#### Coleman & GLS

## THE CPR REPORT



Providing the most detailed monthly SBA 7(a), 504 and SBIC prepayment, default and market information available anywhere.

#### BOB JUDGE, GLS Editor



#### SPECIAL POINTS OF INTEREST:

- 7a Prepays above 15%
- Prepays by loan size
- Loan pricing higher

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## Actual 7(a) Prepays Go Back Above 16%

VOLUME 13, ISSUE #1

In January, total prepays, including paid excess principal (ACPR), came in at 16.38%, a 14% increase from last month's reading of 14.36%.

After correcting for the excess principal being released from the MRF, pool prepays (CCPR) came in at 14.45%, up 17% from the previous reading of 12.35%.

Underlying loan level CPRs (LCPR) came in at 15.89%, also up 17% from the prior level of 13.61%.

Through December pooling

(January reporting), SunTrust

finished 2018 as the leader, with

a total for ALL POOLS of \$2.1

billion. They were followed by

Signature Bank with \$1.4 billion

and Raymond James with \$1.3

billion. Totals for all assembled

from \$8.95 billion from 2017.

Turning to the second largest

issuance maturity bucket, 10-13

year pools, Raymond James took

the crown with a total of \$593

pools was \$8.35 billion, down 7%

As for the largest sector in the market, 20+ years to maturity, the ACPR came in at 17.81%, an increase of 16% from the previous reading of 15.31%. The CCPR came in at 15.94% versus 13.38% and the LCPR recorded 17.54%, up from 14.76%, previously.

The CDR calculations came out as follows:

Including excess (ACDR) was 1.75%, pool corrected (CCDR) was 1.55% and the loan-level (LCDR) was 1.70%.

JANUARY, 2019

As for the CRR, they came is as follows:

ACRR: 14.62%, CCRR: 12.90%, LCRR: 14.19%.

Regarding our maturity buckets, we saw 7 out of 7 buckets increase.

By order of magnitude, increases

Continued on page 2. Charts begin on page 3 and continue on page 27

### 7(a) Pooling League Tables

million, followed by SunTrust with \$584MM, FTN with \$462MM and Signature with \$385MM. YTD totals were \$2.9 billion. Compared to last year, pooling in this sector was down 15% from \$3.4 billion.

As for the largest issuance bucket, 20+ years to maturity, Sun-Trust finished the year number one with \$1.4 billion, followed by Signature (\$866MM), FTN (\$546MM) and Raymond James (\$542). Totals in the long-end for 2018 was \$4.5 billion. Compared to 2017, long-end pooling was down 10% from \$5 billion.

As for fixed rate pools, JVB finished first with \$21MM, followed by FTN with \$12MM. YTD totals for fixed rate pools is \$34MM. Compared to last year, fixed rate pooling was down 26% from \$46MM.

For further information on the terminology and concepts used in this article,

Data on page 7

#### **Master Reserve Fund Watch**

As of the January Factor Report, we estimate the principal shortfall in the MRF to be \$2.45 billion. This month saw \$52 million of excess paid out and since October 2017, the cumulative total is \$972 million.

## 7(a) Prepayment Speeds Commentary...Continued

were seen in the actual data in <8 (+94% to ACPR 21.55%), I3-I6 (+76% to ACPR I3.78%), Fixed (+67% to ACPR I3.33%), I6-20 (+29% to ACPR I2.03%), 20+ (+16% to ACPR I7.81%), 8-I0 (+6% to ACPR I0.98%) and I0-I3 (+4% to ACPR I4.22%).

No decreases were seen in the ACPR last month.

As for the CCPR, we saw 7 buckets increase, with the largest one being: <8 (+142% to CCPR 18.18%), Fixed (+95% to CCPR 12.30%), 13-16 (+83% to CCPR 11.87%), 16-20 (+34% to CCPR 10.78%), 20+ (+19% to CCPR 15.94%), 10-13 (+6% to CCPR 12.07%) and 8-10 (+6% to CCPR 9.70%). Also no decreases were seen in the CCPR last month.

Lastly, for the LCPR, we also witnessed 7 increases, led by <8 (+141% to LCPR 20.25%), Fixed (+95% to LCPR 13.00%), 13-16 (+82% to LCPR 12.67%), 16-20 (+33% to LCPR 12.80%), 20+ (+19% to LCPR 17.54%), 10-13 (+6% to LCPR 13.25%), and 8-10 (+6% to LCPR 10.19%).

No decreases were seen in the LCPR last month.

As for next month, expect a reading similar to December.

For further information on the terminology and concepts used in this article, please refer to the "Glossary and Definitions" at the end of the report. "As for next month, expect a reading similar to December."

Data starts on page 3 and continues on page 27

GOVERNMENT LOAN SOLUTIONS

The nationwide leader in the valuation of SBA and USDA assets.

**GLS** provides valuations for:

- SBA 7(a), 504 1st mortgage and USDA servicing rights
- SBA 7(a) and 504 1st mortgage pools
- Guaranteed and non-guaranteed 7
  (a) loan portions Interest-only portions of SBA and USDA loans

In these times of market uncertainty, let GLS help you in determining the value of your SBA and USDA related-assets.

For further information, please contact Bob Judge at (216) 456-2480 ext. 133 or at

ACT CPR	<8	8 - 10	10 - 13	13 - 16	16 - 20	20+	FIXED	ALL
Oct-18	19.01%	10.93%	14.89%	9.10%	17.40%	14.36%	9.54%	14.44%
Nov-18	9.43%	17.80%	17.74%	17.77%	19.90%	20.56%	2.17%	19.42%
Dec-18	11.08%	10.38%	13.68%	7.85%	9.36%	15.31%	7.96%	14.36%
Jan-19	21.55%	10.98%	14.22%	13.78%	12.03%	17.81%	13.33%	16.38%
Grand Total	15.38%	12.54%	15.14%	12.23%	14.80%	17.05%	8.31%	16.18%

#### Actual prepayments versus actual pool trading balances

Corrected prepayments versus corrected pool trading balances

COR CPR	<8	8 - 10	10 - 13	13 - 16	16 - 20	20+	FIXED	ALL
Oct-18	15.65%	9.71%	12.57%	8.25%	15.23%	12.99%	7.57%	12.77%
Nov-18	7.42%	15.70%	15.13%	16.88%	17.58%	18.52%	2.09%	17.24%
Dec-18	7.51%	9.15%	11.35%	6.49%	8.07%	13.38%	6.31%	12.35%
Jan-19	18.18%	9.70%	12.07%	11.87%	10.78%	15.94%	12.30%	14.45%
<b>Grand Total</b>	12.28%	11.08%	12.79%	10.97%	13.01%	15.24%	7.11%	14.23%

Corrected prepayments versus underlying loan trading balances

LOAN CPR	<8	<mark>8 - 10</mark>	<u> 10 - 13</u>	<b>13 - 16</b>	<u> 16 - 20</u>	20+	FIXED	ALL
Oct-18	17.48%	10.36%	13.81%	8.87%	18.01%	14.36%	8.02%	14.10%
Nov-18	8.32%	16.59%	16.59%	18.08%	20.74%	20.38%	2.22%	18.96%
Dec-18	8.41%	9.62%	12.46%	6.96%	9.60%	14.76%	6.67%	13.61%
Jan-19	20.25%	10.19%	13.25%	12.67%	12.80%	17.54%	13.00%	15.89%
Grand Total	13.73%	11.69%	14.04%	11.76%	15.41%	16.80%	7.53%	15.67%

## Loan-level prepayments by maturity bucket and guaranteed portion size at time of sale into the Secondary Market

ALL	<250	250-500	500-1mm	1-1.5mm	1.5-2mm	2-2.5mm	2.5-3mm	3-3.5mm	3.5-4mm	4mm+
Oct-18	15.09%	18.43%	16.77%	25.12%	19.45%	16.73%	23.81%	22.73%	38.00%	25.48%
Nov-18	12.66%	14.73%	14.71%	16.08%	15.13%	15.88%	15.95%	9.91%	16.99%	0.17%
Dec-18	17.67%	18.39%	18.33%	19.97%	21.33%	13.43%	20.23%	11.20%	16.43%	0.25%
Jan-19	12.56%	14.80%	15.02%	15.18%	14.91%	14.46%	23.19%	10.82%	15.51%	0.31%
Grand Total	14.52%	16.61%	16.22%	<b>19.18%</b>	17.75%	15.12%	20.85%	13.71%	22.24%	7.18%

<8	<250	250-500	500-1mm	1-1.5mm	1.5-2mm	2-2.5mm	2.5-3mm	3-3.5mm	3.5-4mm	4mm+
Oct-18	19.29%	14.56%	2.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Nov-18	15.37%	11.14%	8.36%	2.39%	0.00%	4.13%	0.00%	0.00%	0.00%	0.00%
Dec-18	19.61%	32.00%	29.18%	9.38%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Jan-19	15.69%	19.55%	2.26%	38.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Grand Total	17.52%	19.64%	11.37%	13.66%	0.00%	1.06%	0.00%	0.00%	0.00%	0.00%

8-10	<250	250-500	500-1mm	1-1.5mm	1.5-2mm	2-2.5mm	2.5-3mm	3-3.5mm	3.5-4mm	4mm+
Oct-18	26.80%	11.51%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Nov-18	8.13%	27.32%	4.66%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Dec-18	19.50%	17.25%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Jan-19	16.34%	8.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Grand Total	17.97%	16.59%	1.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

10-13	<250	250-500	500-1mm	1-1.5mm	1.5-2mm	2-2.5mm	2.5-3mm	3-3.5mm	3.5-4mm	4mm+
Oct-18	14.08%	17.83%	17.68%	23.83%	17.30%	24.62%	23.03%	14.31%	51.72%	0.00%
Nov-18	12.79%	14.21%	15.80%	15.02%	11.62%	17.77%	17.86%	4.62%	15.09%	0.00%
Dec-18	17.62%	17.12%	15.66%	11.34%	17.69%	12.58%	25.14%	1.78%	12.34%	1.00%
Jan-19	11.40%	13.41%	14.63%	9.41%	17.59%	24.67%	32.03%	3.57%	14.03%	0.99%
Grand Total	14.01%	15.65%	15.94%	15.00%	16.10%	20.08%	24.75%	6.06%	25.18%	0.50%

## Loan-level prepayments by maturity bucket and guaranteed portion size at time of sale into the Secondary Market

13-16	<250	250-500	500-1mm	1-1.5mm	1.5-2mm	2-2.5mm	2.5-3mm	3-3.5mm	3.5-4mm	4mm+
Oct-18	10.94%	18.80%	15.86%	20.00%	27.58%	25.86%	44.69%	0.95%	59.86%	2.83%
Nov-18	17.78%	27.13%	11.83%	16.08%	18.45%	6.82%	0.92%	1.03%	1.64%	0.00%
Dec-18	19.41%	14.19%	13.89%	25.92%	13.51%	0.35%	0.31%	0.00%	0.23%	0.00%
Jan-19	14.35%	5.45%	9.64%	8.72%	0.67%	0.40%	0.68%	1.44%	1.06%	0.00%
Grand Total	15.66%	16.86%	12.85%	17.94%	15.63%	8.74%	13.78%	0.86%	21.62%	0.72%

16-20	<250	250-500	500-1mm	1-1.5mm	1.5-2mm	2-2.5mm	2.5-3mm	3-3.5mm	3.5-4mm	4mm+
Oct-18	30.27%	40.69%	16.07%	21.38%	43.40%	0.00%	0.00%	0.49%	0.00%	0.00%
Nov-18	29.35%	11.21%	11.02%	35.79%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%
Dec-18	38.40%	23.93%	10.65%	47.69%	39.65%	1.16%	2.03%	0.00%	0.00%	0.00%
Jan-19	8.48%	18.89%	7.76%	17.44%	0.63%	0.77%	0.00%	78.09%	0.00%	0.00%
Grand Total	27.59%	24.64%	11.44%	31.73%	24.01%	0.49%	0.51%	33.92%	0.00%	0.00%

20+	<250	250-500	500-1mm	1-1.5mm	1.5-2mm	2-2.5mm	2.5-3mm	3-3.5mm	3.5-4mm	4mm+
Oct-18	18.40%	18.61%	16.77%	26.25%	19.48%	14.67%	23.43%	26.61%	33.16%	38.40%
Nov-18	11.11%	14.42%	14.58%	16.18%	16.27%	16.17%	16.29%	12.01%	18.16%	0.28%
Dec-18	17.40%	19.49%	19.89%	21.06%	22.62%	14.49%	19.96%	14.43%	18.18%	0.00%
Jan-19	16.70%	16.56%	15.87%	16.94%	15.10%	12.65%	21.99%	10.87%	16.53%	0.11%
Grand Total	15.95%	17.30%	16.81%	20.22%	18.42%	14.50%	20.46%	16.06%	21.73%	11.21%

FIXED	<250	250-500	500-1mm	1-1.5mm	1.5-2mm	2-2.5mm	2.5-3mm	3-3.5mm	3.5-4mm	4mm+
Oct-18	2.88%	15.77%	1.23%	2.11%	0.07%	0.00%	0.00%	1.60%	0.00%	0.00%
Nov-18	7.64%	28.00%	14.60%	1.14%	0.29%	0.50%	0.00%	0.74%	0.00%	0.00%
Dec-18	6.88%	13.92%	2.99%	40.71%	0.06%	0.00%	0.00%	1.96%	0.00%	0.00%
Jan-19	10.34%	9.73%	1.58%	15.13%	0.28%	0.00%	0.00%	0.00%	0.00%	0.00%
Grand Total	7.04%	17.22%	5.28%	16.29%	0.17%	0.12%	0.00%	1.08%	0.00%	0.00%

# Bank Operating System

III ncino.					Sp	rea				
Income Statement Balance Sheet Cash Plow Statement UCA Cash Plow Ratios										
Port City Coffee * 2	014 • Months • End	of Period 💌	Common Sizing	Show Oper	ations					
Configure Groups 0	Global Analysis 🔹									
Gross Profit 🏾 📽	2012 Tax Return	CS %	2013 Tax Return	CS %	2014 Projected	CS				
Sales	743,000.00	100.0	943,000.00	100.0	1,124,000.00	100				
(Returns & allowances)	(12.000.00)	1.6	(15.000.00)	1.6	(27,000.00)	2.4				
(Cost of goods sold)	(350,987.00)	47.2	(450,989.00)	47.8	(569,523.00)	50.				
Gross Profit	\$380,013.00	51.1	\$477,011.00	50.6	\$527,477.00	46.				
Operating expense *	2012	CS %	2013	CS %	2014	CS				
Sales, gen & admin expense	270,000.00	36.3	239,839.00	25.4	326,000.00	29.				
Admin. wages & salaries	75,000.00	10.1	85,000.00	9.0	152,000.00	13.				
Officers compensation	34,000.00	4.6	10,000.00	1.1	50,000.00	4.4				
Rent	16,500.00	2.2	18,000.00	1.9	0.00	0.0				
Bad debt	0.00	0.0	0.00	0.0	0.00	0.0				
Insurance	2,800.00	0.4	3,000.00	0.3	6,000.00	0.5				
Professional fees	450.00	0.1	700.00	0.1	1,500.00	0.1				

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### 7(a) Pool Assembler League Tables, All Pools—2018

POOL ASSEMBLER	ALL POOLS
SUNTRUST BANK	\$2,094,071,189
SIGNATURE BANK	\$1,370,339,056
RAYMOND JAMES BANK, N.A.	\$1,280,253,541
FTN FINANCIAL CAPITAL MARKETS	\$1,245,066,232
VINING-SPARKS IBG, L.P.	\$602,389,216
STIFEL NICOLAUS & COMPANY, INC.	\$423,954,696
KGS-ALPHA CAPITAL MARKETS, L.P.	\$379,670,196
CANTOR FITZGERALD & CO.	\$374,275,363
STONEWALL INVESTMENTS INC. dba HANOVER SEC.	\$257,248,343
J.V.B. FINANCIAL GROUP. LLC	\$179,404,486
WELLS FARGO SECURITIES, LLC	\$80,331,932
ZB, NATIONAL ASSOCIATION	\$30,916,851
ZIONS BANCORPORATION, NAT ASSOCIATION	\$30,774,298
TOTAL	\$8,348,695,399

### 7(a) Pool Assembler League Tables, 10-13 year maturity pools—2018

POOL ASSEMBLER	10-13 YRS.
RAYMOND JAMES BANK, N.A.	\$592,741,171
SUNTRUST BANK	\$584,119,174
FTN FINANCIAL CAPITAL MARKETS	\$462,415,880
SIGNATURE BANK	\$384,617,936
KGS-ALPHA CAPITAL MARKETS, L.P.	\$295,074,043
VINING-SPARKS IBG, L.P.	\$282,176,147
WELLS FARGO SECURITIES, LLC	\$80,331,932
STONEWALL INVESTMENTS INC. dba HANOVER SEC.	\$78,072,404
STIFEL NICOLAUS & COMPANY, INC.	\$72,780,150
J.V.B. FINANCIAL GROUP. LLC	\$40,732,851
CANTOR FITZGERALD & CO.	\$32,778,816
TOTAL	\$2,905,840,504

### 7(a) Pool Assembler League Tables, 20+ year maturity pools—2018

POOL ASSEMBLER	20+ YRS.
SUNTRUST BANK	\$1,395,364,770
SIGNATURE BANK	\$866,321,962
FTN FINANCIAL CAPITAL MARKETS	\$546,221,307
RAYMOND JAMES BANK, N.A.	\$542,552,822
STIFEL NICOLAUS & COMPANY, INC.	\$269,842,311
CANTOR FITZGERALD & CO.	\$233,458,760
VINING-SPARKS IBG, L.P.	\$232,787,009
STONEWALL INVESTMENTS INC. dba HANOVER SEC.	\$139,313,238
J.V.B. FINANCIAL GROUP. LLC	\$130,841,513
KGS-ALPHA CAPITAL MARKETS, L.P.	\$84,596,154
ZB, NATIONAL ASSOCIATION	\$30,916,851
ZIONS BANCORPORATION, NAT ASSOCIATION	\$30,774,298
TOTAL	\$4,502,990,993

### 7(a) Pool Assembler League Tables, Fixed Rate pools—2018

POOL ASSEMBLER	FIXED RATE
J.V.B. FINANCIAL GROUP. LLC	\$21,442,093
FTN FINANCIAL CAPITAL MARKETS	\$12,329,444
TOTAL	\$33,771,537

## **SBIC Debenture Prepayment Speeds**

#### **Historical SBIC Defaults and Voluntary Prepayments**

#### SBIC Defaults and Voluntary Prepayments by

Debenture Age

				SBIC DEB
	SBIC DEB	SBIC DEB	SBIC DEB	AMORT
MONTH	CDR	CRR	CPR	EQUIV CPR
3/1/2003	0.00%	5.81%	5.81%	-3.70%
9/1/2003	5.13%	6.84%	11.79%	2.60%
3/1/2004	2.79%	8.11%	10.78%	0.24%
9/1/2004	3.74%	10.37%	13.92%	3.82%
3/1/2005	1.63%	12.43%	13.95%	3.83%
9/1/2005	13.67%	9.19%	22.19%	13.21%
3/1/2006	1.76%	7.18%	8.88%	-1.77%
9/1/2006	2.34%	7.75%	10.00%	0.13%
3/1/2007	0.00%	9.39%	9.39%	-0.40%
9/1/2007	2.99%	10.91%	13.73%	3.57%
3/1/2008	2.04%	8.57%	10.53%	0.52%
9/1/2008	0.19%	9.53%	9.71%	-1.12%
3/1/2009	1.79%	5.23%	6.97%	-3.65%
9/1/2009	4.36%	5.64%	9.87%	-1.02%
3/1/2010	0.00%	7.22%	7.22%	-4.32%
9/1/2010	1.50%	8.87%	10.30%	-1.09%
3/1/2011	4.51%	15.21%	19.36%	9.14%
9/1/2011	0.00%	12.66%	12.66%	2.32%
3/1/2012	5.45%	10.39%	15.55%	5.42%
9/1/2012	0.50%	17.80%	18.26%	8.37%
3/1/2013	0.84%	10.28%	11.08%	1.75%
9/1/2013	3.89%	9.07%	12.78%	2.70%
3/1/2014	3.82%	8.10%	11.76%	1.45%
9/1/2014	0.16%	12.17%	12.33%	1.76%
3/1/2015	0.00%	11.09%	11.09%	0.26%
9/1/2015	0.67%	9.17%	9.81%	-0.72%
3/1/2016	0.00%	7.55%	7.55%	-3.93%
9/1/2016	0.00%	9.08%	9.08%	-1.95%
3/1/2017	0.78%	10.45%	11.18%	-0.51%
9/1/2017	0.81%	15.07%	15.81%	4.53%
3/1/2018	0.00%	13.53%	13.53%	1.70%
9/1/2018	0.00%	20.13%	20.13%	9.02%

				AMORT
SBIC DEB				EQUIV
AGE	SBIC CDR	SBIC CRR	SBIC CPR	CPR
0	0.00%	0.00%	0.00%	0.00%
6	0.32%	1.33%	1.65%	-7.22%
12	0.25%	1.59%	1.84%	-7.60%
18	0.25%	3.60%	3.85%	-6.01%
24	0.80%	4.75%	5.54%	-4.84%
30	1.43%	8.59%	9.96%	-0.66%
36	1.01%	10.48%	11.43%	0.16%
42	1.08%	14.49%	15.50%	3.81%
48	1.68%	17.17%	18.70%	6.44%
54	2.36%	17.83%	19.97%	6.67%
60	2.25%	20.77%	22.77%	8.48%
66	2.53%	24.77%	26.97%	11.69%
72	2.96%	27.09%	29.61%	12.84%
78	3.02%	28.83%	31.37%	12.41%
84	4.78%	31.39%	35.34%	14.14%
90	4.01%	25.31%	28.77%	0.14%
96	9.33%	35.81%	43.24%	13.85%
102	7.20%	27.69%	33.79%	-13.73%
108	9.74%	43.76%	51.00%	-5.91%
114	16.59%	49.96%	61.47%	-45.92%
120	21.11%	0.00%	21.11%	0.00%

#### tered in March.

Once we correct for amortization using our Amortization Equivalent CPR (AECPR) calculation, we see that prepays came in at AECPR 9.02%, up from 1.70% six months ago.

Turning to the components, defaults again came in at 0.00% CDR, while the un-amortized CRR came in at 20.13%.

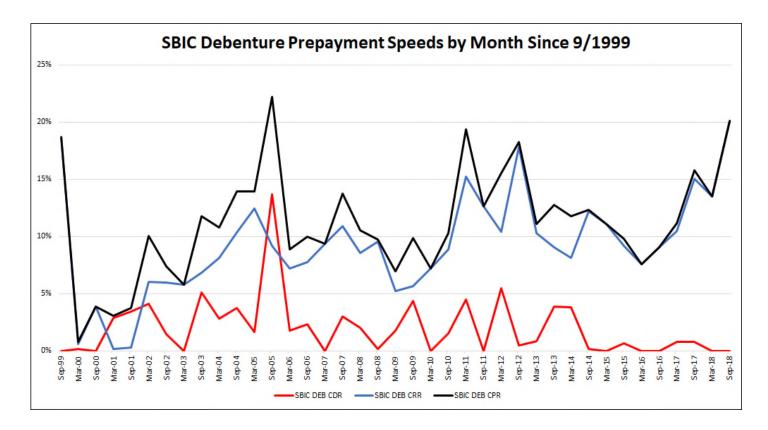
See you next March with a new update.

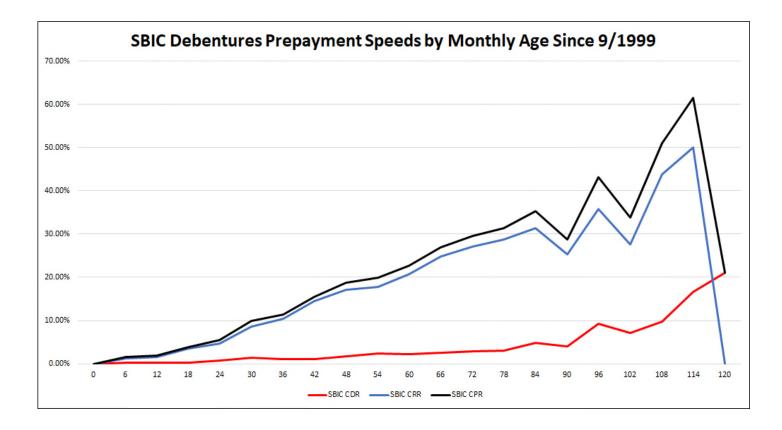
For further information on the terminology and concepts used in this article, please refer to the "Glossary and Definitions" at the end of the report.

#### **Reprinted from September, 2018:**

For September, we saw overall CPRs go above 20% for the first time since 2005, recording a speed of CPR 20.13%, up from 13.53% regis-

## **SBIC Debenture Prepayment Speeds**





## **FMLP Lifetime Prepayment Speeds**

							-			_			
MO / WAM BUCKET	<192 Mos.	192-263 Mos.	264-288 Mos.	289+ Mos.	Total by Month	RESET TYPE	FIXED RATE	FHLB VARIOUS	PRIME RATE	5 YR LIBOR SWAP	3 MO LIBOR	5 YR CMT	Total by Month
	0.000/		0.040/	0.000/	<b>a</b> c <b>a</b> a(		0.000/	0.000/	0.000/		0.000/	0.000/	
Aug-14	0.00%	14.49%	-0.01%	0.00%	2.62%	Aug-14	0.00%	0.00%	0.00%	7.18%	0.00%	0.00%	2.62%
Sep-14	9.58%	27.82%	11.40%	0.22%	10.33%	Sep-14	0.00%	0.00%	18.58%	0.21%	0.00%	49.31%	10.33%
Oct-14	10.74%	40.03%	1.82%	0.00%	10.49%	Oct-14	3.74%	0.00%	21.98%	0.21%	0.00%	0.00%	10.49%
Nov-14	0.00%	25.65%	40.96%	2.52%	18.38%	Nov-14	52.60%	0.00%	23.54%	1.31%	0.00%	0.00%	18.38%
Dec-14	0.00%	0.00%	0.01%	3.08%	1.14%	Dec-14	0.14%	0.00%	0.00%	0.01%	17.58%	0.00%	1.14%
Jan-15	52.31%	59.57%	21.46%	1.73%	30.25%	Jan-15	3.33%	0.00%	43.92%	26.00%	8.45%	0.00%	30.25%
Feb-15	3.97%	28.86%	43.51%	5.55%	21.13%	Feb-15	10.32%	0.00%	33.54%	14.00%	2.68%	0.00%	21.13%
Mar-15	0.00%	7.86%	0.01%	3.73%	2.65%	Mar-15	0.07%	0.00%	2.09%	3.10%	10.30%	0.00%	2.65%
Apr-15	0.01%	5.93%	13.12%	-0.03%	4.58%	Apr-15	-0.01%	0.00%	9.92%	1.19%	0.00%	0.07%	4.58%
May-15	50.36%	0.00%	0.00%	34.13%	25.62%	May-15	0.00%	0.00%	34.21%	22.64%	34.03%	20.06%	25.62%
Jun-15	0.00%	0.00%	29.19%	22.27%	17.26%	Jun-15	29.17%	0.00%	12.42%	22.73%	0.02%	0.00%	17.26%
Jul-15	28.25%	0.00%	25.45%	14.08%	18.24%	Jul-15	8.62%	92.73%	18.86%	10.34%	12.92%	38.15%	18.24%
Aug-15	55.92%	1.07%	22.54%	51.93%	39.39%	Aug-15	35.88%	0.00%	33.74%	45.24%	62.41%	0.00%	39.39%
Sep-15	48.90%	32.20%	17.80%	17.79%	27.00%	Sep-15	0.00%	0.00%	33.65%	25.50%	36.65%	35.26%	27.00%
Oct-15	46.23%	0.00%	37.60%	11.65%	25.01%	Oct-15	29.06%	0.00%	28.59%	24.05%	0.00%	23.56%	25.01%
Nov-15	0.00%	50.42%	8.23%	7.97%	15.81%	Nov-15	0.00%	0.00%	25.26%	14.04%	0.00%	0.00%	15.81%
Dec-15	0.00%	38.73%	9.11%	23.53%	18.63%	Dec-15	0.08%	0.00%	31.95%	13.92%	0.00%	0.00%	18.63%
Jan-16	29.38%	3.68%	25.90%	11.08%	17.92%	Jan-16	9.73%	92.10%	8.35%	19.07%	30.92%	27.01%	17.92%
Feb-16	33.14%	0.00%	12.75%	20.58%	18.08%	Feb-16	0.00%	0.00%	24.69%	3.01%	74.27%	0.00%	18.08%
Mar-16	1.81%	55.70%	24.02%	0.34%	18.60%	Mar-16	44.14%	0.00%	0.00%	28.62%	0.00%	9.05%	18.60%
Apr-16	0.00%	23.98%	13.26%	0.00%	7.65%	Apr-16	0.00%	0.00%	9.73%	0.06%	51.00%	0.00%	7.65%
May-16	49.15%	0.00%	23.05%	21.57%	25.17%	May-16	17.53%	0.00%	39.11%	3.40%	36.12%	63.71%	25.17%
Jun-16	33.50%	46.77%	0.00%	1.98%	15.80%	Jun-16	0.01%	0.00%	34.87%	0.12%	13.23%	0.00%	15.80%
Jul-16	24.65%	21.12%	4.84%	9.69%	12.87%	Jul-16	0.23%	0.00%	0.03%	20.54%	19.39%	68.63%	12.87%
Aug-16	0.00%	35.47%	3.27%	6.29%	9.29%	Aug-16	6.76%	0.00%	14.97%	3.88%	18.80%	0.00%	9.29%
Sep-16	39.47%	0.36%	4.26%	16.16%	15.60%	Sep-16	8.75%	0.00%	18.99%	13.14%	35.67%	0.00%	15.60%
Oct-16	39.47%	80.44%	6.50%	6.79%	29.53%	Oct-16	13.31%	0.00%	51.05%	7.09%	49.98%	0.00%	29.53%
Nov-16	0.00%	0.00%	16.69%	5.80%	7.51%	Nov-16	0.00%	0.00%	17.73%	1.66%	0.00%	0.00%	7.51%
Dec-16	42.29%	28.12%	0.00%	24.53%	22.07%	Dec-16	0.00%	0.00%	27.46%	28.41%	0.00%	0.00%	22.07%
Jan-17	19.49%	54.03%	5.15%	30.13%	25.61%	Jan-17	19.61%	0.00%	25.05%	21.91%	72.00%	0.00%	25.61%
Feb-17	3.55%	70.16%	23.13%	41.34%	36.10%	Feb-17	23.56%	0.00%	42.95%	40.70%	0.00%	0.00%	36.10%
Mar-17	5.00%	0.00%	7.31%	13.26%	8.61%	Mar-17	0.00%	0.00%	16.90%	5.84%	0.00%	0.00%	8.61%
Apr-17	25.30%	72.04%	8.26%	7.25%	21.90%	Apr-17	2.92%	0.00%	38.32%	13.87%	0.00%	33.73%	21.90%
May-17	0.00%	0.00%	0.00%	15.94%	6.94%	May-17	14.23%	0.00%	0.00%	11.56%	0.00%	0.00%	6.94%
Jun-17	76.55%	0.00%	4.11%	12.77%	25.74%	Jun-17	0.00%	0.00%	56.10%	4.28%	0.00%	0.00%	25.74%
Jul-17	9.87%	47.97%	35.43%	14.81%	25.47%	Jul-17	9.65%	0.00%	29.35%	26.89%	49.87%	0.00%	25.47%
Aug-17	4.71%	0.00%	2.95%	18.95%	10.00%	Aug-17	26.32%	0.00%	2.18%	10.01%	0.00%	20.06%	10.00%
Sep-17	0.00%	0.00%	0.01%	18.24%	8.06%	Sep-17	0.00%	0.00%	0.00%	18.72%	0.00%	0.00%	8.06%
Oct-17	23.67%	61.32%	23.85%	9.08%	23.60%	Oct-17	0.00%	0.00%	34.54%	27.20%	0.00%	0.00%	23.60%
Nov-17	0.00%	0.03%	31.31%	10.77%	15.49%	Nov-17	5.72%	0.00%	30.61%	9.21%	0.00%	0.00%	15.49%
Dec-17	0.02%	0.00%	42.10%	16.59%	21.99%	Dec-17	9.58%	0.00%	25.75%	26.83%	16.28%	0.00%	21.99%
Jan-18	66.29%	0.00%	47.65%	0.03%	30.64%	Jan-18	31.52%	0.00%	0.00%	50.52%	0.05%	49.09%	30.64%
Feb-18	0.00%	0.00%	25.23%	52.60%	33.79%	Feb-18	18.55%	0.00%	0.00%	57.21%	62.09%	0.00%	33.79%
Mar-18	64.83%	15.54%	41.02%	11.84%	32.40%	Mar-18	7.13%	97.73%	49.52%	17.60%	0.00%	0.00%	32.40%
Apr-18	0.00%	0.00%	0.01%	45.37%	22.90%	Apr-18	1.48%	0.00%	42.88%	16.71%	0.06%	0.00%	22.90%
May-18	56.64%	97.30%	5.23%	10.78%	43.21%	May-18	0.00%	0.00%	79.33%	15.53%	0.00%	0.00%	43.21%
Jun-18	0.00%	0.00%	8.49%	0.23%	2.91%	Jun-18	0.00%	0.00%	9.24%	0.04%	0.02%	0.00%	2.91%
Jul-18	0.00%	0.00%	0.00%	18.28%	8.47%	Jul-18	0.00%	0.00%	8.60%	14.26%	0.13%	0.00%	8.47%
Aug-18	0.00%	0.00%	13.52%	0.03%	4.58%	Aug-18	0.00%	0.00%	0.00%	9.40%	0.01%	16.00%	4.58%
Sep-18	0.00%	84.75%	0.00%	17.39%	21.86%	Sep-18	0.00%	0.00%	45.61%	9.54%	34.30%	0.00%	21.86%
Oct-18	38.91%	0.00%	0.02%	0.03%	7.11%	Oct-18	0.00%	0.00%	0.00%	0.04%	73.53%	0.00%	7.11%
Nov-18	0.00%	20.09%	11.17%	29.79%	19.19%	Nov-18	19.05%	0.00%	30.04%	0.04%	74.62%	0.00%	19.19%
Dec-18	45.80%	0.00%	78.84%	18.08%	49.23%	Dec-18	0.00%	0.00%	66.83%	54.09%	59.03%	0.00%	49.23%
Jan-19	10.58%	0.00%	17.72%	12.50%	12.86%	Jan-19	26.68%	0.00%	18.03%	5.17%	0.00%	0.00%	12.86%
Total	13.34%	15.96%	10.27%	9.44%	11.38%	Total	6.39%	8.08%	13.61%	10.59%	12.24%	11.22%	11.38%
-													

## **FMLP Lifetime Prepayment Speed Commentary**

In January, the FMLP saw prepayments fall by 74%, coming in at CPR 12.86%. For the history of the FMLP, overall prepayments rose to CPR 11.38% from CPR 11.37%.

As for fixed rate pools, they recorded a CPR of 27%, which increased the lifetime speed to CPR 6.39% from CPR 6.21%. Fixed rate pools continue to be the lowest prepayment reset category in the FMLP.

For further information on the terminology and concepts used in this article, please refer to the "Glossary and Definitions" at the end of the report.

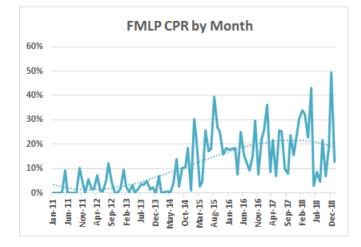


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## **Small Business Indexes Commentary**

**Please note:** We have added our "Hedge" indexes to the CPR Report, which are IO Strip indexes without sub-indexes for pricing and return of capital. They take all interest received and include it as income without dividing it into income and return of capital, which is how the tax accounting is done for most investors. Since pricing and the accounting method can vary across the industry, the hedge index only measures that which comes purely from the data, such as interest and prepayments. We leave it to the industry to utilize their own pricing and tax accounting methodologies.

#### State of the Secondary Market

Beginning with the Rich/Cheap analysis on the following page, we see that by the end of January, a continued recovery in the secondary market pushed short maturities into "Rich" territory while the longend continues to come back from record low "cheapness".

#### **SBI Index Results**

For January, we witnessed increases in four out of five index groups, including 7a pools, SBAPs, SBICs and the Composite. The lone decrease was seen in 7a IOs.

SBA 7a pools returned +0.31% for actual and +0.31% for equal weighting this month versus +0.25% / +0.26% last month as prices remained strong in the Secondary Market.

For IO Strips, we witnessed returns of -0.85% / -0.74%, up from returns of -1.06% / -1.04% last month. Price stability in both the short and long end could not overcome continued high prepayment speeds in 7a loans and pools. It bears repeating that, as the most sensitive asset class to changes in 7a market conditions, movements in price and prepayment speeds can have an outsized impact on the IO indexes.

Turning to our SBAP and SBIC indexes, we saw the 504 debenture indexes come in at +0.56% / +0.55% and SBIC debenture indexes were +0.59% / +0.58%.

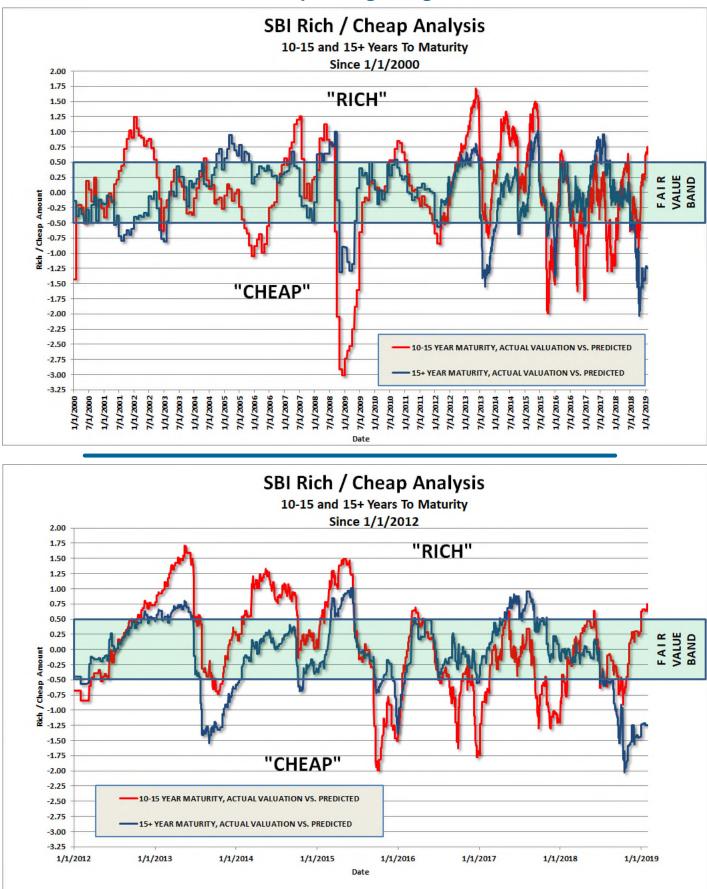
Overall, our Composite Index came in at +0.43% / +0.42%.

If you wish to further delve into the SBI Indexes, please visit our website at <u>www.sbindexes.com</u>. Registration is currently free and it contains a host of information relating to these indexes, as well as indexing in general.

For further information on the SBI Indexes, please refer to the "Glossary and Definitions" at the end of the report.

Charts begin on next page

### **Rich / Cheap Graphs**



END DATE: 01/31/2019			SBI PC	OL INDEX	TOTAL RI	TURN		
INDEX TYPE	1 MONTH	3 MONTH	6 MONTH	1 YEAR	3 YEAR	5 YEAR	10 YEAR	INCEPTION
POOL, ALL EQUAL INDEX	0.31%	0.93%	0.19%	0.24%	3.07%	4.83%	40.68%	129.51%
POOL, ALL ACTUAL INDEX	0.31%	0.96%	0.22%	0.21%	3.13%	4.87%	30.02%	103.12%
POOL, LONG EQUAL INDEX	0.28%	0.85%	(0.17%)	(0.09%)	2.84%	4.52%	46.58%	145.24%
POOL, LONG ACTUAL INDEX	0.27%	0.85%	(0.22%)	(0.16%)	2.81%	4.48%	32.69%	111.24%
POOL, SHORT EQUAL INDEX	0.39%	1.14%	1.21%	1.17%	3.67%	5.67%	27.59%	93.45%
POOL, SHORT ACTUAL INDEX	0.42%	1.22%	1.31%	1.11%	3.91%	5.83%	24.07%	84.66%
POOL, ALL EQUAL INCOME INDEX	0.38%	1.08%	2.12%	4.02%	10.37%	16.04%	53.80%	181.25%
POOL, ALL ACTUAL INCOME INDEX	0.38%	1.09%	2.14%	4.07%	10.53%	16.31%	42.40%	147.75%
POOL, LONG EQUAL INCOME INDEX	0.36%	1.03%	2.01%	3.78%	9.53%	14.59%	56.62%	190.95%
POOL, LONG ACTUAL INCOME INDEX	0.35%	1.01%	1.97%	3.72%	9.46%	14.60%	41.87%	148.86%
POOL, SHORT EQUAL INCOME INDEX	0.42%	1.23%	2.44%	4.71%	13.02%	20.73%	49.11%	164.12%
POOL, SHORT ACTUAL INCOME INDEX	0.44%	1.29%	2.57%	4.95%	13.50%	21.47%	45.54%	151.72%
POOL, ALL EQUAL PRICE INDEX	(0.01%)	0.06%	(1.40%)	(2.55%)	(3.64%)	(4.74%)	(0.59%)	(4.28%)
POOL, ALL ACTUAL PRICE INDEX	(0.00%)	0.08%	(1.37%)	(2.60%)	(3.64%)	(4.77%)	(0.64%)	(4.32%)
POOL, LONG EQUAL PRICE INDEX	(0.03%)	0.01%	(1.68%)	(2.73%)	(3.47%)	(4.43%)	0.09%	(3.23%)
POOL, LONG ACTUAL PRICE INDEX	(0.03%)	0.01%	(1.71%)	(2.76%)	(3.44%)	(4.41%)	0.02%	(3.25%)
POOL, SHORT EQUAL PRICE INDEX	0.05%	0.20%	(0.60%)	(2.06%)	(4.25%)	(5.81%)	(2.77%)	(7.70%)
POOL, SHORT ACTUAL PRICE INDEX	0.07%	0.25%	(0.55%)	(2.22%)	(4.28%)	(5.97%)	(2.81%)	(7.76%)
POOL, ALL EQUAL PREPAY INDEX	(0.05%)	(0.16%)	(0.41%)	(0.88%)	(2.20%)	(3.56%)	(5.14%)	(10.99%)
POOL, ALL ACTUAL PREPAY INDEX	(0.05%)	(0.17%)	(0.42%)	(0.89%)	(2.25%)	(3.69%)	(5.25%)	(10.58%)
POOL, LONG EQUAL PREPAY INDEX	(0.04%)	(0.16%)	(0.41%)	(0.89%)	(2.15%)	(3.47%)	(4.69%)	(10.42%)
POOL, LONG ACTUAL PREPAY INDEX	(0.04%)	(0.15%)	(0.40%)	(0.87%)	(2.18%)	(3.58%)	(4.74%)	(9.90%)
POOL, SHORT EQUAL PREPAY INDEX	(0.06%)	(0.19%)	(0.41%)	(0.87%)	(2.35%)	(3.82%)	(6.30%)	(12.65%)
POOL, SHORT ACTUAL PREPAY INDEX	(0.06%)	(0.22%)	(0.46%)	(0.95%)	(2.46%)	(4.02%)	(6.51%)	(12.49%)
POOL, ALL EQUAL DEFAULT INDEX	(0.01%)	(0.02%)	(0.05%)	(0.13%)	(0.30%)	(0.53%)	(1.25%)	(2.38%)
POOL, ALL ACTUAL DEFAULT INDEX	(0.01%)	(0.02%)	(0.06%)	(0.13%)	(0.31%)	(0.55%)	(1.26%)	(2.30%)
POOL, LONG EQUAL DEFAULT INDEX	(0.01%)	(0.02%)	(0.05%)	(0.13%)	(0.29%)	(0.52%)	(1.03%)	(2.12%)
POOL, LONG ACTUAL DEFAULT INDEX	(0.01%)	(0.02%)	(0.05%)	(0.12%)	(0.30%)	(0.53%)	(1.02%)	(2.00%)
POOL, SHORT EQUAL DEFAULT INDEX	(0.01%)	(0.02%)	(0.05%)	(0.12%)	(0.32%)	(0.57%)	(1.79%)	(3.07%)
POOL, SHORT ACTUAL DEFAULT INDEX	(0.01%)	(0.03%)	(0.06%)	(0.14%)	(0.33%)	(0.60%)	(1.83%)	(3.05%)
POOL, ALL EQUAL VOL PREPAY INDEX	(0.04%)	(0.14%)	(0.35%)	(0.76%)	(1.90%)	(3.04%)	(3.94%)	(8.82%)
POOL, ALL ACTUAL VOL PREPAY INDEX	(0.04%)	(0.15%)	(0.36%)	(0.77%)	(1.95%)	(3.16%)	(4.04%)	(8.48%)
POOL, LONG EQUAL VOL PREPAY INDEX	(0.04%)	(0.14%)	(0.35%)	(0.76%)	(1.86%)	(2.97%)	(3.70%)	(8.48%)
POOL, LONG ACTUAL VOL PREPAY INDEX	(0.04%)	(0.13%)	(0.34%)	(0.75%)	(1.89%)	(3.07%)	(3.76%)	(8.06%)
POOL, SHORT EQUAL VOL PREPAY INDEX	(0.05%)	(0.16%)	(0.35%)	(0.75%)	(2.04%)	(3.27%)	(4.59%)	(9.88%)
POOL, SHORT ACTUAL VOL PREPAY INDEX	(0.05%)	(0.19%)	(0.40%)	(0.82%)	(2.13%)	(3.44%)	(4.76%)	(9.74%)
POOL, ALL EQUAL SCHED PRIN INDEX	(0.01%)	(0.04%)	(0.10%)	(0.23%)	(0.91%)	(1.67%)	(3.00%)	(4.22%)
POOL, ALL ACTUAL SCHED PRIN INDEX	(0.02%)	(0.05%)	(0.10%)	(0.25%)	(0.94%)	(1.69%)	(3.02%)	(4.16%)
POOL, LONG EQUAL SCHED PRIN INDEX	(0.01%)	(0.02%)	(0.06%)	(0.15%)	(0.60%)	(1.12%)	(1.90%)	(2.76%)
POOL, LONG ACTUAL SCHED PRIN INDEX	(0.01%)	(0.02%)	(0.05%)	(0.14%)	(0.57%)	(1.08%)	(1.84%)	(2.62%)
POOL, SHORT EQUAL SCHED PRIN INDEX	(0.03%)	(0.10%)	(0.20%)	(0.48%)	(1.89%)	(3.38%)	(6.07%)	(9.14%)
POOL, SHORT ACTUAL SCHED PRIN INDEX	(0.04%)	(0.11%)	(0.22%)	(0.52%)	(1.94%)	(3.45%)	(6.18%)	(9.10%)
POOL, ALL EQUAL TOTAL PRIN INDEX	(0.06%)	(0.21%)	(0.50%)	(1.11%)	(3.09%)	(5.16%)	(7.99%)	(14.75%)
POOL, ALL ACTUAL TOTAL PRIN INDEX	(0.06%)	(0.22%)	(0.52%)	(1.14%)	(3.17%)	(5.32%)	(8.11%)	(14.31%)
POOL, LONG EQUAL TOTAL PRIN INDEX	(0.05%)	(0.18%)	(0.46%)	(1.03%)	(2.73%)	(4.55%)	(6.49%)	(12.89%)
POOL, LONG ACTUAL TOTAL PRIN INDEX	(0.05%)	(0.17%)	(0.45%)	(1.01%)	(2.74%)	(4.63%)	(6.49%)	(12.26%)
POOL, SHORT EQUAL TOTAL PRIN INDEX	(0.09%)	(0.28%)	(0.61%)	(1.35%)	(4.19%)	(7.07%)	(11.99%)	(20.64%)
POOL, SHORT ACTUAL TOTAL PRIN INDEX	(0.10%)	(0.33%)	(0.68%)	(1.47%)	(4.35%)	(7.34%)	(12.28%)	(20.46%)

END DATE: 01/31/2019			SBI ST	RIP INDEX	TOTAL R	ETURN		
INDEX TYPE	1 MONTH	3 MONTH	6 MONTH	1 YEAR	3 YEAR	5 YEAR	10 YEAR	INCEPTION
STRIP, ALL EQUAL INDEX	(0.74%)	0.04%	(9.28%)	(25.91%)	(32.98%)	(47.85%)	151.50%	172.55%
STRIP, ALL ACTUAL INDEX	(0.85%)	0.05%	(9.14%)	(27.10%)	(31.56%)	(48.72%)	121.60%	129.93%
STRIP, LONG EQUAL INDEX	(1.35%)	(1.47%)	(14.53%)	(28.90%)	(32.93%)	(40.28%)	263.05%	390.81%
STRIP, LONG ACTUAL INDEX	(1.60%)	(1.18%)	(14.33%)	(28.97%)	(33.26%)	(41.21%)	184.44%	255.38%
STRIP, SHORT EQUAL INDEX	0.56%	3.36%	4.45%	(18.72%)	(34.34%)	(63.00%)	22.62%	(21.60%)
STRIP, SHORT ACTUAL INDEX	0.36%	2.10%	0.75%	(24.09%)	(28.59%)	(63.86%)	26.86%	(5.35%)
STRIP, ALL EQUAL INCOME INDEX	0.69%	2.30%	4.81%	10.09%	36.87%	68.40%	384.30%	3,569.90%
STRIP, ALL ACTUAL INCOME INDEX	0.64%	2.17%	4.56%	9.74%	35.87%	66.49%	312.13%	2,652.26%
STRIP, LONG EQUAL INCOME INDEX	0.72%	2.41%	5.01%	10.55%	38.55%	72.71%	509.51%	5,030.95%
STRIP, LONG ACTUAL INCOME INDEX	0.67%	2.28%	4.71%	10.11%	36.91%	69.63%	384.54%	3,319.64%
STRIP, SHORT EQUAL INCOME INDEX	0.62%	2.04%	4.37%	8.94%	32.59%	58.34%	240.82%	1,900.32%
STRIP, SHORT ACTUAL INCOME INDEX	0.59%	1.98%	4.32%	9.06%	33.93%	60.25%	225.07%	1,762.51%
STRIP, ALL EQUAL PRICE INDEX	0.25%	3.43%	(2.62%)	(15.86%)	(18.65%)	(32.04%)	106.60%	68.31%
STRIP, ALL ACTUAL PRICE INDEX	0.16%	3.52%	(2.35%)	(17.25%)	(16.93%)	(33.08%)	110.00%	76.89%
STRIP, LONG EQUAL PRICE INDEX	(0.53%)	1.47%	(8.71%)	(20.20%)	(22.54%)	(29.59%)	84.36%	70.74%
STRIP, LONG ACTUAL PRICE INDEX	(0.69%)	1.83%	(8.28%)	(20.08%)	(22.10%)	(29.45%)	78.25%	75.66%
STRIP, SHORT EQUAL PRICE INDEX	1.90%	7.80%	13.43%	(4.97%)	(9.16%)	(38.07%)	125.59%	33.78%
STRIP, SHORT ACTUAL PRICE INDEX	1.54%	6.37%	8.95%	(12.45%)	(6.06%)	(43.17%)	130.80%	51.43%
STRIP, ALL EQUAL PREPAY INDEX	(1.27%)	(4.34%)	(9.10%)	(16.27%)	(30.57%)	(41.69%)	(57.73%)	(89.99%)
STRIP, ALL ACTUAL PREPAY INDEX	(1.24%)	(4.27%)	(8.94%)	(15.89%)	(30.17%)	(41.53%)	(57.43%)	(89.46%)
STRIP, LONG EQUAL PREPAY INDEX	(1.29%)	(4.49%)	(9.52%)	(16.95%)	(31.20%)	(42.14%)	(55.26%)	(90.29%)
STRIP, LONG ACTUAL PREPAY INDEX	(1.34%)	(4.47%)	(9.57%)	(16.97%)	(31.49%)	(42.65%)	(55.19%)	(90.03%)
STRIP, SHORT EQUAL PREPAY INDEX	(1.23%)	(4.01%)	(8.00%)	(14.51%)	(28.89%)	(40.42%)	(60.65%)	(87.30%)
STRIP, SHORT ACTUAL PREPAY INDEX	(1.08%)	(3.93%)	(7.72%)	(13.81%)	(27.47%)	(39.16%)	(59.76%)	(86.28%)
STRIP, ALL EQUAL DEFAULT INDEX	(0.15%)	(0.58%)	(1.25%)	(2.46%)	(4.78%)	(7.44%)	(21.40%)	(39.84%)
STRIP, ALL ACTUAL DEFAULT INDEX	(0.15%)	(0.57%)	(1.23%)	(2.40%)	(4.71%)	(7.43%)	(21.41%)	(39.55%)
STRIP, LONG EQUAL DEFAULT INDEX	(0.15%)	(0.60%)	(1.31%)	(2.57%)	(4.90%)	(7.53%)	(18.56%)	(38.54%)
STRIP, LONG ACTUAL DEFAULT INDEX	(0.16%)	(0.59%)	(1.32%)	(2.57%)	(4.96%)	(7.65%)	(18.42%)	(38.30%)
STRIP, SHORT EQUAL DEFAULT INDEX	(0.14%)	(0.53%)	(1.09%)	(2.17%)	(4.48%)	(7.19%)	(25.07%)	(39.68%)
STRIP, SHORT ACTUAL DEFAULT INDEX	(0.13%)	(0.52%)	(1.05%)	(2.06%)	(4.22%)	(6.96%)	(24.94%)	(39.11%)
STRIP, ALL EQUAL VOL PREPAY INDEX	(1.12%)	(3.78%)	(7.93%)	(14.13%)	(27.04%)	(36.96%)	(46.17%)	(83.30%)
STRIP, ALL ACTUAL VOL PREPAY INDEX	(1.10%)	(3.71%)	(7.80%)	(13.80%)	(26.69%)	(36.80%)	(45.78%)	(82.49%)
STRIP, LONG EQUAL VOL PREPAY INDEX	(1.14%)	(3.91%)	(8.30%)	(14.73%)	(27.62%)	(37.39%)	(45.01%)	(84.13%)
STRIP, LONG ACTUAL VOL PREPAY INDEX	(1.18%)	(3.89%)	(8.35%)	(14.74%)	(27.88%)	(37.85%)	(45.01%)	(83.76%)
STRIP, SHORT EQUAL VOL PREPAY INDEX	(1.08%)	(3.49%)	(6.97%)	(12.59%)	(25.53%)	(35.77%)	(47.42%)	(78.88%)
STRIP, SHORT ACTUAL VOL PREPAY INDEX	(0.95%)	(3.42%)	(6.72%)	(11.97%)	(24.25%)	(34.57%)	(46.33%)	(77.41%)
STRIP, ALL EQUAL SCHED PRIN INDEX	(0.38%)	(1.13%)	(2.21%)	(4.41%)	(13.20%)	(21.57%)	(40.76%)	(55.40%)
STRIP, ALL ACTUAL SCHED PRIN INDEX	(0.39%)	(1.15%)	(2.24%)	(4.46%)	(13.05%)	(20.97%)	(40.10%)	(54.75%)
STRIP, LONG EQUAL SCHED PRIN INDEX	(0.24%)	(0.71%)	(1.44%)	(2.92%)	(9.07%)	(14.96%)	(28.02%)	(41.61%)
STRIP, LONG ACTUAL SCHED PRIN INDEX	(0.22%)	(0.67%)	(1.35%)	(2.75%)	(8.57%)	(14.17%)	(26.73%)	(40.06%)
STRIP, SHORT EQUAL SCHED PRIN INDEX	(0.69%)	(2.05%)	(4.06%)	(8.04%)	(23.21%)	(36.10%)	(59.55%)	(76.51%)
STRIP, SHORT ACTUAL SCHED PRIN INDEX	(0.65%)	(1.94%)	(3.84%)	(7.54%)	(21.63%)	(34.13%)	(58.09%)	(75.14%)
STRIP, ALL EQUAL TOTAL PRIN INDEX	(1.65%)	(5.44%)	(11.14%)	(20.02%)	(39.82%)	(54.36%)	(75.05%)	(95.57%)
STRIP, ALL ACTUAL TOTAL PRIN INDEX	(1.63%)	(5.39%)	(11.01%)	(19.69%)	(39.37%)	(53.89%)	(74.59%)	(95.26%)
STRIP, LONG EQUAL TOTAL PRIN INDEX	(1.53%)	(5.18%)	(10.85%)	(19.41%)	(37.50%)	(50.87%)	(67.87%)	(94.36%)
STRIP, LONG ACTUAL TOTAL PRIN INDEX	(1.56%)	(5.12%)	(10.81%)	(19.29%)	(37.42%)	(50.84%)	(67.24%)	(94.05%)
STRIP, SHORT EQUAL TOTAL PRIN INDEX	(1.91%)	(6.00%)	(11.78%)	(21.47%)	(45.53%)	(62.08%)	(84.19%)	(97.06%)
STRIP, SHORT ACTUAL TOTAL PRIN INDEX	(1.73%)	(5.82%)	(11.31%)	(20.39%)	(43.29%)	(60.06%)	(83.25%)	(96.63%)

END DATE: 01/31/2019			SBI HEDGE	STRIP IN	DEX TOTAL	RETURN		
INDEX TYPE	1 MONTH	3 MONTH	6 MONTH	1 YEAR	3 YEAR	5 YEAR	10 YEAR	INCEPTION
HEDGE, ALL EQUAL INDEX	0.71%	1.34%	2.10%	5.35%	34.70%	75.11%	744.62%	2,879.25%
HEDGE, ALL ACTUAL INDEX	0.75%	1.52%	2.43%	6.01%	36.36%	77.97%	487.70%	1,694.12%
HEDGE, LONG EQUAL INDEX	0.64%	1.05%	1.37%	4.10%	31.82%	70.46%	867.65%	3,365.08%
HEDGE, LONG ACTUAL INDEX	0.64%	1.21%	1.65%	4.53%	32.34%	71.52%	527.53%	1,801.48%
HEDGE, SHORT EQUAL INDEX	0.97%	2.43%	4.85%	10.35%	47.22%	95.89%	461.80%	2,359.88%
HEDGE, SHORT ACTUAL INDEX	1.11%	2.56%	5.08%	11.20%	52.00%	104.75%	396.75%	1,985.56%
HEDGE, ALL EQUAL INCOME INDEX	2.23%	6.77%	13.98%	29.56%	117.04%	263.44%	2,975.91%	59,788.75%
HEDGE, ALL ACTUAL INCOME INDEX	2.25%	6.81%	14.07%	29.81%	118.11%	264.87%	2,005.32%	34,187.67%
HEDGE, LONG EQUAL INCOME INDEX	2.08%	6.31%	13.02%	27.46%	107.23%	236.70%	2,941.51%	59,882.13%
HEDGE, LONG ACTUAL INCOME INDEX	2.08%	6.31%	13.02%	27.46%	107.23%	236.70%	1,848.15%	31,471.48%
HEDGE, SHORT EQUAL INCOME INDEX	2.78%	8.47%	17.66%	38.05%	163.35%	401.93%	3,405.44%	82,182.46%
HEDGE, SHORT ACTUAL INCOME INDEX	2.78%	8.47%	17.66%	38.05%	163.35%	401.93%	2,853.07%	62,296.05%
HEDGE, ALL EQUAL PREPAY INDEX	(1.13%)	(4.04%)	(8.44%)	(15.00%)	(28.62%)	(38.78%)	(54.95%)	(89.28%)
HEDGE, ALL ACTUAL PREPAY INDEX	(1.12%)	(3.94%)	(8.29%)	(14.76%)	(28.56%)	(38.85%)	(55.04%)	(88.97%)
HEDGE, LONG EQUAL PREPAY INDEX	(1.14%)	(4.17%)	(8.80%)	(15.50%)	(29.01%)	(38.89%)	(53.51%)	(89.35%)
HEDGE, LONG ACTUAL PREPAY INDEX	(1.16%)	(4.07%)	(8.65%)	(15.34%)	(29.21%)	(39.23%)	(53.78%)	(89.15%)
HEDGE, SHORT EQUAL PREPAY INDEX	(1.07%)	(3.57%)	(7.06%)	(13.02%)	(27.14%)	(38.47%)	(59.42%)	(86.71%)
HEDGE, SHORT ACTUAL PREPAY INDEX	(0.97%)	(3.54%)	(7.06%)	(12.80%)	(26.28%)	(37.73%)	(58.91%)	(85.89%)
HEDGE, ALL EQUAL DEFAULT INDEX	(0.13%)	(0.54%)	(1.16%)	(2.25%)	(4.43%)	(6.79%)	(20.35%)	(38.99%)
HEDGE, ALL ACTUAL DEFAULT INDEX	(0.13%)	(0.52%)	(1.14%)	(2.21%)	(4.41%)	(6.81%)	(20.57%)	(38.97%)
HEDGE, LONG EQUAL DEFAULT INDEX	(0.13%)	(0.56%)	(1.21%)	(2.33%)	(4.50%)	(6.80%)	(18.89%)	(38.23%)
HEDGE, LONG ACTUAL DEFAULT INDEX	(0.14%)	(0.54%)	(1.19%)	(2.30%)	(4.53%)	(6.87%)	(19.11%)	(38.25%)
HEDGE, SHORT EQUAL DEFAULT INDEX	(0.13%)	(0.47%)	(0.96%)	(1.94%)	(4.16%)	(6.75%)	(24.91%)	(39.44%)
HEDGE, SHORT ACTUAL DEFAULT INDEX	(0.11%)	(0.47%)	(0.96%)	(1.91%)	(4.00%)	(6.63%)	(24.93%)	(39.09%)
HEDGE, ALL EQUAL VOL PREPAY INDEX	(1.00%)	(3.52%)	(7.35%)	(13.02%)	(25.28%)	(34.29%)	(43.39%)	(82.36%)
HEDGE, ALL ACTUAL VOL PREPAY INDEX	(0.98%)	(3.43%)	(7.22%)	(12.81%)	(25.23%)	(34.35%)	(43.35%)	(81.86%)
HEDGE, LONG EQUAL VOL PREPAY INDEX	(1.01%)	(3.63%)	(7.67%)	(13.46%)	(25.63%)	(34.39%)	(42.64%)	(82.70%)
HEDGE, LONG ACTUAL VOL PREPAY INDEX	(1.02%)	(3.54%)	(7.54%)	(13.32%)	(25.82%)	(34.70%)	(42.81%)	(82.35%)
HEDGE, SHORT EQUAL VOL PREPAY INDEX	(0.95%)	(3.11%)	(6.15%)	(11.28%)	(23.95%)	(33.98%)	(45.90%)	(77.99%)
HEDGE, SHORT ACTUAL VOL PREPAY INDEX	(0.85%)	(3.08%)	(6.15%)	(11.09%)	(23.18%)	(33.27%)	(45.19%)	(76.77%)
HEDGE, ALL EQUAL SCHED PRIN INDEX	(0.36%)	(1.07%)	(2.14%)	(4.29%)	(12.94%)	(21.15%)	(38.86%)	(53.32%)
HEDGE, ALL ACTUAL SCHED PRIN INDEX	(0.34%)	(1.03%)	(2.06%)	(4.13%)	(12.38%)	(20.09%)	(37.73%)	(52.28%)
HEDGE, LONG EQUAL SCHED PRIN INDEX	(0.27%)	(0.80%)	(1.62%)	(3.30%)	(10.30%)	(17.03%)	(31.41%)	(45.48%)
HEDGE, LONG ACTUAL SCHED PRIN INDEX	(0.25%)	(0.75%)	(1.51%)	(3.09%)	(9.70%)	(16.06%)	(30.16%)	(44.25%)
HEDGE, SHORT EQUAL SCHED PRIN INDEX	(0.69%)	(2.05%)	(4.06%)	(8.02%)	(23.10%)	(36.34%)	(60.24%)	(77.22%)
HEDGE, SHORT ACTUAL SCHED PRIN INDEX	(0.66%)	(1.95%)	(3.85%)	(7.55%)	(21.55%)	(34.28%)	(58.80%)	(76.03%)
HEDGE, ALL EQUAL TOTAL PRIN INDEX	(1.49%)	(5.08%)	(10.43%)	(18.69%)	(37.94%)	(51.82%)	(72.55%)	(95.03%)
HEDGE, ALL ACTUAL TOTAL PRIN INDEX	(1.46%)	(4.95%)	(10.20%)	(18.33%)	(37.48%)	(51.23%)	(72.09%)	(94.77%)
HEDGE, LONG EQUAL TOTAL PRIN INDEX	(1.41%)	(4.95%)	(10.30%)	(18.33%)	(36.39%)	(49.37%)	(68.19%)	(94.23%)
HEDGE, LONG ACTUAL TOTAL PRIN INDEX	(1.41%)	(4.79%)	(10.06%)	(17.99%)	(36.14%)	(49.06%)	(67.79%)	(93.98%)
HEDGE, SHORT EQUAL TOTAL PRIN INDEX	(1.76%)	(5.57%)	(10.88%)	(20.07%)	(44.10%)	(60.97%)	(83.98%)	(97.01%)
HEDGE, SHORT ACTUAL TOTAL PRIN INDEX	(1.62%)	(5.45%)	(10.69%)	(19.45%)	(42.28%)	(59.21%)	(83.18%)	(96.66%)

END DATE: 01/31/2019			SBI SE	BAP INDEX	TOTAL RE	TURN		
INDEX TYPE	1 MONTH	3 MONTH	6 MONTH	1 YEAR	3 YEAR	5 YEAR	10 YEAR	INCEPTION
SBAP, ALL EQUAL INDEX	0.55%	3.68%	4.67%	5.62%	1.57%	3.59%	30.21%	116.53%
SBAP, ALL ACTUAL INDEX	0.56%	3.81%	4.55%	5.21%	0.10%	2.29%	31.59%	121.72%
SBAP, LONG EQUAL INDEX	0.57%	3.82%	4.54%	5.15%	(0.12%)	1.36%	29.85%	119.82%
SBAP, LONG ACTUAL INDEX	0.57%	3.82%	4.53%	5.15%	(0.14%)	1.96%	31.39%	121.76%
SBAP, SHORT EQUAL INDEX	0.41%	2.72%	3.96%	5.09%	5.97%	12.16%	35.28%	113.00%
SBAP, SHORT ACTUAL INDEX	0.36%	2.49%	3.82%	5.10%	6.40%	13.27%	36.63%	112.65%
SBAP, ALL EQUAL INCOME INDEX	0.26%	0.77%	1.54%	3.07%	9.51%	17.24%	45.72%	152.00%
SBAP, ALL ACTUAL INCOME INDEX	0.27%	0.82%	1.65%	3.30%	10.34%	18.67%	48.41%	155.54%
SBAP, LONG EQUAL INCOME INDEX	0.28%	0.83%	1.68%	3.35%	10.54%	19.18%	49.93%	164.22%
SBAP, LONG ACTUAL INCOME INDEX	0.27%	0.82%	1.66%	3.32%	10.45%	18.89%	48.87%	156.62%
SBAP, SHORT EQUAL INCOME INDEX	0.19%	0.56%	1.11%	2.15%	6.24%	11.04%	32.60%	115.12%
SBAP, SHORT ACTUAL INCOME INDEX	0.17%	0.51%	1.03%	2.00%	5.83%	10.07%	30.30%	111.81%
SBAP, ALL EQUAL PRICE INDEX	0.23%	2.35%	1.84%	0.47%	(4.18%)	(2.59%)	3.21%	3.37%
SBAP, ALL ACTUAL PRICE INDEX	0.23%	2.50%	1.94%	0.49%	(4.40%)	(2.63%)	4.45%	5.21%
SBAP, LONG EQUAL PRICE INDEX	0.23%	2.54%	1.99%	0.53%	(4.39%)	(2.83%)	3.74%	4.35%
SBAP, LONG ACTUAL PRICE INDEX	0.23%	2.52%	1.96%	0.50%	(4.42%)	(2.66%)	4.46%	5.30%
SBAP, SHORT EQUAL PRICE INDEX	0.22%	1.70%	1.32%	0.26%	(3.55%)	(1.81%)	1.36%	(0.62%)
SBAP, SHORT ACTUAL PRICE INDEX	0.19%	1.50%	1.16%	0.15%	(3.40%)	(1.10%)	2.83%	(0.33%)
SBAP, ALL EQUAL PREPAY INDEX	0.04%	0.26%	0.58%	0.86%	(3.00%)	(7.28%)	(10.02%)	(12.79%)
SBAP, ALL ACTUAL PREPAY INDEX	0.04%	0.26%	0.48%	0.63%	(4.17%)	(8.81%)	(11.40%)	(13.42%)
SBAP, LONG EQUAL PREPAY INDEX	0.04%	0.24%	0.45%	0.58%	(4.27%)	(9.28%)	(12.14%)	(15.24%)
SBAP, LONG ACTUAL PREPAY INDEX	0.04%	0.25%	0.47%	0.60%	(4.32%)	(9.06%)	(11.66%)	(13.70%)
SBAP, SHORT EQUAL PREPAY INDEX	0.00%	0.15%	0.59%	0.97%	1.27%	0.99%	(0.04%)	(0.68%)
SBAP, SHORT ACTUAL PREPAY INDEX	0.00%	0.13%	0.60%	1.04%	1.47%	1.39%	0.41%	(0.34%)
SBAP, ALL EQUAL DEFAULT INDEX	0.00%	0.04%	0.10%	0.14%	(0.08%)	(0.49%)	(1.69%)	(1.96%)
SBAP, ALL ACTUAL DEFAULT INDEX	0.00%	0.03%	0.05%	0.07%	(0.23%)	(0.73%)	(2.15%)	(2.36%)
SBAP, LONG EQUAL DEFAULT INDEX	0.00%	0.03%	0.05%	0.06%	(0.24%)	(0.76%)	(1.99%)	(2.24%)
SBAP, LONG ACTUAL DEFAULT INDEX	0.00%	0.03%	0.05%	0.06%	(0.25%)	(0.76%)	(2.19%)	(2.40%)
SBAP, SHORT EQUAL DEFAULT INDEX	0.00%	0.05%	0.18%	0.26%	0.32%	0.32%	(0.19%)	(0.40%)
SBAP, SHORT ACTUAL DEFAULT INDEX	0.00%	0.05%	0.14%	0.24%	0.33%	0.34%	(0.17%)	(0.41%)
SBAP, ALL EQUAL VOL PREPAY INDEX	0.03%	0.22%	0.48%	0.71%	(2.92%)	(6.81%)	(8.47%)	(11.05%)
SBAP, ALL ACTUAL VOL PREPAY INDEX	0.04%	0.22%	0.43%	0.57%	(3.94%)	(8.14%)	(9.45%)	(11.32%)
SBAP, LONG EQUAL VOL PREPAY INDEX	0.03%	0.21%	0.40%	0.52%	(4.03%)	(8.59%)	(10.35%)	(13.30%)
SBAP, LONG ACTUAL VOL PREPAY INDEX	0.04%	0.22%	0.42%	0.54%	(4.08%)	(8.36%)	(9.68%)	(11.57%)
SBAP, SHORT EQUAL VOL PREPAY INDEX	0.00%	0.10%	0.42%	0.71%	0.94%	0.67%	0.16%	(0.28%)
SBAP, SHORT ACTUAL VOL PREPAY INDEX	0.00%	0.08%	0.45%	0.80%	1.14%	1.04%	0.58%	0.07%
SBAP, ALL EQUAL SCHED PRIN INDEX	0.02%	0.26%	0.63%	1.13%	(0.22%)	(2.16%)	(3.78%)	(4.67%)
SBAP, ALL ACTUAL SCHED PRIN INDEX	0.02%	0.19%	0.41%	0.72%	(0.98%)	(2.93%)	(4.18%)	(4.73%)
SBAP, LONG EQUAL SCHED PRIN INDEX	0.02%	0.18%	0.36%	0.62%	(1.28%)	(3.51%)	(4.96%)	(5.92%)
SBAP, LONG ACTUAL SCHED PRIN INDEX	0.02%	0.18%	0.38%	0.65%	(1.12%)	(3.11%)	(4.34%)	(4.89%)
SBAP, SHORT EQUAL SCHED PRIN INDEX	0.00%	0.29%	0.88%	1.63%	2.12%	1.86%	0.68%	0.31%
SBAP, SHORT ACTUAL SCHED PRIN INDEX	0.00%	0.33%	0.99%	1.82%	2.57%	2.62%	1.55%	1.07%
SBAP, ALL EQUAL TOTAL PRIN INDEX	0.06%	0.53%	1.21%	2.00%	(3.21%)	(9.28%)	(13.43%)	(16.87%)
SBAP, ALL ACTUAL TOTAL PRIN INDEX	0.06%	0.45%	0.90%	1.35%	(5.11%)	(11.48%)	(15.11%)	(17.53%)
SBAP, LONG EQUAL TOTAL PRIN INDEX	0.06%	0.42%	0.81%	1.20%	(5.50%)	(12.48%)	(16.51%)	(20.27%)
SBAP, LONG ACTUAL TOTAL PRIN INDEX	0.06%	0.44%	0.85%	1.26%	(5.40%)	(11.90%)	(15.51%)	(17.93%)
SBAP, SHORT EQUAL TOTAL PRIN INDEX	0.00%	0.44%	1.48%	2.61%	3.41%	2.86%	0.64%	(0.37%)
SBAP, SHORT ACTUAL TOTAL PRIN INDEX	0.00%	0.46%	1.59%	2.88%	4.08%	4.05%	1.96%	0.73%

END DATE: 01/31/2019			SBI S	BIC INDEX	TOTAL RE	TURN		
INDEX TYPE	1 MONTH	3 MONTH	6 MONTH	1 YEAR	3 YEAR	5 YEAR	10 YEAR	INCEPTION
SBIC, ALL EQUAL INDEX	0.58%	4.06%	4.22%	5.67%	5.09%	11.80%	42.45%	138.93%
SBIC, ALL ACTUAL INDEX	0.59%	4.19%	4.29%	5.80%	5.31%	12.40%	46.17%	149.57%
SBIC, ALL EQUAL INCOME INDEX	0.24%	0.71%	1.44%	2.86%	8.89%	16.06%	43.49%	145.58%
SBIC, ALL ACTUAL INCOME INDEX	0.24%	0.71%	1.42%	2.82%	8.59%	15.21%	41.04%	137.14%
SBIC, ALL EQUAL PRICE INDEX	0.34%	3.33%	2.41%	2.25%	(3.36%)	(2.35%)	4.40%	5.57%
SBIC, ALL ACTUAL PRICE INDEX	0.35%	3.45%	2.50%	2.38%	(3.13%)	(1.88%)	6.96%	11.04%
SBIC, ALL EQUAL PREPAY INDEX	0.00%	0.00%	0.32%	0.47%	(0.14%)	(1.36%)	(4.92%)	(7.85%)
SBIC, ALL ACTUAL PREPAY INDEX	0.00%	0.00%	0.33%	0.50%	0.11%	(0.57%)	(3.12%)	(5.23%)
SBIC, ALL EQUAL DEFAULT INDEX	0.00%	0.00%	0.00%	0.00%	(0.01%)	(0.17%)	(0.66%)	(1.39%)
SBIC, ALL ACTUAL DEFAULT INDEX	0.00%	0.00%	0.00%	0.00%	(0.00%)	(0.09%)	(0.46%)	(1.07%)
SBIC, ALL EQUAL VOL PREPAY INDEX	0.00%	0.00%	0.32%	0.47%	(0.12%)	(1.20%)	(4.29%)	(6.54%)
SBIC, ALL ACTUAL VOL PREPAY INDEX	0.00%	0.00%	0.33%	0.50%	0.11%	(0.48%)	(2.67%)	(4.20%)
SBIC, ALL EQUAL SCHED PRIN INDEX	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
SBIC, ALL ACTUAL SCHED PRIN INDEX	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
SBIC, ALL EQUAL TOTAL PRIN INDEX	0.00%	0.00%	0.32%	0.47%	(0.14%)	(1.36%)	(4.92%)	(7.85%)
SBIC, ALL ACTUAL TOTAL PRIN INDEX	0.00%	0.00%	0.33%	0.50%	0.11%	(0.57%)	(3.12%)	(5.23%)

SB Indexes, LLC, ate the first Total Return Indexes for SBA 7(a) Pools and SBA 7(a) Interest-Only Strips, with a history going back to January 1st, 2000.

Using the "Ryan Rules" for index creation, the SBI indexes represent best practices in both structure and transparency.

#### Principals:

Ronald J. Ryan, CFA, Founder and CEO of Ryan ALM, Inc. Ron has a long history of designing bond indexes, starting at Lehman Brothers, where he designed most of the popular Lehman bond indexes. Over his distinguished career, Ron and his team have designed hundreds of bond indexes and ETFs.

Bob Judge, Partner, GLS. Bob, a recognized expert in the valuation of SBA-related assets as well as the SBA Secondary Market and is the editor of The CPR Report, a widely-read monthly publication that tracks SBA loan defaults, prepayment and secondary market activity.

END DATE: 01/31/2019			SBI COMP	OSITE IND	EX TOTAL	RETURN		
INDEX TYPE	1 MONTH	3 MONTH	6 MONTH	1 YEAR	3 YEAR	5 YEAR	10 YEAR	INCEPTION
COMP, ALL EQUAL INDEX	0.42%	2.47%	2.30%	2.28%	2.59%	4.42%	36.70%	125.24%
COMP, ALL ACTUAL INDEX	0.43%	2.54%	2.29%	2.08%	2.38%	4.24%	36.11%	123.57%
COMP, LONG EQUAL INDEX	0.40%	2.40%	1.99%	1.80%	1.48%	2.81%	37.47%	130.82%
COMP, LONG ACTUAL INDEX	0.39%	2.41%	1.99%	1.82%	1.49%	3.16%	35.55%	124.42%
COMP, SHORT EQUAL INDEX	0.50%	2.80%	3.03%	3.02%	3.42%	6.36%	35.24%	112.86%
COMP, SHORT ACTUAL INDEX	0.51%	2.85%	3.00%	2.74%	3.87%	6.53%	35.63%	114.28%
COMP, ALL EQUAL INCOME INDEX	0.32%	0.94%	1.86%	3.65%	10.59%	18.14%	51.21%	170.58%
COMP, ALL ACTUAL INCOME INDEX	0.32%	0.96%	1.90%	3.75%	10.94%	18.74%	49.18%	161.70%
COMP, LONG EQUAL INCOME INDEX	0.32%	0.96%	1.91%	3.74%	10.95%	18.95%	54.19%	179.22%
COMP, LONG ACTUAL INCOME INDEX	0.32%	0.94%	1.87%	3.68%	10.81%	18.69%	49.90%	163.26%
COMP, SHORT EQUAL INCOME INDEX	0.33%	0.97%	1.93%	3.81%	11.14%	18.88%	49.08%	164.78%
COMP, SHORT ACTUAL INCOME INDEX	0.33%	0.99%	1.98%	3.90%	11.26%	18.78%	46.09%	154.39%
COMP, ALL EQUAL PRICE INDEX	0.15%	1.55%	0.45%	(1.02%)	(3.08%)	(2.96%)	4.61%	4.35%
COMP, ALL ACTUAL PRICE INDEX	0.15%	1.64%	0.51%	(1.07%)	(2.81%)	(2.66%)	6.21%	6.54%
COMP, LONG EQUAL PRICE INDEX	0.10%	1.42%	0.15%	(1.44%)	(3.00%)	(2.52%)	5.42%	5.84%
COMP, LONG ACTUAL PRICE INDEX	0.10%	1.42%	0.14%	(1.45%)	(2.96%)	(2.37%)	6.04%	6.67%
COMP, SHORT EQUAL PRICE INDEX	0.27%	2.12%	1.49%	0.24%	(3.54%)	(4.38%)	4.01%	1.57%
COMP, SHORT ACTUAL PRICE INDEX	0.27%	2.16%	1.45%	(0.07%)	(3.26%)	(4.41%)	5.71%	4.75%
COMP, ALL EQUAL PREPAY INDEX	(0.04%)	(0.09%)	(0.16%)	(0.50%)	(3.34%)	(6.57%)	(9.60%)	(15.36%)
COMP, ALL ACTUAL PREPAY INDEX	(0.04%)	(0.09%)	(0.19%)	(0.57%)	(3.81%)	(7.21%)	(10.05%)	(15.04%)
COMP, LONG EQUAL PREPAY INDEX	(0.03%)	(0.05%)	(0.20%)	(0.60%)	(4.45%)	(8.52%)	(11.33%)	(17.06%)
COMP, LONG ACTUAL PREPAY INDEX	(0.03%)	(0.04%)	(0.17%)	(0.56%)	(4.48%)	(8.42%)	(11.02%)	(15.82%)
COMP, SHORT EQUAL PREPAY INDEX	(0.06%)	(0.20%)	(0.23%)	(0.57%)	(2.06%)	(3.86%)	(7.92%)	(14.29%)
COMP, SHORT ACTUAL PREPAY INDEX	(0.06%)	(0.22%)	(0.26%)	(0.61%)	(2.00%)	(3.57%)	(7.19%)	(12.92%)
COMP, ALL EQUAL DEFAULT INDEX	(0.00%)	(0.01%)	(0.02%)	(0.07%)	(0.32%)	(0.71%)	(1.98%)	(2.99%)
COMP, ALL ACTUAL DEFAULT INDEX	(0.00%)	(0.01%)	(0.04%)	(0.10%)	(0.38%)	(0.82%)	(2.21%)	(3.13%)
COMP, LONG EQUAL DEFAULT INDEX	(0.00%)	(0.01%)	(0.03%)	(0.10%)	(0.42%)	(0.90%)	(2.14%)	(3.07%)
COMP, LONG ACTUAL DEFAULT INDEX	(0.00%)	(0.00%)	(0.03%)	(0.09%)	(0.42%)	(0.91%)	(2.29%)	(3.14%)
COMP, SHORT EQUAL DEFAULT INDEX	(0.01%)	(0.03%)	(0.05%)	(0.11%)	(0.27%)	(0.54%)	(1.96%)	(3.34%)
COMP, SHORT ACTUAL DEFAULT INDEX	(0.01%)	(0.03%)	(0.05%)	(0.12%)	(0.27%)	(0.53%)	(1.91%)	(3.19%)
COMP, ALL EQUAL VOL PREPAY INDEX	(0.03%)	(0.08%)	(0.14%)	(0.43%)	(3.03%)	(5.90%)	(7.78%)	(12.74%)
COMP, ALL ACTUAL VOL PREPAY INDEX	(0.03%)	(0.08%)	(0.16%)	(0.47%)	(3.44%)	(6.45%)	(8.02%)	(12.29%)
COMP, LONG EQUAL VOL PREPAY INDEX	(0.03%)	(0.05%)	(0.16%)	(0.51%)	(4.05%)	(7.68%)	(9.40%)	(14.43%)
COMP, LONG ACTUAL VOL PREPAY INDEX	(0.02%)	(0.03%)	(0.14%)	(0.47%)	(4.07%)	(7.57%)	(8.93%)	(13.09%)
COMP, SHORT EQUAL VOL PREPAY INDEX	(0.06%)	(0.18%)	(0.18%)	(0.46%)	(1.79%)	(3.34%)	(6.09%)	(11.33%)
COMP, SHORT ACTUAL VOL PREPAY INDEX	(0.05%)	(0.19%)	(0.20%)	(0.49%)	(1.73%)	(3.05%)	(5.38%)	(10.05%)
COMP, ALL EQUAL SCHED PRIN INDEX	(0.01%)	0.05%	0.14%	0.19%	(0.97%)	(2.50%)	(4.40%)	(5.75%)
COMP, ALL ACTUAL SCHED PRIN INDEX	(0.01%)	0.02%	0.05%	0.03%	(1.29%)	(2.80%)	(4.49%)	(5.62%)
COMP, LONG EQUAL SCHED PRIN INDEX	0.00%	0.07%	0.13%	0.18%	(1.30%)	(3.07%)	(4.61%)	(5.82%)
COMP, LONG ACTUAL SCHED PRIN INDEX	0.00%	0.07%	0.14%	0.21%	(1.18%)	(2.78%)	(4.16%)	(5.06%)
COMP, SHORT EQUAL SCHED PRIN INDEX	(0.03%)	(0.10%)	(0.18%)	(0.42%)	(1.50%)	(2.67%)	(5.28%)	(7.65%)
COMP, SHORT ACTUAL SCHED PRIN INDEX	(0.04%)	(0.10%)	(0.19%)	(0.44%)	(1.53%)	(2.70%)	(5.38%)	(7.65%)
COMP, ALL EQUAL TOTAL PRIN INDEX	(0.05%)	(0.03%)	(0.02%)	(0.30%)	(4.28%)	(8.91%)	(13.58%)	(20.22%)
COMP, ALL ACTUAL TOTAL PRIN INDEX	(0.05%)	(0.07%)	(0.14%)	(0.54%)	(5.04%)	(9.82%)	(14.09%)	(19.82%)
COMP, LONG EQUAL TOTAL PRIN INDEX	(0.03%)	0.01%	(0.07%)	(0.43%)	(5.70%)	(11.33%)	(15.43%)	(21.89%)
COMP, LONG ACTUAL TOTAL PRIN INDEX	(0.02%)	0.04%	(0.03%)	(0.36%)	(5.61%)	(10.97%)	(14.72%)	(20.08%)
COMP, SHORT EQUAL TOTAL PRIN INDEX	(0.10%)	(0.30%)	(0.41%)	(0.99%)	(3.53%)	(6.43%)	(12.79%)	(20.85%)
COMP, SHORT ACTUAL TOTAL PRIN INDEX	(0.10%)	(0.32%)	(0.45%)	(1.04%)	(3.49%)	(6.17%)	(12.18%)	(19.58%)



The nationwide leader in the valuation of SBA and USDA assets.

### **GLS** provides valuations for:

- SBA 7(a), 504 1st mortgage and USDA servicing rights
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  (a) loan portions Interest-only portions of SBA and USDA loans

In these times of market uncertainty, let GLS help you in determining the value of your SBA and USDA related-assets.

For further information, please contact Bob Judge at (216) 456-2480 ext. 133 or at

Signature Bank

### **504 Debenture Prepayment Speed Commentary**

This month, 20 year debenture prepayment speeds fell by 12% to CPR 7.12% from CPR 8.13%. As for 10 year paper, this is an offmonth.

Returning to 20s, the reason for the decrease in the overall CPR was a fall in both defaults (CDR) and voluntary prepayments (CRR). Defaults decreased by 21% to CDR 0.43% from CDR 0.54%. Voluntary prepays fell by 12% to CRR 6.70% from CRR 7.61%.

This month's reading is the first sub-8% speed since last March.

For further information on the terminology and concepts used in this article, please refer to the "Glossary and Definitions" at the end of the report.

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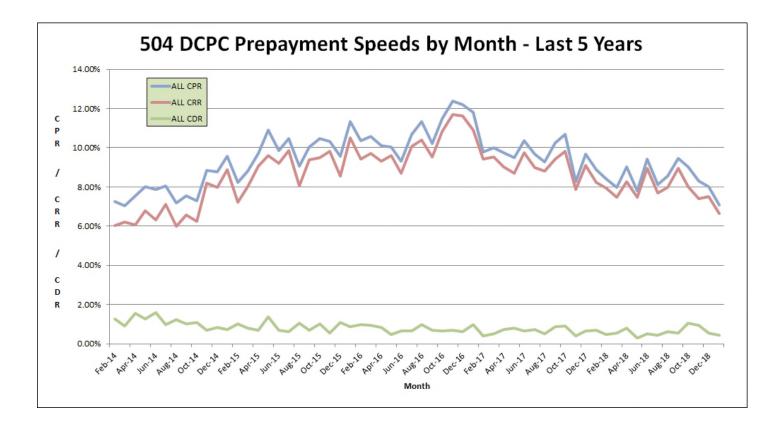
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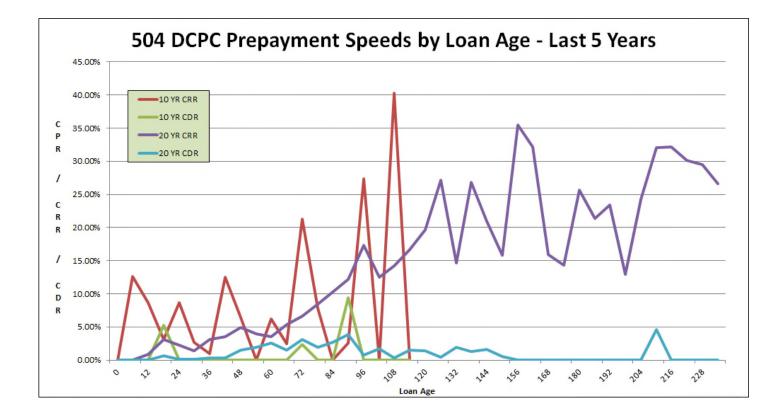
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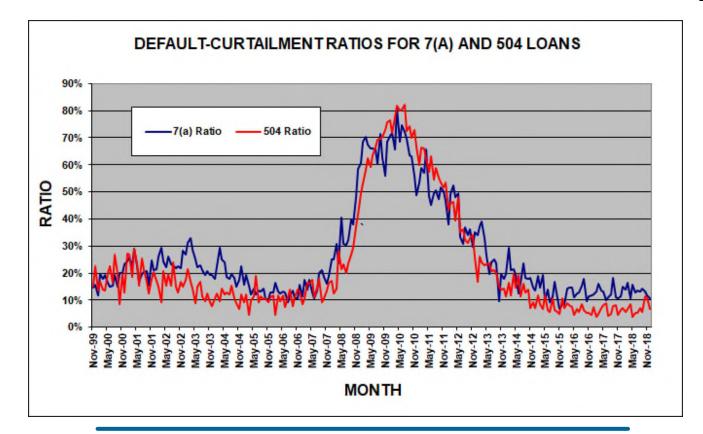
Charts & graphs begin on next page

## **504 Debenture Prepayment Speed Results**

FACTOR MONTH	20 YR. CPR	20 YR. CRR	20 YR. CDR	10 YR. CPR	10 YR. CRR	10 YR. CDR	ALL CPR	ALL CRR	ALL CDR	WAVG AGE ALL	WAVG AGE 20 YR.	WAVG AGE 10 YR.
Feb-14	7.24%	6.00%	1.28%	7.88%	6.73%	1.19%	7.27%	6.04%	1.28%	46.46	47.47	27.34
Mar-14	7.06%	6.20%	0.89%	NA	NA	NA	7.06%	6.20%	0.89%	46.58	46.58	NA
Apr-14	7.59%	6.20%	1.44%	7.01%	3.31%	3.77%	7.56%	6.05%	1.56%	47.17	48.44	25.72
May-14	8.00%	6.80%	1.25%	NA	NA	NA	8.00%	6.80%	1.25%	50.01	50.01	NA
Jun-14	7.74%	6.19%	1.60%	10.43%	8.94%	1.55%	7.86%	6.32%	1.59%	46.32	47.23	27.97
Jul-14	8.06%	7.11%	0.99%	NA 4.910/	NA	NA	8.06%	7.11%	0.99%	48.70	48.70	NA 20.10
Aug-14	7.29% 7.54%	6.08% 6.56%	1.25% 1.01%	4.81% NA	4.14% NA	0.69% NA	7.17% 7.54%	5.99% 6.56%	1.22% 1.01%	47.22 48.54	48.16 48.54	29.10 NA
Sep-14 Oct-14	7.43%	6.38%	1.01%	4.84%	3.61%	1.25%	7.29%	6.24%	1.01%	48.94	50.23	27.55
Nov-14	8.85%	8.20%	0.68%	4.0470 NA	NA	1.2370 NA	8.85%	8.20%	0.68%	50.41	50.23	27.55 NA
Dec-14	8.90%	8.08%	0.86%	6.37%	5.65%	0.74%	8.79%	7.97%	0.85%	47.98	48.85	30.15
Jan-15	9.56%	8.88%	0.71%	NA	NA	NA	9.56%	8.88%	0.71%	50.24	50.24	NA
Feb-15	8.27%	7.25%	1.05%	7.23%	6.60%	0.65%	8.22%	7.22%	1.03%	48.85	49.72	31.56
Mar-15	8.80%	8.03%	0.81%	NA	NA	NA	8.80%	8.03%	0.81%	49.05	49.05	NA
Apr-15	9.65%	8.99%	0.69%	10.87%	9.95%	0.97%	9.72%	9.04%	0.70%	49.63	50.76	29.98
May-15	10.92%	9.60%	1.38%	NA	NA	NA	10.92%	9.60%	1.38%	51.04	51.04	NA
Jun-15	10.11%	9.45%	0.70%	4.62%	4.23%	0.40%	9.87%	9.21%	0.68%	49.15	49.98	32.22
Jul-15	10.45%	9.87%	0.62%	NA	NA	NA	10.45%	9.87%	0.62%	50.94	50.94	NA
Aug-15	9.09%	8.06%	1.07%	8.31%	7.92%	0.41%	9.05%	8.05%	1.04%	49.98	50.74	34.07
Sep-15	10.02%	9.38%	0.68%	NA	NA	NA	10.02%	9.38%	0.68%	49.79	49.79	NA
Oct-15	10.48%	9.59%	0.93%	10.10%	7.36%	2.85%	10.46%	9.48%	1.03%	50.62	51.69	31.61
Nov-15	10.33%	9.81%	0.55%	NA	NA	NA	10.33%	9.81%	0.55%	51.93	51.93	NA
Dec-15	9.60%	8.64%	1.01%	9.09%	6.63%	2.55%	9.58%	8.55%	1.08%	50.80	51.69	32.95
Jan-16	11.32%	10.49%	0.88%	NA	NA	NA	11.32%	10.49%	0.88%	50.96	50.96	NA
Feb-16	10.47%	9.64%	0.88%	8.04%	4.91%	3.21%	10.36%	9.43%	0.98%	51.01	51.76	35.24
Mar-16	10.59%	9.71%	0.93%	NA	NA	NA	10.59%	9.71%	0.93%	50.66	50.66	NA
Apr-16	10.15%	9.49%	0.69%	9.22%	6.21%	3.10%	10.11%	9.33%	0.82%	51.72	52.65	34.48
May-16	10.05%	9.59%	0.48%	NA	NA	NA	10.05%	9.59%	0.48%	51.65	51.65	NA
Jun-16	9.36%	8.77%	0.63%	8.48%	7.02%	1.51%	9.32%	8.69%	0.67%	51.66	52.52	34.27
Jul-16	10.67%	10.07%	0.64%	NA	NA	NA	10.67%	10.07%	0.64%	51.26	51.26	NA 26.07
Aug-16 Sep-16	11.31% 10.20%	10.41% 9.53%	0.95%	11.74% NA	10.14% NA	1.69% NA	11.33% 10.20%	10.40% 9.53%	0.98%	51.55 51.04	52.22 51.04	36.87 NA
Oct-16	11.60%	11.00%	0.63%	9.02%	7.80%	1.27%	11.47%	10.85%	0.66%	51.54	52.22	37.77
Nov-16	12.37%	11.71%	0.03%	9.0276 NA	NA	NA	12.37%	11.71%	0.70%	51.78	51.78	NA
Dec-16	12.46%	11.88%	0.63%	6.75%	6.27%	0.49%	12.21%	11.63%	0.62%	51.97	52.66	37.34
Jan-17	11.82%	10.91%	0.96%	NA	NA	NA	11.82%	10.91%	0.96%	50.66	50.66	NA
Feb-17	9.81%	9.45%	0.38%	8.85%	8.41%	0.46%	9.77%	9.41%	0.39%	51.89	52.46	38.80
Mar-17	10.01%	9.52%	0.51%	NA	NA	NA	10.01%	9.52%	0.51%	51.37	51.37	NA
Apr-17	9.70%	9.15%	0.57%	10.52%	6.62%	4.04%	9.73%	9.04%	0.73%	51.37	51.95	39.08
May-17	9.50%	8.72%	0.81%	NA	NA	NA	9.50%	8.72%	0.81%	51.66	51.66	NA
Jun-17	10.30%	9.79%	0.54%	11.31%	8.46%	2.99%	10.35%	9.74%	0.64%	52.11	52.72	38.28
Jul-17	9.67%	8.97%	0.73%	NA	NA	NA	9.67%	8.97%	0.73%	50.39	50.39	NA
Aug-17	9.14%	8.75%	0.41%	12.74%	10.05%	2.84%	9.28%	8.80%	0.50%	52.34	52.80	40.52
Sep-17	10.24%	9.43%	0.86%	NA	NA	NA	10.24%	9.43%	0.86%	52.27	52.27	NA
Oct-17	10.72%	9.86%	0.91%	10.17%	9.22%	1.00%	10.70%	9.83%	0.91%	51.33	51.92	38.59
Nov-17	8.25%	7.87%	0.40%	NA	NA	NA	8.25%	7.87%	0.40%	52.48	52.48	NA
Dec-17	9.58%	8.99%	0.62%	12.25%	11.23%	1.08%	9.69%	9.08%	0.64%	52.69	53.26	39.04
Jan-18	8.87%	8.23%	0.67%	NA	NA	NA	8.87%	8.23%	0.67%	50.63	50.63	NA
Feb-18	8.39%	7.98%	0.43%	8.47%	6.78%	1.75%	8.39%	7.94%	0.48%	53.14	53.60	40.96
Mar-18	7.97%	7.46%	0.53%	NA	NA	NA 2.5.49/	7.97%	7.46%	0.53%	52.47	52.47	NA 29.47
Apr-18 May 18	9.14%	8.46%	0.71%	6.61%	4.13%	2.54%	9.04%	8.28%	0.79%	50.98	51.55	38.47
May-18	7.78% 9.39%	7.49% 8.90%	0.31%	NA 10.08%	NA 10.04%	NA 0.05%	7.78%	7.49%	0.31%	52.76 53.05	52.76 53.92	NA 40.37
Jun-18 Jul-18	9.39%	8.90% 7.71%	0.51%	10.08% NA	10.04% NA	0.05% NA	9.41% 8.12%	8.94% 7.71%	0.49%	53.05	53.92	40.37 NA
Jui-18 Aug-18	8.43%	7.95%	0.43%	12.15%	8.66%	3.65%	8.56%	7.98%	0.43%	53.47	54.61	41.26
Sep-18	9.46%	8.94%	0.55%	12.1370 NA	0.0070 NA	3.0376 NA	9.46%	8.94%	0.55%	52.27	53.28	41.20 NA
Oct-18	9.14%	8.18%	1.00%	6.52%	4.10%	2.47%	9.03%	8.01%	1.06%	51.53	52.76	41.44
Nov-18	8.29%	7.40%	0.93%	0.3276 NA	4.1070 NA	2.4770 NA	8.29%	7.40%	0.93%	53.20	54.22	+1.44 NA
Dec-18	8.13%	7.61%	0.54%	6.68%	5.67%	1.03%	8.02%	7.49%	0.55%	52.60	54.88	40.94
Jan-19	7.12%	6.70%	0.43%	NA	NA	NA	7.07%	6.66%	0.42%	55.03	55.38	NA







## Default—Curtailment Ratios

In our Default-Curtailment Ratios (DCR) we witnessed decreases in both the 7a and the 504 ratios this month.

Please note that an increase in the DCR does not necessarily mean that the default rate is rising, only that the percentage of early curtailments attributable to defaults has increased.

#### SBA 7(a) Default Ratios

This month, the 7(a) DCR registered a 9% decrease to 10.70% from 11.75%, previously. This reading represents the 52nd consecutive reading below 20%.

The cause of this decrease was the fact that voluntary prepayments rose by a greater percentage than defaults. Turning to actual dollar amounts, defaults rose by 6% to \$67 million from \$63 million. As for voluntary prepayments, they increased by 18% to \$559 million from \$476 million, previously.

#### **SBA 504 Default Ratios**

This month, the 504 DCR fell by 39% to 6.71% from 10.96%, previously. With defaults decreasing by a greater percentage than voluntary prepayments, the ratio decreased.

Specifically, the dollar amount of defaults decreased by \$8 million to \$11 million (-44%). As for voluntary prepayments, they fell by \$6 million to \$151 million (-4%).

#### **Summary**

Both ratios continue to suggest low defaults in SBA lending.

For further information on the terminology and concepts used in this article, please refer to the "Glossary and Definitions" at the end of the report.

## **GLS Value Indices Update**

For January, the GLS Value Indices rose in all six sub-indices.

The Base Rate / Libor spread rose by 28 basis point to +273 from +245 while prepayment speeds fell in four out of six maturity buckets.

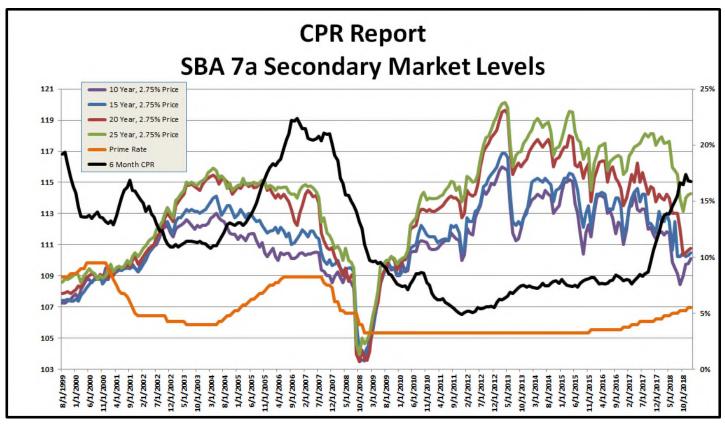
By the end of January, the secondary market was up +0.225% in 10 year loans and +0.10% in 25 year paper. As for 10 year loans, it rose to 110.125, while 25 year paper increased to 114.30. Turning to the specifics, the largest increase was seen in the GLS VI-6, which rose by 1150% to +25 basis points. The other increases, by order of magnitude, were seen in VI-3 (+136% to +59), VI-1 (+60% to +104), VI-5 (+52% to +90), VI-4 (+18% to +104) and VI-2 (+11% to +133).

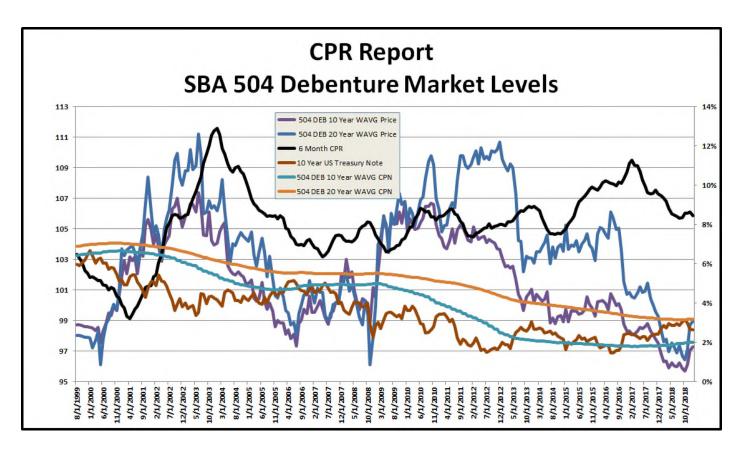
While volumes were very light in January due to the government shutdown, the momentum is toward higher prices in the Secondary Market. For further information on the terminology and concepts used in this article, please refer to the "Glossary and Definitions" at the end of the report.

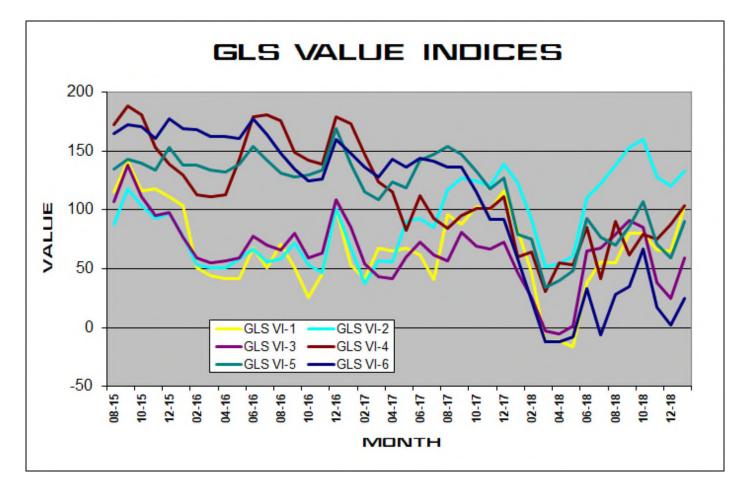
Graphs continue on next page

## 7(a) Secondary Market Pricing Grid: January 2019

Maturity	Gross Margin	Net Margin	Servicing	This Month Price	Last Month Price	3-Mos. Ago Price	6-Mos. Ago Price	1-Yr. Ago Price
10 yrs.	2.75%	1.075%	1.00%	110.125	109.800	109.000	109.500	111.750
15 yrs.	2.75%	1.075%	1.00%	110.500	110.300	110.500	112.500	113.125
20 yrs.	2.75%	1.075%	1.00%	110.750	110.650	110.300	113.000	114.250
25 yrs.	2.75%	1.075%	1.00%	114.300	114.200	113.150	115.750	117.750







## **GLS Value Indices Supporting Data**

	BUCKET	BUCKET	BUCKET	BUCKET	BUCKET	BUCKET
MONTH	1 CPR	2 CPR	3 CPR	4 CPR	5 CPR	6 CPR
Aug-15	10.38%	10.91%	8.20%	5.95%	7.74%	7.35%
Sep-15	10.53%	11.19%	7.99%	5.99%	8.23%	7.68%
Oct-15	9.81%	9.64%	8.27%	5.90%	8.21%	7.89%
Nov-15	10.43%	9.66%	8.20%	7.53%	8.04%	7.98%
Dec-15	10.73%	9.39%	8.03%	9.60%	8.55%	8.11%
Jan-16	11.06%	9.07%	8.17%	9.70%	8.71%	8.01%
Feb-16	14.66%	9.40%	7.85%	9.79%	8.09%	7.68%
Mar-16	14.76%	9.03%	7.56%	9.83%	7.51%	7.43%
Apr-16	15.59%	9.41%	7.65%	9.51%	7.62%	7.43%
May-16	16.15%	9.05%	7.69%	6.97%	7.06%	7.43%
Jun-16	15.05%	10.24%	7.69%	4.59%	7.31%	7.57%
Jul-16	16.26%	10.65%	7.87%	3.92%	7.28%	7.80%
Aug-16	13.72%	10.56%	7.99%	3.28%	6.96%	7.97%
Sep-16	14.59%	11.12%	8.40%	4.50%	7.68%	8.38%
Oct-16	15.61%	10.93%	7.96%	4.24%	7.06%	8.44%
Nov-16	13.80%	11.98%	7.55%	5.06%	6.81%	8.28%
Dec-16	13.85%	11.32%	7.47%	5.89%	6.73%	7.97%
Jan-17	11.79%	11.64%	7.07%	4.73%	8.02%	8.28%
Feb-17	11.41%	11.05%	7.09%	5.43%	9.00%	8.14%
Mar-17	11.55%	10.72%	6.82%	5.75%	8.24%	7.76%
Apr-17	13.00%	11.24%	7.30%	8.12%	9.14%	7.93%
May-17	13.40%	9.89%	7.73%	10.36%	9.25%	8.14%
Jun-17	15.02%	10.52%	8.10%	10.46%	8.60%	8.44%
Jul-17	15.15%	10.30%	8.49%	11.02%	7.27%	8.10%
Aug-17	14.05%	10.77%	9.04%	11.75%	7.17%	8.16%
Sep-17	13.96%	11.79%	9.41%	10.67%	8.02%	8.24%
Oct-17	11.54%	11.82%	10.04%	13.18%	8.78%	9.29%
Nov-17	12.55%	12.30%	10.77%	13.03%	9.67%	10.37%
Dec-17	12.40%	12.09%	11.32%	13.12%	10.62%	11.29%
Jan-18	14.40%	11.79%	11.80%	14.09%	12.22%	12.33%
Feb-18	15.11%	12.25%	12.32%	13.68%	12.53%	13.49%
Mar-18	16.76%	11.79%	12.71%	13.85%	13.57%	14.21%
Apr-18	17.30%	11.49%	12.93%	11.29%	13.33%	14.41%
May-18	18.31%	11.36%	13.00%	12.67%	13.05%	14.34%
Jun-18	19.94%	11.76%	13.84%	15.63%	14.32%	14.93%
Jul-18	19.88%	11.94%	14.60%	15.60%	14.30%	15.31%
Aug-18	20.35%	10.87%	14.78%	16.27%	16.07%	15.93%
Sep-18	19.05%	10.22%	15.57%	18.81%	16.37%	17.38%
Oct-18	19.52%	9.97%	15.71%	17.72%	17.17%	17.10%
Nov-18	17.45%	10.92%	16.41%	16.82%	18.81%	18.07%
Dec-18	15.10%	9.81%	15.96%	13.73%	17.84%	17.65%
Jan-19	15.10%	9.57%	15.57%	13.88%	16.68%	17.84%

## **GLS Value Indices Supporting Data**

	WAVG	WAVG	BASE LIBOR	GLS	GLS	GLS	GLS	GLS	GLS
MONTH	LIBOR	BASE	SPD	<b>VI-1</b>	<b>VI-2</b>	<b>VI-3</b>	<b>VI-4</b>	<b>VI-5</b>	<b>VI-6</b>
Aug-15	0.32%	3.25%	2.93%	115	88	107	172	135	165
Sep-15	0.33%	3.25%	2.92%	141	118	138	188	143	172
Oct-15	0.32%	3.25%	2.93%	116	104	111	181	140	171
Nov-15	0.36%	3.25%	2.89%	118	93	95	153	134	161
Dec-15	0.53%	3.25%	2.72%	111	97	98	139	153	177
Jan-16	0.62%	3.50%	2.88%	104	78	77	130	138	169
Feb-16	0.62%	3.50%	2.88%	51	53	59	113	138	168
Mar-16	0.64%	3.50%	2.86%	44	51	55	111	134	162
Apr-16	0.63%	3.50%	2.87%	42	51	57	113	132	162
May-16	0.63%	3.50%	2.87%	42	58	59	143	139	161
Jun-16	0.66%	3.50%	2.84%	68	67	78	179	154	177
Jul-16	0.69%	3.50%	2.81%	51	56	70	181	142	164
Aug-16	0.80%	3.50%	2.70%	71	58	66	176	131	148
Sep-16	0.86%	3.50%	2.64%	51	72	80	149	128	135
Oct-16	0.88%	3.50%	2.62%	26	53	59	142	130	125
Nov-16	0.91%	3.50%	2.59%	46	47	63	139	134	126
Dec-16	0.97%	3.75%	2.78%	101	101	109	179	169	160
Jan-17	1.02%	3.75%	2.73%	53	68	85	173	139	148
Feb-17	1.04%	3.75%	2.71%	42	37	54	147	115	136
Mar-17	1.15%	3.75%	2.60%	68	57	43	124	109	128
Apr-17	1.16%	4.00%	2.84%	65	56	42	115	124	143
May-17	1.18%	4.00%	2.82%	68	90	60	83	119	136
Jun-17	1.27%	4.25%	2.98%	62	93	73	112	142	144
Jul-17	1.30%	4.25%	2.95%	41	85	62	93	147	141
Aug-17	1.31%	4.25%	2.94%	96	117	57	84	154	136
Sep-17	1.32%	4.25%	2.93%	88	127	81	95	147	136
Oct-17	1.35%	4.25%	2.90%	103	125	69	101	133	115
Nov-17	1.42%	4.25%	2.83%	100	120	67	101	118	92
Dec-17	1.61%	4.50%	2.89%	116	139	73	111	127	92
Jan-18	1.73%	4.50%	2.77%	83	123	47	60	79	58
Feb-18	1.87%	4.50%	2.63%	47	92	26	64	75	23
Mar-18	2.18%	4.50%	2.32%	-12	52	-3	31	34	-12
Apr-18	2.35%	4.75%	2.40%	-11	54	-5	55	40	-12
May-18	2.32%	4.75%	2.43%	-16	61	1	53	48	-8
Jun-18	2.33%	5.00%	2.67%	38	110	65	85	93	33
Jul-18	2.34%	5.00%	2.66%	56	122	68	42	77	-6
Aug-18	2.31%	5.00%	2.69%	55	138	79	90	70	28
Sep-18	2.34%	5.00%	2.66%	80	153	91	62	86	35
Oct-18	2.45%	5.25%	2.80%	80	160	85	79	107	67
Nov-18	2.64%	5.25%	2.61%	66	128	38	75	71	17
Dec-18	2.80%	5.25%	2.45%	65	120	25	88	59	2
Jan-19	2.77%	5.50%	2.73%	104	133	59	104	90	25

I	INDICES LEGEND
	HIGHEST READING

LOWEST READING

Age Buckets—Actual prepayments versus actual pool trading balances

ACT CPR < 8	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	2.91%	11.62%	42.91%	11.08%	37.44%
Nov-18	3.13%	9.58%	0.65%	14.96%	22.94%
Dec-18	8.39%	4.64%	0.00%	19.64%	33.95%
Jan-19	6.62%	13.61%	35.91%	38.85%	31.40%
Grand Total	5.38%	9.87%	23.39%	20.77%	31.67%

ACT CPR 10-13	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	2.89%	16.34%	14.75%	20.33%	25.82%
Nov-18	8.10%	14.79%	18.40%	27.47%	29.44%
Dec-18	3.61%	13.59%	15.12%	22.04%	22.76%
Jan-19	3.61%	16.56%	14.53%	16.74%	24.47%
Grand Total	4.60%	15.37%	15.72%	21.68%	25.67%

ACT CPR 16-20	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	0.00%	10.72%	11.59%	23.66%	20.94%
Nov-18	0.00%	1.66%	32.20%	29.03%	21.17%
Dec-18	0.00%	18.52%	12.78%	0.00%	8.90%
Jan-19	0.00%	25.35%	12.47%	8.46%	9.39%
Grand Total	0.00%	13.60%	17.64%	16.55%	15.33%

### Age Buckets

Actual prepayments versus actual pool trading balances

ACT CPR 8-10	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	5.42%	28.05%	7.81%	14.04%	15.93%
Nov-18	6.17%	4.36%	52.31%	58.24%	30.48%
Dec-18	6.02%	26.98%	6.65%	2.09%	25.96%
Jan-19	6.55%	13.02%	17.20%	14.77%	30.14%
Grand Total	6.09%	18.87%	23.94%	26.11%	25.97%

ACT CPR 13-16	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	0.95%	13.35%	1.74%	0.00%	17.60%
Nov-18	0.00%	35.58%	0.00%	0.00%	26.40%
Dec-18	5.50%	1.00%	15.03%	0.00%	10.13%
Jan-19	0.00%	7.77%	15.43%	0.00%	39.56%
Grand Total	1.60%	15.96%	8.69%	0.00%	24.00%

ACT CPR 20+	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	2.33%	10.20%	14.31%	34.83%	17.04%
Nov-18	3.99%	13.96%	31.70%	19.83%	28.01%
Dec-18	2.01%	8.79%	24.40%	20.30%	20.11%
Jan-19	1.95%	11.07%	26.84%	30.28%	22.38%
Grand Total	2.59%	11.02%	24.60%	26.65%	22.00%

ACT CPR FIX	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	10.38%	0.00%	11.84%	0.00%	16.89%
Nov-18	0.98%	0.00%	2.15%	0.00%	4.85%
Dec-18	0.00%	2.75%	0.00%	0.00%	24.31%
Jan-19	0.00%	23.33%	2.41%	11.60%	23.03%
Grand Total	3.43%	6.93%	3.70%	3.58%	17.51%

Age Buckets—Corrected prepayments versus corrected pool trading balances

COR CPR < 8	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	2.91%	11.81%	43.14%	9.72%	17.22%
Nov-18	3.13%	9.70%	0.64%	13.06%	10.55%
Dec-18	8.39%	4.69%	0.00%	16.59%	11.70%
Jan-19	6.62%	13.51%	35.27%	33.84%	14.66%
Grand Total	5.38%	9.94%	23.25%	17.92%	13.62%

COR CPR 10-13	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	2.89%	16.04%	14.12%	18.66%	15.05%
Nov-18	8.10%	14.58%	17.73%	25.12%	17.50%
Dec-18	3.61%	13.39%	14.55%	19.79%	11.86%
Jan-19	3.61%	16.32%	13.93%	15.19%	13.95%
Grand Total	4.60%	15.13%	15.10%	19.71%	14.61%

COR CPR 16-20	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	0.00%	10.89%	11.30%	25.32%	16.03%
Nov-18	0.00%	1.67%	32.82%	28.65%	16.31%
<b>Dec-18</b>	0.00%	18.68%	12.90%	0.00%	6.17%
Jan-19	0.00%	25.41%	12.49%	8.19%	7.13%
Grand Total	0.00%	13.71%	17.81%	16.89%	11.55%

#### Age Buckets

Corrected prepayments versus corrected pool trading balances

COR CPR 8-10	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	5.42%	27.44%	7.24%	11.84%	9.79%
Nov-18	6.17%	4.29%	50.82%	50.13%	22.67%
Dec-18	6.02%	27.25%	6.19%	1.74%	15.95%
Jan-19	6.55%	12.90%	16.29%	13.03%	20.30%
Grand Total	6.09%	18.71%	22.91%	21.76%	17.42%

COR CPR 13-16	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	0.95%	13.61%	1.76%	0.00%	13.30%
Nov-18	0.00%	35.82%	0.00%	0.00%	21.87%
Dec-18	5.50%	0.98%	14.91%	0.00%	7.13%
Jan-19	0.00%	7.82%	15.95%	0.00%	30.19%
Grand Total	1.60%	16.13%	8.80%	0.00%	18.46%

COR CPR 20+	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	2.33%	10.37%	14.65%	35.72%	12.65%
Nov-18	3.99%	14.13%	32.44%	20.02%	21.88%
Dec-18	2.01%	8.90%	24.93%	20.55%	14.47%
Jan-19	1.95%	11.17%	27.48%	30.86%	16.56%
Grand Total	2.59%	11.15%	25.18%	27.15%	16.47%

COR CPR FIXED	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	10.38%	0.00%	11.85%	0.00%	16.38%
Nov-18	0.98%	0.00%	2.15%	0.00%	4.69%
Dec-18	0.00%	2.76%	0.00%	0.00%	23.48%
Jan-19	0.00%	23.37%	2.41%	11.61%	22.15%
Grand Total	3.43%	6.94%	3.71%	3.58%	16.92%

Age Buckets—Corrected prepayments versus underlying loan trading balances

LOAN CPR < 8	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	2.90%	11.79%	43.94%	11.52%	32.16%
Nov-18	3.10%	9.70%	0.65%	15.48%	20.65%
Dec-18	8.30%	4.67%	0.00%	19.73%	23.22%
Jan-19	6.54%	13.43%	36.26%	39.40%	27.76%
Grand Total	5.33%	9.92%	23.82%	21.19%	26.20%

LOAN CPR 10-13	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	2.87%	16.27%	14.71%	20.47%	24.35%
Nov-18	8.04%	14.79%	18.40%	27.44%	27.88%
<b>Dec-18</b>	3.58%	13.57%	15.12%	21.68%	19.22%
Jan-19	3.57%	16.51%	14.47%	16.66%	22.52%
Grand Total	4.56%	15.33%	15.69%	21.59%	23.54%

LOAN CPR 16-20	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	0.00%	10.82%	11.26%	25.19%	23.28%
Nov-18	0.00%	1.65%	32.79%	28.64%	23.70%
<b>Dec-18</b>	0.00%	18.55%	12.81%	0.00%	9.27%
Jan-19	0.00%	25.22%	12.41%	8.21%	10.39%
Grand Total	0.00%	13.61%	17.72%	16.87%	16.92%

### Age Buckets

### Corrected prepayments versus underlying loan trading balances

LOAN CPR 8-10	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	5.38%	27.63%	7.64%	14.11%	14.99%
Nov-18	6.14%	4.33%	52.72%	55.50%	33.17%
Dec-18	5.98%	27.47%	6.56%	2.01%	23.69%
Jan-19	6.50%	13.02%	17.17%	14.96%	29.86%
Grand Total	6.05%	18.86%	24.07%	25.02%	25.90%

LOAN CPR 13-16	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	0.95%	13.43%	1.73%	0.00%	18.83%
Nov-18	0.00%	35.46%	0.00%	0.00%	30.48%
<b>Dec-18</b>	5.45%	0.97%	14.58%	0.00%	10.36%
Jan-19	0.00%	7.74%	15.58%	0.00%	41.54%
Grand Total	1.59%	15.95%	8.62%	0.00%	26.01%

LOAN CPR 20+	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	2.32%	10.23%	14.33%	35.36%	17.74%
Nov-18	3.97%	13.94%	31.81%	19.79%	29.87%
Dec-18	2.00%	8.79%	24.40%	20.27%	20.11%
Jan-19	1.94%	11.03%	26.88%	30.34%	22.85%
Grand Total	2.57%	11.01%	24.65%	26.80%	22.80%

LOAN CPR FIX	0-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	48+ Mos.
Oct-18	10.34%	0.00%	11.73%	0.00%	20.54%
Nov-18	0.98%	0.00%	2.13%	0.00%	6.00%
<b>Dec-18</b>	0.00%	2.72%	0.00%	0.00%	29.22%
Jan-19	0.00%	23.06%	2.39%	11.42%	27.77%
Grand Total	3.41%	6.85%	3.67%	3.52%	21.28%

#### Default-Curtailment Ratio

The Default-Curtailment Ratio (DCR), or the percentage of secondary loan curtailments that are attributable to defaults, can be considered a measurement of the health of small business in the U.S. GLS, with default and borrower prepayment data supplied by Colson Services, has calculated DCRs for both SBA 7(a) and 504 loans since January, 2000.

The default ratio is calculated using the following formula:

Defaults / (Defaults + Prepayments)

By definition, when the DCR is increasing, defaults are increasing faster than borrower prepayments, suggesting a difficult business environment for small business, perhaps even recessionary conditions. On the flip side, when the DCR is decreasing, either defaults are falling or borrower prepayments are outpacing defaults, each suggesting improving business conditions for small business.

Our research suggests that a reading of 20% or greater on 7(a) DCRs and 15% or greater on 504 DCRs suggest economic weakness in these small business borrower groups.

#### Theoretical Default Rate

Due to a lack of up-to-date default data, we attempt to estimate the current default rate utilizing two datasets that we track:

Total prepayment data on all SBA pools going back to 2003. This is the basis for our monthly prepayment information.

Total prepayment data on all secondary market 7(a) loans going back to 1999, broken down by defaults and voluntary prepayments. This is the basis for our monthly default ratio analysis.

With these two datasets, it is possible to derive a theoretical default rate on SBA 7(a) loans. We say "theoretical" because the reader has to accept the following assumptions as true:

The ratio of defaults to total prepayments is approximately the same for SBA 7(a) pools and secondary market 7(a) loans.

Fact: 60% to 70% of all secondary market 7(a) loans are inside SBA pools.

The default rate for secondary market 7(a) loans closely approximates the default rate for all outstanding 7(a) loans.

Fact: 25% to 35% of all outstanding 7(a) loans have been sold into the secondary market.

While the above assumptions seem valid, there exists some unknown margin for error in the resulting analysis. However, that does not invalidate the potential value of the information to the SBA lender community.

The Process

To begin, we calculated total SBA pool prepayments, as a percentage of total secondary loan prepayments, using the following formula: Pool Prepay Percentage = Pool Prepayments / Secondary Loan Prepayments

This tells us the percentage of prepayments that are coming from loans that have been pooled. Next, we calculated the theoretical default rate using the following equation:

((Secondary Loan Defaults \* Pool Prepay Percentage) / Pool Opening Balance) \* 12

This provides us with the theoretical default rate for SBA 7(a) loans, expressed as an annualized percentage.

#### **GLS Long Value Indices**

Utilizing the same maturity buckets as in our CPR analysis, we calculate 6 separate indexes, denoted as GLS VI-1 to VI-6. The numbers equate to our maturity buckets in increasing order, with VI-1 as <8 years, VI-2 as 8-10 years, VI-3 as 10-13 years, VI-4 as 13-16 years, VI-5 as 16-20 years and ending with VI-6 as 20+ years.

The new Indices are basically weighted-average spreads to Libor, using the rolling six-month CPR for pools in the same maturity bucket, at the time of the transaction. While lifetime prepayment speeds would likely be lower for new loans entering the secondary market, utilizing six-month rolling pool speeds allowed us to make relative value judgments across different time periods.

We compare the bond-equivalent yields to the relevant Libor rate at the time of the transaction. We then break the transactions into the six different maturity buckets and calculate the average Libor spread, weighting them by the loan size.

For these indices, the value can be viewed as the average spread to Libor, with a higher number equating to greater value in the trading levels of SBA 7(a) loans.

#### Prepayment Calculations

SBA Pool prepayment speeds are calculated using the industry convention of Conditional Prepayment Rate, or CPR. CPR is the annualized percentage of the outstanding balance of a pool that is expected to prepay in a given period. For example, a 10% CPR suggests that 10% of the current balance of a pool will prepay each year.

When reporting prepayment data, we break it into seven different original maturity categories: <8 years, 8-10 years, 10-13 years, 13-16 years, 16-20 years and 20+ years. Within these categories we provide monthly CPR and YTD values.

In order to get a sense as to timing of prepayments during a pool's life, we provide CPR for maturity categories broken down by five different age categories: 0-12 months, 13-24 months, 25-36 months, 37-48 months and 48+ months.

As to the causes of prepayments, we provide a graph which shows prepayment speeds broken down by voluntary borrower prepayment speeds, denoted VCPR and default prepayment speeds, denoted as DCPR. The formula for Total CPR is as follows:

#### Total Pool CPR = VCPR + DCPR

#### SBA Libor Base Rate

The SBA Libor Base Rate is set on the first business day of the month utilizing one-month LIBOR, as published in a national financial newspaper or website, plus 3% (300 basis points). The rate will be rounded to two digits with .004 being rounded down and .005 being rounded up. Please note that the SBA's maximum 7(a) interest rates continue to apply to SBA base rates: Lenders may charge up to 2.25% above the base rate for maturities under seven years and up to 2.75% above the base rate for maturities of seven years or more, with rates 2% higher for loans of \$25,000 or less and 1% higher for loans between \$25,000 and \$50,000. (Allowable interest rates are slightly higher for SBAExpress loans.)

#### Risk Types

The various risk types that impact SBA pools are the following:

Basis Risk: The risk of unexpected movements between two indices. The impact of this type of risk was shown in the decrease in the Prime/ Libor spread experienced in 2007 and 2008.

Prepayment Risk: The risk of principal prepayments due to borrower voluntary curtailments and defaults. Overall prepayments are expressed in CPR, or Conditional Prepayment Rate.

Interest Rate Risk: The risk of changes in the value of an interest-bearing asset due to movements in interest rates. For pools with monthly or quarterly adjustments, this risk is low.

Credit Risk: Losses experienced due to the default of collateral underlying a security. Since SBA loans and pools are guaranteed by the US government, this risk is very small.

#### Secondary Market First Lien Position 504 Loan Pool Guarantee Program

As part of the American Recovery and Reinvestment Act (AKA the Stimulus Bill), Congress authorized the SBA to create a temporary program that provides a guarantee on an eligible pool of SBA 504 first liens. The program was authorized for a period of two years from the date of bill passage – February, 2009. The eligibility of each loan is dependent on the date of the SBA Debenture funding. To be eligible, the Debenture must have been funded <u>on or after</u> February 17, 2009. The total guarantee allocation is \$3 Billion. HR 5297 provides for a two-year extension from the first pooling month, so that the final end date of the program was September, 2012.

#### The SBA began issuing pool guarantees in September, 2010 for early October settlement.

For the purposes of the program, a pool is defined as 2 or more loans. A pool must be either fixed (for life) or adjustable (any period adjustment including 5 or 10 years). If the pool is comprised of adjustable rate loans, all loans must have the same base rate (e.g. Prime, LIBOR, LIBOR Swaps, FHLB, etc.). Finally, each loan must be current for the lesser of 6 months or from the time of loan funding. Congress mandated that this be a zero subsidy program to the SBA (and the US taxpayer). The SBA has determined the program cost (management and expected losses) can be covered by an ongoing subsidy fee of .744% for fiscal year 2012.

#### SBA 504 Program and Debenture Funding

To support small businesses and to strengthen the economy Congress created the U.S. Small Business Administration (SBA) in 1953 to provide a range of services to small businesses including financing. In 1958 Congress passed the Small Business Investment Act which established what is known today as the SBA 504 loan program.

The 504 loan program provides financing for major fixed assets, such as owner-occupied real estate and long-term machinery and equipment. A 504 project is funded by a loan from a bank secured with a first lien typically covering 50% of the project's cost, a loan from a CDC secured with a second lien (backed by a 100% SBA-guaranteed debenture) covering a maximum of 40% of the cost, and a contribution of at least 10% of the project cost from the small business being financed. The SBA promotes the 504 program as an economic development tool because it is a small-business financing product that generates jobs.

Each debenture is packaged with other CDC debentures into a national pool and is sold on a monthly basis to underwriters. Investors purchase interests in debenture pools and receive certificates representing ownership of all or part of a debenture pool. SBA uses various agents to facilitate the sale and service of the certificates and the orderly flow of funds among the parties involved. The debenture sales are broken into monthly sales of 20 year debentures and bi-monthly sales of 10 year debentures.

It is the performance of these debenture pools that we track in the CPR Report on a monthly basis.

#### SBI Pool and IO Strip Indexes

Through a joint venture called Small Business Indexes, Inc. or SBI, GLS and Ryan ALM introduced a group of total return indexes for SBA 7a pools and I/O strips with history going back to I/1/2000.

#### Why did we do this?

Indexes have been around since 1896 when the Dow Jones Industrial Average was introduced. They have grown in importance to the financial markets, whereby today \$6 trillion are invested in Index Funds throughout the world.

The reasons for having investment indexes are fivefold:

- 1. Asset Allocation Models: Asset Allocation usually accounts for over 90% of a client's total return and becomes the most critical asset decision. Such models use 100% index data to calculate their asset allocations. Bond index funds are the best representation of the intended risk/reward of fixed income asset classes.
- 2. **Transparency:** Most bond index benchmarks publish daily returns unlike active managers who publish monthly or even quarterly returns usually with a few days of delinquency. Such transparency should provide clients with more information on the risk/reward behavior of their assets so there are no surprises at quarterly asset management review meetings.
- 3. Performance Measurement: Creates a benchmark for professional money managers to track their relative performance.
- 4. Dictates Risk/Reward Behavior: By analyzing historical returns of an index, an investor can better understand how an asset class will perform over long periods of time, as well as during certain economic cycles.
- 5. **Hedging:** An investment index can provide a means for hedging the risk of a portfolio that is comprised of assets tracked by the index. An example would be hedging a 7a servicing portfolio using the SBI I/O Strip Index.

By creating investment indexes for SBA 7a pool and IO strips, these investments can become a recognized asset class by pension funds and other large investors who won't consider any asset class in their asset allocation models that does not have a benchmark index.

An additional use for the I/O index could be to allow 7a lenders to hedge servicing portfolios that are getting large due to production and the low prepayment environment. This increase in exposure to 7a IO Strips would be welcome by IO investors who are constrained by the amount of loans that are stripped prior to being pooled.

#### SBI Pool and IO Strip Indexes (continued)

#### How are the indexes calculated?

The rules for choosing which outstanding pools are eligible for both the pool and IO indexes are the following:

#### **Pool Size:**

- \$5 million minimum through 1/1/2005.
- \$10 million minimum after 1/1/2005.

#### **Pool Structure:**

- Minimum of 5 loans inside the pool.
- Minimum average loan size of \$250,000.

#### **Pool Maturity:**

- Minimum of 10 years of original maturity.
- Sub indices for 10-15 years and 15-25 year maturities.
- The rules for remaining in the indices are the following:

#### **Pool Size:**

- Minimum pool factor of .25
- Factor Updates in the Indices are on the first of the month, based on the Colson Factor Report that is released in the middle of the previous month.

#### **Pool Structure:**

• Minimum of 5 loans inside the pool.

We have produced two weightings for each pool in the various indexes, "Actual" and "Equal":

#### "Actual" weighted Indices:

- The actual original balance of each pool is used to weight the pool in the index.
- An index for all eligible pools, as well as one for 10-15 years and one for 15-25 years of original maturity.
- A total of 3 actual weighted sub-indices.

#### "Equal" weighted Indices:

- An original balance of \$10 million is assigned to each pool, regardless of its true size.
- An index for all eligible pools, as well as one for 10-15 years and one for 15-25 years of original maturity.
- A total of 3 equal weighted sub-indices.

#### SBI Pool and IO Strip Indexes (continued)

This equates to a total of (6) Pool sub-indices. We will refer to them on a go-forward basis as the following:

#### Actual Weighting:

- All 10-25 year in original maturity pools "All Actual"
- 10-15 year in original maturity pools "Short Actual"
- I5-25 year in original maturity pools "Long Actual"

#### **Equal Weighting:**

- All 10-25 year in original maturity pools "All Equal"
- 10-15 year in original maturity pools "Short Equal"
- I5-25 year in original maturity pools "Long Equal"

#### **Return Calculations**

Each index is tracked by its value on a daily basis, as well as the components of return.

#### Income Component

• Daily return is calculated for the contribution of interest earned.

#### Mark-to-Market Component

• Daily return is calculated for the contribution of Mark-To-Market changes.

#### **Scheduled Principal Component**

• Daily return is calculated for the contribution of normal principal payments. Only impacts the first of the month.

#### **Prepayed Principal Component**

- Daily return is calculated for the contribution of prepayed principal payments. Only impacts the first of the month.
- We have also added a Default Principal Component and a Voluntary Principal Component that, together, equate to the Prepayed Principal Component. This also only impacts the first of the month.

#### **Total Principal Component**

• Daily return is calculated for the contribution of all principal payments. Only impacts the first of the month.

The formula for Total Daily Return is as follows:

#### Total Daily Return = Income Return + MTM Return + Principal Return

The Principal Return is generated using the following formula:

#### Principal Return = Prepayed Principal Return + Scheduled Principal Return

#### SBI Pool and IO Strip Indexes (continued)

The I/O Strip Indexes are a bit more involved, since we have to calculate the pricing multiple, as well as the breakdown between income earned and return of capital from interest accruals and payments. Here are the specific rules for the I/O Strip Indexes:

- The I/O Strip Indices utilize the same pools as the Pool Indices.
- Each pool is synthetically "stripped" upon entering the I/O Indices.
- For the equal and actual weighted indices and the maturity sub-indices (10-15 and 15-25), the pools are split into two even buckets utilizing the pool reset margins. The bucket with the higher margins we refer to as the "Upper Bucket" and the lower margin pools are in the "Lower Bucket".
- The weighted average reset margin and pool MTM is calculated for each bucket. The MTM is the same one utilized in the pool indices.
- The weighted average price of the Lower Bucket is subtracted from the Upper Bucket. The same thing is done for the weighted average reset margin.
- The MTM difference is divided by the reset margin difference, giving us the pricing multiple by maturity and weighting.
- The end result is a pricing multiple for equal and actual weighting for 10-15 year pools and 15-25 year pools, totaling (4) distinct multiples. For the Hedge Indexes, there is no pricing component.
- Not all interest received is considered earned income, therefore interest received by the stripped pools is divided into earnings and return of capital, utilizing OID accounting rules. This lowers the income portion return since a portion of each pool's interest payment is considered return of principal. However, for our Hedge Indices, all interest is considered earnings with no return of capital.
- The OID accounting rule create a straight-line return of capital upon entry into the index and the difference between the return of capital and interest received is earned income.
- Fundamentally, high prepayments can push more received interest into return of capital, thus limiting earned income. Excellent prepayment performance can generate large amounts of earned income over time.

Once the return percentages are determined for each day, it is then applied to the previous day's index level, in order to calculate the index levels for that day.

#### **Supporting Calculations**

To aid in the analysis of the indexes, we track (22) distinct calculations for each of the (6) sub-indices:

#### Size

Pool count and total outstanding balance

#### Structure

• Weighted average issue date, maturity date, reset date, maturity months, remaining months, age, coupon, reset margin, strip percent (strip indexes only).

#### Price and Yield

• Weighted average pool price, bond-equivalent yield, strip discount rate, multiple and strip pricing (strip indexes only)

#### Other Calculations

• CPR assumption, weighted average life, modified duration, index duration, strip duration and strip return of capital average life.

#### SBI Pool and IO Strip Indexes (continued)

#### SBA 504 Debenture and SBIC Debenture Indexes

While the above calculations for both the SBA 504 Debenture (SBAP) and SBIC Debenture Indexes are the same, there are differences in structure and reporting between all three SBA Programs. Here are the differences:

- SBAP's have monthly factor updates for 20 year (deemed "Long") but bi-monthly updates for 10-year paper ("Short").
- SBAP's have one new 20-year maturity each month and one 10-year every other month.
- SBICs only have 10 year debentures and they update factors only twice a year, in March and September.
- SBICs have a new debenture issued in the same months as above.
- SBICs do not amortize, whereas both SBAPs and 7a Pools do. For this reason, there is no Scheduled Principal Sub-Index.
- While 7a pools are all floating rate securities in the indexes, SBAP and SBICs debentures are all fixed rate, thus having longer durations and greater sensitivity to interest rate movements.

#### **SBA Composite Indexes**

The SBI Composite Indexes combine the four primary indexes (7a Pools, 7a IO Strips, SBAPs and SBICs) into one suite of indexes. While the actual weighted indexes use the four primary actual indexes weighted by actual size, the equal weighted indexes use the four primary equal weighted indexes also weighted by actual size. Due to the fact that the three SBA programs have grown, and continue to grow, at different rates since 1999, a static equal weighting methodology would create balancing issues over time. Therefore, we thought it best to weight the equal indexes by the actual program sizes.

The Composite indexes have all of the same sub-indexes as the four primary indexes.

#### SBI Rich / Cheap Analysis

The SBI Rich /Cheap Analysis is an attempt to create a "fair value" pricing model, based on 13 years of historical index pricing. We then compare the fair value price to current market levels, as represented by the GLS pricing models. We do this for 10 to 15 year maturity indexeligible pools and for 15+ maturity ones, effectively creating two separate calculations.

The first step was to create a fair value pricing algorithm for each maturity bucket, which is based on the following historical inputs:

Fundamental Inputs:

- The rolling I2-month historical CPR for all pools, including non-eligible ones, inside each maturity bucket.
- The previous month's I month CPR for the same population and maturity bucket.
- We used all pools, since the GLS pricing models do not differentiate between eligible and non-eligible pools.
- Weighted average pool coupon.

We chose the prepayment inputs in order to provide a directional element for pool prepayments. For instance, when the I month CPR is lower than the 12 month one, than the trend for prepayments is lower and when it is higher, the trend is toward higher prepayments.

We added the coupon input to add market level interest rates to the analysis. Since we are only using floating-rate SBA 7a pools that reset monthly or quarterly, this input is a proxy for the base rate on the pricing date.

#### SBI Rich / Cheap Analysis (continued)

#### Structural Inputs:

- Weighted average pool net margin to the base rate.
- Weighted average remaining months to maturity.
- Weighted average pool age.

The structural inputs put the weighted average index price into context, based on the amount and number of interest payments into the future.

The algorithm will be re-calibrated on an annual basis with the addition of the previous year's pricing data and then applied to the next year's pricing data to calculate the fair value price.

#### Methodology

We used multiple regression for the analysis and achieved an r-squared of .80 for the 10-15 year maturity bucket and .95 for the 15+ maturity bucket.

We then subtracted the fair value price from the index pricing level to find the difference between these two pricing elements. Basically, when the index pricing level is higher than the fair value price, the index price is, to varying degrees, "rich" and when it is below the fair value price, it is "cheap".

Additionally, we determined that a "Fair Value Band" was necessary for the analysis. We decided that when the two pricing components are within +.50 and -.50 of each other (green portion of the accompanying graph), the index pricing level was fairly valued as per the model. When the index price rose above the fair value band, the market for SBA pools is considered "Rich", or expensive compared to historical pricing and when it is below the band, it is "Cheap" or inexpensive as compared to our fair value price.

#### SBIC Debenture Program

A Small Business Investment Company (SBIC) is a privately owned and operated company that makes long-term investments in American small businesses and is licensed by the United States Small Business Administration (SBA).

A principal reason for a company to become licensed as an SBIC is access to financing (Leverage) provided by SBA. In addition, banks and Federal savings associations (as well as their holding companies) have the ability to own or to invest in SBICs and thereby to own indirectly more than 5 percent of the voting stock of a small business, I and can receive Community Reinvestment Act credit for SBIC investments. Banks and their holding companies also receive exemptions from certain capital charge regulations and lending "affiliation" rules under the Gramm-Leach-Bliley Act. A business seeking a U.S. Government contract that is a set aside for small businesses does not lose its status as a small business by reason of a control investment by an SBIC. Many Business Development Companies (BDCs) also have formed SBIC "subsidiaries" as part of their business strategies.

The SBIC Program has undergone significant changes since its creation in 1958. The original Program permitted only Debenture Leverage. The Small Business Equity Enhancement Act of 1992 drastically changed the SBIC program. It created a new form of SBA Leverage known as "Participating Securities" (essentially preferred limited partnership interests); increased the amount of Leverage available to an SBIC to \$90 million (which subsequently was indexed to reflect changes in the cost of living since March 31, 1993 and then modified in 2009 to be \$150 million); required minimum private capital of \$10 million for SBICs using Participating Securities and \$5 million for SBICs using Debentures; provided for stricter SBA licensing standards; and enacted other changes to make the program more consistent with the private venture capital industry. Unlike the Debenture program which requires periodic interest payments, the Participating Securities program required an SBIC to pay SBA a prioritized payment (preferred return) and a profit share when the SBIC realized profits. As a consequence, the Participating Securities program was designed to permit investing in equity securities whether or not those securities had a current pay component.

#### SBIC Debenture Program (continued)

This new program resulted in a large expansion of the number of SBIC licenses granted. Following the burst of the "technology bubble" in 2002, the Administration decided there was no longer a need for an equity SBIC program and determined that the existing participating securities program would result in significant losses to SBA. Accordingly, SBA terminated the program, and that beginning on October 1, 2004, stopped issuing commitments to use participating securities leverage and licensing new participating securities SBICs.

SBA currently provides financing (called "Leverage") to SBICs in the form of "Debentures." Debentures are unsecured ten-year loans issued by the SBIC that have interest-only payable semi-annually. Most Debentures bear a temporary interest rate based on LIBOR. The interest rate on these Debentures is fixed when the SBA pools Debentures from various SBICs and sells them to the public, with the pooled Debentures having a 10-year maturity from the sale date.

It is these debentures that are analyzed in the CPR Report.

Since SBIC Debentures do not have an amortization component, I have added a different CPR calculation inside the CPR Report.

I call it the "Amortization Equivalent CPR" (AECPR). Since the principal balance does not amortize for SBIC debentures, it makes it difficult to compare them, from a pre-payment perspective, to amortizing assets, such as SBA 7a and 504 debenture pools.

The AECPR assumes the asset amortizes and looks at the beginning and ending balance to calculate the CPR. The calculation uses the exact MBA (Mortgage Banker's Association) standard formula for CPR.

Because of the amortization assumption, the AECPR is always lower than the normal CPR calculation for SBIC pools, and can go below zero if the principal reduction does not fully offset the assumed amortization amount.

#### SBA 7a League Tables

League tables track volumes of SBA 7a pools by pool assembler, maturity bucket and fixed rate structure during a given calendar year. For the Report, we show the two largest maturity buckets, 10-13 year and 20+ year pools, as well as all formed pools and fixed rate ones. As for how we credit originations for pools with multiple assemblers, we divide the pool amount equally between the pool assemblers involved in the origination.

#### Prepayment Calculation Explanations

After extensive analysis, including sourcing loan level data on a bi-monthly basis going back to 10/31/2017, we are now able to calculate the amount of excess principal paid out since last October with a high degree of accuracy. With this data, we have calculated two other prepayment figures:

- 1. **ACPR**: A prepayment speed that includes paid excess from the Master Reserve Fund, which synthetically inflates CPRs for many pools issued between FY 2005 and FY 2017. This uses the exact amount of pool prepayments without any adjustments. The paid out excess also inflates overall prepayment speeds to the point that this measure is of limited use in judging the prepayment environment.
- 2. **CCPR**: A CPR that corrects pool prepayments for paid out excess, resulting in a prepayment measure that is lower than the ACPR. This measure of prepayment also adds back the excess to the trading balance and tracks it separately over time.
- 3. **LCPR**: A loan level CPR, which utilizes the underlying loan balances in the calculation instead of the corrected pool balances. It uses the same prepayment amounts as the CCPR measure. Since actual loan balances are lower than the pool balances, this measure is higher than the CCPR, but lower than the ACPR.

#### Prepayment Calculation Explanations (continued)

Our loan size prepayment analysis is based on the guaranteed balance of all pooled loans when they were sold into the Secondary Market. The analysis is twofold, in that we divide each loan into our six maturity buckets and then into one of eleven loan size buckets. These loan size buckets are defined as: <250,000, 250,000 to 500,000, 500,000 to IMM, IMM to I.5MM, I.5MM to 2MM, 2MM to 2.5MM, 2.5MM to 3MM, 3MM to 3.5MM, 3.5MM to 4MM, 4MM to 4.5MM and +4.5MM.



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Our Staff: Bob Judge, Editor Scott Evans Brianna Harrison Robert E. Judge II, Production Assistant **Government Loan Solutions, Inc. (GLS)** was founded by three former Bond Traders in Cleveland, OH. Our current partners possess a combined 60 years experience in the institutional fixed income markets, 40 of which are in the loan securitization business. GLS formally began operations in January, 2007 and became a wholly-owned subsidiary of Live Oak Bancshares in September, 2013. Our mission:

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