Federal Home Loan Bank Seattle

Understanding the Floating-to-Fixed Convertible ("FFC") Advance

John P. Biestman, CFA, Director of Business Development
Erick Rendon, CFA, Business Development Analyst
Brett Manning, Financial Institutions Strategist

Seattle Bank Web Seminar
June 21, 2006

Agenda

1. Product Overview and Expanded Applications
2. Understanding the FFC in the Context of Forward Rates
3. Understanding the FFC in the Context of Alternative Funding Structures
4. Current Offerings

The FFC Complements the Seattle Bank's Structured Advance Line

Product	Description	Application	Advantages
Putable Advance	Subject to termination by the Seattle Bank on pre-determined dates	Funding for specific assets; macro-funding of balance sheet; ALM	Lower rate in exchange for selling option(s) to terminate
Knockout Advance	Putable advance cancelled if LIBOR exceeds strike price on certain dates	Same as a putable advance	Pre-determined assignment of specific underlying index to the put option
NEW PRODUCT: Capped Floater Advance	Adjustable rate capped at a pre-determined strike price	Interest-rate risk management; matched funding for capped floating-rate loans & loans held in portfolio	Address potential dual-rate sensitivity; benefit from lower borrowing costs if interest rates decline
NEW PRODUCT: FFC Advance	Floating-rate advance that flips to fixed-rate unless the Seattle Bank cancels	Macro balance sheet management	Sub-LIBOR pricing in exchange for selling the right to convert to a fixed rate on a specified date

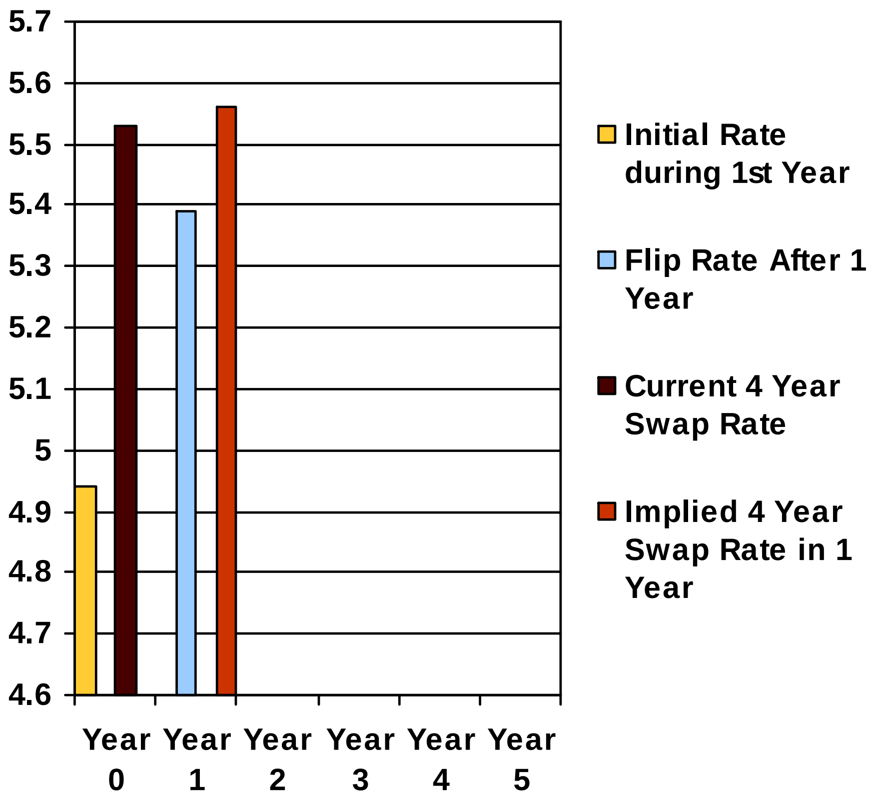
FFC Advance Applications and Strategies

- FFC Mechanics
  - Floating-rate advance that flips to a fixed-rate advance.
  - Member sells an option for the duration of the fixed portion of the advance and benefits by paying a rate below prevailing variable rate advances.
  - Combines characteristics of a guaranteed spread advance and a putable advance: a putable advance with a lock-out term that is floating, rather than fixed.
  - Exercise structure can be European or Bermudan.

FFC Advance Applications and Strategies – European Structure

- Representative Terms: 5-year, 1-year European FFC
  - Floats first year at 3-month LIBOR – 0.40%.
  - Rate adjusts quarterly during the first year.
  - On only one date, one year from now, the Seattle Bank will have the option to cancel.
  - If the Seattle Bank does not cancel, the advance will flip to the set fixed rate (assume 5.39%) and become a 4-year bullet fixed rate borrowing.
  - If the Seattle Bank cancels the advance, two choices:
    - Restructure into another advance
    - Float the advance at the prevailing interest rate

Will the advance flip to the fixed rate, or will it be terminated at the end of the lockout period?



- Initial rate for first year = 4.94%.
- Fixed flip rate after first year = 5.39%. If 4-year rate is below 5.39%, the Seattle Bank will likely flip the advance to a fixed 4-year bullet.
- Current 4-year swap rate = 5.53%.
- Implied 4-year swap rate one year from now = 5.56%.
- If flip rate is below 4-year borrowings, one year forward, the Seattle Bank will likely cancel and the borrower would have received sub-LIBOR funding for one year.

Federal Home Loan Bank Seattle

<HELP> for explanation. P164 Muni FWCV

FORWARD CURVE ANALYSIS
US Dollar

BASE CURVE DEFAULTS - BGN

Curve Dated: 6/14/06
Settlement Date: 6/16/06
Coupon/Spot: C
Bid/Ask/Mid: B
FMC # or SWDF # 23

1 GO Graph
2 GO Update Curve
3 GO Forwards Analysis

		TERM	YIELD	9/18/06	P	12/18/06	P	6/18/07	P
		1 Wk	5.0719	5.3739	R	5.4052	R	5.3845	R
D		1 Mo	5.2081	5.3969	O	5.4184	O	5.3945	O
E	R	2 Mo	5.2781	5.4214	J	5.4312	J	5.4088	J
P	A	3 Mo	5.3406	5.4577	E	5.4420	E	5.4213	E
O	T	4 Mo	5.3706	5.4667	C	5.4401	C	5.4343	C
S	E	5 Mo	5.3987	5.4777	T	5.4421	T	5.4482	T
I	S	6 Mo	5.4356	5.4874	E	5.4461	E	5.4607	E
T		9 Mo	5.4869	5.5000	D	5.4879	D	5.5002	D
		1 Yr	5.5163	5.5372		5.5288		5.5398	
		2 Yr	5.5350	5.5428		5.5345		5.5284	
S	R	3 Yr	5.5240	5.5335		5.5329		5.5408	
W	A	4 Yr	5.5340	5.5441		5.5466		5.5587	
A	T	5 Yr	5.5490	5.5582		5.5612		5.5753	
P	E	7 Yr	5.5760	5.5855		5.5904		5.6044	
	S	10Yr	5.6200	5.6287		5.6341		5.6478	
		15Yr	5.6710	5.6795		5.6855		5.6996	
		20Yr	5.6930	5.6990		5.7032		5.7132	
		30Yr	5.6860	n/a		n/a		n/a	

FFC Advance Applications and Strategies – Bermudan Structure

- Representative Terms: 7-year, non-put 1-year Bermudan FFC
  - Floats first year at 3-month LIBOR– 0.80%.
  - Rate adjusts quarterly during the first year.
  - After the first year, on a quarterly basis, the Seattle Bank will have the option to cancel.
  - If the Seattle Bank does not cancel, the advance will flip to the set fixed rate (assume ?%) and become a 6-year fixed-rate borrowing that is putable quarterly.
  - If the Seattle Bank cancels the advance, two choices:
    - Restructure into another advance
    - Float the advance at the prevailing interest rate

Current FFC Advance Offering – European Structure / Final Maturity Date: 06/23/2011

Structure:	5-year/non-put 1 year (European)
Indicative Start/Floating Rate:	3-mo LIBOR – 40 bps or 4.94% (3-mo LIBOR 5.34% as of 6/14/06)
Indicative Flip/Fixed Rate:	5.39%
Order Deadline:	10:00 a.m. Pacific Time 6/23/06
Settlement:	6/23/06
Put Option Exercise:	Seattle Bank may exercise option to terminate the advance at the end of the lockout (6/23/07)
Reset Date:	Quarterly, with a look-back period of 2 London business days
Interest Payment Dates:	Quarterly, beginning 9/23/06, and at maturity
Day Count:	Actual/360
Repayment:	Bullet at maturity or upon exercise of the termination option
Prepayment Fee:	“Structured Advance Prepayment” calculation

Current FFC Advance Offering – European Structure / Final Maturity Date: 06/23/2011

Structure:	5-year/non-put 1 year (European)
Indicative Start/Floating Rate:	3-mo LIBOR – 45 bps or 4.94% (3-mo LIBOR 5.34% as of 6/14/06)
Indicative Flip/Fixed Rate:	5.39%

Option Attribution as of 06/08/06:

In exchange for a lower rate on this advance, you have sold an option to the Seattle Bank. One of the Seattle Bank's internal models calculated a value attribution for this option as 1.64% of the par value of this advance. This value attribution is an estimate only and may or may not be indicative of the actual market value for this option. You should make your own independent assessment of value and risk related to this transaction. See Valuations Provided below.

FFC Advance Sensitivity Analysis as of 06/08/06:

Structure	Maturity	First Put	Coupon	-300	-200	-100	0	100	200	300
5-yr/non-put 1-yr (European)	6/23/11	6/23/07	4.91/5.30	109.26	105.41	101.99	100.00	99.47	99.40	99.38

Minimum Transaction Amount: $5,000,000

Federal Home Loan Bank Seattle

Current FFC Advance Offering – European Structure / Final Maturity Date: 06/23/2016

Structure:	10-year/non-put 3 year (European)
Indicative Start/Floating Rate:	3-mo LIBOR – 45 bps or 4.89% (3-mo LIBOR 5.34% as of 6/14/06)
Indicative Flip/Fixed Rate:	5.44%
Order Deadline:	10:00 a.m. Pacific Time 6/23/06
Settlement:	6/23/06
Put Option Exercise:	Seattle Bank may exercise option to terminate the advance at the end of the lockout (6/23/07)
Reset Date:	Quarterly, with a look-back period of 2 London business days
Interest Payment Dates:	Quarterly, beginning 9/23/06, and at maturity
Day Count:	Actual/360
Repayment:	Bullet at maturity or upon exercise of the termination option
Prepayment Fee:	“Structured Advance Prepayment” calculation

Federal Home Loan Bank Seattle

Current FFC Advance Offering – European Structure / Final Maturity Date: 06/23/2016

Structure:	10-year/non-put 3 year (European)
Indicative Start/Floating Rate:	3-mo LIBOR – 45 bps or 4.89% (3-mo LIBOR 5.34% as of 6/14/06)
Indicative Flip/Fixed Rate:	5.44%

Option Attribution as of 06/08/06:

In exchange for a lower rate on this advance, you have sold an option to the Seattle Bank. One of the Seattle Bank's internal models calculated a value attribution for this option as 1.64% of the par value of this advance. This value attribution is an estimate only and may or may not be indicative of the actual market value for this option. You should make your own independent assessment of value and risk related to this transaction. See Valuations Provided below.

FFC Advance Sensitivity Analysis as of 06/08/06:

Structure	Maturity	First Put	Coupon	-300	-200	-100	0	100	200	300
10-yr/non-put 3-yr (European)	6/23/16	6/23/09	4.86/5.35	113.38	107.16	102.62	100.00	98.79	98.30	98.13

Minimum Transaction Amount: $5,000,000

Why Consider the FFC?

- FFC funding is ***attractively priced*** relative to other wholesale funding structures.
- The FFC advance is more ***collateral-friendly*** than standard term repurchase agreement structures.
  - Single-family, multi-family, commercial real estate, and HELOC collateral may be used in lieu of highly liquid marketable securities.
- From a historical perspective, the ***absolute rate level is low***. As a result, the downside of selling an interest-rate option may not be as severe as was the case in the late 1990's and early 2000's.

Indicative Yields of 5-Year, n/p 1-Year (1X) FFC vs. Alternative Advance Structures (3-month LIBOR – 45 bps floating, 5.39% Fixed)

	Sep 2006	Dec 2006	Mar 2007	Jun 2007	Jun 2008	Jun 2009	Jun 2010	Jun 2011
3-mo LIBOR (projected)	5.46%	5.44%	5.38%	5.34%	5.44%	5.37%	5.43%	5.40%
5-yr FFC	5.01%	4.99%	4.93%	4.89%	5.39%	5.39%	5.39%	5.39%
5-yr Bullet	5.53%	5.53%	5.53%	5.53%	5.53%	5.53%	5.53%	5.53%
5-yr 1 yr/1x Putable	5.20%	5.20%	5.20%	5.20%	5.20%	5.20%	5.20%	5.20%
1-yr Prime Floater	5.53%	5.51%	5.45%	5.41%	5.51%	5.44%	5.50%	5.47%
3-mo LIBOR Floater	5.51%	5.49%	5.43%	5.39%	5.49%	5.43%	5.48%	5.45%

Indicative Yield Differences Between 5-Year, n/p 1-Year (1X) FFC (3-month Libor – 45 bps floating, 5.39% Fixed) and Alternative Advance Structures - Floating Leg

	Sep 2006	Dec 2006	Mar 2007	Jun 2007	Jun 2008	Jun 2009	Jun 2010	Jun 2011
5-yr FFC	5.01%	4.99%	4.93%	4.89%	5.39%	5.39%	5.39%	5.39%
5-yr Bullet	-0.52%	-0.52%	-0.52%	-0.52%	-0.52%	-0.52%	-0.52%	-0.52%
5-yr 1-yr/1x Putable	-0.19%	-0.19%	-0.19%	-0.19%	-0.19%	-0.19%	-0.19%	-0.19%
1-yr Prime Floater	-0.52%	-0.50%	-0.44%	-0.40%	-0.50%	-0.43%	-0.49%	-0.46%
3-mo LIBOR Floater	-0.50%	-0.47%	-0.41%	-0.38%	-0.47%	-0.40%	-0.46%	-0.43%

Federal Home Loan Bank Seattle

Indicative Yield Differences Between 5-Year, n/p 1-Year (1X) FFC (3-month Libor – 45 bps floating, 5.39% Fixed) and Alternative Advance Structures - Fixed Leg

	Sep 2006	Dec 2006	Mar 2007	Jun 2007	Jun 2008	Jun 2009	Jun 2010	Jun 2011
5-yr FFC					5.39%	5.39%	5.39%	5.39%
5-yr Bullet					-0.14%	-0.14%	-0.14%	-0.14%
5-yr 1-yr/1x Putable					0.19%	0.19%	0.19%	0.19%
1-yr Prime Floater					-0.12%	-0.05%	-0.11%	-0.08%
3-mo LIBOR Floater					-0.09%	-0.02%	-0.08%	-0.05%

Understanding the FFC in the Context of Alternative Funding Structures:

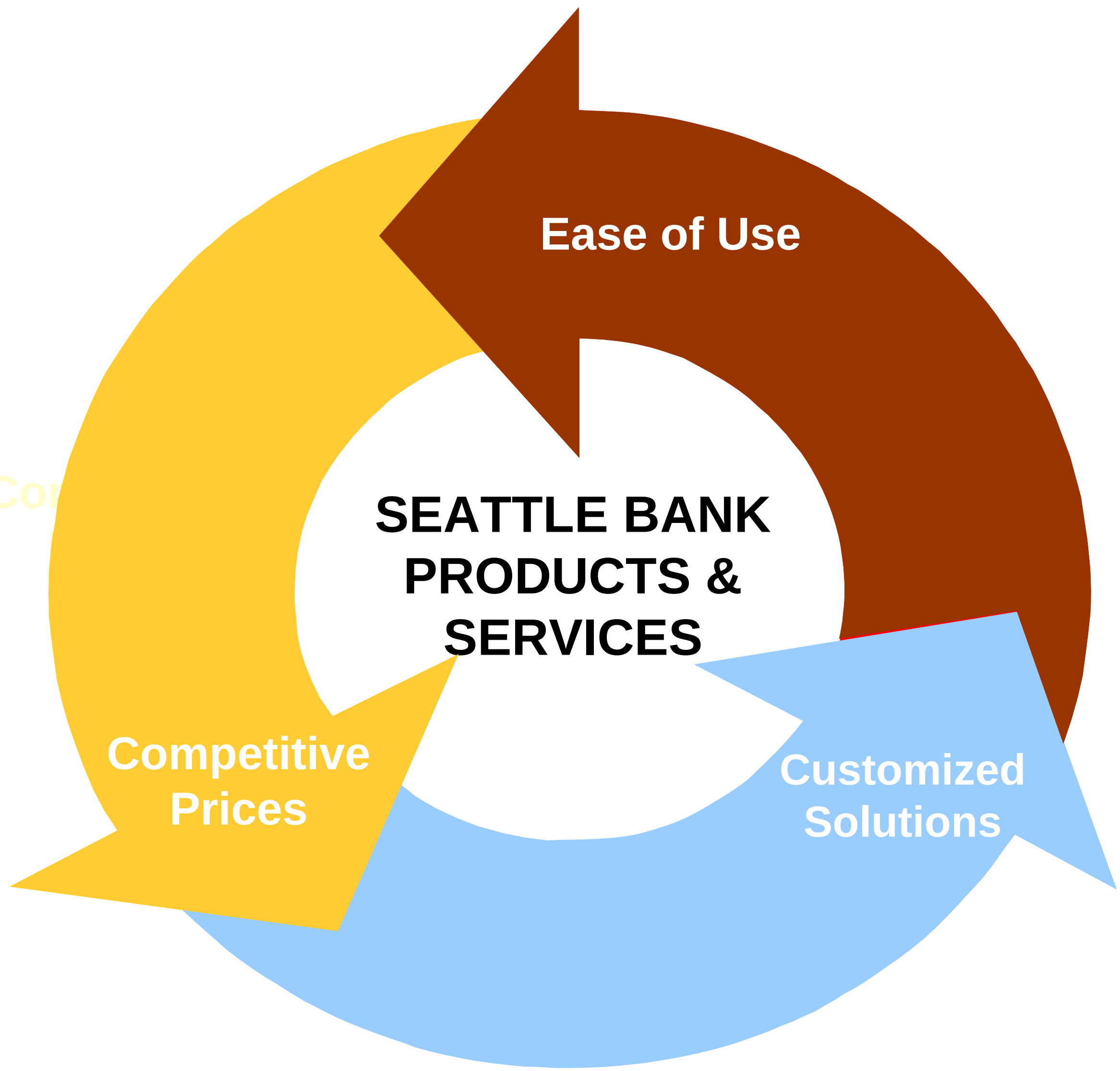
Yields on 5-year non-put 1-year European FFC are:

- ***Competitive with Comparable Putable Advances:***
  - Floating leg is 19 bps lower than 5/np 1-year, 1x putable
  - Fixed leg is only 19 bps above the 5/np1-year, 1x putable
- ***Competitive with Comparable Fixed Rate Bullet Advances:***
  - Floating leg is 52 bps lower than a 5-year bullet advance
  - Fixed leg is 14 bps lower than a 5-year bullet advance
  - Fixed leg is 14 bps lower than a 4-year bullet advance
- ***Competitive with Comparable Floating Rate Advances:***
  - Floating leg is 52 bps lower than a one-year Prime floating advance
  - Floating leg is 50 bps lower than a 3-month Libor floating advance

Federal Home Loan Bank Seattle

On Deck…

PRODUCT	DESCRIPTION	APPLICATION	ADVANTAGES
Callable or "Returnable" Advance	Subject to termination by the *Borrower* on pre-determined dates	Funding specific assets not subject to prepayment penalty; loan and investment portfolio management; liquidity and balance sheet management	Addresses loan pre-payment problem for customers w/o prepayment penalty; protects portfolio from accelerating prepayments


Ease of Use
SEATTLE BANK PRODUCTS & SERVICES
Competitive Prices
Customized Solutions

Federal Home Loan Bank Seattle

Disclaimer:

This material is not an offer to sell or buy any security or financial product, and the information in these materials is subject to change. The information set forth is for informational purposes only. The Bank does not warrant or guarantee the accuracy of the information presented. The information presented is not investment, financial, accounting, regulatory, tax or related advice and you are advised to consult your accounting, tax and financial advisers regarding any questions you may have about the information presented. The rates and other values presented in this material are indications only; the actual amounts may vary. All terms are subject to change without notice. Any member who engages in any transaction described in this material will be required to execute a written agreement with the Federal Home Loan Bank of Seattle that will govern the terms and conditions of that transaction. It is the member's sole responsibility to review any such agreement prior to signing it. In the event of any inconsistencies between this information and any such agreement, the agreement shall be determinative.

Federal Home Loan Bank Seattle