# LIQUIDITY STRESS TESTING – WHOLESALE DEPOSIT RUNOFF ASSUMPTIONS

Version	Date Change Made	Drafter	Reviewer	Approver	Description of Changes
V1.0	04/30/2016	Xiang Fang	Niraj Biswas	Min Li	Creation
V2.0	03/06/2019	Xiang Fang	Kexiang Xiang	Xiaowei Zhang	Transferred to TRY
V2.1	09/15/2020	Chulin Yan	Hongsheng Guo	Xiaowei Zhang	Revisit and Update

Identifying Information	
Title	Wholesale Deposit Runoff Assumptions
Procedure Owner	TRY
Contact Information	Hongsheng Guo, SVP
Effective Date	09/15/2020
Location	J:\1. Policy, Procedure & Plan\2. TRY Procedures
Document Type	Methodology Documentation

Approved by	Approved by					
Xiaowei Zhang,  SVP & Head of Treasury	Signature	Date: 9/15/2020				

Reviewed by		
Hongsheng Guo, SVP of Treasury	Signature	Date: 9/15/2020

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### SECTION 1. OVERVIEW

#### 1.1 EXECUTIVE SUMMARY

The purpose of this document is to describe the analysis and approach to Bank of China US ("BOCNY") assignment of wholesale deposit runoff rates for the purposes of Internal Liquidity Stress Testing (ILST). The TRY team has considered various benchmarks for calibrating runoff rates and has written this document to support the implementation of those rates in the ILST.

Throughout the development of this document, the Financial Institutions Department (FID), Corporate Banking Department (CBD), Treasury (TRY) and Market Risk Management Department (MRD) were engaged to holistically evaluate the bank's wholesale deposit business and provide feedback on stressed scenario wholesale deposit runoff assumptions. The following sections and appendix items provide a comprehensive description of the approach and initial results.

As part of this exercise, BOCNY reviewed a variety of internal and external sources to calibrate runoff rates associated with wholesale deposits. In addition, BOCNY engaged third-party support to obtain broader industry perspective.

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# SECTION 2. Calibrating Wholesale Deposit Assumptions

#### 2.1 SEGMENTATION

BOCNY has performed analysis to segment its wholesale deposit balances into categories with similar liquidity risk characteristics. Segmentation included the evaluation of multiple variables including counterparty type, product type, and FDIC insurance status. For wholesale deposits, additional consideration has been given to the classification as 'operational' versus 'excess' based on BOCNY's *Operational Deposit Methodology*.

The outcome of the segmentation analysis has segregated wholesale deposits into 5 primary categories based on counterparty type. These segments include:

- Banks
- Financial Institutions
- Corporates
- Affiliates
- Interbranch

Each of these segments is further bifurcated into operational and excess/non-operational categories.TRY also evaluated the impact of product type and FDIC insurance however it was determined that these attributes are not meaningful predictors of liquidity risk at BOCNY. In assessment of impact of product type, it was determined that customer funds are largely fungible across wholesale products, making placement of funds by product (e.g. DDA versus Investment accounts) a less meaningful indicator of liquidity risk. In assessment of impact of FDIC insurance - while balances insured by the FDIC are generally assumed to be less stress sensitive, the limited amount of insured wholesale balances (less than 1% of wholesale funds) reduced applicability to BOCNY's deposit base. BOCNY continuously monitors its wholesale deposit base and will adjust this segmentation as needed to reflect changes in the risk profile as part of its annual review process.

Note – Since Oct 2019, a new methodology was developed based on historical data and applied to FI non-maturity deposits, which differs from below process stated in 2.2 Calibration Approach. Please refer to 3.4 Financial Institutions or document: EPS LST MRA Remediation Resolution: Financial Institution Deposit Runoff And Unfunded Loan Commitment Drawdown Assumptions.

Exhibit 1. Deposit Balances by Segment

Segment	Balance as of August 31, 2016
Banks	23,256,822,654
Financial Institutions	1,318,056,274
Corporates	7,774,583,848
Interbranch	6,084,312,190
Affiliate	955,956,674
Total	39,389,731,642

Source: T24

#### 2.2 CALIBRATION APPROACH

#### **Inputs**

BOCNY utilized inputs from multiple sources to help calibrate stressed runoff rates for its wholesale deposit accounts. Runoff rates have been calibrated to capture expected behavior in each of the current stress scenarios (Systemic, Idiosyncratic, & Combined). Below is a summary of these inputs that were evaluated, where applicable, as part BOCNY's calibration process:

- 1. **Input from Business Lines** TRY conducted interviews with each of the major deposit business lines to help understand the nature of each unit's product offerings and customer base. Business lines also provided inputs on expected behavior in periods of stress.
- 2. **Internal Historical Data** BOCNY evaluated internal balance data from the GPS and T24 reporting systems for month-end dates spanning from March 2006 to August 2016. Usage of this data set was meant to capture balance fluctuations through stressed (2008 financial crisis) and non-stressed environments.
- 3. **Management Judgment** BOCNY evaluated each deposit segment based on a qualitative assessment of how account holders are expected to behave in periods of stress. This assessment is based on the economic intuition of each counterparty/product segment to serve as an overlay to quantitative analysis.
- 4. **Regulatory Benchmark** Runoff rates were compared to those prescribed in the Liquidity Coverage Ratio regulatory guidance for purposes of a sanity check. Variance between BOCNY's internal runoff rates and those included in the LCR were further assessed for reasonability.
- 5. **External Domestic & Failed Bank Data** BOCNY evaluated publicly available bank financial data, academic studies, and failed bank data to serve as additional benchmarks in the calibration of its stress runoff rates.

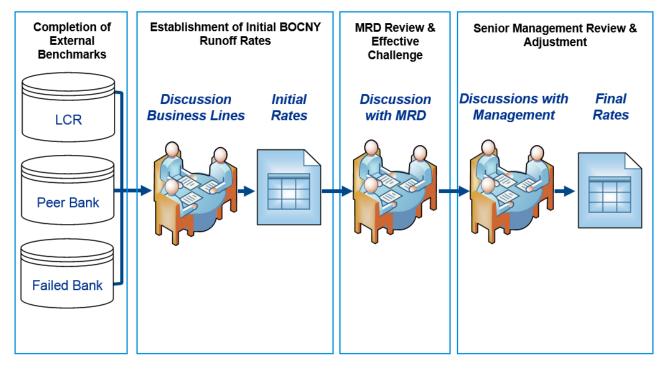
#### **Calibration Process**

Due to limitations of internal data, BOCNY utilized an iterative calibration process that leveraged externally available data as a starting point. Iterative process was designed to set runoff rates that (1) reasonably captured the potential behavior of wholesale deposits in periods of stress and (2) were sufficiently tailored to the size, complexity and risk profile of BOCNY deposits.

BOCNY did not experience liquidity stress through the 2008 Financial Crisis and has not subsequently experienced any meaningful idiosyncratic stress event. Furthermore, the reliability of internal historical data is reduced due to (1) the strong growth of balance sheet since 2008 and (2) relatively recent establishment and diversification of product offerings.

The below diagram represents the approach to deriving final runoff rates based on the various inputs.

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- Compilation of External Benchmarks Given the lack of meaningful internal data, BOCNY has
  opted to leverage external benchmarks as the starting point for its stress testing runoff rates. External
  benchmarks include a compilation of regulatory stress scenarios (e.g. Liquidity Coverage Ratio),
  failed and stressed bank data, and peer bank stress testing data provided by a 3<sup>rd</sup> party consulting
  firm.
- 2. **Establishment of Initial BOCNY Runoff Rates** To adjust external inputs, TRY held multiple workshops with deposit business lines to discern the expected behavior of wholesale deposits periods of stress. Workshop discussions were designed to tailor external assumptions to the underlying risk profile of BOCNY including the evaluation of the following attributes specific to BOCNY deposits:
  - Counterparty types
  - Product offerings
  - Strength of relationships
  - Underlying purpose of accounts (e.g. operational versus non-operational)
  - Presence of FDIC insurance
- 3. **MRD Review & Effective Challenge -** Initial BOCNY runoff rates were subsequently reviewed and challenged by Market Risk Management Department to test for reasonability. MRD analysis incorporated comparison of runoff rates to observed historical volatility in business-as-usual conditions and review of underlying qualitative assumptions.
- **4. Senior Management Review & Adjustment** Following finalization of MRD-reviewed runoff rates, senior management, including the Chief Financial Officer (CFO), reviewed runoff rates for

reasonability and recommended further adjustments based on the economic intuition of specific deposit offerings.

# **Time Horizon Scaling**

BOCNY has established 'reactiveness factors' for each segment to scale runoff factors across the required time horizons (Overnight, 14 Day, 30 Day, 90 Day, 1 Year). Reactiveness factors are a method to quantify the rate of runoff within stress scenario time frames. Reactiveness factors are presented as a percentage of 30 day runoff rates (i.e. 30 day runoff rates are utilized as the baseline) and vary by counterparty segment according to the counterparty's expected propensity to draw down balancesFor example, if a segment has a 10% 30-day runoff and the 14-day reactiveness factor is 80%, the 14-day runoff would be equal to 8%.

## **Assumption Governance**

BOCNY intends to reevaluate the appropriateness of this approach on a go-forward basis. A change in market conditions or the experience of a BOCNY liquidity stress event may warrant reconsideration usage of external data as a starting point. Runoff rates and overall approach will be reviewed on at least an annual basis.

# SECTION 3. Wholesale Deposit Analysis Results

#### 3.1 OVERVIEW

The following sections include the runoff rates and supporting rationale for each wholesale deposit segment. The scope of this analysis only includes wholesale deposit products and has not considered non-deposit products nor liabilities from retail customers.

#### 3.2 INTERBRANCH

#### **Description**

'Interbranch' deposits are funds placed in deposit accounts by branch offices of BOCNY's parent company, BOC LTD. Interbranch is defined as an entity that is 100% owned by BOC LTD. As of August 31, 2016, there were over 50 individual entities representing 27 countries with total balance of approximately \$6 billion in this segment. It is noted that balances from the Head Office comprised approximately 50% of balances for this segment.

Interbranch entities utilize accounts at BOCNY for purposes of U.S.-based payment and settlement services including USD foreign exchange activity. BOCNY serves as the primary, and often the only provider of USD clearing services for interbranch entities. These accounts are largely operational based on BOCNY's methodology to determine the amount of operational versus excess balances.

Note – Interbranch deposits do not include Call Loans which are treated separately for purposes of internal stress testing. Call Loans are essentially excess funds from the Interbranches that can be returned to the counterpart at maturity. Due to different attributes, Call Loans from Head Office are specially treated, please refer to *Bank of China U.S. Branches and Combined Operations: Liquidity Stress Testing Documentation*. Other Interbranch Call Loans are in non-transactional accounts and receive a 100% runoff rate.

# **Runoff Assumptions and Rationale**

Although Interbranch entities are financial counterparties, the operational nature of the accounts combined with the relationship with BOCNY is expected to increase the stability of these deposits relative to unrelated financial entities. These entities are deemed to be more sensitive to market stress events relative to idiosyncratic events given the common Parent between entities. In addition, the reliance on BOCNY for operational services further reduces the potential for rapid withdrawal of funds. Interbranch entities would not be expected to replace BOCNY as their primary payment and settlement service provider in a period of stress.

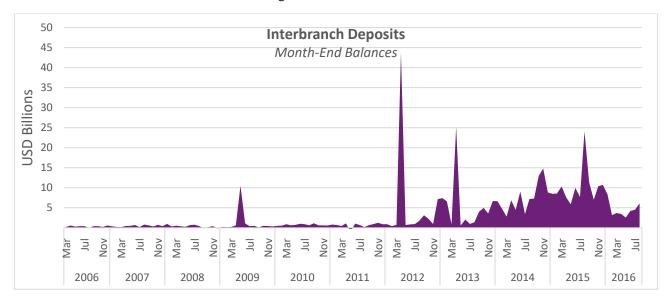
# **Runoff Rate Tables**

Runoff Rates by Scenario (30 Day)						
Segment	Balance Type	Systemic	Idiosyncratic	Combined		
Interbranch	Operational	10%	3%	12%		
interpranti	Excess/Non-Operational	15%	7%	20%		

Reactiveness Factors							
Segment	Balance Type	O/N	14 Day	30 Day	90 Day	1 Year	
Interbranch	Operational	10%	80%	100%	120%	150%	
	Excess/Non-Operational	20%	100%	100%	120%	150%	

# **Internal Data Analysis**

The transfer of funds between Call Loans and Interbranch deposits is a significant driver of volatility in Interbranch deposits. These movements do not typically result in balance sheet volatility as they are booked as internal transfers. Balances were stable during the 2008 financial crisis.



# **External Benchmarking (runoff rates are stated for financials)**

External Benchmarking - BOCNY 30 Day Combined Scenario						
Segment Balance Type BOCNY LCR TCH Study						
Interbranch	Operational	12%	25%	23%		
interprancii	Excess/Non-Operational	20%	100%	38%		

#### 3.3 AFFILIATES

# **Description**

'Affiliate' deposits are funds placed in deposit accounts by entities partially owned by BOCNY's parent company, BOC LTD. As of August 31, 2016 there were nearly 50 affiliate entities with active accounts at BOCNY comprising ~\$1 billion in deposits.

Affiliate entities utilize accounts at BOCNY for purposes of U.S.-based payment and settlement services including USD foreign exchange activity. BOCNY often serves as the primary provider of USD clearing services for affiliate entities however several have secondary clearing relationships at domestic institutions. These accounts are largely operational based on BOCNY's methodology to determine the amount of operational versus excess balances.

#### **Runoff Assumptions and Rationale**

Although Affiliate entities are financial counterparties, the operational nature of the accounts combined with the relationship with BOCNY is expected to increase the stability of these deposits relative to unrelated financial entities. Similar to Interbranch deposits, Affiliates have a legal relationship to BOCNY via the Parent company and utilize BOCNY for operational services. Affiliates could be more sensitive to BOCNY credit risk in a period of stress as compared to Interbranch given the weaker legal relationship and certain accounts' ability to utilize alternative service providers. This has resulted in a higher runoff rate for Affiliates relative to Interbranch deposits.

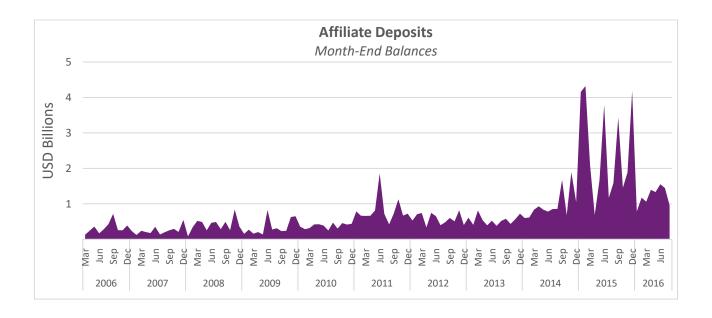
As shown in the graph below, balances were stable during the 2008 financial crisis.

#### **Runoff Rate Tables**

Runoff Rates by Scenario (30 Day)						
Segment	Balance Type	Systemic	Idiosyncratic	Combined		
Affiliate	Operational	5%	12%	15%		
	Excess/Non-Operational	10%	20%	25%		

Reactiveness Rates							
Segment	Balance Type	O/N	14 Day	30 Day	90 Day	1 Year	
Affiliate	Operational	10%	80%	100%	120%	150%	
	Excess/Non-Operational	20%	100%	100%	120%	150%	

# **Internal Data Analysis**



# **External Benchmarking-Combined Scenario (runoff rates based on financial entities)**

External Benchmarking - BOCNY 30 Day Combined Scenario						
Segment Balance Type BOCNY LCR TCH Study						
Affiliate	Operational	15%	25%	23%		
	Excess/Non-Operational	25%	100%	38%		

# 3.4 FINANCIAL INSTITUTIONS (FI)

# **Description**

Financial institution deposits (FI deposits) at Bank of China, USA refers to the bank's liabilities due to third-party banks and non-bank financial institutions, to which BOC provides USD clearing and escrow services. BOC is the largest USD clearing service provider among all Chinese banks.

Net debit method is applied in determining operational deposit amounts. Three progressively increasing runoff rates are derived from the bank's historical operational deposit balance data. If the deposit balance is below a certain level, a lower runoff rate is imposed; excessive amount above such level is penalized with higher runoff rates. For non-operational FI deposits, the bank assumes it to runoff by 100% in 14 days. The details of incremental runoff methodology are described in EPS LST MRA Remediation Resolution: Financial Institution Deposit Runoff And Unfunded Loan Commitment Drawdown Assumptions.

#### 3.5 CORPORATE

# **Description**

'Corporate' deposits are funds placed in deposit accounts by domestic and foreign corporate clients. Corporate customers typically have multiple relationships with BOCNY including provisions of lines of credit and other lending services. Funds are placed in demand deposit accounts and used for operational purposes. As of August 31, 2016, Corporate deposits held at BOCNY were approximately \$7.8 billion.

# **Runoff Assumptions and Rationale**

Corporate runoff rates have been calibrated based on qualitative assessment of the accounts with benchmarking to external data sources. Based on BOCNY's Operational Deposit Methodology, typically under 40% of total segment balances are considered to be operational. Deposits placed for purposes of operational activity are assumed to be more stable relative to non-operational/excess balances. The presence of multiple relationships can be expected to increase the stability of these deposits relative to regulatory benchmarks.

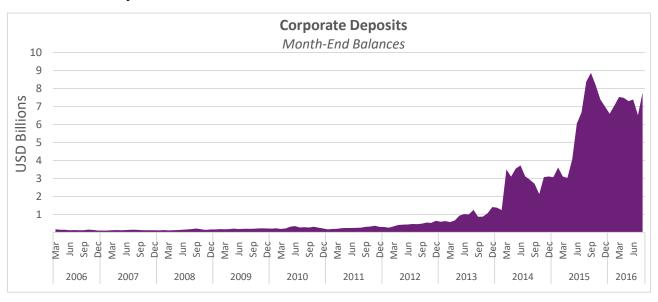
As shown in the graph below, balances increased during the 2008 financial crisis. However, although unexpected and for purposes of conservatism, a runoff rate has been assigned to the systemic event to account for any unforeseen circumstances that could erode depositor confidence.

#### **Runoff Rate Tables**

Runoff Rates by Scenario (30 Day)								
Segment	Balance Type	Systemic	Idiosyncratic	Combined				
Composatos	Operational	10%	14%	16%				
Corporates	Excess/Non-Operational	15%	24%	28%				

Reactiveness Rates									
Segment	Balance Type	O/N	14 Day	30 Day	90 Day	1 Year			
Corporates	Operational	5%	60%	100%	120%	150%			
Corporates	Excess/Non-Operational	10%	80%	100%	120%	150%			

# **Internal Data Analysis**



# **External Benchmarking-Combined Scenario**

External Benchmarking - BOCNY 30 Day Combined Scenario								
Segment	Balance Type BOCNY LCR TCH Study							
Corporato	Operational	16%	25%	16%				
Corporate	Excess/Non-Operational	28%	40%	41%				

#### 3.6 ESCROW ACCOUNTS

# **Description**

Escrow accounts are deposits placed at BOCNY for purposes of wholesale customer mortgage payments. These balances are held at BOCNY for the sole purpose of receiving escrow services, are not incentivized to remain due to 'rate paid', and are held in specially designated accounts. Escrow balances were deemed to be 100% operational solely due to the underlying purpose of the accounts. These balances have very limited transaction volume, therefore if balances were applied to BOCNY's operational deposit methodology they would be classified as 100% excess. As of August 31, 2016 Escrow balances held at BOCNY totaled approximately \$140 million.

#### **Runoff Assumptions and Rationale**

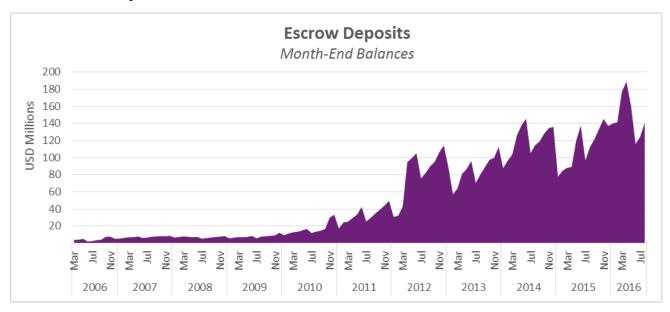
It can be expected that Escrow balances would be relatively sticky resulting in slower runoff relative to other operationally intensive balances. Escrow balances are also deemed to be relatively less sensitive to market stress events given their operational purposes. While balances have been generally stable and growing, and balances remained stable during the 2008 financial crisis, BOCNY assumes a 16% runoff rate (30 day Combined scenario) for purposes of conservatism.

#### **Runoff Rate Tables**

**Escrow** 

Runoff Rates by Scenario (30 Day)									
Segment	Balance Type		Sys	stemic	Idiosync	ratic	Cor	mbined	
Escrow	Operational			10%	14%		16%		
ESCIOW									
Reactiveness Rates									
Segment	Balance Type	O/N		14 Day	30 Day	9	00 Day	1 Year	
Foores	Operational	20%		50%	100%		150%	200%	

# **Internal Data Analysis**



# **External Benchmarking-Combined Scenario**

External Benchmarking - BOCNY 30 Day Combined Scenario							
Segment	Balance Type	BOCNY	LCR	TCH Study			
Escrow	Operational	16%	25%	16%			
ESCIOW							

# SECTION 4. Treatment of Certain 'Key Customers'

#### 4.1 DESCRIPTION

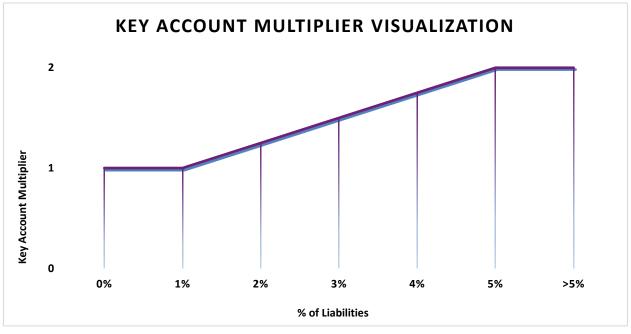
BOCNY has opted to increase the runoff rates for certain large depositor relationships to account for potential concentration risks. While BOCNY does not believe these counterparties are any less stable compared to other counterparties in their segment, BOCNY has opted to increase overall conservatism of its approach to its wholesale deposit stress assumptions given the relatively large concentrations.

As currently defined, counterparties with deposits exceeding 1.0% of total liabilities are considered for increased runoff rates via the application of the *Key Account Multiplier*.

#### 4.2 KEY ACCOUNT MULTIPLIER CALIBRATION

The Key Account Multiplier is calibrated to increase runoff rates for counterparties based on their total deposit balance as a percent of liabilities. The multiplier takes effect when the percent of liabilities exceeds 1% and linearly increases from 1x to 2x as the percent of liabilities reaches 5%. A multiple of 2.0x was deemed appropriate based on management judgment and analysis of historical volatility relative to current runoff rates. Below is a visual representation of how the multiplier would increase in accordance with the growth in deposits as a percent of liabilities.

The multiplier is linearly interpolated between 1% and 5% of liabilities to prevent cliff effects and properly incentive active management of the liquidity risk posed by the key counterparty. The 1x to 2x multiple was deemed to be appropriately conservative based on analysis of current runoff rates (pre- and post-multiplier) relative to internal and external benchmarks.



# 4.3 SAMPLE OF KEY ACCOUNTS

Below is a representative sample of key accounts and respective multiplier amounts as of August 31, 2016.

Counterparty Name	8/3	1/2016 Balance	% of Liabilities	Multiplier
PBOC-SAFE HO	\$	5,715,911,905	7.5%	2.0
CHINA DEVELOPMENT BANK	\$	6,963,572,502	9.2%	2.0
CHINA DEVELOPMENT BK-HONG KONG BR.	\$	3,938,663,226	5.2%	2.0
CHICAGO MERCANTILE EXCHANGE INC.	\$	3,491,402,663	4.6%	1.9
GIFS CAPITAL COMPANY, LLC	\$	3,475,728,180	4.6%	1.9
BOC HEAD OFFICE - A	\$	2,685,608,376	3.5%	1.6
BOC MACAU	\$	1,255,472,028	1.7%	1.2
BEST INVESTMENT CORPORATION	\$	1,032,730,377	1.4%	1.1

# 4.4 MONITORING

On a monthly basis, TRY will perform analysis on individual customer wholesale deposit balances that exceed 1% of total BOCNY liabilities. The multiplier will be applied to customer balances that meet this threshold and would be removed from customers who fall below the threshold.

# SECTION 5. Summary

The TRY team has considered various benchmarks for calibrating wholesale deposit runoff rates and has written this document to support the implementation of those rates in the BOCNY ILST. BOCNY will continuously analyze, review, and monitor the use of these rates and will make adjustments as needed. Effective challenge by MRD throughout the wholesale deposit rate calibration was a critical component of the analysis and will continue to be an integral element on a go-forward basis.

#### **APPENDIX**

#### APPENDIX 1. PUBLICLY AVAILABLE BANK DATA

#### **Total Bank Deposit Outflow Analysis**

The purpose of this analysis is to document the behavioral characteristics of bank deposits at the highest level, total bank deposits. The analysis will utilize two groups of historical data sets summarized below:

- **Domestic bank**: includes bank data from the quarters ending December 31, 2004 through December 31, 2015. This data was sourced from SNL reports with synthesized information from FR Y9C submissions.
- Failed bank: includes bank data from the quarters ending March 31, 2006 through December 31, 2010. This data was sourced from SNL that synthesizes information from several financial submissions (incl. FR Y9C, FFIEC 041, FDIC TFR, other US GAAP).

#### **SUMMARY OF FINDINGS**

Informational Element	Findings
Domestic Bank Data	<ul> <li>Most severe outflow rates were observed by institutions with exposure to trust and custody business (BK and NTRS)</li> <li>BK (3M, 6M, 9M): -16%, -23%, -24%</li> <li>NTRS (3M, 6M): -15%, -15%</li> <li>CMA had second highest cumulative 6M outflow rate at -15%</li> </ul>
Failed Bank Data	<ul> <li>Most severe 12M outflow rate of -43%, led to bank failure at small institution with \$3B in assets, Silverton</li> <li>Most severe large bank 12M outflow rate of -16%, Wachovia</li> </ul>

#### **Domestic Bank Data**

Domestic bank data is reported quarterly and is compiled using information from FR Y9C submissions. The Y9C provides enough information for a high-level analysis, but some qualitative judgment will be required to assign a specific runoff percentage.

This external bank dataset includes 25 banks of varied sizes. All of the banks are subject to Regulations WW and YY. A summary of this data set is included in Figure TB.1 below. Asset size varies, but overall complexity relative to asset size should be similar. All banks in this group experienced a market liquidity stress event, with a few banks also experiencing an idiosyncratic event defined by a minimum 3-notch credit rating downgrade.

Company	Ticker	City	State, Country	Industra	Industry Total Assets Total Deposits		Total Deposits Deposits 9		its % of	
Company	пскег	City	State, Country	industry	2004 YE	2015 YE	2004 YE	2015 YE	2004 YE	2015 YE
Ally Financial Inc.	ALLY	Detroit	MI, USA	Specialty Lender	NA	149,195,000	-	23,107,651	NA	15%
American Express Co.	AXP	New York	NY, USA	Specialty Lender	NA	153,862,000	-	384,424	NA	0%
Bank of America Corp.	BAC	Charlotte	NC, USA	Bank	1,112,035,486	2,126,138,000	117,108,069	56,642,266	11%	3%
Bank of New York Mellon Corp.	ВК	New York	NY, USA	Bank	94,572,074	386,296,000	16,532,190	83,278,281	17%	22%
BB&T Corp.	BBT	Winston-Salem	NC, USA	Bank	100,508,641	187,021,509	19,781,746	15,121,212	20%	8%
Capital One Financial Corp.	COF	McLean	VA, USA	Bank	53,747,255	300,444,020	24,366,647	3,747,146	45%	1%
Charles Schwab Corp.	SCHW	San Francisco	CA, USA	Broker-Dealer/Investment Bank	47,132,922	147,445,000	3,224,145	-	7%	0%
CIT Group Inc.	CIT	New York	NY, USA	Specialty Lender	NA	46,480,980	-	19,873,488	NA	43%
Citigroup Inc.	С	New York	NY, USA	Bank	1,484,101,000	1,882,505,000	45,528,561	44,853,817	3%	2%
Comerica Inc.	CMA	Dallas	TX, USA	Bank	52,375,773	68,949,210	5,173,104	4,159,235	10%	6%
Discover Financial Services	DFS	Riverwoods	IL, USA	Specialty Lender	NA	80,596,481	-	10,456,364	NA	13%
Fifth Third Bancorp	FITB	Cincinnati	OH, USA	Bank	94,455,731	134,187,722	4,238,877	5,178,568	4%	4%
Goldman Sachs Group Inc.	GS	New York	NY, USA	Broker-Dealer/Investment Bank	NA	868,995,000	-	3,835,866	NA	0%
Huntington Bancshares Inc.	HBAN	Columbus	OH, USA	Bank	32,566,899	64,330,629	6,321,565	2,149,202	19%	3%
JPMorgan Chase & Co.	JPM	New York	NY, USA	Bank	1,157,248,000	2,526,655,000	140,375,955	142,048,365	12%	6%
KeyCorp	KEY	Cleveland	OH, USA	Bank	90,653,059	89,884,477	9,395,014	3,822,928	10%	4%
M&T Bank Corp.	MTB	Buffalo	NY, USA	Bank	52,938,721	97,230,366	6,497,765	10,575,152	12%	11%
Morgan Stanley	MS	New York	NY, USA	Broker-Dealer/Investment Bank	NA	814,511,000	-	31,207	NA	0%
Northern Trust Corp.	NTRS	Chicago	IL, USA	Bank	45,276,690	111,153,721	4,124,461	2,557,339	9%	2%
PNC Financial Services Group	PNC	Pittsburgh	PA, USA	Bank	79,742,776	334,602,342	6,575,686	12,600,228	8%	4%
Regions Financial Corp.	RF	Birmingham	AL, USA	Bank	84,366,269	119,301,813	15,018,010	5,976,205	18%	5%
SunTrust Banks Inc.	STI	Atlanta	GA, USA	Bank	158,869,784	186,860,815	22,077,963	7,434,564	14%	4%
U.S. Bancorp	USB	Minneapolis	MN, USA	Bank	195,104,000	391,284,000	23,906,718	14,539,360	12%	4%
Wells Fargo & Co.	WFC	San Francisco	CA, USA	Bank	427,849,000	1,636,855,000	83,721,747	97,884,720	20%	6%
Zions Bancorp.	ZION	Salt Lake City	UT, USA	Bank	31,472,754	55,458,870	2,650,782	2,266,835	8%	4%

#### FIGURE TB. 1

Each bank experiences varying degrees of outflows throughout the population. In order to better identify each institution's most severe periods of runoff a simple process was adopted. Each bank's quarterly deposit changes were evaluated by calculating the most severe cumulative outflows over 1, 2, 3, and 4 quarter rolling periods. The most severe rolling period will be evaluated further in this analysis. A summary of the most severe rolling periods can be seen in Figure TB.2 below.

Max Deposit Decline by # of Quarters							
Firm	1	2	3	4			
ALLY	-2.20%	-2.22%	0.00%	0.00%			
AXP	-5.77%	-5.04%	-2.34%	-0.79%			
BAC	-1.93%	-2.53%	-1.46%	-0.33%			
BK	-16.31%	-23.26%	-24.17%	-22.22%			
BBT	-8.15%	-9.15%	-8.78%	-7.07%			
COF	-3.63%	-5.46%	-5.34%	-3.68%			
SCHW	-2.35%	0.00%	0.00%	0.00%			
CIT	-7.16%	-10.11%	-10.86%	-13.26%			
С	-3.32%	-5.11%	-6.86%	-8.24%			
CMA	-9.54%	-15.20%	-10.52%	-10.28%			
DFS	-3.67%	-3.35%	-3.56%	-1.77%			
FITB	-5.37%	-3.44%	-3.58%	-3.15%			
GS	-6.93%	-9.34%	-12.58%	-13.59%			
HBAN	-1.80%	-1.77%	-0.90%	-2.15%			
JPM	-10.14%	-14.15%	-14.00%	-10.50%			
KEY	-4.04%	-5.76%	-7.18%	-8.85%			
MTB	-2.44%	-1.30%	-3.60%	-1.88%			
MS	-4.00%	-4.26%	-1.68%	-1.94%			
NTRS	-14.52%	-14.57%	-14.19%	-11.40%			
PNC	-3.48%	-5.56%	-4.70%	-6.19%			
RF	-5.89%	-6.11%	-7.71%	-6.46%			
STI	-5.72%	-6.14%	-6.58%	-6.86%			
USB	-5.46%	-4.15%	-3.80%	-3.03%			
WFC	-5.33%	-4.52%	-4.27%	-0.88%			
ZION	-3.56%	-2.70%	-3.38%	-4.76%			

#### FIGURE TB. 2

Figure TB.2 summarizes the most severe single period outflows within 4 rolling quarters. The periods, represented by columns headings "1", "2", "3", "4", equate to 1 consecutive year of quarterly Y-9C analysis for each of the representative banking institutions and are meant to show the total change in deposits each quarter from the starting point. Column "1" represents a period of deposit decline from the previous quarter. The following three columns represent the total deposit decline since the onset of the rolling period. The two most severe 1-quarter outflow rates observed are from Bank of New York Mellon and Northern Trust, with -16% and -15% outflow rates, respectively. These outflow rates are primarily due to the bank's high exposure to Institutional trust and custody business and followed large deposit inflows in preceding periods.

#### **Failed Bank Data**

Failed bank data is reported quarterly and is compiled using information from FR Y9C submissions. The Y9C provides enough information for a high level analysis, but some qualitative judgment will be required to assign a specific runoff percentage. Due to the imminent failure of these banks, a final assessment of their liquidity position cannot be determined.

Quantitatively the profiles of these failed banks vary widely. However, all of these banks are known to have suffered from a severe liquidity event that included a combination of idiosyncratic and market pressures. These pressures ultimately forced the bank insolvent, or into an acquisition from another financial institution.

Due to the variability in timing of bank failures during the 2007-2009 crisis, the failed bank data must be analyzed differently than the domestic bank group. In order to determine whether a bank suffered a liquidity event, a simple definition was adopted:

Liquidity stress event parameters (any of the following):
1. One quarterly period outflow > 15%
2. Cumulative two quarter outflows > 20%
3. Cumulative rolling four quarter outflows > 30%
4. Publicly documented liquidity event failure

A summary table of the failed banks and their stress event types can be seen below:

Event	Company	Short	Short City State, Industry Total Asset		Industry		Total Assets	s (\$00	00,000)
Туре	Company	Name	City	Country	mustry	- 2	2006 YE	2	008 YE*
1	AMCORE Bank NA	AMCO	Rockford	IL, USA	Commercial Bank	\$	5,311	\$	5,036
2	AmTrust Bank	Amtr	Cleveland	OH, USA	Savings & Loan Assoc	\$	16,178	\$	15,558
3	First Fed Bk of California FSB	Firs	Santa Monica	CA, USA	Savings & Loan Assoc	\$	10,567	\$	7,450
4	IndyMac Bank F.S.B.	Indy	Pasadena	CA, USA	Savings & Loan Assoc	\$	23,101	\$	30,699
1	PFF Bank & Trust	PFF	Rancho Cucamonga	CA, USA	Savings & Loan Assoc	\$	4,241	\$	3,715
1	Silverton Bank N.A.	Silv	Atlanta	GA, USA	Commercial Bank	\$	1,957	\$	3,155
1	United Commercial Bank	Unit	San Francisco	CA, USA	Commercial Bank	\$	7,976	\$	13,476
4	Wachovia Bank N.A.	Wach	Charlotte	NC, USA	Bank	\$	496,566	\$	635,476
4	Washington Mutual Bank	WaMu	Henderson	NV, USA	Savings Bank/Thrift/Mutual	\$	347,416	\$	307,022

<sup>\*</sup>or final reporting period if failure occurred prior to 12/31/2008

FIGURE TB. 3

Figure TB.4 presents the most severe rolling period outflows for the failed banks. Nearly all of the banks within the dataset experience events lasting four quarters and ultimately lead to insolvency.

	Rolling Period Severity (# of Periods)									
Firm	1	2	3	4						
AMCO	-19.81%	-29.62%	-35.31%	-37.49%						
Amtr	-11.18%	-17.04%	-24.69%	-29.89%						
Firs	-13.21%	-4.52%	-24.08%	-29.44%						
Indy	-0.64%	NA	NA	NA						
PFF	-18.44%	-25.38%	-26.45%	-27.03%						
Silv	-22.15%	-26.83%	-39.10%	-42.80%						
Unit	-15.07%	-15.44%	-15.50%	NA						
Wach	-12.38%	-12.38%	-15.45%	-16.26%						
WaMu	-5.32%	-8.24%	-12.51%	-14.78%						
Count:	1	0	1	7						

Most Severe Rolling Period Time Frame												
T+0	T+1	T+2	T+3	T+4								
03/09 Q	06/09 Q	09/09 Q	12/09 Q	03/10 Q								
09/08 Q	12/08 Q	03/09 Q	06/09 Q	09/09 Q								
12/06 Q	03/07 Q	06/07 Q	09/07 Q	12/07 Q								
03/08 Q	06/08 Q											
09/07 Q	12/07 Q	03/08 Q	06/08 Q	09/08 Q								
09/06 Q	12/06 Q	03/07 Q	06/07 Q	09/07 Q								
12/08 Q	03/09 Q	06/09 Q	09/09 Q									
12/08 Q	03/09 Q	06/09 Q	09/09 Q	12/09 Q								
12/06 Q	03/07 Q	06/07 Q	09/07 Q	12/07 Q								
Beg. Bal	End Bal >>	·>										

FIGURE TB. 4

The most severe rolling four quarter liquidity events indicate cumulative outflow rates of -43% and -37%, observed from Silverton Bank and AMCORE Bank, respectively.

# APPENDIX 2. RATE TABLES

# **Iterative 30-Day Combined Rate Table**

The below table shows the adjustment of rates throughout the calibration process as described in Section 2.2. All rates represent 30-day combined rates

			Exte	External				Senior	
			тсн	LCR	Original BOCNY Rates	Business Line	Recalibrated	Management	
Index	Item Name	Operational	220/	250/	250/	Input	Rates	Review	
	Due to Interbranch - Demand	Operational	23%	25% 100%	25% 25%	6%	6% 15%	12% 20%	
	Due to Interbranch - Demand  Due to Interbranch - Investment (Exclude H.O.)	Non-Operational Operational	38% 23%	25%	25%	15%	6%	12%	
	Due to Interbranch - Investment (Exclude H.O.)	Non-Operational	38%	100%	25%	15%	15%	20%	
	Due to Interbranch - Investment (H.O.)	Operational	23%	25%	25%	6%	6%	12%	
	Due to Interbranch - Investment (H.O.)	Non-Operational	38%	100%	25%	15%	15%	20%	
	Due to Interbranch - Call Loans (Exclude HO)	Operational	30%	100%	100%	100%	100%	100%	
	Due to Interbranch - Call Loans (Exclude HO)	Non-Operational			100%	100%	100%	100%	
	Due to Interbranch - Call Loans (H.O.)	Operational			100%	100%	100%	100%	
	Due to Interbranch - Call Loans (H.O.)	Non-Operational			100%	100%	100%	100%	
0.2.0.2	Due to Affiliate - Demand - US	Operational	23%	25%	0%	6%	6%	15%	
	Due to Affiliate - Demand - US	Non-Operational	38%	100%	0%	15%	15%	25%	
		•		25%					
8.1.B	Due to Affiliate - Demand - Non-US	Operational	23%		0%	6%	6%	15%	
	Due to Affiliate - Demand - Non-US	Non-Operational	38%	100%	0%	15%	15%	25%	
	Due to Affiliate - Investment - US	Operational	23% 38%	25% 100%	0% 0%	6%	6% 15%	15%	
	Due to Affiliate - Investment - US  Due to Affiliate - Investment - Non-US	Non-Operational	23%	25%	25%	15%	6%	25% 15%	
		Operational				6%			
	Due to Affiliate - Investment - Non-US	Non-Operational	38%	100%	25%	15%	15%	25%	
	Due to Affiliate - Call Loans	Operational			100%	100%	100%	100%	
	Due to Affiliate - Call Loans	Non-Operational	220/	250/	100%	100%	100%	100%	
	Due to Banks - Demand	Operational	23%	25%	25%	23%	23%	23%	
	Due to Banks - Demand	Non-Operational	38%	100%	25%	58%	58%	58%	
	Due to Banks - Call Loans	Operational			100%	100%	100%	100%	
-	Due to Banks - Call Loans	Non-Operational	2001		100%	100%	100%	100%	
	Due to Non-Bank FI (Exclude Best Investment)	Operational	23%	25%	25%	23%	23%	23%	
	Due to Non-Bank FI (Exclude Best Investment)	Non-Operational	38%	100%	25%	58%	58%	58%	
	Due to Non-Bank FI - Investment - Volitile FI Client (Best Investment)	Operational	23%	25%	100%	46%	46%	25%	
	Due to Non-Bank FI - Investment - Volitile FI Client (Best Investment)	Non-Operational	38%	100%	100%	87%	100%	64%	
	Due to Banks - Investment - US (4440 ) - CME	Operational	23%	25%	100%	46%	46%	44%	
	Due to Banks - Investment - US (4440 ) - CME	Non-Operational	38%	100%	100%	87%			
	Due to Banks - Investment - Non-US - (4450 - Exclude CDB, PBOC, Best Investment)	Operational	23%	25%	25%	46%	23%	23%	
	Due to Banks - Investment - Non-US - (4450 - Exclude CDB, PBOC, Best Investment)	Non-Operational	38%	100%	25%	87%	58%	58%	
	Due to Banks - Investment - Non-US - Volatile FI clients (4450)- PBOC	Operational	23%	25%	80%	46%	46%	46%	
	Due to Banks - Investment - Non-US - Volatile FI clients (4450)- PBOC	Non-Operational	38%	100%	80%	87%	100%	100%	
	Due to Banks - Investment - Non-US - Volatile FI clients (4450)- CDB HO and S	Operational	23%	25%	80%	46%	46%	46%	
	Due to Banks - Investment - Non-US - Volatile FI clients (4450)- CDB HO and S	Non-Operational	38%	100%	80%	87%	100%	100%	
	Due to Banks - Investment - Non-US - Volatile FI clients (4450)- CDB HK	Operational	23%	25%	80%	46%	46%	46%	
	Due to Banks - Investment - Non-US - Volatile FI clients (4450)- CDB HK	Non-Operational	38%	100%	80%	87%	100%	100%	
-	Demand, MM & Savings - Corporates	Operational	16%	25%	40%	16%	16%	16%	
9.2.2	Demand, MM & Savings - Corporates	Non-Operational	41%	40%	40%	28%	28%	28%	
	Escrow - corporates	Operational			40%			16%	
	Escrow - corporates	Non-Operational							

# **Final Runoff Rates by Scenario**

The below table shows final runoff rates by scenario and time horizon.

			Idiosyncratic			Systemic				Combined							
Index	Item Name	Operational	O/N	14 Day	30 Day	90 Day	1 Year	O/N	14 Day	30 Day	90 Day	1 Year	O/N	14 Day	30 Day	90 Day	1 Year
8.1.1	Due to Interbranch - Demand	Operational	0.3%	2.4%	3.0%	3.6%	4.5%	1.2%	9.6%	12.0%	14.4%	18.0%	1.2%	9.6%	12.0%	14.4%	18.0%
8.1.1	Due to Interbranch - Demand	Non-Operational	1.4%	7.0%	7.0%	8.4%	10.5%	4.0%	20.0%	20.0%	24.0%	30.0%	4.0%	20.0%	20.0%	24.0%	30.0%
8.1.2	Due to Interbranch - Investment (Exclude H.O.)	Operational	0.3%	2.4%	3.0%	3.6%	4.5%	1.2%	9.6%	12.0%	14.4%	18.0%	1.2%	9.6%	12.0%	14.4%	18.0%
8.1.2	Due to Interbranch - Investment (Exclude H.O.)	Non-Operational	1.4%	7.0%	7.0%	8.4%	10.5%	4.0%	20.0%	20.0%	24.0%	30.0%	4.0%	20.0%	20.0%	24.0%	30.0%
8.1.2.1	Due to Interbranch - Investment (H.O.)	Operational	0.3%	2.4%	3.0%	3.6%	4.5%	1.2%	9.6%	12.0%	14.4%	18.0%	1.2%	9.6%	12.0%	14.4%	18.0%
8.1.2.1	Due to Interbranch - Investment (H.O.)	Non-Operational	1.4%	7.0%	7.0%	8.4%	10.5%	4.0%	20.0%	20.0%	24.0%	30.0%	4.0%	20.0%	20.0%	24.0%	30.0%
8.1.3	Due to Interbranch - Call Loans (Exclude HO)	Operational	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
8.1.3	Due to Interbranch - Call Loans (Exclude HO)	Non-Operational	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
8.1.3.1	Due to Interbranch - Call Loans (H.O.)	Operational	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
8.1.3.1	Due to Interbranch - Call Loans (H.O.)	Non-Operational	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
8.1.A	Due to Affiliate - Demand - US	Operational	1.2%	9.6%	12.0%	14.4%	18.0%	1.5%	12.0%	15.0%	18.0%	22.5%	1.5%	12.0%	15.0%	18.0%	22.5%
8.1.A	Due to Affiliate - Demand - US	Non-Operational	4.0%	20.0%	20.0%	24.0%	30.0%	5.0%	25.0%	25.0%	30.0%	37.5%	5.0%	25.0%	25.0%	30.0%	37.5%
8.1.B	Due to Affiliate - Demand - Non-US	Operational	1.2%	9.6%	12.0%	14.4%	18.0%	1.5%	12.0%	15.0%	18.0%	22.5%	1.5%	12.0%	15.0%	18.0%	22.5%
8.1.B	Due to Affiliate - Demand - Non-US	Non-Operational	4.0%	20.0%	20.0%	24.0%	30.0%	5.0%	25.0%	25.0%	30.0%	37.5%	5.0%	25.0%	25.0%	30.0%	37.5%
8.1.C	Due to Affiliate - Investment - US	Operational	1.2%	9.6%	12.0%	14.4%	18.0%	1.5%	12.0%	15.0%	18.0%	22.5%	1.5%	12.0%	15.0%	18.0%	22.5%
8.1.C	Due to Affiliate - Investment - US	Non-Operational	4.0%	20.0%	20.0%	24.0%	30.0%	5.0%	25.0%	25.0%	30.0%	37.5%	5.0%	25.0%	25.0%	30.0%	37.5%
8.1.4	Due to Affiliate - Investment - Non-US	Operational	1.2%	9.6%	12.0%	14.4%	18.0%	1.5%	12.0%	15.0%	18.0%	22.5%	1.5%	12.0%	15.0%	18.0%	22.5%
8.1.4	Due to Affiliate - Investment - Non-US	Non-Operational	4.0%	20.0%	20.0%	24.0%	30.0%	5.0%	25.0%	25.0%	30.0%	37.5%	5.0%	25.0%	25.0%	30.0%	37.5%
8.1.E	Due to Affiliate - Call Loans	Operational	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
8.1.E	Due to Affiliate - Call Loans	Non-Operational	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
8.2.1	Due to Banks - Demand	Operational	2.0%	16.0%	20.0%	24.0%	30.0%	2.3%	18.4%	23.0%	27.6%	34.5%	2.3%	18.4%	23.0%	27.6%	34.5%
8.2.1	Due to Banks - Demand	Non-Operational	11.0%	55.0%	55.0%	66.0%	82.5%	11.6%	58.0%	58.0%	69.6%	87.0%	11.6%	58.0%	58.0%	69.6%	87.0%
8.2.2	Due to Banks - Call Loans	Operational	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
8.2.2	Due to Banks - Call Loans	Non-Operational	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
8.2.4	Due to Non-Bank FI (Exclude Best Investment)	Operational	2.0%	16.0%	20.0%	24.0%	30.0%	2.3%	18.4%	23.0%	27.6%	34.5%	2.3%	18.4%	23.0%	27.6%	34.5%
8.2.4	Due to Non-Bank FI (Exclude Best Investment)	Non-Operational	11.0%	55.0%	55.0%	66.0%	82.5%	11.6%	58.0%	58.0%	69.6%	87.0%	11.6%	58.0%	58.0%	69.6%	87.0%
8.2.4.1	Due to Non-Bank FI - Investment - Volitile FI Client (Best Investment)	Operational	2.2%	17.6%	22.0%	26.4%	33.0%	2.5%	20.2%	25.3%	30.4%	38.0%	2.5%	20.2%	25.3%	30.4%	38.0%
8.2.4.1	Due to Non-Bank FI - Investment - Volitile FI Client (Best Investment)	Non-Operational	12.1%	60.5%	60.5%	72.6%	90.8%	12.8%	63.8%	63.8%	76.6%	95.7%	12.8%	63.8%	63.8%	76.6%	95.7%
8.2.5	Due to Banks - Investment - US (4440 ) - CME	Operational	3.8%	30.4%	38.0%	45.6%	57.0%	4.4%	35.0%	43.7%	52.4%	65.6%	4.4%	35.0%	43.7%	52.4%	65.6%
8.2.5	Due to Banks - Investment - US (4440 ) - CME	Non-Operational	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
8.2.6.1	Due to Banks - Investment - Non-US - (4450 - Exclude CDB, PBOC, Best Investment)	Operational	2.0%	16.0%	20.0%	24.0%	30.0%	2.3%	18.4%	23.0%	27.6%	34.5%	2.3%	18.4%	23.0%	27.6%	34.5%
8.2.6.1	Due to Banks - Investment - Non-US - (4450 - Exclude CDB, PBOC, Best Investment)	Non-Operational	11.0%	55.0%	55.0%	66.0%	82.5%	11.6%	58.0%	58.0%	69.6%	87.0%	11.6%	58.0%	58.0%	69.6%	87.0%
8.2.6.2	Due to Banks - Investment - Non-US - Volatile FI clients (4450)- PBOC	Operational	4.0%	32.0%	40.0%	48.0%	60.0%	4.6%	36.8%	46.0%	55.2%	69.0%	4.6%	36.8%	46.0%	55.2%	69.0%
8.2.6.2	Due to Banks - Investment - Non-US - Volatile FI clients (4450)- PBOC	Non-Operational	22.0%	100.0%	100.0%	100.0%	100.0%	23.2%	100.0%	100.0%	100.0%	100.0%	23.2%	100.0%	100.0%	100.0%	100.0%
8.2.6.2.2	Due to Banks - Investment - Non-US - Volatile FI clients (4450)- CDB HO and S	Operational	4.0%	32.0%	40.0%	48.0%	60.0%	4.6%	36.8%	46.0%	55.2%	69.0%	4.6%	36.8%	46.0%	55.2%	69.0%
8.2.6.2.2	Due to Banks - Investment - Non-US - Volatile FI clients (4450)- CDB HO and S	Non-Operational	22.0%	100.0%	100.0%	100.0%	100.0%	23.2%	100.0%	100.0%	100.0%	100.0%	23.2%	100.0%	100.0%	100.0%	100.0%
8.2.6.2.3	Due to Banks - Investment - Non-US - Volatile FI clients (4450)- CDB HK	Operational	4.0%	32.0%	40.0%	48.0%	60.0%	4.6%	36.8%	46.0%	55.2%	69.0%	4.6%	36.8%	46.0%	55.2%	69.0%
8.2.6.2.3	Due to Banks - Investment - Non-US - Volatile FI clients (4450)- CDB HK	Non-Operational	22.0%	100.0%	100.0%	100.0%	100.0%	23.2%	100.0%	100.0%	100.0%	100.0%	23.2%	100.0%	100.0%	100.0%	100.0%
9.2.2	Demand,MM & Savings - Corporates	Operational	0.7%	8.4%	14.0%	16.8%	21.0%	0.8%	9.6%	16.0%	19.2%	24.0%	0.8%	9.6%	16.0%	19.2%	24.0%
9.2.2	Demand,MM & Savings - Corporates	Non-Operational	2.4%	19.2%	24.0%	28.8%	36.0%	2.8%	22.4%	28.0%	33.6%	42.0%	2.8%	22.4%	28.0%	33.6%	42.0%
	Escrow-corporates	Operational	2.8%	7.0%	14.0%	21.0%	28.0%	2.0%	5.0%	10.0%	15.0%	20.0%	3.2%	8.0%	16.0%	24.0%	32.0%
	Escrow-corporates	Non-Operational															
9.2.1	Demand,MM & Savings - GIFS Capital Company	Operational	3.8%	30.4%	38.0%	45.6%	57.0%	2.9%	22.8%	28.5%	34.2%	42.8%	4.4%	35.0%	43.7%	52.4%	65.6%
9.2.1	Demand,MM & Savings - GIFS Capital Company	Non-Operational	20.9%	100.0%	100.0%	100.0%	100.0%	9.5%	47.5%	47.5%	57.0%	71.3%	22.0%	100.0%	100.0%	100.0%	100.0%