# CALLABLE ADVANCE, PUTABLE ADVANCE, PUTABLE ADVANCE WITH CUSTOMIZED STRIKE, ADJUSTABLE-RATE ADVANCE WITH CAP

# PRODUCT DISCLOSURE

This Product Disclosure has been prepared by the Federal Home Loan Bank of New York ("FHLBNY") to provide general information about certain bank loan products described herein (each, a "Product") that contain options and therefore may be more complex or riskier for FHLBNY customers than the use of Products without option features. The Products described in this Product Disclosure are 1) the Callable Advance ("CA"), 2) the Putable Advance ("PA"), 3) the Putable Advance with Customized Strike ("PA/S"), 4) the Adjustable-Rate Advance with Cap ("ARC w/ CAP"), and 5) the Fixed-Rate Advance with Cap ("FIX w/ CAP").

The CA is a loan or advance that allows a borrowing customer, in the customer's sole discretion, after a predetermined lockout period, and at dates predetermined according to contractual terms ("review dates"), to repay the advance prior to the stated maturity date of the advance.

The PA is an advance that allows the FHLBNY, in the FHLBNY's sole discretion, after a predetermined lockout period, and at dates predetermined according to contractual terms ("review dates"), to require the customer to repay the advance prior to the stated maturity date of the advance. PAs are more likely to be subject to a potential "put back" or extinguishment at their option dates in rising rate environments and could potentially extend, possibly to their final contractual maturity should rates decline.

The PA/S is an advance that allows the FHLBNY, in the FHLBNY's sole discretion, after a predetermined lockout period, and at dates predetermined according to contractual terms to require the customer to repay the advance prior to the stated maturity date of the advance. The PA/S is an advance that permits a customer to choose a threshold level (the "Strike") on a reference interest rate index (Secured Overnight Financing Rate or SOFR\*). After a predetermined lockout period, at the first occurrence the reference interest rate index is at or above the Strike threshold (as chosen by the customer) on average over a quarterly payment period, the advance will automatically become due and payable.

The ARC w/ CAP is an advance that permits a customer to choose a threshold level (the "Strike") on a reference interest rate index (SOFR). If over a payment period the SOFR index average is at or above the Strike threshold, the advance payment in arears will be the strike level plus the spread on the advance. Should the reference interest rate index average subsequently fall below the strike over a payment period, the payment in arears would be the SOFR average plus the spread on the advance.

The FIX w/ CAP is an advance that permits a customer to choose a threshold level (the "Strike") on a reference interest rate index (SOFR) and a multiplier which cannot exceed 1. If on a periodic reset the reference interest rate index average over the payment period is at or above the Strike threshold, the payment in arrears will adjust lower by the product of the multiplier times the difference between where the reference interest rate has averaged over the payment period and the Strike, subject to a zero percent floor.

A customer should not use any of these Products unless the customer (based on its own capabilities and/or the capabilities of advisors chosen by it acting on its behalf) understands and can bear the risks of the Product and is making its own independent decision to do so without relying on advice or recommendations from FHLBNY. Since FHLBNY will be acting for its own account as a principal in every Product, its interests will be in conflict with those of its customers. For example, with regards to the PA and PA/S Products, FHLBNY could require repayment at the first review date, or on review dates thereafter no matter what the customer might prefer.

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<sup>\*</sup> SOFR = Secured Overnight Financing Rate

Upon the required advance repayment, the customer will then have the option of: (1) paying off the PA or PA/S and making alternative asset/liability management arrangements; (2) requesting replacement funding of any advance type available at the time for which the member qualifies and at the then-prevailing rate of interest. Thus, there is the risk that any replacement funding provided by the FHLBNY may carry a higher interest rate than the original PA or PA/S advance. On the other hand, if rates fall, the FHLBNY is less likely to exercise its option, thus leaving the terms of the advance unchanged. Please note, however, that the FHLBNY cannot and will not make any representations as to the expected life of any particular PA or PA/S, nor the specific criteria which may motivate the FHLBNY to exercise its option to require repayment prior to the stated maturity date with respect to any particular PA.

For the CA, upon the customer's cancelation of the advance, the customer will then have the option of: (1) paying off the advance and making alternative asset/liability management arrangements; (2) requesting replacement funding of any advance type available at the time for which the member qualifies and at the then-prevailing rate of interest. Please note, however, that the FHLBNY cannot and will not make any representations as to the expected life of any particular CA.

For illustrative purposes only, attached is hypothetical analysis illustrating the performance of various Products under different interest rate scenarios.

## IMPORTANT INFORMATION

- 1. While FHLBNY has attempted to provide information contained in this Product Disclosure that is reliable FHLBNY does not guarantee its accuracy or completeness.
- 2. This Product Disclosure is not, and should not be treated or relied upon as, or considered to be, investment or financial advice or an offer, recommendation, suggestion or call for a customer to enter into any Product.
- 3. The Products described in this Product Disclosure have embedded options but are not considered to be swaps (as defined in Section 1a(47) of the Commodity Exchange Act and Commodity Futures Trading Commission Rule 1.3(xxx)) because the advances are fixed or variable interest rate commercial loans entered into by a Federal Home Loan Bank. Further, these advances represent secured obligations of FHLBNY customers and are subject to the Federal Home Loan Bank Act<sup>2</sup> and regulations of the Federal Housing Finance Agency, FHLBNY's primary regulator. <sup>3</sup>
- 4. Past performance of a Product, including without limitation, changes in interest rates, including the SOFR index, is no guarantee of future performance.

<sup>&</sup>lt;sup>1</sup> See 77 Fed. Reg. 48207 (August 13, 2012) at 48247, 48249, and 48318.

<sup>&</sup>lt;sup>2</sup> 12 U.S.C. § 1421 et seg.

<sup>&</sup>lt;sup>3</sup> See, e.g., 12 C.F.R. § 1266, which governs Federal Home Loan Bank advances.

# **SCENARIOS**

# **DEFINITIONS**

In the scenarios below, the initial anchor was the forward SOFR curve as observed on 03/14/2024. This scenario is called "No Change".

The other scenarios are defined below:

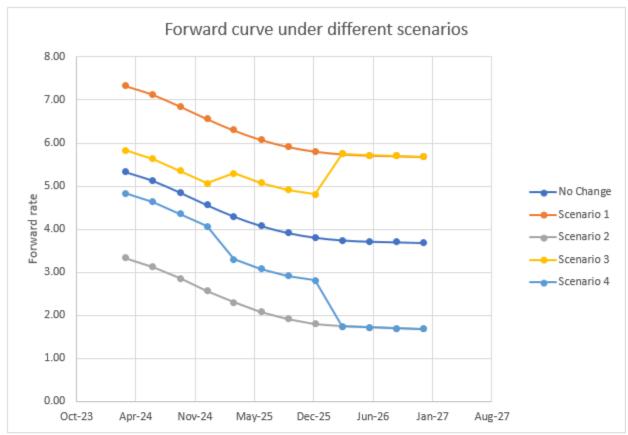
Scenario1: Instant parallel shock of 200 bps higher in rate Scenario2: Instant parallel shock of 200 bps lower in rate

Scenario3: Instant bear steepening between 50 and 200 bps higher Scenario4: Instant bull flattening between 50 and 200 bps lower

Resulting forward rates for all scenarios as well as charts illustrating the rates and changes are shown below:

			Forw	/ards	
Date	No Change	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Mar-24	5.33	7.33	3.33	5.83	4.83
Jun-24	5.13	7.13	3.13	5.63	4.63
Sep-24	4.86	6.86	2.86	5.36	4.36
Dec-24	4.57	6.57	2.57	5.07	4.07
Mar-25	4.30	6.30	2.30	5.30	3.30
Jun-25	4.08	6.08	2.08	5.08	3.08
Sep-25	3.92	5.92	1.92	4.92	2.92
Dec-25	3.81	5.81	1.81	4.81	2.81
Mar-26	3.75	5.75	1.75	5.75	1.75
Jun-26	3.72	5.72	1.72	5.72	1.72
Sep-26	3.70	5.70	1.70	5.70	1.70
Dec-26	3.69	5.69	1.69	5.69	1.69

	Forward sh	ocks (bps	)
Scenario 1	Scenario 2	Scenario 3	Scenario 4
200	(200)	50	(50)
200	(200)	50	(50)
200	(200)	50	(50)
200	(200)	50	(50)
200	(200)	100	(100)
200	(200)	100	(100)
200	(200)	100	(100)
200	(200)	100	(100)
200	(200)	200	(200)
200	(200)	200	(200)
200	(200)	200	(200)
200	(200)	200	(200)





## PRODUCTS USED FOR ILLUSTRATIONS AND PRICING

Level

3y ARC SOFR + 40

3y ARC w 6% cap SOFR + 52

3y Fixed (Q ACT360) 4.63%

3y fixed with a 6% cap 4.73%

1y Fixed rolling (Q ACT360) 5.19% (SOFR + 22 equiv)

3 NP 1 Euro 4.45%

3 NC 1 Euro 5.61%

In the example above, 3 NP 1 Euro refers to a Putable advance structure with a 3-year final maturity, a Non-Put lockout period of 1 year, with a European (one time) option to extinguish. The 3 NC 1 Euro refers to a fixed-rate Callable advance structure with a 3-year final maturity, a Non-Call lockout period of 1 year with a European (one time) option to extinguish.

#### Assumptions:

- All fixed advances are assumed to have Quarterly ACT/360 convention to enable direct comparison with ARCs and Structured advances
- 1y fixed rate advance is assumed to be rolled annually at a spread of 1y SOFR swap + 22 bps
- After 1 year, 2y fixed advance rate is assumed to be priced at 2y SOFR swap + 32 bps
- 3y NP 1y European puttable swap is assumed to be 4.01% (corresponding to the advance rate of 4.45%)

# **SCENARIOS RESULTS**

Below the resulting average advance rates over the 3-year period are shown for each of the scenarios. The ranking shows best-to-worst structures for each scenario (1=best, 7=worst) Assumptions for each scenario are described below.

		RES	SULTING RAT	ΓES	
	No Change	Scenario 1	Scenario 2	Scenario 3	Scenario 4
3y ARC	4.64	6.64	2.64	5.80	3.47
3y ARC w 6% cap	4.76	6.40	2.76	5.92	3.59
3y Fixed	4.63	4.63	4.63	4.63	4.63
3y fixed w 6% cap	4.73	4.37	4.73	4.73	4.73
1y Fixed rolling	4.46	5.79	3.12	5.46	3.46
3 NP 1 Euro	4.45	5.54	4.45	5.21	4.45
3 NC 1 Euro	4.66	5.61	3.33	5.61	3.66

		RANKING							
	No Chg	Scenario 1 Scenario 2 Scenario 3 Scenario 4							
3y ARC	4	7	1	6	2				
3y ARC w 6% cap	7	6	2	7	3				
3y Fixed	3	2	6	1	6				
3y fixed w 6% cap	6	1	7	2	7				
1y Fixed rolling	2	5	3	4	1				
3 NP 1 Euro	1	3	5	3	5				
3 NC 1 Euro	5	4	4	5	4				

<b>SCENARIO</b>	"NO CH	HANGE"
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			SOFR + 40	SOFR + 52	4.63%	4.73%	5.19% (SOFR + 22 equiv)	4.45%	5.61%
	3m	1y	3y ARC	3y ARC w 6% cap	3y Fixed	3y fixed w 6% cap	1y Fixed rolling	3 NP 1 Euro	3 NC 1 Euro
Mar-24	5.33	4.97	5.73	5.85	4.63	4.73	5.19	4.45	5.61
Jun-24	5.13		5.53	5.65	4.63	4.73	5.19	4.45	5.61
Sep-24	4.86		5.26	5.38	4.63	4.73	5.19	4.45	5.61
Dec-24	4.57		4.97	5.09	4.63	4.73	5.19	4.45	5.61
Mar-25	4.30	4.03	4.70	4.82	4.63	4.73	4.25	4.45	4.19
Jun-25	4.08		4.48	4.60	4.63	4.73	4.25	4.45	4.19
Sep-25	3.92		4.32	4.44	4.63	4.73	4.25	4.45	4.19
Dec-25	3.81		4.21	4.33	4.63	4.73	4.25	4.45	4.19
Mar-26	3.75	3.71	4.15	4.27	4.63	4.73	3.93	4.45	4.19
Jun-26	3.72		4.12	4.24	4.63	4.73	3.93	4.45	4.19
Sep-26	3.70		4.10	4.22	4.63	4.73	3.93	4.45	4.19
Dec-26	3.69		4.09	4.21	4.63	4.73	3.93	4.45	4.19
y->2y sofr	3.87	Average	4.64	4.76	4.63	4.73	4.46	4.45	4.66
y adv rate	4.19	_							

Put Swap called? Memb call? FALSE TRUE

- After 4 quarters (Mar 2025), the 2y SOFR swap is 3.87%, which is below the 4.01% rate that the
  dealer receives on the 3 NP 1 Euro putable swap, therefore the 3 NP 1 Euro swap and advance
  survive until maturity.
- After 4 quarters (Mar 2025), the 2y advance rate is 4.19%, which is below the rate for the 3 NC 1 Euro callable advance (5.61%), thus a member exercises the advance and books a new 2y fixed advance rate at 4.19%

## **SCENARIO 1**

			SOFR + 40	SOFR + 52	4.63%	4.73%	5.19% (SOFR + 22 equiv)	4.45%	5.61%
	3m	1y	3y ARC	3y ARC w 6% cap	3y Fixed	3y fixed w 6% cap	1y Fixed rolling	3 NP 1 Euro	3 NC 1 Euro
Mar-24	7.33	6.97	7.73	6.52	4.63	3.40	5.19	4.45	5.61
Jun-24	7.13		7.53	6.52	4.63	3.60	5.19	4.45	5.61
Sep-24	6.86		7.26	6.52	4.63	3.87	5.19	4.45	5.61
Dec-24	6.57		6.97	6.52	4.63	4.16	5.19	4.45	5.61
Mar-25	6.30	6.03	6.70	6.52	4.63	4.43	6.25	6.25	5.61
Jun-25	6.08		6.48	6.52	4.63	4.65	6.25	6.25	5.61
Sep-25	5.92		6.32	6.44	4.63	4.73	6.25	6.25	5.61
Dec-25	5.81		6.21	6.33	4.63	4.73	6.25	6.25	5.61
Mar-26	5.75	5.71	6.15	6.27	4.63	4.73	5.93	5.93	5.61
Jun-26	5.72		6.12	6.24	4.63	4.73	5.93	5.93	5.61
Sep-26	5.70		6.10	6.22	4.63	4.73	5.93	5.93	5.61
Dec-26	5.69		6.09	6.21	4.63	4.73	5.93	5.93	5.61
		-							
/->2y sofr	5.87	Average	6.64	6.40	4.63	4.37	5.79	5.54	5.61

Put Swap called? Memb call?
TRUE FALSE

- After 4 quarters (Mar 2025), the 2y SOFR swap is 5.87%, which is above 4.01% rate that the
  dealer receives on the 3 NP 1 Euro putable swap, therefore the 3 NP 1 Euro swap is exercised by
  the dealer, in turn, FHLBNY exercised the 3 NP 1 Euro advance and the member takes out a new
  1 year fixed rate advance at the rate of 6.25% (1y SOFR swap + 22 bps), and rolls it after
  maturity into another 1 year.
- After 4 quarters (Mar 2025), the 2y advance rate is 6.19%, which is above the rate for the 3 NC 1 Euro callable advance (5.61%), thus a member keeps the callable advance until maturity
- 6% cap is in the money for the quarters between Mar 2024 and June 2025 (applicable for ARC with 6% cap and 3y fixed with 6% cap)

## **SCENARIO 2**

			SOFR + 40	SOFR + 52	4.63%	4.73%	5.19% (SOFR + 22 equiv)	4.45%	5.61%
	3m	1y	3y ARC	3y ARC w 6% cap	3y Fixed	3y fixed w 6% cap	1y Fixed rolling	3 NP 1 Euro	3 NC 1 Euro
Mar-24	3.33	2.97	3.73	3.85	4.63	4.73	5.19	4.45	5.61
Jun-24	3.13		3.53	3.65	4.63	4.73	5.19	4.45	5.61
Sep-24	2.86		3.26	3.38	4.63	4.73	5.19	4.45	5.61
Dec-24	2.57		2.97	3.09	4.63	4.73	5.19	4.45	5.61
Mar-25	2.30	2.03	2.70	2.82	4.63	4.73	2.25	4.45	2.19
Jun-25	2.08		2.48	2.60	4.63	4.73	2.25	4.45	2.19
Sep-25	1.92		2.32	2.44	4.63	4.73	2.25	4.45	2.19
Dec-25	1.81		2.21	2.33	4.63	4.73	2.25	4.45	2.19
Mar-26	1.75	1.71	2.15	2.27	4.63	4.73	1.93	4.45	2.19
Jun-26	1.72		2.12	2.24	4.63	4.73	1.93	4.45	2.19
Sep-26	1.70		2.10	2.22	4.63	4.73	1.93	4.45	2.19
Dec-26	1.69		2.09	2.21	4.63	4.73	1.93	4.45	2.19
	4.07	٨	2.64	2.76	4.62	4.72	2.42	4.45	2.22
y->2y sofr y adv rate	1.87 2.19	Average	2.64	2.76	4.63	4.73	3.12	4.45	3.33

Put Swap called? Memb call? FALSE TRUE

- After 4 quarters (Mar 2025), the 2y SOFR swap is 1.87%, which is below the 4.01% rate that the
  dealer receives on the 3 NP 1 Euro putable swap, therefore the 3 NP 1 Euro swap and advance
  survive until maturity.
- After 4 quarters (Mar 2025), the 2y advance rate is 2.19%, which is below the rate for the 3 NC 1 Euro callable advance (5.61%), thus a member exercises the advance and books a new 2y fixed advance rate at 2.19%

## **SCENARIO 3**

			SOFR + 40	SOFR + 52	4.63%	4.73%	5.19% (SOFR + 22 equiv)	4.45%	5.61%
	3m	1y	3y ARC	3y ARC w 6% cap	3y Fixed	3y fixed w 6% cap	1y Fixed rolling	3 NP 1 Euro	3 NC 1 Euro
Mar-24	5.83	5.47	6.23	6.35	4.63	4.73	5.19	4.45	5.61
Jun-24	5.63		6.03	6.15	4.63	4.73	5.19	4.45	5.61
Sep-24	5.36		5.76	5.88	4.63	4.73	5.19	4.45	5.61
Dec-24	5.07		5.47	5.59	4.63	4.73	5.19	4.45	5.61
Mar-25	5.30	5.03	5.70	5.82	4.63	4.73	5.25	5.25	5.61
Jun-25	5.08		5.48	5.60	4.63	4.73	5.25	5.25	5.61
Sep-25	4.92		5.32	5.44	4.63	4.73	5.25	5.25	5.61
Dec-25	4.81		5.21	5.33	4.63	4.73	5.25	5.25	5.61
Mar-26	5.75	5.71	6.15	6.27	4.63	4.73	5.93	5.93	5.61
Jun-26	5.72		6.12	6.24	4.63	4.73	5.93	5.93	5.61
Sep-26	5.70		6.10	6.22	4.63	4.73	5.93	5.93	5.61
Dec-26	5.69		6.09	6.21	4.63	4.73	5.93	5.93	5.61
		_							
/->2y sofr	5.37	Average	5.80	5.92	4.63	4.73	5.46	5.21	5.61
adv rate	5.69								

Put Swap called? Memb call? TRUE FALSE

- After 4 quarters (Mar 2025), the 2y SOFR swap is 5.37%, which is above 4.01% rate that the
  dealer receives on the 3 NP 1 Euro putable swap, therefore the 3 NP 1 Euro swap is exercised by
  the dealer, in turn, FHLBNY exercised the 3 NP 1 Euro advance and the member takes out a new
  1 year fixed rate advance at the rate of 5.25% (1y SOFR swap + 22 bps), and rolls it after
  maturity into another 1 year.
- After 4 quarters (Mar 2025), the 2y advance rate is 5.69%, which is above the rate for the 3 NC 1 Euro callable advance (5.61%), thus a member keeps the callable advance until maturity

# **SCENARIO 4**

			SOFR + 40	SOFR + 52	4.63%	4.73%	5.19% (SOFR + 22 equiv)	4.45%	5.61%
3m	3m	1y	3y ARC	3y ARC w 6% cap	3y Fixed	3y fixed w 6% cap	1y Fixed rolling	3 NP 1 Euro	3 NC 1 Euro
Mar-24	4.83	4.47	5.23	5.35	4.63	4.73	5.19	4.45	5.61
Jun-24	4.63		5.03	5.15	4.63	4.73	5.19	4.45	5.61
Sep-24	4.36		4.76	4.88	4.63	4.73	5.19	4.45	5.61
Dec-24	4.07		4.47	4.59	4.63	4.73	5.19	4.45	5.61
Mar-25	3.30	3.03	3.70	3.82	4.63	4.73	3.25	4.45	2.69
Jun-25	3.08		3.48	3.60	4.63	4.73	3.25	4.45	2.69
Sep-25	2.92		3.32	3.44	4.63	4.73	3.25	4.45	2.69
Dec-25	2.81		3.21	3.33	4.63	4.73	3.25	4.45	2.69
Mar-26	1.75	1.71	2.15	2.27	4.63	4.73	1.93	4.45	2.69
Jun-26	1.72		2.12	2.24	4.63	4.73	1.93	4.45	2.69
Sep-26	1.70		2.10	2.22	4.63	4.73	1.93	4.45	2.69
Dec-26	1.69		2.09	2.21	4.63	4.73	1.93	4.45	2.69
		-							
->2y sofr	2.37	Average	3.47	3.59	4.63	4.73	3.46	4.45	3.66
adv rate	2.69								
								Put Swap called?	Memb call

Put Swap called?	Memb call?
FALSE	TRUE

- After 4 quarters (Mar 2025), the 2y SOFR swap is 2.37%, which is below the 4.01% rate that the dealer receives on the 3 NP 1 Euro putable swap, therefore the 3 NP 1 Euro swap and advance survive until maturity.
- After 4 quarters (Mar 2025), the 2y advance rate is 2.69%, which is below the rate for the 3 NC 1 Euro callable advance (5.61%), thus a member exercises the advance and books a new 2y fixed advance rate at 2.69%

IMPORTANT INFORMATION: This scenario analysis does not present all possible outcomes for the Products discussed, so it cannot be relied upon as an indicator of the results which might actually be obtained by a customer that uses the Products, WHICH RESULTS MIGHT BE WORSE THAN ANY SET FORTH IN THIS ANALYSIS.