UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

Form 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the quarterly period ended March 31, 2021 Commission File Number 001-14951



FEDERAL AGRICULTURAL MORTGAGE CORPORATION

(Exact name of registrant as specified in its charter)

Federally chartered instrumentality of the United States

(State or other jurisdiction of incorporation or organization)

1999 K Street, N.W., 4th Floor,

Washington, DC

(Address of principal executive offices)

52-1578738

(I.R.S. employer identification number)

20006

(Zip code)

(202) 872-7700

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading symbol	Exchange on which registered
Class A voting common stock	AGM.A	New York Stock Exchange
Class C non-voting common stock	AGM	New York Stock Exchange
6.000% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series C	AGM.PRC	New York Stock Exchange
5.700% Non-Cumulative Preferred Stock, Series D	AGM.PRD	New York Stock Exchange
5.750% Non-Cumulative Preferred Stock, Series E	AGM.PRE	New York Stock Exchange
5.250% Non-Cumulative Preferred Stock, Series F	AGM.PRF	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: Class B voting common stock

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes 🗷 No 🗆

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes 🗷 No 🗆

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	X	Accelerated filer	
Non-accelerated filer		Smaller reporting company	
		Emerging growth company	

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes 🗆 No 🗷

As of April 29, 2021, the registrant had outstanding 1,030,780 shares of Class A voting common stock, 500,301 shares of Class B voting common stock, and 9,230,842 shares of Class C non-voting common stock.

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PART I

Item 1. **Financial Statements**

FEDERAL AGRICULTURAL MORTGAGE CORPORATION AND SUBSIDIARIES **CONSOLIDATED BALANCE SHEETS**

(unaudited)

(unununcu)				
		As	s of	
	Ma	arch 31, 2021	Dec	cember 31, 2020
		(in tho	usands)	
Assets:	•		<u>^</u>	
Cash and cash equivalents	\$	1,012,541	\$	1,033,941
Investment securities:		2 000 (22		2.052.602
Available-for-sale, at fair value (amortized cost of \$3,800,537 and \$3,843,666, respectively)		3,809,632		3,853,692
Held-to-maturity, at amortized cost		45,032		45,032
Other investments Total Investment Securities		403		3.898.724
Farmer Mac Guaranteed Securities:		3,855,067	-	3,898,724
Available-for-sale, at fair value (amortized cost of \$6,511,776 and \$6,594,992, respectively)		6,763,209		6,947,701
Held-to-maturity, at amortized cost		1,158,792		1,175,792
Total Farmer Mac Guaranteed Securities		7,922,001		8,123,493
USDA Securities:		7,922,001		0,125,475
Trading, at fair value		5,578		6,695
Held-to-maturity, at amortized cost		2,489,500		2,473,626
Total USDA Securities		2,495,078		2,480,321
Loans:		_,.,,,,,,,		_,,
Loans held for investment, at amortized cost		7,341,912		7,261,933
Loans held for investment in consolidated trusts, at amortized cost		1,174,525		1,287,045
Allowance for losses		(14,807)		(13,832)
Total loans, net of allowance		8,501,630		8,535,146
Financial derivatives, at fair value		18,370		17,468
Interest receivable (includes \$8,411 and \$16,401, respectively, related to consolidated trusts)		141,764		186,429
Guarantee and commitment fees receivable		35,878		37,113
Deferred tax asset, net		_		18,321
Prepaid expenses and other assets		31,582		24,545
Total Assets	\$	24,013,911	\$	24,355,501
Liabilities and Equity: Liabilities:				
Notes payable	\$	21,560,310	\$	21,848,917
Debt securities of consolidated trusts held by third parties	φ	1,188,521	Φ	1,323,786
Financial derivatives, at fair value		28,345		29,892
Accrued interest payable (includes \$6,752 and \$14,370, respectively, related to consolidated trusts)		85,216		92,738
Guarantee and commitment obligation		34,403		35,535
Accounts payable and accrued expenses		36,770		28,879
Deferred tax liability, net		521		20,077
Reserve for losses		2,333		3,277
Total Liabilities		22,936,419		23,363,024
		22,930,419		25,505,024
Commitments and Contingencies (Note 6) Equity:				
Preferred stock:				
Series C, par value \$25 per share, 3,000,000 shares authorized, issued and outstanding		73,382		73,382
Series D, par value \$25 per share, 4,000,000 shares authorized, issued and outstanding		96,659		96,659
Series E, par value \$25 per share, 3,180,000 shares authorized, issued and outstanding		77,003		77,003
Series F, par value \$25 per share, 4,800,000 shares authorized, issued and outstanding		116,160		116,160
Common stock:		110,100		110,100
Class A Voting, \$1 par value, no maximum authorization, 1,030,780 shares outstanding		1,031		1,031
Class B Voting, \$1 par value, no maximum authorization, 1,050,700 shares outstanding		500		500
Class C Non-Voting, \$1 par value, no maximum authorization, 9,027,132 shares and 9,205,897				
shares outstanding, respectively		9,227		9,206
Additional paid-in capital		123,718		122,899
Accumulated other comprehensive income/(loss), net of tax		51,744		(13,923)
Retained earnings		528,068		509,560
Total Equity		1,077,492		992,477
Total Liabilities and Equity	\$	24,013,911	\$	24,355,501
	4	= .,010,911		= .,000,001

FEDERAL AGRICULTURAL MORTGAGE CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OPERATIONS

(unaudited)

	F	For the Three Months Ended			
	March	31, 2021	March 31, 2020		
	(in the	ousands, except p	per share amounts)		
Interest income:					
Investments and cash equivalents	\$	5,529	5 17,741		
Farmer Mac Guaranteed Securities and USDA Securities		42,404	71,517		
Loans		59,494	60,596		
Total interest income		107,427	149,854		
Total interest expense		54,176	108,542		
Net interest income		53,251	41,312		
Provision for losses		(913)	(3,438)		
Net interest income after provision for losses		52,338	37,874		
Non-interest income/(expense):					
Guarantee and commitment fees		3,030	3,196		
Gains/(losses) on financial derivatives		4,293	(9,298)		
(Losses)/gains on trading securities		(13)	106		
Gains on sale of real estate owned			485		
Release of/(provision for) reserve for losses		944	(393)		
Other income		583	816		
Non-interest income/(expense)		8,837	(5,088)		
Operating expenses:					
Compensation and employee benefits		11,795	10,127		
General and administrative		6,336	5,363		
Regulatory fees		750	725		
Operating expenses		18,881	16,215		
Income before income taxes		42,294	16,571		
Income tax expense		9,067	3,741		
Net income		33,227	12,830		
Preferred stock dividends		(5,269)	(3,431)		
Net income attributable to common stockholders	\$	27,958	\$ 9,399		
Earnings per common share:					
Basic earnings per common share	\$	2.60	§ 0.88		
Diluted earnings per common share	\$	2.58	\$ 0.87		

FEDERAL AGRICULTURAL MORTGAGE CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(unaudited)

	For the Three Months Ended			
	March 31, 2021 March 31,			ch 31, 2020
	(in thousands)			
Net income	\$	33,227	\$	12,830
Other comprehensive income/(loss) before taxes:				
Net unrealized gains/(losses) on available-for-sale securities		66,364		(99,316)
Net changes in held-to-maturity securities		(2,157)		(5,688)
Net unrealized gains/(losses) on cash flow hedges		18,916		(28,256)
Other comprehensive income/(loss) before tax		83,123		(133,260)
Income tax (expense)/benefit related to other comprehensive income/(loss)		(17,456)		27,984
Other comprehensive income/(loss) net of tax		65,667		(105,276)
Comprehensive income/(loss)	\$	98,894	\$	(92,446)

FEDERAL AGRICULTURAL MORTGAGE CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF EQUITY

(unaudited)

		(incuj					
					Additional	Accumulated Other		
	Prefer	red Stock	Comm	on Stock	Paid-In	Comprehensive	Retained	Total
	Shares	Amount	Shares	Amount	Capital	Income/(Loss)	Earnings	Equity
					(in thousands)			
Balance as of December 31, 2019	9,400	\$ 228,374	10,712	\$ 10,712	\$ 119,304	\$ (16,161)	\$ 457,047	\$ 799,276
Cumulative effect adjustment from adoption of current expected credit loss standard			_	_	_	_	(2,099)	(2,099)
Balances as of January 1, 2020	9,400	\$ 228,374	10,712	\$ 10,712	\$ 119,304	\$ (16,161)	\$ 454,948	\$ 797,177
Net Income	_	_	_		_		12,830	12,830
Other comprehensive loss, net of tax	—	_	_	_	_	(105,276)	_	(105,276)
Cash dividends:								
Preferred stock	—	_	—	_	_	_	(3,431)	(3,431)
Common stock (cash dividend of \$0.80 per share)	_	_	_	—	_	—	(8,571)	(8,571)
Issuance of Class C Common Stock	_	_	15	15	19	—	_	34
Repurchase of Class C Common Stock	_	_	(4)	(4)	_	—	(231)	(235)
Stock-based compensation cost		—	—	_	1,293	—		1,293
Other stock-based award activity					(204)			(204)
Balance as of March 31, 2020	9,400	\$ 228,374	10,723	\$ 10,723	\$ 120,412	\$ (121,437)	\$ 455,545	\$ 693,617
Balance as of December 31, 2020	14,980	\$ 363,204	10,737	¢ 10.727	\$ 122,899	¢ (12.022)	\$ 509,560	¢ 002 477
Net Income	14,980	\$ 303,204	10,737	\$ 10,737	\$ 122,899	\$ (13,923)		\$ 992,477
Other comprehensive income, net of tax	_	_	_	_	_	65,667	33,227	33,227 65,667
Cash dividends:	_	_	_	_	_	05,007	_	03,007
Preferred stock							(5,269)	(5,269)
Common stock (cash dividend of \$0.88 per share)	_	_	_	_	_	_	(9,450)	(9,450)
Issuance of Class C Common Stock	_		21	21	12	_	(9,450)	(9,430)
Stock-based compensation cost		_	21	21	1,665	_		1,665
Other stock-based award activity					(858)			(858)
Balance as of March 31, 2021	14,980	\$ 363,204	10,758	\$ 10,758	\$ 123,718	\$ 51,744	\$ 528,068	\$1,077,492
Dumite us of March 51, 2021	14,700	\$ 505,204	10,750	φ 10,750	φ 125,/10	ψ 51,/44	\$ 520,000	ψ1,077, τ72

FEDERAL AGRICULTURAL MORTGAGE CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS

(unaudited)

	Lender Thurse	(
	For the Three N	
	March 31, 2021 (in thou.	March 31, 2020
Cash flows from operating activities:	(in mou.	sunusj
Net income	\$ 33,227	\$ 12,830
Adjustments to reconcile net income to net cash provided by operating activities:		
Net amortization of deferred gains, premiums, and discounts on loans, investments, Farmer Mac Guaranteed	4.022	(177)
Securities, and USDA Securities	4,933	(177)
Amortization of debt premiums, discounts, and issuance costs	1,994	9,221
Net change in fair value of trading securities, hedged assets, and financial derivatives	300,424	(379,004)
Gain on sale of real estate owned	_	(485)
Total (release)/provision for allowance for losses	(31)	3,831
Excess tax benefits related to stock-based awards	190	(508)
Deferred income taxes	1,387	(3,347)
Stock-based compensation expense	1,665	1,293
Proceeds from repayment of loans purchased as held for sale	25,374	20,674
Net change in:	42 (01	44.670
Interest receivable Guarantee and commitment fees receivable	43,601 103	44,679 160
Other assets	(7,227)	(39,783)
Accrued interest payable	(7,522)	(39,783) (2,579)
Other liabilities	(7,322)	2,884
Net cash provided by/(used in) operating activities	397,796	(330,311)
Cash flows from investing activities:	571,170	(550,511)
Purchases of available-for-sale investment securities	(400,701)	(704,306)
Purchases of available for sale investment securities	(403)	(704,500)
Purchases of Farmer Mac Guaranteed Securities and USDA Securities	(599,833)	(657,959)
Purchases of loans held for investment	(728,748)	(554,771)
Purchases of defaulted loans	(8,713)	
Proceeds from repayment of available-for-sale investment securities	446,325	706,061
Proceeds from repayment of Farmer Mac Guaranteed Securities and USDA Securities	683,090	408,103
Proceeds from repayment of loans purchased as held for investment	624,448	345,736
Proceeds from sale of Farmer Mac Guaranteed Securities	49,133	28,050
Proceeds from sale of real estate owned		2,191
Net cash provided by/(used in) investing activities	64,598	(426,895)
Cash flows from financing activities:		
Proceeds from issuance of discount notes	16,077,510	17,783,348
Proceeds from issuance of medium-term notes	3,498,544	3,734,025
Payments to redeem discount notes	(16,199,154)	(17,387,222)
Payments to redeem medium-term notes	(3,638,000)	(2,633,565)
Payments to third parties on debt securities of consolidated trusts	(207,861)	(99,769)
Proceeds from common stock issuance	12	19
Tax payments related to share-based awards	(126)	(189)
Purchases of common stock	_	(235)
Dividends paid on common and preferred stock	(14,719)	(12,002)
Net cash (used in)/provided by financing activities	(483,794)	1,384,410
Net change in cash and cash equivalents	(21,400)	627,204
Cash and cash equivalents at beginning of period	1,033,941	604,381
Cash and cash equivalents at end of period	\$ 1,012,541	\$ 1,231,585
Non-cash activity:		
Loans acquired and securitized as Farmer Mac Guaranteed Securities	49,133	28,050
Consolidation of Farmer Mac Guaranteed Securities from off-balance sheet to loans held for investment in consolidated trusts and to debt securities of consolidated trusts held by third parties	49,133	28,050
Reclassification of defaulted loans from loans held for investment in consolidated trusts to loans held for investment	23,463	4,742
Capitalized interest	782	_
Capitalized interest	702	

FEDERAL AGRICULTURAL MORTGAGE CORPORATION AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The interim unaudited consolidated financial statements of the Federal Agricultural Mortgage Corporation ("Farmer Mac") and subsidiaries have been prepared pursuant to the rules and regulations of the U.S. Securities and Exchange Commission ("SEC"). These interim unaudited consolidated financial statements reflect all normal and recurring adjustments that are, in the opinion of management, necessary to present a fair statement of the financial position and the results of operations and cash flows of Farmer Mac and subsidiaries for the interim periods presented. Certain information and footnote disclosures normally included in the annual consolidated financial statements have been omitted as permitted by SEC rules and regulations. The December 31, 2020 consolidated balance sheet presented in this report has been derived from Farmer Mac's audited 2020 consolidated financial statements. Management believes that the disclosures are adequate to present fairly the consolidated financial statements as of the dates and for the periods presented. These interim unaudited consolidated financial statements should be read in conjunction with the 2020 consolidated financial statements of Farmer Mac and subsidiaries included in Farmer Mac's Annual Report on Form 10-K for the year ended December 31, 2020, as filed with the SEC on February 25, 2021. Results for interim periods are not necessarily indicative of those that may be expected for the fiscal year. Presented below are Farmer Mac's significant accounting policies that contain updated information for the three months ended March 31, 2021.

Principles of Consolidation

The consolidated financial statements include the accounts of Farmer Mac and its two subsidiaries during the year: (1) Farmer Mac Mortgage Securities Corporation ("FMMSC"), whose principal activities are to facilitate the purchase and issuance of Farmer Mac Guaranteed Securities; and (2) Farmer Mac II LLC, whose principal activity is the operation of substantially all of the business related to the USDA Guarantees line of business – primarily the acquisition of USDA Securities. The consolidated financial statements also include the accounts of Variable Interest Entities ("VIEs") in which Farmer Mac determined itself to be the primary beneficiary.

Table 1.1

	Consolidation of Variable Interest Entities					
	As of March 31, 2021					
	Farm & Ranch	Total				
		usands)				
On-Balance Sheet:						
Consolidated VIEs:						
Loans held for investment in consolidated trusts, at amortized cost	\$ 1,174,525	\$ —	\$ —	\$ 1,174,525		
Debt securities of consolidated trusts held by third parties ⁽¹⁾	1,188,521	_	_	1,188,521		
Unconsolidated VIEs:						
Farmer Mac Guaranteed Securities:						
Carrying value ⁽²⁾	_	32,128	_	32,128		
Maximum exposure to loss ⁽³⁾	—	32,050		32,050		
Investment securities:						
Carrying value ⁽⁴⁾	—	_	1,963,903	1,963,903		
Maximum exposure to loss ^{(3) (4)}	_	_	1,954,583	1,954,583		
Off-Balance Sheet:						
Unconsolidated VIEs:						
Farmer Mac Guaranteed Securities:						
Maximum exposure to loss ^{(3) (5)}	72,203	284,868		357,071		

⁽¹⁾ Includes borrower remittances of \$14.0 million. The borrower remittances had not been passed through to third party investors as of March 31, 2021.

⁽²⁾ Includes \$0.1 million of unamortized premiums and discounts and fair value adjustments related to the USDA Guarantees line of business.

Farmer Mac uses unpaid principal balance and outstanding face amount of investment securities to represent maximum exposure to loss.
 Includes auction-rate certificates, government-sponsored enterprise ("GSE")-guaranteed mortgage-backed securities, and other mission reliable.

(4) Includes auction-rate certificates, government-sponsored enterprise ("GSE")-guaranteed mortgage-backed securities, and other mission related investments.

⁽⁵⁾ The amount under the Farm & Ranch line of business relates to unconsolidated trusts where Farmer Mac determined it was not the primary beneficiary due to shared power with an unrelated party.

	Consolidation of Variable Interest Entities					
	As of December 31, 2020					
	Farm & Ranch	Corporate	Total			
		usands)				
On-Balance Sheet:						
Consolidated VIEs:						
Loans held for investment in consolidated trusts, at amortized cost	\$ 1,287,045	\$ —	\$ —	\$ 1,287,045		
Debt securities of consolidated trusts held by third parties ⁽¹⁾	1,323,786	—	—	1,323,786		
Unconsolidated VIEs:						
Farmer Mac Guaranteed Securities:						
Carrying value ⁽²⁾	_	34,537	_	34,537		
Maximum exposure to loss ⁽³⁾		34,456	_	34,456		
Investment securities:						
Carrying value ⁽⁴⁾		_	1,918,672	1,918,672		
Maximum exposure to loss ^{(3) (4)}		_	1,909,535	1,909,535		
Off-Balance Sheet:						
Unconsolidated VIEs:						
Farmer Mac Guaranteed Securities:						
Maximum exposure to loss ^{(3) (5)}	79,312	299,298	_	378,610		

⁽¹⁾ Includes borrower remittances of \$36.7 million. The borrower remittances had not been passed through to third party investors as of December 31, 2020.

(2) Includes \$0.1 million of unamortized premiums and discounts and fair value adjustments related to the USDA Guarantees line of business.

⁽³⁾ Farmer Mac uses unpaid principal balance and outstanding face amount of investment securities to represent maximum exposure to loss.

⁽⁴⁾ Includes auction-rate certificates, asset-backed securities, and government-sponsored enterprise ("GSE")-guaranteed mortgage-backed securities.

- ⁽⁵⁾ The amount under the Farm & Ranch line of business relates to unconsolidated trusts where Farmer Mac determined it was not the primary beneficiary due to shared power with an unrelated party.
- (a) Earnings Per Common Share

Basic earnings per common share ("EPS") is based on the daily weighted-average number of shares of common stock outstanding. Diluted earnings per common share is based on the daily weighted-average number of shares of common stock outstanding adjusted to include all potentially dilutive stock appreciation rights ("SARs") and unvested restricted stock awards. The following schedule reconciles basic and diluted EPS for the three months ended March 31, 2021 and 2020:

Table 1.2

		For the Three Months Ended							
	M	arch 31, 2021	-	Ν)				
	Net Income			Net Income	Weighted- Average Shares	\$ per Share			
		(in thousands, except per share amounts)							
Basic EPS									
Net income attributable to common stockholders	\$ 27,958	10,738	\$ 2.60	\$ 9,399	10,712	\$ 0.88			
Effect of dilutive securities ⁽¹⁾									
SARs and restricted stock		81	(0.02)	—	70	(0.01)			
Diluted EPS	\$ 27,958	10,819	\$ 2.58	\$ 9,399	10,782	\$ 0.87			

(1) For the three months ended March 31, 2021 and 2020, SARs and restricted stock of 99,684 and 87,148, respectively, were outstanding but not included in the computation of diluted earnings per share of common stock because they were anti-dilutive. For the three months ended March 31, 2021 and 2020, contingent shares of unvested restricted stock of 18,183 and 12,680, respectively, were outstanding but not included in the computation of diluted earnings per share of common stock because performance conditions had not yet been met.

(b) Comprehensive Income

Comprehensive income represents all changes in stockholders' equity except those resulting from investments by or distributions to stockholders, and is comprised of net income and unrealized gains and losses on available-for-sale securities, certain held-to-maturity securities transferred from the available-for-sale classification, and cash flow hedges, net of related taxes.

The following table presents the changes in accumulated other comprehensive income ("AOCI"), net of tax, by component for the three months ended March 31, 2021 and 2020.

Table 1.3

		As of Marc	ch 31, 2021			As of Marc	ch 31, 2020	
	Available- for-Sale Securities	Held-to- Maturity Securities	Cash Flow Hedges	Total	Available- for-Sale Securities	Held-to- Maturity Securities	Cash Flow Hedges	Total
				(in thor	ısands)			
For the Three Months Ended:								
Beginning Balance	\$ (13,937)	\$ 22,829	\$ (22,815)	\$ (13,923)	\$ (43,397)	\$ 32,845	\$ (5,609)	\$ (16,161)
Other comprehensive income/ (loss) before reclassifications	53,211	_	13,562	66,773	(77,685)	_	(22,668)	(100,353)
Amounts reclassified from AOCI	(783)	(1,704)	1,381	(1,106)	(776)	(4,494)	347	(4,923)
Net comprehensive income/ (loss)	52,428	(1,704)	14,943	65,667	(78,461)	(4,494)	(22,321)	(105,276)
Ending Balance	\$ 38,491	\$ 21,125	\$ (7,872)	\$ 51,744	\$(121,858)	\$ 28,351	\$ (27,930)	\$(121,437)

The following table presents other comprehensive income activity, the impact on net income of amounts reclassified from each component of AOCI, and the related tax impact for the three months ended March 31, 2021 and 2020:

Table 1.4

	For the Three M							Months Ended					
		March 31, 2021							March 31, 2020				
		Before Tax		rovision Benefit)	А	fter Tax		Before Tax		ovision Benefit)	Aft	ter Tax	
						(in thoi	isar	nds)					
Other comprehensive income:													
Available-for-sale-securities:													
Unrealized holding gains/(losses) on available-for-sale securities	\$	67,356	\$	14,145	\$	53,211	\$	(98,334)	\$	(20,649)	\$ ((77,685)	
Less reclassification adjustments included in:													
Net interest income ⁽¹⁾		(984)		(207)		(777)		(969)		(203)		(766)	
Other income ⁽²⁾		(8)		(2)		(6)		(13)		(3)		(10)	
Total	\$	66,364	\$	13,936	\$	52,428	\$	(99,316)	\$	(20,855)	\$ (78,461)	
Held-to-maturity securities:													
Less reclassification adjustments included in:													
Net interest income ⁽³⁾		(2,157)		(453)		(1,704)		(5,688)		(1,194)		(4,494)	
Total	\$	(2,157)	\$	(453)	\$	(1,704)	\$	(5,688)	\$	(1,194)	\$	(4,494)	
Cash flow hedges	_				_								
Unrealized gains/(losses) on cash flow hedges	\$	17,170	\$	3,608	\$	13,562	\$	(28,695)	\$	(6,027)	\$ (22,668)	
Less reclassification adjustments included in:													
Net interest income ⁽⁴⁾		1,746		365		1,381		439		92		347	
Total	\$	18,916	\$	3,973	\$	14,943	\$	(28,256)	\$	(5,935)	\$ (22,321)	
Other comprehensive income/(loss)	\$	83,123	\$	17,456	\$	65,667	\$	(133,260)	\$	(27,984)	\$(1	05,276)	

⁽¹⁾ Relates to the amortization of unrealized gains on hedged items prior to the application of fair value hedge accounting.

(2) Represents amortization of deferred gains related to certain available-for-sale USDA Securities and Farmer Mac Guaranteed USDA Securities.
 (3) Relates to the amortization of unrealized gains or losses prior to the reclassification of these securities from available-for-sale to held-to-maturity. The amortization of unrealized gains or losses reported in AOCI for held-to-maturity securities will be offset by the amortization of the premium or discount created from the transfer into held-to-maturity securities, which occurred at fair value. These unrealized gains or losses will be recorded over the remaining life of the security with no impact on future net income.

⁽⁴⁾ Relates to the recognition of unrealized gains and losses on cash flow hedges recorded in AOCI.

(c) New Accounting Standards

Recently Adopted Accounting Guidance

2021-01, Reference Rate Reform (Topic 848):optional guidance for a limited period of time to ease the potential burden in accounting for reference rate reform on financial reporting.specific to discounting transition on a retrospective basis, and as a result of election, the discounting transition di have a material effect on Farmer Mac	Standard	Description	Date of Adoption	Effect on Consolidated Financial Statements
	2021-01 , Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on	optional guidance for a limited period of time to ease the potential burden in accounting for reference rate reform on financial reporting. They provide optional expedients and exceptions for applying GAAP to contracts, hedging relationships, and other transactions affected by reference rate reform if certain	January 1, 2020	Farmer Mac adopted optional expedients specific to discounting transition on a retrospective basis, and as a result of this election, the discounting transition did not have a material effect on Farmer Mac's financial position, results of operations, or cash flows.

2. INVESTMENT SECURITIES

The following tables set forth information about Farmer Mac's available-for-sale and held-to-maturity investment securities as of March 31, 2021 and December 31, 2020:

Table 2.1

		As of March 31, 2021									
	Amount Outstanding	Unamortized Premium/ (Discount)	Amortized Cost ⁽¹⁾	Allowance for losses ⁽²⁾	Unrealized Gains	Unrealized Losses	Fair Value				
				(in thousands)							
Available-for-sale:											
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$ 19,700	\$ —	\$ 19,700	\$ (61)	\$ —	\$ (493)	\$ 19,146				
Floating rate Government/GSE guaranteed mortgage-backed securities	2,378,471	(35)	2,378,436	_	12,059	(2,937)	2,387,558				
Fixed rate GSE guaranteed mortgage- backed securities	179	_	179	_	22	_	201				
Fixed rate U.S. Treasuries	1,388,408	13,814	1,402,222		554	(49)	1,402,727				
Total available-for-sale	3,786,758	13,779	3,800,537	(61)	12,635	(3,479)	3,809,632				
Held-to-maturity:											
Floating rate Government/GSE guaranteed mortgage-backed securities ⁽³⁾	45,032		45,032		1,552		46,584				
Total held-to-maturity	\$ 45,032	\$ _	\$ 45,032	\$ —	\$ 1,552	\$ _	\$ 46,584				

⁽¹⁾ Amounts presented exclude \$6.4 million of accrued interest receivable on investment securities as of March 31, 2021.

(2) Represents the amount of impairment that has resulted from credit-related factors, and therefore was recognized in the consolidated statement of

operations as a provision for losses. Amount excludes unrealized losses relating to non-credit factors.

⁽³⁾ The held-to-maturity investment securities had a weighted average yield of 1.5% as of March 31, 2021.

		As of December 31, 2020										
	Amount Outstanding	Unamortized Premium/ (Discount)	Amortized Cost ⁽¹⁾	Allowance for losses ⁽²⁾	Unrealized Gains	Unrealized Losses	Fair Value					
				(in thousands)								
Available-for-sale:												
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$ 19,700	\$	\$ 19,700	\$ (36)	\$ —	\$ (493)	\$ 19,171					
Floating rate asset-backed securities	6,232	_	6,232	—	—	(1)	6,231					
Floating rate Government/GSE guaranteed mortgage-backed securities	2,350,963	(44)	2,350,919	_	12,150	(3,043)	2,360,026					
Fixed rate GSE guaranteed mortgage- backed securities	279	_	279	_	34	_	313					
Fixed rate U.S. Treasuries	1,449,408	17,128	1,466,536		1,458	(43)	1,467,951					
Total available-for-sale	3,826,582	17,084	3,843,666	(36)	13,642	(3,580)	3,853,692					
Held-to-maturity:												
Floating rate Government/GSE guaranteed mortgage-backed securities ⁽³⁾	45,032		45,032		1,201		46,233					
Total held-to-maturity	\$ 45,032	\$	\$ 45,032	\$	\$ 1,201	\$	\$ 46,233					

⁽¹⁾ Amounts presented exclude \$9.0 million of accrued interest receivable on investment securities as of December 31, 2020.

(2) Represents the amount of impairment that has resulted from credit-related factors, and therefore was recognized in the consolidated statement of operations as a provision for losses. Amount excludes unrealized losses relating to non-credit factors.

⁽³⁾ The held-to-maturity investment securities had a weighted average yield of 1.5% as of December 31, 2020.

Farmer Mac did not sell any securities from its available-for-sale investment portfolio during the three months ended March 31, 2021 and 2020.

As of March 31, 2021 and December 31, 2020, unrealized losses on available-for-sale investment securities were as follows:

Table 2.2

	As of March 31, 2021									
	Available-for-Sale Securities									
	U	Unrealized lo less than			Unrealized lo more than					
	Fa	air Value	τ	Inrealized Loss		Fair Value	τ	Jnrealized Loss		
				(dollars in	thoi	ısands)				
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$	_	\$	_	\$	19,146	\$	(493)		
Floating rate Government/GSE guaranteed mortgage-backed securities		142,747		(434)		293,876		(2,503)		
Fixed rate U.S. Treasuries		278,420		(49)		_				
Total	\$	421,167	\$	(483)	\$	313,022	\$	(2,996)		
	_				_		_			
Number of securities in loss position				27				55		

	As of December 31, 2020									
	Available-for-Sale Securities									
	U	nrealized lo less than				osition for nonths				
	F٤	Fair Value Unrealized				Fair Value	ι	Unrealized Loss		
				(dollars in	tho	usands)				
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$	_	\$	_	\$	19,171	\$	(493)		
Floating rate asset-backed securities		_		_		6,231		(1)		
Floating rate Government/GSE guaranteed mortgage-backed securities		172,842		(593)		324,423		(2,450)		
Fixed rate U.S. Treasuries		364,320		(43)						
Total	\$	537,162	\$	(636)	\$	349,825	\$	(2,944)		
Number of securities in loss position				27				62		

The unrealized losses presented above are principally due to a general widening of market spreads and changes in the levels of interest rates from the dates of acquisition to March 31, 2021 and December 31, 2020, as applicable. The resulting decrease in fair values reflects an increase in the perceived risk by the financial markets related to those securities. As of both March 31, 2021 and December 31, 2020, all of the investment securities in an unrealized loss position either were backed by the full faith and credit of the U.S. government or had credit ratings of at least "AA+."

Securities in unrealized loss positions for 12 months or longer have a fair value as of March 31, 2021 that is, on average, approximately 99.1% of their amortized cost basis. Farmer Mac believes that all of these unrealized losses are recoverable within a reasonable period of time by way of maturity or changes in credit spreads.

The amortized cost, fair value, and weighted-average yield of available-for-sale investment securities by remaining contractual maturity as of March 31, 2021 are set forth below. Asset-backed and mortgage-backed securities are included based on their final maturities, although the actual maturities may differ due to prepayments of the underlying assets.

Table 2.3

	_			March 31, 2021 e-for-Sale Securi	
	_	Amortized Cost	Fair Value		Weighted- Average Yield
			(dolla	ars in thousands)	
Due within one year	\$	1,085,097	\$	1,085,613	1.90%
Due after one year through five years		693,669		694,736	0.77%
Due after five years through ten years		1,205,894		1,212,911	0.56%
Due after ten years		815,877		816,372	0.63%
Total	\$	3,800,537	\$	3,809,632	1.00%

3. FARMER MAC GUARANTEED SECURITIES AND USDA SECURITIES

The following tables set forth information about on-balance sheet Farmer Mac Guaranteed Securities and USDA Securities as of March 31, 2021 and December 31, 2020:

Table 3.1

			As	of March 31, 2	021		
	Unpaid Principal Balance	Unamortized Premium/ (Discount)	Amortized Cost ⁽¹⁾	Allowance for losses ⁽²⁾	Unrealized Gains	Unrealized Losses	Fair Value
				(in thousands)			
Held-to-maturity:							
AgVantage	\$ 1,126,914	\$ (27)	\$ 1,126,887	\$ (223)	\$ 18,994	\$ (5,129)	\$ 1,140,529
Farmer Mac Guaranteed USDA Securities	32,050	78	32,128		1,385		33,513
Total Farmer Mac Guaranteed Securities	1,158,964	51	1,159,015	(223)	20,379	(5,129)	1,174,042
USDA Securities	2,464,803	24,697	2,489,500	_	129,775	(397)	2,618,878
Total held-to-maturity	\$ 3,623,767	\$ 24,748	\$ 3,648,515	\$ (223)	\$ 150,154	\$ (5,526)	\$ 3,792,920
Available-for-sale:							
AgVantage	\$ 6,510,351	\$ 1,425	\$ 6,511,776	\$ (127)	\$ 261,178	\$ (9,618)	\$ 6,763,209
Trading:							
USDA Securities ⁽³⁾	\$ 5,344	\$ 165	\$ 5,509	\$ —	\$ 72	\$ (3)	\$ 5,578
(1) A mounts presented exclude $\$32.1$	million \$26.0 mil	lion and \$0.1 mi	lion of accrued i	ntorost rosoivable	on available for	cala hald to me	turity and

(1) Amounts presented exclude \$32.1 million, \$36.9 million, and \$0.1 million of accrued interest receivable on available-for-sale, held-to-maturity, and trading securities, respectively, as of March 31, 2021.

(2) Represents the amount of impairment that has resulted from credit-related factors, and therefore was recognized in the statement of financial operations as a provision for losses. Amount excludes unrealized losses relating to non-credit factors.

⁽³⁾ The trading USDA securities had a weighted average yield of 5.03% as of March 31, 2021.

		As of December 31, 2020										
	Unpaid Principal Balance	Р	amortized remium/ Discount)	Amortized Cost ⁽¹⁾	fc	Allowance for losses ⁽²⁾ (in thousands)		Unrealized Gains		nrealized Losses	Fair Value	
Held-to-maturity:					(111	inousunusj						
AgVantage	\$ 1,141,430	\$	(55)	\$ 1,141,375	\$	(120)	\$	23,986	\$	(61)	\$ 1,165,180	
Farmer Mac Guaranteed USDA Securities	34,456		81	34,537				1,273		_	35,810	
Total Farmer Mac Guaranteed Securities	1,175,886		26	1,175,912		(120)		25,259		(61)	1,200,990	
USDA Securities	2,446,550		27,076	2,473,626				157,748		(560)	2,630,814	
Total held-to-maturity	\$ 3,622,436	\$	27,102	\$ 3,649,538	\$	(120)	\$	183,007	\$	(621)	\$ 3,831,804	
Available-for-sale:												
AgVantage	\$ 6,593,518	\$	1,474	\$ 6,594,992	\$	(310)	\$	368,257	\$	(15,238)	\$ 6,947,701	
Trading:												
USDA Securities ⁽³⁾	\$ 6,413	\$	198	\$ 6,611	\$		\$	84	\$		\$ 6,695	

⁽¹⁾ Amounts presented exclude \$32.3 million, \$44.7 million, and \$0.2 million of accrued interest receivable on available-for-sale, held-to-maturity, and trading securities, respectively, as of December 31, 2020.

(2) Represents the amount of impairment that has resulted from credit-related factors, and therefore was recognized in the statement of financial operations as a provision for losses. Amount excludes unrealized losses relating to non-credit factors.

(3) The trading USDA securities had a weighted average yield of 5.05% as of December 31, 2020.

As of March 31, 2021 and December 31, 2020, unrealized losses on held-to-maturity and available-forsale on-balance sheet Farmer Mac Guaranteed Securities and USDA Securities were as follows:

Table 3.2

		As of March 31, 2021										
		Held	-to-N	Aaturity and Ava	ilat	le-for-Sale Securi	ties					
		Unrealized lo less than	ss po 12 m	osition for onths		Unrealized los more than	s pos 12 mo	ition for onths				
		Unr Fair Value I			Fair Value		1	Unrealized Loss				
			_	(in thou	san	ds)						
Held-to-maturity:												
AgVantage	\$	269,871	\$	(5,129)	\$	—	\$	—				
Farmer Mac Guaranteed USDA Securities		—	-	—		—						
USDA Securities			-			18,024		(397)				
Total held-to-maturity	\$	269,871	\$	(5,129)	\$	18,024	\$	(397)				
Available-for-sale:												
AgVantage	\$	225,079	\$	(8,801)	\$	204,183	\$	(817)				
	As of December 31, 2020 Held-to-Maturity and Available-for-Sale Securities											
		Unrealized los less than 1	s pos	sition for	mac	Unrealized los more than 1	ss position for					
		Fair Value		Unrealized Loss		Fair Value		Inrealized Loss				
				(in thou	san	ds)						
Held-to-maturity:												
AgVantage	\$	49,939	\$	(61)	\$		\$	_				
Farmer Mac Guaranteed USDA Securities						_		_				
USDA Securities						21,061		(560)				
Total held-to-maturity	\$	49,939	\$	(61)	\$	21,061	\$	(560)				
Available-for-sale:												
	\$	122 702	\$	(221)	\$	981,757	\$	(15,007)				
AgVantage	\$	133,703	Э	(231)	Ф	981,/3/	\$	(15,007)				

The unrealized losses presented above are principally due to changes in interest rates from the date of acquisition to March 31, 2021 and December 31, 2020, as applicable. The unrealized losses on the held-to-maturity USDA Securities as of both March 31, 2021 and December 31, 2020 reflect their increased cost basis resulting from their transfer to held-to-maturity as of October 1, 2016.

The credit exposure related to Farmer Mac's USDA Guarantees line of business is covered by the full faith and credit guarantee of the United States of America.

The unrealized losses from AgVantage securities were on 7 and 11 available-for-sale securities as of March 31, 2021 and December 31, 2020, respectively. There were 4 and 2 held-to-maturity AgVantage securities with an unrealized loss as of March 31, 2021 and December 31, 2020, respectively. As of

March 31, 2021 and December 31, 2020, 2 and 7 available-for-sale AgVantage securities, respectively, had been in a loss position for more than 12 months.

During the three months ended March 31, 2021 and 2020, Farmer Mac had no sales of Farmer Mac Guaranteed Securities or USDA Securities and, therefore, Farmer Mac realized no gains or losses.

The amortized cost, fair value, and weighted-average yield of available-for-sale and held-to-maturity Farmer Mac Guaranteed Securities and USDA Securities by remaining contractual maturity as of March 31, 2021 are set forth below. The balances presented are based on their final maturities, although the actual maturities may differ due to prepayments of the underlying assets.

Table 3.3

Available-for-Sale Securitie	
Available-101-Sale Securitie	es
Amortized Cost ⁽¹⁾ Fair Value	Weighted- Average Yield
(dollars in thousands)	
Due within one year \$ 1,289,615 \$ 1,293,004	1.43 %
Due after one year through five years2,992,7923,122,713	2.40 %
Due after five years through ten years986,0131,058,037	2.31 %
Due after ten years 1,243,356 1,289,455	2.75 %
Total <u>\$ 6,511,776</u> <u>\$ 6,763,209</u>	2.28 %

⁽¹⁾ Amounts presented exclude \$32.1 million of accrued interest receivable.

	 As of March 31, 2021								
	Held-to-Maturity Securities								
	Amortized Cost ⁽¹⁾		Fair Value	Weighted- Average Yield					
		(doll	ars in thousands)						
Due within one year	\$ 374,093	\$	376,290	2.77 %					
Due after one year through five years	812,373		825,702	2.55 %					
Due after five years through ten years	260,383		272,256	2.79 %					
Due after ten years	 2,201,666		2,318,672	3.13 %					
Total	\$ 3,648,515	\$	3,792,920	2.92 %					

⁽¹⁾ Amounts presented exclude \$36.9 million of accrued interest receivable.

4. FINANCIAL DERIVATIVES

Farmer Mac enters into financial derivative transactions to protect against risk from the effects of market price, or interest rate movements, on the value of certain assets, future cash flows, or debt issuance, and not for trading or speculative purposes. For more information about Farmer Mac's financial derivatives, see Note 6 in Farmer Mac's Annual Report on Form 10-K for the fiscal year ended December 31, 2020, as filed with the SEC on February 25, 2021.

The following tables summarize information related to Farmer Mac's financial derivatives on a gross basis without giving consideration to master netting arrangements as of March 31, 2021 and December 31, 2020:

Table 4.1

			As o	f March 31, 2	2021		
	Notional Amount	 Fair T Asset	 lue Liability)	Weighted- Average Pay Rate	Weighted- Average Receive Rate	Weighted- Average Forward Price	Weighted- Average Remaining Term (in years)
			(dol	lars in thousar	ıds)		
Fair value hedges:							
Interest rate swaps:							
Pay fixed non-callable	\$ 5,457,191	\$ 7,832	\$ (1,517)	2.25%	0.19%		11.99
Receive fixed non-callable	3,587,529	76	(11,143)	0.25%	1.21%		2.26
Receive fixed callable	601,577	2,055	(4,712)	0.07%	0.86%		4.35
Cash flow hedges:							
Interest rate swaps:							
Pay fixed non-callable	472,000	7,483	(4,022)	2.04%	0.54%		5.80
No hedge designation:							
Interest rate swaps:							
Pay fixed non-callable	338,951		(6,829)	2.38%	0.18%		3.98
Receive fixed non-callable	2,258,220			0.14%	0.70%		0.90
Receive fixed callable	100,000		—	0.15%	0.15%		0.50
Basis swaps	2,883,911	978	(143)	0.15%	0.19%		2.33
Treasury futures	12,300	20	—			131.10	
Credit valuation adjustment		(74)	21				
Total financial derivatives	\$ 15,711,679	\$ 18,370	\$ (28,345)				
Collateral (held)/pledged		(4,917)	198,159				
Net amount		\$ 13,453	\$ 169,814				

				As of l	December 31	2020		
		 Fair '	Val	ue		Weighted-	Weighted-	Weighted- Average
	Notional Amount	 Asset	(1	Liability)	Weighted- Average Pay Rate	Average Receive Rate	Average Forward Price	Remaining Term (in years)
				(dol	lars in thousan	ds)		
Fair value hedges:								
Interest rate swaps:								
Pay fixed non-callable	\$ 5,463,303	\$ 10,157	\$	(2,585)	2.26%	0.21%		11.95
Receive fixed non-callable	2,611,029	2		(8,755)	0.32%	1.61%		2.10
Receive fixed callable	343,500	3,108		(4)	0.16%	1.78%		3.16
Cash flow hedges:								
Interest rate swaps:								
Pay fixed non-callable	472,000	2,584		(8,771)	2.04%	0.57%		6.04
No hedge designation:								
Interest rate swaps:								
Pay fixed non-callable	339,090	—		(9,675)	2.38%	0.19%		4.23
Receive fixed non-callable	2,359,220	_		_	0.16%	0.87%		1.07
Receive fixed callable	200,000	1		(12)	0.13%	0.15%		0.72
Basis swaps	3,628,911	1,617		(43)	0.18%	0.23%		2.03
Treasury futures	30,500	_		(82)			137.81	
Credit valuation adjustment		(1)		35				
Total financial derivatives	\$ 15,447,553	\$ 17,468	\$	(29,892)				
Collateral (held)/pledged		(1,345)		212,263				
Net amount		\$ 16,123	\$	182,371				

As of March 31, 2021, Farmer Mac expects to reclassify \$5.2 million after tax from accumulated other comprehensive income to earnings over the next twelve months. This amount could differ from amounts actually recognized due to changes in interest rates, hedge de-designations, and the addition of other hedges after March 31, 2021. During the three months ended March 31, 2021 and 2020, there were no gains or losses from interest rate swaps designated as cash flow hedges reclassified to earnings because it was probable that the originally forecasted transactions would occur.

The following table summarizes the net income/(expense) recognized in the consolidated statements of operations related to derivatives for the three months ended March 31, 2021 and 2020:

Table 4.2

	For the Three Months Ended March 31, 2021									
	Ne	t Income/(Expe	nse) Recognize		n Consolida rivatives	atec	l Statement of O	pera	tions on
		Net Iı	nter	est Income			Non-Interest Income			
	Securities and Income Interest finan				Gains on financial derivatives		Total			
					(in i	thousands)				
Total amounts presented in the consolidated statement of operations	\$	42,404	\$	59,494	\$	(54,176)	\$	4,293	\$	52,015
Income/(expense) related to interest settlements on fair value hedging relationships:										
Recognized on derivatives		(21,437)		(6,572)		9,481				(18,528)
Recognized on hedged items		30,775		11,487		(11,808)				30,454
Discount amortization recognized on hedged items		_		_		(221)				(221)
Income/(expense) related to interest settlements on fair value hedging relationships	\$	9,338	\$	4,915	\$	(2,548)	\$	_	\$	11,705
(Losses)/gains on fair value hedging relationships:										
Recognized on derivatives	\$	168,078	\$	145,771	\$	(29,455)	\$		\$	284,394
Recognized on hedged items		(168,801)		(144,749)		29,501				(284,049)
(Losses)/gains on fair value hedging relationships	\$	(723)	\$	1,022	\$	46	\$	_	\$	345
Expense related to interest settlements on cash flow hedging relationships:										
Interest settlements reclassified from AOCI into net income on derivatives	\$	_	\$		\$	(1,746)	\$	_	\$	(1,746)
Recognized on hedged items		_				(655)				(655)
Discount amortization recognized on hedged items		_		_		(7)				(7)
Expense recognized on cash flow hedges	\$	_	\$	_	\$	(2,408)	\$	—	\$	(2,408)
Gains on financial derivatives not designated in hedging relationships:									_	
Gains on interest rate swaps	\$		\$		\$		\$	1,470	\$	1,470
Interest expense on interest rate swaps		—		—		—		2,223		2,223
Treasury futures								600		600
Gains on financial derivatives not designated in hedge relationships	\$	_	\$		\$		\$	4,293	\$	4,293

For The Three Months Ended March 31, 2020

	N	Net Income/(Expense) Recognized in Consolidated Statement of Oper Derivatives								
		Net Ir	nter	est Income				Non-Interest Income		
		nterest Income Farmer Mac Guaranteed Securities and SDA Securities		Interest Income Loans		Total Interest Expense		Losses on financial derivatives		Total
					(in i	thousands)				
Total amounts presented in the consolidated statement of operations:	\$	71,517	\$	60,596	\$	(108,542)	\$	(9,298)	\$	14,273
Income/(expense) related to interest settlements on fair value hedging relationships:										
Recognized on derivatives		(6,152)		(1,877)		1,634		_		(6,395)
Recognized on hedged items		31,826		8,677		(14,276)				26,227
Discount amortization recognized on hedged items		_		_		(180)		_		(180)
Income/(expense) related to interest settlements on fair value hedging relationships	\$	25,674	\$	6,800	\$	(12,822)	\$		\$	19,652
(Losses)/gains on fair value hedging relationships:										
Recognized on derivatives	\$	(293,932)	\$	(145,906)	\$	58,934	\$	_	\$	(380,904)
Recognized on hedged items		290,379		145,409		(60,565)		_		375,223
(Losses)/gains on fair value hedging relationships	\$	(3,553)	\$		\$	(1,631)	\$		\$	
Expense related to interest settlements on cash flow hedging relationships:										
Interest settlements reclassified from AOCI into net income on derivatives	\$		\$	_	\$	(439)	\$		\$	(439)
Recognized on hedged items						(2,123)		_		(2,123)
Discount amortization recognized on hedged items				_		(1)		_		(1)
Expense recognized on cash flow hedges	\$	_	\$	—	\$	(2,563)	\$	_	\$	(2,563)
Losses on financial derivatives not designated in hedge relationships:										
Losses on interest rate swaps	\$	_	\$	_	\$	_	\$	(6,550)	\$	(6,550)
Interest expense on interest rate swaps		_		—		—		(862)		(862)
Treasury futures				_		_		(1,886)		(1,886)
Losses on financial derivatives not designated in hedge relationships	\$		\$	_	\$		\$	(9,298)	\$	(9,298)

The following table shows the carrying amount and associated cumulative basis adjustment related to the application of hedge accounting that is included in the carrying amount of hedged assets and liabilities in fair value hedging relationships as of March 31, 2021 and December 31, 2020:

Table 4.3

	Hedged Items in Fair Value Relationship									
		Carrying Amount c (Liabil		A	nulative Amount o Adjustments includ ount of the Hedge	ed in	the Carrying			
	N	March 31, 2021	cember 31, 2020	М	arch 31, 2021	Dec	cember 31, 2020			
				(in the	ousands	s)				
Farmer Mac Guaranteed Securities, Available- for-Sale, at fair value ⁽¹⁾	\$	4,113,973	\$	4,244,027	\$	214,023	\$	382,825		
Loans held for investment, at amortized cost ⁽²⁾		1,547,825		1,692,609		(33,416)		111,333		
Notes Payable ⁽³⁾		(3,986,760)		(3,006,140)		(23,739)		(53,240)		

⁽¹⁾ Includes \$1.5 million and \$1.6 million of hedging adjustments on discontinued hedging relationships as of March 31, 2021 and December 31, 2020, respectively.

(2) Includes \$1.3 million and \$1.4 million of hedging adjustments on a discontinued hedging relationship as of March 31, 2021 and December 31, 2020, respectively.

⁽³⁾ Carrying amount represents amortized cost.

The following table shows Farmer Mac's credit exposure to interest rate swap counterparties as of March 31, 2021 and December 31, 2020:

Table 4.4

	Gross Amount Recognized ⁽¹⁾		Counterparty Netting		ant Presented in the ated Balance Sheet
			(in thousands)		
Assets:					
Derivatives					
Interest rate swap	\$ 168,741	\$	165,060	\$	3,681
Liabilities:					
Derivatives					
Interest rate swap	\$ 368,135	\$	368,063	\$	72

⁽¹⁾ Gross amount excludes netting arrangements and any adjustment for nonperformance risk, but includes accrued interest.

		20			
	Gross Amount Recognized ⁽¹⁾		Counterparty Netting		nount Presented in the lidated Balance Sheet
			(in thousands)		
Assets:					
Derivatives					
Interest rate swaps	\$ 112,287	\$	111,761	\$	526
Liabilities:					
Derivatives					
Interest rate swaps	\$ 620,236	\$	595,867	\$	24,369

⁽¹⁾ Gross amount excludes netting arrangements and any adjustment for nonperformance risk, but includes accrued interest.

As of March 31, 2021, Farmer Mac held \$4.9 million of cash and no investment securities as collateral for its derivatives in net asset positions, compared to \$1.3 million of cash and no investment securities as collateral for its derivatives in net asset positions as of December 31, 2020.

Farmer Mac posted \$8.2 million cash and \$190.0 million of investment securities as of March 31, 2021 and posted \$11.2 million cash and \$201.1 million investment securities as of December 31, 2020. Farmer Mac records posted cash as a reduction in the outstanding balance of cash and cash equivalents and an increase in the balance of prepaid expenses and other assets. Any investment securities posted as collateral are included in the investment securities balances on the consolidated balance sheets. If Farmer Mac had breached certain provisions of the derivative contracts as of March 31, 2021 and December 31, 2020, it could have been required to settle its obligations under the agreements, but would not have been required to post additional collateral. As of March 31, 2021 and December 31, 2020, there were no financial derivatives in a net payable position where Farmer Mac was required to pledge collateral which the counterparty had the right to sell or repledge.

Of Farmer Mac's \$15.7 billion notional amount of interest rate swaps outstanding as of March 31, 2021, \$13.5 billion were cleared through the swap clearinghouse, the Chicago Mercantile Exchange ("CME"). Of Farmer Mac's \$15.4 billion notional amount of interest rate swaps outstanding as of December 31, 2020, \$12.8 billion were cleared through the CME. During first quarter 2021, Farmer Mac continued the use of non-cleared basis swaps to prepare for the transition away from the use of LIBOR as a reference rate.

5. LOANS

Farmer Mac classifies loans as either held for investment or held for sale. Loans held for investment are recorded at the unpaid principal balance, net of unamortized premium or discount and other cost basis adjustments. Loans held for sale are reported at the lower of cost or fair value determined on a pooled basis. As of both March 31, 2021, and December 31, 2020, Farmer Mac had no loans held for sale.

The following table includes loans held for investment and displays the composition of the loan balances as of March 31, 2021 and December 31, 2020:

Table 5.1

	As	of March 31, 20	021	As of December 31, 2020				
	Unsecuritized	In Consolidated Trusts	Total	Unsecuritized	In Consolidated Trusts	Total		
			(in tho	usands)				
Farm & Ranch	\$ 5,128,442	\$ 1,174,525	\$ 6,302,967	\$ 4,889,393	\$ 1,287,045	\$ 6,176,438		
Rural Utilities	2,247,104		2,247,104	2,260,412		2,260,412		
Total unpaid principal balance ⁽¹⁾	7,375,546	1,174,525	8,550,071	7,149,805	1,287,045	8,436,850		
Unamortized premiums, discounts, fair value hedge basis adjustment, and other cost basis adjustments	(33,634)	_	(33,634)	112,128	_	112,128		
Total loans	7,341,912	1,174,525	8,516,437	7,261,933	1,287,045	8,548,978		
Allowance for losses	(14,021)	(786)	(14,807)	(12,943)	(889)	(13,832)		
Total loans, net of allowance	\$ 7,327,891	\$ 1,173,739	\$ 8,501,630	\$ 7,248,990	\$ 1,286,156	\$ 8,535,146		

⁽¹⁾ Unpaid principal balance is the basis of presentation in disclosures of outstanding balances for Farmer Mac's lines of business.

Allowance for Losses

The following table is a summary, by asset type, of the allowance for losses as of March 31, 2021 and December 31, 2020:

Table 5.2

	Marc	h 31, 2021	Decen	nber 31, 2020
	Allowar	Allowance for Losses		nce for Losses
		(in tho	usands)	
Loans:				
Farm & Ranch	\$	3,718	\$	3,745
Rural Utilities		11,089		10,087
Total	\$	14,807	\$	13,832

The following is a summary of the changes in the allowance for losses for the three month period ended March 31, 2021 and 2020:

Table 5.3

	For the Three Months Ended				
	Mare	ch 31, 2021	М	arch 31, 2020	
	Allowa	nce for Losses	Allow	wance for Losses	
		(in tho	isands)		
Farm & Ranch:					
Balance as of December 31	\$	3,745	\$	10,454	
Cumulative effect adjustment from adoption of current expected credit loss standard				(3,909)	
Balance as of January 1		3,745		6,545	
(Release of)/provision for losses	\$	(27)	\$	808	
Charge-offs					
Ending Balance ⁽¹⁾	\$	3,718	\$	7,353	
Rural Utilities:					
Balance as of December 31	\$	10,087	\$		
Cumulative effect adjustment from adoption of current expected credit loss standard				5,378	
Balance as of January 1		10,087		5,378	
Provision for losses	\$	1,002	\$	2,125	
Charge-offs		_			
Ending Balance ⁽²⁾	\$	11,089	\$	7,503	

(1) As of March 31, 2021 and 2020, allowance for losses for Farm & Ranch includes no allowance and \$2.2 million, respectively, for collateral dependent assets secured by agricultural real estate.

⁽²⁾ As of both March 31, 2021 and 2020, allowance for losses for Rural Utilities includes no allowance for collateral dependent assets.

The provision to the allowance for Rural Utilities loan losses of \$1.0 million recorded during first quarter 2021 was primarily attributable to the impact of ratings downgrades on multiple rural utilities that were negatively impacted by the polar vortex that struck Texas in February 2021. The small release from the allowance for the Farm & Ranch portfolio during first quarter 2021 was primarily attributable to ratings upgrades and updated loss-given-default assumptions, offset by net growth in our loan portfolio.

The provision to the allowance for loan losses recorded during first quarter 2020 was primarily due to the impact of updated economic factor forecasts, particularly higher credit spreads and expected higher

unemployment, as a result of the COVID-19 pandemic and the resulting economic volatility. In addition, economic factor forecasts for lower commodity prices impacted the Farm & Ranch portfolio.

The following table presents the unpaid principal balances by delinquency status of Farmer Mac's loans and non-performing assets as of March 31, 2021 and December 31, 2020:

Table 5.4

			Accruing				
	Current	30-59 Days	60-89 Days	90 Days and Greater ⁽²⁾	Total Past Due	Nonaccrual loans ⁽³⁾⁽⁴⁾	Total Loans
				(in thousands)			
Loans ⁽¹⁾ :							
Farm & Ranch	\$ 6,154,416	\$ 4,733	\$ 261	\$ 14,150	\$ 19,144	\$ 129,407	\$ 6,302,967
Rural Utilities	2,247,104						2,247,104
Total	\$ 8,401,520	\$ 4,733	\$ 261	\$ 14,150	\$ 19,144	\$ 129,407	\$ 8,550,071

(1) Amounts represent unpaid principal balance of risk rated loans, which is the basis Farmer Mac uses to analyze its portfolio, and recorded investment of past due loans.

⁽²⁾ Includes loans in consolidated trusts with beneficial interests owned by third parties that are 90 days or more past due.

(3) Includes loans that are 90 days or more past due, in foreclosure, or in bankruptcy with at least one missed payment, excluding loans performing under either their original loan terms or a court-approved bankruptcy plan.

(4) Includes \$58.1 million of nonaccrual loans for which there was no associated allowance. During the three months ended March 31, 2021, Farmer Mac received \$1.1 million in interest on nonaccrual loans.

		As of December 31, 2020								
			Accruing							
	Current	30-59 Days	60-89 Days	90 Days and Greater ⁽²⁾	Total Past Due	Nonaccrual loans ⁽³⁾⁽⁴⁾	Total Loans			
				(in thousands))					
Loans ⁽¹⁾ :										
Farm & Ranch	\$ 6,055,154	\$ 4,582	\$ 632	\$ 1,072	\$ 6,286	\$ 114,998	\$ 6,176,438			
Rural Utilities	2,260,412						2,260,412			
Total	\$ 8,315,566	\$ 4,582	\$ 632	\$ 1,072	\$ 6,286	\$ 114,998	\$ 8,436,850			

(1) Amounts represent unpaid principal balance of risk rated loans, which is the basis Farmer Mac uses to analyze its portfolio, and recorded investment of past due loans.

⁽²⁾ Includes loans in consolidated trusts with beneficial interests owned by third parties that are 90 days or more past due.

(3) Includes loans that are 90 days or more past due, in foreclosure, or in bankruptcy with at least one missed payment, excluding loans performing under either their original loan terms or a court-approved bankruptcy plan.

⁽⁴⁾ Includes \$44.2 million of nonaccrual loans for which there was no associated allowance. During the year ended December 31, 2020, Farmer Mac received \$4.4 million in interest on nonaccrual loans.

Credit Quality Indicators

The following tables present credit quality indicators related to Farm & Ranch loans and Rural Utilities loans held as of March 31, 2021 and December 31, 2020, by year of origination:

Table 5.5

Revolving Loans - Amortized 7 Prior Cost Basis Total
Loans - Amortized
931 \$1,334,771 \$ 482,993 \$5,851,854
569 23,003 11,804 229,126
791 94,565 12,124 221,987
291 \$1,452,339 \$ 506,921 \$6,302,96
- \$ - \$ - \$ -
<u> </u>
5

(1) Amounts represent unpaid principal balance of risk-rated loans, which is the basis Farmer Mac uses to analyze its portfolio, and recorded investment of past due loans.

(2) Assets in the "Special mention" category generally have potential weaknesses due to performance issues but are currently considered to be adequately secured.

(3) Substandard assets have a well-defined weakness or weaknesses and there is a distinct possibility that some loss will be sustained if deficiencies are not corrected.

							As of Ma	rch	31, 2021						
					Year of C	Drig	ination:								
	 2021	20)20		2019		2018		2017		Prior	А	Revolving Loans - Amortized Cost Basis	To	otal
							(in th	ousa	inds)						
Rural Utilities ⁽¹⁾ :															
Internally Assigned Risk Rating:															
Acceptable	\$ 10,979	\$ 63	9,730	\$	801,799	\$	8,181	\$	89,621	\$	650,486	\$	22,708	\$2,22	3,504
Special mention ⁽²⁾	_	2	3,600						_		_			2	3,600
Substandard ⁽³⁾	_		_						_		_				_
Total	\$ 10,979	\$ 66	3,330	\$	801,799	\$	8,181	\$	89,621	\$	650,486	\$	22,708	\$2,24	7,104
				-						_		_			
For the Three Months Ended March 31, 2021:															
Current period charge-offs	\$ 	\$		\$	—	\$		\$	—	\$	—	\$	—	\$	
Current period recoveries			_												_
Current period Rural Utilities net charge-offs	\$ 	\$		\$	_	\$	_	\$		\$		\$		\$	
(1)															_

⁽¹⁾ Amounts represent unpaid principal balance of risk-rated loans, which is the basis Farmer Mac uses to analyze its portfolio, and recorded investment of past due loans.

⁽²⁾ Assets in the "Special mention" category generally have potential weaknesses due to performance issues but are currently considered to be adequately secured.

(3) Substandard assets have a well-defined weakness or weaknesses and there is a distinct possibility that some loss will be sustained if deficiencies are not corrected.

				As of Dece	mber 31, 202	0		
			Year of (Drigination:				
	2020	2019	2018	<u>2017</u>	2016 ousands)	Prior	Revolving Loans - Amortized Cost Basis	Total
Farm & Ranch ⁽¹⁾ :				(11 11	ousunusj			
Internally Assigned Risk Rating:								
Acceptable	\$1,947,618	\$774,315	\$ 484,345	\$ 500,768	\$ 465,277	\$1,068,693	\$ 535,742	\$5,776,758
Special mention ⁽²⁾	70,171	79,744	18,317	8,530	13,111	21,328	7,656	218,857
Substandard ⁽³⁾	3,400	5,821	21,879	52,709	37,173	50,582	9,259	180,823
Total	\$2,021,189	\$ 859,880	\$ 524,541	\$ 562,007	\$ 515,561	\$1,140,603	\$ 552,657	\$6,176,438
For the Three Months Ended March 31, 2020:								
Current period charge-offs	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Current period recoveries		—	_	_	_	_	_	_
Current period Farm & Ranch net charge-offs	<u>\$ </u>	\$	<u>\$ </u>	<u>\$ </u>				
(1) A mounts represent uppaid princip	al balance of r	ick rated loop	a which is the	basis Former M	a uses to engly	rza ita portfolio	and recorded in	wastmant of

(1) Amounts represent unpaid principal balance of risk-rated loans, which is the basis Farmer Mac uses to analyze its portfolio, and recorded investment of past due loans.

(2) Assets in the "Special mention" category generally have potential weaknesses due to performance issues but are currently considered to be adequately secured.

(3) Substandard assets have a well-defined weakness or weaknesses and there is a distinct possibility that some loss will be sustained if deficiencies are not corrected.

						A	As of Dece	mbe	er 31, 2020)					
					Year of (Orig	ination:								
	2020		2019	2018 201		2017		2016		Prior	А	Loans - mortized	To	otal	
							(in th	ousc	inds)						
\$	667,489	\$ 8	809,921	\$	8,260	\$	89,842	\$	31,275	\$	641,145	\$	12,480	\$2,26	50,412
			_												_
					_				_				—		
\$	667,489	\$8	309,921	\$	8,260	\$	89,842	\$	31,275	\$	641,145	\$	12,480	\$2,26	50,412
_				-		-									
\$	_	\$		\$		\$		\$	_	\$	_	\$	—	\$	—
	_		_						_		_		_		_
\$		\$		\$		\$		\$		\$		\$		\$	
	\$	\$ 667,489 <u>\$ 667,489</u>	\$ 667,489 \$ 8 <u>\$ 667,489 \$ 8</u>	\$ 667,489 \$ 809,921 — — — <u>\$ 667,489</u> <u>\$ 809,921</u> <u>\$ 809,921</u>	2020 2019 \$ 667,489 \$ 809,921 \$ 	2020 2019 2018 \$ 667,489 \$ 809,921 \$ 8,260	Year of Orig 2020 2019 2018 \$ 667,489 \$ 809,921 \$ 8,260 \$	Year of Origination: 2020 2019 2018 2017 (in the second	Year of Origination: 2020 2019 2018 2017 (in thousa \$ 667,489 \$ 809,921 \$ 8,260 \$ 89,842 \$	Year of Origination: 2020 2019 2018 2017 2016 (in thousands) \$ 667,489 \$ 809,921 \$ 8,260 \$ 89,842 \$ 31,275 - - - - - \$ 667,489 \$ 809,921 \$ 8,260 \$ 89,842 \$ 31,275 - - - - - \$ 667,489 \$ 809,921 \$ 8,260 \$ 89,842 \$ 31,275	2020 2019 2018 2017 2016 (in thousands) \$ 667,489 \$ 809,921 \$ 8,260 \$ 89,842 \$ 31,275 \$ 	Year of Origination: 2020 2019 2018 2017 2016 Prior (in thousands) (in thousands) Prior (in thousands) Prior \$ 667,489 \$ 809,921 \$ 8,260 \$ 89,842 \$ 31,275 \$ 641,145 - - - - - - \$ 667,489 \$ 809,921 \$ 8,260 \$ 89,842 \$ 31,275 \$ 641,145 - - - - - - - \$ 667,489 \$ 809,921 \$ 8,260 \$ 89,842 \$ 31,275 \$ 641,145	Year of Origination: 2020 2019 2018 2017 2016 Prior A (in thousands) (in thousands) (in thousands) Prior C \$ 667,489 \$ 809,921 \$ 8,260 \$ 89,842 \$ 31,275 \$ 641,145 \$ - - - - - - - - \$ 667,489 \$ 809,921 \$ 8,260 \$ 89,842 \$ 31,275 \$ 641,145 \$ - - - - - - - - \$ 667,489 \$ 809,921 \$ 8,260 \$ 89,842 \$ 31,275 \$ 641,145 \$ - - - - - - - - - \$ 667,489 \$ 809,921 \$ 8,260 \$ 89,842 \$ 31,275 \$ 641,145 \$	Year of Origination: 2020 2019 2018 2017 2016 Prior Revolving Loans - Amortized Cost Basis \$ 667,489 \$ 809,921 \$ 8,260 \$ 89,842 \$ 31,275 \$ 641,145 \$ 12,480	Year of Origination: 2020 2019 2018 2017 2016 Prior Revolving Loans - Amortized Cost Basis To Amortized Cost Basis \$ 667,489 \$ 809,921 \$ 8,260 \$ 89,842 \$ 31,275 \$ 641,145 \$ 12,480 \$2,260 - - - - - - - \$ 667,489 \$ 809,921 \$ 8,260 \$ 89,842 \$ 31,275 \$ 641,145 \$ 12,480 \$2,260 - - - - - - - - - \$ 667,489 \$ 809,921 \$ 8,260 \$ 89,842 \$ 31,275 \$ 641,145 \$ 12,480 \$2,260 - - - - - - - - - \$ 667,489 \$ 809,921 \$ 8,260 \$ 89,842 \$ 31,275 \$ 641,145 \$ 12,480 \$ 2,260

⁽¹⁾ Amounts represent unpaid principal balance of risk-rated loans, which is the basis Farmer Mac uses to analyze its portfolio, and recorded investment of past due loans.

(2) Assets in the "Special mention" category generally have potential weaknesses due to performance issues but are currently considered to be adequately secured.

(3) Substandard assets have a well-defined weakness or weaknesses and there is a distinct possibility that some loss will be sustained if deficiencies are not corrected.

6. GUARANTEES

The following table presents the maximum principal amount of potential undiscounted future payments that Farmer Mac could be required to make under all off-balance sheet Farmer Mac Guaranteed Securities as of March 31, 2021 and December 31, 2020, not including offsets provided by any recourse provisions, recoveries from third parties, or collateral for the underlying loans:

Table 6.1

	As of M	farch 31, 2021	As of De	cember 31, 2020
		(in those	usands)	
Farm & Ranch:				
Farmer Mac Guaranteed Securities	\$	72,203	\$	79,312
USDA Guarantees:				
Farmer Mac Guaranteed USDA Securities		284,868		299,298
Institutional Credit:				
AgVantage Securities		4,412		4,412
Total off-balance sheet Farmer Mac Guaranteed Securities	\$	361,483	\$	383,022

Eligible loans and other eligible assets may be placed into trusts that are used as vehicles for the securitization of the transferred assets and the Farmer Mac-guaranteed beneficial interests in the trusts are sold to investors. The following table summarizes the significant cash flows received from and paid to trusts used for Farmer Mac securitizations:

Table 6.2

		For the Three Months EndedMarch 31, 2021March 31, 2				
]	March 31, 2021	Ма	arch 31, 2020		
		(in thou	sands)			
Proceeds from new securitizations	\$	49,133	\$	28,050		
Guarantee fees received		360		466		

Farmer Mac presents a liability for its obligation to stand ready under its guarantee in "Guarantee and commitment obligation" on the consolidated balance sheets. The following table presents the liability and the weighted-average remaining maturity of all loans underlying off-balance sheet Farmer Mac Guaranteed Securities:

Table 6.3

	As of Mar	ch 31, 2021	As of De	ecember 31, 2020
		(dollars in	thousands)	
Guarantee and commitment obligation	\$	1,492	\$	1,625
Weighted average remaining maturity:				
Farmer Mac Guaranteed Securities		9.5 years		9.5 years
AgVantage Securities		3.7 years		4.0 years

Long-Term Standby Purchase Commitments

Farmer Mac has recorded a liability for its obligation to stand ready under the guarantee in the guarantee and commitment obligation on the consolidated balance sheets. The following table presents the liability, the maximum principal amount of potential undiscounted future payments that Farmer Mac could be requested to make under all LTSPCs, not including offsets provided by any recourse provisions, recoveries from third parties, or collateral for the underlying loans, as well as the weighted-average remaining maturity of all loans underlying LTSPCs:

Table 6.4

	As of M	arch 31, 2021	As of December 31, 2020		
		(dollars in	thousands)		
Guarantee and commitment obligation ⁽¹⁾	\$	32,910	\$	33,909	
Maximum principal amount		2,811,515		2,881,856	
Weighted-average remaining maturity		15.4 years		15.3 years	

⁽¹⁾ Relates to LTSPCs issued or modified on or after January 1, 2003.

Reserve for Losses

The following table is a summary, by asset type, of the reserve for losses as of March 31, 2021 and December 31, 2020:

Table 6.5

	March	31, 2021	Decer	mber 31, 2020	
	Reserve	for Losses	Reserve for Losses		
		(in tho	usands)		
Farm & Ranch:					
LTSPCs and Farmer Mac Guaranteed Securities	\$	1,366	\$	2,097	
Rural Utilities					
LTSPCs		967		1,180	
Total	\$	2,333	\$	3,277	

The following is a summary of the changes in the reserve for losses for the three month period ended March 31, 2021 and 2020:

Table 6.6

		For the Three	Mont	hs Ended
	Mai	rch 31, 2021		March 31, 2020
	Reser	rve for Losses	R	eserve for Losses
		(in tho	isands	;)
Farm & Ranch:				
Balance as of December 31,	\$	2,097	\$	2,164
Cumulative effect adjustment from adoption of current expected credit loss standard				(148)
Adjusted Beginning Balance		2,097		2,016
(Release of)/provision for losses	\$	(731)	\$	4
Charge-offs		_		_
Ending Balance	\$	1,366	\$	2,020
Rural Utilities:				
Balance as of December 31,	\$	1,180	\$	_
Cumulative effect adjustment from adoption of current expected credit loss standard				1,011
Adjusted Beginning Balance		1,180		1,011
(Release of)/provision for losses	\$	(213)	\$	389
Charge-offs				_
Ending Balance	\$	967	\$	1,400
			-	

The release from the reserve for losses in the Rural Utilities LTSPC portfolio recorded during first quarter 2021 was primarily due to improving economic factor forecasts and ratings upgrades. The release in the Farm & Ranch LTSPC portfolio was primarily due to ratings upgrades and updated loss-given-default assumptions.

The provision to the reserve for losses recorded during first quarter 2020 was primarily due to the impact of economic factor forecasts, particularly higher credit spreads and expected higher unemployment, as a result of the COVID-19 pandemic and the resulting economic volatility.

The following table presents the unpaid principal balances by delinquency status of Farm & Ranch loans underlying LTSPCs. Farm & Ranch Farmer Mac Guaranteed Securities, Rural Utilities loans underlying LTSPCs, and non-performing assets as of March 31, 2021:

Table 6.7

					As of Marc	ch 3	1, 2021				
	Current	30-	59 Days	60	-89 Days	90 (Days and Greater ⁽¹⁾	Т	otal Past Due	Тс	otal Loans
					(in tho	usan	ds)				
Farm and Ranch:											
LTSPCs and Farmer Mac Guaranteed Securities	\$ 2,315,243	\$	3,901	\$	332	\$	6,909	\$	11,142	\$ 2	2,326,385
Rural Utilities:											
LTSPCs	\$ 557,333	\$		\$	_	\$	_	\$	_	\$	557,333

(1) Includes loans underlying off-balance sheet Farm & Ranch Guaranteed Securities and LTSPCs that are 90 days of more past due, in foreclosure, or in bankruptcy with at least one missed payment, excluding loans performing under either their original loan terms or a court-approved bankruptcy plan.

			As of Decem	ber 31, 2020		
	Current	30-59 Days	60-89 Days	90 Days and Greater ⁽¹⁾	Total Past Due	Total Loans
			(in tho	usands)		
Farm and Ranch:						
LTSPCs and Farmer Mac Guaranteed Securities	\$ 2,389,777	\$ 2,189	\$ 1,344	\$ 11,433	\$ 14,966	\$ 2,404,743
Rural Utilities:						
LTSPCs	\$ 556,425	\$ —	\$ —	\$ —	\$ —	\$ 556,425

(1) Includes loans underlying off-balance sheet Farm & Ranch Guaranteed Securities and LTSPCs that are 90 days of more past due, in foreclosure, or in bankruptcy with at least one missed payment, excluding loans performing under either their original loan terms or a court-approved bankruptcy plan.

Credit Quality Indicators

The following tables present credit quality indicators related to Farm & Ranch loans underlying LTSPCs, Farm & Ranch Farmer Mac Guaranteed Securities, and Rural Utilities loans underlying LTSPCs as of March 31, 2021 and December 31, 2020, by year of origination:

Table 6.8

					As of Mar	ch	31, 2021						
			Year of O	rig	ination:								
	 2021	 2020	 2019		2018		2017		Prior	Revolving Loans - Amortized Cost Basis]	Total
					(in the	usa	inds)						
Farm & Ranch LTSPCs and Farmer Mac Guaranteed Securities:													
Internally Assigned Risk Rating:													
Acceptable	\$ 83,222	\$ 181,684	\$ 193,825	\$	178,134	\$	222,030	\$1	,071,479	\$	205,814	\$2,1	36,188
Special mention ⁽¹⁾		12,020	1,727		1,493		436		62,767		12,080		90,523
Substandard ⁽²⁾		242	736		12,335		14,415		67,712		4,234		99,674
Total	\$ 83,222	\$ 193,946	\$ 196,288	\$	191,962	\$	236,881	\$1	,201,958	\$	222,128	\$2,3	26,385
For the Three Months Ended March 31, 2021:													
Current period charge-offs	\$ 	\$ 	\$ 	\$		\$	_	\$	—	\$		\$	
Current period recoveries	_						_		_		_		_
Current period Farm & Ranch net charge-offs	\$ 	\$ 	\$ 	\$		\$		\$		\$		\$	

⁽¹⁾ Assets in the "Special mention" category generally have potential weaknesses due to performance issues but are currently considered to be adequately secured.

⁽²⁾ Substandard assets have a well-defined weakness or weaknesses and there is a distinct possibility that some loss will be sustained if deficiencies are not corrected.

								As of Ma	rch	31, 2021						
		Year of Origination:														
	2	021	2	.020	2	019		2018 (in th	ousi	2017 ands)		Prior	A	evolving Loans - mortized ost Basis	Te	otal
Rural Utilities LTSPCs:								ţ								
Internally Assigned Risk Rating:																
Acceptable	\$		\$		\$		\$	—	\$		\$	538,541	\$	18,792	\$ 55	7,333
Special mention ⁽¹⁾																
Substandard ⁽²⁾		—		—				—		—		—		—		_
Total	\$		\$	_	\$	_	\$	_	\$	_	\$	538,541	\$	18,792	\$ 55	7,333
For the Three Months Ended March 31, 2021:																
Current period charge-offs	\$	_	\$		\$		\$	_	\$	_	\$	_	\$	_	\$	—
Current period recoveries				_												
Current period Rural Utilities net charge-offs	\$	_	\$	_	\$		\$		\$		\$	_	\$	_	\$	

⁽¹⁾ Assets in the "Special mention" category generally have potential weaknesses due to performance issues but are currently considered to be adequately secured.

(2) Substandard assets have a well-defined weakness or weaknesses and there is a distinct possibility that some loss will be sustained if deficiencies are not corrected.

							А	s of Decer	nbe	r 31, 2020						
						Year of O	rig	ination:								
		2020		2019		2018		2017		2016		Prior	A	Revolving Loans - Amortized Cost Basis	T	otal
								(in the	usa	nds)						
Farm & Ranch LTSPCs and Farmer Mac Guaranteed Securities:																
Internally Assigned Risk Rating:																
Acceptable	\$	178,213	\$	213,620	\$	183,948	\$	237,042	\$	207,296	\$	969,860	\$	211,620	\$2,2	01,599
Special mention ⁽¹⁾		3,920		1,742		1,502		5,603		19,644		50,004		10,058	(92,473
Substandard ⁽²⁾		264		10,250		12,611		14,578		7,841		60,602		4,525	1	10,671
Total	\$	182,397	\$	225,612	\$	198,061	\$	257,223	\$	234,781	\$	1,080,466	\$	226,203	\$2,4	04,743
											-					
For the Three Months Ended March 31, 2020:																
Current period charge-offs	\$		\$	—	\$	_	\$	—	\$	_	\$		\$	—	\$	
Current period recoveries										_						
Current period Farm & Ranch net charge-offs	\$		\$		\$		\$		\$		\$		\$		\$	
⁽¹⁾ Assets in the "Special mention	" cate	egory gener	ally	/ have poten	tial	weaknesses	s du	e to perform	anc	e issues but	are	currently c	ons	idered to be a	adequa	itely

Assets in the "Special mention" category generally have potential weaknesses due to performance issues but are currently considered to be adequately secured.

⁽²⁾ Substandard assets have a well-defined weakness or weaknesses and there is a distinct possibility that some loss will be sustained if deficiencies are not corrected.

					A	As of Dece	mb	er 31, 202	0					
				Year of C)rig	ination:								
	2	020	 2019	 2018		2017 (in th	ous	2016 ands)		Prior	Revolving Loans - Amortized Cost Basis		T	otal
Rural Utilities LTSPCs:						,		,						
Internally Assigned Risk Rating:														
Acceptable	\$		\$ 	\$ 	\$		\$		\$	549,405	\$	7,020	\$ 55	6,425
Special mention ⁽¹⁾														
Substandard ⁽²⁾								—				—		
Total	\$		\$ _	\$ _	\$	_	\$		\$	549,405	\$	7,020	\$ 55	6,425
For the Three Months Ended March 31, 2020:														
Current period charge-offs	\$		\$ _	\$ 	\$	_	\$	_	\$	_	\$	_	\$	
Current period recoveries			_											_
Current period Rural Utilities net charge-offs	\$	_	\$ 	\$ _	\$		\$		\$		\$		\$	

⁽¹⁾ Assets in the "Special mention" category generally have potential weaknesses due to performance issues but are currently considered to be adequately secured.

(2) Substandard assets have a well-defined weakness or weaknesses and there is a distinct possibility that some loss will be sustained if deficiencies are not corrected.

7. NOTES PAYABLE

Farmer Mac's borrowings consist of discount notes and medium-term notes, both of which are unsecured general obligations of Farmer Mac. Discount notes generally have original maturities of 1.0 year or less, whereas medium-term notes generally have maturities of 0.5 years to 15.0 years.

The following tables set forth information related to Farmer Mac's borrowings as of March 31, 2021 and December 31, 2020:

Table 7.1

	March 31, 2021										
		Outstanding a	s of March 31	Average Outstan Quar							
		Amount	Weighted- Average Rate	Amount	Weighted- Average Rate						
			(dollars in th	ousands)							
Due within one year:											
Discount notes	\$	1,675,995	0.06 % 3	\$ 1,625,416	0.11 %						
Medium-term notes		2,514,691	0.14 %	2,725,057	0.16 %						
Current portion of medium-term notes		5,402,791	0.78 %								
Total due within one year	\$	9,593,477	0.49 %								
Due after one year:											
Medium-term notes due in:											
Two years	\$	2,912,497	0.96 %								
Three years		2,509,857	1.16 %								
Four years		1,308,945	1.25 %								
Five years		1,853,777	0.84 %								
Thereafter		3,358,018	1.81 %								
Total due after one year	\$	11,943,094	1.25 %								
Total principal net of discounts	\$	21,536,571	0.91 %								
Hedging adjustments		23,739									
Total	\$	21,560,310									

	 December 31, 2020											
	Outstanding as o	of December 31	Average Outstandin	Average Outstanding During the Year								
	Amount	Weighted- Average Rate	Amount	Weighted- Average Rate								
		(dollars in	thousands)									
Due within one year:												
Discount notes	\$ 1,797,175	0.11 %	\$ 2,343,702	0.63 %								
Medium-term notes	2,645,146	0.19 %	1,593,253	0.60 %								
Current portion of medium-term notes	 6,304,061	0.90 %										
Total due within one year	\$ 10,746,382	0.59 %										
Due after one year:												
Medium-term notes due in:												
Two years	\$ 3,004,203	1.00 %										
Three years	2,809,551	1.24 %										
Four years	927,119	1.67 %										
Five years	1,342,250	1.03 %										
Thereafter	2,966,172	1.92 %										
Total due after one year	\$ 11,049,295	1.37 %										
Total principal net of discounts	\$ 21,795,677	0.98 %										
Hedging adjustments	 53,240											
Total	\$ 21,848,917											

The maximum amount of Farmer Mac's discount notes outstanding at any month end during the three months ended March 31, 2021 and 2020 was \$1.8 billion and \$2.6 billion, respectively.

Callable medium-term notes give Farmer Mac the option to redeem the debt at par value on a specified call date or at any time on or after a specified call date. The following table summarizes by maturity date the amounts and costs for Farmer Mac debt callable in 2021 as of March 31, 2021:

Table 7.2

Debt Ca	lable in 2021 as of March 31, 2021, by	Maturity				
		Amount	Weighted-Average Rate			
		(dollars in thousands)				
Maturity:						
2022	\$	350,449	0.27 %			
2023		355,710	0.77 %			
2024		119,413	1.09 %			
2025		267,726	0.83 %			
Thereafter		788,996	1.44 %			
Total	\$	1,882,294	0.98 %			

The following schedule summarizes the earliest interest rate reset date, or debt maturities, of total borrowings outstanding as of March 31, 2021, including callable and non-callable medium-term notes, assuming callable notes are redeemed at the initial call date:

Table 7.3

	Earli	Earliest Interest Rate Reset Date, or Debt Maturities, of Borrowings Outstanding							
		Amount Weighted-Average R							
		(dollars in th	ousands)						
Debt with interest rate resets, or debt maturities in:									
2021	\$	10,287,077	0.43 %						
2022		2,719,969	1.06 %						
2023		2,479,427	1.24 %						
2024		1,247,008	1.28 %						
2025		1,283,087	1.00 %						
Thereafter		3,520,003	1.82 %						
Total principal net of discounts	\$	21,536,571	0.91 %						

During the three months ended March 31, 2021 and 2020, Farmer Mac called \$1.0 billion and \$0.8 billion of callable medium-term notes, respectively.

Authority to Borrow from the U.S. Treasury

Farmer Mac's statutory charter authorizes it, upon satisfying certain conditions, to borrow up to \$1.5 billion from the U.S. Treasury through the issuance of debt obligations to the U.S. Treasury. Any funds borrowed from the U.S. Treasury may be used solely to fulfill Farmer Mac's guarantee obligations. Any debt obligations issued by Farmer Mac under this authority would bear interest at a rate determined by the U.S. Treasury, taking into consideration the average rate on outstanding marketable obligations of the United States as of the last day of the last calendar month ending before the date of the purchase of the obligations from Farmer Mac. The charter requires Farmer Mac to repurchase any of its debt obligations held by the U.S. Treasury within a reasonable time. As of March 31, 2021, Farmer Mac had not used this borrowing authority.

Gains on Repurchase of Outstanding Debt

No outstanding debt repurchases were made in the three months ended March 31, 2021 or 2020.

8. EQUITY

Common Stock

During first quarter 2021, Farmer Mac paid a quarterly dividend of \$0.88 per share on all classes of its common stock. For each quarter in 2020, Farmer Mac paid a quarterly dividend of \$0.80 per share on all classes of its common stock.

Farmer Mac's board of directors approved a share repurchase program during third quarter 2015 authorizing Farmer Mac to repurchase up to \$25.0 million of its outstanding Class C non-voting common stock. The share repurchase program, last modified on March 14, 2019, authorized Farmer Mac to

repurchase up to \$10.0 million of Farmer Mac's outstanding Class C non-voting common stock. During first quarter 2020, Farmer Mac repurchased approximately 4,000 shares of Class C non-voting common stock at a cost of approximately \$0.2 million. Shortly after these repurchases were completed, Farmer Mac indefinitely suspended its share repurchase program in an effort to preserve capital and liquidity in view of market volatility and uncertainty caused by the COVID-19 pandemic. In March 2021, Farmer Mac's board of directors reinstated the share repurchase program on its previous terms (with a remaining authorization of up to \$9.8 million in stock repurchases) and extended the expiration date of the program to March 2023. As of March 31, 2021, Farmer Mac had repurchased approximately 673,000 shares of Class C non-voting common stock at a cost of approximately \$19.8 million under the share repurchase program since 2015.

Capital Requirements

Farmer Mac is required to comply with the higher of the minimum capital requirement and the risk-based capital requirement. As of both March 31, 2021 and December 31, 2020, the minimum capital requirement was greater than the risk-based capital requirement. Farmer Mac's ability to declare and pay dividends could be restricted if it fails to comply with applicable capital requirements.

As of March 31, 2021, Farmer Mac's minimum capital requirement was \$677.6 million and its core capital level was \$1.0 billion, which was \$348.1 million above the minimum capital requirement as of that date. As of December 31, 2020, Farmer Mac's minimum capital requirement was \$680.9 million and its core capital level was \$1.0 billion, which was \$325.5 million above the minimum capital requirement as of that date.

In accordance with the Farm Credit Administration's rule on Farmer Mac's capital planning, and as part of Farmer Mac's capital plan, Farmer Mac has adopted a policy for maintaining a sufficient level of Tier 1 capital (consisting of retained earnings, paid-in-capital, common stock, and qualifying preferred stock) and imposing restrictions on Tier 1-eligible dividends and any discretionary bonus payments in the event that this capital falls below specified thresholds.

9. FAIR VALUE DISCLOSURES

Fair Value Classification and Transfers

The following tables present information about Farmer Mac's assets and liabilities measured at fair value on a recurring basis as of March 31, 2021 and December 31, 2020, respectively, and indicate the fair value hierarchy of the valuation techniques used by Farmer Mac to determine such fair value:

Table 9.1

Assets and Liabilities Measured at Fair Value			2021			(1)		
	I	Level 1		Level 2		Level 3 ⁽¹⁾		Total
				(in the	ousar	ıds)		
Recurring:								
Assets:								
Investment Securities:								
Available-for-sale:								
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$	_	\$	_	\$	19,146	\$	19,146
Floating rate Government/GSE guaranteed mortgage-backed securities		_		2,387,558		—		2,387,558
Fixed rate GSE guaranteed mortgage-backed securities		_		201		—		201
Fixed rate U.S. Treasuries	1	,402,727						1,402,727
Total Available-for-sale Investment Securities	1	,402,727		2,387,759		19,146		3,809,632
Farmer Mac Guaranteed Securities:								
Available-for-sale:								
AgVantage		_	_			6,763,209		6,763,209
Total Farmer Mac Guaranteed Securities		_	_		_	6,763,209	_	6,763,209
USDA Securities:								
Trading		_	_			5,578	_	5,578
Total USDA Securities		_				5,578		5,578
Financial derivatives		20	_	18,350			_	18,370
Total Assets at fair value	\$ 1	,402,747	\$	2,406,109	\$	6,787,933	\$	10,596,789
Liabilities:								
Financial derivatives	\$	_	\$	28,345	\$	_	\$	28,34
Total Liabilities at fair value	\$	_	\$	28,345	\$		\$	28,345

⁽¹⁾Level 3 assets represent 28% of total assets and 64% of financial instruments measured at fair value.

	Level		Level 2	Level 3 ⁽¹⁾		Total
			(in t			
Recurring:						
Assets:						
Investment Securities:						
Available-for-sale:						
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$		\$ _	\$ 19,171	\$	19,17
Floating rate asset-backed securities		—	6,231	—		6,23
Floating rate Government/GSE guaranteed mortgage-backed securities		—	2,360,026	_		2,360,02
Fixed rate GSE guaranteed mortgage-backed securities		_	313	—		31
Fixed rate U.S. Treasuries	1,467,9	51	—	 _		1,467,95
Total Available-for-sale Investment Securities	1,467,9	51	2,366,570	19,171		3,853,69
Farmer Mac Guaranteed Securities:						
Available-for-sale:						
AgVantage		_	_	6,947,701	_	6,947,70
Total Farmer Mac Guaranteed Securities		_	_	 6,947,701		6,947,70
USDA Securities:						
Trading		_	_	6,695		6,69
Total USDA Securities				 6,695		6,69
Financial derivatives		_	17,468	 _		17,46
Total Assets at fair value	\$ 1,467,9	51	\$ 2,384,038	\$ 6,973,567	\$	10,825,55
Liabilities:						
Financial derivatives	\$	82	\$ 29,810	\$ _	\$	29,89
Total Liabilities at fair value	\$	82	\$ 29,810	\$ _	\$	29,89

⁽¹⁾Level 3 assets represent 29% of total assets and 65% of financial instruments measured at fair value.

There were no significant assets or liabilities measured at fair value on a non-recurring basis as of March 31, 2021 or December 31, 2020.

Transfers in and/or out of the different levels within the fair value hierarchy are based on the fair values of the assets and liabilities as of the beginning of the reporting period. During the three months ended March 31, 2021 and 2020, there were no transfers within the fair value hierarchy for fair value measurements of Farmer Mac's investment securities, Farmer Mac Guaranteed Securities, USDA Securities, and financial derivatives.

The following tables present additional information about assets and liabilities measured at fair value on a recurring basis for which Farmer Mac has used significant unobservable inputs to determine fair value. Net transfers in and/or out of Level 3 are based on the fair values of the assets and liabilities as of the beginning of the reporting period. There were no liabilities measured at fair value using significant unobservable inputs during the three months ended March 31, 2021 and 2020.

Table 9.2

Level 3 Assets and Liabilities Measured at Fair Value for the Three Months Ended March 31, 2021											
	Beginning Balance	Purchases	Sales	Settlements (in	Allowance for Losses thousands)	Realized and unrealized losses included in Income	Unrealized gains included in Other Comprehensive Income	Ending Balance			
Recurring:					,						
Assets:											
Investment Securities:											
Available-for-sale:											
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$ 19,171	\$ —	\$ —	\$ —	\$ (25)	\$ —	\$ —	\$ 19,146			
Total available-for-sale	19,171		_		(25)			19,146			
Farmer Mac Guaranteed Securities:											
Available-for-sale:											
AgVantage	6,947,701	160,615	_	(243,832)	182	(168,742)	67,285	6,763,209			
Total available-for-sale	6,947,701	160,615		(243,832)	182	(168,742)	67,285	6,763,209			
USDA Securities:											
Trading	6,695			(1,103)		(14)		5,578			
Total USDA Securities	6,695			(1,103)		(14)		5,578			
Total Assets at fair value	\$ 6,973,567	\$ 160,615	\$	\$ (244,935)	\$ 157	\$ (168,756)	\$ 67,285	\$ 6,787,933			

	Beginning Balance	Purchases	Sales	Settlements (in t	Allowance for Losses housands)	Realized and unrealized gains included in Income	Unrealized losses included in Other Comprehensive Income	Ending Balance
Recurring:								
Assets: Investment Securities:								
Available-for-sale:								
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$ 18,912	\$ —	<u>\$ </u>	\$	\$ (24)	<u>\$ </u>	\$ (2,167)	\$ 16,721
Total available-for-sale	18,912				(24)		(2,167)	16,721
Farmer Mac Guaranteed Securities:								
Available-for-sale:								
AgVantage	7,143,025	483,580		(227,255)	(166)	290,380	(102,378)	7,587,186
Total available-for-sale	7,143,025	483,580		(227,255)	(166)	290,380	(102,378)	7,587,186
USDA Securities:								
Trading	8,913	_	_	(611)	_	106	_	8,408
Total USDA Securities	8,913			(611)		106		8,408
Total Assets at fair value	\$ 7,170,850	\$ 483,580	\$ _	\$ (227,866)	\$ (190)	\$ 290,486	\$ (104,545)	\$ 7,612,315

Level 3 Assets and Liabilities Measured at Fair Value for the Three Months Ended March 31, 2020

The following tables present additional information about the significant unobservable inputs, such as discount rates and constant prepayment rates ("CPR"), used in the fair value measurements categorized in Level 3 of the fair value hierarchy as of March 31, 2021 and December 31, 2020:

Table 9.3

	As of March 31, 2021											
Financial Instruments		Value	Valuation Technique	Unobservable Input (in thousands)	Range (Weighted-Average)							
Assets:												
Investment securities:												
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$	19,146	Indicative bids	Range of broker quotes	97.5% - 97.5% (97.5%)							
Farmer Mac Guaranteed Securities:												
AgVantage	\$6,7	63,209	Discounted cash flow	Discount rate	0.8% - 2.7% (1.5%)							
USDA Securities	\$	5,578	Discounted cash flow	Discount rate	1.1% - 1.8% (1.4%)							
				CPR	23% - 43% (33%)							

	As of December 31, 2020											
Financial Instruments		r Value	Valuation Technique	Unobservable Input	Range (Weighted-Average)							
				(in thousands)								
Assets:												
Investment securities:												
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$	19,171	Indicative bids	Range of broker quotes	97.5% - 97.5% (97.5%)							
Farmer Mac Guaranteed Securities:												
AgVantage	\$6,9	947,701	Discounted cash flow	Discount rate	0.8% - 2.3% (1.3%)							
USDA Securities	\$	6,695	Discounted cash flow	Discount rate	0.9% - 1.9% (1.4%)							
				CPR	25% - 49% (44%)							

The significant unobservable input used in the fair value measurements of AgVantage Farmer Mac Guaranteed Securities is the discount rate commensurate with the risks involved. Typically, significant increases (decreases) in this input in isolation may result in materially lower (higher) fair value measurements. Generally, in a rising interest rate environment, Farmer Mac would expect average discount rates to increase. Conversely, in a declining interest rate environment, Farmer Mac would expect average discount rates to decrease. Prepayment rates are not presented in the table above for AgVantage securities because they generally have fixed maturity dates when the secured general obligations are due and do not prepay.

The significant unobservable inputs used in the fair value measurements of USDA Securities are the prepayment rate and discount rate commensurate with the risks involved. Typically, significant increases (decreases) in any of these inputs in isolation may result in materially lower (higher) fair value measurements. Generally, in a rising interest rate environment, Farmer Mac would expect average discount rates to increase and would likely expect a corresponding decrease in forecasted prepayment rates. Conversely, in a declining interest rate environment, Farmer Mac would expect average discount rates to decrease and would likely expect a corresponding increase in forecasted prepayment rates.

Disclosures on Fair Value of Financial Instruments

The following table sets forth the estimated fair values and carrying values for financial assets, liabilities, and guarantees and commitments as of March 31, 2021 and December 31, 2020:

Table 9.4

As of Marc	ch 31, 2021	As of Decem	nber 31, 2020
Fair Value	Carrying Amount	Fair Value	Carrying Amount
	(in thos	usands)	
\$ 1,012,541	\$ 1,012,541	\$ 1,033,941	\$ 1,033,941
3,856,619	3,855,067	3,899,925	3,898,724
7,937,251	7,922,001	8,148,691	8,123,493
2,624,456	2,495,078	2,637,509	2,480,321
9,178,052	8,501,630	9,167,525	8,535,146
18,370	18,370	17,468	17,468
34,114	35,878	34,115	37,113
21,678,738	21,560,310	22,130,263	21,848,917
1,264,293	1,188,521	1,390,330	1,323,786
28,345	28,345	29,892	29,892
32,639	34,403	32,537	35,535
	Fair Value \$ 1,012,541 3,856,619 7,937,251 2,624,456 9,178,052 18,370 34,114 21,678,738 1,264,293 28,345	Fair Value Amount (in thore) \$ 1,012,541 \$ 1,012,541 3,856,619 3,855,067 7,937,251 7,922,001 2,624,456 2,495,078 9,178,052 8,501,630 18,370 18,370 34,114 35,878 21,678,738 21,560,310 1,264,293 1,188,521 28,345 28,345	Fair Value Carrying Amount Fair Value (in thousands) (in thousands) \$ 1,012,541 \$ 1,012,541 \$ 1,033,941 3,856,619 3,855,067 3,899,925 7,937,251 7,922,001 8,148,691 2,624,456 2,495,078 2,637,509 9,178,052 8,501,630 9,167,525 18,370 18,370 17,468 34,114 35,878 34,115 21,678,738 21,560,310 22,130,263 1,264,293 1,188,521 1,390,330 28,345 28,345 29,892

The carrying value of cash and cash equivalents is a reasonable estimate of their approximate fair value and is classified as Level 1. The fair value of investments in U.S. Treasuries are valued based on unadjusted quoted prices in active markets and are classified as Level 1. A significant portion of Farmer Mac's investment portfolio is valued using a reputable nationally recognized third-party pricing service. The prices obtained are non-binding and generally representative of recent market trades and are classified as Level 2. Farmer Mac internally models the fair value of its loan portfolio, including loans held for investment and loans held for investment in consolidated trusts. Farmer Mac Guaranteed Securities, and USDA Securities by discounting the projected cash flows of these instruments at projected interest rates. The fair values are based on the present value of expected cash flows using management's best estimate of certain key assumptions, which include prepayment speeds, forward yield curves and discount rates commensurate with the risks involved. These fair value measurements do not take into consideration the fair value of the underlying property and are classified as Level 3. Financial derivatives primarily are valued using unadjusted counterparty valuations and are classified as Level 2. The fair value of the guarantee fees receivable/obligation and debt securities of consolidated trusts are estimated based on the present value of expected future cash flows of the underlying mortgage assets using management's best estimate of certain key assumptions, which include prepayments speeds, forward yield curves, and discount rates commensurate with the risks involved and are classified as Level 3. Notes payable are valued by discounting the expected cash flows of these instruments using a yield curve derived from market prices observed for similar agency securities and are also classified as Level 3. Because the cash flows of Farmer Mac's financial instruments may be interest rate path dependent, estimated fair values and projected discount rates for Level 3 financial instruments are derived using a Monte Carlo simulation model. Different market assumptions and estimation methodologies could significantly affect estimated fair value amounts.

10. BUSINESS SEGMENT REPORTING

The following tables present core earnings for Farmer Mac's operating segments and a reconciliation to consolidated net income for the three months ended March 31, 2021 and 2020:

Table 10.1

	Core Earnings by Business Segment For the Three Months Ended March 31, 2021														
		Farm & USDA Ranch Guarantees				Rural Institutional Utilities Credit		Corporate		Reconciling Adjustments				onsolidated Net Income	
								(in thousand	s))					
Net interest income	\$ 21,	855	\$	5,689	\$	7,649	\$	15,523	\$	2,535	\$	—		\$	53,251
Less: reconciling adjustments ⁽¹⁾⁽²⁾⁽³⁾	(401)		678	_	(975)		1,150		156		(608)			_
Net effective spread	21,	454		6,367		6,674		16,673		2,691		(608)			—
Guarantee and commitment fees ⁽²⁾	3,	733		183		319		5		_		(1,210)			3,030
Other income/(expense) ⁽³⁾		404		169		1		_		(123)		4,412			4,863
Non-interest income/(loss)	4,	137		352		320		5		(123)		3,202			7,893
Release of/(provision for) losses		27		-		(1,002)		87		(25)		—			(913)
Release of reserve for losses		731		—		213		_		_		_			944
Other non-interest expense	(6,	549)	(2,533)		(2,057)		(2,590)		(5,152)		—			(18,881)
Non-interest expense ⁽⁴⁾	(5,	818)	(2,533)		(1,844)		(2,590)		(5,152)		_			(17,937)
Core earnings before income taxes	19,	800		4,186		4,148		14,175		(2,609)		2,594	(5)		42,294
Income tax (expense)/benefit	(4,	158)		(879)	_	(871)		(2,977)		365		(547)			(9,067)
Core earnings before preferred stock dividends	15,	642		3,307		3,277		11,198		(2,244)		2,047	(5)		33,227
Preferred stock dividends		_		_		_		_		(5,269)					(5,269)
Segment core earnings/(losses)	\$ 15,	642	\$	3,307	\$	3,277	\$	11,198	\$	(7,513)	\$	2,047	(5)	\$	27,958
Total assets at carrying value	\$ 6,395,	438	\$ 2,55	7,412	\$	2,207,810	\$	7,929,662	\$	4,923,589	\$	—		\$	24,013,911
Total on- and off-balance sheet program assets at principal balance	\$ 8,629,	352	\$ 2,78	7,065	\$	2,804,437	\$	7,641,677	\$	_	\$			\$	21,862,531
(1)															

⁽¹⁾ Includes the amortization of premiums and discounts on assets consolidated at fair value, originally included in interest income, to reflect core earnings amounts.

(2) Includes the reclassification of interest income and interest expense from consolidated trusts owned by third parties to guarantee and commitment fees, to reflect management's view that the net interest income Farmer Mac earns is effectively a guarantee fee.

(3) Includes the reclassification of interest expense related to interest rate swaps not designated as hedges, which are included in "Gains/(losses) on financial derivatives" on the consolidated financial statements, to determine the effective funding cost for each operating segment.

⁽⁴⁾ Includes directly attributable costs and an allocation of indirectly attributable costs based on employee headcount.

⁽⁵⁾ Net adjustments to reconcile to the corresponding income measures: core earnings before income taxes reconciled to income before income taxes; core earnings before preferred stock dividends reconciled to net income; and segment core earnings reconciled to net income attributable to common stockholders.

Core Earnings by Business Segment For the Three Months Ended March 31, 2020

	Farm & Ranch	USDA Guarantees	Rural Utilities	Institutional Credit	Corporate	Reconciling Adjustments	Consolidated Net Income
				(in thousan	ds)		
Net interest income	\$ 16,365	\$ 4,541	\$ 4,747	\$ 13,804	\$ 1,855	\$	\$ 41,312
Less: reconciling adjustments ⁽¹⁾⁽²⁾⁽³⁾	(1,427)	84	173	3,898	123	(2,851)	_
Net effective spread	14,938	4,625	4,920	17,702	1,978	(2,851)	
Guarantee and commitment fees ⁽²⁾	4,317	235	335	9	_	(1,700)	3,196
Other income/(expense) ⁽³⁾	1,169	112	7		(129)	(9,050)	(7,891)
Non-interest income/(loss)	5,486	347	342	9	(129)	(10,750)	(4,695)
Provision for loan losses	(808)	_	(2,125)	(491)	(14)	—	(3,438)
Provision for reserve for losses	(4)	_	(389)	_	_		(393)
Other non-interest expense	(5,997)	(1,818)	(1,604)	(2,363)	(4,433)		(16,215)
Non-interest expense ⁽⁴⁾	(6,001)	(1,818)	(1,993)	(2,363)	(4,433)		(16,608)
Core earnings before income taxes	13,615	3,154	1,144	14,857	(2,598)	(13,601) (5)	16,571
Income tax (expense)/benefit	(2,859)	(662)	(240)	(3,120)	283	2,857	(3,741)
Core earnings before preferred stock dividends	10,756	2,492	904	11,737	(2,315)	(10,744) (5)	12,830
Preferred stock dividends					(3,431)		(3,431)
Segment core earnings/(losses)	\$ 10,756	\$ 2,492	\$ 904	\$ 11,737	\$ (5,746)	\$ (10,744) (5)	\$ 9,399
Total assets at carrying value	\$5,457,134	\$ 2,341,698	\$1,964,901	\$ 9,049,154	\$ 4,367,223	\$ —	\$ 23,180,110
Total on- and off-balance sheet program assets at							

 Total on- and off-balance sheet program assets at principal balance
 \$7,811,594
 \$2,646,206
 \$2,385,411
 \$8,696,101
 \$

⁽¹⁾ Includes the amortization of premiums and discounts on assets consolidated at fair value, originally included in interest income, to reflect core earnings amounts.

\$

\$ 21,539,312

(2) Includes the reclassification of interest income and interest expense from consolidated trusts owned by third parties to guarantee and commitment fees, to reflect management's view that the net interest income Farmer Mac earns is effectively a guarantee fee.

(3) Includes the reclassification of interest expense related to interest rate swaps not designated as hedges, which are included in "Gains/(losses) on financial derivatives" on the consolidated financial statements, to determine the effective funding cost for each operating segment.

⁽⁴⁾ Includes directly attributable costs and an allocation of indirectly attributable costs based on employee headcount.

⁽⁵⁾ Net adjustments to reconcile to the corresponding income measures: core earnings before income taxes reconciled to income before income taxes; core earnings before preferred stock dividends reconciled to net income; and segment core earnings reconciled to net income attributable to common stockholders.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The objective of this section of the report is to provide a discussion and analysis, from management's perspective, of the material information necessary to assess Farmer Mac's financial condition and results of operations for the quarter ended March 31, 2021. Financial information included in this report is consolidated to include the accounts of Farmer Mac and its two subsidiaries – Farmer Mac Mortgage Securities Corporation and Farmer Mac II LLC. This discussion and analysis of financial condition and results of operations should be read together with: (1) the interim unaudited consolidated financial statements and the related notes that appear elsewhere in this report; and (2) Farmer Mac's Annual Report on Form 10-K for the fiscal year ended December 31, 2020, as filed with the SEC on February 25, 2021 (the "2020 Annual Report").

Updates to Critical Accounting Estimates

None.

FORWARD-LOOKING STATEMENTS

In this report, the words "Farmer Mac," "we," "our," and "us" refer to the Federal Agricultural Mortgage Corporation unless otherwise stated or unless the context otherwise requires.

Some statements made in this report, such as in the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section, are "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995 about management's current expectations for Farmer Mac's future financial results, business prospects, and business developments. Forward-looking statements include, without limitation, any statement, including statements about the COVID-19 pandemic and its impact on Farmer Mac, that may predict, forecast, indicate, or imply future results, performance, or achievements. These statements typically include terms such as "anticipates," "believes," "continues," "estimates," "expects," "forecasts," "intends," "outlook," "plans," "potential," "project," "target" and similar terms, and future or conditional tense verbs like "could," "may," "might," "should," "will," and "would." This report includes forward-looking statements addressing Farmer Mac's:

- prospects for earnings;
- prospects for growth in business volume;
- assessment of the effect of the COVID-19 pandemic on our business, financial results, financial condition, and business plans and strategies;
- trends in net interest income and net effective spread;
- trends in portfolio credit quality, delinquencies, substandard assets, credit losses, and provisions for losses;
- assessment of economic and market trends;
- trends in expenses;
- trends in investment securities;
- prospects for asset impairments and allowance for losses;
- changes in capital position;
- future dividend payments; and
- other business and financial matters.

Management's expectations for Farmer Mac's future necessarily involve assumptions, estimates, and the evaluation of risks and uncertainties. Various factors or events, both known and unknown, could cause Farmer Mac's actual results to differ materially from the expectations as expressed or implied by the forward-looking statements, including the factors discussed under "Risk Factors" in Item 1A of this report and of the 2020 Annual Report, as well as uncertainties about:

- the duration, spread, and severity of the COVID-19 pandemic and its effects on the business operations of agricultural and rural borrowers, the capital markets, and Farmer Mac's business operations;
- the actions taken to address the COVID-19 pandemic, including government actions to
 mitigate the economic impact of the pandemic, how quickly and to what extent normal
 economic and operating conditions can resume, the possibility of future disruptions to
 economic recovery caused by any future outbreaks, regulatory measures or voluntary actions to
 limit the spread of COVID-19, and the duration and efficacy of any restrictions that may be
 imposed;
- the availability to Farmer Mac of debt and equity financing and, if available, the reasonableness of rates and terms;
- legislative or regulatory developments that could affect Farmer Mac, its sources of business, or the agricultural or rural utilities industries;
- fluctuations in the fair value of assets held by Farmer Mac and its subsidiaries;
- the level of lender interest in Farmer Mac's products and the secondary market provided by Farmer Mac;
- the general rate of growth in agricultural mortgage and rural utilities indebtedness;
- the effect of economic conditions and geopolitics on agricultural mortgage or rural utilities lending, borrower repayment capacity, or collateral values, including fluctuations in interest rates, changes in U.S. trade policies, fluctuations in export demand for U.S. agricultural products, and volatility in commodity prices;
- the degree to which Farmer Mac is exposed to interest rate risk resulting from fluctuations in Farmer Mac's borrowing costs relative to market indexes;
- developments in the financial markets, including possible investor, analyst, and rating agency reactions to events involving government-sponsored enterprises, including Farmer Mac;
- the effect of any changes in Farmer Mac's executive leadership; and
- other factors that could hinder agricultural mortgage lending or borrower repayment capacity, including the effects of weather and fluctuations in agricultural real estate values.

Considering these potential risks and uncertainties, no undue reliance should be placed on any forward-looking statements expressed in this report. Farmer Mac undertakes no obligation to release publicly the results of revisions to any forward-looking statements to reflect new information or any future events or circumstances, except as otherwise required by applicable law. The information in this report is not necessarily indicative of future results.

Overview

Farmer Mac is a mission-focused, purpose-driven company determined to improve the economic opportunity in rural America by increasing the availability and affordability of credit. As the nation's secondary market for agricultural and rural infrastructure loans, we provide a broad array of financial solutions to lenders that support flexible low-cost financing to farmers, ranchers, agribusinesses, renewable energy projects, rural utilities, and other institutions. Farmer Mac also serves as a critical investment tool for states, counties, municipalities, pension funds, banks, public trust funds, and credit unions by providing diversification in their investment portfolios, issuance structure flexibility, and a safe, competitive return on their investment dollars.

During first quarter 2021:

- we continued to operate effectively while nearly all employees worked remotely;
- we provided nearly \$1.5 billion in liquidity and lending capacity to lenders serving rural America;
- we maintained uninterrupted access to the debt capital markets and a strong capital position; and
- we maintained strong liquidity in our investment portfolio well above regulatory requirements.

Farmer Mac's performance during first quarter 2021 described in more detail in this report reflects the success of our continued focus on pursuing new channels and innovative ways to further our mission to help build a strong and vital rural America. The discussion below of Farmer Mac's financial information includes "non-GAAP measures," which are measures of financial performance not presented in accordance with generally accepted accounting principles in the United States ("GAAP"). For more information about the non-GAAP measures Farmer Mac uses, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Use of Non-GAAP Measures."

Net Income and Core Earnings

The following table shows our net income attributable to common stockholders and core earnings for the periods presented. Core earnings and core earnings per share are non-GAAP measures that differ from net income attributable to common stockholders and earnings per common share, respectively, by excluding the effects of fair value fluctuations and specified infrequent or unusual transactions.

Table 1

		For the Three Months Ended						
	Mar	March 31, 2021		nber 31, 2020	М	arch 31, 2020		
			(in	thousands)				
Net income attributable to common stockholders	\$	27,958	\$	29,431	\$	9,399		
Core earnings		25,911		26,431		20,143		

The \$1.5 million sequential decrease in net income attributable to common stockholders was primarily due to a \$2.4 million after-tax decrease in net interest income and a \$1.9 million after-tax increase in operating expenses, partially offset by a \$2.4 million after-tax decrease in the total provision for credit losses.

The \$18.6 million year-over-year increase in net income attributable to common stockholders was due to a \$10.7 million after-tax increase in the fair value of undesignated financial derivatives due to fluctuations

in long-term interest rates, a \$9.4 million after-tax increase in net interest income, and a \$3.1 million aftertax decrease in the provision for credit losses. These factors were partially offset by a \$2.0 million aftertax increase in operating expenses and a \$1.8 million increase in preferred stock dividends.

The \$0.5 million sequential decrease in core earnings was primarily due to a \$1.9 million after-tax increase in operating expenses and a \$0.5 million after-tax decrease in net effective spread, partially offset by a \$2.4 million after-tax decrease in the total provision for credit losses.

The \$5.8 million year-over-year increase in core earnings was primarily due to a \$7.7 million after-tax increase in net effective spread and a \$3.1 million after-tax decrease in the total provision for credit losses. This increase was partially offset by a \$2.1 million after-tax increase in operating expenses and a \$1.8 million increase in preferred stock dividends.

For more information about net income attributable to common stockholders, the composition of core earnings, and a reconciliation of net income attributable to common stockholders to core earnings, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations." For more information about the non-GAAP measures Farmer Mac uses, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Use of Non-GAAP Measures."

Net Interest Income and Net Effective Spread

The following table shows our net interest income and net effective spread in both dollars and percentage yield or spread for the periods presented. Farmer Mac uses net effective spread, a non-GAAP measure, as an alternative to net interest income because management believes it is a useful metric that reflects the economics of the net spread between all the assets owned by Farmer Mac and all related funding, including any associated derivatives, some of which may not be included in net interest income.

Table 2

		For the Three Months Ended							
	1	March 31, 2021		December 31, 2020		March 31, 2020			
				(in thousands)					
Net interest income	\$	53,251	\$	56,267	\$	41,312			
Net interest yield %		0.91 %		0.96 %		0.78 %			
Net effective spread		53,859		54,522		44,163			
Net effective spread %		0.97 %		0.98 %		0.89 %			

The \$3.0 million sequential decrease in net interest income was primarily due to a \$3.6 million decrease in the fair value of derivatives designated in fair value hedge accounting relationships (designated financial derivatives) and partially offset by a \$0.7 million increase related to new business volume. In percentage terms, the decrease of 0.05% in net interest income yield was primarily attributable to a decrease of 0.06% in net fair value changes from designated financial derivatives, partially offset by an increase of 0.01% related to new business volume.

The \$12.0 million year-over-year increase in net interest income was primarily due to a \$6.0 million increase in the fair value of derivatives designated in fair value hedge accounting relationships (designated financial derivatives) and a \$6.1 million increase related to new business volume. In percentage terms, the

0.13% increase was primarily attributable to an increase of 0.10% in net fair value changes from designated financial derivatives and an increase of 0.05% in new business volume.

The \$0.7 million sequential decrease in net effective spread was primarily due to a \$0.6 million decrease in interest income related to fewer interest-bearing days in the quarter and a \$0.6 million increase in non-GAAP funding costs, which were partially offset by a \$0.7 million increase related to new business volume. In percentage terms, the decrease of 0.01% was primarily attributable to the increase in non-GAAP funding costs of 0.01%.

The \$9.7 million year-over-year increase in net effective spread in dollars was primarily due to an increase of \$6.1 million from new business volume and a \$3.5 million decrease in non-GAAP funding costs. In percentage terms, the increase of 0.08% was primarily attributable to the increase in new business volume of 0.05% and a decrease in non-GAAP funding costs of 0.03%.

For more information about Farmer Mac's use of net effective spread as a financial measure, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Use of Non-GAAP Measures." For a reconciliation of net interest income to net effective spread, see Table 11 in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations—Net Interest Income."

Business Volume

Our outstanding business volume was \$21.9 billion as of March 31, 2021, a net decrease of \$61.6 million from December 31, 2020 after taking into account all new business, maturities, and paydowns on existing assets. The net decrease was primarily attributable to net decreases of \$97.7 million in the Institutional Credit line of business and \$12.4 million in Rural Utilities. The net decreases were partially offset by net increases of \$48.2 million in Farm & Ranch and \$0.3 million in USDA Guarantees.

For more information about Farmer Mac's business volume, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations—Business Volume."

Capital

Table 3

	 As of				
	March 31, 2021	Decer	mber 31, 2020		
	 (in thousands)				
Core capital	\$ 1,025,748	\$	1,006,400		
Capital in excess of minimum capital level required	348,102		325,455		

The increase in capital in excess of the minimum capital level required was primarily due to the increase in retained earnings.

Current Expected Credit Loss

As of March 31, 2021, Farmer Mac's allowance for losses on its on-balance sheet loan portfolio was \$14.8 million (0.17% of all loans), compared to \$13.8 million (0.16% of all loans) as of December 31,

2020. During first quarter 2021, Farmer Mac recorded a provision to its allowance for loan losses of \$1.0 million.

As of March 31, 2021, Farmer Mac's reserve for losses on its off-balance sheet LTSPCs and Guaranteed Securities was \$2.3 million (0.07% of all off-balance sheet LTSPCs and Guaranteed Securities), compared to \$3.3 million (0.10% of all off-balance sheet LTSPCs and Guaranteed Securities) as of December 31, 2020. During first quarter 2021, Farmer Mac recorded a release from the reserve for its off-balance sheet portfolio of \$1.0 million.

Credit Quality

The following table presents Farm & Ranch substandard assets, in dollars and as a percentage of the Farm & Ranch portfolio, for both on- and off-balance sheet assets as of March 31, 2021 and December 31, 2020:

Table 4

	Farm & Ranch Line of Business						
		On-Balano	ce Sheet	Off-Balance	ce Sheet		
	Subst	andard Assets	% of Portfolio	Substandard Assets	% of Portfolio		
			(dollars in	thousands)			
March 31, 2021	\$	221,987	3.5 %	\$ 99,674	4.3 %		
December 31, 2020		180,823	2.9 %	110,671	4.6 %		
Increase/(decrease) from prior year-ending	\$	41,164	0.6 %	\$ (10,997)	(0.3)%		

The increase of \$41.2 million in on-balance sheet substandard assets during first quarter 2021 was primarily driven by credit downgrades during the quarter, particularly in permanent plantings and crops. The on-balance sheet Farm & Ranch portfolio grew by \$126.5 million, which, when coupled with credit downgrades, caused the percentage of substandard assets to increase. The \$11.0 million decrease in substandard assets in our off-balance sheet Farm & Ranch portfolio during first quarter 2021 was primarily due to payoffs in crops and credit upgrades in the livestock and crops portfolios during the quarter.

There were no substandard assets in the Rural Utilities portfolio as of both March 31, 2021 and December 31, 2020.

For an analysis of current loan-to-value ratios across substandard and other internally assigned risk ratings, see Table 26 in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Management—Credit Risk—Loans and Guarantees."

The following table presents Farm & Ranch 90-day delinquencies, in dollars and as a percentage of the Farm & Ranch portfolio, for both on- and off-balance sheet assets as of March 31, 2021 and December 31, 2020:

Table 5

	Farm & Ranch Line of Business							
	 On-Balan	ce Sheet	Off-Balan	ce Sheet				
	90-Day inquencies	% of Portfolio	90-Day Delinquencies	% of Portfolio				
		(dollars in th	ousands)					
March 31, 2021	\$ 65,437	1.04 %	\$ 6,909	0.30 %				
December 31, 2020	34,799	0.56 %	11,433	0.48 %				
Increase/(decrease) from prior year-ending	\$ 30,638	0.48 %	\$ (4,524)	(0.18)%				

On-balance sheet Farm & Ranch loans 90 or more days delinquent increased in crops, permanent plantings, and livestock. Off-balance sheet Farm & Ranch loans 90 days or more delinquent decreased in crops. The top ten borrower exposures over 90 days delinquent in either the on- or off-balance sheet portfolio represented over half of the aggregate 90-day delinquencies as of March 31, 2021.

There were no delinquencies in the Rural Utilities portfolio as of both March 31, 2021 and December 31, 2020.

For more information about Farmer Mac's credit metrics, including 90-day delinquencies, the total allowance for losses, and substandard assets, as well as the effects of the COVID-19 pandemic on loan payment deferments, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Management—Credit Risk—Loans and Guarantees."

COVID-19 Update

Farmer Mac continues to closely monitor the effects of the COVID-19 pandemic on our financial condition and operations. We have operated uninterrupted and entirely remotely since March 2020, and our liquidity levels remain well above regulatory requirements, which has enabled us to execute our mission to support rural America during the pandemic. During the pandemic, we have continued to work with our loan servicers and other partners to respond to and facilitate COVID-19-related payment deferment requests from borrowers. Since March 2020, we have executed COVID-19 payment deferments for \$429.8 million of unpaid principal balance on Farm & Ranch loans, Farm & Ranch LTSPCs, and USDA Securities, with approximately \$51.0 million of unpaid principal balance still in deferment as of March 31, 2021.

Use of Non-GAAP Measures

In the accompanying analysis of its financial information, Farmer Mac uses "non-GAAP measures," which are measures of financial performance that are not presented in accordance with GAAP. Specifically, Farmer Mac uses the following non-GAAP measures: "core earnings," "core earnings per share," and "net effective spread." Farmer Mac uses these non-GAAP measures to measure corporate economic performance and develop financial plans because, in management's view, they are useful alternative measures in understanding Farmer Mac's economic performance, transaction economics, and business trends.

The non-GAAP financial measures that Farmer Mac uses may not be comparable to similarly labeled non-GAAP financial measures disclosed by other companies. Farmer Mac's disclosure of these non-GAAP measures is intended to be supplemental in nature and is not meant to be considered in isolation from, as a substitute for, or as more important than, the related financial information prepared in accordance with GAAP.

Core Earnings and Core Earnings Per Share

The main difference between core earnings and core earnings per share (non-GAAP measures) and net income attributable to common stockholders and earnings per common share (GAAP measures) is that those non-GAAP measures exclude the effects of fair value fluctuations. These fluctuations are not expected to have a cumulative net impact on Farmer Mac's financial condition or results of operations reported in accordance with GAAP if the related financial instruments are held to maturity, as is expected. Another difference is that these two non-GAAP measures exclude specified infrequent or unusual transactions that we believe are not indicative of future operating results and that may not reflect the trends and economic financial performance of Farmer Mac's core business. For example, we have excluded from core earnings and core earnings per share any losses on retirement of preferred stock. For a reconciliation of Farmer Mac's net income attributable to common stockholders to core earnings and of earnings per common share to core earnings per share, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations."

Net Effective Spread

Farmer Mac uses net effective spread to measure the net spread Farmer Mac earns between its interestearning assets and the related net funding costs of these assets. As further explained below, net effective spread differs from net interest income and net interest yield by excluding certain items from net interest income and net interest yield and including certain other items that net interest income and net interest yield do not contain.

Farmer Mac excludes from net effective spread the premiums and discounts on assets consolidated at fair value because they either do not reflect actual cash premiums paid for the assets at acquisition or are not expected to have an economic effect on Farmer Mac's financial performance if the assets are held to maturity, as is expected. Farmer Mac also excludes from net effective spread the interest income and interest expense associated with the consolidated trusts and the average balance of the loans underlying these trusts to reflect management's view that the net interest income Farmer Mac earns on the related Farmer Mac Guaranteed Securities owned by third parties is effectively a guarantee fee. Accordingly, the excluded interest income and interest expense associated with consolidated trusts is reclassified to guarantee and commitment fees in determining Farmer Mac's core earnings. Farmer Mac also excludes from net effective spread the fair value changes of financial derivatives and the corresponding assets or liabilities designated in fair value hedge relationships because they are not expected to have an economic effect on Farmer Mac's financial performance, as we expect to hold the financial derivatives and corresponding hedged items to maturity.

Net effective spread also differs from net interest income and net interest yield because it includes the accrual of income and expense related to the contractual amounts due on financial derivatives that are not designated in hedge accounting relationships ("undesignated financial derivatives"). Farmer Mac uses interest rate swaps to manage its interest rate risk exposure by synthetically modifying the interest rate

reset or maturity characteristics of certain assets and liabilities. The accrual of the contractual amounts due on interest rate swaps designated in hedge accounting relationships is included as an adjustment to the yield or cost of the hedged item and is included in net interest income. For undesignated financial derivatives, Farmer Mac records the income or expense related to the accrual of the contractual amounts due in "Gains/(losses) on financial derivatives" on the consolidated statements of operations. However, the accrual of the contractual amounts due for undesignated financial derivatives are included in Farmer Mac's calculation of net effective spread.

Net effective spread also differs from net interest income and net interest yield because it includes the net effects of terminations or net settlements on financial derivatives, which consist of: (1) the net effects of cash settlements on agency forward contracts on the debt of other GSEs and U.S. Treasury security futures that we use as short-term economic hedges on the issuance of debt; and (2) the net effects of initial cash payments that Farmer Mac receives upon the inception of certain swaps. The inclusion of these items in net effective spread is intended to reflect our view of the complete net spread between an asset and all of its related funding, including any associated derivatives, whether or not they are designated in a hedge accounting relationship.

For a reconciliation of net interest income and net interest yield to net effective spread, see Table 11 in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations—Net Interest Income."

Results of Operations

Reconciliations of Farmer Mac's net income attributable to common stockholders to core earnings and core earnings per share are presented in the following tables along with information about the composition of core earnings:

Table 6

Reconciliation of Net Income Attributable to Common Stockholders to	o Core E	arnings		
		hs Ended		
	Marc	ch 31, 2021	Ma	arch 31, 2020
	(in th	housands, excep	t per s	hare amounts)
Net income attributable to common stockholders	\$	27,958	\$	9,399
Less reconciling items:				
Gains/(losses) on undesignated financial derivatives due to fair value changes (see Table 14)		1,695		(6,484)
Losses on hedging activities due to fair value changes		(271)		(5,925)
Unrealized (losses)/gains on trading securities		(14)		106
Net effects of amortization of premiums/discounts and deferred gains on assets consolidated at fair value		16		3
Net effects of terminations or net settlements on financial derivatives		1,165		(1,300)
Income tax effect related to reconciling items		(544)		2,856
Sub-total		2,047		(10,744)
Core earnings	\$	25,911	\$	20,143
Composition of Core Earnings:				
Revenues:				
Net effective spread ⁽¹⁾	\$	53,859	\$	44,163
Guarantee and commitment fees ⁽²⁾		4,240		4,896
Other ⁽³⁾		451		674
Total revenues		58,550		49,733
Credit related expense (GAAP):				
(Release of)/provision for losses		(31)		3,831
Gains on sale of REO				(485)
Total credit related expense		(31)		3,346
Operating expenses (GAAP):				
Compensation and employee benefits		11,795		10,127
General and administrative		6,336		5,363
Regulatory fees		750		725
Total operating expenses		18,881		16,215
Net earnings		39,700		30,172
Income tax expense ⁽⁴⁾		8,520		6,598
Preferred stock dividends (GAAP)		5,269		3,431
Core earnings	\$	25,911	\$	20,143
Core earnings per share:				
Basic	\$	2.41	\$	1.88
Diluted		2.39		1.87
Weighted-average shares:				
Basic		10,738		10,712
Diluted		10,819		10,782

(1) Net effective spread is a non-GAAP measure. See "Management's Discussion and Analysis of Financial Condition and Results of Operations-Use of Non-GAAP Measures-Net Effective Spread" for an explanation of net effective spread. See Table 11 for a reconciliation of net interest income to net effective spread.

(2) Includes interest income and interest expense related to consolidated trusts owned by third parties reclassified from net interest income to guarantee and commitment fees to reflect management's view that the net interest income Farmer Mac earns is effectively a guarantee fee on the consolidated Farmer Mac Guaranteed Securities.

(3) Reflects reconciling adjustments for the reclassification to exclude expenses related to interest rate swaps not designated as hedges and terminations or net settlements on financial derivatives, and reconciling adjustments to exclude fair value adjustments on financial derivatives and trading assets and the recognition of deferred gains over the estimated lives of certain Farmer Mac Guaranteed Securities and USDA Securities.

(4) Includes the tax impact of non-GAAP reconciling items between net income attributable to common stockholders and core earnings.

Table 7

Reconciliation of GAAP Basic Earnings Per Share to Core Earnings - Basic Earnings Per Share

		is Ended		
	Ма	arch 31, 2021	Ma	arch 31, 2020
	(ir	n thousands, excep	t per sk	nare amounts)
GAAP - Basic EPS	\$	2.60	\$	0.88
Less reconciling items:				
Gains/(losses) on undesignated financial derivatives due to fair value changes (see Table 14)		0.16		(0.61)
Losses on hedging activities due to fair value changes		(0.03)		(0.55)
Unrealized gains on trading securities		—		0.01
Net effects of amortization of premiums/discounts and deferred gains on assets consolidated at fair value		_		_
Net effects of terminations or net settlements on financial derivatives		0.11		(0.12)
Income tax effect related to reconciling items		(0.05)		0.27
Sub-total		0.19		(1.00)
Core Earnings - Basic EPS	\$	2.41	\$	1.88
Shares used in per share calculation (GAAP and Core Earnings)		10,738		10,712

		s Ended		
	Mar	rch 31, 2021	Ma	urch 31, 2020
	(in	thousands, excep	are amounts)	
GAAP - Diluted EPS	\$	2.58	\$	0.87
Less reconciling items:				
Gains/(losses) on undesignated financial derivatives due to fair value changes (see Table 14)		0.16		(0.60)
Losses on hedging activities due to fair value changes		(0.03)		(0.55)
Unrealized gains on trading securities		_		0.01
Net effects of amortization of premiums/discounts and deferred gains on assets consolidated at fair value		_		_
Net effects of terminations or net settlements on financial derivatives		0.11		(0.12)
Income tax effect related to reconciling items		(0.05)		0.26
Sub-total		0.19		(1.00)
Core Earnings - Diluted EPS	\$	2.39	\$	1.87
Shares used in per share calculation (GAAP and Core Earnings)		10,819		10,782

Reconciliation of GAAP Diluted Earnings Per Share to Core Earnings - Diluted Earnings Per Share

The non-GAAP reconciling items between net income attributable to common stockholders and core earnings are:

1. Losses on financial derivatives due to fair value changes are presented by two reconciling items in Table 6 above: (a) Gains/(losses) on undesignated financial derivatives due to fair value changes; and (b) Losses on hedging activities due to fair value changes. The table below calculates the non-GAAP reconciling item for losses on hedging activities due to fair value changes:

Table 8

Non-GAAP Reconciling Items for (Losses)/Gains on Hedging Activities due to Fair Value Changes

	For the Three Months Ended			
	March 31, 2021 March 3		h 31, 2020	
	(in thousands)			
Gains/(losses) due to fair value changes (see Table 4.2)	\$	345	\$	(5,681)
Initial cash payment (received) at inception of swap		(616)		(244)
Losses on hedging activities due to fair value changes	\$	(271)	\$	(5,925)

2. Unrealized gains on trading securities. The unrealized gains/(losses) on trading securities are reported on Farmer Mac's consolidated statements of operations, which represent changes during the period in fair values for trading assets remaining on Farmer Mac's balance sheet as of the end of the reporting period.

3. The net effects of amortization of premiums/discounts and deferred gains on assets consolidated at fair value. The amount of this non-GAAP reconciling item is the recorded amount of premium, discount, or deferred gain amortization during the reporting period on those assets for which the premium, discount, or deferred gain was based on the application of an accounting principle (e.g., consolidation of variable interest entities) rather than on a cash transaction (e.g., a purchase price premium or discount).

4. The net effects of terminations or net settlements on financial derivatives. These terminations or net settlements relate to:

- Forward contracts on the debt of other GSEs and futures contracts on U.S. Treasury securities. These contracts are used as a short-term economic hedge of the issuance of debt. For GAAP purposes, realized gains or losses on settlements of these contracts are reported in the consolidated statements of operations in the period in which they occur. For core earnings purposes, these realized gains or losses are deferred and amortized as net yield adjustments over the term of the related debt, which generally ranges from 3 to 15 years.
- Initial cash payments received by Farmer Mac upon the inception of certain swaps. When there is no direct payment arrangement between a swap dealer counterparty and a debt dealer issuing Farmer Mac's medium-term notes for a particular transaction, Farmer Mac may receive an initial cash payment from the swap dealer at the inception of the swap to offset dollar-for-dollar the amount of the discount on the associated hedged debt. For GAAP purposes, changes in fair value of the swaps are recognized in "Gains on financial derivatives," while the economically offsetting discount on the associated hedged debt is amortized over the term of the debt as an adjustment to its yield. For purposes of core earnings, these initial cash payments are deferred and amortized as net yield adjustments over the term of the related debt, which generally ranges from 3 to 15 years.

The following sections provide more detail about specific components of Farmer Mac's results of operations.

<u>Net Interest Income</u>. The following table provides information about interest-earning assets and funding for the quarters ended March 31, 2021 and 2020. The average balance of non-accruing loans is included in the average balance of loans, Farmer Mac Guaranteed Securities, and USDA Securities presented, though the related income is accounted for on a cash basis. Therefore, as the average balance of non-accruing loans and the income received increases or decreases, the net interest income and yield will fluctuate accordingly. The average balance of loans in consolidated trusts with beneficial interests owned by third parties is disclosed in the net effect of consolidated trusts and is not included in the average balances of interest-bearing liabilities. The interest income and expense associated with these trusts are shown in the net effect of consolidated trusts.

Table 9

	For the Three Months Ended							
	Ma	rch 31, 2021		Ма				
	Average Balance	Income/ Expense	Average Rate	Average Balance	Income/ Expense	Average Rate		
			(dollars in	thousands)				
Interest-earning assets:								
Cash and investments	\$ 4,840,870	\$ 5,529	0.46 %	\$ 3,708,499	\$ 17,741	1.91 %		
Loans, Farmer Mac Guaranteed Securities and USDA Securities ⁽¹⁾	17,354,400	91,281	2.10 %	16,075,354	117,230	2.92 %		
Total interest-earning assets	22,195,270	96,810	1.74 %	19,783,853	134,971	2.73 %		
Funding:								
Notes payable due within one year	4,350,474	1,583	0.15 %	3,014,566	12,132	1.61 %		
Notes payable due after one year ⁽²⁾	17,215,386	43,186	1.00 %	16,393,917	83,227	2.03 %		
Total interest-bearing liabilities ⁽³⁾	21,565,860	44,769	0.83 %	19,408,483	95,359	1.97 %		
Net non-interest-bearing funding	629,410	_		375,370	_			
Total funding	22,195,270	44,769	0.81 %	19,783,853	95,359	1.93 %		
Net interest income/yield prior to consolidation of certain trusts	22,195,270	52,041	0.94 %	19,783,853	39,612	0.80 %		
Net effect of consolidated trusts ⁽⁴⁾	1,152,098	1,210	0.42 %	1,530,301	1,700	0.44 %		
Net interest income/yield	\$23,347,368	\$ 53,251	0.91 %	\$21,314,154	\$ 41,312	0.78 %		

(1) Excludes interest income of \$10.6 million and \$14.9 million in first quarter 2021 and 2020, respectively, related to consolidated trusts with beneficial interests owned by third parties.

⁽²⁾ Includes current portion of long-term notes.

⁽³⁾ Excludes interest expense of \$9.4 million and \$13.2 million in first quarter 2021 and 2020, respectively, related to consolidated trusts with beneficial interests owned by third parties.

⁽⁴⁾ Includes the effect of consolidated trusts with beneficial interests owned by third parties.

The following table sets forth information about changes in the components of Farmer Mac's net interest income prior to consolidation of certain trusts for the periods indicated. For each category, information is provided on changes attributable to changes in volume (change in volume multiplied by old rate), and changes in rate (change in rate multiplied by old volume), and then allocated based on the relative size of rate and volume changes from the prior period.

Table 10

	For the Three Months Ended March 31, 202 Compared to Same Period in 2020						
	Increase/(Decrease) Due to						
		Rate Volume T			Total		
			(in thousand)			
Income from interest-earning assets:							
Cash and investments	\$	(16,449)	\$ 4,23	7 \$	(12,212)		
Loans, Farmer Mac Guaranteed Securities and USDA Securities		(34,698)	8,75	0	(25,948)		
Total		(51,147)	12,98	7	(38,160)		
Expense from other interest-bearing liabilities		(60,201)	9,61	2	(50,589)		
Change in net interest income prior to consolidation of certain trusts ⁽¹⁾	\$	9,054	\$ 3,37	5 \$	12,429		

⁽¹⁾ Excludes the effect of debt in consolidated trusts with beneficial interests owned by third parties.

The following table presents a reconciliation of net interest income and net interest yield to net effective spread. Net effective spread is measured by: including (1) expenses related to undesignated financial derivatives, which consists of income or expense related to contractual amounts due on financial derivatives not designated in hedge relationships (the income or expense related to financial derivatives designated in hedge accounting relationships is already included in net interest income), and (2) the amortization of losses due to terminations or net settlements of financial derivatives; and excluding (3) the amortization of premiums and discounts on assets consolidated at fair value, (4) the net effects of consolidated trusts with beneficial interests owned by third parties, and (5) the fair value changes of financial derivatives and corresponding financial assets or liabilities in fair value hedge relationships. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Use of Non-GAAP Measures—Net Effective Spread" for more information about net effective spread.

Table 11

		For the Three Months Ended							
		March 31,	2021	March 3	31, 2020				
]	Dollars	Yield	Dollars	Yield				
			(dollars in						
Net interest income/yield	\$	53,251	0.91 %	\$ 41,312	0.78 %				
Net effects of consolidated trusts		(1,210)	0.03 %	(1,700)	0.02 %				
Expense related to undesignated financial derivatives		2,068	0.04 %	(1,190)	(0.02)%				
Amortization of premiums/discounts on assets consolidated at fair value		(8)	<u> %</u>	11	— %				
Amortization of losses due to terminations or net settlements on financial derivatives		103	— %	49	%				
Fair value changes on fair value hedge relationships		(345)	(0.01)%	5,681	0.11 %				
Net effective spread	\$	53,859	0.97 %	\$ 44,163	0.89 %				

See Note 10 to the consolidated financial statements for more information about net interest income and net effective spread from Farmer Mac's individual business segments. See "Management's Discussion and

Analysis of Financial Condition and Results of Operations—Supplemental Information" for quarterly net effective spread by line of business.

Provision for and Release of Allowance for Losses and Reserve for Losses. The following table summarizes the components of Farmer Mac's total allowance for losses for the three months ended March 31, 2021 and 2020:

Table 12

					For	the Three I	Mon	ths Ended				
]	Marc	h 31, 2021	-	March 31, 2020						
				eserve Losses	Total Allowance for Losses		Allowance for Losses		Reserve for Losses			Total lowance r Losses
						(in tho	isanc	ls)				
Beginning balance	\$	14,298	\$	3,277	\$	17,575	\$	10,454	\$	2,164	\$	12,618
Cumulative effect adjustment from adoption of current expected credit loss standard		_		_		_		1,793		863		2,656
Adjusted beginning balance		14,298		3,277		17,575		12,247		3,027		15,274
Provision for/(release of) losses		913		(944)		(31)		3,438		393		3,831
Ending balance	\$	15,211	\$	2,333	\$	17,544	\$	15,685	\$	3,420	\$	19,105

See Notes 5 and 6 to the consolidated financial statements and "Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Management—Credit Risk—Loans and Guarantees."

Guarantee and Commitment Fees. The following table presents guarantee and commitment fees, which compensate Farmer Mac for assuming the credit risk on loans underlying off-balance sheet Farmer Mac Guaranteed Securities and LTSPCs, for the three months ended March 31, 2021 and 2020:

Table 13

	For the Three Months Ended								
						Chang	ge		
	Marc	March 31, 2021 March 31, 20		h 31, 2020		\$	%		
			(doll	lars in thousan	ds)				
Guarantee and commitment fees	\$	3,030	\$	3,196	\$	(166)	(5)%		

In Farmer Mac's presentation of core earnings, guarantee and commitment fees include interest income and interest expense related to consolidated trusts owned by third parties to reflect management's view that the net interest income Farmer Mac earns is effectively a guarantee fee on the consolidated Farmer Mac Guaranteed Securities. The decrease in guarantee and commitment fees for the three months ended March 31, 2021 compared to 2020 was primarily due to decreased LTSPC volume. As adjusted for the core earnings presentation, guarantee and commitment fees were \$4.2 million for first quarter 2021, compared to \$4.9 million in first quarter 2020, respectively.

For more information about net income attributable to common stockholders, the composition of core earnings, and a reconciliation of net income attributable to common stockholders to core earnings, see Table 1 in "Management's Discussion and Analysis of Financial Condition and Results of Operations— Results of Operations." For more information about the non-GAAP measures Farmer Mac uses, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Use of Non-GAAP Measures."

<u>Gains/(losses) on financial derivatives</u>. The components of gains and losses on financial derivatives for the three months ended March 31, 2021 and 2020 are summarized in the following table:

Table 14

		For the Three Months Ended									
					Change						
	Marc	March 31, 2021		ch 31, 2020		\$	%				
	(dollars				sands))					
Gains/(losses) due to fair value changes	\$	1,695	\$	(6,484)	\$	8,179	126 %				
Accrual of contractual payments		2,068		(1,190)		3,258	274 %				
Gains/(losses) due to terminations or net settlements		530		(1,624)		2,154	133 %				
Gains/(losses) on financial derivatives	\$	4,293	\$	(9,298)	\$	13,591	146 %				

These changes in fair value are primarily the result of fluctuations in long-term interest rates. The accrual of periodic cash settlements for interest paid or received from Farmer Mac's interest rate swaps that are undesignated financial derivatives is shown as expense related to financial derivatives. Payments or receipts to terminate undesignated derivative positions or net cash settled forward sales contracts on the debt of other GSEs and undesignated U.S. Treasury security futures and initial cash payments received upon the inception of certain undesignated swaps are included in "Gains/(losses) due to terminations or net settlements" in the table above. For undesignated swaps, when there is no direct payment arrangement between a swap dealer counterparty and a debt dealer issuing Farmer Mac's medium-term notes for a particular transaction, Farmer Mac may receive an initial cash payment from the swap dealer at the inception of the swap to offset dollar-for-dollar the amount of the discount on the associated hedged debt. Changes in the fair value of these swaps are recognized immediately in "Gains/(losses) on financial derivatives," while the offsetting discount on the hedged debt is amortized over the term of the debt as an adjustment to its yield. The amounts of initial cash payments received by Farmer Mac vary depending on the number of the aforementioned type of swaps it executes during a quarter.

<u>Other Income</u>. The following table presents other income for the three months ended March 31, 2021 and 2020:

Table 15

			For the Three Months Ended Change March 31, 2020 \$ % (dollars in thousands)				
						Chang	ge
	March	1 31, 2021	March 31,	2020		\$	%
			(dollars	in thou	sands)		
ees	\$	287	\$	592	\$	(305)	(52)%
er		296		224		72	32 %
Total other income	\$	583	\$	816	\$	(233)	(29)%

The decrease in other income is primarily due to a decrease in late fee income on Farm & Ranch loans.

<u>Operating Expenses</u>. The components of operating expenses for the three months ended March 31, 2021 and 2020 are summarized in the following table:

Table 16

	For the Three Months Ended									
						Chan	ge			
	March 31, 2021		Mar	March 31, 2020		\$	%			
	(dollars i				sands					
Compensation and employee benefits	\$	11,795	\$	10,127	\$	1,668	16 %			
General and administrative		6,336		5,363		973	18 %			
Regulatory fees		750		725		25	3 %			
Total Operating Expenses	\$	18,881	\$	16,215	\$	2,666	16 %			

- *a.* <u>Compensation and Employee Benefits</u>. The increase in compensation and employee benefits expenses for 2021 compared to 2020 was due to increased headcount.
- *b.* <u>General and Administrative Expenses (G&A)</u>. The increase in G&A expenses for 2021 compared to 2020 was primarily due to increased spending on software licenses and information technology consultants to support growth and strategic initiatives.

Income Tax Expense. The following table presents income tax expense and the effective income tax rate for the three months ended March 31, 2021 and 2020:

Table 17

	For the Three Months Ended								
			_			Chang	ge		
	Mar	ch 31, 2021	Marc	h 31, 2020		\$	%		
	(dollars in thousa)			
Income tax expense	\$	9,067	\$	3,741	\$	5,326	142 %		
Effective tax rate		21.4 %		22.6 %			(1.2)%		

Business Volume.

The following table sets forth the net growth or decrease in Farmer Mac's four lines of business for the three months ended March 31, 2021 and 2020:

Table 18

Net New Business Volume – Farmer Mac Loan Purchases, Guaran	, ,	For the Three Months Ended							
	Ma	rch 31, 2021	Mar	rch 31, 2020					
		et Growth/ Decrease)		et Growth/ Decrease)					
		(in thousands)							
Farm & Ranch:									
Loans	\$	239,048	\$	142,053					
Loans held in trusts:									
Beneficial interests owned by third party investors		(112,519)		(60,227)					
LTSPCs		(78,358)		(47,181)					
USDA Guarantees:									
USDA Securities		14,777		44,344					
Farmer Mac Guaranteed USDA Securities		(14,430)		(18,313)					
Rural Utilities:									
Loans		(13,308)		118,433					
LTSPCs		908		(13,594)					
Institutional Credit:									
AgVantage securities		(97,682)		255,855					
Total purchases, guarantees, LTSPCs, and AgVantage securities	\$	(61,564)	\$	421,370					

Our outstanding business volume was \$21.9 billion as of March 31, 2021, a net decrease during the quarter of \$61.6 million, after taking into account all new business, maturities, and paydowns on existing assets. The net decrease was primarily attributable to net decreases of \$97.7 million in the Institutional Credit line of business and \$12.4 million in Rural Utilities. The net decreases were partially offset by net increases of \$48.2 million in Farm & Ranch and \$0.3 million in USDA Guarantees.

The \$97.7 million net decrease in the Institutional Credit line of business during first quarter 2021 was due primarily to two large counterparties who reduced their amount of outstanding credit in connection with scheduled maturities and payments on multiple AgVantage bonds. The quarterly change in AgVantage securities volume is primarily driven by the generally larger transaction sizes for that product, scheduled maturity amounts, the liquidity needs of Farmer Mac's AgVantage counterparties, and changes in the pricing and availability of wholesale funding.

The \$12.4 million net decrease in our Rural Utilities line of business reflected a \$13.3 million net decrease in outstanding loan purchase volume that was partially offset by a \$0.9 million net increase in loans under LTSPCs.

The \$48.2 million net increase in our Farm & Ranch line of business reflected a \$239.0 million net increase in outstanding loan purchase volume that was partially offset by net decreases of \$112.5 million in loans held in consolidated trusts and \$78.4 million in loans underlying LTSPCs and off-balance sheet Farmer Mac Guaranteed Securities. The Farm & Ranch portfolio grew despite our heaviest payment date

of the year (January 1) occurring during the quarter. Our net growth of 17.6% in the Farm & Ranch onbalance sheet portfolio over the twelve months ended March 31, 2021 is significantly higher than the 5.8% net growth of the overall agricultural mortgage loan market over the twelve months ended December 31, 2020 (based on our analysis of bank and Farm Credit System call report data).

The level and composition of Farmer Mac's outstanding business volume is based on the relationship between new business, maturities, and repayments on existing assets from quarter to quarter. This relationship in turn depends on a variety of factors both internal and external to Farmer Mac. The external factors include general market forces, competition, and our counterparties' liquidity needs, access to alternative funding, desired products, and assessment of strategic factors. The internal factors include our assessment of profitability, mission fulfillment, credit risk, and customer relationships. For more information about potential growth opportunities in Farmer Mac's lines of business, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Outlook" in this report.

The following table sets forth information about the Farmer Mac Guaranteed Securities issued during the periods indicated:

Table 19

	For the T	For the Three Months Ended					
	March 31, 20	21 Ma	arch 31, 2020				
	(1	(in thousands					
Loans securitized and sold as Farm & Ranch Guaranteed Securities	\$ 49,	133 \$	28,050				
Farmer Mac Guaranteed USDA Securities		_	28,050				
AgVantage securities	442,	912	560,395				
Total Farmer Mac Guaranteed Securities Issuances	\$ 492,	045 \$	616,495				

Farmer Mac either retains the loans it purchases or securitizes them and retains or sells Farmer Mac Guaranteed Securities backed by those loans. The weighted-average age of the Farm & Ranch nondelinquent eligible loans purchased and retained (excluding the purchases of defaulted loans) during both first quarter 2021 and 2020 was less than one year. Of those loans, 55% and 53% had principal amortization periods longer than the maturity date, resulting in balloon payments at maturity, with a weighted-average remaining term to maturity of 21.6 years and 22.8 years for each period, respectively.

During first quarter 2021 and 2020, Farmer Mac securitized some of the Farm & Ranch loans it had purchased and sold the resulting Farmer Mac Guaranteed Securities, as shown above. During first quarter 2021 and 2020, Farmer Mac realized no gains or losses from the sale of Farmer Mac Guaranteed Securities or USDA Securities. Farmer Mac consolidates these loans and presents them as "Loans held for investment in consolidated trusts, at amortized cost" on the consolidated balance sheets. For first quarter 2021 and 2020 none of Farmer Mac Guaranteed Securities were sold to a related party. The following table sets forth information about outstanding volume in each of Farmer Mac's four lines of business as of the dates indicated:

Table 20

Lines of Business - Outs	tanding Business Volum	e		
	As of M	March 31, 2021	As of E	December 31, 2020
		(in tho	usands)	
Farm & Ranch:				
Loans	\$	5,128,442	\$	4,889,393
Loans held in trusts:				
Beneficial interests owned by third party investors		1,174,525		1,287,045
LTSPCs		2,254,182		2,325,431
Guaranteed Securities		72,203		79,312
USDA Guarantees:				
USDA Securities		2,470,147		2,452,964
Farmer Mac Guaranteed USDA Securities		316,918		333,754
Rural Utilities:				
Loans		2,247,104		2,260,412
LTSPCs		557,333		556,425
Institutional Credit				
AgVantage Securities		7,641,677		7,739,359
Total	\$	21,862,531	\$	21,924,095

The following table summarizes by maturity date the scheduled principal amortization of loans held, loans underlying off-balance sheet Farmer Mac Guaranteed Securities (excluding AgVantage securities) and LTSPCs, USDA Securities, and Farmer Mac Guaranteed USDA Securities as of March 31, 2021:

Schedule of Principal Amortization as of March 31, 2021												
		Loans Held			Loans Held			Loans nderlying ff-Balance eet Farmer Mac uaranteed curities and LTSPCs	and	DA Securities 1 Farmer Mac Guaranteed DA Securities		Total
					(in the	ousan	ds)					
2021		\$	196,506	\$	188,406	\$	87,779	\$	472,691			
2022			362,420		229,133		120,010		711,563			
2023			354,546		206,576		123,930		685,052			
2024			347,460		175,471		124,050		646,981			
2025			386,351		180,306		125,478		692,135			
Thereafter			6,902,788		1,903,826		2,205,818		11,012,432			
Total		\$	8,550,071	\$	2,883,718	\$	2,787,065	\$	14,220,854			

Of the \$21.9 billion outstanding principal balance of volume included in Farmer Mac's four lines of business as of March 31, 2021, \$7.6 billion were AgVantage securities included in the Institutional Credit line of business. Unlike business volume in the form of purchased loans, USDA Securities, and loans underlying LTSPCs and non-AgVantage Farmer Mac Guaranteed Securities, most AgVantage securities

do not require periodic payments of principal based on amortization schedules and instead have fixed maturity dates when the secured general obligation is due. The following table summarizes by maturity date the outstanding principal amount of both on- and off-balance sheet AgVantage securities as of March 31, 2021:

Table 22

AgVantage Balances by Year of Maturity			
	As of		
	March 31, 2	March 31, 2021	
	(in thousand	ds)	
2021	\$ 1,3	68,639	
2022	1,5	49,934	
2023	1,0	62,272	
2024	8	66,450	
2025	2	31,025	
Thereafter ⁽¹⁾	2,5	63,357	
Total	\$ 7,6	641,677	

⁽¹⁾ Includes various maturities ranging from 2026 to 2044.

The weighted-average remaining maturity of the outstanding AgVantage securities shown in the table above was 5.0 years as of March 31, 2021.

Outlook

Farmer Mac continues to provide a stable source of liquidity, capital, and risk management tools as the secondary market that helps meet the financing needs of rural America. The pace of Farmer Mac's growth will depend on the capital and liquidity needs of the lending institutions in the agricultural and rural utilities business as well as the overall health of borrowers in the sectors we serve. Farmer Mac foresees opportunities for profitable growth across our lines of business driven by several key factors:

- As agricultural and rural utilities lenders seek to manage equity capital and return on equity capital requirements or seek to reduce exposure due to lending or concentration limits, Farmer Mac can provide relief for those institutions through loan and portfolio purchases, participations, guarantees, LTSPCs, or wholesale funding.
- While prospects for overall loan growth within the rural utilities industry appear to be moderate in the near term due to slower growth in the demand for capital reflected in an increase in interest rates, future growth opportunities may increase in Farmer Mac's Rural Utilities line of business from deepening business relationships with eligible counterparties, broadband-related capital expenditures, growing opportunities for renewable energy project finance, and the exploration of new types of loan products. These opportunities may be limited by sector growth, credit quality, and the competitiveness of Farmer Mac's products.
- As a result of business and product development efforts and continued interest in the agricultural asset class from institutional investors, Farmer Mac's customer base and product set continue to expand, which may generate more demand for Farmer Mac's products from new sources.
- Consolidation within the agricultural finance industry, coupled with Farmer Mac's relationships with larger regional and national lenders, continue to provide opportunities that could influence

Farmer Mac's loan demand and increase the average transaction size within Farmer Mac's Farm & Ranch line of business.

• Expansion and refinancing opportunities for agricultural producers and agribusinesses resulting from competitive interest rates have increased financing requirements for mergers and acquisitions, consolidation, and vertical integration across many sectors of the agricultural industry, which may also generate demand for Farmer Mac's loan products.

The COVID-19 pandemic continues to disrupt parts of the global economy, although the disruptions experienced during 2020 were significantly moderated during first quarter 2021. Government stimulus programs designed to mitigate the economic impacts of the pandemic, as well as continued liquidity support by the Federal Reserve to facilitate the functioning of the capital markets, continue to reduce volatility to the economy and the sectors we serve. But the continued spread of COVID-19 resulting from certain variants of coronavirus and the effectiveness and availability of vaccines globally continue to evolve and create uncertainty, which may result in increased market volatility. Farmer Mac's mission is to support rural America during this pandemic, and the disruptions caused by COVID-19 may present some new and expanded opportunities for Farmer Mac to help meet the financing needs of rural America while also presenting uncertainties and risks. COVID-19 has highlighted the importance of a healthy and stable global food supply chain, as well as the need for increased connectivity through rural broadband. These market conditions could result in increased investment in the supply chain for food, fuel, fiber, energy, and broadband, all of which require access to competitive, long-term capital. Farmer Mac can provide a source of secondary market liquidity to help stimulate capital deployment to help facilitate these investments while continually monitoring potential market and sector volatility associated with the ongoing impacts of the pandemic. See "Risk Factors" in Part I, Item 1A of the 2020 Annual Report for more information about the uncertainties and risks associated with the COVID-19 pandemic on Farmer Mac and its business.

<u>Operating Expense</u>. Farmer Mac continues to expand its investments in human capital, technology, and business infrastructure to increase capacity and efficiency as it seeks to accommodate its growth opportunities and achieve its long-term strategic objectives. Farmer Mac expects continued increases in its operating expenses over the next several years corresponding to business and revenue growth. We expect these efforts to continue and increase over the next 12 - 18 months as we innovate and grow our business while monitoring the growth in operating expenses commensurate with the growth in our revenue.

<u>Agricultural Industry</u>. Economic conditions throughout the agricultural, food, fuel, and fiber sectors continued to improve in early 2021. Consumers picked up first quarter retail spending at both food and drinking places (only 7% below pre-pandemic levels) as well as food and beverage stores (14% above pre-pandemic levels). Consumer mobility increased steadily in first quarter 2021, helping to restore fuel demand and bring ethanol production back to 93% of 2019 levels by April 2021, according to U.S. Energy Information Administration data. Reduced global supply of grains and increased export demand for grains combined to push world grain prices to 8-year highs. USDA corn and soybean cash price indices closed the year 70% and 66% above pre-pandemic levels, respectively. Cattle and dairy prices are the only major agricultural commodities with continued pressure on prices, but both sectors are above 90% of pre-pandemic price levels in April 2021. During 2020, Congress provided a significant amount of emergency assistance through direct payments to producers, food support funding, and other measures to support the food supply chain. An estimated \$13 billion of that funding is scheduled to be disbursed in 2021.

The rebound in commodity prices combined with extensive government support payments led to a large increase in sector-wide profitability for 2020. USDA projections for net farm income and net cash farm income in 2020 are the highest levels since 2013 at \$121.1 billion and \$136.2 billion, respectively. An average year generates approximately \$100 billion in net farm income, so both 2020 metrics are well above historical averages. A small decline in cash expenses due to a reduction in interest expense added to improved profitability. Animal protein and specialty crop producers did not fully participate in the increased profitability, as higher labor, feed, and other input costs partially offset any gains in cash receipts. Early USDA estimates for 2021 show a stable income outlook of \$111.4 billion in net farm income and \$128.3 billion in net cash farm income. Higher commodity prices are estimated to offset lower projected government payments in 2021. Higher profitability and lower overall interest rates allow sector participants to refinance and restructure their balance sheets with more favorable terms, driving deal flow and lender competition.

Farmland values held steady throughout the first half of 2020 after rising at approximately the rate of inflation for the last two years. Data released in August 2020 by the USDA indicates an average increase in farm real estate values of 0.2% in 2020 in Corn Belt states (Illinois, Indiana, Iowa, Missouri, and Ohio), but a decrease of 2.3% in Northern Plains states (Kansas, Nebraska, North Dakota, and South Dakota). In all other regions, farmland value averages are reported to be flat to increasing. The COVID-19 pandemic slowed public auctions and sales in the first half of 2020, but transactions picked up in the third and fourth quarters, and values trended higher in the fourth quarter. An improved profitability outlook combined with low market interest rates provided support for land values in fourth guarter 2020 and first guarter 2021. Early estimates from the USDA show a 2% increase in farm real estate in 2021. The Federal Reserve Bank of Chicago AgLetter reported a 4% gain in farmland values in the Seventh District (primarily Iowa, Indiana, Illinois, and Wisconsin) in fourth quarter 2020 alone. Data from the Federal Reserve Bank of Kansas City show a similar rise in land values in the Tenth District (primarily Kansas, Missouri, Nebraska, and Oklahoma). Historically, rising farm real estate values are paired with an increase in real estate-secured debt. While regional averages for farmland values provide a good barometer for the overall movement in U.S. farmland values, economic forces affecting land markets are highly localized, and some markets may experience greater volatility than state or national averages indicate.

As a result of improved profitability and an injection of working capital into the sectors, Farmer Mac's 90day delinquencies and substandard assets levels improved in first quarter 2021 relative to first quarter 2020. Thirty-nine percent of the loans past due 90-days or more in the fourth quarter 2020 cured or paid off by March 31, 2021. The overall delinquency rate rose from 0.54% of the Farm & Ranch portfolio as of December 31, 2020 to 0.84% of the Farm & Ranch portfolio by March 31, 2021, but that increase is consistent with the seasonal rise historically observed during the first quarter of each year due to the large percentage of loans with January 1 payment due dates. Compared to first quarter 2020, the delinquency rate has fallen by 18 basis points (from 1.04% in 2020). However, the ongoing COVID-19 pandemic and the potential for continued economic stress increase the level of uncertainty inherent in the agricultural credit sector and could alter the trajectory of the current agricultural cycle. A virus resurgence or another economic disruption may result in elevated loan delinquencies and a higher percentage of loans rated substandard. Farmer Mac believes that its portfolio continues to be highly diversified, both geographically and by commodity, and that its portfolio has been underwritten to high credit quality standards. Therefore, Farmer Mac believes that its portfolio is well-positioned to endure reasonably foreseeable volatility in commodity prices and farmland values. For more information about the loan balances, loan-to-value ratios, 90-day delinquencies, and substandard asset rate for the Farm & Ranch loans in Farmer Mac's portfolio as of March 31, 2021, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Management—Credit Risk—Loans and Guarantees."

Apart from the COVID-19 pandemic, three exogenous factors will continue to be a source of heightened uncertainty for the agricultural and food sectors: international trade, weather conditions, and state and federal farm policy. The U.S. agricultural sector has become increasingly dependent on foreign markets as a source of demand. Agriculture exports were strong in 2020, aided by a weaker U.S. dollar, a recovery in Chinese demand for grains and oilseeds, and better overall trade relations. These conditions continued to be positive in first quarter 2021. The U.S. experienced \$22 billion in severe weather disasters in 2020, the highest level in the 40 years tracked by the National Oceanic and Atmospheric Administration. Many of those events affected agriculture, including a midwestern derecho, western wildfires, and western drought. Federal crop insurance provides a strong mitigator against this risk, but farmers and ranchers face increasingly-severe weather incidents. For more information about the February 2021 "Texas arctic freeze," please refer to the separate section below.

<u>*Rural Utilities Industry*</u>. The rural energy industry has less cyclicality than the agricultural sector, but does trend with conditions in the general economy. According to data from the U.S. Energy Information Administration, electricity sales to commercial and industrial consumers dropped 8% in 2020 compared to 2019 as a result of the COVID-19 pandemic. However, residential sales during the same period were up 3% compared to 2019, as residents spent more time at home during state, local, and self-imposed quarantines. Electricity revenues in January 2021 increased 4% compared to January 2020, indicating a strong start to the year for both residential and industrial power sales. Overall economic conditions improved considerably in first quarter 2021, with improved employment, credit, and retail sales activity, but COVID-19 continues to threaten the depth and speed of the economic recovery. Through March 31, 2021, Farmer Mac had not observed material degradation in the financial performance of its Rural Utilities portfolio.

Prospects for loan growth within the rural utilities industry overall appear to be moderate in the near term, as ongoing normal-course capital expenditures related to maintaining and upgrading utility infrastructure continue at typical levels. Farmer Mac's future growth opportunities for financing the electric cooperative industry may be affected by the demand for electric power in rural areas, capital expenditures by electric cooperatives driven by regulatory or technological changes, the continuation of a low interest rate environment, and competitive dynamics within the rural utilities cooperative finance industry. In December 2020, the Federal Communications Commission's Rural Digital Opportunity Fund (RDOF) auction awarded \$9.2 billion in broadband-related operating cost subsidies to winning bidders. This may provide a catalyst for capital demands from rural electric cooperatives who seek to develop and deploy broadband services, as over \$1.5 billion in subsidies were awarded to various rural electric cooperatives. The cooperatives that were unsuccessful RDOF bidders also gained knowledge about the processes and technologies involved in broadband projects, which may enable them to develop broadband infrastructure. In particular, these capital needs may provide Farmer Mac with new financing opportunities with our existing customers.

The growth in renewable energy generation and deployment of energy storage technologies may help deepen Farmer Mac's relationships with existing customers through new business opportunities with them. This growth may also broaden Farmer Mac's customer base with cooperative lenders focused on lending to renewable cooperatives. In response to this growth, Farmer Mac has deployed new financing products tailored to the renewable energy sector, which represents a new market opportunity for Farmer Mac. Under this new initiative, Farmer Mac purchased solar and wind project participation interests totaling \$64 million from new and existing counterparties in 2020. Farmer Mac anticipates further growth in this area during 2021, with an additional \$22 million commitment closed in first quarter 2021. As of March 31,

2021, the total outstanding loan purchase balance of Farmer Mac's renewable energy financing portfolio was \$82.9 million.

Texas Arctic Freeze. Farmer Mac continues to monitor the ongoing effects of the extremely cold weather event that occurred during mid-February 2021 in the mid-south region, particularly in Texas, on both our agricultural and rural infrastructure portfolios. As of March 31, 2021, our agricultural portfolio exposure in Texas was approximately \$624 million, with cattle being the largest commodity exposure. We currently do not expect there to be material impacts from the freeze on this population of the Farmer Mac portfolio. As of March 31, 2021, our rural infrastructure portfolio exposure in Texas was approximately \$416 million and split between distribution and generation and transmission cooperatives. Many of these cooperatives were affected in some way by the arctic freeze such as obstacles in receiving fuel for power plants or the inability to obtain contracted electricity, which resulted in rolling blackouts across the state. We believe that the electric cooperatives in our portfolio located in Texas entered this period of stress in a strong financial position (including revolving lines of credit) to absorb cost increases. Many of these electric cooperatives have fuel or power cost pass-through provisions within their rate-making authority which provides flexibility to recoup market price fluctuations. It is unknown at this time what magnitude of cost pass-throughs will be required to pay for additional energy costs and whether there will be new regulatory barriers to implementing them. We believe that the current internal risk ratings applied to our rural infrastructure portfolio reflect the elevated financial stress resulting from the Texas freeze and elevated energy costs.

Legislative and Regulatory Outlook. Democrats took control of the White House, the U.S. House of Representatives, and the U.S. Senate in 2021. Party control has not historically correlated with the availability of government farm payments. However, other changes in regulatory or tax policies stemming from the change in control could affect Farmer Mac or the U.S. agricultural and food sectors. Farmer Mac continues to monitor legislative and regulatory changes that could affect Farmer Mac or its stakeholders, including:

- On March 11, 2021, President Biden signed into law the American Rescue Plan Act of 2021, which authorized the USDA to provide debt relief to socially disadvantaged producers who had outstanding principal balances on Farm Service Agency ("FSA") loans as of January 1, 2021. We estimate that approximately 3% to 8% of Farmer Mac's USDA Securities that comprise FSA loans may be eligible for this program, which could result in an accelerated rate of prepayments when the provision is fully implemented. The aggregate outstanding principal balance of all of Farmer Mac's USDA Securities comprising FSA loans was \$2.6 billion as of March 31, 2021.
- On March 31, 2021, President Biden announced as part of the American Jobs Plan a proposal to increase the U.S. corporate tax rate from the current rate of 21%. Farmer Mac expects that any such tax increase would likely apply to Farmer Mac and could result in decreased profitability.
- FCA's three-member Board currently has a vacancy as well as a sitting member whose term expired in 2018. We expect that President Biden will nominate individuals to fill these seats as early as 2021, with the potential for a two-thirds turnover of the FCA Board composition in a short time frame, which could affect Farmer Mac's regulatory environment.

Balance Sheet Review

The following table summarizes the balance sheet as of the periods indicated:

Table 23

		As	s of			ge	
	Ν	farch 31, 2021	De	ecember 31, 2020		\$	%
				(in thousands)			
Assets							
Cash and cash equivalents	\$	1,012,541	\$	1,033,941	\$	(21,400)	(2)%
Investment securities, net of allowance		3,855,067		3,898,724		(43,657)	(1)%
Farmer Mac Guaranteed Securities, net of allowance		7,922,001		8,123,493		(201,492)	(2)%
USDA Securities		2,495,078		2,480,321		14,757	1 %
Loans, net of allowance		7,327,891		7,248,990		78,901	1 %
Loans held in trusts, net of allowance		1,173,739		1,286,156		(112,417)	(9)%
Other		227,594		283,876		(56,282)	(20)%
Total assets	\$	24,013,911	\$	24,355,501	\$	(341,590)	(1)%
Liabilities							
Notes Payable		21,560,310		21,848,917		(288,607)	(1)%
Debt securities of consolidated trusts held by third parties		1,188,521		1,323,786		(135,265)	(10)%
Other		187,588		190,321		(2,733)	(1)%
Total liabilities	\$	22,936,419	\$	23,363,024	\$	(426,605)	(2)%
Total equity		1,077,492		992,477		85,015	9 %
Total liabilities and equity	\$	24,013,911	\$	24,355,501	\$	(341,590)	(1)%

<u>Assets</u>. The decrease in total assets was primarily attributable to the maturity of Farmer Mac Guaranteed Securities and the receipt of other principal payments.

Liabilities. The decrease in total liabilities was primarily due to a decrease in total notes payable, mainly driven by a decreased collateral posting requirement in our cleared derivatives portfolio.

Equity. The increase in total equity was primarily due to increased accumulated other comprehensive income and retained earnings.

Risk Management

Credit Risk - Loans and Guarantees.

Farm & Ranch

Farmer Mac's direct credit exposure to Farm & Ranch loans held and loans underlying Farm & Ranch Guaranteed Securities and LTSPCs as of March 31, 2021 was \$8.6 billion across 48 states. Farmer Mac applies credit underwriting standards and methodologies to help assess exposures to Farm & Ranch loans, which may include collateral valuation, financial metrics, and other appropriate borrower financial and credit information. For larger loan exposures to agriculture production and agribusinesses that support agriculture production, food and fiber processing, and other supply chain production, which may have different risk profiles, Farmer Mac has implemented methodologies and parameters that help assess credit risk based on the appropriate sector, borrower construct, and transaction complexity. For more information

about Farmer Mac's underwriting and collateral valuation standards for Farm & Ranch loans, see "Business—Farmer Mac's Lines of Business—Farm & Ranch—Underwriting and Collateral Standards" in Farmer Mac's 2020 Annual Report.

Farmer Mac has indirect credit exposure to the Farm & Ranch loans that secure AgVantage securities included in the Institutional Credit line of business. As of March 31, 2021, Farmer Mac had not experienced any credit losses on any AgVantage securities. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Management—Credit Risk—Institutional" for more information about Farmer Mac's credit risk on AgVantage securities.

Farmer Mac considers a loan's original loan-to-value ratio as one of many factors in evaluating loss severity. Loan-to-value ratios depend on the market value of a property, as determined in accordance with Farmer Mac's collateral valuation standards. As of March 31, 2021 and December 31, 2020, the average unpaid principal balances for loans outstanding in the Farm & Ranch line of business was \$752,000 and \$742,000, respectively. Farmer Mac calculates the "original loan-to-value" ratio of a loan by dividing the original loan principal balance by the original appraised property value. This calculation does not reflect any amortization of the original loan balance or any adjustment to the original appraised value to provide a current market value. The original loan-to-value ratio of any cross-collateralized loans is calculated on a combined basis rather than on a loan-by-loan basis. The weighted-average original loan-to-value ratio for Farm & Ranch loans purchased during first quarter 2021 was 53%, compared to 54% for loans purchased during first quarter 2020. The weighted-average original loan-to-value ratio for all Farm & Ranch loans held and all loans underlying off-balance sheet Farm & Ranch Guaranteed Securities and LTSPCs was 52% as of both March 31, 2021 and December 31, 2020. The weighted-average original loan-to-value ratio for all 90-day delinquencies was 52% and 50% as of March 31, 2021 and December 31, 2020, respectively.

The weighted-average current loan-to-value ratio (the loan to-value ratio based on original appraised value and current outstanding loan amount adjusted to reflect amortization) for Farm & Ranch loans held and loans underlying off-balance sheet Farm & Ranch Guaranteed Securities and LTSPCs was 46% as of both March 31, 2021 and December 31, 2020.

For more information about the credit quality of Farmer Mac's Farm & Ranch portfolio and the associated allowance for losses please refer to Note 5 to the consolidated financial statements. Activity affecting the allowance for loan losses and reserve for losses is discussed in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations—Provision for and Release of Allowance for Loan Losses and Reserve for Losses."

Farmer Mac's 90-day delinquency measure includes loans 90 days or more past due, as well as loans in foreclosure and non-performing loans where the borrower is in bankruptcy. As of March 31, 2021, Farmer Mac's 90-day delinquencies were \$72.3 million (0.84% of the Farm & Ranch portfolio), compared to \$46.2 million (0.54% of the Farm & Ranch portfolio) as of December 31, 2020. Those 90-day delinquencies were comprised of 55 delinquent loans as of March 31, 2021, compared to 38 delinquent loans as of December 31, 2020. The increase in 90-day delinquencies was primarily driven by three commodity groups – crops, permanent plantings, and livestock. The top ten borrower exposures over 90 days delinquent represented over half of the 90-day delinquencies as of March 31, 2021. Farmer Mac believes that it remains adequately collateralized on its delinquent loans. Loans under COVID-19 deferment are not considered past due and are not included in our 90-day delinquent loan statistics until after those loans have exited their deferment period and remain unpaid for 90 or more days. As of

March 31, 2021, \$3.6 million of loans that have exited a COVID-19 deferment period were 90 or more days delinquent.

Our 90-day delinquency rate as of March 31, 2021 was below Farmer Mac's historical average. In the near-term, our delinquency rate may exceed our historical average due to the impact of the COVID-19 pandemic on the agricultural economy. Farmer Mac's average 90-day delinquency rate as a percentage of its Farm & Ranch portfolio over the last 15 years is approximately 1%. The highest 90-day delinquency rate observed during that period occurred in 2009 at approximately 2%, which coincided with increased delinquencies in loans within Farmer Mac's ethanol loan portfolio.

The following table presents historical information about Farmer Mac's 90-day delinquencies in the Farm & Ranch line of business compared to the unpaid principal balance of all Farm & Ranch loans held and loans underlying off-balance sheet Farm & Ranch Guaranteed Securities and LTSPCs:

	Farm & Ranch Line of Business	90-Day Delinquencies	Percentage
	(do	ollars in thousands)	
As of:			
March 31, 2021	\$ 8,629,352	\$ 72,346	0.84 %
December 31, 2020	8,581,181	46,232	0.54 %
September 30, 2020	8,249,349	88,041	1.07 %
June 30, 2020	8,017,850	68,682	0.86 %
March 31, 2020	7,811,594	79,722	1.02 %
December 31, 2019	7,776,950	60,954	0.78 %
September 30, 2019	7,393,728	59,691	0.81 %
June 30, 2019	7,291,352	28,045	0.38 %
March 31, 2019	7,215,585	52,366	0.73 %

Table 24

Across all of Farmer Mac's lines of business, 90-day delinquencies represented 0.33% of total outstanding business volume as of March 31, 2021, compared to 0.21% as of December 31, 2020 and 0.37% as of March 31, 2020.

The following table presents outstanding Farm & Ranch loans held and loans underlying LTSPCs and offbalance sheet Farm & Ranch Guaranteed Securities and 90-day delinquencies as of March 31, 2021 by year of origination, geographic region, commodity/collateral type, original loan-to-value ratio, and range in the size of borrower exposure:

Table 25

Farm & Ranch 90-Day Delinquencies as of March 31, 2021

	Distribution of Farm & Ranch Line of Business	Farm & Ranch Line of Business	90-Day Delinquencies ⁽¹⁾	Percentage
		(dollars in the	ousands)	
By year of origination:				
2011 and prior	7 %	. ,		0.54 %
2012	3 %	291,405	1,320	0.45 %
2013	5 %	426,275	1,321	0.31 %
2014	4 %	342,452	2,651	0.77 %
2015	6 %	489,745	1,667	0.34 %
2016	9%	778,328	18,886	2.43 %
2017	9%	774,413	18,893	2.44 %
2018	9%	761,840	14,664	1.92 %
2019 2020	13 % 27 %	1,093,292	9,448	0.86 %
2020	8 %	2,360,350		— 7 — 9
Total	100 %	667,425 \$ 8,629,352	\$ 72,346	0.84 %
By geographic region ⁽²⁾ :	100 /0	\$ 0,027,552	φ 72,540	0.01 /
Northwest	12 %	\$ 1,063,271	\$ 4,881	0.46 %
Southwest	35 %	3,005,755	17,575	0.58 %
Mid-North	28 %	2,450,152	26,632	1.09 %
Mid-South	13 %	1,073,786	5,828	0.54 %
Northeast	4 %	376,918	4,401	1.17 %
Southeast	8 %	659,470	13,029	1.98 %
Total	100 %	\$ 8,629,352	\$ 72,346	0.84 %
By commodity/collateral type:				
Crops	50 %	\$ 4,342,438	\$ 40,046	0.92 %
Permanent plantings	24 %	2,027,821	12,233	0.60 %
Livestock	18 %	1,562,561	11,531	0.74 %
Part-time farm	6 %	521,271	1,036	0.20 %
Ag. Storage and Processing	2 %	169,651	7,500	4.42 %
Other		5,610		%
Total	100 %	\$ 8,629,352	\$ 72,346	0.84 %
By original loan-to-value ratio:				
0.00% to 40.00%	16 %	\$ 1,393,420	\$ 4,873	0.35 %
40.01% to 50.00%	24 %	2,048,138	27,326	1.33 %
50.01% to 60.00%	36 %	3,083,413	29,607	0.96 %
60.01% to 70.00%	21 %	1,776,879	10,540	0.59 %
70.01% to 80.00% ⁽³⁾	3 %	299,213	_	%
80.01% to 90.00% ⁽³⁾	— %	28,289		<u> </u>
Total	100 %	\$ 8,629,352	\$ 72,346	0.84 %
By size of borrower exposure ⁽⁴⁾ :				
Less than \$1,000,000	29 %	\$ 2,461,260	\$ 10,754	0.44 %
\$1,000,000 to \$4,999,999	34 %	2,962,500	33,794	1.14 %
\$5,000,000 to \$9,999,999	15 %	1,346,171	27,798	2.06 %
\$10,000,000 to \$24,999,999	13 %	1,088,403		%
\$25,000,000 and greater	9 %	771,018		<u> </u>
Total	100 %	\$ 8,629,352	\$ 72,346	0.84 %

(1) Includes loans held and loans underlying off-balance sheet Farm & Ranch Guaranteed Securities and LTSPCs that are 90 days or more past due, in foreclosure, or in bankruptcy with at least one missed payment, excluding loans performing under either their original loan terms or a court-approved bankruptcy plan.

⁽²⁾ Geographic regions: Northwest (AK, ID, MT, OR, WA, WY); Southwest (AZ, CA, CO, HI, NM, NV, UT); Mid-North (IA, IL, IN, MI, MN, NE, ND, SD, WI); Mid-South (AR, KS, LA, MO, OK, TX); Northeast (CT, DE, KY, MA, MD, ME, NH, NJ, NY, OH, PA, RI, VA, VT, WV); Southeast (AL, FL, GA, MS, NC, SC, TN).

⁽³⁾ Primarily part-time farm loans. Loans with an original loan-to-value ratio of greater than 80% are required to have private mortgage insurance.

⁽⁴⁾ Includes aggregated loans to single borrowers or borrower-related entities.

Another indicator that Farmer Mac considers in analyzing the credit quality of its Farm & Ranch portfolio is the level of internally-rated "substandard" assets, both in dollars and as a percentage of the outstanding Farm & Ranch portfolio. Assets categorized as "substandard" have a well-defined weakness or weaknesses, and there is a distinct possibility that some loss will be sustained if deficiencies are not corrected. As of March 31, 2021, Farmer Mac's substandard assets were \$321.7 million (3.7% of the Farm & Ranch portfolio), compared to \$291.5 million (3.4% of the Farm & Ranch portfolio) as of December 31, 2020. Those substandard assets were comprised of 354 loans as of March 31, 2021 and 343 loans as of December 31, 2020.

The increase of \$30.2 million in substandard assets during first quarter 2021 was primarily driven by credit downgrades in our on-balance sheet portfolio, partially offset by payoffs in our off-balance sheet portfolio during the year. Substandard assets increased as a percentage of the total on-balance sheet portfolio primarily due to the credit downgrades in our on-balance sheet portfolio. Substandard assets decreased as a percentage of the total off-balance sheet portfolio primarily due to payoffs in our off-balance sheet portfolio.

The percentage of substandard assets within the portfolio as of March 31, 2021 was slightly below the historical average. Farmer Mac's average substandard assets as a percentage of its Farm & Ranch portfolio over the last 15 years is approximately 4%. The highest substandard asset rate observed during the last 15 years occurred in 2010 at approximately 8%, which coincided with an increase in substandard loans within Farmer Mac's ethanol portfolio. If Farmer Mac's substandard asset rate increases from current levels, it is likely that Farmer Mac's provision to the allowance for loan losses and the reserve for losses will also increase.

Although some credit losses are inherent to the business of agricultural lending, Farmer Mac believes that losses associated with the current agricultural credit cycle will be moderated by the strength and diversity of its portfolio, which Farmer Mac believes is adequately collateralized.

The following table presents the current loan-to-value ratios for the Farm & Ranch portfolio, as disaggregated by internally assigned risk ratings:

	 Acceptable	Spee	cial Mention	Sı	ıbstandard	 Total
			(in tho			
Current loan-to-value ratio ⁽¹⁾ :						
0.00% to 40.00%	\$ 2,566,172	\$	65,193	\$	106,760	\$ 2,738,125
40.01% to 50.00%	2,117,826		81,314		73,913	2,273,05
50.01% to 60.00%	2,032,576		108,101		83,869	2,224,54
60.01% to 70.00%	1,040,848		49,168		29,810	1,119,82
70.01% to 80.00%	230,227		15,628		17,734	263,58
80.01% and greater	393		245		9,575	10,21
Total	\$ 7,988,042	\$	319,649	\$	321,661	\$ 8,629,35

Table 26

(1) The current loan-to-value ratio is based on original appraised value (or most recently obtained appraisal, if available) and current outstanding loan amount adjusted to reflect loan amortization.

The following table presents Farmer Mac's cumulative net credit losses relative to the cumulative original balance for all Farm & Ranch loans purchased and loans underlying LTSPCs and off-balance sheet Farm & Ranch Guaranteed Securities as of March 31, 2021 by year of origination, geographic region, and commodity/collateral type. The purpose of this information is to present information about realized losses relative to original Farm & Ranch purchases, guarantees, and commitments.

Table 27

	& Ranch Credit Losses Relations, Guarantees, and LTSP		2021		
	Cumulativ	ve Original Loans, ees and LTSPCs	Cur Cre	nulative Net edit Losses/ ecoveries)	Cumulative Loss Rate
		(doi	lars in th	ousands)	
By year of origination:					
2011 and prior	\$	16,095,048	\$	33,785	0.21 %
2012		1,157,760		—	%
2013		1,460,375		_	— %
2014		1,032,953		_	— %
2015		1,197,566		(516)	(0.04)%
2016		1,493,794		_	— %
2017		1,578,674		5,365	0.34 %
2018		1,291,175		—	%
2019		1,488,791		_	%
2020		2,686,201			%
2021		724,054			%
Total	\$	30,206,391	\$	38,634	0.13 %
By geographic region ⁽¹⁾ :					
Northwest	\$	3,910,347	\$	11,191	0.29 %
Southwest		10,690,637		8,542	0.08 %
Mid-North		7,610,686		18,219	0.24 %
Mid-South		3,760,786		(613)	(0.02)%
Northeast		1,671,798		323	0.02 %
Southeast		2,562,137		972	0.04 %
Total	\$	30,206,391	\$	38,634	0.13 %
By commodity/collateral type:					
Crops	\$	13,948,681	\$	2,887	0.02 %
Permanent plantings		6,750,384		9,783	0.14 %
Livestock		6,712,014		3,836	0.06 %
Part-time farm		1,764,354		1,090	0.06 %
Ag. Storage and Processing		877,017		21,038	2.40 %
Other		153,941			— %
Total	\$	30,206,391	\$	38,634	0.13 %

⁽¹⁾ Geographic regions: Northwest (AK, ID, MT, OR, WA, WY); Southwest (AZ, CA, CO, HI, NM, NV, UT); Mid-North (IA, IL, IN, MI, MN, NE, ND, SD, WI); Mid-South (AR, KS, LA, MO, OK, TX); Northeast (CT, DE, KY, MA, MD, ME, NH, NJ, NY, OH, PA, RI, VA, VT, WV); Southeast (AL, FL, GA, MS, NC, SC, TN).

Analysis of portfolio performance indicates that commodity type is the primary determinant of Farmer Mac's exposure to loss on a given loan. The following tables present concentrations of Farm & Ranch loans held and loans underlying LTSPCs and off-balance sheet Farm & Ranch Guaranteed Securities by commodity type within geographic region and cumulative credit losses by origination year and commodity type:

Table 28

		As of March 31, 2021											
		Farm & Ranch	Concentrations	by Commodity	Type within Geogra	phic Region							
	Crops	Permanent Plantings	Livestock	Part-time Farm	Ag. Storage and Processing	Other	Total						
			(de	ollars in thouse	unds)								
By geographic region ⁽¹⁾ :													
Northwest	\$ 507,501	\$ 178,946	\$ 267,768	\$103,637	\$ 5,361	\$ 58	\$1,063,271						
	5.9 %	2.1 %	3.1 %	1.2 %	0.1 %	%	12.4 %						
Southwest	711,434	1,554,243	557,307	95,333	83,992	3,446	3,005,755						
	8.2 %	18.0 %	6.5 %	1.1 %	1.0 %	%	34.8 %						
Mid-North	2,065,517	9,197	214,730	115,413	43,474	1,821	2,450,152						
	23.9 %	0.1 %	2.5 %	1.3 %	0.5 %	%	28.3 %						
Mid-South	649,665	44,732	304,961	68,013	6,396	19	1,073,786						
	7.6 %	0.5 %	3.5 %	0.8 %	0.1 %	%	12.5 %						
Northeast	182,893	47,568	78,070	65,041	3,346		376,918						
	2.1 %	0.6 %	0.9 %	0.8 %	<u> </u>	%	4.4 %						
Southeast	225,428	193,135	139,725	73,834	27,082	266	659,470						
	2.6 %	2.2 %	1.6 %	0.9 %	0.3 %	%	7.6 %						
Total	\$ 4,342,438	\$ 2,027,821	\$1,562,561	\$521,271	\$ 169,651	\$ 5,610	\$8,629,352						
	50.3 %	23.5 %	18.1 %	6.1 %	2.0 %	%	100.0 %						

⁽¹⁾ Geographic regions: Northwest (AK, ID, MT, OR, WA, WY); Southwest (AZ, CA, CO, HI, NM, NV, UT); Mid-North (IA, IL, IN, MI, MN, NE, ND, SD, WI); Mid-South (AR, KS, LA, MO, OK, TX); Northeast (CT, DE, KY, MA, MD, ME, NH, NJ, NY, OH, PA, RI, VA, VT, WV); Southeast (AL, FL, GA, MS, NC, SC, TN).

Table 29

	As of March 31, 2021										
	Farm &	& Rar	ich Cumula	tive	Credit Los	ses l	by Originat	ion `	Year and Commo	odity	Туре
	 Crops	Permanent Plantings		Livestock		Part-time Farm		Ag. Storage and Processing			Total
					(in	tho	usands)				
By year of origination:											
2011 and prior	\$ 3,427	\$	9,783	\$	3,836	\$	1,066	\$	15,673	\$	33,785
2012	_		_		_		—		_		_
2013											_
2.014	—		—		—		—				_
2015	(540)						24				(516)
2016	—		—		—		—				_
2017									5,365		5,365
2018	_				_				—		_
2019											_
2020	_				_				_		_
2021			_				_				_
Total	\$ 2,887	\$	9,783	\$	3,836	\$	1,090	\$	21,038	\$	38,634

COVID-19

Farmer Mac continues to monitor the effects of the COVID-19 pandemic on Farmer Mac's credit risk related to Farmer Mac's borrower exposures. During first quarter 2021, Farmer Mac experienced a significant decrease in payment deferment requests from borrowers. As of March 31, 2021, we had executed cumulative COVID-19 payment deferments on loans with unpaid principal balances of \$333.3 million (i.e., net of payoffs and paydowns) in the Farm & Ranch portfolio, which represented 1.52% of our total outstanding business volume. As of March 31, 2021, deferments on \$276.7 million aggregate unpaid principal balance of Farm & Ranch loans had expired, of which \$273.1 million are current as of the date of this report. As of March 31, 2021, loans with approximately \$56.6 million of unpaid principal balance are still in deferment in the Farm & Ranch portfolio. These unpaid principal balances exclude deferments in our USDA Securities portfolio because those assets are backed by the full faith and credit of the United States government. Deferred interest on loans under COVID-19 deferment is capitalized into the loan balance at the end of the deferment period.

Rural Utilities

Farmer Mac's direct credit exposure to Rural Utilities loans held and loans underlying LTSPCs as of March 31, 2021 was \$2.8 billion across 45 states. For more information about Farmer Mac's underwriting and collateral valuation standards for Rural Utilities loans, see "Business—Farmer Mac's Lines of Business—Rural Utilities—Underwriting" in Farmer Mac's 2020 Annual Report. As of March 31, 2021, there were no delinquencies in Farmer Mac's portfolio of Rural Utilities loans.

Farmer Mac has indirect credit exposure to Rural Utilities loans that secure AgVantage securities included in the Institutional Credit line of business. As of March 31, 2021, Farmer Mac had not experienced any credit losses on any AgVantage securities. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Management—Credit Risk—Institutional" for more information about Farmer Mac's credit risk on AgVantage securities. Farmer Mac evaluates credit risk for these assets by reviewing a variety of borrower credit risk characteristics. These characteristics can include (but is not limited to) financial metrics, internal risk ratings, ratings assigned by ratings agencies, types of customers served, sources of power supply, and the regulatory environment.

The following table presents Farmer Mac's portfolio of generation and transmission ("G&T") and distribution cooperative borrowers, as well as renewable energy loans, disaggregated by internally assigned risk ratings.

Table 30

	ŀ	Rural Utilities po	rtfol	io by internally as	ssigned risk rating as	s of	f Marc	h 31, 2021
		Acceptable	S	pecial Mention	Substandard			Total
				(in tho	usands)			
Distribution Cooperative	\$	2,087,849	\$	—	\$	-	\$	2,087,849
G&T Cooperative		599,140		23,600		-		622,740
Renewable Energy		93,848				-		93,848
Rural Utilities Total	\$	2,780,837	\$	23,600	\$	-	\$	2,804,437

For more information about the credit quality of Farmer Mac's Rural Utilities portfolio and the associated allowance for losses please refer to Notes 5 and 6 of the consolidated financial statements.

Other Considerations Regarding Credit Risk Related to Loans and Guarantees

The credit exposure on USDA Securities, including those underlying Farmer Mac Guaranteed USDA Securities, is guaranteed by the full faith and credit of the United States. Therefore, Farmer Mac believes that we have little or no credit risk exposure in the USDA Guarantees line of business because of the USDA guarantee. As of March 31, 2021, Farmer Mac had not experienced any credit losses on any securities under the USDA Guarantees line of business and does not expect to incur any such losses in the future. Because we do not expect credit losses on this portfolio, Farmer Mac does not provide an allowance for losses on its portfolio of USDA Securities.

Farmer Mac requires most approved lenders to make representations and warranties about the conformity of eligible agricultural mortgage and Rural Utilities loans to Farmer Mac's standards, the accuracy of loan data provided to Farmer Mac, and other requirements related to the loans. Sellers who make these representations and warranties are responsible to Farmer Mac for breaches of those representations and warranties. Farmer Mac has the ability to require a seller to cure, replace, or repurchase a loan sold or transferred to Farmer Mac if any breach of a representation or warranty is discovered that was material to Farmer Mac's decision to purchase the loan or that directly or indirectly causes a default or potential loss on a loan sold or transferred by the seller to Farmer Mac. During the previous three years ended March 31, 2021, there have been no breaches of representations and warranties by sellers that resulted in Farmer Mac requiring a seller to cure, replace, or repurchase a loan. In addition to relying on the representations and warranties of sellers, Farmer Mac also underwrites the agricultural real estate mortgage loans (other than rural housing and part-time farm mortgage loans) and Rural Utilities loans on which it has direct credit exposure. For rural housing and part-time farm mortgage loans, Farmer Mac relies on representations and warranties from the seller that those loans conform to Farmer Mac's specified underwriting criteria without exception. For more information about Farmer Mac's loan eligibility requirements and underwriting standards, see "Business-Farmer Mac's Lines of Business-Farm & Ranch-Loan Eligibility,"

"Business—Farmer Mac's Lines of Business—Farm & Ranch—Underwriting and Collateral Standards," "Business—Farmer Mac's Lines of Business—Rural Utilities—Loan Eligibility," and "Business—Farmer Mac's Lines of Business—Rural Utilities—Underwriting and Collateral Standards" in Farmer Mac's 2020 Annual Report.

Under contracts with Farmer Mac and in consideration for servicing fees, Farmer Mac-approved servicers service loans in accordance with Farmer Mac's requirements. Servicers are responsible to Farmer Mac for serious errors in the servicing of those loans. If a servicer materially breaches the terms of its servicing agreement with Farmer Mac, such as failing to forward payments received or releasing collateral without Farmer Mac's consent, or experiences insolvency or bankruptcy, the servicer is responsible for any corresponding damages to Farmer Mac and, in most cases, Farmer Mac has the right to terminate the servicing relationship for a particular loan or the entire portfolio serviced by the servicer. Farmer Mac also can proceed against the servicer in arbitration or exercise any remedies available to it under law. During the previous three years ended March 31, 2021, Farmer Mac had not exercised any remedies or taken any formal action against any servicers. For more information about Farmer Mac's servicing requirements, see "Business—Farmer Mac's Lines of Business—Farmer Mac's 2020 Annual Report.

<u>Credit Risk – Institutional</u>. Farmer Mac is exposed to credit risk arising from its business relationships with other institutions, which include:

- issuers of AgVantage securities;
- approved lenders and servicers; and
- interest rate swap counterparties.

Farmer Mac approves AgVantage counterparties and manages institutional credit risk related to those AgVantage counterparties by requiring them to meet Farmer Mac's standards for creditworthiness for the particular counterparty type and transaction. The required collateralization level is established when the AgVantage facility is entered into with the counterparty and does not change during the life of the AgVantage securities issued under the facility without Farmer Mac's consent. In AgVantage transactions, the corporate obligor is typically required to remove from the pool of pledged collateral loans that become and remain (within specified parameters) delinquent in the payment of principal or interest and to substitute eligible loans that are current in payment or pay down the AgVantage securities to maintain the minimum required collateralization level. Since the onset of the COVID-19 pandemic, Farmer Mac has approved payment deferments on loans collateralizing AgVantage securities, allowing the AgVantage counterparty to keep these loans in its collateral pool without replacing them. The criteria currently in place for approving payment deferments for these loans is similar to the criteria Farmer Mac has established for loans in its Farm & Ranch portfolio that are affected by the COVID-19 pandemic.

In the event of a default on an AgVantage security, Farmer Mac would have recourse to the pledged collateral and have rights to the ongoing borrower payments of principal and interest. For Farm Equity AgVantage counterparties and smaller financial funds or entities, Farmer Mac also requires that the counterparty generally (1) maintain a higher collateralization level either through a higher overcollateralization percentage or through lower loan-to-value ratio thresholds and (2) comply with specified financial covenants for the life of the related AgVantage security to avoid default. For a more detailed description of AgVantage securities, see "Business—Farmer Mac's Lines of Business—Institutional Credit" in Farmer Mac's 2020 Annual Report.

The unpaid principal balance of outstanding on-balance sheet AgVantage securities secured by loans eligible for the Farm & Ranch line of business totaled \$5.0 billion as of March 31, 2021 and \$5.2 billion as of December 31, 2020. The unpaid principal balance of on-balance sheet AgVantage securities secured by loans eligible for the Rural Utilities line of business totaled \$2.7 billion as of March 31, 2021 and \$2.6 billion as of December 31, 2020. The unpaid principal balance of outstanding off-balance sheet AgVantage securities totaled \$4.4 million as of March 31, 2021 and \$4.4 million as of December 31, 2020.

The following table provides information about the issuers of AgVantage securities and the required collateralization levels for those transactions as of March 31, 2021 and December 31, 2020:

	 As of Ma	rch 31, 2021		As of December 31, 2020			
Counterparty	Balance	Required Collateralization		Balance	Required Collateralization		
		(dollars in	thou.	sands)			
AgVantage:							
CFC	\$ 2,672,246	100%	\$	2,570,249	100%		
MetLife	2,350,000	103%		2,375,000	103%		
Rabo AgriFinance	1,875,000	110%		2,050,000	110%		
Other ⁽¹⁾	549,763	106% to 125%		551,654	106% to 125%		
Farm Equity AgVantage ⁽²⁾	194,668	110%		192,456	110%		
Total outstanding	\$ 7,641,677		\$	7,739,359			

Table 31

(1) Consists of AgVantage securities issued by 8 and 6 different issuers as of March 31, 2021 and December 31, 2020, respectively.

²⁾ Consists of AgVantage securities issued by 4 and 4 different issuers as of March 31, 2021 and December 31, 2020, respectively.

Farmer Mac manages institutional credit risk related to lenders and servicers by requiring those institutions to meet Farmer Mac's standards for creditworthiness. Farmer Mac monitors the financial condition of those institutions by evaluating financial statements and credit rating agency reports. For more information about Farmer Mac's lender eligibility requirements, see "Business—Farmer Mac's Lines of Business—Farm & Ranch—Lenders" and "Business—Farmer Mac's Lines of Business—Rural Utilities —Lenders" in Farmer Mac's 2020 Annual Report.

Farmer Mac manages institutional credit risk related to its interest rate swap counterparties through collateralization provisions contained in each of its swap agreements that vary based on the market value of its swap portfolio with each counterparty. Farmer Mac and its interest rate swap counterparties are required to fully collateralize their derivatives positions without any minimum threshold for cleared swap transactions, as well as for non-cleared swap transactions entered into after March 1, 2017. Farmer Mac transacts interest rate swaps with multiple counterparties to reduce counterparty credit exposure concentration. Farmer Mac's usage of cleared derivatives has increased over time as has its exposure to clearinghouses. The usage of cleared swap transactions reduces Farmer Mac's exposure to individual counterparties with the central clearinghouse acting to settle the change in value of contracts on a daily basis. Credit risk related to interest rate swap contracts is discussed in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Management—Interest Rate Risk" and Note 4 to the consolidated financial statements.

<u>Credit Risk – Other Investments</u>. As of March 31, 2021, Farmer Mac had \$1.0 billion of cash and cash equivalents and \$3.9 billion of investment securities. The management of the credit risk inherent in these investments is governed by Farmer Mac's internal policies as well as FCA regulations that establish

criteria for investments eligible for Farmer Mac's investment portfolio, including limitations on asset class, dollar amount, issuer concentration, and credit quality (the "Liquidity and Investment Regulations"). In addition to establishing a portfolio of highly liquid investments as an available source of cash, the goals of Farmer Mac's investment policies are designed to minimize Farmer Mac's exposure to financial market volatility, preserve capital, and support Farmer Mac's access to the debt markets.

The Liquidity and Investment Regulations and Farmer Mac's internal policies require that investments held in Farmer Mac's investment portfolio meet the following creditworthiness standards: (1) at a minimum, at least one obligor of the investment must have a very strong capacity to meet financial commitments for the life of the investment, even under severely adverse or stressful conditions, and generally present a very low risk of default; (2) if the obligor whose capacity to meet financial commitments is being relied upon to meet the standard set forth in subparagraph (1) is located outside of the United States, the investment must also be fully guaranteed by a U.S. government agency; and (3) the investment must exhibit low credit risk and other risk characteristics consistent with the purpose or purposes for which it is held.

The Liquidity and Investment Regulations and Farmer Mac's internal policies also establish concentration limits, which are intended to limit exposure to any single entity, issuer, or obligor. The Liquidity and Investment Regulations limit Farmer Mac's total credit exposure to any single entity, issuer, or obligor of securities to 10% of Farmer Mac's regulatory capital (\$104.3 million as of March 31, 2021). However, Farmer Mac's current policy limits this total credit exposure to 5% of its regulatory capital (\$52.2 million as of March 31, 2021). These exposure limits do not apply to obligations of U.S. government agencies or GSEs, although Farmer Mac's current policy restricts investing more than 100% of regulatory capital in the senior non-convertible debt securities of any one GSE.

Although the Liquidity and Investments Regulations do not establish limits on the maximum amount, expressed as a percentage of Farmer Mac's investment portfolio, that can be invested in each eligible asset class, Farmer Mac's internal policies set forth asset class limits as part of Farmer Mac's overall risk management framework.

Interest Rate Risk. Farmer Mac is subject to interest rate risk on all financial assets retained on its balance sheet because of timing differences in the cash flows due to maturity, paydown, or repricing of the assets and debt together with financial derivatives. This risk is primarily related to loans, loan participation interests, Farmer Mac Guaranteed Securities, USDA Securities, and certain investment securities due to the contractual right of borrowers to prepay their loans before the scheduled maturities. Cash flow mismatches due to changing interest rates can reduce the earnings of Farmer Mac if assets prepay sooner than expected and the resulting cash flows must be reinvested in lower-yielding investments when Farmer Mac's funding costs cannot be correspondingly reduced. Alternatively, Farmer Mac could see a drop in income if assets repay more slowly than expected in a rising interest rate environment and the associated debt must be replaced by higher-cost debt.

Interest Rate Risk Management

The goal of interest rate risk management at Farmer Mac is to manage the balance sheet in a manner that generates stable earnings and value across a variety of interest rate environments. Recognizing that interest rate sensitivity may change with the passage of time and as interest rates change, Farmer Mac regularly assesses this exposure and, if necessary, adjusts its portfolio of funded financial assets, debt, and financial derivatives.

Farmer Mac's objective is to maintain its exposure to interest rate risk within appropriate limits, as approved by Farmer Mac's board of directors. Farmer Mac's management-level Asset and Liability Committee ("ALCO") provides oversight, establishes guidelines, and approves strategies to maintain interest rate risk within the board-established limits.

Farmer Mac's primary strategy for managing interest rate risk is to fund asset purchases with debt that together with financial derivatives have similar duration and convexity characteristics and help to mitigate impacts from interest rates changes across the yield curve. As part of this debt issuance strategy, Farmer Mac seeks to issue debt securities across a variety of maturities that together with financial derivatives approximately align the debt and financial derivative cash flows with forecasted asset cash flows.

Farmer Mac issues discount notes and both callable and non-callable medium-term notes across a spectrum of maturities to execute its debt issuance strategy. Callable debt is issued to mitigate prepayment risk associated with certain funded financial assets held on balance sheet. In general, as interest rates decline, prepayments typically increase, and Farmer Mac is able to extinguish certain callable debt issuances. Therefore, these callable liabilities are reduced typically around the same time and by approximately the amount of asset prepayments. Furthermore, the interest rate sensitivities of the debt together with financial derivatives tend to increase or decrease as interest rates change in a manner that fully or partially offset similar changes in the interest rate sensitivities of the funded financial assets. In addition, Farmer Mac enters into financial derivatives, primarily interest rate swaps, to better match the durations of Farmer Mac's assets and liabilities, thereby reducing overall sensitivity to changing interest rates.

Taking into consideration the prepayment provisions and the default probabilities associated with its portfolio of retained assets, Farmer Mac incorporates behavioral prepayment models when projecting and valuing cash flows associated with these assets. Because borrowers' behaviors in various interest rate environments may change over time, Farmer Mac periodically evaluates the effectiveness of these models compared to actual prepayment experience and adjusts and refines the models as necessary to improve the precision of future prepayment forecasts.

Changes in interest rates may affect asset prepayment rates which may, in turn, impact durations and values of the assets. Declining interest rates generally increase prepayment rates, which shortens the duration of these assets, while rising interest rates tend to lower prepayments, thereby extending the duration of the assets.

Farmer Mac is subject to interest rate risk on loans and securities committed to acquire but has not yet purchased (other than delinquent loans purchased through LTSPCs or loans designated for securitization under a forward purchase agreement). When Farmer Mac commits to purchase these assets, it is exposed to interest rate risk between the time it commits to purchase the loans and the time it issues debt to fund the purchase of those loans. Farmer Mac manages the interest rate risk related to these loans by entering into exchange-traded futures contracts involving U.S. Treasury securities and other financial derivatives.

Farmer Mac's \$1.0 billion of cash and cash equivalents mature within three months and are generally funded with debt having similar maturities. As of March 31, 2021, \$3.5 billion of the \$3.9 billion of investment securities (92%) were floating rate securities with rates that adjust within one year or fixed rate securities with original maturities between three months and one year. Farmer Mac's floating rate investment securities are funded with floating rate debt that closely matches the rate adjustment frequency

of the associated investments. The fixed rate investment securities are generally funded in a manner consistent with Farmer Mac's overall funding strategy that approximates a duration and convexity match.

Interest Rate Risk Metrics

Farmer Mac regularly stress tests and runs simulations on its portfolio of financial assets and debt for interest rate risk and examines a variety of metrics to quantify and manage its interest rate risk. These metrics include sensitivity to interest rate movements of market value of equity ("MVE") and projected net effective spread ("NES") as well as duration gap analysis. MVE represents management's estimate of the present value of all future cash flows from on- and off-balance sheet assets, liabilities, and financial derivatives, discounted at current interest rates and appropriate spreads. However, MVE is not indicative of the market value of Farmer Mac as a going concern because these market values are theoretical and do not reflect future business activities. The MVE sensitivity analysis measures the degree to which the market values of Farmer Mac's assets, liabilities, and financial derivatives are estimated to change for a given change in interest rates. Because this analysis evaluates the effect of interest rate movements on the value of all future cash flows, this measure provides an evaluation of Farmer Mac's long-term interest rate risk.

Farmer Mac's NES simulation represents the difference between projected income over the next twelve months from the current portfolio of interest-earning assets and interest expense produced by the related funding, including associated financial derivatives. Farmer Mac's NES simulation may be impacted by changes in market interest rates resulting from timing differences between maturities and re-pricing characteristics of funded assets and debt together with the associated financial derivatives. The direction and magnitude of any such effect depends on the direction and magnitude of the change in interest rates across the yield curve as well as the composition of Farmer Mac's portfolio. The NES simulation represents an estimate of the net effective spread income that Farmer Mac's current portfolio is expected to produce over a twelve-month horizon. As a result, the NES simulation sensitivity statistics provide a short-term view of Farmer Mac's sensitivity to interest rate shocks.

Duration is a measure of a financial instrument's fair value sensitivity to small changes in interest rates. Duration gap is the net estimated durations of Farmer Mac's funded assets, debt, and financial derivatives. Because duration is a measure of fair value sensitivity, duration gap quantifies the extent to which estimated fair value sensitivities for funded assets, debt and financial derivatives are matched. Duration gap provides a relatively concise measure of the interest rate risk inherent in Farmer Mac's outstanding portfolio.

A positive duration gap denotes that the duration of Farmer Mac's funded assets is greater than the duration of its debt and financial derivatives. A positive duration gap indicates that fair value changes of Farmer Mac's funded assets is more sensitive to small interest rate movements than fair value changes of its debt and financial derivatives. Conversely, a negative duration gap indicates that fair value changes of Farmer Mac's funded assets are less sensitive to small interest rate movements than fair value changes of its debt and financial derivatives. A duration gap of zero indicates that with small changes in interest rate movements the fair value change of Farmer Mac's assets is effectively offset by the fair value change of its debt and financial derivatives.

Each of the interest rate metrics is produced using asset/liability models and is derived based on management's best estimates of factors such as forward interest rates across the yield curve, interest rate volatility, and asset prepayment speeds. Accordingly, these metrics are estimates rather than precise measurements. Actual results may differ to the extent there are material changes to Farmer Mac's financial

asset portfolio or changes in funding or hedging strategies undertaken to mitigate unfavorable sensitivities to interest rate changes.

The following schedule summarizes the results of Farmer Mac's MVE and NES sensitivity analysis as of March 31, 2021 and December 31, 2020 to an immediate and instantaneous uniform or "parallel" shift in the yield curve:

Table 32

	Percentage Change in MVE from Base Case						
Interest Rate Scenario ⁽¹⁾	As of March 31, 2021	As of December 31, 2020 ⁽¹⁾					
+100 basis points	1.5 %	4.9 %					
-100 basis points	— %	(0.2)%					
	Percentage Change in	NES from Base Case					
Interest Rate Scenario	As of March 31, 2021	As of December 31, 2020 ⁽¹⁾					
+100 basis points	4.0 %	3.9 %					
-100 basis points	— %	<u> </u>					

The down 100 basis points shock scenario was replaced in 2020 with a proportional shock relative to 50% of the 3-month Treasury bill rate, with the approval of the Financial Risk Committee of the Board of Directors. The replacement down shock scenario was negative 1 basis point as of March 31, 2021 and negative 4 basis points as of December 31, 2020.

As of March 31, 2021, Farmer Mac's effective duration gap was negative 0.1 months, compared to negative 1.6 months as of December 31, 2020. In 2020, Farmer Mac updated its duration gap measure to funded assets, debt, and financial derivatives. Interest rates within the yield curve steepened significantly during first quarter 2021 with the 2-year and 10-year U.S. Treasury Note yield-to-maturity increasing by approximately 4 basis points and 83 basis points, respectively, versus year-end 2020. This rate movement contributed to extending the duration of Farmer Mac's funded assets compared to its debt and financial derivatives, thereby narrowing Farmer Mac's duration gap.

Financial Derivatives Transactions

The economic effects of financial derivatives are included in Farmer Mac's MVE, NES, and duration gap analyses. Farmer Mac enters into the following types of financial derivative transactions principally to protect against risk from the effects of market price or interest rate movements on the value of funded assets, future cash flows, and debt issuance, and not for trading or speculative purposes:

- "pay-fixed" interest rate swaps, in which Farmer Mac pays fixed rates of interest to, and receives floating rates of interest from, counterparties;
- "receive-fixed" interest rate swaps, in which Farmer Mac receives fixed rates of interest from, and pays floating rates of interest to, counterparties; and
- "basis swaps," in which Farmer Mac pays variable rates of interest based on one index to, and receives variable rates of interest based on a different index from, counterparties.

As of March 31, 2021, Farmer Mac had \$15.7 billion combined notional amount of interest rate swaps, with terms ranging from less than one year to thirty years, of which \$6.3 billion were pay-fixed interest rate swaps, \$6.5 billion were receive-fixed interest rate swaps, and \$2.9 billion were basis swaps.

Farmer Mac enters into interest rate swaps to more closely match the cash flow and duration characteristics of its funded financial assets with those of its debt. For example, Farmer Mac transacts pay-fixed interest rate swaps and issues floating rate debt to effectively create fixed rate funding that approximately matches the duration with the corresponding fixed rate assets being funded. Farmer Mac evaluates the overall cost of using the swap market in conjunction with debt issuance as a funding alternative to duration-matched debt and enters into interest rate swaps to manage interest rate risks across the balance sheet.

Certain financial derivatives are designated as fair value hedges of fixed rate assets classified as available for sale or liabilities to protect against fair value changes in the assets or liabilities related to a benchmark interest rate (e.g., LIBOR and SOFR). Also, certain financial derivatives are designated as cash flow hedges to mitigate the volatility of future interest rate payments on floating rate debt.

As discussed in Note 4 to the consolidated financial statements, all financial derivatives are recorded on the balance sheet at fair value as derivative assets or as derivative liabilities. Changes in the fair values of undesignated financial derivatives are reported in "Gains/(losses) on financial derivatives" in the consolidated statements of operations. For financial derivatives designated in fair value hedge accounting relationships, changes in the fair values of the hedged items related to the risk being hedged are reported in "Net interest income" in the consolidated statements of operations. Interest accruals on derivatives designated in fair value hedge accounting relationships are also recorded in "Net interest income" in the consolidated statements of operations. For financial derivatives designated in cash flow hedge accounting relationships, the unrealized gain or loss on the derivative is recorded in other comprehensive income. Because the hedging instrument is an interest rate swap and the hedged forecasted transactions are future interest payments on variable rate debt, amounts recorded in accumulated other comprehensive income are reclassified to "Total interest expense" in conjunction with the recognition of interest expense on the debt. All of Farmer Mac's financial derivatives transactions are conducted under standard collateralized agreements that limit Farmer Mac's potential credit exposure to any counterparty. As of March 31, 2021 and December 31, 2020, Farmer Mac had no uncollateralized net exposures.

Re-funding and repricing risk

Farmer Mac is subject to re-funding and repricing risk on any floating rate assets that are not funded to contractual maturity. Re-funding and repricing risk arises from potential changes in funding costs when Farmer Mac funds floating rate, or synthetic floating rate, assets with floating rate liabilities with shorter maturities. Changes in Farmer Mac's funding costs relative to the benchmark market index rate to which the assets are indexed can cause changes to net interest income when debt matures and is reissued to continue funding those assets.

In addition, many of Farmer Mac's floating rate assets may prepay before the contractual maturity date. Farmer Mac is subject to re-funding and repricing risk on a portion of its fixed rate assets as a result of its use of pay-fixed receive-floating interest rate swaps that effectively convert the required funding needed from fixed rate to floating rate. These fixed rate assets are then effectively synthetically floating rate assets that require floating rate funding.

Farmer Mac can meet floating rate funding needs in several ways, including:

• issuing short-term discount notes with maturities that match the reset period of the assets;

- issuing floating rate medium-term notes with maturities and reset frequencies that match the assets being funded;
- issuing non-maturity matched, floating rate medium-term notes with reset frequencies that match the assets being funded; or
- issuing non-maturity matched, fixed rate discount notes or medium-term notes swapped to floating rate to match the interest rate reset dates of the assets as an alternative source of effectively floating rate funding.

To meet floating rate funding needs, Farmer Mac frequently issues shorter-term floating-rate mediumterm notes or fixed rate medium-term notes paired with a received-fixed interest rate swap because these alternatives generally provide a lower cost of funding while generating an effective interest rate match. As funding for these floating rate assets matures, Farmer Mac seeks to refinance the debt associated with these assets in a similar fashion to achieve an appropriate interest rate match in the context of Farmer Mac's overall liability issuance and liquidity management strategies.

However, if the funding cost of Farmer Mac's discount notes or medium-term notes were to increase relative to the benchmark market index to which the assets are being funded during the time between when these floating rate assets were first funded and when Farmer Mac refinanced the associated debt, Farmer Mac would be exposed to a commensurate reduction in its net effective spread on the associated assets. Conversely, if the funding cost on Farmer Mac's discount notes or medium-term notes were to decrease relative to the benchmark market index during that time, Farmer Mac would benefit from a commensurate increase in its net effective spread on those assets.

Farmer Mac's debt issuance strategy targets balancing liquidity risk and re-funding and repricing risk while maintaining an appropriate liability management profile that is consistent with Farmer Mac's risk tolerance. ALCO regularly reviews Farmer Mac's liability issuance strategy to appropriately manage refunding and repricing risk.

As of March 31, 2021, Farmer Mac held \$6.3 billion of floating rate assets in its lines of business and its investment portfolio that reset based on floating rate market indices, such as LIBOR or SOFR. As of the same date, Farmer Mac also had \$6.3 billion of interest rate swaps outstanding where Farmer Mac pays a fixed rate of interest and receives a floating rate of interest, primarily LIBOR.

Following a period of market volatility in the first half of 2020, Farmer Mac's funding spreads relative to LIBOR stabilized with spreads modestly higher compared to historical averages on shorter-term maturities. Farmer Mac's funding spreads relative to LIBOR on longer-term maturity issuances have improved and are currently lower than historical averages. Farmer Mac regularly adjusts its funding strategies to mitigate the effects of spread variability and seeks to maintain an effective mixture of funding structures in the context of its overall liability management and liquidity management strategies.

Discontinuation of LIBOR

As described in "Risk Factors—Market Risk" in Part I, Item 1A of the 2020 Annual Report, Farmer Mac faces risks associated with the reform, replacement, or discontinuation of the LIBOR benchmark interest rate and the transition to an alternative benchmark interest rate. Farmer Mac is evaluating the potential effect on our business of the replacement of the LIBOR benchmark interest rate, including the possibility of replacement benchmark interest rates.

As of March 31, 2021, Farmer Mac held \$4.8 billion of floating rate assets in its lines of business and its investment portfolio, had issued \$4.2 billion of floating rate debt, and had entered into \$14.9 billion notional amount of interest rate swaps, each of which reset based on LIBOR. In addition, our Non-Cumulative Series C Preferred Stock currently pays a fixed rate of interest until July 17, 2024. It becomes redeemable at our option on July 18, 2024 and thereafter pays interest at a floating rate equal to three-month LIBOR plus 3.260%.

The market transition away from LIBOR and towards an alternative benchmark interest rate indices that may be developed is expected to be complicated and may require the development of term and credit adjustments to accommodate for differences between the benchmark interest rate indices. The transition may also result in different financial performance for previously booked transactions, require different hedging strategies, or require renegotiation of previously booked transactions. As of March 31, 2021, we had \$0.9 billion outstanding in medium-term notes based on the Secured Overnight Financing Rate (SOFR), a potential alternative benchmark interest rate.

Liquidity and Capital Resources

Farmer Mac's primary sources of funds to meet its liquidity and funding needs are the proceeds of its debt issuances, guarantee and commitment fees, net effective spread, loan repayments, and maturities of AgVantage securities. Farmer Mac regularly accesses the capital markets for funding, and Farmer Mac has maintained access to the capital markets at favorable rates throughout first quarter 2021. Farmer Mac funds its purchases of eligible loan assets, USDA Securities, Farmer Mac Guaranteed Securities, and investment assets and finances its operations primarily by issuing debt obligations of various maturities in the public capital markets. As of March 31, 2021, Farmer Mac had outstanding discount notes of \$1.7 billion, medium-term notes that mature within one year of \$7.9 billion, and medium-term notes that mature after one year of \$11.9 billion.

Assuming continued access to the capital markets, Farmer Mac believes it has sufficient liquidity and capital resources to support its operations for the next 12 months and for the foreseeable future. Farmer Mac has a contingency funding plan to manage unanticipated disruptions in its access to the capital markets. That plan involves borrowing through repurchase agreement arrangements and the sale of liquid assets. Farmer Mac must maintain a minimum of 90 days of liquidity under the Liquidity and Investment Regulations prescribed for Farmer Mac by FCA. In accordance with the methodology for calculating available days of liquidity under those regulations, Farmer Mac maintained a monthly average of 242 days of liquidity during first quarter 2021 and had 264 days of liquidity as of March 31, 2021. ALCO regularly reviews Farmer Mac's liquidity position to ensure that the required minimums are maintained.

Farmer Mac maintains cash, cash equivalents (including U.S. Treasury securities and other short-term money market instruments), and other investment securities that can be drawn upon for liquidity needs. Farmer Mac's current policies authorize liquidity investments in:

- obligations of or fully guaranteed by the United States or a U.S. government agency;
- obligations of or fully guaranteed by GSEs;
- municipal securities;
- international and multilateral development bank obligations;
- money market instruments;
- diversified investment funds;
- asset-backed securities;

- corporate debt securities; and
- mortgage-backed securities.

The following table presents these assets as of March 31, 2021 and December 31, 2020:

Table 33

	As of	March 31, 2021	As of	December 31, 2020				
	(in thousands)							
Cash and cash equivalents	\$	1,012,541	\$	1,033,941				
Investment securities:								
Guaranteed by U.S. Government and its agencies		1,846,194		1,935,056				
Guaranteed by GSEs		1,989,324		1,944,497				
Asset-backed securities		19,146		19,171				
Total	\$	4,867,205	\$	4,932,665				

The objective of the investment portfolio as of March 31, 2021 and December 31, 2020 was to provide a greater level of liquidity than historically in response to market disruptions driven by the COVID-19 pandemic, to prepare for the possibility of future volatility in the debt capital markets, and to support program asset growth.

<u>*Capital Requirements*</u>. Farmer Mac is subject to the following statutory capital requirements – minimum, critical, and risk-based. Farmer Mac must comply with the higher of the minimum capital requirement and the risk-based capital requirement. As of March 31, 2021, Farmer Mac was in compliance with its statutory capital requirements and was classified as within "level 1" (the highest compliance level).

In accordance with FCA's rule on capital planning, Farmer Mac's board of directors has adopted a policy for maintaining a sufficient level of "Tier 1" capital (consisting of retained earnings, paid-in capital, common stock, and qualifying preferred stock). That policy restricts Tier 1-eligible dividends and any discretionary bonus payments if Tier 1 capital falls below specified thresholds. As of March 31, 2021 and December 31, 2020, Farmer Mac's Tier 1 capital ratio was 14.0% and 14.1%, respectively. The decrease in our Tier 1 capital ratio resulted from growth in risk-weighted assets outpacing capital growth during first quarter 2021. As of March 31, 2021, Farmer Mac was in compliance with its capital adequacy policy. Farmer Mac does not expect its compliance on an ongoing basis with FCA's rule on capital planning, including Farmer Mac's policy on Tier 1 capital, to materially affect Farmer Mac's operations or financial condition.

For more information about the capital requirements applicable to Farmer Mac, its capital adequacy policy, and FCA's rule on capital planning, see "Business—Government Regulation of Farmer Mac—Capital Standard" in Farmer Mac's 2020 Annual Report. See Note 8 to the consolidated financial statements for more information about Farmer Mac's capital position.

Other Matters

None.

Supplemental Information

The following tables present quarterly and annual information about new business volume, repayments, and outstanding business volume:

Table 34

					New	Business Volu	me							
	_	Farm a	& Ra	inch	USDA Guarantees			Rural Ut	iliti	es	I	nstitutional Credit		
		Loans		LTSPCs	US	SDA Securities		Loans		TSPCs	AgVantage		Total	
						(1	in thousands)							
For the quarter ended:														
March 31, 2021	\$	681,412	\$	117,693	\$	157,273	\$	48,030	\$	22,000	\$	442,912	\$ 1,469,320	
December 31, 2020		731,434		141,332		180,520		189,729				96,424	1,339,439	
September 30, 2020		740,823		94,495		225,494		62,300				211,908	1,335,020	
June 30, 2020		609,284		85,390		224,016		339,366		19,500		430,024	1,707,580	
March 31, 2020		401,853		73,674		147,906		152,668				560,395	1,336,496	
December 31, 2019		602,750		65,614		143,565		102,900		_		371,075	1,285,904	
September 30, 2019		309,805		125,022		113,664		117,279				402,611	1,068,381	
June 30, 2019		248,152		57,321		118,335		105,000		_		659,447	1,188,255	
March 31, 2019		203,156		91,215		57,223		546,198				825,417	1,723,209	
For the year ended:														
December 31, 2020	\$	2,483,394	\$	394,891	\$	777,936	\$	744,063	\$	19,500	\$	1,298,751	\$ 5,718,535	
December 31, 2019		1,363,863		339,172		432,787		871,377		_		2,258,550	5,265,749	

Table 35

			Rep	ayments of	Ass	ets by Line	of	Business					
		Farr	n & Ranch	l	G	USDA uarantees		Rural U	Jtilities]	Institutional Credit		
	Loans		uaranteed ecurities	LTSPCs	S	USDA Securities		Loans	LTSPCs		AgVantage		Total
						(ir	n tho	ousands)					
For the quarter ended:				* * * * * *									
Scheduled	\$ 214,978	\$	4,362	\$ 56,642	\$	48,137	\$	59,059	\$ 21,092	\$	540,594	\$	944,864
Unscheduled	339,905	<u>ф</u>	2,747	132,300	¢	108,789	¢	2,279		¢		¢	586,020
March 31, 2021	\$ 554,883	\$	7,109	\$188,942	\$	156,926	\$	61,338	\$ 21,092	\$	540,594	\$	1,530,884
Scheduled	\$ 175,613	\$	4,213	\$ 26,895	\$	29,120	\$	37,062	\$ 19,528	\$	676,567	\$	968,998
Unscheduled	231,342		2,242	95,264		99,811		1,610					430,269
December 31, 2020	\$ 406,955	\$	6,455	\$122,159	\$	128,931	\$	38,672	\$ 19,528	\$	676,567	\$	1,399,267
Scheduled	\$ 174,986	\$	2,524	\$ 32,276	\$	29,654	\$	54,513	\$ 14,100	\$	547,236	\$	855,289
Unscheduled	326,025		1,934	66,074		138,518			—		—		532,551
September 30, 2020	\$ 501,011	\$	4,458	\$ 98,350	\$	168,172	\$	54,513	\$ 14,100	\$	547,236	\$	1,387,840
Scheduled	\$ 101,264	\$	3,043	\$ 39,010	\$	37,879	\$	23,589	\$ 25,132	\$	471,295	\$	701,212
Unscheduled	248,890		4,034	92,177		154,536		3,935			_		503,572
June 30, 2020	\$350,154	\$	7,077	\$131,187	\$	192,415	\$	27,524	\$ 25,132	\$	471,295	\$	1,204,784
Scheduled	\$ 128,768	\$	6,132	\$ 50,393	\$	43,069	\$	34,235	\$ 13,593	\$	304,540	\$	580,730
Unscheduled	191,260		3,888	60,442		78,806			—				334,396
March 31, 2020	\$ 320,028	\$	10,020	\$110,835	\$	121,875	\$	34,235	\$ 13,593	\$	304,540	\$	915,126
Scheduled	\$ 57,488	\$	4,737	\$ 39,878	\$	25,142	\$	10,317	\$ 10,551	\$	656,095	\$	804,208
Unscheduled	105,671		3,247	74,121		66,011		34,063	—		13,000		296,113
December 31, 2019	\$ 163,159	\$	7,984	\$113,999	\$	91,153	\$	44,380	\$ 10,551	\$	669,095	\$	1,100,321
Scheduled	\$ 97,421	\$	3,095	\$ 22,713	\$	27,853	\$	31,656	\$ 8,692	\$	441,575	\$	633,005
Unscheduled	129,676		2,663	76,883		39,442					1,088		249,752
September 30, 2019	\$ 227,097	\$	5,758	\$ 99,596	\$	67,295	\$	31,656	\$ 8,692	\$	442,663	\$	882,757
Scheduled	\$ 39,879	\$	3,758	\$ 58,779	\$	38,676	\$	6,951	\$ 17,092	\$	612,964	\$	778,099
Unscheduled	64,912		3,399	58,979		43,044							170,334
June 30, 2019	\$ 104,791	\$	7,157	\$117,758	\$	81,720	\$	6,951	\$ 17,092	\$	612,964	\$	948,433
Scheduled	\$ 112,973	\$	5,843	\$ 74,054	\$	41,266	\$	31,492	\$ 7,660	\$	470,812	\$	744,100
Unscheduled	67,608		1,798	50,482		46,798		24,448			5,587		196,721
March 31, 2019	\$ 180,581	\$	7,641	\$124,536	\$	88,064	\$	55,940	\$ 7,660	\$	476,399	\$	940,821
For the year ended:													
Scheduled	\$ 580,631	\$	15,912	\$148,574	\$	139,722	\$	149,399	\$ 72,353	\$	1,999,638	\$	3,106,229
Unscheduled	997,517		12,098	313,957		471,671		5,545	_		_		1,800,788
December 31, 2020	\$1,578,148	\$	28,010	\$462,531	\$	611,393	\$	154,944	\$ 72,353	\$	1,999,638	\$	4,907,017
Scheduled	\$ 307,761	\$	17,433	\$195,424	\$	132,937	\$	80,416	\$ 43,995	\$	2,181,446	\$	2,959,412
Unscheduled	367,867		11,107	260,465		195,295		58,511	_		19,675		912,920
December 31, 2019	\$ 675,628	\$	28,540	\$455,889	\$	328,232	\$	138,927	\$ 43,995	\$	2,201,121	\$	3,872,332
		_			-		_						

Table 36

		Lines o	of Business - C	utstanding Bus	siness volume			
		Farm & Ranch	n	USDA Guarantees	Rural U	Jtilities	Institutional Credit	
	Loans	Guaranteed Securities	LTSPCs	USDA Securities	Loans	LTSPCs	AgVantage	Total
				(in th	ousands)			
As of:								
March 31, 2021	\$6,302,967	\$ 72,203	\$2,254,182	\$ 2,787,065	\$ 2,247,104	\$ 557,333	\$ 7,641,677	\$21,862,531
December 31, 2020	6,176,438	79,312	2,325,431	2,786,718	2,260,412	556,425	7,739,359	21,924,095
September 30, 2020	5,857,324	85,767	2,306,258	2,735,129	2,109,355	575,953	8,319,502	21,989,288
June 30, 2020	5,617,512	90,225	2,310,113	2,677,807	2,101,568	590,053	8,654,830	22,042,108
March 31, 2020	5,358,382	97,302	2,355,910	2,646,206	1,789,726	595,685	8,696,101	21,539,312
December 31, 2019	5,276,557	107,322	2,393,071	2,620,175	1,671,293	609,278	8,440,246	21,117,942
September 30, 2019	4,836,966	115,306	2,441,456	2,567,763	1,612,773	619,829	8,738,266	20,932,359
June 30, 2019	4,754,258	121,064	2,416,030	2,521,394	1,527,150	628,521	8,778,318	20,746,735
March 31, 2019	4,610,897	128,221	2,476,467	2,484,779	1,429,101	645,613	8,731,835	20,506,913

Lines of Business - Outstanding Business Volume

Table 37

On-Balance	Shee	et Outstanding B	usir	ness Volume				
		Fixed Rate	A	5- to 10-Year ARMs & Resets	1-N	Anth to 3-Year ARMs]	Fotal Held in Portfolio
				(in the	ousan	ds)		
As of:								
March 31, 2021	\$	11,454,321	\$	2,824,551	\$	4,410,661	\$	18,689,533
December 31, 2020		11,330,414		2,816,840		4,511,964		18,659,218
September 30, 2020		10,879,372		2,811,547		5,013,640		18,704,559
June 30, 2020		10,793,629		2,845,266		5,076,445		18,715,340
March 31, 2020		10,296,598		2,818,869		4,996,478		18,111,945
December 31, 2019		10,045,712		2,863,199		4,702,577		17,611,488
September 30, 2019		9,642,802		2,850,000		4,549,689		17,042,491
June 30, 2019		9,446,117		2,825,151		4,601,917		16,873,185
March 31, 2019		9,206,082		2,720,639		4,643,506		16,570,227

The following table presents the quarterly net effective spread (a non-GAAP measure) by segment:

Table 38

			Net Effe	ctive Sprea	d by Line of	f Business						
	Farm &	Ranch	USDA Gi	arantees	Rural U	tilities	Institutiona	al Credit	Corpo	orate	Net Eff Spre	
	Dollars	Yield	Dollars	Yield	Dollars	Yield	Dollars	Yield	Dollars	Yield	Dollars	Yield
						(dollars in	n thousands)					
For the quarter ended:												
March 31, 2021 ⁽¹⁾	\$21,454	1.74 %	\$ 6,367	1.02 %	\$ 6,674	1.19 %	\$ 16,673	0.87 %	\$ 2,691	0.22 %	\$ 53,859	0.97 %
December 31, 2020	20,313	1.75 %	6,786	1.10 %	7,322	1.35 %	17,401	0.85 %	2,700	0.22 %	54,522	0.98 %
September 30, 2020	18,025	1.67 %	5,865	0.97 %	6,939	1.32 %	18,601	0.87 %	2,372	0.23 %	51,802	0.96 %
June 30, 2020	16,733	1.71 %	4,689	0.81 %	5,516	1.15 %	18,782	0.86 %	749	0.08 %	46,469	0.89 %
March 31, 2020 ⁽¹⁾	14,938	1.64 %	4,625	0.81 %	4,920	1.14 %	17,702	0.84 %	1,978	0.21 %	44,163	0.89 %
December 31, 2019	16,374	1.90 %	4,363	0.78 %	4,871	1.17 %	18,008	0.85 %	2,375	0.27 %	45,991	0.95 %
September 30, 2019	13,181	1.66 %	4,314	0.79 %	4,502	1.16 %	17,807	0.84 %	2,657	0.30 %	42,461	0.90 %
June 30, 2019	13,335	1.72 %	4,097	0.76 %	3,996	1.10 %	17,371	0.82 %	2,556	0.34 %	41,355	0.91 %
March 31, 2019	12,737	1.70 %	3,964	0.74 %	3,233	1.12 %	16,373	0.79 %	2,494	0.35 %	38,801	0.89 %

⁽¹⁾ See Note 10 to the consolidated financial statements for a reconciliation of GAAP net interest income by line of business to net effective spread by line of business for the three months ended March 31, 2021 and 2020.

The following table presents quarterly core earnings (a non-GAAP measure) reconciled to net income attributable to common stockholders:

Table 39

				Core Ear	nings by Qu	arter End			
	March 2021	December 2020	September 2020	June 2020	March 2020	December 2019	September 2019	June 2019	March 2019
					(in thousands)			
Revenues:									
Net effective spread	\$ 53,859	\$ 54,522	\$ 51,802	\$ 46,469	\$ 44,163	\$ 45,991	\$ 42,461	\$ 41,355	\$ 38,801
Guarantee and commitment fees	4,240	4,652	4,659	4,943	4,896	5,432	5,208	5,276	5,419
Other	451	512	453	1,048	674	100	389	777	509
Total revenues	58,550	59,686	56,914	52,460	49,733	51,523	48,058	47,408	44,729
Credit related expense/(income):									
(Release of)/provision for losses	(31)	2,973	1,200	51	3,831	2,851	623	420	(393)
REO operating expenses	—	_	—	_	—	_	_	64	—
Losses/(gains) on sale of REO	_	22	_	_	(485)	_	_	_	_
Total credit related expense/ (income)	(31)	2,995	1,200	51	3,346	2,851	623	484	(393)
Operating expenses:									
Compensation and employee benefits	11,795	9,497	8,791	8,087	10,127	6,732	7,654	6,770	7,606
General and administrative	6,336	6,274	5,044	5,295	5,363	5,773	5,253	4,689	4,596
Regulatory fees	750	750	725	725	725	725	688	687	688
Total operating expenses	18,881	16,521	14,560	14,107	16,215	13,230	13,595	12,146	12,890
Net earnings	39,700	40,170	41,154	38,302	30,172	35,442	33,840	34,778	32,232
Income tax expense	8,520	8,470	8,297	8,016	6,598	7,526	7,018	7,351	6,715
Preferred stock dividends	5,269	5,269	5,166	3,939	3,431	3,432	3,427	3,785	3,296
Core earnings	\$ 25,911	\$ 26,431	\$ 27,691	\$ 26,347	\$ 20,143	\$ 24,484	\$ 23,395	\$ 23,642	\$ 22,221
Reconciling items:									
Gains/(losses) on undesignated financial derivatives due to fair	1 (05	(1.550)	(1.1.10)	0.500	(6.10.1)	1.160		10.405	
value changes	1,695	(1,758)	(4,149)	8,700	(6,484)	4,469	(7,117)	10,485	2,240
(Losses)/gains on hedging activities due to fair value changes	(271)	3,827	(5,245)	(2,676)	(5,925)	(220)	(4,535)	(1,438)	(2,817)
Unrealized (losses)/gains on trading assets	(14)	223	(258)	(20)	106	172	49	61	44
Net effects of amortization of premiums/discounts and deferred gains on assets consolidated at fair value	16	(77)	97	35	3	40	(7)	(139)	(16)
Net effects of terminations or net settlements on financial derivatives	1,165	1,583	233	720	(1,300)	1,339	232	(592)	110
Issuance costs on the retirement of preferred stock	_	_	(1,667)	_	_	_	_	(1,956)	_
Income tax effect related to reconciling items	(544)	(798)	1,957	(1,419)	2,856	(1,218)	2,389	(1,759)	92
Net income attributable to common stockholders	\$ 27,958	\$ 29,431	\$ 18,659	\$ 31,687	\$ 9,399	\$ 29,066	\$ 14,406	\$ 28,304	\$ 21,874

Item 3 Quantitative and Qualitative Disclosures About Market Risk

Farmer Mac is exposed to market risk from changes in interest rates. Farmer Mac manages this market risk by entering into various financial transactions, including financial derivatives, and by monitoring and

measuring its exposure to changes in interest rates. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Management—Interest Rate Risk" for more information about Farmer Mac's exposure to interest rate risk and its strategies to manage that risk. For information about Farmer Mac's use of financial derivatives and related accounting policies, see Note 4 to the consolidated financial statements.

Item 4 Controls and Procedures

Management's Evaluation of Disclosure Controls and Procedures. Farmer Mac maintains disclosure controls and procedures designed to ensure that information required to be disclosed in its periodic filings under the Securities Exchange Act of 1934 ("Exchange Act"), including this Quarterly Report on Form 10-Q, is recorded, processed, summarized, and reported on a timely basis. These disclosure controls and procedures include controls and procedures designed to ensure that information required to be disclosed under the Exchange Act is accumulated and communicated to Farmer Mac's management on a timely basis to allow decisions about required disclosure. Management, including Farmer Mac's Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the design and operation of Farmer Mac's disclosure controls and procedures (as defined under Rules 13a-15(e) and 15d-15(e) of the Exchange Act) as of March 31, 2021.

Farmer Mac carried out the evaluation of the effectiveness of its disclosure controls and procedures, required by paragraph (b) of Exchange Act Rules 13a-15 and 15d-15, under the supervision and with the participation of management, including the Chief Executive Officer and Chief Financial Officer. Based upon this evaluation, the Chief Executive Officer and Chief Financial Officer concluded that Farmer Mac's disclosure controls and procedures were effective as of March 31, 2021.

<u>Changes in Internal Control Over Financial Reporting</u>. There were no changes in Farmer Mac's internal control over financial reporting during the three months ended March 31, 2021 that have materially affected, or are reasonably likely to materially affect, Farmer Mac's internal control over financial reporting.

PART II

Item 1. Legal Proceedings

None.

Item 1A. Risk Factors

Information about risk factors can be found in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Forward-Looking Statements" in Part I, Item 2 of this Form 10-Q and in Part I, Item 1A of Farmer Mac's 2020 Annual Report. There were no material changes during the quarter ended March 31, 2021 to the risk factors reported in Farmer Mac's 2020 Annual Report.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

(a) Farmer Mac is a federally chartered instrumentality of the United States whose debt and equity securities are exempt from registration under Section 3(a)(2) of the Securities Act of 1933. During first quarter 2021, the following transactions occurred related to Farmer Mac's equity securities that were not registered under the Securities Act of 1933 and were not otherwise reported on a Current Report on Form 8-K:

<u>Class C Non-Voting Common Stock</u>. Under Farmer Mac's policy that permits directors of Farmer Mac to elect to receive shares of Class C non-voting common stock in lieu of their cash retainers, Farmer Mac issued an aggregate of 158 shares of its Class C non-voting common stock in January 2021 to the four directors who elected to receive stock in lieu of their cash retainers. Farmer Mac calculated the number of shares issued to the directors based on a price of \$74.25 per share, which was the closing price of the Class C non-voting common stock on December 31, 2020 (the last trading day of the previous quarter) as reported by the New York Stock Exchange.

In addition to the March 2, 2021 grants of stock appreciation rights and restricted stock units to the four named executive officers and fifteen directors reported in Farmer Mac's Current Report on Form 8-K filed with the SEC on March 8, 2021, Farmer Mac made the following additional grants under its Amended and Restated 2008 Omnibus Incentive Plan on March 2, 2021 to other executive officers and employees as incentive compensation:

- an aggregate of 4,680 stock appreciation rights (SARs") to three executive officers, which have the same terms as the SARs granted to the named executive officers on March 2, 2021 a grant price of \$88.68 per share, an expiration date of March 2, 2031, and vesting in three equal annual installments on each of March 31, 2022, March 31, 2023, and March 31, 2024;
- an aggregate of 1,163 target number of performance-vested restricted stock units ("RSUs") to three executive officers, which have the same terms as the performance-vested RSUs granted to the named executive officers on March 2, 2021 and are eligible for "cliff" vesting on March 31, 2024 in an amount between 0% and 200% of the target number of RSUs granted based on performance objectives related to business volume, subject to "gatekeeper" metrics related to capital and asset quality for the performance period of January 1, 2021 through December 31, 2023;
- an aggregate of 3,258 time-vested RSUs to four executive officers and employees vesting in three equal annual installments on each of March 31, 2022, March 31, 2023, and March 31, 2024; and

• an aggregate of 19,158 time-vested RSUs to 53 employees, all of which will "cliff" vest on April 15, 2024.

On March 15, 2021, Farmer Mac granted 657 time-vested RSUs to an employee upon commencement of employment, vesting in three equal annual installments on each of March 31, 2022, March 31, 2023, and March 31, 2024.

(b) Not applicable.

(c) None.

Item 3. Defaults Upon Senior Securities

- (a) None.
- (b) None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5 Other Information

- (a) None.
- (b) None.

Item 6. Exhibits

*	3.1	—	<u>Title VIII of the Farm Credit Act of 1971, as most recently amended on June 18, 2020 (Previously filed as</u> Exhibit 3.1 to Form 10-Q filed August 10, 2020).
*	3.2		Amended and Restated By-Laws of the Registrant (Previously filed as Exhibit 3.1 to Form 8-K filed May 12, 2020).
*	4.1	—	Specimen Certificate for Farmer Mac Class A Voting Common Stock (Previously filed as Exhibit 4.1 to Form 10-Q filed May 15, 2003).
*	4.2	—	Specimen Certificate for Farmer Mac Class B Voting Common Stock (Previously filed as Exhibit 4.2 to Form 10-Q filed May 15, 2003).
*	4.3	—	Specimen Certificate for Farmer Mac Class C Non-Voting Common Stock (Previously filed as Exhibit 4.3 to Form 10-Q filed May 15, 2003).
*	4.4	—	Specimen Certificate for 6.000% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series C (Previously filed as Exhibit 4.6 to Form 10-Q filed August 11, 2014).
*	4.4.1	_	<u>Certificate of Designation of Terms and Conditions of 6.000% Fixed-to-Floating Rate Non-Cumulative</u> Preferred Stock, Series C (Previously filed as Exhibit 4.1 to Form 8-A filed June 20, 2014).
*	4.5	—	Specimen Certificate for 5.700% Non-Cumulative Preferred Stock, Series D (Previously filed as Exhibit 4.7 to Form 10-Q filed August 1, 2019).
*	4.5.1	—	<u>Certificate of Designation of Terms and Conditions of 5.700% Non-Cumulative Preferred Stock, Series D</u> (Previously filed as Exhibit 4.1 to Form 8-A filed May 13, 2019).
*	4.6	_	Specimen Certificate for 5.750% Non-Cumulative Preferred Stock, Series E (Previously filed as Exhibit 4.7 to Form 10-Q filed August 10, 2020).
*	4.6.1	—	Certificate of Designation of Terms and Conditions of 5.750% Non-Cumulative Preferred Stock, Series E (Previously filed as Exhibit 4.1 to Form 8-A filed May 20, 2020).
*	4.7	—	Specimen Certificate for 5.250% Non-Cumulative Preferred Stock, Series F (Previously filed as Exhibit 4.8 to Form 10-Q filed November 9, 2020).
*	4.7.1	—	Certificate of Designation of Terms and Conditions of 5.250% Non-Cumulative Preferred Stock, Series F (Previously filed as Exhibit 4.1 to Form 8-A filed August 20, 2020).
*	4.8	—	Description of the Registrant's securities that are registered under Section 12 of the Securities Exchange Act of 1934 (Previously filed as Exhibit 4.9 to Form 10-Q filed November 9, 2020).
† *	10.1	—	Form of Time-Based Restricted Stock Units Award Agreement for grants made to executive officers on or after March 2, 2021 (Previously filed as Exhibit 10.1 to Form 8-K filed March 8, 2021)
† *	10.2	—	Form of Time-Based Restricted Stock Units Award Agreement for grants made to directors on or after March 2, 2021 (Previously filed as Exhibit 10.2 to Form 8-K filed March 8, 2021)
*	21		List of the Registrant's subsidiaries (Previously filed as Exhibit 21 to Form 10-K filed March 8, 2018).
**	31.1		Certification of Registrant's principal executive officer relating to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2021, pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
**	31.2	_	Certification of Registrant's principal financial officer relating to the Registrant's Quarterly Report on Form 10- Q for the quarter ended March 31, 2021, pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
**	32	—	Certification of Registrant's principal executive officer and principal financial officer relating to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2021, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
**	101.INS	—	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
**	101.SCH		Inline XBRL Taxonomy Extension Schema
**	101.CAL	_	Inline XBRL Taxonomy Extension Calculation
**	101.DEF		Inline XBRL Taxonomy Extension Definition
**	101.LAB	_	Inline XBRL Taxonomy Extension Label
**	101.PRE	_	Inline XBRL Taxonomy Extension Presentation
**	101.1112	_	Cover Page Inline Interactive Data File - the cover page interactive data file does not appear in the Interactive
	101		Data File because its XBRL tags are embedded within the Inline XBRL document included as Exhibit 101

a.

* Incorporated by reference to the indicated prior filing.

** Filed with this report.

Portions of this exhibit have been omitted pursuant to a request for confidential treatment.

† Management contract or compensatory plan.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

FEDERAL AGRICULTURAL MORTGAGE CORPORATION

	/s/ Bradford T. Nordholm	May 6, 2021	
By:	Bradford T. Nordholm	Date	
	President and Chief Executive Officer		
	(Principal Executive Officer)		
/s/	Aparna Ramesh	May 6, 2021	
/s/ By:	Aparna Ramesh	May 6, 2021 Date	
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	Aparna Ramesh		