AGENDA – THREE TOPICS

1. Result of the latest BIS triennial central bank survey
2. Recent euro resilience against the US dollar
3. Overview of gold price developments
**FX TURNOVER - CORE THEMES**

- Daily FX turnover increased to $5.3trn in April 2013, from $4.0trn in April 2010.
- Daily FX turnover is rising at a faster pace of 35%; outpacing the 2007/2010 growth rate of 19%.
  - USD is the dominant currency with an 87% share.
  - AUD is the 5\textsuperscript{th} most actively traded currency, with a rising share.
- Share of turnover: importance of EM, with both MXN & CNY in top 10 most active.
BIS – THE MAJORS’ SHIFTING TURNOVER

THE MAJORS-DISTRIBUTION OF GLOBAL FX TURNOVER (%)

Source: BIS, Scotiabank FX Strategy

- USD is dominant and reclaiming share.
  - EUR’s share is falling - accounts for 33% of all turnover.
  - EUR – 2010 volumes were likely impacted by the EURCHF floor.
  - JPY is reclaiming lost share – but also story of the year.
BIS – TURNOVER BY EUR PAIR ($) VS SAME USD PAIR
BIS – G10 CURRENCIES LOSE SHARE TO EMERGING MARKETS & OCEANIA

SINCE 2001 THE ADVANCED ECONOMIES ARE LOSING SHARE TO EM
Percentage point change in share 2001 to 2013

- Drop in EUR share is a shift from G10 to EM (Europe, Latam & Asia) & Oceania.
  - This is a G10 and less a EUR story.

GEOGRAPHICAL DISTRIBUTION OF GLOBAL FX TURNOVER

eg: in 2001 the USD had 89.9%; this has fallen to 87.0% in 2013 = 2.9%

Source: BIS, Scotiabank FX Strategy
**BIS – CONCENTRATION IN ‘OTHER FINANCIAL INSTITUTIONS’**

**TURNOVER BY COUNTERPARTY HIGHLIGHTS IMPORTANT SHIFT TO HFT**

- Most of growth in other financial institutions.
- High frequency trading proves to be important component.
- Rising volumes do not equate to increased liquidity.
- Misunderstanding rising volumes could leave markets vulnerable when they need liquidity the most.
BIS – CONCENTRATION OF GEOGRAPHY

DISTRIBUTION OF GLOBAL FX TURNOVER

- Trading is increasingly concentrated in the major centers, particularly the UK.
- European trading centers are losing share.
BIS TRIENNIAL CENTRAL BANK SURVEY – CORE THEMES

1. Turnover increased to $5.3trn but does not necessarily equate to higher liquidity.
2. Rising concentration in geography of trading activity.
3. Shifting importance of counterparties.
4. Increasing importance of high frequency and algorithmic trading.
5. EUR is losing share; but 2010 vs 2013 data magnifies overall trends.
6. G10 is losing share to EM and Oceania.
7. EM is gaining share with MXN & CNY in top 10 for the first time.
EUR: RECENT RESILIENCE AGAINST THE USD

GETTING LOST IN THE NOISE
EUR RESILIENCE – ACTUAL VERSUS FORECAST

EUR SPOT VERSUS DECEMBER 2013 CONSENSUS FORECASTS

EUR RALLIES - DEFYING BEARISH OUTLOOK

- EUR defies bearish forecasts and rallies 4.5% ytd (to October 22, 2013).
- As of Dec 2012, consensus forecast was for EUR to close Dec 2013 at 1.27 (a 4% depreciation).
  - Forecasters did not waver in bearish outlook, even as spot rallied.
- Forecasters focused on EUR side of equation; but it was USD side that drove EUR in first three quarters.
EUR RESILIENCE – ACTUAL VERSUS FORECAST

EUR OR USD DOMINANCE

EUR STORY

USD STORY

USD STORY

EUR

USD

US$ trade wght

Dec 2012 | Mar 2013 | Jun 2013 | Sep 2013

USD, NOT EUR, PROVES DRIVER OF EURUSD IN 2013

• EUR drove rally in late 2012 and early 2013.
  • USD has driven EUR rally in summer and fall of 2013:
    - Central bank policy, the growth outlook and politics have all weighed on USD.
      • The bearish EUR side has been ignored.
EUR RESILIENCE – RELATIVE CENTRAL BANK POLICY

RELATIVE MONETARY POLICY

• ECB – as data improved, ECB tone was stable, rising EUR is not perceived as a threat (yet).
  • ECB – balance sheet declines on LTRO repayments.
  • FED – aggressive balance sheet growth continues.
  • Flows have supported EUR side.
EUR RESILIENCE – RELATIVE CENTRAL BANK POLICY

**EXPECTATIONS FOR QE TAPERING**

- Fed expectations and how they have changed over the year.
- QE tapering – volatile during year, at times supporting the USD and vice versa.
- QE completion – was pushed out, weighing on USD.

**US FED POLICY PROVES USD NEGATIVE**

Source: New York Fed Primary Dealer Survey, Scotiabank FX Strategy
EUR RESILIENCE - GROWTH

GROWTH FORECASTS SHIFT IN EUROPE’S FAVOUR

- Eurozone - in the early summer growth outlook undergoes positive shift.
  - US – in early summer growth outlook is still be revised lower.
  - Diverging growth outlooks play into currency sentiment.
EUR RESILIENCE – FROM CRISIS TO STABILITY

EURO-CENTRIC UNCERTAIN FADES & SUPPORTS EUR

Source: Scotiabank & Economic Policy Uncertainty

EUROZONE UNCERTAIN FADES

• Economic policy uncertainty is an important market driver.

Index:

- Newspaper coverage of policy related economic uncertainty.
- Disagreement among economic forecasters as a proxy for uncertainty.
EUR RESILIENCE – CONFIDENCE & SENTIMENT

CONSUMER CONFIDENCE DIVERGES

EC consumer confidence Eurozone

US Michigan consumer confidence

Source: Bloomberg, Scotiabank FX Strategy

EUR NET POSITION - SHIFTING

Source: Bloomberg, Scotiabank FX Strategy

DIVERGING CONSUMER CONFIDENCE

- Consumer confidence diverges in Europe and the US.
- EUR sentiment shifts increasingly bullish in the spring.
  - Powerful near-term drivers.
EUR RESILIENCE – FX RESERVES

FX RESERVE MANAGERS MAKE IMPORTANT BUYER OF EUR

- EUR allocations in $ are constant – even as percentage falls.
  - EUR percentage of reserves – likely bottoming.
- Diversification of reserves is an important short-term driver.
EUR: RECENT RESILIENCE AGAINST THE USD – CORE THEMES

1. A lot of noise clouds the outlook.

2. Drivers of EUR:
   - Relative central bank policy
   - Growth outlook and changes in outlook
   - Politics
   - Level of uncertainty
   - Sentiment

3. Market focused on USD side of equation.
GOLD: A DECLINE IN DEMAND, SUPPLY AND PRICES

GOLD – DEMAND & PRICE FALL

Source: Bloomberg, World Gold Council, Scotiabank FX Strategy

GOLD PRICES LOSE THEIR SHINE

- Gold peak: $1,921 on September 6, 2011.
- Gold (mid October at $1325) is down 32% from its peak.
- Demand has been trending lower since Q3 2012.
GOLD DEMAND – SHIFTING DEMAND TRENDS

HISTORICAL GOLD DEMAND

- **Largest demand:** jewellery.
- **Largest fall in demand:** investment.
- **Steady demand:** technology (& official sector to lesser extent).

BROAD DEMAND THEMES

Source: World Gold Council, Scotiabank FX Strategy
GOLD DEMAND – JEWELLERY, THE IMPORTANCE OF INDIA & CHINA

BROAD DEMAND THEMES

- Jewellery demand is rising as prices fall.
- China & India jewellery demand in Q213 accounted for 60% of total gold demand.
- Risks: India imposes gold import duties of 10% - creating confusion & weighing on demand.
  - Risks: China’s demand has been strong, fears building that they are overstocked.
GOLD DEMAND – INVESTORS DIVERGE

GEOGRAPHY OF GOLD & DIVERGING DEMAND

- ETF – before crisis demand positively linked with bar/coin demand.
- NA & Europe: shift to other assets on changing safe haven demand, Fed policy & commodity super-cycle.
  - Asia: Gold as form of protection against currency depreciation.

Source: World Gold Council, Scotiabank FX Strategy
GOLD DEMAND - THE GEOGRAPHICAL SHIFT

GEOGRAPHY OF PHYSICAL vs ETF DEMAND

PHYSICAL DEMAND – 12MTH ENDED Q2 13

- ASIA 62%
- EUROPE
- US / NA
- OTHER

ETF HOLDINGS AS OF Q1 13

- North America 61%

Source: World Gold Council, Scotiabank FX Strategy

GEOGRAPHY & GOLD MARKETS

- Asia: physical demand is significant; ETF market less developed.
- North America (NA) & Europe – well developed ETF markets.
GOLD – FAILS TO RALLY WITH USD WEAKNESS

USD, GOLD AND CORRELATIONS

GOLD AND THE USD – CORRELATION BREAKS DOWN

- USD trending lower
GOLD PRICE DEVELOPMENTS

General Drivers

• Safe haven demand
• Inflation fears
• Central bank policy - unconventional
• The US dollar / currency devaluation
• Portfolio diversification into commodities

Supply Drivers

• Official sector – sales expected to remain well below their ceiling
• Mine production – uncertain

Demand Drivers

• Jewellery – trend is positive but at risk
• Investment – dependent on unconventional policy developments
• Official & technology demand stable
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APPENDIX: EUR RESILIENCE – BUT OUTLOOK IS STILL WEAK

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>DEVELOPMENTS TO DATE</th>
<th>STILL NEEDED</th>
<th>CHANGE IN TAIL RISK</th>
<th>REMAINING TAIL RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Solvency / Fragmentation</td>
<td>1. LTRO - provided liquidity</td>
<td>SSM, SRM &amp; deposit insurance fund</td>
<td>increasing</td>
<td>high</td>
</tr>
<tr>
<td></td>
<td>2. Banking union plans</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Euro exit / bail outs</td>
<td>1. OMT</td>
<td>A framework for a closer fiscal union</td>
<td>decreased</td>
<td>medium</td>
</tr>
<tr>
<td></td>
<td>2. Ireland, Portugal &amp; Greece</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Politics</td>
<td>Italy, Germany, France</td>
<td>Solid political base across Europe</td>
<td>stable</td>
<td>medium</td>
</tr>
<tr>
<td>Government debt</td>
<td>Austerity</td>
<td>Balance between growth &amp; austerity</td>
<td>stable</td>
<td>medium</td>
</tr>
<tr>
<td>Growth</td>
<td>Improving growth outlook</td>
<td>Balance between growth &amp; austerity</td>
<td>stable</td>
<td>low</td>
</tr>
</tbody>
</table>

UPCOMING KNOWN RISKS

- Q1 2014 risks: AQR, parliament approval of SRM, Ireland program concludes.
- Q2 2014 risks: Council to approve SRM, EBA stress tests.
- Q3 2014: ECB & SSM, Portuguese program concludes.
- Q4 2014: Greece program concludes.