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The Impact of Basel III on the Cost of a Trade Finance Transaction

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Introduction

- Brief overview of Basel III capital & liquidity rules affecting trade finance
- Impact of capital & liquidity rules on the cost of trade finance
- Challenges and opportunities for trade finance
- It took the Great Recession, the Real Estate Crash & the Global Financial Crisis to swing the regulatory pendulum towards punishing levels of capital & liquidity; beware, that the third fact of life – business cycles, will bring upon us the next installment, be ready.

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More Capital: 1) new definition; 2) higher risk weights; 3) higher ratios; plus 4) buffers

Table 1: U.S. Dodd-Frank Act - Capital Ratios – Standardized - Approach						
	Pre-Basel III	Basel III				
	2014	2015	2016	2017	2018	2019
Leverage Ratio	3.0/4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Tier 1: Common Equity - RWA	NA	4.5%	4.5%	4.5%	4.5%	4.5%
Tier 1 Capital - RWA	4.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Total Capital - RWA	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Capital Conservation Buffer	NA	0.0%	0.625%	1.250%	1.875%	2.500%
Total Capital + Buffer	8.0%	8.0%	8.6%	9.3%	9.9%	10.5%
Notes: RWA is Risk-weighted assets. Source: FDIC, Final Rule, (2013)						

Advanced approaches banks – double the capital ratios

Table 3: U.S. Dodd-Frank Act - Capital Ratios - Advanced Approaches & G - SIBs						
	Pre-Basel III	Basel III				
	2014	2015	2016	2017	2018	2019
Leverage Ratio	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Supplemental Leverage Ratio	NA	3.0%	3.0%	3.0%	3.0%	3.0%
Tier 1: Common Equity - RWA	4.0%	4.5%	4.5%	4.5%	4.5%	4.5%
Tier 1 Capital - RWA	4.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Total Capital - RWA	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Capital Conservation Buffer (CET1)	-	0.0%	0.625%	1.250%	1.875%	2.500%
Countercyclical buffer (CET1) (*)			0.625%	1.250%	1.875%	2.500%
G-SIB Capital Surcharge (CET1) (*)			1.875%	2.250%	2.625%	3.000%
Total Capital + Buffers	8.0%	8.0%	11.1%	12.8%	14.4%	16.0%
Source: FDIC, Final Rule, (2013).						

Countercyclical: ratio changes periodically

G-SIB: Based on systemic risk profile

Most notable changes in risk weights pertain to trade finance exposure

Table 2: Standardized Approach to Risk Weighted Assets – Selected Categories*		
Claims on:	**Pre-Basel III**	**Basel III**
1-4 family homes	50% / 100% depends on underwriting & whether owner occupied	50 / 100% depends on underwriting & whether owner occupied
Corporate	100%	100%
High volatility R/E	100%	150%
Foreign governments & their central banks	0% OECD governments 20% conditional claims on OECD governments 100% non-OECD with	0 – 150%Dependent on OECD Country Risk Classification (CRC) 0% OECD members with no CRC 100% sovereigns with no CRC 150% if sovereign defaulted
Foreign banks**	20% in OECD countries 20% short-term claims on banks in non-OECD countries	20 – 150% depending on OECD status or CRC 100% if country does not have a CRC grade 150% if sovereign defaulted
Off-balance sheet CCF	0% commitment w maturity ≤ 1yr. & unconditionally cancellable 20% self-liquidating trade-related contingent items	0% commitment w maturity ≤ 1yr. & unconditionally cancellable 20% commitment w maturity ≤ 1yr. & not unconditionally cancellable 20% self-liquidating trade-related contingent items
Source: FDIC (2014)		

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OECD Methodology needs to be more responsive to changes in country risk

Section 939A of D-F Act: in determining creditworthy status regulators must "remove any reference to … or reliance on credit ratings."

Table 15: Country Risk Rating and OECD CRCs: The Case of Greece

	2006	2007	2008	2009	2010	2011	2012	2013
OECD CRC	0	0	0	0	0	0	0	U
Credit Events				1, 2	3	4	5	

1: In October 2009, Greek Government disclosed that the budget deficit had been substantially higher than initial estimates (15.6% of GDP).

2: S&P & Moody's downgraded Greece one notch in December 2009.

3: in April 2010 S&P downgraded Greek debt to junk status.

4a: in July, 2011 a debt "restructuring" with private sector involvement was negotiated by Euro-Governments. Agreement reached Regarding a 21% reduction in the net present value of Greek debt service.
4b: in October 2011 the debt "haircut" was increased to 50%.

5: March 2013 the International Swaps and Derivatives Association (ISDA) Ruled that a restructuring credit event had occurred.
U: high income Euro area country not reviewed as of 2013.

Source: OECD Historical CRCs, and M Xafa (2014)

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Cost of a trade finance transaction: Basel III vs. pre-Basel III – % difference standardized approach banks

Table 7: Total costs for trade transaction (capital & non-capital) - standardized approach banks

	Pre-Basel III	Basel III				
	2014	2015	2016	2017	2018	2019
Post- vs Pre-Basel III total costs (% difference)						
Claims on foreign bank	0.0%					
OECD CRC Ratings/RW:						
0 – 1: 20%		0.0%	0.2%	0.4%	0.6%	0.8%
2: 50%		4.0%	4.5%	5.0%	5.5%	6.0%
3: 100%		10.5%	11.6%	12.6%	13.6%	14.7%
4– 7: 150%		17.1%	18.7%	20.2%	21.8%	23.3%

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Cost of a trade finance transaction: Basel III vs. pre-Basel III – % difference advanced approaches banks

Table 10: Total costs (capital & non-capital) – advanced approaches banks

	Pre-Basel III	Basel III				
	2014	2015	2016	2017	2018	2019
Post- vs Pre-Basel III total costs (% difference)						
Claims on foreign bank	0.0%					
OECD CRC Ratings/RW:						
0 – 1: 20%		0.0%	1.2%	1.8%	2.4%	3.0%
2: 50%		4.6%	7.5%	9.1%	10.6%	12.2%
3: 100%		12.2%	18.1%	21.2%	24.3%	27.4%
4– 7: 150%		19.8%	28.7%	33.3%	38.0%	42.6%

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Liquidity rules & the Liquidity Coverage Ratio

High-Quality Liquid Assets (HQLA) is comprised of three categories of highly liquid assets:
Level 1 (excess deposits at FED, U.S. Government securities);
Level 2A, which receive a 15% value haircut/discount; and
Level 2B, which receive a 50% value haircut.

$$\textbf{FORMULA: } CR = \frac{HQLA}{Net\ cash\ outflow\ (30\ days)}$$

net cash outflow is based on contractual & prescribed outflows and inflows during a 30 day period, where the amount in the denominator represents the cumulative net outflows at day 30.

Who is subject to LCR rules? Banks with more than $50 billion in consolidated total assets:
Comprehensive (> $250 billion) and modified (> %50 billion) approach

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How LCR impacts the cost of trade finance

Table 11: Bank Deposit Outflows	
Retail Deposits	Outflows
Stable	3%
Other	10%

Note: a stable deposit is a retail deposit with 100% FDIC insurance.

1)

Table 12: Bank Commitment outflows	
Amounts available up to 30 days:	Outflow
Available to:	
Retail customer	5%
Liquidity facility to wholesale non-financial customer	30%
Credit and liquidity facilities to domestic & foreign banks	50%

2) *For a bank commitment, outflow Of 50%, bank has to invest that Amount in HQLA.*
Net cost of funds is as follows:

$$i_{Net\ Cost\ of\ funds} = \frac{i_{cost\ of\ funds} - (i_{yield\ on\ HQLA} \times CORate)}{1 - CORate}$$

3)

Table 15: Impact of HQLA on Net Cost of Funds		
	Fed Rate	3mTB
$i_{net\ cost\ of\ funds}$	0.30%	0.51%
$i_{cost\ of\ funds}$	0.40%	0.40%
$i_{yield\ on\ HQLA}$	0.50%	0.29%
CORate	50.00%	50.00%

Note:
the Fed Rate is the rate on deposits at the Fed, and the 3mTB is the three-month U.S. Treasury Bill rate.

- The LCR works through two channels:
  1. first, the cost of funds, which would increase the cost of a trade finance transaction; and

  2. the opportunity cost of funds invested in HQLA

     Example:

     In 2015 the average yield on bank loans was 3.93%, and the average interest rate on deposits at the Fed (HQLA) was 0.27%

Basel III & the cost of trade finance: Challenges & Opportunities

- Compliance: the other major impact on cost of trade finance
  - Trade-Based Money Laundering
- Opportunities in trade finance for regional banks
- Growth of world trade will drive the volume of trade finance and thus cost economies
- Other risks: interest rate and operational risks
- Monetary policy elements of the capital and liquidity rules

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Basel III & the cost of trade finance: Challenges & Opportunities

Thank You

Further details on the information in this presentation can be found in the following document:

***The Impact of Basel III on the Cost of a Trade Finance Transaction*, by Manuel Lasaga, May 23, 2016**