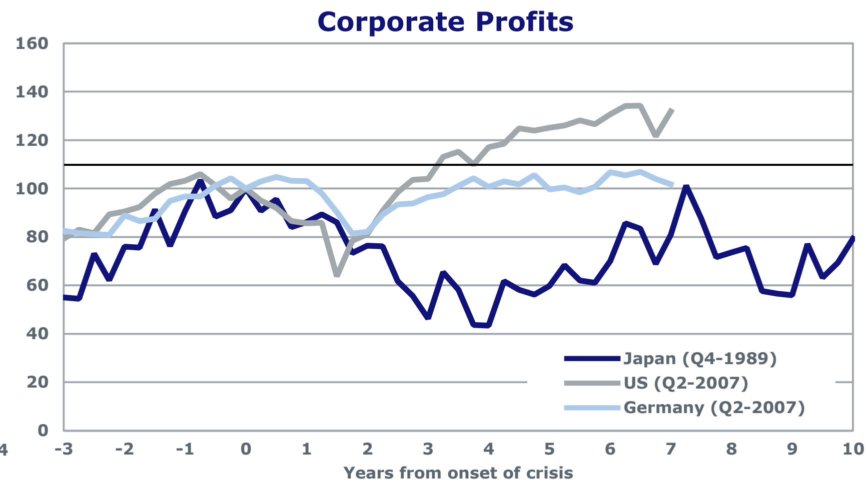
Comparison of US/EU & Japanese financial crisis









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From data to theory

Conundrum explanation?

Gordon's growth model

$$P_0 = \frac{D_1}{r - g}$$

… if r'=g' then p'=0

Explaining Inflation Scare and Japan?

Expectation hypothesis: r^n is the risk-free long term rate, r^m is the short term rate and $\pi^{n,m}$ is the term premium.

$$r_t^n = \frac{1}{k}\sum_{i=0}^{k-1} E_t[r_{t+mi}^m] + \pi^{n,m}$$

The risk-free rate i s driven by the sum of current and expected future short term rates plus the term premium.

The term premium is mainly driven by inflation expectations.

Conundrum and Taper Tantrum explanation?

r is the discount rate

$$r = r_f + \underbrace{\beta(r_{marked} - r_f)}_{\text{Risk premium}}$$

… the risk premium is correlated with VIX

Other explanatory factors

Risk-free rate = Real rate + Break Even Inflation

Taylor's Rule

$$i_t = \pi_t + r_t^* + \alpha_\pi(\pi_t - \pi_t^*) + \alpha_y(y_t - \bar{y}_t), hvor\ a_{\pi,y} > 0$$

Summary

- Central banks have become key players in financial markets
- When they act and expectations change, markets move
- If the world is good and the central banks act according to expectations then the financial markets are likely to be in a good state
- If the central banks fall behind the inflation curve, interest rates can increase quickly
- The average correlation between the long-term rate and the stock market is negative, but fluctuations in the risk premium can create large positive correlation
- If the Euro area goes ”Japanese”, we have other worries than a rise in interest rates
- Understanding risk-, term- and liquidity premiums, and the reaction functions of central banks is important for our understanding of financial markets.

"You can check-out any time you like, but you can never leave!"
Eagles, Hotel California, 1976

Bonus Slides

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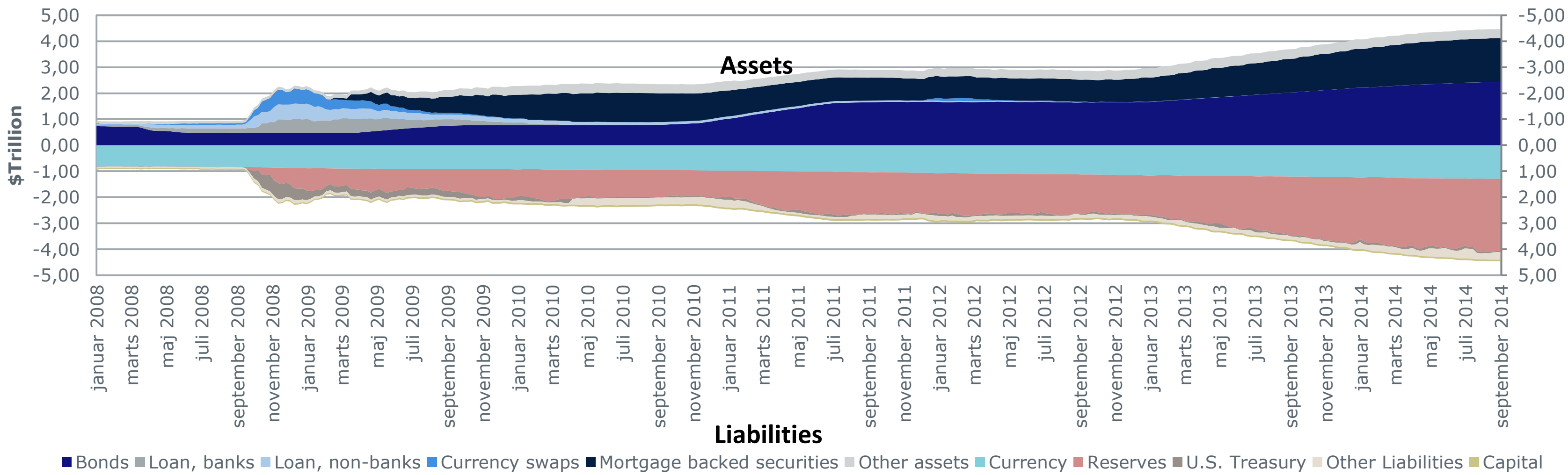
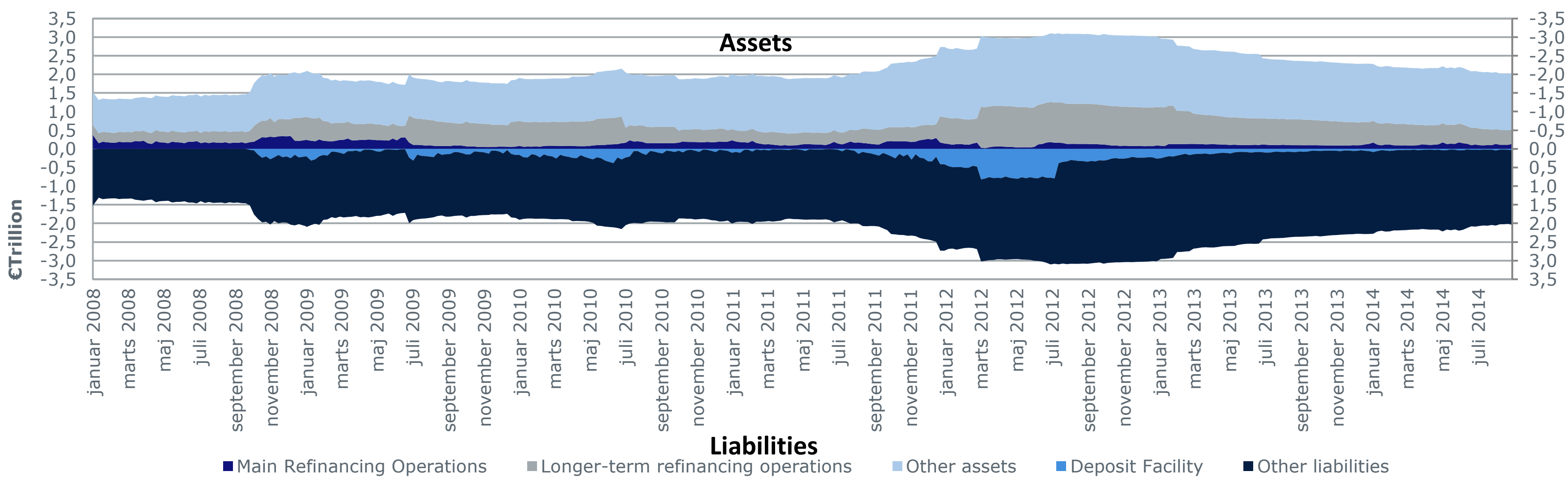
The Federal Reserve (TOP) & ECB (BOT.) Balance Sheets





Source: ECB & The Federal Reserve Bank.

Taper Tantrum – *Ben Bernanke press conference 19th of June 2013*

- ”The slowing in the pace of purchases is akin to letting up on the gas pedal as a car picks up speed rather than applying the brakes”.
- ”(…) if the incoming data support the view that the economy is able to sustain a reasonable cruising speed, we will ease the pressure on the accelerator by gradually reducing the pace of purchases. However, any need to consider applying the brakes by raising short-term rates is still far in the future”.
- ”I would like to emphasize once more the point that our policy is in no way predetermined and will depend on the incoming data and the evolution of the outlook as well as on the cumulative progress toward our objectives”.

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Liquidity Premium – The syndrome of Lyngbyvej

- The central banks have flooded the markets with liquidity and thereby removed volatility
- The liquidity premiums are historically low
- The advantage of being liquid has fallen
- Regulation has increased the costs of being liquid for market makers
- The general pressure on deleveraging the financial system has increased
- The capacity of market makers is at an all time low
- Is there a gap between the low liquidity premiums and the buffer capacity of market makers?
- How we in our effort to increase the resilience of institutions reduced the capability of the system to absorb choks?

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