B #:	B15997-21
Date:	October 25, 2021
To:	All Participants
Category:	Settlement
From:	DTC Risk Management
Attention:	Settlement Manager/Managing Director/Cashier
Subject:	Changes to DTC Collateral Haircuts

Beginning October 29, 2021, for Settlement Date November 1, 2021, DTC will implement the following changes to modify the collateral value for certain securities, which may affect the value of positions applied to the Collateral Monitor:

- 1. United States Agencies and GSE securities that are not rated or rated Aaa to Aa2 / AAA to AA will receive a **haircut ranging between 5% to 35%**. Those rated below Aa2/AA will receive a **100% haircut**. (Appendix A includes the current list of eligible collateral).
- 2. Supranational bonds¹ rated Aaa to Aa2/AAA to AA will receive a **haircut of 20%**. (Appendix A includes the current list of eligible collateral).
- Most securities with no active market prices for three consecutive days will receive a 100% haircut. This will
 apply to new securities during the initial issuance stage and to active securities where DTC has not received
 a vendor price for three business days.
 - a. The only exception to this rule will be Mortgage-Backed Securities (MBS) issued by US agency or GSE. These securities will continue to receive 100% haircut if DTC has not received a vendor price the prior business day (Appendix B includes the current list of eligible collateral).

As a reminder, to help manage intraday transaction blockages due to DTC's risk management controls, Participants can (i) designate additional securities as collateral, (ii) process delivery-versus-payment transactions that will generate intraday credits, or (iii) submit settlement progress payments via Fedwire®. Participants can monitor their Collateral Monitor balance via the Risk Management Controls Inquiry link in the Cash and Balances tab in the Settlement Web.

For more information related to collateral processing at DTC, please see DTC's Settlement Service Guide.²

Questions regarding this notice should be directed to:

- your Relationship Manager or
- DTC Risk Hotline (212) 855-2260.

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¹ Supranational bonds are defined as those issued by entities formed by two or more central governments to promote economic development for the member countries

² Available at http://www.dtcc.com/~/media/Files/Downloads/legal/service-guides/Settlement.pdf

Appendix A – Eligible Collateral (United States Agencies and GSE securities)

	Datin (000/00	C-llet III I
Security Type	Rating (S&P/Moody)	Collateral Haircut
MBS issued by a US Agency and US Government	<u> </u>	<u> </u>
Sponsored Enterprise (GSÉ)		7%
All other GSEs not under US Govt conservatorship	AAA to AA / Aaa to Aa2	7%
MBS issued by a US Agency and US Government Sponsored Enterprise (GSE)	Rated below Aa2/AA	100%
All other GSEs not under US Govt conservatorship	Not Rated or rated below Aa2/AA	100%
Interest bearing Agency unsecured notes, debentures and other interest-bearing obligations of (i) instrumentalities of the U.S. or (ii) GSEs		
GNMA, FNMA, FHLMC, remaining terms to maturity of up to 10 years		5%
All other GSEs not under US Govt conservatorship with remaining terms to maturity of up to 10 years	AAA to AA / Aaa to Aa2	7%
GNMA, FNMA, FHLMC, remaining terms to maturity in excess of 10 years		7%
All other GSEs not under US Govt conservatorship with remaining terms to maturity in excess of 10	AAA to AA / Aaa to Aa2	10%
years GNMA, FNMA, FHLMC with any remaining maturity	Rated below Aa2/AA	100%
All other GSEs not under US Govt conservatorship with any remaining maturity	Not Rated or rated below Aa2/AA	100%
Zero Coupon Agency unsecured notes, debentures and other interest bearing obligations of (i) Instrumentalities of the U.S. or (ii) GSEs		
GNMA, FNMA, FHLMC, remaining terms to maturity of up to 5 years		7%
All other GSEs not under US Govt conservatorship with remaining terms to maturity of up to 5 years	AAA to AA / Aaa to Aa2	7%
GNMA, FNMA, FHLMC, remaining terms to maturity in excess of 5 years		12%
All other GSEs not under US Govt conservatorship with remaining terms to maturity in excess of 5 years	AAA to AA / Aaa to Aa2	18%
GNMA, FNMA, FHLMC with any remaining maturity	Rated below Aa2/AA	100%
All other GSEs not under US Govt conservatorship with any remaining terms to maturity	Not rated or rated below Aa2/AA	100%
Agency CMOs		
Supported by US Govt conservatorship and 2 Vendor prices		20%
All other GSEs not under US Govt conservatorship < 2 Vendor Prices	AAA to AA / Aaa to Aa2	20%
NE VEHICUT THEES		100%

Asset Backed Securities (ABS) supported by US Govt conservatorship and 2 Vendor prices		35%
Publicly issued Asset Backed Securities (ABS)		
2 Vendor prices	AAA / Aaa	35%
2 Vendor prices	AA+ to AA- / Aa1 to Aa3	45%
2 Vendor prices	A+ / A1 and below or unrated	100%
< 2 Vendor prices		100%

Supranational Bonds		
Medium-Term Notes or Bond issued by a supranational institution	AAA to AA / Aaa to Aa2	20%
	Not rated or rated below Aa2/AA	100%

Appendix B – Eligible Collateral (All categories)

Security Type	Rating (S&P/Moody)	Collateral Haircut
Interest bearing United States Treasury Securities		
with remaining terms to maturity of up to 2 years		2%
with remaining terms to maturity in excess of 2 years and up to 5 years		3%
with remaining terms to maturity in excess of 5 years and up to 10 years		4%
with remaining terms to maturity in excess of 10 years		6%
Zero Coupon United States Treasury Securities		
with remaining terms to maturity of up to 2 years		2%
with remaining terms to maturity in excess of 2 years and up to 5 years		5%
with remaining terms to maturity in excess of 5 years		12%
MBS issued by a US Agency and US Government		
Sponsored Enterprise (GSE)		7%
All other GSEs not under US Govt conservatorship	AAA to AA / Aaa to Aa2	7%
MBS issued by a US Agency and US Government Sponsored Enterprise (GSE)	Rated below Aa2/AA	100%
All other GSEs not under US Govt conservatorship	Not Rated or rated below Aa2/AA	100%

Security Type	Rating (S&P/Moody)	Collateral Haircut
Interest bearing Agency unsecured notes, debentures and other interest-bearing obligations of (i) instrumentalities of the U.S. or (ii) GSEs		
GNMA, FNMA, FHLMC, remaining terms to maturity of up to 10 years		5%
All other GSEs not under US Govt conservatorship with remaining terms to maturity of up to 10 years	AAA to AA / Aaa to Aa2	7%
GNMA, FNMA, FHLMC, remaining terms to maturity in excess of 10 years		7%
All other GSEs not under US Govt conservatorship with remaining terms to maturity in excess of 10 years	AAA to AA / Aaa to Aa2	10%
GNMA, FNMA, FHLMC with any remaining maturity	Rated below Aa2/AA	100%
All other GSEs not under US Govt conservatorship with any remaining maturity	Not Rated or rated below Aa2/AA	100%
Zero Coupon Agency unsecured notes, debentures and other interest bearing obligations of (i) Instrumentalities of the U.S. or (ii) GSEs		
GNMA, FNMA, FHLMC, remaining terms to maturity of up to 5 years		7%
All other GSEs not under US Govt conservatorship with remaining terms to maturity of up to 5 years	AAA to AA / Aaa to Aa2	7%
GNMA, FNMA, FHLMC, remaining terms to maturity in excess of 5 years		12%
All other GSEs not under US Govt conservatorship with remaining terms to maturity in excess of 5 years	AAA to AA / Aaa to Aa2	18%
GNMA, FNMA, FHLMC with any remaining maturity	Rated below Aa2/AA	100%
All other GSEs not under US Govt conservatorship with any remaining terms to maturity	Not rated or rated below Aa2/AA	100%
Fixed-rate, non-callable, non-amortizing Canadian Dollar (CAD) - denominated negotiable debt obligations with fixed maturity, in book entry form, issued by the federal Government of Canada		
with remaining terms to maturity of up to 10 years	AAA / Aaa	4%
with remaining terms to maturity in excess of 10 years	AAA / Aaa	8%
Zero coupon Canadian Dollar (CAD) - denominated negotiable debt obligations with fixed maturity, in book entry form, issued by the federal Government of Canada		
with remaining terms to maturity of up to 10 years	AAA / Aaa	7%
with remaining terms to maturity in excess of 10 years	AAA / Aaa	14%

Security Type	Rating (S&P/Moody)	Collateral Haircut
Agency CMOs Supported by US Govt conservatorship and 2 Vendor		
prices		20%
All other GSEs not under US Govt conservatorship	AAA to AA / Aaa to Aa2	20%
< 2 Vendor Prices		100%
Medium-Term Notes / Corporate Bonds	AAA to AA / Aaa to Aa2	20%
Issued by a supranational institution		
Issued by a corporation other than a supranational	AAA to A- / Aaa to A3	20%
	BBB+ to BBB- / Baa1 to Baa3	30%
	BB+ to BB- / Ba1 to Ba3	40%
	B+ to B- / B1 to B3	50%
	CCC+ / Caa1 and below or unrated	100%
Municipal Bonds		
	AAA to A- / Aaa to A3	25%
	BBB+ to BBB- / Baa1 to Baa3	30%
	BB+ to BB- / Ba1 to Ba3	100%
	B+ / B1 and below or unrated	100%
Manager was also be leading as a second		
Money market Instruments Corporate Commercial Paper Discount Notes (maturity		
not to exceed one year)	A-1+ to A-1 / P-1	6%
	A-2 / P-2	30%
	A-3 / P-3	100%
	below A-3 / P-3 or unrated	100%
Institutional Negotiable Certificates of Deposit (original		
maturity 270 days or less)	A-1+ to A-1 / P-1	6%
	A-2 / P-2	100%
	A-3 / P-3	100%
	below A-3 / P-3 or unrated	100%
Municipal Commercial Paper Discount Notes, Municipa Notes and Other Short Term Municipal Debt (maturity not to exceed one year)	SP-1+ to SP-1 / MIG-1	10%
	CD 2 / MIC 2	1000/
	SP-2 / MIG-2 SP-3 / MIG-3	100%
	below SP-3 / MIG-3	100%
	,	
Preferred Stock in CP mode	All	100%
Bankers Acceptances	All	100%
Discount Notes	All	100% 100%
Short Term Bank Notes	All	100%
Institutional Negotiable Certificates of Deposit (original maturity greater than 270 days, with remaining maturity of up to five years)		
	AAA to A- / Aaa to A3	10%
	BBB+ to BBB- / Baa1 to Baa3	25%
-	BB+ to BB- / Ba1 to Ba3	100%
	B+ to B- / B1 to B3	100%
	CCC+ / Caa1 and below or unrated	100%
with remaining maturity of more than 5 years	All	100%

	Rating (S&P/Moody)	Collateral Haircut
Corporate and Municipal Variable-Rate Demand Obligations (non-CP Mode with 2 Agency Ratings)		
	AAA / Aaa	20%
	AA+ to AA- / Aa1 to Aa3	35%
	A+ to A- / A1 to A3	50%
	BBB+ to BBB- / Baa1 to Baa3	75%
less than 2 Agency Ratings	BB+ / Ba1 and below or unrated	100% 100%
icss than 2 Agency Natings		10070
Corporate and Municipal Variable-Rate Demand Obligations (in-CP Mode)		
	All	100%
Non-Agency CMOs		
2 Agency Ratings & 2 Vendor Prices	AAA / Aaa	50%
2 Agency Ratings & 2 Vendor Prices	AA+ to AA- / Aa1 to Aa3	60%
2 Agency Ratings & 2 Vendor Prices	A+ / A1 and below or unrated	100%
< 2 Agency Ratings or < 2 Vendor Prices		100%
Acces Deviled Countries (ADC)		2501
Asset Backed Securities (ABS) supported by US Govt conservatorship and 2 Vendor prices		35%
Publicly issued Asset Backed Securities (ABS)	1000/000	250/
2 Vendor prices 2 Vendor prices	AAA / Aaa AA+ to AA- / Aa1 to Aa3	35% 45%
2 Vendor prices	A+ / A1 and below or unrated	100%
< 2 Vendor prices	At and below of diffaced	100%
Equity Securities (Common, Preferred) listed on a U.S. national securities exchange, NASDAQ, or a Canadian securities exchange		
with a market price of \$10.00 or more per share or per		
with a market price of \$10.00 or more per share or per other unit		25%
other unit with a market price between \$7.50 and \$9.99 per share or		25%
other unit with a market price between \$7.50 and \$9.99 per share or with a market price between \$5.00 and \$7.49 per share or		
other unit with a market price between \$7.50 and \$9.99 per share or with a market price between \$5.00 and \$7.49 per share		30%
other unit with a market price between \$7.50 and \$9.99 per share or with a market price between \$5.00 and \$7.49 per share or with a market price below \$5.00 per share or per other		30% 50%
with a market price between \$7.50 and \$9.99 per share or with a market price between \$5.00 and \$7.49 per share or with a market price below \$5.00 per share or per other unit Equity Securities (Warrants, Rights, Units, Closed End Mutual Funds) listed on a U.S. national securities exchange, NASDAQ, or a Canadian securities exchange with a market price of \$5.00		30% 50%
other unit with a market price between \$7.50 and \$9.99 per share or with a market price between \$5.00 and \$7.49 per share or with a market price below \$5.00 per share or per other unit Equity Securities (Warrants, Rights, Units, Closed End Mutual Funds) listed on a U.S. national securities exchange, NASDAQ, or a Canadian securities exchange with a market price of \$5.00 or more per share or per other unit		30% 50% 100%
with a market price between \$7.50 and \$9.99 per share or with a market price between \$5.00 and \$7.49 per share or with a market price below \$5.00 per share or per other unit Equity Securities (Warrants, Rights, Units, Closed End Mutual Funds) listed on a U.S. national securities exchange, NASDAQ, or a Canadian securities exchange with a market price of \$5.00 or more per share or per other unit with a market price of \$5.00 or more per share or per other unit		30% 50% 100%

American Depository Receipts (ADRs) traded OTC	
with a market price below \$5.00 per share or per other unit	100%

Security Type	Rating (S&P/Moody)	Collateral Haircut
UITs listed or not listed on a U.S. national securities exchange, NASDAQ, or a Canadian securities exchange		
with a market price of \$5.00 or more per share or per other unit		50%
with a market price below \$5.00 per share or per other unit		100%
Equity Securities (Common, Preferred, Warrants, Rights, Units) not listed on a U.S. national securities exchange, NASDAQ, or a Canadian securities exchange with a market price of \$5.00 or more per share or per other unit		65%
with a market price below \$5.00 per share or per other unit		100%
144A / Reg S (All Securities - Equity & Debt)	All	100%
Auction Rate Preferred Stock and Tender Rate Preferred Stock		100%

- 1. Securities are assigned a 100% haircut if the issue has matured, the issuer is in bankruptcy or the security is not priced by an approved DTC pricing model or by a third-party vendor.
- 2. DTC may reduce its risk by assigning higher haircuts, where applicable, to equity securities designated as highly volatile, based on their historical price volatility.