Exploring Trade Finance

*In the Context of the MacroEnvironment*

Sameer Sehgal, Head of Global Trade, Europe, Middle East and Africa
Agenda

- Global Macro Trends and Environment
- Digitisation Trends Overview
- Regulation and Compliance Trends Overview
- Possible Implications of Basel III
- Case Studies
1. Global Macro Trends and Environment
Polling Question #1

What is your sentiment on the macroeconomic environment over the next year?

A. Will improve

B. Will stay as is

C. Will worsen
Polling Question #2

What is your sentiment on the *geopolitical* situation over the next year?

A. Will improve

B. Will stay as is

C. Will worsen
Environment

Abundant liquidity caused massive spread declines in 2013 and 2014. Intense competition in world of two extremes (Liquidity vs. Trade). Trade industry is at an inflection point.

- Easy Money: With accommodative monetary policies and asset purchase programs, the market has been flushed with liquidity for an extended period now. Even while the Fed has begun tapering, liquidity still remains abundant. ECB lowered interest rates. European Banks continue to focus on Trade as short-term lending driving spreads down in addition the UK government is supporting trade through bespoke programmes. Quantitative easing announced in Europe, sovereign bond buying programme of €60 billion a month, which would come to €1.1 trillion through 2016.

- Interest Rates: On a global basis interest rates are the lowest they have ever been. There is talk of US and UK int. rates moving up but on the short-term trade front there is minimum impact expected.

- Macroeconomic slowdown: Germany with its Export surplus reducing first time in years. China’s growth rate of 7.1% lowest since 2009 global financial crisis 6.6%. Oil prices stabilise around $50, 50% drop YoY March15 vs. '14. Shale oil companies facing credit crunch.

- Geopolitical Risks: Sovereign concerns around Russia, Ukraine, Syria and Iraq. Russia and Ukraine crisis has created enormous stress globally. Ghana facing FX concerns earlier in 2014, Ebola in West Africa, Nigerian presidential elections took place in March, UK general elections in May. Turkey, Portugal, Spain elections later in the year. Post Greek parliamentary elections – exit EU?

- Basel III Impact: Banks are seeing a delayed flight to quality with non-investment grade credit being priced aggressively. Banks are focusing on revenues with asset spreads coming into sharper focus. New US Rules announced bringing the following two areas in line with global standards – calculation of supplementary leverage ratio and one Year Floor on Maturity when calculating capital.

1. Source: Business Insider; Political Violence Index 2015;
2. Emerging Markets includes Asia, LatAm and CEEMA. World Bank, BEA, WTO, BIS, CIRA, Citi GPS Global Perspectives and Solutions.
A Continuing Challenging Environment

Global Economic Output over the past 50 years shows a downward trend, with deeper recessions and week growth periods.

   - Credit and Liquidity Crisis
     - Aggressive risk taking by highly leveraged FIs
     - Loose credit policies fueled rise in consumer debt and home prices
     - Caused global recession as financial markets seized
     - Required massive amounts of fiscal stimulus, bank bailouts and bank b/s recapitalisation
     - US now experiencing modest recovery

2. **Euro 2009–2011**
   - Sovereign Debt/Bank Crisis
     - Deficit spending led to rising government debt
     - Significant sovereign downgrades with spillover impact on banks who held sovereign debt
     - Fiscal austerity and credit crunch led to EU recession
     - Required massive amounts of bailouts within the EU for governments and banks, many of which were nationalised
     - Challenges linger but an absence of new bad news

3. **Emerging Markets 2013/2014**
   - Slowdown and Volatility
     - Recent decline in EM GDP growth and stock indexes
     - FX rates plunge for Brazil, Russia and India
     - Triggered by collapse of G10 imports and China slowdown – tighter US fiscal policy will take a toll
     - Many EMs have responded by fueling rapid credit growth, loosening fiscal policy and launching new infrastructure projects

4. **What is Going to be Next? 2015 Onwards**
   - Uncertain Outlook
     - Secular Stagnation
     - Stalling Globalisation
     - Lowflation
     - Commodity prices
     - FX and Monetary Policies
     - Geopolitical Risks/Political Elections
     - China slowdown
     - Eurozone/Greece

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World GDP Growth (Annual %) (1961–2013)

![Graph showing World GDP Growth with Boom, Recession, Volumes and Spreads are down]
## Trends that are Shaping the World

### Key Themes
- More Cross-Border than domestic
- More Urban than Rural
- Aging Population
- Channels redefined
- More and diverse Regulation
- Safer, less proprietary and less speculative

### Globalisation
- **Past (1990)**
  - Exports share of GDP: 17%
  - USA JPN CHN
  - Largest world economies
- **Present**
  - Exports share of GDP: 26%
  - USA CHN JPN
  - Largest world economies
- **Future (2017–2020)**
  - Exports share of GDP: 33%
  - CHN USA IND
  - Largest world economies

### Urbanisation
- Past (1990)
  - 43% world population in cities
  - 9% world population >60 y ears old
- Present
  - 52% world population in cities
  - 11% world population >60 y ears old
- Future (2017–2020)
  - 60% world population in cities
  - 17% world population >60 y ears old (2030)

### Digitisation
- Past (1990)
  - Mobile broadband subscriptions: None
  - Internet users: Nominal
  - Web browser introduced in 1992
- Present
  - Mobile broadband subscriptions: 1.4bn
  - Internet users: 2.4bn
  - 34% global penetration
- Future (2017–2020)
  - Mobile broadband subscriptions: 5bn (2017)
  - Internet users: 3.5bn (2017)
  - 50% global penetration

### Regulation
- Major New Regulation passed every 15-20 y ears
- 1950 – Office of Foreign Asset Control
- 1970 – Bank Secrecy Act
- 1986 – Money Laundering Control Act
- Increasingly complex banking rules passed at an escalating pace in the past 13 y ears, with indications that pace will continue …

### Note:
Primary Sources: EIU, Roland Berger, United Nations Statistics, Forrester Research, Citi Analysis.
Quantitative Easing (‘QE’) and Negative Interest Rates

Key Updates
- 22 January – ECB announced the ‘QE’ programme under which it will buy €60 billion of public and private debt securities per month, until end-September 2016 and a sustained adjustment in the path of inflation is seen.
- Will this QE be enough?
  - We estimate €1 trillion balance sheet expansion could add 1pp to nominal GDP growth.
  - Inflation is likely to remain still well below target.
- Bank of England first rate increase now expected for early 2016.
- Recent Central Bank rate cuts in Europe:
  - 15 January – Swiss National Bank moved its deposit rate for CHF to negative 75bps.
  - 6 February – Danish Central Bank moved its deposit rate for DKK to negative 75bps.
  - 18 March – Sweden Central Bank moved its repo rate to negative 25bps.

Points to Ponder

1. Benchmarks have Moved
2. Documentation
3. Trapped Liquidity

Source: Citi Research February 2015.
Trade Business Trends

Trade industry is at an inflection point – we must adapt and collaborate to remain relevant.

- Increased Sovereign and Credit Risk
- Liquidity Coverage Ratio has Challenged Correspondent Banking Model
- Market Pricing is Unrealistic
- Compliance Increasingly Complex and Expensive
- Supplementary Leverage Ratio has become a Constraint
- Basel III is Forcing us to Reinvent how we Use our Balance Sheets

Trade Business Trends
Polling Question #3

What think will be the main macro driver in the next 12 months?

A. Interest Rates

B. Oil Price

C. Emerging Markets Economic Slowdown

D. Political Transition
2. Digitisation Trends Overview
There is Massive Disruption along the Value Chain

<table>
<thead>
<tr>
<th>The New Entrants</th>
<th>Traditional Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alibaba.com</td>
<td>VISA</td>
</tr>
<tr>
<td>Tencent</td>
<td>monitise</td>
</tr>
<tr>
<td>TOPSY</td>
<td>Apple</td>
</tr>
<tr>
<td>Facebook</td>
<td>MasterCard</td>
</tr>
<tr>
<td>Amazon</td>
<td>Cue</td>
</tr>
<tr>
<td>Google</td>
<td>Burstly</td>
</tr>
<tr>
<td>Samsung</td>
<td>Oculus VR</td>
</tr>
<tr>
<td>NeuroLogica</td>
<td>Pvt Sense</td>
</tr>
<tr>
<td>novadod</td>
<td>Embark</td>
</tr>
<tr>
<td>Global Blue</td>
<td>Prime Sense</td>
</tr>
<tr>
<td>Onavo</td>
<td>AlgoTrim</td>
</tr>
<tr>
<td>91 Wireless</td>
<td></td>
</tr>
<tr>
<td>LEJU</td>
<td></td>
</tr>
<tr>
<td>Student Loan Corp</td>
<td></td>
</tr>
</tbody>
</table>

Potential Payment Targets
- ebay / PayPal
- klarna
- stripe
- Square
- LendingClub
- globalcollect
- Placecast
- Qiwi
- Dunnhumby
- adyen
- dunhumby
- Global Blue
- EMVCo

For certain technology giants, their ability to disrupt the payment ecosystem may occur through commoditisation of the payment function, rather than through disintermediation/acquisitions.

Source: Company filings, MergerMarket, CapIQ and FactSet.
1. Represents minority investment.

~US$50bn acquisition/investments since Jan 2013
Digital Trends have Completely Reshaped Other Industries

**Physical World**

- Netflix
- Google
- Tower Records
- Airbnb

**Digital World**

- Netflix (Streaming)
- Google
- iTunes
- Airbnb

**Disrupted Industry: Physical vs. Digital Market Share**

- **(US, over 10 Years)**
  - 44% Average Share Shift

**Digital Trend: Mobile**

- **CAGR**
  - 56%
- 2013
  - 22%
- 2012
  - 20%
- 2011
  - 18%
- 2010
  - 16%
- 2009
  - 10%
- 2008
  - 8%
- 2007
  - 6%
- 2006
  - 4%
- 2005
  - 2%
- 2004
  - 1%

**Installed Devices as a % of Global Population**

- 2004: 7%
- 2005: 10%
- 2006: 18%
- 2007: 25%
- 2008: 27%
- 2009: 30%
- 2010: 32%
- 2011: 34%
- 2012: 36%
- 2013: 38%


**Travels**

- Video
- Newspaper
- Music
- Best Fit

**Year of Disruption**

- 2004
- 2005
- 2006
- 2007
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013

**Disruption**

- Travel
- Video
- Newspaper
- Music
- Best Fit
Polling Question #4

*Traditional Trade is mainly paper based – Do you see a transition to a fully automated/digitized STP approach for Trade transactions?*

A. Yes

B. No
Optical Character Recognition (OCR) – The Way Forward

Today’s Process

- Paper-based, manual process
- Prone to typos when processing
- More volume = more people required to process

Tomorrow’s Process

- Automated text extraction
- Reduces human error
- Generates capacity
Mobile Capabilities: Citi’s Trade Advisor

Immediate information at the press of a button
• Provides real-time details on the status of Letters of Credit, Document Presentations, Collections and Open Account Transactions

Available anywhere and everywhere
• Free of charge to banks, importers, exporters and virtually any party involved in a trade transaction processed by Citi
• Counterparties of clients can find out the same information without having to call the client or Citi
• Browser-based solution, allowing for access from any device that can connect to the internet – no smartphone requirements or app downloading necessary

Simple but advanced search options for fast, accurate results
• Only five simple search fields are required before transaction information can be searched
• Additionally, users can find out the status of Amendments, Bill Payments, and Courier Details
Efficiency

Declining margins
- Convert from fixed to variable costs
- Gain access to a global network to capture end to end transactional flows

Infrastructure Needs
- Limited flexibility to move to lower cost locations

Technology Requirements
- Legacy back office platforms are still in use
- In house expertise to manage a complex system conversion is not readily available

Regulatory Environment
- Cause for concern with regards to Basel III, AML, KYC, etc.
- Manual processing exposes greater risk for error

Need to Enhance Revenues
- New products and additional revenue streams
- Improve speed to market of new product offerings
- New products have high fixed and other hidden costs

Technology Requirements
- Client-facing systems are difficult to integrate
- Total technology commitment to upgrade is not justified by the ROI
- Implement new capabilities (open account trading, TSU, Payment Investigations, etc.)

Operational and Technical Expertise
- Expertise to support new capabilities
Choosing the Right Strategy

• Build vs. Buy Decisions
  – Core functionality that cannot be outsourced: Assess upfront costs of developing and maintaining infrastructure in house
  – Build infrastructure
  – Partnership for add-on services

• Partnerships can Provide
  – Shorter time to market for new products
  – Variable cost structures
  – Leverage “best of breed” solutions
  – Eliminate the need for upgrades based on various industry and regulatory changes
  – Define your objective for partnership upfront

• Define your objectives upfront
3. Regulation and Compliance Trends Overview
Compliance is Increasingly Complex and Expensive

Continued strengthening of KYC, AML and other regulatory increase the time, cost and risk of Trade – investments in large scale technology to address compliance requirements is the only practical solution.

**Increasingly Complex Banking Rules Passed at an Escalating Pace …**

- Office of Foreign Asset Control
- Money Laundering Control Act
- Dodd-Frank Law
- US Foreign Account Tax Compliance Act (FATCA)
- USAPA Certificate Benchmarking
- Bank Secrecy Act
- USA PATRIOT Act

**… With Heavy Fines for Compliance Errors Recently Banks have Paid US$5 Billion in Penalties**

<table>
<thead>
<tr>
<th>Bank</th>
<th>Year</th>
<th>Fine (in Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSBC</td>
<td>2012</td>
<td>667</td>
</tr>
<tr>
<td>Standard Chartered</td>
<td>2012</td>
<td>619</td>
</tr>
<tr>
<td>ING Bank</td>
<td>2012</td>
<td>536</td>
</tr>
<tr>
<td>Credit Suisse</td>
<td>2009</td>
<td>500</td>
</tr>
<tr>
<td>ABN Amro</td>
<td>2010</td>
<td>350</td>
</tr>
<tr>
<td>Lloyds</td>
<td>2009</td>
<td>298</td>
</tr>
<tr>
<td>Barclays</td>
<td>2010</td>
<td>259</td>
</tr>
<tr>
<td>Bank of Tokyo-Mitsubishi</td>
<td>2012/2013</td>
<td>152</td>
</tr>
<tr>
<td>Clearstream Banking</td>
<td>2014</td>
<td>100</td>
</tr>
</tbody>
</table>

**Penalised**
Fines and forfeitures paid in US sanctions-violations and money-laundering cases, in millions

The total amount spent on remediation can be equivalent to the fine itself, considering expenses related to hiring of external counsel and consultants, technology improvements, staffing, etc.

Source: Department of Justice, OFAC filings; The Wall Street Journal.
Decade of Regulatory and Industry Changes

We are Living in the Decade of Regulation

Figure from World Payments Report, 2012, pg 22, issued by Capgemini, RBS and EFMA

Start of the Initiative/Regulation (If ≥2010)
Intermediate Point/Milestone
End of the Initiative/Regulation
Elapsed Time
KRIIs Previously Cited in WPR 2011
KRIIs Introduced in WPR 2012
Basel III – Overview

Basel III introduces radical changes in capital rules, new liquidity and leverage ratios as well as additional rules for global systemically important banks, making capital expensive and capital deployment finite.

### Basel III Overview

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Minimum Common Equity (CET1)</td>
<td>2.0%</td>
<td>2.0%</td>
<td>3.5%</td>
<td>4.0%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Deductions from CET1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>20%</td>
<td>40%</td>
<td>60%</td>
<td>80%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Minimum Tier 1 Capital</td>
<td>4.5%</td>
<td>5.5%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
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</tr>
<tr>
<td>Minimum Total Capital</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
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<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Capital Conservation Buffer (CCB)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>0.625%</td>
<td>1.25%</td>
<td>1.875%</td>
<td>2.5%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Min. Total Capital and CCB</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.625%</td>
<td>9.25%</td>
<td>9.875%</td>
<td>10.5%</td>
</tr>
</tbody>
</table>

### Counter Cyclical Buffer

<table>
<thead>
<tr>
<th>Counter Cyclical Buffer (If Triggered)</th>
<th>Up to 0.625%</th>
<th>Up to 1.25%</th>
<th>Up to 1.875%</th>
<th>Up to 2.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Loss Absorbency for Systematic Importance</td>
<td>TLAC will Apply as Additional G-SIB Requirement from 2019</td>
<td>Phase in</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Maximum Total Capital for G-SIB including Counter Cyclical Buffer

<table>
<thead>
<tr>
<th>Leverage Ratio</th>
<th>Parallel Run with Disclosures 2015+</th>
<th>3%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid Ratio</td>
<td></td>
<td>3%</td>
</tr>
<tr>
<td>Liquidity Coverage Ratio (LCR)</td>
<td>Observation Period</td>
<td>≥60%</td>
</tr>
<tr>
<td>Net Stable Funding Ratio (NSFR)</td>
<td>Observation Period</td>
<td></td>
</tr>
</tbody>
</table>

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1. Deferred Tax Assets (DTA), Mortgage Servicing Rights (MSRs) and equity ownership of other financial institutions is capped each at 10% of CET1 and combined at 15% of CET1; phased out completely by 2018; 2. Additional requirement is for CET1 for G-SIBs; proposed 25 June 2011. Additional 1% is required for banks in the 2.5% category who increase their systematic importance; 3. Test run at 3% during observation period before figure set for 2018+; 4. Proposed but not final ratio.
## Regulatory Arbitrage

<table>
<thead>
<tr>
<th></th>
<th>US Proposal</th>
<th>Global Basel III</th>
<th>EU Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital Phase-out</strong></td>
<td>• Faster phase-out of non-qualifying capital (3 vs. 5 years)(^1)</td>
<td>• 5 year phase-out for non-qualifying capital starting in 2014</td>
<td>• Same as Global Standards</td>
</tr>
<tr>
<td></td>
<td>• TARP preferred stock continue to qualify as add’l Tier 1 Capital</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Countercyclical Capital Buffer</strong></td>
<td>• Applies only to Advanced Approach Banks(^2)</td>
<td>• 2.5% Common Equity Tier 1 Capital for all banks</td>
<td>• Same as Global Standards</td>
</tr>
<tr>
<td><strong>Approach to Calculating RWA</strong></td>
<td>• Large Banks(^2) – Standard and Advanced approaches</td>
<td>• Large Banks – Advanced approach</td>
<td>• Same as Global Standards</td>
</tr>
<tr>
<td></td>
<td>• Small Banks – Standard only</td>
<td>• Small Banks – Standard approach</td>
<td></td>
</tr>
<tr>
<td><strong>Leverage Ratio</strong></td>
<td>• Existing 4% Tier 1 capital ratio with Credit Conversion Factor for off-balance sheet assets like LCs</td>
<td>• Min 3% of tier 1 capital of a combination of ALL on- and off-balance sheet assets</td>
<td>• Min 3% of tier 1 capital ratio with Credit Conversion Factor for off-balance sheet assets</td>
</tr>
<tr>
<td></td>
<td>• And also adds Global Standard for Large banks</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Liquidity</strong></td>
<td>• LCR has been adopted in 2014 and is in force since Jan 2015. NSFR is going to be consulted on by the agencies this year and is expected to be applicable from 2019.</td>
<td>• New liquidity ratios (LCR and NSFR)</td>
<td>• LCR has been adopted as in being phased in from 2015, in line with Basel III transition approach</td>
</tr>
<tr>
<td><strong>Tenor</strong></td>
<td>• Appears to exempt only Trade L/Cs from 1 year floor; previously exempted all Trade instruments</td>
<td>• 1 year floor, except Trade L/Cs</td>
<td>• Broader definition of Trade instruments that are exempt from one year floor</td>
</tr>
<tr>
<td><strong>GSIB Surcharges</strong></td>
<td>• No specifics yet but indications there may be extra capital req’d for banks &gt;US$50 billion assets</td>
<td>• Additional 1–2.5% Common Equity Tier 1 Capital req’d for 29 named banks</td>
<td>• Same as Global Standards</td>
</tr>
</tbody>
</table>

1. Per Collins Amendment for banks over US$15 billion in assets; 2. For banks with over US$250 billion in total assets or more than US$10 billion in on-balance sheet foreign exposure.
4. Possible Implications of Basel III
Assets and Liabilities

Conclusions
- Pricing is increasing
- Immense focus on Corporate Deposits (Price up)
- Immense competition in the assets space (Flight to Quality/price down)
- Leads to an interesting squeeze towards efficiency and productivity
- Banks Balance Sheet might reduce

Industry Trends
- Consolidation
- Convergence
- Balance Sheet Optimisation
- Alternative Sources of Funding
- Originate to Distribute

Operations/OCR
Balance Sheet
Top 3 Trade Banks, Including Citi, are Driving Consolidation

Trade Market Share

<table>
<thead>
<tr>
<th>Year</th>
<th>Top 3 Trade Banks</th>
<th>Trade Banks Ranked 4–10</th>
<th>Rest of Trade Bank Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>85%</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>2009</td>
<td>81%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>2010</td>
<td>79%</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>2011</td>
<td>80%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>2012</td>
<td>79%</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Drivers of Consolidation

- Scale needed for cost efficiency
- Global network required to serve client’s global supply chain
- Required investment in technology and infrastructure
- Regulatory complexity and capital rules
- Access to USD funding
- Portfolio choices by banks to focus on core businesses

Source: Oliver Wyman report on Trade Market dynamics for market size; Top 10 Trade Bank size based on financial disclosures or estimates; Note: Citi figures include CCB and Trade SBLCs.
Polling Question #5

*Have you seen a pricing change due to Basel III?*

A. Yes

B. No
Basel III Presents a Challenge to Banks

Banks will increase pricing to meet required returns. Few have fully priced-in Basel III already. The biggest impact will be on Small-Medium Sized Enterprises (SME), especially in Emerging Markets.

New Regulatory Regime will Trigger Change

- **Pricing will rise:** Banks will eventually need to price to cover increased costs of holding more capital, liquidity and long-term funding. Margins on short-term working capital financing facilities may increase by 25–100%
- **Available bank credit will shrink:** Banks without global scale will struggle to meet returns on short-term financing to support their clients’ trade flows. Banks that do not consider Trade a core business will re-allocate capital elsewhere
- **Sub-investment grade borrowers will be hit hardest:** SME suppliers and distributors, particularly in EM, will be challenged to support their customers’ and vendors’ sales growth objectives
- **Relief may come from non-bank investors entering the Trade market:** Insurance companies, pension funds and other investors not subject to Basel III are beginning to recognise the attractiveness of Trade assets, offering potential liquidity for well-structured deals

### Significantly More Capital, Liquidity Required under Basel III

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2016</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Total Capital</td>
<td>8.0</td>
<td>8.6</td>
<td>10.5</td>
</tr>
<tr>
<td>Counter-cyclical Buffer (If Triggered)</td>
<td>0.0</td>
<td>0.6</td>
<td>2.5</td>
</tr>
<tr>
<td>Additional Capital for Global banks</td>
<td>0.0</td>
<td>0.0</td>
<td>1–3.5</td>
</tr>
<tr>
<td><strong>Total Capital, Maximum</strong></td>
<td><strong>8.0</strong></td>
<td><strong>9.5</strong></td>
<td><strong>16.5</strong></td>
</tr>
<tr>
<td>Minimum Liquidity Ratio</td>
<td>NA</td>
<td>70</td>
<td>100</td>
</tr>
<tr>
<td>Minimum Net Stable Funding Ratio</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
</tr>
</tbody>
</table>

### Basel III Impact on Working Capital Pricing

(Margin on 6 Month Loan by Credit Rating)

<table>
<thead>
<tr>
<th>Rating</th>
<th>Basel I (8% Capital)</th>
<th>Basel II (8% Capital)</th>
<th>Basel III (10.5–16.5% Capital)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>370 bps</td>
<td>60 bps</td>
<td>75–115 bps</td>
</tr>
<tr>
<td>BB—</td>
<td>370 bps</td>
<td>310 bps</td>
<td>400–650 bps</td>
</tr>
</tbody>
</table>

1. Assumes 50% efficiency rate. 2. Assumes advanced approach. 3. Assumes 1 year floor on tenor for Basel III. 4. Assumes bank is large enough to require 25% AVC and is from a non OECD country.
Polling Question #6

Do you believe that ‘Convergence’ will happen i.e. few Banks provide processing services?

A. Yes
B. No
Avalanche of new regulations and increased capital and liquidity requirements permanently changed the economics of financial services.

- European banks have reduced corporate lending by 9% in 2011 and 2012.
- Corporates are increasingly accessing capital markets and reducing reliance on borrowing from financial institutions.
- Citi’s credit exposures remained relatively flat in the region, despite significant de-risking in GIIPS, with growing market share.

**Credit Exposure, 2012**

- 13.5tn €
- 360bn €
- Capital/EAD (%)
  - Capital: 2.4, 3.4, 1.8, 1.5
  - EAD: 4.7, 0.4

**2010–2012 EAD Change**

- %
  - Securitisation: (29)%
  - Corporate: (9)%
  - Retail (Ex-mortgage): (9)%
  - Financial Institution: (9)%
  - Residential Mortgage: 12%
  - Sovereign: 26%

- EAD Change (€bn)
  - Securitisation: (168) €bn
  - Corporate: (441) €bn
  - Retail (Ex-mortgage): (172) €bn
  - Financial Institution: (167) €bn
  - Residential Mortgage: 276 €bn
  - Sovereign: 552 €bn
Polling Question #7

What do you think will be the biggest challenge of Basel III?

A. Internal Implementation Costs
B. Pricing and Returns
C. Regulatory Arbitrage
D. Any Other
5. Case Studies
Club Loans – Bridging the Global to the Local

The Big Picture
- Extensive funding need of local players
- Spread wars
- Intention to liquidity diversification
- Abundant trade flows
- Limited access to global markets
- Dependency on inward liquid flows
- Flexibility to adapt new structures

Execution Model – Benefits
- Upfront fee, skim fee and margin enhancement
- Leverage of Distribution Team
- Single and larger financing facility
- Introduction to new investors other than core relationships
- Optimisation of capital by distributing risk effectively
- Close partnership with Sales, Product and Banking teams
- Convenience for FIs
- PR coverage and branding opportunities

Structure

FI Client       Bilateral Trade Agreement       Citi

Financing Request

Participation Agreement

Bank A  Bank B  Bank C  Bank D

“Club” Structure
Export and Agency Finance (EAF)

Citi, acting as the Mandated Lead Arranger closed ECA-fronted financing for the acquisition of two (2) Airbus A320 aircraft, delivered in February and April 2013.

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrower</td>
<td>SPV set up for the transaction</td>
</tr>
<tr>
<td>Lessee</td>
<td>Company A</td>
</tr>
<tr>
<td>Lead Arranger</td>
<td>Citi</td>
</tr>
<tr>
<td>Lender</td>
<td>Company B</td>
</tr>
<tr>
<td>Guarantor</td>
<td>Company C</td>
</tr>
<tr>
<td>ECA</td>
<td>Multiples</td>
</tr>
<tr>
<td>Facility Amount</td>
<td>Confidential</td>
</tr>
<tr>
<td>Tenor</td>
<td>10+ years</td>
</tr>
<tr>
<td>Purpose</td>
<td>To finance acquisition of two A320–214 Airbus aircraft</td>
</tr>
<tr>
<td>Signing Date</td>
<td>June 2013</td>
</tr>
<tr>
<td>Citi’s Role</td>
<td>Mandated Lead Arranger</td>
</tr>
<tr>
<td></td>
<td>Advisor</td>
</tr>
<tr>
<td></td>
<td>Facility Agent</td>
</tr>
</tbody>
</table>

**Transaction Highlights**
- Company A is a flag carrier airline and operates both domestically and internationally. Company A aims to become a major player in the global market.
- Citi was mandated as Advisor and Lead Arranger for the ECA backed financing of two A320 aircraft.
- In an Advisory capacity, Citi assisted Company A throughout the ECA process, with a view of achieving the optimal financing structure.
- Agency D acted as fronting Agency for the European ECAs, seeking reinsurance from International Agencies.
- The loan facility benefited from a sovereign guarantee.

**Innovations**
- The loan facility enables Company A to continue its fleet renewal and expansion plan in an effort to better meet the demand of passenger and cargo transport.
- Despite turbulent market conditions and uncertain political situation in the country, Citi in its capacity as MLA and as sole advisor of this facility, brought in Company B to provide competitive financing for both aircraft.
- This transaction adds to Citi’s dominant position in aviation financing in the EMEA Region.
Company A – Export L/Cs, including Documentation Preparation

**Company**
- Company A

**Client Need**
- Company A was mandated to maximise downstream integration and therefore leading to significant ramping up of L/Cs volumes in a short period. Since the customer did not have the necessary infrastructure and expertise in handling these flows, they were looking for a bank to partner with who would provide them with their Export L/Cs needs which included Document preparation. They were relying on the partner bank with the requisite expertise and know-how to handle these substantial new flows without any disruption to their business.

**Origination**
- RFP was floated and 10+ banks both international and regional banks were competing.

**Deal Structure**
- Requirement was to handle around 10,000+ sales orders in a year
- Requirement under the structure included L/Cs advising, document preparation, negotiation and scrutiny of documents, payment services and confirmations of Letters of Credit

**Replication**
- Clients who have the need for an end to end solution for their Export L/Cs processing not wanting to substantially increase their in-house operations capabilities

**Key Takeaways**
- Company A is a key franchise name and this is a trophy deal to have with this name
- This deal – being a pilot as well – can be replicated to other big names

---

**Diagram: L/C Processing Flow**

1. Commercial Contract
2. L/Cs Opening Application
3. Import L/Cs Issued
4. L/Cs Advised to Company A
5. Shipment of Goods
6. (a) Citi Engages with Supplier to Prepare First Party Documents
   (b) Citi Engages with Counterparties to Prepare Third-party Documents
7. Documents Collated and Dispatched
8. Documents
9. Payment
10. Payment
11. Payment

**Counterparties**
- Shipping Agent, Surveyor, Chamber of Commerce, etc.
Target Operating Model for Insourcing

**Architecture**
- Transaction initiation
- Product inquiries
- Reporting
- Image retrieval
- Event notifications
- Other communications

**Customer Model**

<table>
<thead>
<tr>
<th>Touch-points/Handoffs</th>
<th>Group Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release of Transactions Initiated via CitiDirect</td>
<td>Group staff approves and releases transactions to Citi for further processing</td>
</tr>
<tr>
<td>Scanning of Non-electronic Applications, Amendments and Other Non-electronic Client Communication</td>
<td>If a Group client does not use CitiDirect and communicates instructions via other methods agreed between Company A and the client, Group staff would need to scan these items into System A for further processing by Citi</td>
</tr>
<tr>
<td>Document Release</td>
<td>Citi’s Penang RPC will coordinate with Group staff the release of documents to the applicant. Similarly, Citi’s Penang RPC will coordinate the release of documents pertaining to inward collections, after receiving instructions from Group staff</td>
</tr>
<tr>
<td>Handling of Transaction Inquiries</td>
<td>Group service staff will field all client transaction inquiries. Group will have access to Citi’s back-office capabilities on System A to access real-time transaction details and generate MIS reports</td>
</tr>
<tr>
<td>Handling of Technical Questions from White-labeled Front End Users</td>
<td>Citi will train Group staff to handle general queries related to CitiDirect and customer on-boarding</td>
</tr>
</tbody>
</table>
Company A – AR Financing

Company
- Company A is a leading communication services and equipment provider to several major global Telecom companies

Client Need
- Company A is selling a material amount of AR globally on quarterly basis and write out tenders to several banks (10+). The main purpose of the sale is to achieve Balance Sheet optimization by converting the ARs into Cash.

Origination
- TTS Trade and Banking teams have been actively pursuing Company A to participate in the AR Finance program

Deal Structure
- Deal was structured on a master agreement approved globally b/w Citi and Company A (same applicable locally)
  - Deal Size: Confidential
  - Obligors: Major global Telecom companies
  - Uncommitted, Limited Recourse, disclosed AR finance
  - Quarterly invoice discounting: Confidential
  - Booking vehicle: Confidential

Key Takeaways
- Selling AR to Citi can be an efficient tool for clients to achieve Balance Sheet enhancement – a very important goal for many corporates
- Quarter end and Year-end AR sale can be the most important
- Main focus is on the bilateral (1 seller - 1 buyer) AR purchase transactions with low complexity to ensure short execution time
- Credit support is crucial
Thank you