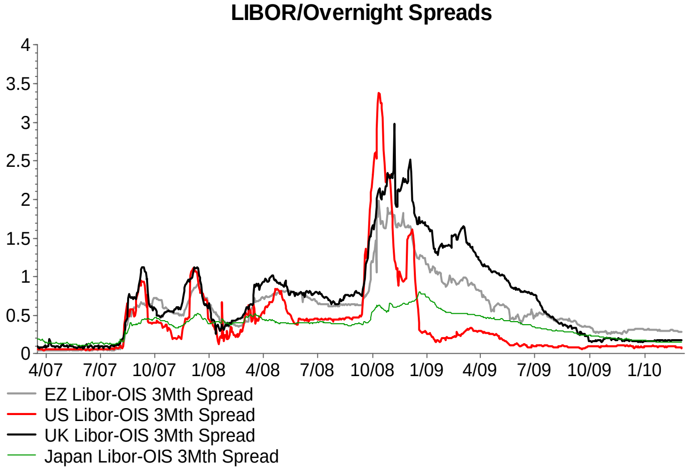
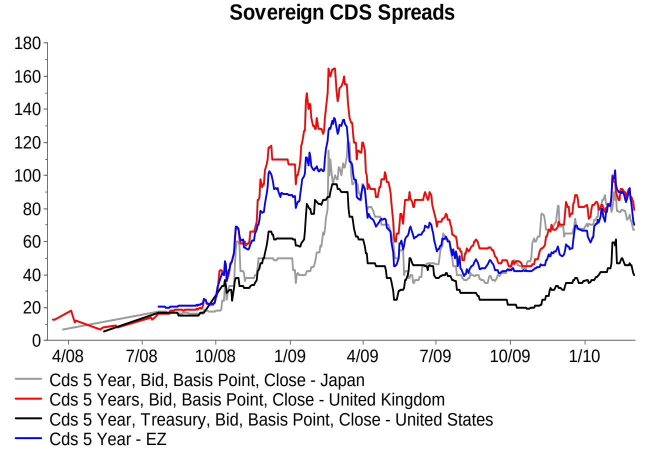
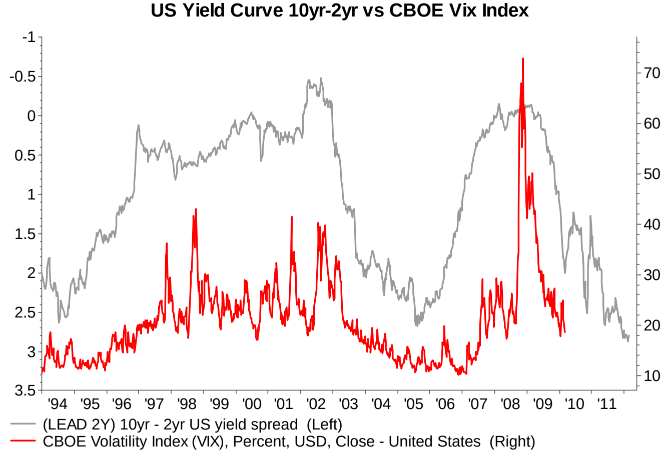
➢Central Bank Exit Strategies – The Process Begins

Derek Halpenny
European Head of Global Currency Research

Exit Strategies in focus – Is now the time?







- Libor-OIS Spreads – Close to pre-crisis levels
- VIX Index – Substantial declines but still higher than pre-crisis levels
- Sovereign CDS Spreads – Recent rise starting to reverse

Bank of Tokyo-Mitsubishi UFJ

MUFG

Federal Reserve Exit Strategy
The 5 probable stages

Stage 1.

Emergency Liquidity Programs terminated.

- Term Auction Facility – final auction on 8th March 2010
- Term Asset-backed Securities Loan Facility – to terminate on 31st March.
- CMBS TALF to terminate on 30th June.
- Primary Credit (Discount) rate spread over federal funds rate is gradually normalised.

Stage 2.

Quantitative Easing terminated.

- Federal Reserve scheduled to reach USD 1.725 trillion worth of asset purchases by end of March 2010 with an intention to then terminate purchases. Supplementary Financing Bills issued over the next 8 weeks to drain USD 195 billion.

Stage 3.

"Extended period" wording removed from FOMC statement.

- This will probably coincide with a notable pick-up in the "Testing Stage" – testing tools used to drain liquidity like reverse repurchase operations and the creation of term deposits.

Stage 4.

Substantial draining of excess reserves.

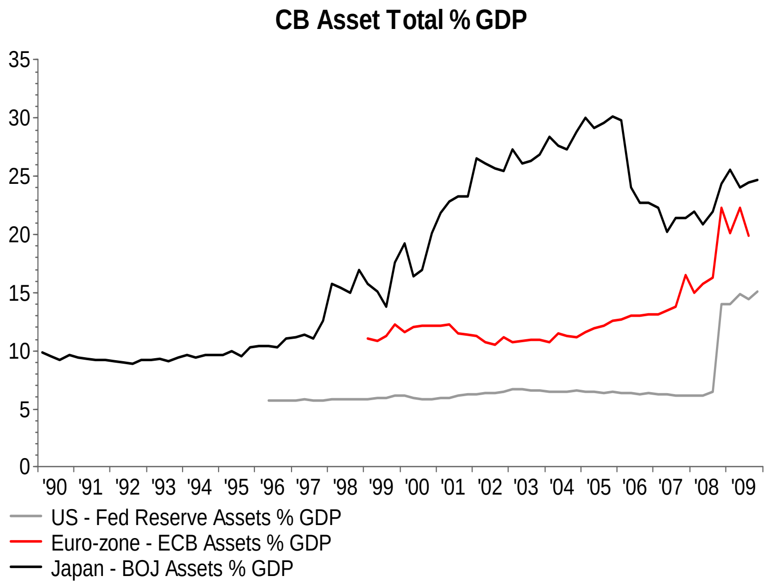
- Reverse repurchase operations and term deposits now utilised to potentially drain "hundreds of billions of dollars" of reserves from the system.

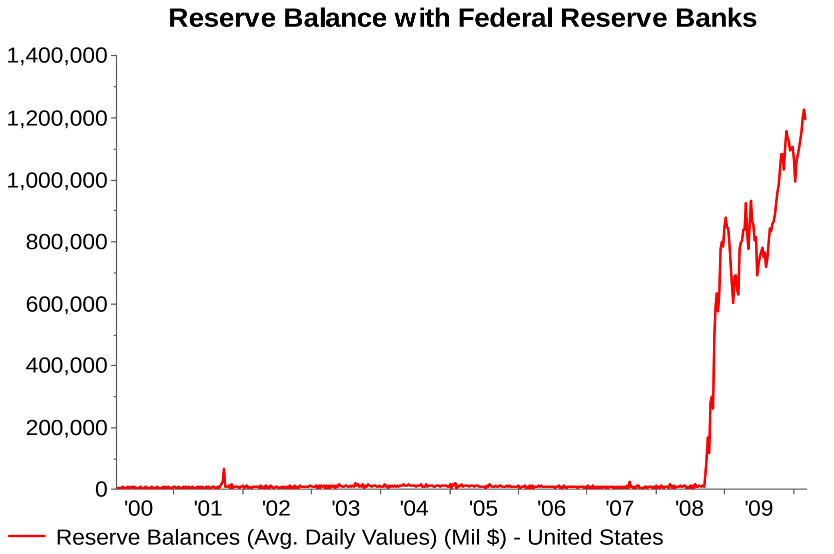
Stage 5.

The interest rate paid on reserve balances is increased.

- This rate becomes the effective key monetary policy rate of the FOMC.
- The FOMC reverts to the federal funds rate as the effective policy rate and its holdings of MBS, Agency debt and US Treasury securities are gradually reduced through maturing holdings and/or outright sales depending on economic conditions.

Reserves may have peaked as Fed shifts from Stage 2 to Stage 3

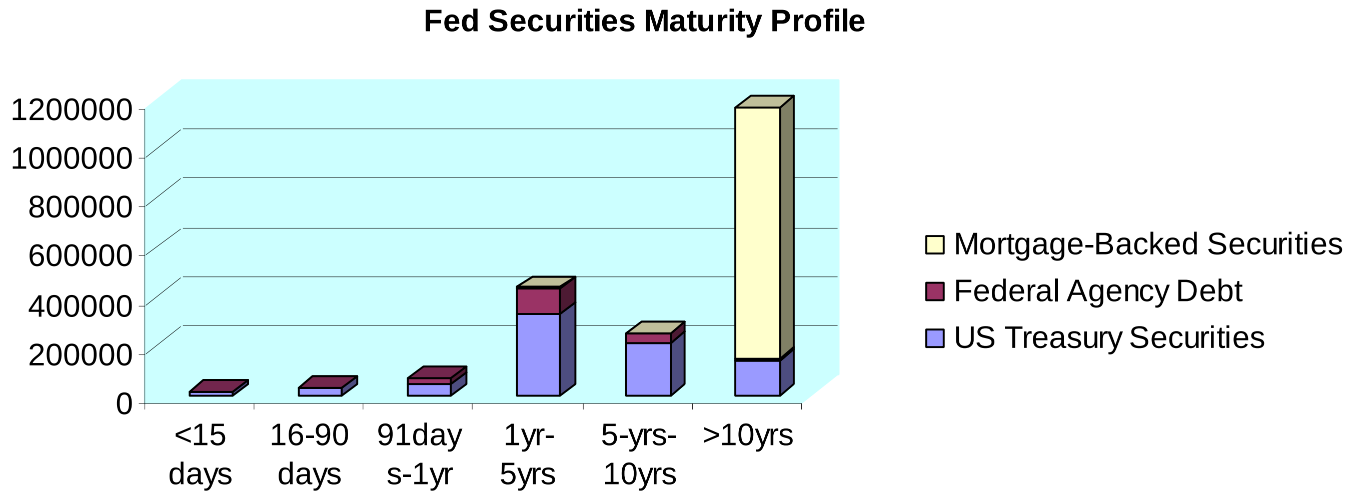




- Balance sheet size not necessarily an indication of monetary stance
- Reserve balance at the Fed declined in the week to 5th March to USD 1,197 billion, the first drop this year

Bank of Tokyo-Mitsubishi UFJ
MUFG

MBS yields to move higher on Fed absence but no outright sales planned

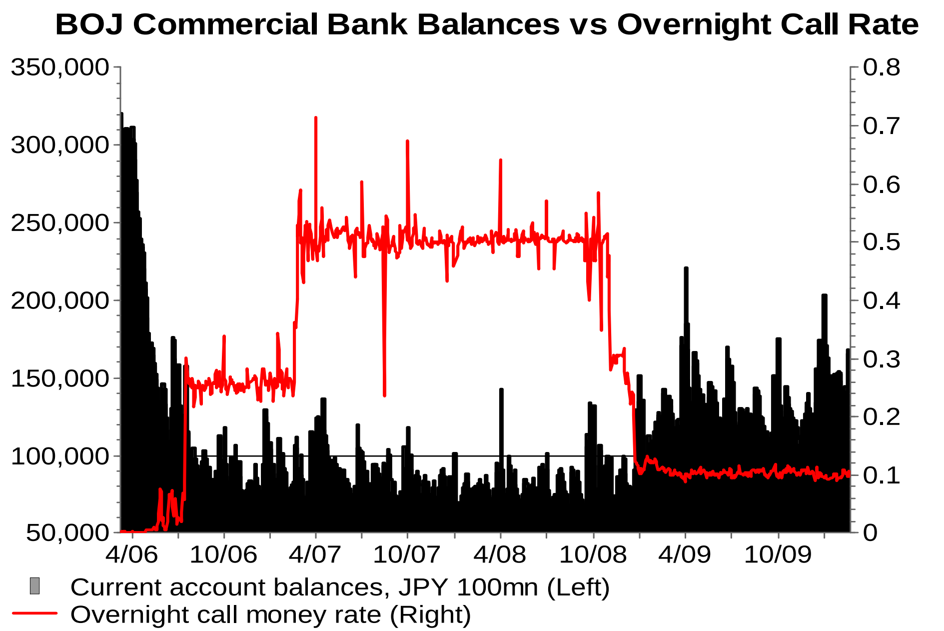


As of 3rd March 2010

USD mn	<15 days	16-90 days	91days-1yr	1yr-5yrs	5-yrs-10yrs	>10yrs	Total
US Treasury Securities	13013	28272	44019	333475	214048	143726	776553
Federal Agency Debt	1523	2273	23466	103372	34530	2347	167511
Mortgage-Backed Securities				17	20	1026790	1026828
Total	14536	30545	67485	436864	248598	1172863	1970892

BOJ caution will continue with protracted exit strategy

- **Stage 1** – Outright purchases of CP and corporate bonds expired at the end of 2009

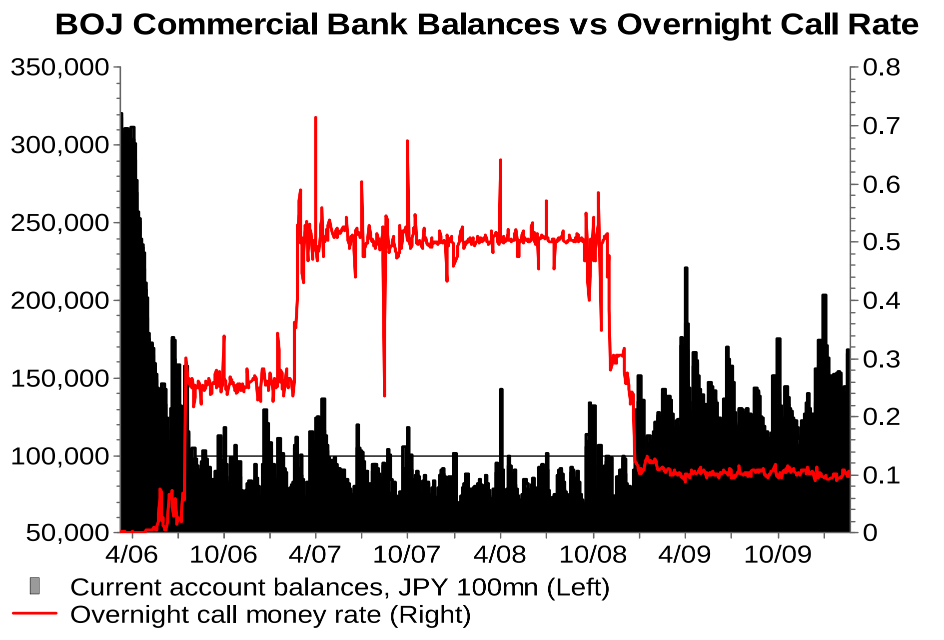


BOJ caution will continue with protracted exit strategy

- Stage 1 – Outright purchases of CP and corporate bonds expired at the end of 2009

- **Stage 2** – Gradual termination of temporary support for special fund-supplying operations

  JPY 19.8 trillion outstanding
  To expire between March 2010-end 2010
  JPY 10 trn lending facility to end in March



BOJ caution will continue with protracted exit strategy

- Stage 1 – Outright purchases of CP and corporate bonds expired at the end of 2009

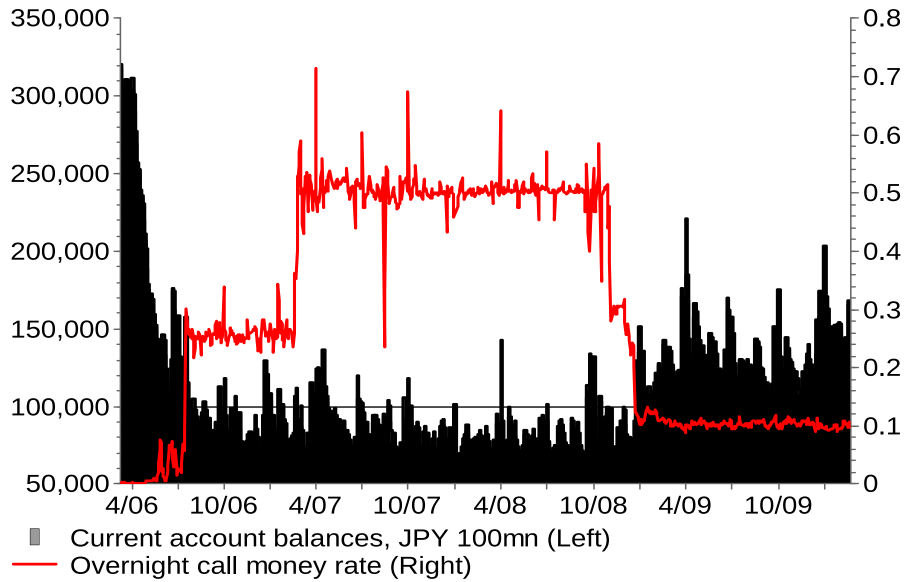
- Stage 2 – Gradual termination of temporary support for special fund-supplying operations

  JPY 19.8 trillion outstanding
  To expire between March 2010-end 2010
  JPY 10 trn lending facility to end in March

- **Stage 3** – Overnight call money rate increased, but probably not before H1 2012 – consistent with "Understanding of Medium – to – Long-term Price Stability"

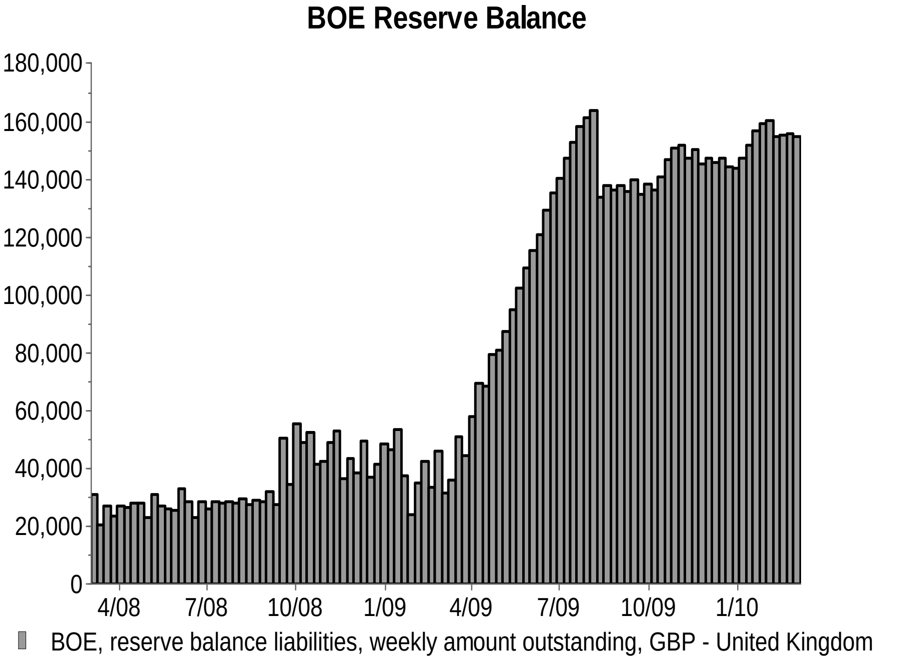
  Outright purchases of JGBs likely to be maintained at JPY 21.6 trillion per year

BOJ Commercial Bank Balances vs Overnight Call Rate



BOE QE ends but outright sales or CB bill issuance a long way off

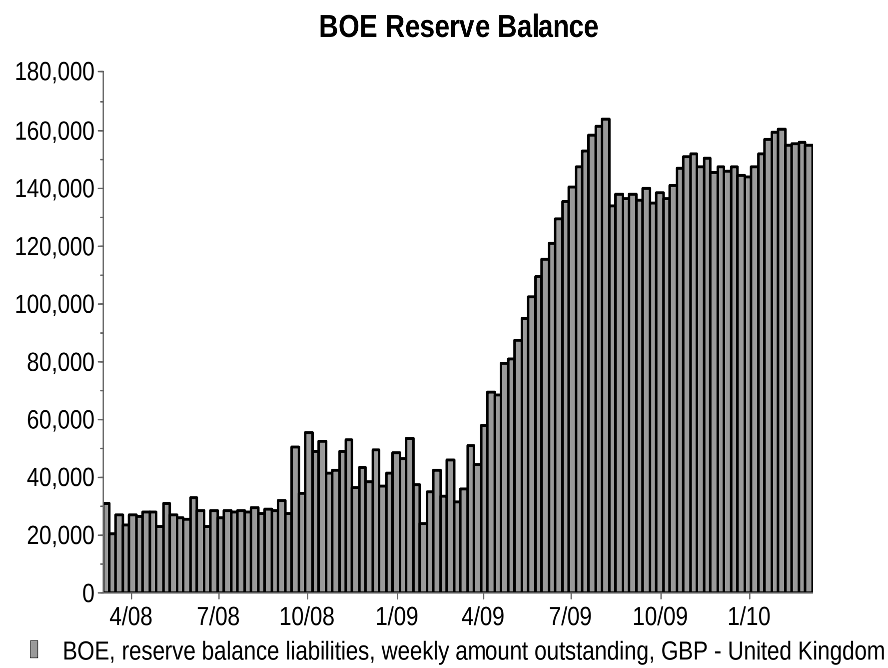
- **Stage 1**
  Asset Purchase Facility is halted at GBP 200bn
  Special Liquidity Scheme closed on 30th January
  Dollar swap agreement with Fed ends Feb 2010



BOE QE ends but outright sales or CB bill issuance a long way off

- Stage 1
  Asset Purchase Facility is halted at GBP 200bn
  Special Liquidity Scheme closed on 30th January
  Dollar swap agreement with Fed ends Feb 2010

- **Stage 2**
  Extended collateral long-term money market operations to end when new permanent operational design is announced



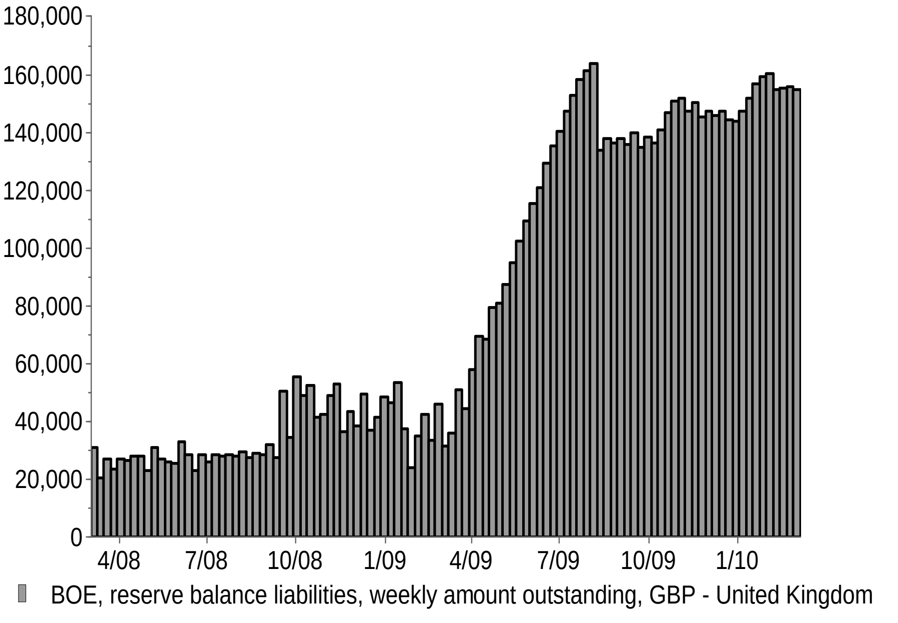
BOE QE ends but outright sales or CB bill issuance a long way off

- Stage 1
  Asset Purchase Facility is halted at GBP 200bn
  Special Liquidity Scheme closed on 30th January
  Dollar swap agreement with Fed ends Feb 2010

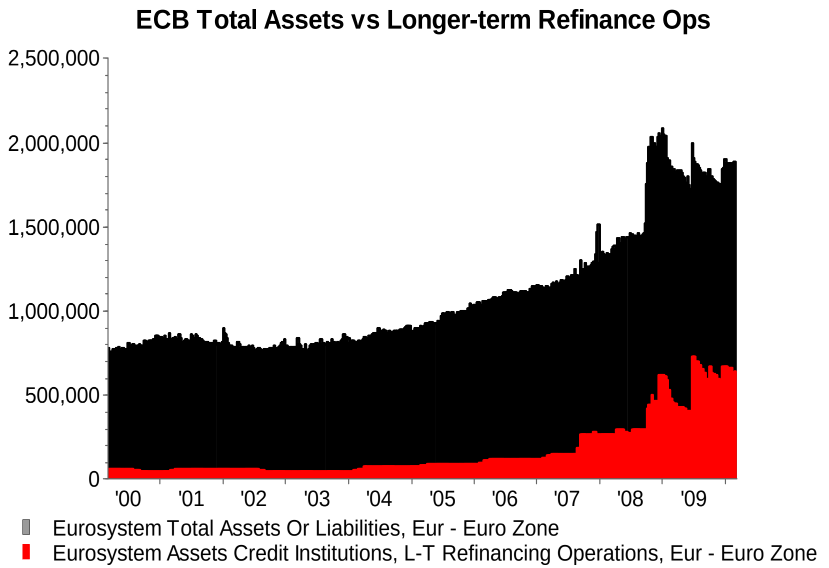
- Stage 2
  Extended collateral long-term money market operations to end when new permanent operational design is announced

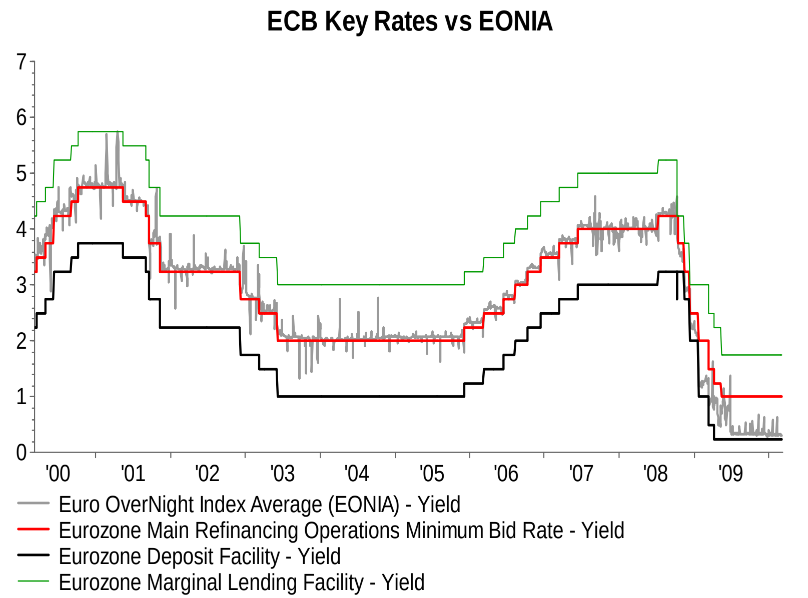
- **Stage 3**
  Bank Rate and Interest paid on reserves are increased. As of yet no plans on draining liquidity apart from asset sales or central bank bill issuance as and when economic conditions warrant it

BOE Reserve Balance



Phasing out of non-standard operations will allow for an orderly exit strategy





- Long-term refinancing operations to be phased out. 3-month LTRO to return to variable rate tender on 28th April. Covered bond purchases to be completed by early July 2010

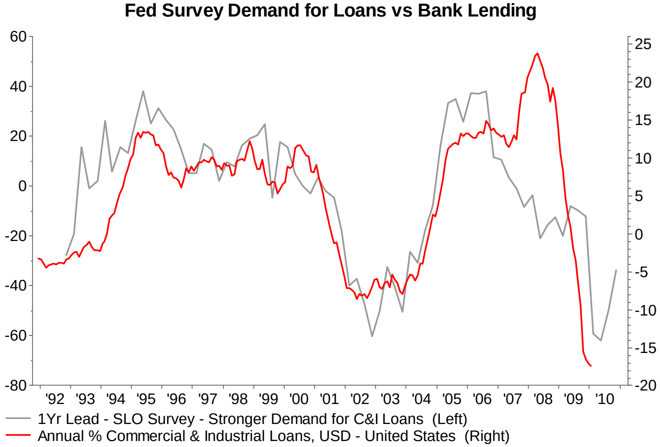
- A gradual return of confidence and a contraction in liquidity will see the EONIA rate drift back toward the MRO minimum bid rate

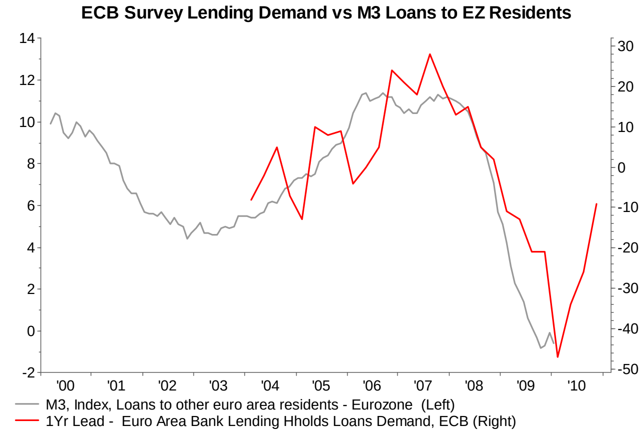
Bank of Tokyo-Mitsubishi UFJ

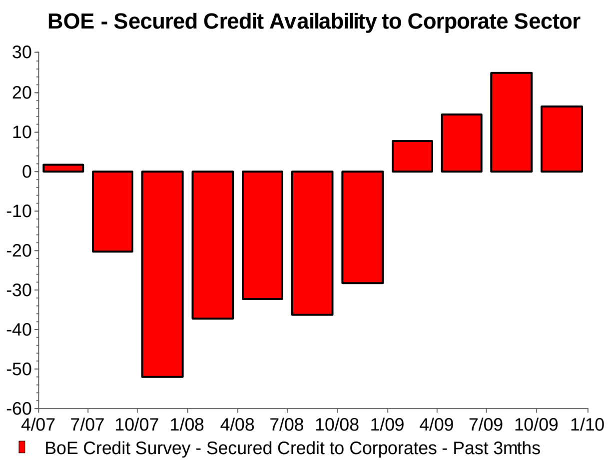
MUFG

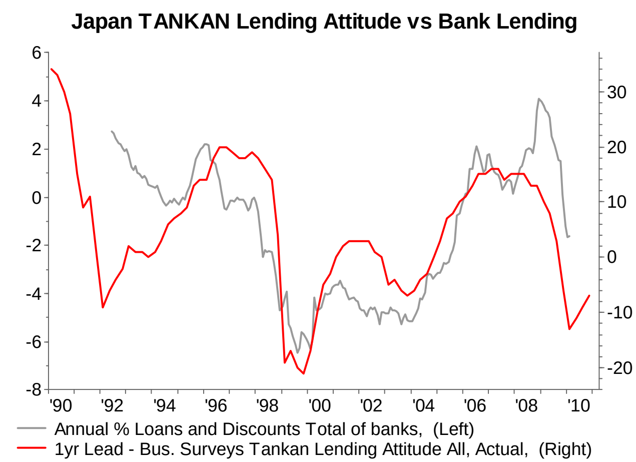
➢Fundamentals Mean Differentiated Exit Strategies

Speed of exit strategies dependent on money supply constraints







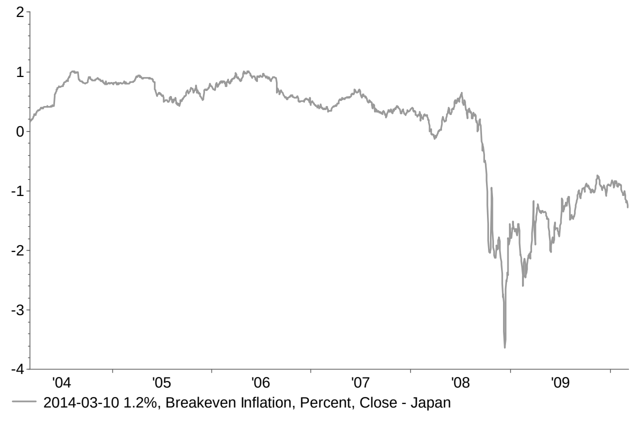


Bank of Tokyo-Mitsubishi UFJ

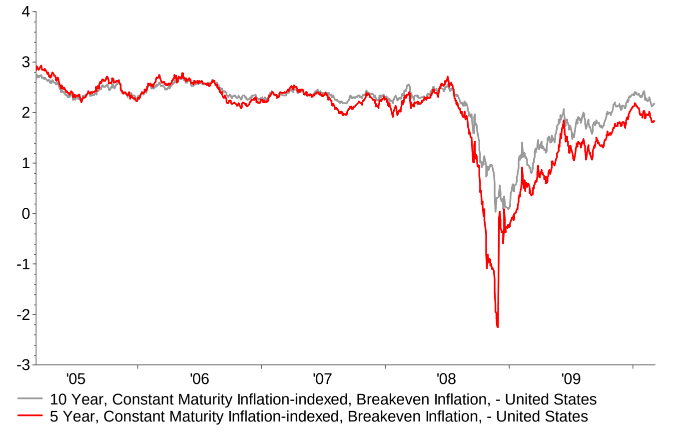
MUFG

Inflation expectations most responsive in QE countries – US & UK

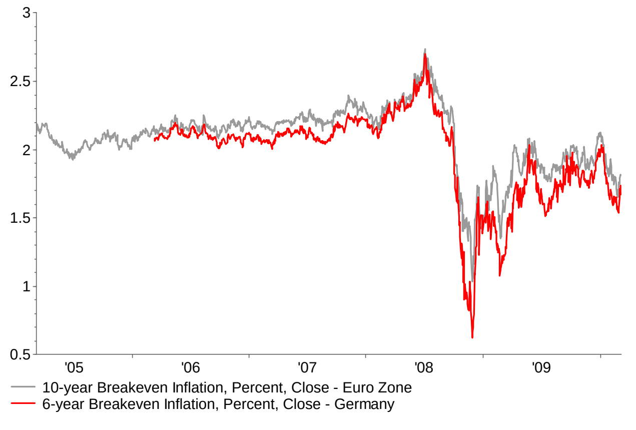
Japan - Breakeven Inflation



US - Breakeven Inflation



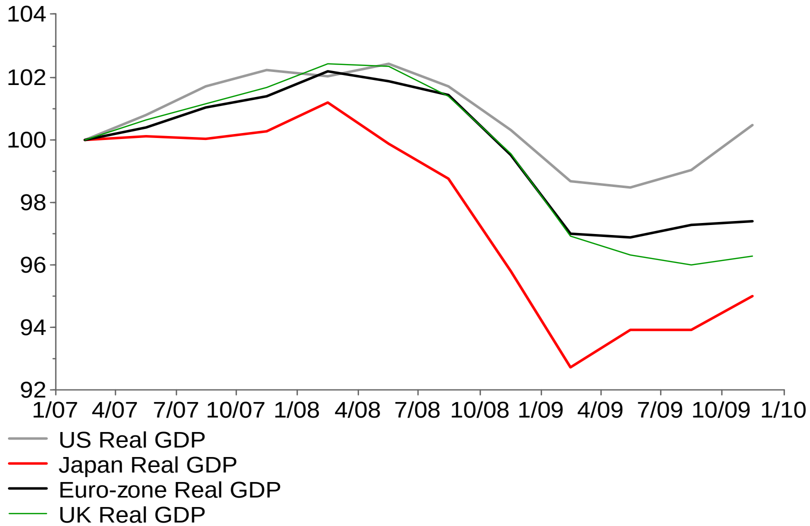
Germany & Euro-zone - Breakeven Inflation



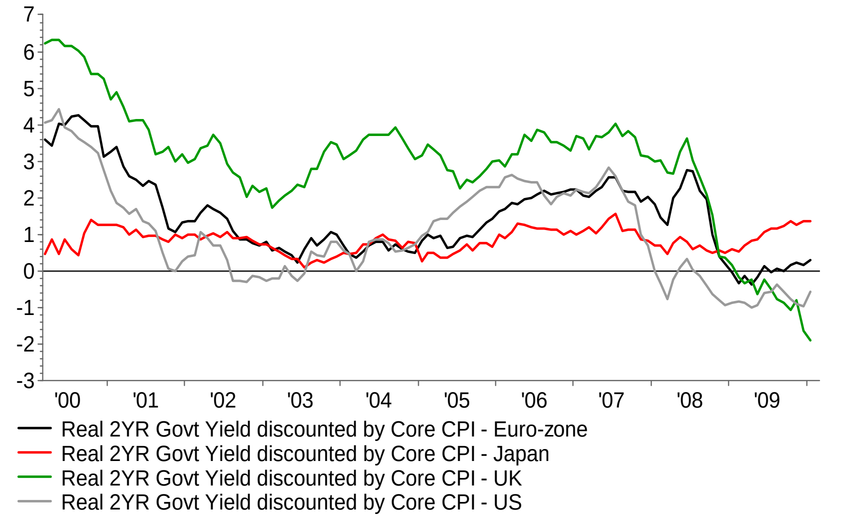
UK - Breakeven Inflation

More rapid, aggressive policy response in US & UK could mean more rapid exit

Peak to Trough Real GDP



Real 2-Year Yield, US, UK, Japan, EZ

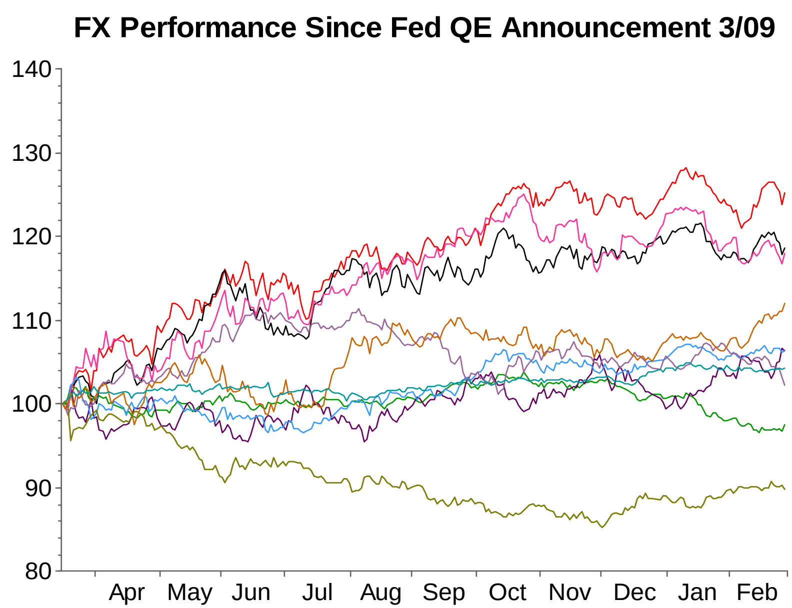


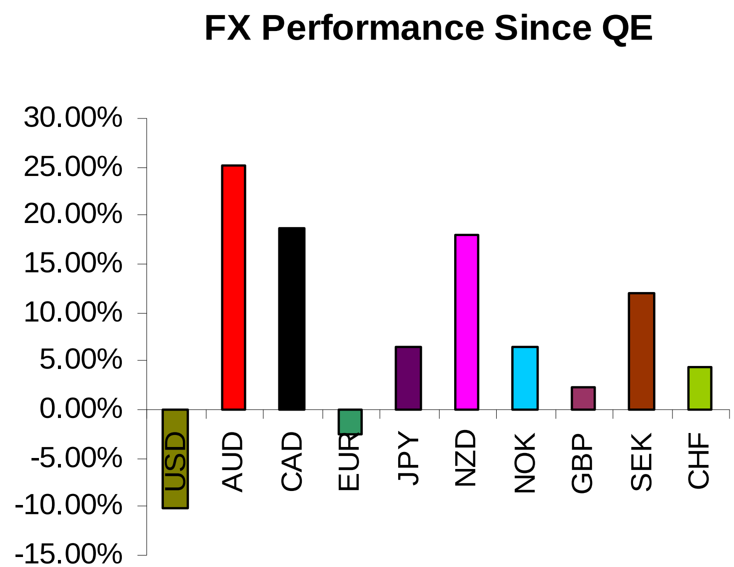
- US GDP now just 1.9% below Q2 2008 peak, but Japan, UK and euro-zone are 6.1%, 6.0% and 4.7% below respectively

- Real 2-year yields in US and UK most conducive to supporting growth – little change in Japan

➢Exit Strategy Implications For Foreign Exchange

AUD, NZD & CAD the main beneficiaries of QE since March 2009

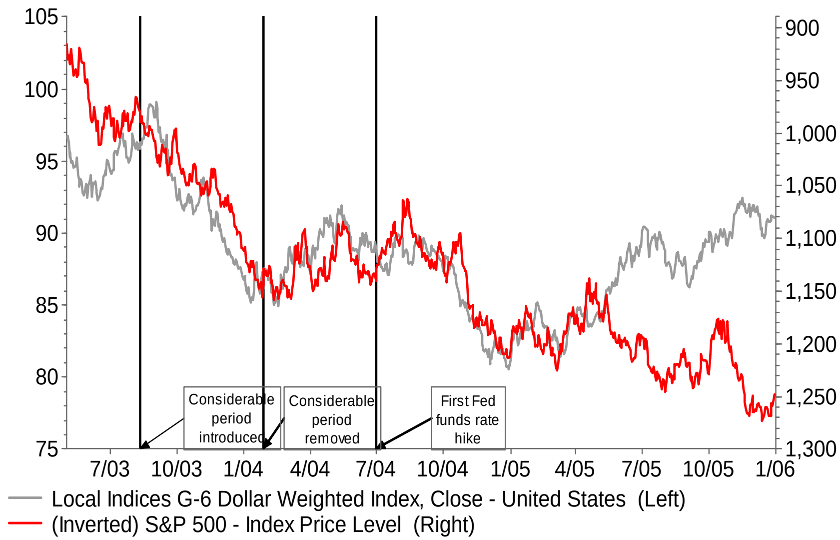




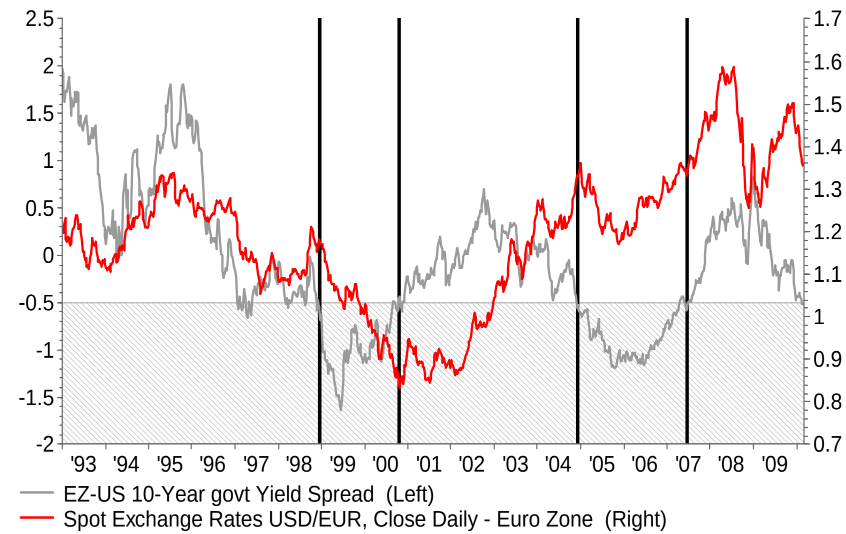
- GBP has gained 2.3% since QE announcement in March 2009 despite asset purchases amounting to 14% of GDP
- USD the clear under-performer. But QE not the only focus in FX with EUR 2nd worst performer since QE announcements last March

Exit by Fed will have positive impact on USD

USD & US Equities Performance

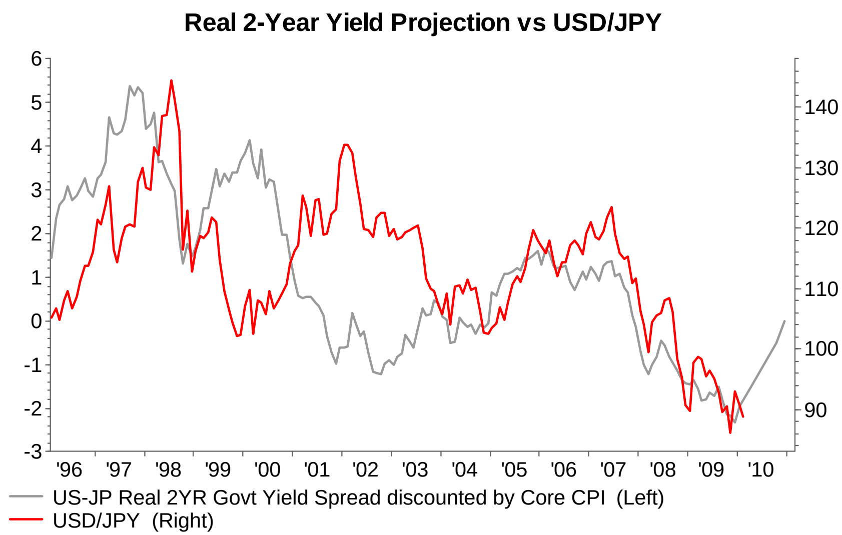


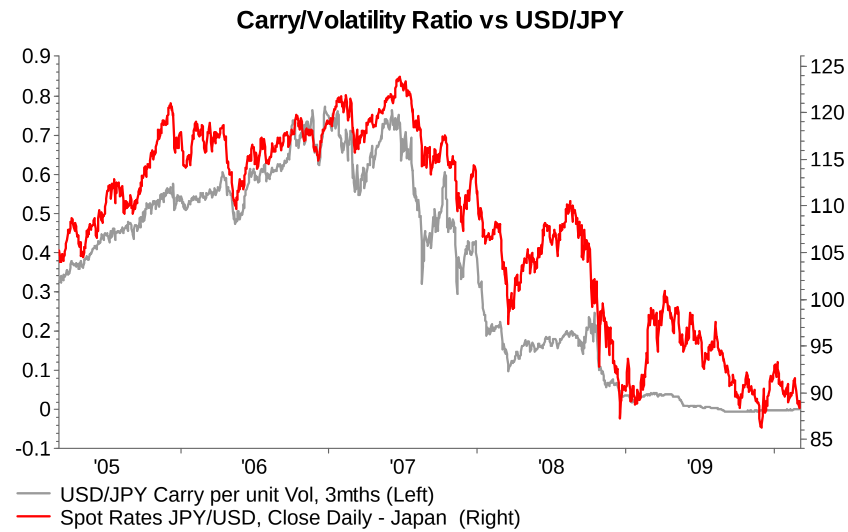
US-EZ 10-Year Spread vs EUR/USD



- Fed-ECB policy divergence will break the Dollar/Equity correlation just like in 2005
- 10-year US-EZ government bond yield spread is signalling lower EUR/USD

BOJ policy exit well behind Fed exit – USD/JPY to move sharply higher

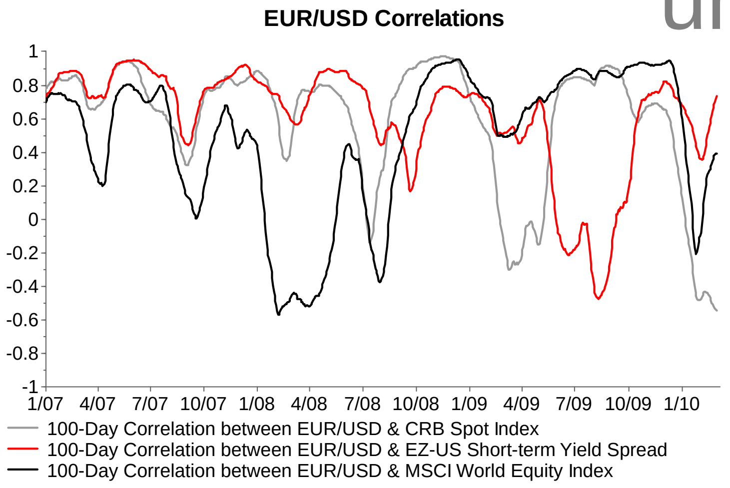


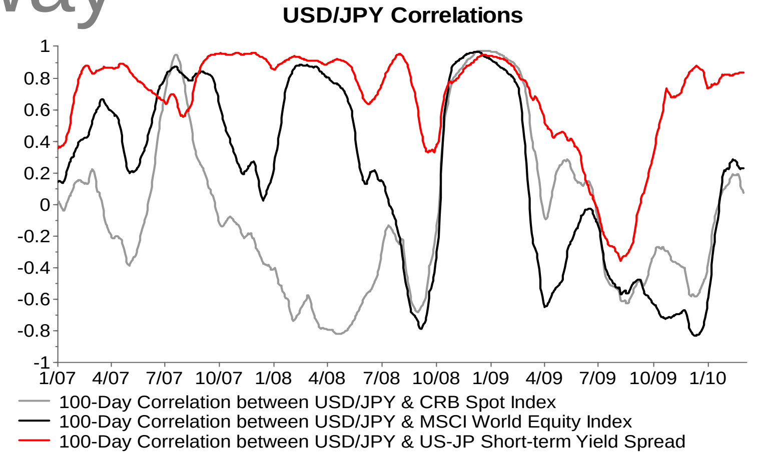


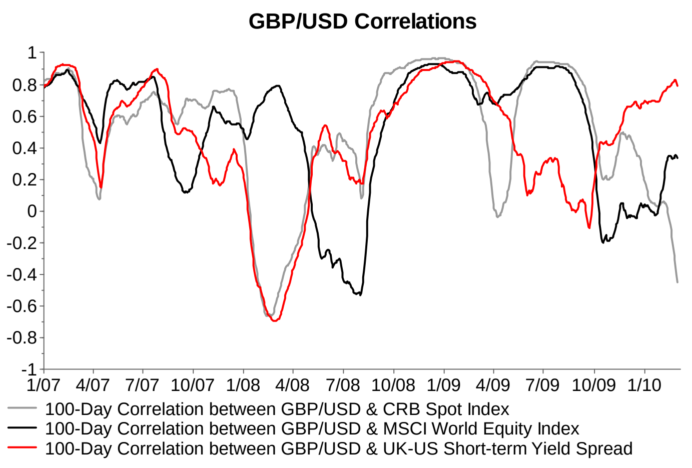
- Real 2-year US-Japan yield spread to spike sharply higher this year, potentially fuelling USD/JPY back above 100.00 by year-end

- Carry appeal will only slowly return. 3-month LIBOR spread moving back in favour of USD

Correlation shift in foreign exchange already underway



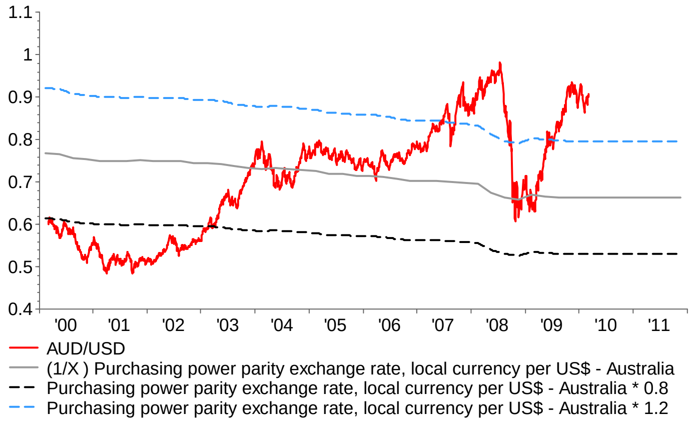




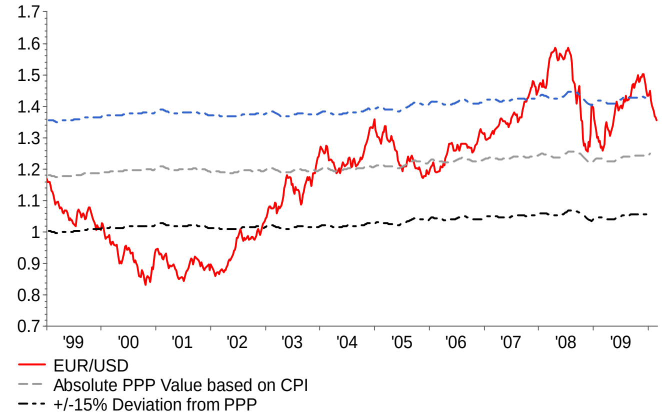
- For the first time since the onset of the financial crisis in 2007 short-term yield differentials are the single most important correlation for EUR/USD and GBP/USD. For USD/JPY it has happened before but not on as sustained a basis as now

QE has distorted FX valuations – distortion to unwind as exit strategies proceed

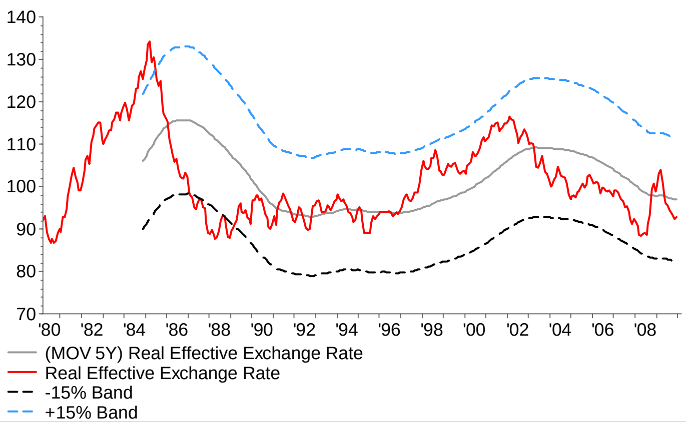
PPP Value of AUD/USD - OECD



Absolute PPP Value of EUR/USD - Based on All CPI



USD Effective Real Exchange Rate



- AUD, CAD, EUR & NZD all recovered close to pre-crisis highs after the introduction of QE by Fed and BOE in March 2009. Early stages of renewed declines are underway