As filed with the Securities and Exchange Commission on August 5, 2021

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 June 30, 2021
Commission File Number 001-14951

FARMER MAC

FEDERAL AGRICULTURAL MORTGAGE CORPORATION
(Exact name of registrant as specified in its charter)

Federally chartered instrumentality of the United States	52-1578738
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification number)
1999 K Street, N.W., 4th Floor, Washington, DC	20006
(Address of principal executive offices)	(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
4.875% Non-Cumulative Preferred Stock, Series G	AGM.PRG	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	☒	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 July 30, 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 9,234,594 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)

	As of	
	June 30, 2021	December 31, 2020
	(in thousands)	
Assets:		
Cash and cash equivalents	$ 828,403	$ 1,033,941
Investment securities:		
Available-for-sale, at fair value (amortized cost of $3,817,578 and $3,843,666, respectively)	3,832,232	3,853,692
Held-to-maturity, at amortized cost	45,032	45,032
Other investments	403	—
Total Investment Securities	3,877,667	3,898,724
Farmer Mac Guaranteed Securities:		
Available-for-sale, at fair value (amortized cost of $6,618,871 and $6,594,992, respectively)	6,877,405	6,947,701
Held-to-maturity, at amortized cost	1,040,757	1,175,792
Total Farmer Mac Guaranteed Securities	7,918,162	8,123,493
USDA Securities:		
Trading, at fair value	5,050	6,695
Held-to-maturity, at amortized cost	2,445,718	2,473,626
Total USDA Securities	2,450,768	2,480,321
Loans:		
Loans held for investment, at amortized cost	7,796,712	7,261,933
Loans held for investment in consolidated trusts, at amortized cost	1,077,993	1,287,045
Allowance for losses	(14,000)	(13,832)
Total loans, net of allowance	8,860,705	8,535,146
Financial derivatives, at fair value	16,224	17,468
Interest receivable (includes $11,197 and $16,401, respectively, related to consolidated trusts)	161,282	186,429
Guarantee and commitment fees receivable	37,261	37,113
Deferred tax asset, net	10,200	18,321
Prepaid expenses and other assets	20,573	24,545
Total Assets	$ 24,181,245	$ 24,355,501
Liabilities and Equity:		
Liabilities:		
Notes payable	$ 21,706,254	$ 21,848,917
Debt securities of consolidated trusts held by third parties	1,120,293	1,323,786
Financial derivatives, at fair value	24,347	29,892
Accrued interest payable (includes $10,126 and $14,370, respectively, related to consolidated trusts)	82,060	92,738
Guarantee and commitment obligation	35,827	35,535
Accounts payable and accrued expenses	30,138	28,879
Reserve for losses	2,111	3,277
Total Liabilities	23,001,030	23,363,024
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
Series G, par value $25 per share, 5,000,000 shares authorized, issued and outstanding	121,327	—
Common stock:		
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, 500,301 shares outstanding	500	500
Class C Non-Voting, $1 par value, no maximum authorization, 9,234,311 shares and 9,205,897 shares outstanding, respectively	9,234	9,206
Additional paid-in capital	124,148	122,899
Accumulated other comprehensive income/(loss), net of tax	16,733	(13,923)
Retained earnings	544,038	509,560
Total Equity	1,180,215	992,477
Total Liabilities and Equity	$ 24,181,245	$ 24,355,501

The accompanying notes are an integral part of these consolidated financial statements.

FEDERAL AGRICULTURAL MORTGAGE CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited)

	For the Three Months Ended		For the Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
	(in thousands, except per share amounts)			
Interest income:				
Investments and cash equivalents	$ 4,457	$ 10,399	$ 9,986	$ 28,140
Farmer Mac Guaranteed Securities and USDA Securities	42,414	61,792	84,818	133,309
Loans	60,214	55,430	119,708	116,026
Total interest income	107,085	127,621	214,512	277,475
Total interest expense	51,956	79,273	106,132	187,815
Net interest income	55,129	48,348	108,380	89,660
Release of/(provision for) losses	761	(451)	(152)	(3,889)
Net interest income after provision for losses	55,890	47,897	108,228	85,771
Non-interest income/(expense):				
Guarantee and commitment fees	2,997	3,140	6,027	6,336
(Losses)/gains on financial derivatives	(3,066)	6,523	1,227	(2,775)
(Losses)/gains on trading securities	(62)	(21)	(75)	85
Gains on sale of real estate owned	—	—	—	485
Release of reserve for losses	222	400	1,166	7
Other income	435	1,229	1,018	2,045
Non-interest income	526	11,271	9,363	6,183
Operating expenses:				
Compensation and employee benefits	9,779	8,087	21,574	18,214
General and administrative	6,349	5,295	12,685	10,658
Regulatory fees	750	725	1,500	1,450
Operating expenses	16,878	14,107	35,759	30,322
Income before income taxes	39,538	45,061	81,832	61,632
Income tax expense	8,252	9,435	17,319	13,176
Net income	31,286	35,626	64,513	48,456
Preferred stock dividends	(5,842)	(3,939)	(11,111)	(7,370)
Net income attributable to common stockholders	$ 25,444	$ 31,687	$ 53,402	$ 41,086
Earnings per common share:				
Basic earnings per common share	$ 2.36	$ 2.95	$ 4.96	$ 3.83
Diluted earnings per common share	$ 2.35	$ 2.94	$ 4.93	$ 3.81

The accompanying notes are an integral part of these consolidated financial statements.

FEDERAL AGRICULTURAL MORTGAGE CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(unaudited)

	For the Three Months Ended		For the Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
	(in thousands)			
Net income	$ 31,286	$ 35,626	$ 64,513	$ 48,456
Other comprehensive income/(loss) before taxes:				
Net unrealized (losses)/gains on available-for-sale securities	(37,389)	42,527	28,975	(56,789)
Net changes in held-to-maturity securities	(1,653)	(2,496)	(3,810)	(8,184)
Net unrealized (losses)/gains on cash flow hedges	(5,274)	(2,132)	13,641	(30,388)
Other comprehensive (loss)/income before tax	(44,316)	37,899	38,806	(95,361)
Income tax benefit/(expense) related to other comprehensive (loss)/income	9,305	(7,959)	(8,150)	20,025
Other comprehensive (loss)/income net of tax	(35,011)	29,940	30,656	(75,336)
Comprehensive (loss)/income	$ (3,725)	$ 65,566	$ 95,169	$ (26,880)

The accompanying notes are an integral part of these consolidated financial statements.

FEDERAL AGRICULTURAL MORTGAGE CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF EQUITY
(unaudited)

	Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income/(Loss)	Retained Earnings	Total Equity
	Shares	Amount	Shares	Amount				
					(in thousands)			
Balance as of December 31, 2020	14,980	$ 363,204	10,737	$ 10,737	$ 122,899	$ (13,923)	$ 509,560	$ 992,477
Net Income	—	—	—	—	—	—	33,227	33,227
Other comprehensive income, net of tax	—	—	—	—	—	65,667	—	65,667
Cash dividends:								
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	—	—	33
Stock-based compensation cost	—	—	—	—	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
Net Income	—	—	—	—	—	—	31,286	31,286
Other comprehensive loss, net of tax	—	—	—	—	—	(35,011)	—	(35,011)
Cash dividends:								
Preferred stock	—	—	—	—	—	—	(5,842)	(5,842)
Common stock (cash dividend of $0.88 per share)	—	—	—	—	—	—	(9,474)	(9,474)
Issuance of Series G Preferred Stock	5,000	121,327	—	—	—	—	—	121,327
Issuance of Class C Common Stock	—	—	7	7	13	—	—	20
Stock-based compensation cost	—	—	—	—	891	—	—	891
Other stock-based award activity	—	—	—	—	(474)	—	—	(474)
Balance as of June 30, 2021	19,980	$ 484,531	10,765	$ 10,765	$ 124,148	$ 16,733	$ 544,038	$1,180,215

	Preferred Stock		Common Stock		Additional Paid-In	Accumulated Other 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
Net Income	—	—	—	—	—	—	35,626	35,626
Other comprehensive income, net of tax	—	—	—	—	—	29,940	—	29,940
Cash dividends:								
Preferred stock	—	—	—	—	—	—	(3,939)	(3,939)
Common stock (cash dividend of $0.80 per share)	—	—	—	—	—	—	(8,585)	(8,585)
Issuance of Series E Preferred Stock	3,180	77,003	—	—	—	—	—	77,003
Issuance of Class C Common Stock	—	—	10	10	17	—	—	27
Stock-based compensation cost	—	—	—	—	719	—	—	719
Other stock-based award activity	—	—	—	—	(292)	—	—	(292)
Balance as of June 30, 2020	12,580	$ 305,377	10,733	$ 10,733	$ 120,856	$ (91,497)	$ 478,647	$ 824,116

The accompanying notes are an integral part of these consolidated financial statements.

FEDERAL AGRICULTURAL MORTGAGE CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(*unaudited*)

	For the Six Months Ended	
	June 30, 2021	June 30, 2020
	(in thousands)	
Cash flows from operating activities:		
Net income	$ 64,513	$ 48,456
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 Securities, and USDA Securities	9,619	1,095
Amortization of debt premiums, discounts, and issuance costs	3,602	14,769
Net change in fair value of trading securities, hedged assets, and financial derivatives	178,314	(401,002)
Gain on sale of real estate owned	—	(485)
Total (release)/provision for allowance for losses	(1,014)	3,882
Excess tax benefits related to stock-based awards	292	(475)
Deferred income taxes	(27)	(2,254)
Stock-based compensation expense	2,557	2,012
Proceeds from repayment of loans purchased as held for sale	30,062	35,351
Net change in:		
Interest receivable	24,025	24,139
Guarantee and commitment fees receivable	144	292
Other assets	3,680	(23,446)
Accrued interest payable	(10,678)	(6,825)
Other liabilities	684	(2,453)
Net cash provided by/(used in) operating activities	305,773	(306,944)
Cash flows from investing activities:		
Purchases of available-for-sale investment securities	(893,754)	(1,591,501)
Purchases of other investment securities	(403)	—
Purchases of Farmer Mac Guaranteed Securities and USDA Securities	(1,168,827)	(1,361,109)
Purchases of loans held for investment	(1,417,958)	(1,502,920)
Purchases of defaulted loans	(8,713)	(6,272)
Proceeds from repayment of available-for-sale investment securities	884,489	1,097,237
Proceeds from repayment of Farmer Mac Guaranteed Securities and USDA Securities	1,305,719	1,029,718
Proceeds from repayment of loans purchased as held for investment	1,014,805	712,238
Proceeds from sale of available-for-sale investment securities	25,573	—
Proceeds from sale of Farmer Mac Guaranteed Securities	49,133	28,050
Proceeds from sale of real estate owned	—	2,191
Net cash used in investing activities	(209,936)	(1,592,368)
Cash flows from financing activities:		
Proceeds from issuance of discount notes	31,775,475	34,376,593
Proceeds from issuance of medium-term notes	6,578,677	7,791,406
Payments to redeem discount notes	(31,895,655)	(34,075,014)
Payments to redeem medium-term notes	(6,574,370)	(5,847,765)
Payments to third parties on debt securities of consolidated trusts	(276,089)	(175,004)
Proceeds from common stock issuance	25	36
Proceeds from preferred stock issuance, net of stock issuance costs	121,327	77,003
Tax payments related to share-based awards	(1,305)	(471)
Purchases of common stock	—	(235)
Dividends paid on common and preferred stock	(29,460)	(24,018)
Net cash (used in)/provided by financing activities	(301,375)	2,122,531
Net change in cash and cash equivalents	(205,538)	223,219
Cash and cash equivalents at beginning of period	1,033,941	604,381
Cash and cash equivalents at end of period	$ 828,403	$ 827,600
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	7,414
Capitalized interest	1,037	—
Purchases of securities - traded, not yet settled	—	4,588

The accompanying notes are an integral part of these consolidated financial statements.

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 and six months ended June 30, 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 June 30, 2021			
	Farm & Ranch	USDA Guarantees	Corporate	Total
	(in thousands)			
On-Balance Sheet:				
Consolidated VIEs:				
Loans held for investment in consolidated trusts, at amortized cost	$ 1,077,993	$ —	$ —	$ 1,077,993
Debt securities of consolidated trusts held by third parties (1)	1,120,293	—	—	1,120,293
Unconsolidated VIEs:				
Farmer Mac Guaranteed Securities:				
Carrying value (2)	—	28,798	—	28,798
Maximum exposure to loss (3)	—	28,756	—	28,756
Investment securities:				
Carrying value (4)	—	—	2,084,486	2,084,486
Maximum exposure to loss (3) (4)	—	—	2,075,774	2,075,774
Off-Balance Sheet:				
Unconsolidated VIEs:				
Farmer Mac Guaranteed Securities:				
Maximum exposure to loss (3) (5)	66,008	270,652	—	336,660

(1) Includes borrower remittances of $42.3 million. The borrower remittances had not been passed through to third party investors as of June 30, 2021.
(2) Includes $41,000 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, 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	USDA Guarantees	Corporate	Total
	(in thousands)			
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 and six months ended June 30, 2021 and 2020:

Table 1.2

	For the Three Months Ended					
	June 30, 2021			June 30, 2020		
	Net Income	Weighted-Average Shares	$ per Share	Net Income	Weighted-Average Shares	$ per Share
	(in thousands, except per share amounts)					
Basic EPS						
Net income attributable to common stockholders	$ 25,444	10,763	$ 2.36	$ 31,687	10,730	$ 2.95
Effect of dilutive securities[1]						
SARs and restricted stock	—	75	(0.01)	—	46	(0.01)
Diluted EPS	$ 25,444	10,838	$ 2.35	$ 31,687	10,776	$ 2.94

(1) For the three months ended June 30, 2021 and 2020, SARs and restricted stock of 29,043 and 83,297, 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 June 30, 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.

	For the Six Months Ended					
	June 30, 2021			June 30, 2020		
	Net Income	Weighted-Average Shares	$ per Share	Net Income	Weighted-Average Shares	$ per Share
	(in thousands, except per share amounts)					
Basic EPS						
Net income attributable to common stockholders	$ 53,402	10,751	$ 4.96	$ 41,086	10,721	$ 3.83
Effect of dilutive securities[1]						
SARs and restricted stock	—	78	(0.03)	—	58	(0.02)
Diluted EPS	$ 53,402	10,829	$ 4.93	$ 41,086	10,779	$ 3.81

(1) For the six months ended June 30, 2021 and 2020, SARs and restricted stock of 64,364 and 85,223, respectively, were outstanding but not included in the computation of diluted earnings per share of common stock because they were anti-dilutive. For the six months ended June 30, 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 and six months ended June 30, 2021 and 2020.

Table 1.3

	As of June 30, 2021				As of June 30, 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 thousands)				
For the Three Months Ended:								
Beginning Balance	$ 38,491	$ 21,125	$ (7,872)	$ 51,744	$(121,858)	$ 28,351	$ (27,930)	$(121,437)
Other comprehensive (loss)/ income before reclassifications	(28,751)	—	(5,570)	(34,321)	34,374	—	(2,920)	31,454
Amounts reclassified from AOCI	(786)	(1,306)	1,402	(690)	(777)	(1,972)	1,235	(1,514)
Net comprehensive (loss)/ income	(29,537)	(1,306)	(4,168)	(35,011)	33,597	(1,972)	(1,685)	29,940
Ending Balance	$ 8,954	$ 19,819	$ (12,040)	$ 16,733	$ (88,261)	$ 26,379	$ (29,615)	$ (91,497)
For the Six 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	24,459	—	7,993	32,452	(43,310)	—	(25,588)	(68,898)
Amounts reclassified from AOCI	(1,568)	(3,010)	2,782	(1,796)	(1,554)	(6,466)	1,582	(6,438)
Net comprehensive income/ (loss)	22,891	(3,010)	10,775	30,656	(44,864)	(6,466)	(24,006)	(75,336)
Ending Balance	$ 8,954	$ 19,819	$ (12,040)	$ 16,733	$ (88,261)	$ 26,379	$ (29,615)	$ (91,497)

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 and six months ended June 30, 2021 and 2020:

Table 1.4

	For the Three Months Ended					
	June 30, 2021			June 30, 2020		
	Before Tax	Provision (Benefit)	After Tax	Before Tax	Provision (Benefit)	After Tax
	(in thousands)					
Other comprehensive income:						
Available-for-sale-securities:						
Unrealized holding (losses)/gains on available-for-sale securities	$ (36,395)	$ (7,644)	$ (28,751)	$ 43,512	$ 9,138	$ 34,374
Less reclassification adjustments included in:						
Net interest income[1]	(987)	(207)	(780)	(971)	(204)	(767)
Other income[2]	(7)	(1)	(6)	(14)	(4)	(10)
Total	$ (37,389)	$ (7,852)	$ (29,537)	$ 42,527	$ 8,930	$ 33,597
Held-to-maturity securities:						
Less reclassification adjustments included in:						
Net interest income[3]	(1,653)	(347)	(1,306)	(2,496)	(524)	(1,972)
Total	$ (1,653)	$ (347)	$ (1,306)	$ (2,496)	$ (524)	$ (1,972)
Cash flow hedges						
Unrealized losses on cash flow hedges	$ (7,050)	$ (1,480)	$ (5,570)	$ (3,695)	$ (775)	$ (2,920)
Less reclassification adjustments included in:						
Net interest income[4]	1,776	374	1,402	1,563	328	1,235
Total	$ (5,274)	$ (1,106)	$ (4,168)	$ (2,132)	$ (447)	$ (1,685)
Other comprehensive (loss)/income	$ (44,316)	$ (9,305)	$ (35,011)	$ 37,899	$ 7,959	$ 29,940

(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.

	For the Six Months Ended					
	June 30, 2021			June 30, 2020		
	Before Tax	Provision (Benefit)	After Tax	Before Tax	Provision (Benefit)	After Tax
	(in thousands)					
Other comprehensive income:						
Available-for-sale-securities:						
Unrealized holding gains/(losses) on available-for-sale securities	$ 30,961	$ 6,502	$ 24,459	$ (54,822)	$ (11,512)	$ (43,310)
Less reclassification adjustments included in:						
Net interest income[1]	(1,971)	(415)	(1,556)	(1,940)	(407)	(1,533)
Other income[2]	(15)	(3)	(12)	(27)	(6)	(21)
Total	$ 28,975	$ 6,084	$ 22,891	$ (56,789)	$ (11,925)	$ (44,864)
Held-to-maturity securities:						
Less reclassification adjustments included in:						
Net interest income[3]	(3,810)	(800)	(3,010)	(8,184)	(1,718)	(6,466)
Total	$ (3,810)	$ (800)	$ (3,010)	$ (8,184)	$ (1,718)	$ (6,466)
Cash flow hedges						
Unrealized gains/(losses) on cash flow hedges	$ 10,118	$ 2,125	$ 7,993	$ (32,390)	$ (6,802)	$ (25,588)
Less reclassification adjustments included in:						
Net interest income[4]	3,523	741	2,782	2,002	420	1,582
Total	$ 13,641	$ 2,866	$ 10,775	$ (30,388)	$ (6,382)	$ (24,006)
Other comprehensive income/(loss)	$ 38,806	$ 8,150	$ 30,656	$ (95,361)	$ (20,025)	$ (75,336)

(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

Standard	Description	Date of Adoption	Effect on Consolidated Financial Statements
ASU 2020-04 and 2021-01, Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting	The amendments in this Update provide 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 criteria are met.	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 June 30, 2021 and December 31, 2020:

Table 2.1

	As of June 30, 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	$ (58)	$ —	$ (394)	$ 19,248
Floating rate Government/GSE guaranteed mortgage-backed securities	2,459,511	8	2,459,519	—	15,833	(652)	2,474,700
Fixed rate GSE guaranteed mortgage-backed securities	28,174	807	28,981	—	29	—	29,010
Fixed rate U.S. Treasuries	1,300,208	9,170	1,309,378	—	204	(308)	1,309,274
Total available-for-sale	3,807,593	9,985	3,817,578	(58)	16,066	(1,354)	3,832,232
Held-to-maturity:							
Floating rate Government/GSE guaranteed mortgage-backed securities[(3)]	45,032	—	45,032	—	—	(198)	44,834
Total held-to-maturity	$ 45,032	$ —	$ 45,032	$ —	$ —	$ (198)	$ 44,834

(1) Amounts presented exclude $6.2 million of accrued interest receivable on investment securities as of June 30, 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 June 30, 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.

During the three and six months ended June 30, 2021, Farmer Mac received proceeds of $25.6 million from the sale of securities from its available-for-sale investment portfolio, resulting in a loss of $2,900. Farmer Mac did not sell any securities from its available-for-sale investment portfolio during the three and six months ended June 30, 2020.

As of June 30, 2021 and December 31, 2020, unrealized losses on available-for-sale investment securities were as follows:

Table 2.2

	As of June 30, 2021			
	Available-for-Sale Securities			
	Unrealized loss position for less than 12 months		Unrealized loss position for more than 12 months	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
	(dollars in thousands)			
Floating rate auction-rate certificates backed by Government guaranteed student loans	$ —	$ —	$ 19,248	$ (394)
Floating rate Government/GSE guaranteed mortgage-backed securities	92,080	(122)	47,682	(530)
Fixed rate U.S. Treasuries	297,864	(308)	—	—
Total	$ 389,944	$ (430)	$ 66,930	$ (924)
Number of securities in loss position		19		25

	As of December 31, 2020			
	Available-for-Sale Securities			
	Unrealized loss position for less than 12 months		Unrealized loss position for more than 12 months	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
	(dollars in thousands)			
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 June 30, 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 June 30, 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 June 30, 2021 that is, on average, approximately 98.6% 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 June 30, 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

	As of June 30, 2021		
	Available-for-Sale Securities		
	Amortized Cost	Fair Value	Weighted-Average Yield
	(dollars in thousands)		
Due within one year	$ 977,778	$ 977,976	1.82%
Due after one year through five years	711,832	712,720	0.61%
Due after five years through ten years	1,362,956	1,368,656	0.52%
Due after ten years	765,012	772,880	0.63%
Total	$ 3,817,578	$ 3,832,232	0.89%

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 June 30, 2021 and December 31, 2020:

Table 3.1

	As of June 30, 2021						
	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	$ 1,012,162	$ (20)	$ 1,012,142	$ (182)	$ 17,046	$ (4,196)	$ 1,024,810
Farmer Mac Guaranteed USDA Securities	28,756	41	28,797	—	561	(178)	29,180
Total Farmer Mac Guaranteed Securities	1,040,918	21	1,040,939	(182)	17,607	(4,374)	1,053,990
USDA Securities	2,422,597	23,121	2,445,718	—	22,418	(1,143)	2,466,993
Total held-to-maturity	$ 3,463,515	$ 23,142	$ 3,486,657	$ (182)	$ 40,025	$ (5,517)	$ 3,520,983
Available-for-sale:							
AgVantage	$ 6,617,498	$ 1,373	$ 6,618,871	$ (220)	$ 271,223	$ (12,469)	$ 6,877,405
Trading:							
USDA Securities[3]	$ 4,904	$ 138	$ 5,042	$ —	$ 22	$ (14)	$ 5,050

(1) Amounts presented exclude $32.0 million, $31.2 million, and $0.1 million of accrued interest receivable on available-for-sale, held-to-maturity, and trading securities, respectively, as of June 30, 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 5.06% as of June 30, 2021.

	As of December 31, 2020						
	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	$ 1,141,430	$ (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 June 30, 2021 and December 31, 2020, unrealized losses on held-to-maturity and available-for-sale on-balance sheet Farmer Mac Guaranteed Securities and USDA Securities were as follows:

Table 3.2

	As of June 30, 2021			
	Held-to-Maturity and Available-for-Sale Securities			
	Unrealized loss position for less than 12 months		Unrealized loss position for more than 12 months	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
		(in thousands)		
Held-to-maturity:				
AgVantage	$ 270,804	$ (4,196)	$ —	$ —
Farmer Mac Guaranteed USDA Securities	12,902	(178)	—	—
USDA Securities	37,862	(353)	16,780	(790)
Total held-to-maturity	$ 321,568	$ (4,727)	$ 16,780	$ (790)
Available-for-sale:				
AgVantage	$ 1,094,412	$ (9,962)	$ 202,492	$ (2,507)

	As of December 31, 2020							
	Held-to-Maturity and Available-for-Sale Securities							
	Unrealized loss position for less than 12 months				Unrealized loss position for more than 12 months			
	Fair Value		Unrealized Loss		Fair Value		Unrealized Loss	
	(in thousands)							
Held-to-maturity:								
AgVantage	$	49,939	$	(61)	$	—	$	—
USDA Securities		—		—		21,061		(560)
Total held-to-maturity	$	49,939	$	(61)	$	21,061	$	(560)
Available-for-sale:								
AgVantage	$	133,703	$	(231)	$	981,757	$	(15,007)

The unrealized losses presented above are principally due to changes in interest rates from the date of acquisition to June 30, 2021 and December 31, 2020, as applicable. The unrealized losses on the held-to-maturity USDA Securities as of both June 30, 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 13 and 11 available-for-sale securities as of June 30, 2021 and December 31, 2020, respectively. There were 4 and 2 held-to-maturity AgVantage securities with an unrealized loss as of June 30, 2021 and December 31, 2020, respectively. As of June 30, 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 and six months ended June 30, 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 June 30, 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

	As of June 30, 2021		
	Available-for-Sale Securities		
	Amortized Cost[(1)]	Fair Value	Weighted-Average Yield
	(dollars in thousands)		
Due within one year	$ 1,581,119	$ 1,586,647	1.58 %
Due after one year through five years	2,526,845	2,621,450	2.51 %
Due after five years through ten years	922,881	959,208	2.05 %
Due after ten years	1,588,026	1,710,100	2.47 %
Total	$ 6,618,871	$ 6,877,405	2.21 %

(1) Amounts presented exclude $32.0 million of accrued interest receivable.

	As of June 30, 2021		
	Held-to-Maturity Securities		
	Amortized Cost[(1)]	Fair Value	Weighted-Average Yield
	(dollars in thousands)		
Due within one year	$ 329,849	$ 332,601	2.71 %
Due after one year through five years	741,605	750,667	2.51 %
Due after five years through ten years	250,695	253,347	2.75 %
Due after ten years	2,164,508	2,184,368	3.11 %
Total	$ 3,486,657	$ 3,520,983	2.90 %

(1) Amounts presented exclude $31.2 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 June 30, 2021 and December 31, 2020:

Table 4.1

	As of June 30, 2021						
		Fair Value					
	Notional Amount	Asset	(Liability)	Weighted-Average Pay Rate	Weighted-Average Receive Rate	Weighted-Average Forward Price	Weighted-Average Remaining Term (in years)
	(dollars in thousands)						
Fair value hedges:							
Interest rate swaps:							
Pay fixed non-callable	$ 5,450,448	$ 7,863	$ (679)	2.24%	0.15%		11.81
Receive fixed non-callable	4,213,029	64	(8,191)	0.20%	0.97%		2.24
Receive fixed callable	1,067,577	1,529	(3,538)	0.04%	0.81%		4.21
Cash flow hedges:							
Interest rate swaps:							
Pay fixed non-callable	528,000	5,572	(5,008)	1.98%	0.51%		5.93
No hedge designation:							
Interest rate swaps:							
Pay fixed non-callable	338,951	—	(6,786)	2.38%	0.14%		3.73
Receive fixed non-callable	1,747,850	—	—	0.13%	0.61%		0.82
Basis swaps	2,608,911	1,215	(79)	0.14%	0.19%		2.44
Treasury futures	33,600	—	(88)			132.24	
Credit valuation adjustment		(19)	22				
Total financial derivatives	$ 15,988,366	$ 16,224	$ (24,347)				
Collateral (held)/pledged		(2,601)	177,228				
Net amount		$ 13,623	$ 152,881				

	As of December 31, 2020						
		Fair Value					
	Notional Amount	Asset	(Liability)	Weighted-Average Pay Rate	Weighted-Average Receive Rate	Weighted-Average Forward Price	Weighted-Average Remaining Term (in years)
	(dollars in thousands)						
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 June 30, 2021, Farmer Mac expects to reclassify $5.7 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 June 30, 2021. During the three and six months ended June 30, 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 and six months ended June 30, 2021 and 2020:

Table 4.2

	For the Three Months Ended June 30, 2021					
	Net Income/(Expense) Recognized in Consolidated Statement of Operations on Derivatives					
	Net Interest Income				Non-Interest Income	
	Interest Income Investments and Cash Equivalents	Interest Income Farmer Mac Guaranteed Securities and USDA Securities	Interest Income Loans	Total Interest Expense	Losses on financial derivatives	Total
	(in thousands)					
Total amounts presented in the consolidated statement of operations	$ 4,457	$ 42,414	$ 60,214	$ (51,956)	$ (3,066)	$ 52,063
Income/(expense) related to interest settlements on fair value hedging relationships:						
Recognized on derivatives	(35)	(21,604)	(6,704)	9,811	—	(18,532)
Recognized on hedged items	67	30,565	11,635	(12,141)	—	30,126
Discount amortization recognized on hedged items	—	—	—	(257)	—	(257)
Income/(expense) related to interest settlements on fair value hedging relationships	$ 32	$ 8,961	$ 4,931	$ (2,587)	$ —	$ 11,337
Gains/(losses) on fair value hedging relationships:						
Recognized on derivatives	$ (176)	$ (48,680)	$ (65,147)	$ (2,657)	$ —	$ (116,660)
Recognized on hedged items	188	49,878	63,978	891	—	114,935
Gains/(losses) on fair value hedging relationships	$ 12	$ 1,198	$ (1,169)	$ (1,766)	$ —	$ (1,725)
Expense related to interest settlements on cash flow hedging relationships:						
Interest settlements reclassified from AOCI into net income on derivatives	$ —	$ —	$ —	$ (1,776)	$ —	$ (1,776)
Recognized on hedged items	—	—	—	(643)	—	(643)
Discount amortization recognized on hedged items	—	—	—	(8)	—	(8)
Expense recognized on cash flow hedges	$ —	$ —	$ —	$ (2,427)	$ —	$ (2,427)
Losses on financial derivatives not designated in hedging relationships:						
Losses on interest rate swaps	$ —	$ —	$ —	$ —	$ (3,739)	$ (3,739)
Interest expense on interest rate swaps	—	—	—	—	1,098	1,098
Treasury futures	—	—	—	—	(425)	(425)
Losses on financial derivatives not designated in hedge relationships	$ —	$ —	$ —	$ —	$ (3,066)	$ (3,066)

	For The Three Months Ended June 30, 2020				
	Net Income/(Expense) Recognized in Consolidated Statement of Operations on Derivatives				
	Net Interest Income			Non-Interest Income	
	Interest Income Farmer Mac Guaranteed Securities and USDA Securities	Interest Income Loans	Total Interest Expense	Gains on financial derivatives	Total
			(in thousands)		
Total amounts presented in the consolidated statement of operations:	$ 61,792	$ 55,430	$ (79,273)	$ 6,523	$ 44,472
Income/(expense) related to interest settlements on fair value hedging relationships:					
Recognized on derivatives	(12,257)	(4,535)	5,432	—	(11,360)
Recognized on hedged items	32,102	9,812	(12,721)	—	29,193
Discount amortization recognized on hedged items	—	—	(181)	—	(181)
Income/(expense) related to interest settlements on fair value hedging relationships	$ 19,845	$ 5,277	$ (7,470)	$ —	$ 17,652
(Losses)/gains on fair value hedging relationships:					
Recognized on derivatives	$ (9,226)	$ (6,616)	$ 3,722	$ —	$ (12,120)
Recognized on hedged items	9,050	3,037	(2,348)	—	9,739
(Losses)/gains on fair value hedging relationships	$ (176)	$ (3,579)	$ 1,374	$ —	$ (2,381)
Expense related to interest settlements on cash flow hedging relationships:					
Interest settlements reclassified from AOCI into net income on derivatives	$ —	$ —	$ (1,563)	$ —	$ (1,563)
Recognized on hedged items	—	—	(1,029)	—	(1,029)
Discount amortization recognized on hedged items	—	—	(2)	—	(2)
Expense recognized on cash flow hedges	$ —	$ —	$ (2,594)	$ —	$ (2,594)
Gains on financial derivatives not designated in hedge relationships:					
Gains on interest rate swaps	$ —	$ —	$ —	$ 8,427	$ 8,427
Interest expense on interest rate swaps	—	—	—	(1,795)	(1,795)
Treasury futures	—	—	—	(109)	(109)
Gains on financial derivatives not designated in hedge relationships	$ —	$ —	$ —	$ 6,523	$ 6,523

	For the Six Months Ended June 30, 2021					
	Net Income/(Expense) Recognized in Consolidated Statement of Operations on Derivatives					
	Net Interest Income				Non-Interest Income	
	Interest Income Investments and Cash Equivalents	Interest Income Farmer Mac Guaranteed Securities and USDA Securities	Interest Income Loans	Total Interest Expense	Gains on financial derivatives	Total
	(in thousands)					
Total amounts presented in the consolidated statement of operations	$ 9,986	$ 84,818	$ 119,708	$ (106,132)	$ 1,227	$ 109,607
Income/(expense) related to interest settlements on fair value hedging relationships:						
Recognized on derivatives	(35)	(43,041)	(13,275)	19,292	—	(37,059)
Recognized on hedged items	67	61,341	23,122	(23,949)	—	60,581
Discount amortization recognized on hedged items	—	—	—	(478)	—	(478)
Income/(expense) related to interest settlements on fair value hedging relationships	$ 32	$ 18,300	$ 9,847	$ (5,135)	$ —	$ 23,044
Gains/(losses) on fair value hedging relationships:						
Recognized on derivatives	$ (176)	$ 119,396	$ 80,624	$ (32,111)	$ —	$ 167,733
Recognized on hedged items	188	(118,922)	(80,770)	30,392	—	(169,112)
Gains/(losses) on fair value hedging relationships	$ 12	$ 474	$ (146)	$ (1,719)	$ —	$ (1,379)
Expense related to interest settlements on cash flow hedging relationships:						
Interest settlements reclassified from AOCI into net income on derivatives	$ —	$ —	$ —	$ (3,523)	$ —	$ (3,523)
Recognized on hedged items	—	—	—	(1,298)	—	(1,298)
Discount amortization recognized on hedged items	—	—	—	(15)	—	(15)
Expense recognized on cash flow hedges	$ —	$ —	$ —	$ (4,836)	$ —	$ (4,836)
Gains on financial derivatives not designated in hedging relationships:						
Losses on interest rate swaps	$ —	$ —	$ —	$ —	$ (2,271)	$ (2,271)
Interest expense on interest rate swaps	—	—	—	—	3,322	3,322
Treasury futures	—	—	—	—	176	176
Gains on financial derivatives not designated in hedge relationships	$ —	$ —	$ —	$ —	$ 1,227	$ 1,227

	For The Six Months Ended June 30, 2020				
	Net Income/(Expense) Recognized in Consolidated Statement of Operations on Derivatives				
	Net Interest Income			Non-Interest Income	
	Interest Income Farmer Mac Guaranteed Securities and USDA Securities	Interest Income Loans	Total Interest Expense	Losses on financial derivatives	Total
			(in thousands)		
Total amounts presented in the consolidated statement of operations:	$ 133,309	$ 116,026	$ (187,815)	$ (2,775)	$ 58,745
Income/(expense) related to interest settlements on fair value hedging relationships:					
Recognized on derivatives	(18,408)	(6,412)	7,066	—	(17,754)
Recognized on hedged items	63,927	18,489	(26,997)	—	55,419
Discount amortization recognized on hedged items	—	—	(361)	—	(361)
Income/(expense) related to interest settlements on fair value hedging relationships	$ 45,519	$ 12,077	$ (20,292)	$ —	$ 37,304
(Losses)/gains on fair value hedging relationships:					
Recognized on derivatives	$ (303,159)	$ (152,521)	$ 62,656	$ —	$ (393,024)
Recognized on hedged items	299,430	148,445	(62,913)	—	384,962
(Losses)/gains on fair value hedging relationships	$ (3,729)	$ (4,076)	$ (257)	$ —	$ (8,062)
Expense related to interest settlements on cash flow hedging relationships:					
Interest settlements reclassified from AOCI into net income on derivatives	$ —	$ —	$ (2,002)	$ —	$ (2,002)
Recognized on hedged items	—	—	(3,152)	—	(3,152)
Discount amortization recognized on hedged items	—	—	(2)	—	(2)
Expense recognized on cash flow hedges	$ —	$ —	$ (5,156)	$ —	$ (5,156)
(Losses)/gains on financial derivatives not designated in hedge relationships:					
Gains on interest rate swaps	$ —	$ —	$ —	$ 1,878	$ 1,878
Interest expense on interest rate swaps	—	—	—	(2,657)	(2,657)
Treasury futures	—	—	—	(1,996)	(1,996)
(Losses)/gains on financial derivatives not designated in hedge relationships	$ —	$ —	$ —	$ (2,775)	$ (2,775)

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 June 30, 2021 and December 31, 2020:

Table 4.3

	Hedged Items in Fair Value Relationship			
	Carrying Amount of Hedged Assets/(Liabilities)		Cumulative Amount of Fair Value Hedging Adjustments included in the Carrying Amount of the Hedged Assets/(Liabilities)	
	June 30, 2021	December 31, 2020	June 30, 2021	December 31, 2020
	(in thousands)			
Investment securities, Available-for-Sale, at fair value	$ 28,815	$ —	$ 188	$ —
Farmer Mac Guaranteed Securities, Available-for-Sale, at fair value[(1)]	4,105,335	4,244,027	263,902	382,825
Loans held for investment, at amortized cost[(2)]	1,608,163	1,692,609	30,562	111,333
Notes Payable[(3)]	(5,065,528)	(3,006,140)	(22,848)	(53,240)

(1) Includes $1.4 million and $1.6 million of hedging adjustments on discontinued hedging relationships as of June 30, 2021 and December 31, 2020, respectively.
(2) Includes $1.4 million of hedging adjustments on a discontinued hedging relationship as of both June 30, 2021 and December 31, 2020.
(3) Carrying amount represents amortized cost.

The following table shows Farmer Mac's credit exposure to interest rate swap counterparties as of June 30, 2021 and December 31, 2020:

Table 4.4

	June 30, 2021		
	Gross Amount Recognized[(1)]	Counterparty Netting	Net Amount Presented in the Consolidated Balance Sheet
	(in thousands)		
Assets:			
Derivatives			
Interest rate swap	$ 112,398	$ 110,893	$ 1,505
Liabilities:			
Derivatives			
Interest rate swap	$ 442,121	$ 419,842	$ 22,279

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

	December 31, 2020		
	Gross Amount Recognized[(1)]	Counterparty Netting	Net Amount Presented in the Consolidated 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 June 30, 2021, Farmer Mac held $2.6 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 $8.4 million cash and $168.8 million of investment securities as of June 30, 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 June 30, 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 June 30, 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 $16.0 billion notional amount of interest rate swaps outstanding as of June 30, 2021, $13.6 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 the first half of 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 June 30, 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 June 30, 2021 and December 31, 2020:

Table 5.1

	As of June 30, 2021			As of December 31, 2020		
	Unsecuritized	In Consolidated Trusts	Total	Unsecuritized	In Consolidated Trusts	Total
	(in thousands)					
Farm & Ranch	$ 5,523,212	$ 1,077,993	$ 6,601,205	$ 4,889,393	$ 1,287,045	$ 6,176,438
Rural Utilities	2,246,568	—	2,246,568	2,260,412	—	2,260,412
Total unpaid principal balance[1]	7,769,780	1,077,993	8,847,773	7,149,805	1,287,045	8,436,850
Unamortized premiums, discounts, fair value hedge basis adjustment, and other cost basis adjustments	26,932	—	26,932	112,128	—	112,128
Total loans	7,796,712	1,077,993	8,874,705	7,261,933	1,287,045	8,548,978
Allowance for losses	(13,290)	(710)	(14,000)	(12,943)	(889)	(13,832)
Total loans, net of allowance	$ 7,783,422	$ 1,077,283	$ 8,860,705	$ 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 June 30, 2021 and December 31, 2020:

Table 5.2

	June 30, 2021	December 31, 2020
	Allowance for Losses	Allowance for Losses
	(in thousands)	
Loans:		
Farm & Ranch	$ 3,092	$ 3,745
Rural Utilities	10,908	10,087
Total	$ 14,000	$ 13,832

The following is a summary of the changes in the allowance for losses for the three and six month period ended June 30, 2021 and 2020:

Table 5.3

	For the Three Months Ended		For the Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
	Allowance for Losses	Allowance for Losses	Allowance for Losses	Allowance for Losses
		(in thousands)		
Farm & Ranch:				
Beginning Balance	$ 3,718	$ 7,353	$ 3,745	$ 10,454
Cumulative effect adjustment from adoption of current expected credit loss standard	—	—	—	(3,909)
Adjusted Beginning Balance	3,718	7,353	3,745	6,545
Release of losses	(626)	(920)	(653)	(112)
Charge-offs	—	(394)	—	(394)
Ending Balance[(1)]	$ 3,092	$ 6,039	$ 3,092	$ 6,039
Rural Utilities:				
Beginning Balance	$ 11,089	$ 7,503	$ 10,087	$ —
Cumulative effect adjustment from adoption of current expected credit loss standard	—	—	—	5,378
Adjusted Beginning Balance	11,089	7,503	10,087	5,378
(Release of)/provision for losses	(181)	1,397	821	3,522
Charge-offs	—	—	—	—
Ending Balance[(2)]	$ 10,908	$ 8,900	$ 10,908	$ 8,900

(1) As of June 30, 2021 and 2020, allowance for losses for Farm & Ranch includes no allowance and $1.8 million, respectively, for collateral dependent assets secured by agricultural real estate.

(2) As of both June 30, 2021 and 2020, allowance for losses for Rural Utilities includes no allowance for collateral dependent assets.

The release from the allowance for Rural Utilities loan losses of $0.2 million recorded during second quarter 2021 was primarily attributable to the impact of improving economic factor forecasts, specifically expectations for unemployment. The $0.6 million release from the allowance for the Farm & Ranch portfolio during second quarter 2021 was primarily attributable to improving economic factor forecasts, particularly agricultural commodity prices.

The small net provision recorded to the allowance for the six months ended June 30, 2021, was primarily a result of the impact of the Texas Arctic Freeze on the Rural Utilities portfolio, partially offset by improving economic factor forecasts.

The provision to the allowance for loan losses of $0.5 million recorded during second quarter 2020 was primarily due to the impact of net new loan volume in the Rural Utilities portfolio of $311.8 million. The impact of the Rural Utilities portfolio on the net increase to the provision was partially offset by improving economic factors that uniquely impacted the Farm & Ranch portfolio, specifically improvements in commodity prices and expectations for stable farm land values. In addition, there was a $0.4 million charge-off to the allowance related to the acquisition of a new real estate owned property ("REO") during second quarter 2020.

The provision to the allowance for loan losses of $3.4 million recorded during the six months ended June 30, 2020 was primarily due to the impact of net new loan volume in the Rural Utilities portfolio and the impact of economic factor forecasts on the Rural Utilities portfolio, especially 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 Farmer Mac's loans and non-performing assets as of June 30, 2021 and December 31, 2020:

Table 5.4

	As of June 30, 2021						
	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	$ 6,475,467	$ 1,501	$ 525	$ 5,418	$ 7,444	$ 118,294	$ 6,601,205
Rural Utilities	2,236,568	10,000	—	—	10,000	—	2,246,568
Total	$ 8,712,035	$ 11,501	$ 525	$ 5,418	$ 17,444	$ 118,294	$ 8,847,773

(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 $58.4 million of nonaccrual loans for which there was no associated allowance. During the three and six months ended June 30, 2021, Farmer Mac received $1.9 million and $3.0 million, respectively, 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 June 30, 2021 and December 31, 2020, by year of origination:

Table 5.5

	As of June 30, 2021							
	Year of Origination:							
	2021	2020	2019	2018	2017	Prior	Revolving Loans - Amortized Cost Basis	Total
	(in thousands)							
Farm & Ranch[1]:								
Internally Assigned Risk Rating:								
Acceptable	$1,085,630	$1,873,579	$ 704,749	$ 409,047	$ 364,489	$1,232,910	$ 511,353	$6,181,757
Special mention[2]	43,076	92,886	33,544	14,643	3,809	16,706	8,826	213,490
Substandard[3]	—	3,614	26,119	30,481	49,801	84,508	11,435	205,958
Total	$1,128,706	$1,970,079	$ 764,412	$ 454,171	$ 418,099	$1,334,124	$ 531,614	$6,601,205
For the Three Months Ended June 30, 2021:								
Current period charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Current period recoveries	—	—	—	—	—	—	—	—
Current period Farm & Ranch net charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
For the Six Months Ended June 30, 2021:								
Current period charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Current period recoveries	—	—	—	—	—	—	—	—
Current period Farm & Ranch net charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —

(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 June 30, 2021							
	Year of Origination:							
	2021	2020	2019	2018	2017	Prior	Revolving Loans - Amortized Cost Basis	Total
	(in thousands)							
Rural Utilities[1]:								
Internally Assigned Risk Rating:								
Acceptable	$ 21,022	$ 635,342	$ 792,333	$ 8,180	$ 89,488	$ 648,818	$ 28,185	$ 2,223,368
Special mention[2]	—	—	—	—	—	—	—	—
Substandard[3]	—	23,200	—	—	—	—	—	23,200
Total	$ 21,022	$ 658,542	$ 792,333	$ 8,180	$ 89,488	$ 648,818	$ 28,185	$ 2,246,568
For the Three Months Ended June 30, 2021:								
Current period charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Current period recoveries	—	—	—	—	—	—	—	—
Current period Rural Utilities net charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
For the Six Months Ended June 30, 2021:								
Current period charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Current period recoveries	—	—	—	—	—	—	—	—
Current period Farm & Ranch net charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —

(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 December 31, 2020							
	Year of Origination:							
	2020	2019	2018	2017	2016	Prior	Revolving Loans - Amortized Cost Basis	Total
	(in thousands)							
Farm & Ranch[1]:								
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 June 30, 2020:								
Current period charge-offs	$ —	$ —	$ —	$ —	$ —	$ 394	$ —	$ 394
Current period recoveries	—	—	—	—	—	—	—	—
Current period Farm & Ranch net charge-offs	$ —	$ —	$ —	$ —	$ —	$ 394	$ —	$ 394
For the Six Months Ended June 30, 2020:								
Current period charge-offs	$ —	$ —	$ —	$ —	$ —	$ 394	$ —	$ 394
Current period recoveries	—	—	—	—	—	—	—	—
Current period Farm & Ranch net charge-offs	$ —	$ —	$ —	$ —	$ —	$ 394	$ —	$ 394

(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 December 31, 2020							
	Year of Origination:							
	2020	2019	2018	2017	2016	Prior	Revolving Loans - Amortized Cost Basis	Total
	(in thousands)							
Rural Utilities[1]:								
Internally Assigned Risk Rating:								
Acceptable	$ 667,489	$ 809,921	$ 8,260	$ 89,842	$ 31,275	$ 641,145	$ 12,480	$2,260,412
Special mention[2]	—	—	—	—	—	—	—	—
Substandard[3]	—	—	—	—	—	—	—	—
Total	$ 667,489	$ 809,921	$ 8,260	$ 89,842	$ 31,275	$ 641,145	$ 12,480	$2,260,412
For the Three Months Ended June 30, 2020:								
Current period charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Current period recoveries	—	—	—	—	—	—	—	—
Current period Rural Utilities net charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
For the Six Months Ended June 30, 2020:								
Current period charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Current period recoveries	—	—	—	—	—	—	—	—
Current period Farm & Ranch net charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —

(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 June 30, 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

Outstanding Balance of Off-Balance Sheet Farmer Mac Guaranteed Securities

	As of June 30, 2021	As of December 31, 2020
	(in thousands)	
Farm & Ranch:		
Farmer Mac Guaranteed Securities	$ 66,008	$ 79,312
USDA Guarantees:		
Farmer Mac Guaranteed USDA Securities	270,652	299,298
Institutional Credit:		
AgVantage Securities	4,412	4,412
Total off-balance sheet Farmer Mac Guaranteed Securities	$ 341,072	$ 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 Six Months Ended	
	June 30, 2021	June 30, 2020
	(in thousands)	
Proceeds from new securitizations	$ 49,133	$ 28,050
Guarantee fees received	669	894

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 June 30, 2021	As of December 31, 2020
	(dollars in thousands)	
Guarantee and commitment obligation	$ 1,411	$ 1,625
Weighted average remaining maturity:		
Farmer Mac Guaranteed Securities	9.3 years	9.5 years
AgVantage Securities	3.5 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 June 30, 2021	As of December 31, 2020
	(dollars in thousands)	
Guarantee and commitment obligation(1)	$ 34,416	$ 33,909
Maximum principal amount	2,922,398	2,881,856
Weighted-average remaining maturity	15.6 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 June 30, 2021 and December 31, 2020:

Table 6.5

	June 30, 2021	December 31, 2020
	Reserve for Losses	Reserve for Losses
	(in thousands)	
Farm & Ranch:		
LTSPCs and Farmer Mac Guaranteed Securities	$ 1,194	$ 2,097
Rural Utilities		
LTSPCs	917	1,180
Total	$ 2,111	$ 3,277

The following is a summary of the changes in the reserve for losses for the three and six month period ended June 30, 2021 and 2020:

Table 6.6

	For the Three Months Ended		For the Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
	Reserve for Losses	Reserve for Losses	Reserve for Losses	Reserve for Losses
	(in thousands)			
Farm & Ranch:				
Beginning Balance	$ 1,366	$ 2,020	$ 2,097	$ 2,164
Cumulative effect adjustment from adoption of current expected credit loss standard	—	—	—	(148)
Adjusted Beginning Balance	1,366	2,020	2,097	2,016
Release of losses	(172)	(370)	(903)	(366)
Charge-offs	—	—	—	—
Ending Balance	$ 1,194	$ 1,650	$ 1,194	$ 1,650
Rural Utilities:				
Beginning Balance	$ 967	$ 1,400	$ 1,180	$ —
Cumulative effect adjustment from adoption of current expected credit loss standard	—	—	—	1,011
Adjusted Beginning Balance	967	1,400	1,180	1,011
(Release of)/provision for losses	(50)	(30)	(263)	359
Charge-offs	—	—	—	—
Ending Balance	$ 917	$ 1,370	$ 917	$ 1,370

The release from the reserve for losses in the Rural Utilities LTSPC portfolio recorded during the three and six months ended June 30, 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 release from the reserve for losses recorded during the three and six months ended June 30, 2020 was primarily due to the net decreases in LTSPC volume of $58.5 million and $119.3 million, respectively.

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 June 30, 2021 and December 31, 2020:

Table 6.7

	As of June 30, 2021					
	Current	30-59 Days	60-89 Days	90 Days and Greater[(1)]	Total Past Due	Total Loans
	(in thousands)					
Farm and Ranch:						
LTSPCs and Farmer Mac Guaranteed Securities	$ 2,440,348	$ 3,853	$ 4,459	$ 6,287	$ 14,599	$ 2,454,947
Rural Utilities:						
LTSPCs	$ 533,459	$ —	$ —	$ —	$ —	$ 533,459

(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 December 31, 2020					
	Current	30-59 Days	60-89 Days	90 Days and Greater[(1)]	Total Past Due	Total Loans
	(in thousands)					
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 June 30, 2021 and December 31, 2020, by year of origination:

Table 6.8

	As of June 30, 2021							
	Year of Origination:							
	2021	2020	2019	2018	2017	Prior	Revolving Loans - Amortized Cost Basis	Total
	(in thousands)							
Farm & Ranch LTSPCs and Farmer Mac Guaranteed Securities:								
Internally Assigned Risk Rating:								
Acceptable	$ 176,513	$ 270,877	$ 198,404	$ 181,287	$ 217,421	$1,040,596	$ 201,691	$2,286,789
Special mention[1]	—	3,920	343	2,117	433	60,494	7,683	74,990
Substandard[2]	—	242	731	11,568	14,273	62,511	3,843	93,168
Total	$ 176,513	$ 275,039	$ 199,478	$ 194,972	$ 232,127	$1,163,601	$ 213,217	$2,454,947
For the Three Months Ended June 30, 2021:								
Current period charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Current period recoveries	—	—	—	—	—	—	—	—
Current period Farm & Ranch net charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
For the Six Months Ended June 30, 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 June 30, 2021							
	Year of Origination:							
	2021	2020	2019	2018	2017	Prior	Revolving Loans - Amortized Cost Basis	Total
	(in thousands)							
Rural Utilities LTSPCs:								
Internally Assigned Risk Rating:								
Acceptable	$ —	$ —	$ —	$ —	$ —	$ 520,145	$ 13,314	$ 533,459
Special mention[(1)]	—	—	—	—	—	—	—	—
Substandard[(2)]	—	—	—	—	—	—	—	—
Total	$ —	$ —	$ —	$ —	$ —	$ 520,145	$ 13,314	$ 533,459
For the Three Months Ended June 30, 2021:								
Current period charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Current period recoveries	—	—	—	—	—	—	—	—
Current period Rural Utilities net charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
For the Six Months Ended June 30, 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 December 31, 2020							
	Year of Origination:							
	2020	2019	2018	2017	2016	Prior	Revolving Loans - Amortized Cost Basis	Total
					(in thousands)			
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	$ 2,201,599
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	110,671
Total	$ 182,397	$ 225,612	$ 198,061	$ 257,223	$ 234,781	$1,080,466	$ 226,203	$ 2,404,743
For the Three Months Ended June 30, 2020:								
Current period charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Current period recoveries	—	—	—	—	—	—	—	—
Current period Farm & Ranch net charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
For the Six Months Ended June 30, 2020:								
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 December 31, 2020							
	Year of Origination:							
	2020	2019	2018	2017	2016	Prior	Revolving Loans - Amortized Cost Basis	Total
	(in thousands)							
Rural Utilities LTSPCs:								
Internally Assigned Risk Rating:								
Acceptable	$ —	$ —	$ —	$ —	$ —	$ 549,405	$ 7,020	$ 556,425
Special mention[1]	—	—	—	—	—	—	—	—
Substandard[2]	—	—	—	—	—	—	—	—
Total	$ —	$ —	$ —	$ —	$ —	$ 549,405	$ 7,020	$ 556,425
For the Three Months Ended June 30, 2020:								
Current period charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Current period recoveries	—	—	—	—	—	—	—	—
Current period Rural Utilities net charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
For the Six Months Ended June 30, 2020:								
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.

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 25.0 years.

The following tables set forth information related to Farmer Mac's borrowings as of June 30, 2021 and December 31, 2020:

Table 7.1

	June 30, 2021			
	Outstanding as of June 30		Average Outstanding During the Quarter	
	Amount	Weighted-Average Rate	Amount	Weighted-Average Rate
	(dollars in thousands)			
Due within one year:				
Discount notes	$ 1,677,800	0.04 %	$ 1,720,263	0.09 %
Medium-term notes	2,081,520	0.09 %	2,522,888	0.14 %
Current portion of medium-term notes	4,565,257	0.72 %		
Total due within one year	$ 8,324,577	0.43 %		
Due after one year:				
Medium-term notes due in:				
Two years	$ 3,469,814	0.86 %		
Three years	2,547,497	0.91 %		
Four years	1,463,668	1.14 %		
Five years	2,109,668	0.85 %		
Thereafter	3,768,182	1.76 %		
Total due after one year	$ 13,358,829	1.15 %		
Total principal net of discounts	$ 21,683,406	0.87 %		
Hedging adjustments	22,848			
Total	$ 21,706,254			

	December 31, 2020			
	Outstanding as of December 31		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 six months ended June 30, 2021 and 2020 was $1.9 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 June 30, 2021:

Table 7.2

Debt Callable in 2021 as of June 30, 2021, by Maturity

	Amount	Weighted-Average Rate
	(dollars in thousands)	
Maturity:		
2022	$ 147,480	0.12 %
2023	245,831	0.90 %
2024	159,393	0.77 %
2025	192,827	0.75 %
Thereafter	845,922	1.47 %
Total	$ 1,591,453	1.10 %

The following schedule summarizes the earliest interest rate reset date, or debt maturities, of total borrowings outstanding as of June 30, 2021, including callable and non-callable medium-term notes, assuming callable notes are redeemed at the initial call date:

Table 7.3

	Earliest Interest Rate Reset Date, or Debt Maturities, of Borrowings Outstanding	
	Amount	Weighted-Average Rate
	(dollars in thousands)	
Debt with interest rate resets, or debt maturities in:		
2021	$ 8,179,536	0.29 %
2022	3,187,154	0.90 %
2023	2,896,525	1.08 %
2024	1,650,373	1.05 %
2025	1,483,928	0.94 %
Thereafter	4,285,890	1.73 %
Total principal net of discounts	$ 21,683,406	0.87 %

During the six months ended June 30, 2021 and 2020, Farmer Mac called $1.6 billion and $1.9 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 June 30, 2021, Farmer Mac had not used this borrowing authority.

Gains on Repurchase of Outstanding Debt

No outstanding debt repurchases were made in the six months ended June 30, 2021 or 2020.

8. EQUITY

Preferred Stock

In May 2021, Farmer Mac issued 5.0 million shares of 4.875% non-cumulative perpetual Series G preferred stock, par value $25.00 per share. Farmer Mac incurred direct costs of $3.7 million related to the issuance of the Series G preferred stock. The dividend rate on the Series G preferred stock will remain at a non-cumulative, fixed rate of 4.875% per year, when, as, and if a dividend is declared by the Board of Directors of Farmer Mac, for so long as the Series G preferred stock remains outstanding. The Series G preferred stock has no maturity date, but Farmer Mac has the option to redeem the preferred stock at any time on any dividend payment date on and after July 17, 2026.

Common Stock

During first and second 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. Farmer Mac did not repurchase any shares of its Class C non-voting common stock during the first half of 2021. As of June 30, 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 June 30, 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 June 30, 2021, Farmer Mac's minimum capital requirement was $680.8 million and its core capital level was $1.2 billion, which was $482.6 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 June 30, 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 as of June 30, 2021

	Level 1	Level 2	Level 3[(1)]	Total
		(in thousands)		
Recurring:				
Assets:				
Investment Securities:				
Available-for-sale:				
Floating rate auction-rate certificates backed by Government guaranteed student loans	$ —	$ —	$ 19,248	$ 19,248
Floating rate Government/GSE guaranteed mortgage-backed securities	—	2,474,700	—	2,474,700
Fixed rate GSE guaranteed mortgage-backed securities	—	29,010	—	29,010
Fixed rate U.S. Treasuries	1,309,274	—	—	1,309,274
Total Available-for-sale Investment Securities	1,309,274	2,503,710	19,248	3,832,232
Farmer Mac Guaranteed Securities:				
Available-for-sale:				
AgVantage	—	—	6,877,405	6,877,405
Total Farmer Mac Guaranteed Securities	—	—	6,877,405	6,877,405
USDA Securities:				
Trading	—	—	5,050	5,050
Total USDA Securities	—	—	5,050	5,050
Financial derivatives	—	16,224	—	16,224
Total Assets at fair value	$ 1,309,274	$ 2,519,934	$ 6,901,703	$ 10,730,911
Liabilities:				
Financial derivatives	$ 88	$ 24,259	$ —	$ 24,347
Total Liabilities at fair value	$ 88	$ 24,259	$ —	$ 24,347

(1) Level 3 assets represent 29% of total assets and 64% of financial instruments measured at fair value.

Assets and Liabilities Measured at Fair Value as of December 31, 2020				
	Level 1	Level 2	Level 3[(1)]	Total
		(in thousands)		
Recurring:				
Assets:				
Investment Securities:				
Available-for-sale:				
Floating rate auction-rate certificates backed by Government guaranteed student loans	$ —	$ —	$ 19,171	$ 19,171
Floating rate asset-backed securities	—	6,231	—	6,231
Floating rate Government/GSE guaranteed mortgage-backed securities	—	2,360,026	—	2,360,026
Fixed rate GSE guaranteed mortgage-backed securities	—	313	—	313
Fixed rate U.S. Treasuries	1,467,951	—	—	1,467,951
Total Available-for-sale Investment Securities	1,467,951	2,366,570	19,171	3,853,692
Farmer Mac Guaranteed Securities:				
Available-for-sale:				
AgVantage	—	—	6,947,701	6,947,701
Total Farmer Mac Guaranteed Securities	—	—	6,947,701	6,947,701
USDA Securities:				
Trading	—	—	6,695	6,695
Total USDA Securities	—	—	6,695	6,695
Financial derivatives	—	17,468	—	17,468
Total Assets at fair value	$ 1,467,951	$ 2,384,038	$ 6,973,567	$ 10,825,556
Liabilities:				
Financial derivatives	$ 82	$ 29,810	$ —	$ 29,892
Total Liabilities at fair value	$ 82	$ 29,810	$ —	$ 29,892

(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 June 30, 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 six months ended June 30, 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 and six months ended June 30, 2021 and 2020.

Table 9.2

Level 3 Assets and Liabilities Measured at Fair Value for the Three Months Ended June 30, 2021

	Beginning Balance	Purchases	Sales	Settlements	Allowance for Losses	Realized and unrealized gains/(losses) included in Income	Unrealized gains/(losses) included in Other Comprehensive Income	Ending Balance
					(in thousands)			
Recurring:								
Assets:								
Investment Securities:								
Available-for-sale:								
Floating rate auction-rate certificates backed by Government guaranteed student loans	$ 19,146	$ —	$ —	$ —	$ 3	$ —	$ 99	$ 19,248
Total available-for-sale	19,146	—	—	—	3	—	99	19,248
Farmer Mac Guaranteed Securities:								
Available-for-sale:								
AgVantage	6,763,209	417,500	—	(310,403)	(93)	49,939	(42,747)	6,877,405
Total available-for-sale	6,763,209	417,500	—	(310,403)	(93)	49,939	(42,747)	6,877,405
USDA Securities:								
Trading	5,578	—	—	(467)	—	(61)	—	5,050
Total USDA Securities	5,578	—	—	(467)		(61)	—	5,050
Total Assets at fair value	$ 6,787,933	$ 417,500	$ —	$ (310,870)	$ (90)	$ 49,878	$ (42,648)	$ 6,901,703

Level 3 Assets and Liabilities Measured at Fair Value for the Three Months Ended June 30, 2020

	Beginning Balance	Purchases	Sales	Settlements	Allowance for Losses	Realized and unrealized gains/(losses) included in Income	Unrealized gains included in Other Comprehensive Income	Ending Balance
					(in thousands)			
Recurring:								
Assets:								
Investment Securities:								
Available-for-sale:								
Floating rate auction-rate certificates backed by Government guaranteed student loans	$ 16,721	$ —	$ —	$ —	$ (15)	$ —	$ 1,577	$ 18,283
Total available-for-sale	16,721	—	—	—	(15)	—	1,577	18,283
Farmer Mac Guaranteed Securities:								
Available-for-sale:								
AgVantage	7,587,186	351,896	—	(85,261)	(69)	9,050	35,585	7,898,387
Total available-for-sale	7,587,186	351,896	—	(85,261)	(69)	9,050	35,585	7,898,387
USDA Securities:								
Trading	8,408	—	—	(602)	—	(20)	—	7,786
Total USDA Securities	8,408	—	—	(602)		(20)	—	7,786
Total Assets at fair value	$ 7,612,315	$ 351,896	$ —	$ (85,863)	$ (84)	$ 9,030	$ 37,162	$ 7,924,456

Level 3 Assets and Liabilities Measured at Fair Value for the Six Months Ended June 30, 2021

	Beginning Balance	Purchases	Sales	Settlements	Allowance for Losses	Realized and unrealized losses included in Income	Unrealized gains included in Other Comprehensive Income	Ending Balance
					(in thousands)			
Recurring:								
Assets:								
Investment Securities:								
Available-for-sale:								
Floating rate auction-rate certificates backed by Government guaranteed student loans	$ 19,171	$ —	$ —	$ —	$ (22)	$ —	$ 99	$ 19,248
Total available-for-sale	19,171	—	—	—	(22)	—	99	19,248
Farmer Mac Guaranteed Securities:								
Available-for-sale:								
AgVantage	6,947,701	578,115	—	(554,235)	89	(118,803)	24,538	6,877,405
Total available-for-sale	6,947,701	578,115	—	(554,235)	89	(118,803)	24,538	6,877,405
USDA Securities:								
Trading	6,695	—	—	(1,570)	—	(75)	—	5,050
Total USDA Securities	6,695	—	—	(1,570)		(75)	—	5,050
Total Assets at fair value	$ 6,973,567	$ 578,115	$ —	$ (555,805)	$ 67	$ (118,878)	$ 24,637	$ 6,901,703

Level 3 Assets and Liabilities Measured at Fair Value for the Six Months Ended June 30, 2020

	Beginning Balance	Purchases	Sales	Settlements	Allowance for Losses	Realized and unrealized gains included in Income	Unrealized losses included in Other Comprehensive Income	Ending Balance
					(in thousands)			
Recurring:								
Assets:								
Investment Securities:								
Available-for-sale:								
Floating rate auction-rate certificates backed by Government guaranteed student loans	$ 18,912	$ —	$ —	$ —	$ (38)	$ —	$ (591)	$ 18,283
Total available-for-sale	18,912	—	—	—	(38)	—	(591)	18,283
Farmer Mac Guaranteed Securities:								
Available-for-sale:								
AgVantage	7,143,025	835,476	—	(312,516)	(234)	299,429	(66,793)	7,898,387
Total available-for-sale	7,143,025	835,476	—	(312,516)	(234)	299,429	(66,793)	7,898,387
USDA Securities:								
Trading	8,913	—	—	(1,213)	—	86	—	7,786
Total USDA Securities	8,913	—	—	(1,213)		86	—	7,786
Total Assets at fair value	$ 7,170,850	$ 835,476	$ —	$ (313,729)	$ (272)	$ 299,515	$ (67,384)	$ 7,924,456

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 June 30, 2021 and December 31, 2020:

Table 9.3

	As of June 30, 2021			
Financial Instruments	Fair Value	Valuation Technique	Unobservable Input	Range (Weighted-Average)
		(in thousands)		
Assets:				
Investment securities:				
Floating rate auction-rate certificates backed by Government guaranteed student loans	$ 19,248	Indicative bids	Range of broker quotes	98.0% - 98.0% (98.0%)
Farmer Mac Guaranteed Securities:				
AgVantage	$ 6,877,405	Discounted cash flow	Discount rate	0.8% - 3.9% (1.5%)
USDA Securities	$ 5,050	Discounted cash flow	Discount rate	2.0% - 2.3% (2.2%)
			CPR	25% - 45% (35%)

	As of December 31, 2020			
Financial Instruments	Fair 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	$ 6,947,701	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 June 30, 2021 and December 31, 2020:

Table 9.4

	As of June 30, 2021		As of December 31, 2020	
	Fair Value	Carrying Amount	Fair Value	Carrying Amount
	(in thousands)			
Financial assets:				
Cash and cash equivalents	$ 828,403	$ 828,403	$ 1,033,941	$ 1,033,941
Investment securities	3,877,470	3,877,667	3,899,925	3,898,724
Farmer Mac Guaranteed Securities	7,931,395	7,918,162	8,148,691	8,123,493
USDA Securities	2,472,043	2,450,768	2,637,509	2,480,321
Loans	9,057,544	8,860,705	9,167,525	8,535,146
Financial derivatives	16,224	16,224	17,468	17,468
Guarantee and commitment fees receivable	34,525	37,261	34,115	37,113
Financial liabilities:				
Notes payable	21,839,641	21,706,254	22,130,263	21,848,917
Debt securities of consolidated trusts held by third parties	1,121,731	1,120,293	1,390,330	1,323,786
Financial derivatives	24,347	24,347	29,892	29,892
Guarantee and commitment obligations	33,091	35,827	32,537	35,535

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 and six months ended June 30, 2021 and 2020:

Table 10.1

Core Earnings by Business Segment

For the Three Months Ended June 30, 2021

	Farm & Ranch	USDA Guarantees	Rural Utilities	Institutional Credit	Corporate	Reconciling Adjustments	Consolidated Net Income
				(in thousands)			
Net interest income	$ 24,057	$ 6,089	$ 5,328	$ 16,894	$ 2,761	$ —	$ 55,129
Less: reconciling adjustments(1)(2)(3)	(79)	893	1,287	(763)	84	(1,422)	—
Net effective spread	23,978	6,982	6,615	16,131	2,845	(1,422)	—
Guarantee and commitment fees(2)	3,839	173	317	5	—	(1,337)	2,997
Other income/(expense)(3)	309	120	—	—	(128)	(2,994)	(2,693)
Non-interest income/(loss)	4,148	293	317	5	(128)	(4,331)	304
Release of/(provision for) losses	626	—	181	(49)	3	—	761
Release of reserve for losses	172	—	50	—	—	—	222
Other non-interest expense	(5,855)	(2,263)	(1,838)	(2,316)	(4,606)	—	(16,878)
Non-interest expense(4)	(5,683)	(2,263)	(1,788)	(2,316)	(4,606)	—	(16,656)
Core earnings before income taxes	23,069	5,012	5,325	13,771	(1,886)	(5,753) (5)	39,538
Income tax (expense)/benefit	(4,844)	(1,053)	(1,118)	(2,892)	444	1,211	(8,252)
Core earnings before preferred stock dividends	18,225	3,959	4,207	10,879	(1,442)	(4,542) (5)	31,286
Preferred stock dividends	—	—	—	—	(5,842)	—	(5,842)
Segment core earnings/(losses)	$ 18,225	$ 3,959	$ 4,207	$ 10,879	$ (7,284)	$ (4,542) (5)	$ 25,444
Total assets at carrying value	$ 6,716,880	$ 2,506,410	$ 2,272,425	$ 7,926,520	$ 4,759,010	$ —	$ 24,181,245
Total on- and off-balance sheet program assets at principal balance	$ 9,056,152	$ 2,726,909	$ 2,780,027	$ 7,634,073	$ —	$ —	$ 22,197,161

(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 "(Losses)/gains 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 June 30, 2020

	Farm & Ranch	USDA Guarantees	Rural Utilities	Institutional Credit	Corporate	Reconciling Adjustments	Consolidated Net Income
				(in thousands)			
Net interest income	$ 19,310	$ 5,403	$ 2,322	$ 20,084	$ 1,229	$ —	$ 48,348
Less: reconciling adjustments(1)(2)(3)	(2,577)	(714)	3,194	(1,302)	(480)	1,879	—
Net effective spread	16,733	4,689	5,516	18,782	749	1,879	—
Guarantee and commitment fees(2)	4,394	210	332	7	—	(1,803)	3,140
Other income/(expense)(3)	585	617	5	—	(159)	6,683	7,731
Non-interest income/(loss)	4,979	827	337	7	(159)	4,880	10,871
Provision for loan losses	920	—	(1,397)	41	(15)	—	(451)
Provision for reserve for losses	370	—	30	—	—	—	400
Other non-interest expense	(5,254)	(1,584)	(1,386)	(2,083)	(3,800)	—	(14,107)
Non-interest expense(4)	(4,884)	(1,584)	(1,356)	(2,083)	(3,800)	—	(13,707)
Core earnings before income taxes	17,748	3,932	3,100	16,747	(3,225)	6,759 (5)	45,061
Income tax (expense)/benefit	(3,727)	(826)	(651)	(3,517)	705	(1,419)	(9,435)
Core earnings before preferred stock dividends	14,021	3,106	2,449	13,230	(2,520)	5,340 (5)	35,626
Preferred stock dividends	—	—	—	—	(3,939)	—	(3,939)
Segment core earnings/(losses)	$ 14,021	$ 3,106	$ 2,449	$ 13,230	$ (6,459)	$ 5,340 (5)	$ 31,687
Total assets at carrying value	$5,746,556	$ 2,408,713	$2,281,490	$ 9,049,393	$ 4,446,504	$ —	$ 23,932,656
Total on- and off-balance sheet program assets at principal balance	$8,017,850	$ 2,677,807	$2,691,621	$ 8,654,830	$ —	$ —	$ 22,042,108

(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 "(Losses)/gains 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 Six Months Ended June 30, 2021

	Farm & Ranch	USDA Guarantees	Rural Utilities	Institutional Credit	Corporate	Reconciling Adjustments	Consolidated Net Income
				(in thousands)			
Net interest income	$ 45,912	$ 11,778	$ 12,977	$ 32,417	$ 5,296	$ —	$ 108,380
Less: reconciling adjustments[(1)(2)(3)]	(480)	1,571	312	387	240	(2,030)	—
Net effective spread	45,432	13,349	13,289	32,804	5,536	(2,030)	—
Guarantee and commitment fees[(2)]	7,572	356	636	10	—	(2,547)	6,027
Other income/(expense)[(3)]	713	289	1	—	(251)	1,418	2,170
Non-interest income/(loss)	8,285	645	637	10	(251)	(1,129)	8,197
Release of/(provision for) losses	653	—	(821)	38	(22)	—	(152)
Release of reserve for losses	903	—	263	—	—	—	1,166
Other non-interest expense	(12,404)	(4,796)	(3,895)	(4,906)	(9,758)	—	(35,759)
Non-interest expense[(4)]	(11,501)	(4,796)	(3,632)	(4,906)	(9,758)	—	(34,593)
Core earnings before income taxes	42,869	9,198	9,473	27,946	(4,495)	(3,159) [(5)]	81,832
Income tax (expense)/benefit	(9,002)	(1,932)	(1,989)	(5,869)	809	664	(17,319)
Core earnings before preferred stock dividends	33,867	7,266	7,484	22,077	(3,686)	(2,495) [(5)]	64,513
Preferred stock dividends	—	—	—	—	(11,111)	—	(11,111)
Loss on retirement of preferred stock	—	—	—	—	—	—	—
Segment core earnings/(losses)	$ 33,867	$ 7,266	$ 7,484	$ 22,077	$ (14,797)	$ (2,495) [(5)]	$ 53,402
Total assets at carrying value	$ 6,716,880	$ 2,506,410	$ 2,272,425	$ 7,926,520	$ 4,759,010	$ —	$ 24,181,245
Total on- and off-balance sheet program assets at principal balance	$ 9,056,152	$ 2,726,909	$ 2,780,027	$ 7,634,073	$ —	$ —	$ 22,197,161

(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 "(Losses)/gains 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 Six Months Ended June 30, 2020

	Farm & Ranch	USDA Guarantees	Rural Utilities	Institutional Credit	Corporate	Reconciling Adjustments	Consolidated Net Income
				(in thousands)			
Net interest income	$ 35,675	$ 9,944	$ 7,069	$ 33,888	$ 3,084	$ —	$ 89,660
Less: reconciling adjustments(1)(2)(3)	(4,004)	(630)	3,367	2,596	(357)	(972)	—
Net effective spread	31,671	9,314	10,436	36,484	2,727	(972)	—
Guarantee and commitment fees(2)	8,711	445	667	16	—	(3,503)	6,336
Other income/(expense)(3)	1,754	729	12	—	(288)	(2,367)	(160)
Non-interest income/(loss)	10,465	1,174	679	16	(288)	(5,870)	6,176
Provision for loan losses	112	—	(3,522)	(450)	(29)	—	(3,889)
Provision for reserve for losses	366	—	(359)	—	—	—	7
Other non-interest expense	(11,251)	(3,402)	(2,990)	(4,446)	(8,233)	—	(30,322)
Non-interest expense(4)	(10,885)	(3,402)	(3,349)	(4,446)	(8,233)	—	(30,315)
Core earnings before income taxes	31,363	7,086	4,244	31,604	(5,823)	(6,842) (5)	61,632
Income tax (expense)/benefit	(6,586)	(1,488)	(891)	(6,637)	988	1,438	(13,176)
Core earnings before preferred stock dividends	24,777	5,598	3,353	24,967	(4,835)	(5,404) (5)	48,456
Preferred stock dividends	—	—	—	—	(7,370)	—	(7,370)
Segment core earnings/(losses)	$ 24,777	$ 5,598	$ 3,353	$ 24,967	$ (12,205)	$ (5,404) (5)	$ 41,086
Total assets at carrying value	$5,746,556	$ 2,408,713	$2,281,490	$ 9,049,393	$ 4,446,504	$ —	$ 23,932,656
Total on- and off-balance sheet program assets at principal balance	$8,017,850	$ 2,677,807	$2,691,621	$ 8,654,830	$ —	$ —	$ 22,042,108

(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 "(Losses)/gains 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 June 30, 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 further 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 agricultural or rural infrastructure 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 severe weather or 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 second quarter 2021:

- we continued to operate effectively while nearly all employees worked remotely;
- we provided $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 second 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		
	June 30, 2021	March 31, 2021	June 30, 2020
		(in thousands)	
Net income attributable to common stockholders	$ 25,444	$ 27,958	$ 31,687
Core earnings	29,986	25,911	26,347

The $2.5 million sequential decrease in net income attributable to common stockholders was primarily due to a $5.8 million after-tax decrease in the fair value of undesignated financial derivatives due to fluctuations in long-term interest rates, which was partially offset by a $1.5 million after-tax increase in net interest income, and a $1.6 million after-tax decrease in operating expenses.

The $6.2 million year-over-year decrease in net income attributable to common stockholders was due to a $7.6 million after-tax decrease in the fair value of undesignated financial derivatives due to fluctuations in long-term interest rates, a $2.2 million after-tax increase in operating expenses, and a $1.9 million increase in preferred stock dividends. These factors were partially offset by a $5.4 million after-tax increase in net interest income.

The $4.1 million sequential increase in core earnings was primarily due to a $2.1 million after-tax increase in net effective spread and a $1.6 million after-tax decrease in operating expenses.

The $3.6 million year-over-year increase in core earnings was primarily due to a $8.0 million after-tax increase in net effective spread. This increase was partially offset by a $2.2 million after-tax increase in operating expenses and a $1.9 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		
	June 30, 2021	March 31, 2021	June 30, 2020
		(in thousands)	
Net interest income	$ 55,129	$ 53,251	$ 48,348
Net interest yield %	0.94 %	0.91 %	0.87 %
Net effective spread	56,551	53,859	46,469
Net effective spread %	1.01 %	0.97 %	0.89 %

The $1.9 million sequential increase in net interest income was primarily due to a $1.2 million increase related to new business volume, a $1.3 million decrease in funding costs, and a $1.1 million increase in cash collections on non-accrual loans. These factors were offset by a $2.1 million decrease in the fair value of derivatives designated in fair value hedge accounting relationships (designated financial derivatives). In percentage terms, the increase of 0.03% in net interest income yield was primarily attributable to a decrease of 0.03% in funding costs, an increase of 0.02% related to cash collections on non-accrual loans, an increase of 0.01% related to new business volume, partially offset by a decrease of 0.03% in net fair value changes from designated financial derivatives.

The $6.8 million year-over-year increase in net interest income was primarily due to a $4.3 million increase related to new business volume, a $1.8 million decrease in funding costs, and a $0.7 million increase in the fair value of derivatives designated in fair value hedge accounting relationships (designated financial derivatives). In percentage terms, the 0.07% increase was primarily attributable to an increase of 0.05% in new business volume and an increase of 0.01% in net fair value changes from designated financial derivatives.

The $2.7 million sequential increase in net effective spread was primarily due to a $1.2 million increase related to new business volume and a $1.1 million increase in cash collections on non-accrual loans. In percentage terms, the increase of 0.04% was primarily attributable to the increase of 0.02% related to cash collections on non-accrual loans and the increase of 0.01% related to new business volume.

The $10.1 million year-over-year increase in net effective spread in dollars was primarily due to a $5.1 million decrease in non-GAAP funding costs, an increase of $4.3 million from new business volume, and a $0.7 million increase in cash collections on non-accrual loans. In percentage terms, the increase of 0.12% was primarily attributable to the decrease in non-GAAP funding costs of 0.06%, the increase of 0.05% related to new business volume, and the increase of 0.01% related to cash collections on non-accrual loans.

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 $22.2 billion as of June 30, 2021, a net increase of $0.3 billion from March 31, 2021 after taking into account all new business, maturities, and paydowns on existing assets. The net increase was primarily attributable to a net increase of $426.8 million in the Farm & Ranch line of business, partially offset by net decreases of $60.2 million in the USDA Guarantees line of business, $24.4 million in the Rural Utilities line of business, and $7.6 million in the Institutional Credit line of business.

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	
	June 30, 2021	December 31, 2020
	(in thousands)	
Core capital	$ 1,163,482	$ 1,006,400
Capital in excess of minimum capital level required	482,647	325,455

The increase in capital in excess of the minimum capital level required was primarily due to the issuance of the Series G Preferred Stock and an increase in retained earnings.

Current Expected Credit Loss

As of June 30, 2021, Farmer Mac's allowance for losses on its on-balance sheet loan portfolio was $14.0 million (0.16% of all loans), compared to $14.8 million (0.17% of all loans) as of March 31, 2021 and $13.8 million (0.16% of all loans) as of December 31, 2020. During second quarter 2021, Farmer Mac recorded a release from its allowance for loan losses of $0.8 million.

As of June 30, 2021, Farmer Mac's reserve for losses on its off-balance sheet LTSPCs and Guaranteed Securities was $2.1 million (0.06% of all off-balance sheet LTSPCs and Guaranteed Securities), compared to $2.3 million (0.07% of all off-balance sheet LTSPCs and Guaranteed Securities) as of March 31, 2021 and $3.3 million (0.10% of all off-balance sheet LTSPCs and Guaranteed Securities) as of December 31, 2020. During second quarter 2021, Farmer Mac recorded a release from the reserve for its off-balance sheet portfolio of $0.2 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 June 30, 2021, March 31, 2021, and December 31, 2020:

Table 4

	Farm & Ranch Line of Business			
	On-Balance Sheet		Off-Balance Sheet	
	Substandard Assets	% of Portfolio	Substandard Assets	% of Portfolio
	(dollars in thousands)			
June 30, 2021	$ 205,958	3.1 %	$ 93,168	3.8 %
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 quarter-ending	$ (16,029)	(0.4)%	$ (6,506)	(0.5)%
Increase/(decrease) from prior year-ending	$ 25,135	0.2 %	$ (17,503)	(0.8)%

The decrease of $16.0 million in on-balance sheet substandard assets during second quarter 2021 was primarily driven by credit upgrades during the quarter, particularly in crops and livestock. The on-balance sheet Farm & Ranch portfolio grew by $298.2 million, which, when coupled with credit upgrades, caused the percentage of substandard assets to decrease. The $6.5 million decrease in substandard assets in our off-balance sheet Farm & Ranch portfolio during second quarter 2021 was primarily due to credit upgrades in the livestock and crops portfolios during the quarter.

There was one substandard asset in the Rural Utilities portfolio as of June 30, 2021 and none as of 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 June 30, 2021, March 31, 2021, and December 31, 2020:

Table 5

	Farm & Ranch Line of Business			
	On-Balance Sheet		Off-Balance Sheet	
	90-Day Delinquencies	% of Portfolio	90-Day Delinquencies	% of Portfolio
	(dollars in thousands)			
June 30, 2021	$ 56,790	0.86 %	$ 6,286	0.26 %
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 quarter-ending	$ (8,647)	(0.18)%	$ (623)	(0.04)%
Increase/(decrease) from prior year-ending	$ 21,991	0.30 %	$ (5,147)	(0.22)%

On-balance sheet Farm & Ranch loans 90 or more days delinquent decreased in permanent plantings and livestock. Off-balance sheet Farm & Ranch loans 90 days or more delinquent decreased in crops and part-time farms. 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 June 30, 2021.

There was one $10.0 million loan that was delinquent in the Rural Utilities portfolio as of June 30, 2021 and none as of December 31, 2020. The delinquent loan became current during third quarter 2021.

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 almost 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 $428.4 million of unpaid principal balance on Farm & Ranch loans, Farm & Ranch LTSPCs, and USDA Securities, most of which have ended their deferment periods and begun making payments.

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 interest-earning 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 accounting 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 "(Losses)/gains 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 Core Earnings

	For the Three Months Ended	
	June 30, 2021	June 30, 2020
	(in thousands, except per share amounts)	
Net income attributable to common stockholders	$ 25,444	$ 31,687
Less reconciling items:		
(Losses)/gains on undesignated financial derivatives due to fair value changes (see Table 14)	(3,721)	8,700
Losses on hedging activities due to fair value changes	(2,097)	(2,676)
Unrealized losses on trading securities	(61)	(20)
Net effects of amortization of premiums/discounts and deferred gains on assets consolidated at fair value	20	35
Net effects of terminations or net settlements on financial derivatives	109	720
Income tax effect related to reconciling items	1,208	(1,419)
Sub-total	(4,542)	5,340
Core earnings	$ 29,986	$ 26,347
Composition of Core Earnings:		
Revenues:		
Net effective spread[(1)]	$ 56,551	$ 46,469
Guarantee and commitment fees[(2)]	4,334	4,943
Other[(3)]	301	1,048
Total revenues	61,186	52,460
Credit related expense (GAAP):		
(Release of)/provision for losses	(983)	51
Gains on sale of REO	—	—
Total credit related expense	(983)	51
Operating expenses (GAAP):		
Compensation and employee benefits	9,779	8,087
General and administrative	6,349	5,295
Regulatory fees	750	725
Total operating expenses	16,878	14,107
Net earnings	45,291	38,302
Income tax expense[(4)]	9,463	8,016
Preferred stock dividends (GAAP)	5,842	3,939
Core earnings	$ 29,986	$ 26,347
Core earnings per share:		
Basic	$ 2.79	$ 2.46
Diluted	2.77	2.45
Weighted-average shares:		
Basic	10,763	10,730
Diluted	10,838	10,776

(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.

Reconciliation of Net Income Attributable to Common Stockholders to Core Earnings

	For the Six Months Ended	
	June 30, 2021	June 30, 2020
	(in thousands, except per share amounts)	
Net income attributable to common stockholders	$ 53,402	$ 41,086
Less reconciling items:		
(Losses)/gains on undesignated financial derivatives due to fair value changes (see Table 14)	(2,026)	2,216
Losses on hedging activities due to fair value changes	(2,368)	(8,601)
Unrealized (losses)/gains on trading securities	(75)	86
Net effects of amortization of premiums/discounts and deferred gains on assets consolidated at fair value	36	38
Net effects of terminations or net settlements on financial derivatives	1,274	(580)
Income tax effect related to reconciling items	664	1,437
Sub-total	(2,495)	(5,404)
Core earnings	$ 55,897	$ 46,490
Composition of Core Earnings:		
Revenues:		
Net effective spread[(1)]	$ 110,410	$ 90,632
Guarantee and commitment fees[(2)]	8,574	9,839
Other[(3)]	752	1,722
Total revenues	119,736	102,193
Credit related expense (GAAP):		
(Release of)/provision for losses	(1,014)	3,882
Gains on sale of REO	—	(485)
Total credit related expense	(1,014)	3,397
Operating expenses (GAAP):		
Compensation and employee benefits	21,574	18,214
General and administrative	12,685	10,658
Regulatory fees	1,500	1,450
Total operating expenses	35,759	30,322
Net earnings	84,991	68,474
Income tax expense[(4)]	17,983	14,614
Preferred stock dividends (GAAP)	11,111	7,370
Core earnings	$ 55,897	$ 46,490
Core earnings per share:		
Basic	$ 5.20	$ 4.34
Diluted	5.16	4.31
Weighted-average shares:		
Basic	10,751	10,721
Diluted	10,829	10,779

(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

	For the Three Months Ended		For the Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
	(in thousands, except per share amounts)			
GAAP - Basic EPS	$ 2.36	$ 2.95	$ 4.96	$ 3.83
Less reconciling items:				
Gains on undesignated financial derivatives due to fair value changes (see Table 14)	(0.35)	0.81	(0.19)	0.21
Losses on hedging activities due to fair value changes	(0.19)	(0.25)	(0.22)	(0.80)
Unrealized gains on trading securities	(0.01)	—	(0.01)	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	0.01	0.06	0.12	(0.06)
Income tax effect related to reconciling items	0.11	(0.13)	0.06	0.13
Sub-total	(0.43)	0.49	(0.24)	(0.51)
Core Earnings - Basic EPS	$ 2.79	$ 2.46	$ 5.20	$ 4.34
Shares used in per share calculation (GAAP and Core Earnings)	10,763	10,730	10,751	10,721

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

	For the Three Months Ended		For the Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
	(in thousands, except per share amounts)			
GAAP - Diluted EPS	$ 2.35	$ 2.94	$ 4.93	$ 3.81
Less reconciling items:				
Gains on undesignated financial derivatives due to fair value changes (see Table 14)	(0.34)	0.81	(0.18)	0.21
Losses on hedging activities due to fair value changes	(0.19)	(0.25)	(0.22)	(0.80)
Unrealized gains on trading securities	(0.01)	—	(0.01)	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	0.01	0.06	0.12	(0.05)
Income tax effect related to reconciling items	0.11	(0.13)	0.06	0.13
Sub-total	(0.42)	0.49	(0.23)	(0.50)
Core Earnings - Diluted EPS	$ 2.77	$ 2.45	$ 5.16	$ 4.31
Shares used in per share calculation (GAAP and Core Earnings)	10,838	10,776	10,829	10,779

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		For the Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
	(in thousands)			
Gains/(losses) due to fair value changes (see Table 4.2)	$ (1,725)	$ (2,381)	$ (1,379)	$ (8,062)
Initial cash payment (received) at inception of swap	(372)	(295)	(989)	(539)
Losses on hedging activities due to fair value changes	$ (2,097)	$ (2,676)	$ (2,368)	$ (8,601)

2. Unrealized gains/(losses) 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 25 years.

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

Net Interest Income. The following table provides information about interest-earning assets and funding for the six months ended June 30, 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-earning assets and 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 Six Months Ended					
	June 30, 2021			June 30, 2020		
	Average Balance	Income/ Expense	Average Rate	Average Balance	Income/ Expense	Average Rate
			(dollars in thousands)			
Interest-earning assets:						
Cash and investments	$ 4,827,210	$ 9,986	0.41 %	$ 3,839,155	$ 28,140	1.47 %
Loans, Farmer Mac Guaranteed Securities and USDA Securities(1)	17,477,294	183,584	2.10 %	16,464,280	220,035	2.67 %
Total interest-earning assets	22,304,504	193,570	1.74 %	20,303,435	248,175	2.44 %
Funding:						
Notes payable due within one year	4,243,254	2,520	0.12 %	3,341,975	18,122	1.08 %
Notes payable due after one year(2)	17,331,371	85,217	0.98 %	16,676,078	143,897	1.73 %
Total interest-bearing liabilities(3)	21,574,625	87,737	0.81 %	20,018,053	162,019	1.62 %
Net non-interest-bearing funding	729,879	—		285,382	—	
Total funding	22,304,504	87,737	0.79 %	20,303,435	162,019	1.60 %
Net interest income/yield prior to consolidation of certain trusts	22,304,504	105,833	0.95 %	20,303,435	86,156	0.85 %
Net effect of consolidated trusts(4)	1,130,069	2,547	0.45 %	1,499,758	3,504	0.47 %
Net interest income/yield	$ 23,434,573	$ 108,380	0.93 %	$ 21,803,193	$ 89,660	0.82 %

(1) Excludes interest income of $20.9 million and $29.3 million in the first half of 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 $18.4 million and $25.8 million in the first half of 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 $18.7 million year-over-year increase in net interest income was primarily due to a $10.9 million increase related to new business volume, a $6.7 million increase in the fair value of derivatives designated in fair value hedge accounting relationships (designated financial derivatives), and a $1.4 million decrease in funding costs.

In percentage terms, the 0.11% increase was primarily attributable to an increase of 0.06% in net fair value changes from designated financial derivatives and an increase of 0.05% in new business volume.

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 Six Months Ended June 30, 2021 Compared to Same Period in 2020		
	Increase/(Decrease) Due to		
	Rate	Volume	Total
		(in thousands)	
Income from interest-earning assets:			
Cash and investments	$ (24,024)	$ 5,870	$ (18,154)
Loans, Farmer Mac Guaranteed Securities and USDA Securities	(49,342)	12,891	(36,451)
Total	(73,366)	18,761	(54,605)
Expense from other interest-bearing liabilities	(86,033)	11,751	(74,282)
Change in net interest income prior to consolidation of certain trusts[1]	$ 12,667	$ 7,010	$ 19,677

(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				For the Six Months Ended			
	June 30, 2021		June 30, 2020		June 30, 2021		June 30, 2020	
	Dollars	Yield	Dollars	Yield	Dollars	Yield	Dollars	Yield
				(dollars in thousands)				
Net interest income/yield	$ 55,129	0.94 %	$ 48,348	0.87 %	$108,380	0.93 %	$ 89,660	0.82 %
Net effects of consolidated trusts	(1,337)	0.02 %	(1,804)	0.02 %	(2,547)	0.02 %	(3,505)	0.03 %
Expense related to undesignated financial derivatives	970	0.02 %	(2,413)	(0.05)%	3,038	0.03 %	(3,603)	(0.04)%
Amortization of premiums/discounts on assets consolidated at fair value	(13)	— %	(21)	— %	(20)	— %	(10)	— %
Amortization of losses due to terminations or net settlements on financial derivatives	77	— %	(22)	— %	180	— %	27	— %
Fair value changes on fair value hedge relationships	1,725	0.03 %	2,381	0.05 %	1,379	0.01 %	8,063	0.08 %
Net effective spread	$ 56,551	1.01 %	$ 46,469	0.89 %	$110,410	0.99 %	$ 90,632	0.89 %

The $19.8 million year-over-year increase in net effective spread in dollars was primarily due to an increase of $10.9 million from new business volume, a $8.2 million decrease in non-GAAP funding costs, and a $1.0 million increase in cash collections on non-accrual loans.

In percentage terms, the increase of 0.10% was primarily attributable to the increase of 0.05% related to net new business volume, the decrease in non-GAAP funding costs of 0.04%, and the increase of 0.01% related to cash collections on non-accrual loans.

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 and six months ended June 30, 2021 and 2020:

Table 12

	As of June 30, 2021			As of June 30, 2020		
	Allowance for Losses	Reserve for Losses	Total Allowance for Losses	Allowance for Losses	Reserve for Losses	Total Allowance for Losses
			(in thousands)			
For the Three Months Ended:						
Beginning balance	$ 15,211	$ 2,333	$ 17,544	$ 15,685	$ 3,420	$ 19,105
(Release of)/provision for losses	(761)	(222)	(983)	467	(400)	67
Charge-offs	—	—	—	(394)	—	(394)
Ending balance	$ 14,450	$ 2,111	$ 16,561	$ 15,758	$ 3,020	$ 18,778
For the Six Months Ended:						
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	152	(1,166)	(1,014)	3,905	(7)	3,898
Charge-offs	—	—	—	(394)	—	(394)
Ending balance	$ 14,450	$ 2,111	$ 16,561	$ 15,758	$ 3,020	$ 18,778

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 and six months ended June 30, 2021 and 2020:

Table 13

	For the Three Months Ended				For the Six Months Ended			
			Change				Change	
	June 30, 2021	June 30, 2020	$	%	June 30, 2021	June 30, 2020	$	%
	(dollars in thousands)							
Guarantee and commitment fees	$ 2,997	$ 3,140	$ (143)	(5)%	$ 6,027	$ 6,336	$ (309)	(5)%

The decrease in guarantee and commitment fees for the three and six months ended June 30, 2021 compared to the same periods in 2020 was primarily due to decreased LTSPC volume. As adjusted for the core earnings presentation, guarantee and commitment fees were $4.3 million and $8.6 million for the three and six months ended June 30, 2021, respectively, compared to $4.9 million and $9.8 million for the three and six months ended June 30, 2020, respectively. 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.

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 6 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."

(Losses)/gains on financial derivatives. The components of gains and losses on financial derivatives for the three and six months ended June 30, 2021 and 2020 are summarized in the following table:

Table 14

	For the Three Months Ended				For the Six Months Ended			
			Change				Change	
	June 30, 2021	June 30, 2020	$	%	June 30, 2021	June 30, 2020	$	%
	(dollars in thousands)							
(Losses)/gains due to fair value changes	$ (3,721)	$ 8,700	$ (12,421)	(143)%	$ (2,026)	$ 2,216	$ (4,242)	(191)%
Accrual of contractual payments	970	(2,413)	3,383	140 %	3,038	(3,603)	6,641	184 %
(Losses)/gains due to terminations or net settlements	(315)	236	(551)	(233)%	215	(1,388)	1,603	115 %
(Losses)/gains on financial derivatives	$ (3,066)	$ 6,523	$ (9,589)	(147)%	$ 1,227	$ (2,775)	$ 4,002	144 %

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 "(Losses)/gains 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 "(Losses)/gains 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.

Other Income. The following table presents other income for the three and six months ended June 30, 2021 and 2020:

Table 15

	For the Three Months Ended				For the Six Months Ended			
			Change				Change	
	June 30, 2021	June 30, 2020	$	%	June 30, 2021	June 30, 2020	$	%
	(dollars in thousands)							
Late fees	$ 252	$ 296	$ (44)	(15)%	$ 539	$ 887	$ (348)	(39)%
Other	183	933	(750)	(80)%	479	1,158	(679)	(59)%
Total other income	$ 435	$ 1,229	$ (794)	(65)%	$ 1,018	$ 2,045	$ (1,027)	(50)%

The decrease in other income is primarily due to a decrease in rate modification fees on Farm & Ranch loans.

Operating Expenses. The components of operating expenses for the three and six months ended June 30, 2021 and 2020 are summarized in the following table:

Table 16

	For the Three Months Ended				For the Six Months Ended			
			Change				Change	
	June 30, 2021	June 30, 2020	$	%	June 30, 2021	June 30, 2020	$	%
	(dollars in thousands)							
Compensation and employee benefits	$ 9,779	$ 8,087	$ 1,692	21 %	$ 21,574	$ 18,214	$ 3,360	18 %
General and administrative	6,349	5,295	1,054	20 %	12,685	10,658	2,027	19 %
Regulatory fees	750	725	25	3 %	1,500	1,450	50	3 %
Total Operating Expenses	$ 16,878	$ 14,107	$ 2,771	20 %	$ 35,759	$ 30,322	$ 5,437	18 %

a. Compensation and Employee Benefits. The increase in compensation and employee benefits expenses for 2021 compared to 2020 was due to increased headcount.

b. General and Administrative Expenses (G&A). 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 and six months ended June 30, 2021 and 2020:

Table 17

	For the Three Months Ended				For the Six Months Ended			
			Change				Change	
	June 30, 2021	June 30, 2020	$	%	June 30, 2021	June 30, 2020	$	%
	(dollars in thousands)							
Income tax expense	$ 8,252	$ 9,435	$ (1,183)	(13)%	$ 17,319	$ 13,176	$ 4,143	31 %
Effective tax rate	20.9 %	20.9 %		— %	21.2 %	21.4 %		(0.2)%

Business Volume.

The following table sets forth the net growth or decrease in Farmer Mac's four lines of business for the three and six months ended June 30, 2021 and 2020:

Table 18

Net New Business Volume – Farmer Mac Loan Purchases, Guarantees, LTSPCs, and AgVantage Securities

	For the Three Months Ended		For the Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
	Net Growth/ (Decrease)	Net Growth/ (Decrease)	Net Growth/ (Decrease)	Net Growth/ (Decrease)
	(in thousands)			
Farm & Ranch:				
Loans	$ 394,770	$ 363,729	$ 633,819	$ 505,782
Loans held in trusts:				
Beneficial interests owned by third party investors	(96,532)	(104,599)	(209,052)	(164,826)
LTSPCs	128,562	(52,874)	50,204	(100,055)
USDA Guarantees:				
USDA Securities	(45,940)	72,194	(31,163)	116,538
Farmer Mac Guaranteed USDA Securities	(14,216)	(40,594)	(28,646)	(58,907)
Rural Utilities:				
Loans	(536)	311,843	(13,844)	430,276
LTSPCs	(23,874)	(5,632)	(22,966)	(19,226)
Institutional Credit:				
AgVantage securities	(7,604)	(41,271)	(105,286)	214,584
Total purchases, guarantees, LTSPCs, and AgVantage securities	$ 334,630	$ 502,796	$ 273,066	$ 924,166

Our outstanding business volume was $22.2 billion as of June 30, 2021, a net increase of $0.3 billion from March 31, 2021 after taking into account all new business, maturities, and paydowns on existing assets. The net increase was primarily attributable to a net increase of $426.8 million in the Farm & Ranch line of business, partially offset by net decreases of $60.2 million in the USDA Guarantees line of business, $24.4 million in the Rural Utilities line of business, and $7.6 million in the Institutional Credit line of business.

The $426.8 million net increase in our Farm & Ranch line of business reflected a $394.8 million net increase in outstanding loan purchase volume and a $128.6 million net increase in loans underlying LTSPCs and off-balance sheet Farmer Mac Guaranteed Securities, which was partially offset by a net decrease of $96.5 million in loans held in consolidated trusts. Our net growth of 17.5% in the Farm & Ranch on-balance sheet portfolio over the twelve months ended June 30, 2021 is significantly higher than the 6.0% net growth of the overall agricultural mortgage loan market over the twelve months ended March 31, 2021 (based on our analysis of bank and Farm Credit System call report data).

The $60.2 million net decrease in the USDA Guarantees line of business reflected $160.6 million in paydowns, partially offset by $100.4 million in gross new volume. The net volume decrease is reflective of the low interest rate environment that has increased the competitiveness and lowered the spreads in this line of business.

The $24.4 million net decrease in the Rural Utilities line of business was due to $63.5 million in paydowns in loans and LTSPCs, partially offset by $39.1 million in gross new loan volume. The net volume decrease is due to increased market competitiveness that has lowered spreads in this line of business.

The $7.6 million net decrease in the Institutional Credit line of business reflects $476.2 million of maturities, partially offset by $468.6 million in gross volume. This net decrease was due to a net volume decrease in our smaller fund counterparties, partially offset by a modest net increase among our three largest counterparties.

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 Three Months Ended		For the Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
	(in thousands)			
Loans securitized and sold as Farm & Ranch Guaranteed Securities	$ —	$ —	$ 49,133	$ 28,050
Farmer Mac Guaranteed USDA Securities	—	—	—	28,050
AgVantage securities	468,616	430,024	911,528	990,419
Total Farmer Mac Guaranteed Securities Issuances	$ 468,616	$ 430,024	$ 960,661	$ 1,046,519

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 non-delinquent eligible loans purchased and retained (excluding the purchases of defaulted loans) during both second quarter 2021 and 2020 was less than one year. Of those loans, 25% and 25% had principal amortization periods longer than the maturity date, resulting in balloon payments at maturity, with a weighted-average remaining term to maturity of 15.6 years and 15.0 years for each period, respectively.

During the three and six months ended June 30, 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 the first six months of 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 - Outstanding Business Volume

	As of June 30, 2021	As of December 31, 2020
	(in thousands)	
Farm & Ranch:		
Loans	$ 5,523,212	$ 4,889,393
Loans held in trusts:		
Beneficial interests owned by third party investors	1,077,993	1,287,045
LTSPCs	2,388,939	2,325,431
Guaranteed Securities	66,008	79,312
USDA Guarantees:		
USDA Securities	2,427,501	2,452,964
Farmer Mac Guaranteed USDA Securities	299,408	333,754
Rural Utilities:		
Loans	2,246,568	2,260,412
LTSPCs	533,459	556,425
Institutional Credit		
AgVantage Securities	7,634,073	7,739,359
Total	$ 22,197,161	$ 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 June 30, 2021:

Table 21

Schedule of Principal Amortization as of June 30, 2021

	Loans Held	Loans Underlying Off-Balance Sheet Farmer Mac Guaranteed Securities and LTSPCs	USDA Securities and Farmer Mac Guaranteed USDA Securities	Total
		(in thousands)		
2021	$ 156,742	$ 126,347	$ 55,124	$ 338,213
2022	367,701	237,010	117,804	722,515
2023	358,593	214,949	120,165	693,707
2024	357,730	186,784	119,951	664,465
2025	389,544	189,862	122,034	701,440
Thereafter	7,217,463	2,033,454	2,191,831	11,442,748
Total	$ 8,847,773	$ 2,988,406	$ 2,726,909	$ 14,563,088

Of the $22.2 billion outstanding principal balance of volume included in Farmer Mac's four lines of business as of June 30, 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 June 30, 2021:

Table 22

AgVantage Balances by Year of Maturity

	As of June 30, 2021
	(in thousands)
2021	$ 1,003,586
2022	1,791,368
2023	1,069,348
2024	870,389
2025	211,025
Thereafter[1]	2,688,357
Total	$ 7,634,073

[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 4.9 years as of June 30, 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.

- Future growth opportunities in Farmer Mac's Rural Utilities line of business may evolve by deepening business relationships with eligible counterparties, financing broadband-related capital expenditures, growing opportunities for renewable energy project finance, and exploring 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 of institutional investors in agricultural assets, 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 lines of business.

- Expansion and refinancing opportunities for agricultural producers and agribusinesses resulting from competitive interest rates have increased financing needs to support 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 disruptions from the COVID-19 pandemic experienced during 2020 continued to be significantly moderated during first half of 2021. However, the continued spread of COVID-19 resulting from certain variants of coronavirus and the effectiveness, availability, and utilization of vaccines both domestically and globally continue to evolve and create uncertainty, which may result in increased market volatility. Farmer Mac's mission is to support rural America, and the disruptions caused by COVID-19 may continue to present new and expanded opportunities for Farmer Mac to help meet the financing needs of rural America while also presenting uncertainties and risks. 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.

Operating Expense. 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.

Agricultural Industry. Economic conditions throughout the agricultural, food, fuel, and fiber sectors remained largely positive throughout the first half of 2021. Consumers picked up retail spending in the first half of 2021 at both food and drinking places (about the same as pre-pandemic levels) as well as food and beverage stores (15% above pre-pandemic levels). Consumer mobility has increased steadily in 2021, helping to restore fuel demand and bring ethanol production back to 2019 levels by July 2021, according to U.S. Energy Information Administration data. Cattle and dairy prices remain the only major agricultural commodities with continued pressure on prices, but both sectors touched pre-pandemic price levels during the second quarter.

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 favorable in first half of 2021. Reduced global supply of grains and increased export demand for grains combined to push world grain prices to 8-year highs in June 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 and into 2021. USDA estimates 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. 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. Though the COVID-19 pandemic slowed public auctions and sales in the first half of 2020, transactions picked up in recent quarters, and values began to trend higher in fourth quarter 2020. An improved profitability outlook combined with low market interest rates provided support for land values in fourth quarter 2020 and first half of 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 followed by a 3% rise in first quarter 2021. 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 have 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.

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. Weather conditions have also presented a challenge to many producers in 2021. Long and persistent drought conditions have impacted western agriculture in the first half of 2021. As of July 13, 2021, 100% of the National Weather Service Western Region was designated as experiencing some level of drought or dryness, and 28% of the region was designated as experiencing exceptional drought, according to data from the National Drought Mitigation Center. Extended periods of drought and dryness can reduce agricultural productivity, cause lasting damage to permanent crops like fruit and tree nuts, and result in producers leaving some fields fallow due to lack of water. Agricultural production in California, Oregon, Washington, Arizona, and Utah is likely to experience the greatest impact from the 2021 drought. For loans in areas that commonly experience exceptional drought (primarily in California), Farmer Mac's underwriting process includes an assessment of anticipated long-term water availability for the related property and how that impacts the collateral value and borrower's cash flow position to mitigate that risk.

Due to improvements in sector profitability and despite weather challenges in the west, Farmer Mac's 90-day delinquencies and substandard assets levels improved in second quarter 2021 relative to second quarter 2020. Twenty-nine percent of the loans past due 90-days or more in first quarter 2021 cured or paid off by June 30, 2021. The overall delinquency rate fell from 0.84% of the Farm & Ranch portfolio as of March 31, 2021 to 0.70% of the Farm & Ranch portfolio by June 30, 2021, a pattern consistent with the seasonal decrease historically observed during the second quarter of each year. Year-over-year, the delinquency rate fell by 15 basis points from 0.85% in second quarter 2020. However, the ongoing COVID-19 pandemic and the potential for continued economic and weather-related 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, another economic disruption, or long-term damage to secured collateral from drought and wildfires could 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 from cyclical and external factors. 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 June 30, 2021, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Management—Credit Risk—Loans and Guarantees."

Rural Utilities Industry. Economic conditions affecting the rural utilities industry tend to follow those in the general economy. According to data from the U.S. Energy Information Administration, sales and the revenue from the sale of electricity to customers is up more than 3% and 9%, respectively, in 2021 through April compared to 2020. This increase was driven by higher sales to residential markets, a rebound in sales to the industrial sector, and an increase in the retail price of electricity. Overall economic conditions continued to improve during the first half of 2021, with improved employment, credit, and retail sales activity, but COVID-19 variants continue to threaten the depth and speed of the economic recovery. Through June 30, 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. This growth may also broaden Farmer Mac's customer base with cooperative lenders focused on lending to renewable energy customers. 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's total outstanding loan purchase balance of renewable energy financing transactions as of June 30, 2021 was $85.1 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 our rural infrastructure portfolio. As of June 30, 2021, our rural infrastructure portfolio exposure in Texas was approximately $412 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. In June 2021, the governor of Texas signed Texas Senate Bill 1580 into law allowing electric cooperatives impacted by the severe weather event to use securitization financing to recover the extraordinary costs and expenses incurred during the event. This bill would allow impacted cooperatives to spread the repayment of power purchases incurred during the arctic freeze period over 30 years, which would reduce the required increase in rates to retail customers dramatically. While this law seems to be a pathway to the Texas electric power industry to manage the extraordinary impacts of the arctic freeze, as of this time, no solution has been implemented and the outcome is still uncertain. 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. Although the provision is currently being litigated, we estimate that approximately 3% to 8% of Farmer Mac's USDA Securities that comprise FSA loans could be eligible for this program, which could result in an accelerated rate of prepayments if the provision is fully implemented. The aggregate outstanding principal balance of all of Farmer Mac's USDA Securities comprising FSA loans was $2.5 billion as of June 30, 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 after-tax 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 of		Change	
	June 30, 2021	December 31, 2020	$	%
		(in thousands)		
Assets				
Cash and cash equivalents	$ 828,403	$ 1,033,941	$ (205,538)	(20)%
Investment securities, net of allowance	3,877,667	3,898,724	(21,057)	(1)%
Farmer Mac Guaranteed Securities, net of allowance	7,918,162	8,123,493	(205,331)	(3)%
USDA Securities	2,450,768	2,480,321	(29,553)	(1)%
Loans, net of allowance	7,783,422	7,248,990	534,432	7 %
Loans held in trusts, net of allowance	1,077,283	1,286,156	(208,873)	(16)%
Other	245,540	283,876	(38,336)	(14)%
Total assets	$ 24,181,245	$ 24,355,501	$ (174,256)	(1)%
Liabilities				
Notes Payable	21,706,254	21,848,917	(142,663)	(1)%
Debt securities of consolidated trusts held by third parties	1,120,293	1,323,786	(203,493)	(15)%
Other	174,483	190,321	(15,838)	(8)%
Total liabilities	$ 23,001,030	$ 23,363,024	$ (361,994)	(2)%
Total equity	1,180,215	992,477	187,738	19 %
Total liabilities and equity	$ 24,181,245	$ 24,355,501	$ (174,256)	(1)%

Assets. The decrease in total assets was primarily attributable to the maturity of Farmer Mac Guaranteed Securities and the decrease in Cash and cash equivalents.

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 the issuance of the Series G Preferred Stock, an increase in accumulated other comprehensive income, and an increase in 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 June 30, 2021 was $9.1 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 June 30, 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 June 30, 2021 and December 31, 2020, the average unpaid principal balances for loans outstanding in the Farm & Ranch line of business was $771,000 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 second quarter 2021 was 48%, compared to 41% for loans purchased during second 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 June 30, 2021 and December 31, 2020. The weighted-average original loan-to-value ratio for all 90-day delinquencies was 53% and 50% as of June 30, 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 47% and 46% as of June 30, 2021 and December 31, 2020, respectively.

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 June 30, 2021, Farmer Mac's 90-day delinquencies were $63.1 million (0.70% of the Farm & Ranch portfolio), compared to $72.3 million (0.84% of the Farm & Ranch portfolio) as of March 31, 2021 and $46.2 million (0.54% of the Farm & Ranch portfolio) as of December 31, 2020. Those 90-day delinquencies were comprised of 42 delinquent loans as of June 30, 2021, compared to 55 delinquent loans as of March 31, 2021 and 38 delinquent loans as of December 31, 2020. The decrease in 90-day delinquencies from first quarter was primarily driven by two commodity groups – permanent plantings and livestock. The top ten borrower exposures over 90 days delinquent represented over half of the 90-day delinquencies as of June 30, 2021. Farmer Mac believes that it remains adequately collateralized on its delinquent loans.

Our 90-day delinquency rate as of June 30, 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:

Table 24

	Farm & Ranch Line of Business	90-Day Delinquencies	Percentage
	(dollars in thousands)		
As of:			
June 30, 2021	$ 9,056,152	$ 63,076	0.70 %
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 %

Across all of Farmer Mac's lines of business, 90-day delinquencies represented 0.28% of total outstanding business volume as of June 30, 2021, compared to 0.21% as of December 31, 2020 and 0.31% as of June 30, 2020.

The following table presents outstanding Farm & Ranch loans held and loans underlying LTSPCs and off-balance sheet Farm & Ranch Guaranteed Securities and 90-day delinquencies as of June 30, 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 June 30, 2021

	Distribution of Farm & Ranch Line of Business	Farm & Ranch Line of Business	90-Day Delinquencies[1]	Percentage
		(dollars in thousands)		
By year of origination:				
2011 and prior	7 %	$ 609,860	$ 1,679	0.28 %
2012	3 %	266,090	492	0.18 %
2013	4 %	383,611	1,289	0.34 %
2014	4 %	319,770	1,850	0.58 %
2015	5 %	472,107	7,677	1.63 %
2016	8 %	738,880	20,159	2.73 %
2017	8 %	726,229	12,887	1.77 %
2018	8 %	727,088	6,837	0.94 %
2019	12 %	1,062,826	8,713	0.82 %
2020	26 %	2,386,010	1,493	0.06 %
2021	15 %	1,363,681	—	0.06 %
Total	100 %	$ 9,056,152	$ 63,076	0.70 %
By geographic region[2]:				
Northwest	12 %	$ 1,112,968	$ 7,169	0.64 %
Southwest	34 %	3,038,415	10,824	0.36 %
Mid-North	28 %	2,535,603	20,467	0.81 %
Mid-South	14 %	1,264,183	11,837	0.94 %
Northeast	4 %	383,110	3,885	1.01 %
Southeast	8 %	721,873	8,894	1.23 %
Total	100 %	$ 9,056,152	$ 63,076	0.70 %
By commodity/collateral type:				
Crops	51 %	$ 4,607,956	$ 40,393	0.88 %
Permanent plantings	24 %	2,104,889	5,719	0.27 %
Livestock	18 %	1,650,285	8,869	0.54 %
Part-time farm	5 %	481,164	595	0.12 %
Ag. Storage and Processing	2 %	204,366	7,500	3.67 %
Other	—	7,492	—	— %
Total	100 %	$ 9,056,152	$ 63,076	0.70 %
By original loan-to-value ratio:				
0.00% to 40.00%	16 %	$ 1,453,817	$ 3,082	0.21 %
40.01% to 50.00%	24 %	2,198,324	21,677	0.99 %
50.01% to 60.00%	36 %	3,217,803	32,845	1.02 %
60.01% to 70.00%	21 %	1,884,406	5,472	0.29 %
70.01% to 80.00%[3]	3 %	273,774	—	— %
80.01% to 90.00%[3]	— %	28,028	—	— %
Total	100 %	$ 9,056,152	$ 63,076	0.70 %
By size of borrower exposure[4]:				
Less than $1,000,000	28 %	$ 2,488,297	$ 7,606	0.31 %
$1,000,000 to $4,999,999	35 %	3,185,562	25,527	0.80 %
$5,000,000 to $9,999,999	16 %	1,420,564	22,440	1.58 %
$10,000,000 to $24,999,999	12 %	1,131,674	6,010	0.53 %
$25,000,000 and greater	9 %	830,055	1,493	0.18 %
Total	100 %	$ 9,056,152	$ 63,076	0.70 %

(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 June 30, 2021, Farmer Mac's substandard assets were $299.1 million (3.3% of the Farm & Ranch portfolio), compared to $321.7 (3.7% of the Farm & Ranch portfolio) as of March 31, 2021 and $291.5 million (3.4% of the Farm & Ranch portfolio) as of December 31, 2020. Those substandard assets were comprised of 323 loans as of June 30, 2021, 354 loans as of March 31, 2021, and 343 loans as of December 31, 2020.

The decrease of $22.6 million in substandard assets during second quarter 2021 was primarily driven by credit upgrades in both our on- and off-balance sheet portfolios during the year. Substandard assets decreased as a percentage of the total on-balance sheet and off-balance sheet portfolios primarily due to these credit upgrades.

The percentage of substandard assets within the portfolio as of June 30, 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:

Table 26

Farm & Ranch current loan-to-value ratio by internally assigned risk rating as of June 30, 2021

	Acceptable	Special Mention	Substandard	Total
	(in thousands)			
Current loan-to-value ratio[(1)]:				
0.00% to 40.00%	$ 2,618,531	$ 49,038	$ 103,277	$ 2,770,846
40.01% to 50.00%	2,240,829	83,082	75,720	2,399,631
50.01% to 60.00%	2,186,619	74,146	65,194	2,325,959
60.01% to 70.00%	1,219,715	46,090	35,592	1,301,397
70.01% to 80.00%	202,275	34,801	9,767	246,843
80.01% and greater	577	1,323	9,576	11,476
Total	$ 8,468,546	$ 288,480	$ 299,126	$ 9,056,152

(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 June 30, 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

Farm & Ranch Credit Losses Relative to Cumulative
Original Loans, Guarantees, and LTSPCs as of June 30, 2021

	Cumulative Original Loans, Guarantees and LTSPCs	Cumulative Net Credit Losses/ (Recoveries)	Cumulative Loss Rate
	(dollars in thousands)		
By year of origination:			
2011 and prior	$ 16,093,552	$ 33,785	0.21 %
2012	1,157,170	—	— %
2013	1,460,375	—	— %
2014	1,034,926	—	— %
2015	1,201,707	(516)	(0.04)%
2016	1,516,489	—	— %
2017	1,592,447	5,365	0.34 %
2018	1,305,992	—	— %
2019	1,502,096	—	— %
2020	2,776,636	—	— %
2021	1,476,110	—	— %
Total	$ 31,117,500	$ 38,634	0.12 %
By geographic region[1]:			
Northwest	$ 4,037,474	$ 11,191	0.28 %
Southwest	10,837,337	8,542	0.08 %
Mid-North	7,824,266	18,219	0.23 %
Mid-South	4,023,901	(613)	(0.02)%
Northeast	1,699,234	323	0.02 %
Southeast	2,695,288	972	0.04 %
Total	$ 31,117,500	$ 38,634	0.12 %
By commodity/collateral type:			
Crops	$ 14,430,480	$ 2,887	0.02 %
Permanent plantings	6,909,559	9,783	0.14 %
Livestock	6,903,963	3,836	0.06 %
Part-time farm	1,767,614	1,090	0.06 %
Ag. Storage and Processing	950,039	21,038	2.21 %
Other	155,845	—	— %
Total	$ 31,117,500	$ 38,634	0.12 %

(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 June 30, 2021						
	Farm & Ranch Concentrations by Commodity Type within Geographic Region						
	Crops	Permanent Plantings	Livestock	Part-time Farm	Ag. Storage and Processing	Other	Total
	(dollars in thousands)						
By geographic region[1]:							
Northwest	$ 537,203	$ 183,141	$ 289,350	$ 93,918	$ 9,274	$ 82	$1,112,968
	6.0 %	2.0 %	3.2 %	1.0 %	0.1 %	— %	12.3 %
Southwest	715,198	1,593,134	553,008	87,713	84,026	5,336	3,038,415
	7.9 %	17.6 %	6.1 %	1.0 %	0.9 %	0.1 %	33.6 %
Mid-North	2,167,854	10,428	209,161	102,663	43,692	1,805	2,535,603
	23.9 %	0.1 %	2.3 %	1.1 %	0.6 %	— %	28.0 %
Mid-South	758,610	55,879	364,594	65,273	19,809	18	1,264,183
	8.4 %	0.6 %	4.0 %	0.7 %	0.2 %	— %	13.9 %
Northeast	189,545	47,446	80,344	62,515	3,260	—	383,110
	2.1 %	0.5 %	0.9 %	0.7 %	— %	— %	4.2 %
Southeast	239,546	214,861	153,828	69,082	44,305	251	721,873
	2.6 %	2.4 %	1.7 %	0.8 %	0.5 %	— %	8.0 %
Total	$ 4,607,956	$ 2,104,889	$1,650,285	$481,164	$ 204,366	$ 7,492	$9,056,152
	50.9 %	23.2 %	18.2 %	5.3 %	2.3 %	0.1 %	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 June 30, 2021					
	Farm & Ranch Cumulative Credit Losses by Origination Year and Commodity Type					
	Crops	Permanent Plantings	Livestock	Part-time Farm	Ag. Storage and Processing	Total
	(in thousands)					
By year of origination:						
2011 and prior	$ 3,427	$ 9,783	$ 3,836	$ 1,066	$ 15,673	$ 33,785
2012	—	—	—	—	—	—
2013	—	—	—	—	—	—
2014	—	—	—	—	—	—
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. Since March 2020, we have executed COVID-19 payment deferments for $428.4 million of unpaid principal balance on Farm & Ranch loans, Farm & Ranch LTSPCs, and USDA Securities, most of which have ended their deferment periods and begun making payments.

Rural Utilities

Farmer Mac's direct credit exposure to Rural Utilities loans held and loans underlying LTSPCs as of June 30, 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. There was one $10.0 million loan that was delinquent in the Rural Utilities portfolio as of June 30, 2021 and none as of December 31, 2020. The delinquent loan became current during third quarter 2021.

Farmer Mac has indirect credit exposure to Rural Utilities loans that secure AgVantage securities included in the Institutional Credit line of business. As of June 30, 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

	Rural Utilities portfolio by internally assigned risk rating as of June 30, 2021			
	Acceptable	Special Mention	Substandard	Total
		(in thousands)		
Distribution Cooperative	$ 2,074,835	$ —	$ —	$ 2,074,835
G&T Cooperative	589,407	—	23,200	612,607
Renewable Energy	92,585	—	—	92,585
Rural Utilities Total	$ 2,756,827	$ —	$ 23,200	$ 2,780,027

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 June 30, 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 June 30, 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. 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 June 30, 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—Farm & Ranch—Servicing" and "Business—Farmer Mac's Lines of Business—Rural Utilities—Servicing" in Farmer Mac’s 2020 Annual Report.

Credit Risk – Institutional. 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 $4.8 billion as of June 30, 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 $2.9 billion as of June 30, 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 both June 30, 2021 and December 31, 2020.

The following table provides information about the issuers of AgVantage securities and the required collateralization levels for those transactions as of June 30, 2021 and December 31, 2020:

Table 31

	As of June 30, 2021		As of December 31, 2020	
Counterparty	Balance	Required Collateralization	Balance	Required Collateralization
	(dollars in thousands)			
AgVantage:				
CFC	$ 2,879,149	100%	$ 2,570,249	100%
MetLife	2,250,000	103%	2,375,000	103%
Rabo AgriFinance	1,775,000	110%	2,050,000	110%
Other[(1)]	535,256	106% to 125%	551,654	106% to 125%
Farm Equity AgVantage[(2)]	194,668	110%	192,456	110%
Total outstanding	$ 7,634,073		$ 7,739,359	

(1) Consists of AgVantage securities issued by 9 and 6 different issuers as of June 30, 2021 and December 31, 2020, respectively.
(2) Consists of AgVantage securities issued by 4 and 4 different issuers as of June 30, 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.

Credit Risk – Other Investments. As of June 30, 2021, Farmer Mac had $0.8 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 ($118.0 million as of June 30, 2021). However, Farmer Mac's current policy limits this total credit exposure to 5% of its regulatory capital ($59.0 million as of June 30, 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 funded financial assets 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. 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 realize a decline in income if assets repay more slowly than originally forecasted or assets reprice after the associated debt and the maturing debt must be replaced by higher-cost due to higher interest rates or spreads.

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 sensitivities 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 closely 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 economically extinguish certain callable debt issuances. 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 funded financial 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 the timing of asset prepayments which may, in turn, impact durations and values of the assets. Declining interest rates generally results in increased prepayments, which shortens the duration of these assets, while rising interest rates generally results in 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 exposure related to these loans by entering into exchange-traded futures contracts involving U.S. Treasury securities and other financial derivatives.

Farmer Mac's $0.8 billion of cash and cash equivalents mature within three months and are generally funded with debt having similar maturities. As of June 30, 2021, $3.5 billion of the $3.9 billion of investment securities (91%) 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 its current portfolio of 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.

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 NES income 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 with small changes in interest rate movements the fair value change of Farmer Mac's funded assets is more sensitive than the fair value change of its debt and financial derivatives. Conversely, a negative duration gap indicates that with small changes in interest rate movements the fair value change of Farmer Mac's funded assets are less sensitive than the fair value change 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 timing of asset prepayments and callable debt redemptions.. 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 June 30, 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 June 30, 2021	As of December 31, 2020[(1)]
+100 basis points	4.2 %	4.9 %
-100 basis points	(0.1)%	(0.2)%

	Percentage Change in NES from Base Case	
Interest Rate Scenario	As of June 30, 2021	As of December 31, 2020[(1)]
+100 basis points	5.7 %	3.9 %
-100 basis points	(0.1)%	— %

(1) 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 2 basis point as of June 30, 2021 and negative 4 basis points as of December 31, 2020.

As of June 30, 2021, Farmer Mac's effective duration gap was negative 1.2 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 the first six months of 2021 with the 2-year and 10-year U.S. Treasury Note yield-to-maturity increasing by approximately 13 basis points and 56 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 floating rates of interest based on one index to, and receives floating rates of interest based on a different index from, counterparties.

As of June 30, 2021, Farmer Mac had $16.0 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, $7.0 billion were receive-fixed interest rate swaps, and $2.6 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 interest rate swaps 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 or Secured Overnight Financing Rate ("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 "(Losses)/gains 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 floating 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 June 30, 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 at then current interest rates 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.

To meet certain floating rate funding needs, Farmer Mac frequently issues shorter-term floating-rate medium-term notes or fixed rate medium-term notes paired with a received-fixed interest rate swap because these funding 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 re-funding and repricing risk. 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.

As of June 30, 2021, Farmer Mac held $6.1 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.

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 June 30, 2021, Farmer Mac held $4.5 billion of floating rate assets in its lines of business and its investment portfolio, had issued $3.1 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 June 30, 2021, we had $0.9 billion outstanding in medium-term notes based on SOFR, a potential alternative benchmark interest rate index.

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 June 30, 2021, Farmer Mac had outstanding discount notes of $1.7 billion, medium-term notes that mature within one year of $6.6 billion, and medium-term notes that mature after one year of $13.4 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. 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 269 days of liquidity during second quarter 2021 and had 274 days of liquidity as of June 30, 2021.

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 June 30, 2021 and December 31, 2020:

Table 33

	As of June 30, 2021	As of December 31, 2020
	(in thousands)	
Cash and cash equivalents	$ 828,403	$ 1,033,941
Investment securities:		
Guaranteed by U.S. Government and its agencies	1,748,019	1,935,056
Guaranteed by GSEs	2,109,998	1,944,497
Asset-backed securities	19,248	19,171
Total	$ 4,705,668	$ 4,932,665

The objective of the investment portfolio as of June 30, 2021 and December 31, 2020 was to provide a level of liquidity that mitigates enterprise risk, provides a reliable source of short-term and long-term liquidity, to prepare for the possibility of future volatility in the debt capital markets, and to support program asset growth.

Capital Requirements. 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 June 30, 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 June 30, 2021 and December 31, 2020, Farmer Mac's Tier 1 capital ratio was 15.3% and 14.1%, respectively. The increase in our Tier 1 capital ratio was due to that fact that capital growth, which reflects the issuance of the Series G Preferred Stock, outpaced the growth in risk-weighted assets during the first half of 2021. As of June 30, 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 Volume

	Farm & Ranch		USDA Guarantees	Rural Utilities		Institutional Credit	
	Loans	LTSPCs	USDA Securities	Loans	LTSPCs	AgVantage	Total
			(in thousands)				
For the quarter ended:							
June 30, 2021	$ 650,436	$ 241,387	$ 100,469	$ 39,107	$ —	$ 468,616	$ 1,500,015
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
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

Repayments of Assets by Line of Business

	Farm & Ranch			USDA Guarantees	Rural Utilities		Institutional Credit	
	Loans	Guaranteed Securities	LTSPCs	USDA Securities	Loans	LTSPCs	AgVantage	Total
				(in thousands)				
For the quarter ended:								
Scheduled	$ 128,126	$ 2,778	$ 39,950	$ 41,480	$ 37,991	$ 23,874	$ 476,220	$ 750,419
Unscheduled	224,072	3,417	66,680	119,145	1,652	—	—	414,966
June 30, 2021	$ 352,198	$ 6,195	$ 106,630	$ 160,625	$ 39,643	$ 23,874	$ 476,220	$ 1,165,385
Scheduled	$ 214,978	$ 4,362	$ 56,642	$ 48,137	$ 59,059	$ 21,092	$ 540,594	$ 944,864
Unscheduled	339,905	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
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 of Business - Outstanding Business Volume

	Farm & Ranch			USDA Guarantees	Rural Utilities		Institutional Credit	
	Loans	Guaranteed Securities	LTSPCs	USDA Securities	Loans	LTSPCs	AgVantage	Total
	(in thousands)							
As of:								
June 30, 2021	$6,601,205	$ 66,008	$2,388,939	$ 2,726,909	$ 2,246,568	$ 533,459	$ 7,634,073	$ 22,197,161
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

Table 37

On-Balance Sheet Outstanding Business Volume

	Fixed Rate	5- to 10-Year ARMs & Resets	1-Month to 3-Year ARMs	Total Held in Portfolio
	(in thousands)			
As of:				
June 30, 2021	$ 11,800,429	$ 2,878,637	$ 4,254,625	$ 18,933,691
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

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

Table 38

	Net Effective Spread by Line of Business											
	Farm & Ranch		USDA Guarantees		Rural Utilities		Institutional Credit		Corporate		Net Effective Spread	
	Dollars	Yield	Dollars	Yield	Dollars	Yield	Dollars	Yield	Dollars	Yield	Dollars	Yield
	(dollars in thousands)											
For the quarter ended:												
June 30, 2021[1]	$ 23,978	1.82 %	$ 6,982	1.12 %	$ 6,615	1.18 %	$ 16,131	0.85 %	$ 2,845	0.24 %	$ 56,551	1.01 %
March 31, 2021	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[1]	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	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 %

(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 June 30, 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 Earnings by Quarter End								
	June 2021	March 2021	December 2020	September 2020	June 2020	March 2020	December 2019	September 2019	June 2019
	(in thousands)								
Revenues:									
Net effective spread	$ 56,551	$ 53,859	$ 54,522	$ 51,802	$ 46,469	$ 44,163	$ 45,991	$ 42,461	$ 41,355
Guarantee and commitment fees	4,334	4,240	4,652	4,659	4,943	4,896	5,432	5,208	5,276
Other	301	451	512	453	1,048	674	100	389	777
Total revenues	61,186	58,550	59,686	56,914	52,460	49,733	51,523	48,058	47,408
Credit related expense/(income):									
(Release of)/provision for losses	(983)	(31)	2,973	1,200	51	3,831	2,851	623	420
REO operating expenses	—	—	—	—	—	—	—	—	64
Losses/(gains) on sale of REO	—	—	22	—	—	(485)	—	—	—
Total credit related expense/ (income)	(983)	(31)	2,995	1,200	51	3,346	2,851	623	484
Operating expenses:									
Compensation and employee benefits	9,779	11,795	9,497	8,791	8,087	10,127	6,732	7,654	6,770
General and administrative	6,349	6,336	6,274	5,044	5,295	5,363	5,773	5,253	4,689
Regulatory fees	750	750	750	725	725	725	725	688	687
Total operating expenses	16,878	18,881	16,521	14,560	14,107	16,215	13,230	13,595	12,146
Net earnings	45,291	39,700	40,170	41,154	38,302	30,172	35,442	33,840	34,778
Income tax expense	9,463	8,520	8,470	8,297	8,016	6,598	7,526	7,018	7,351
Preferred stock dividends	5,842	5,269	5,269	5,166	3,939	3,431	3,432	3,427	3,785
Core earnings	$ 29,986	$ 25,911	$ 26,431	$ 27,691	$ 26,347	$ 20,143	$ 24,484	$ 23,395	$ 23,642
Reconciling items:									
(Losses)/gains on undesignated financial derivatives due to fair value changes	(3,721)	1,695	(1,758)	(4,149)	8,700	(6,484)	4,469	(7,117)	10,485
(Losses)/gains on hedging activities due to fair value changes	(2,097)	(271)	3,827	(5,245)	(2,676)	(5,925)	(220)	(4,535)	(1,438)
Unrealized (losses)/gains on trading assets	(61)	(14)	223	(258)	(20)	106	172	49	61
Net effects of amortization of premiums/discounts and deferred gains on assets consolidated at fair value	20	16	(77)	97	35	3	40	(7)	(139)
Net effects of terminations or net settlements on financial derivatives	109	1,165	1,583	233	720	(1,300)	1,339	232	(592)
Issuance costs on the retirement of preferred stock	—	—	—	(1,667)	—	—	—	—	(1,956)
Income tax effect related to reconciling items	1,208	(544)	(798)	1,957	(1,419)	2,856	(1,218)	2,389	(1,759)
Net income attributable to common stockholders	$ 25,444	$ 27,958	$ 29,431	$ 18,659	$ 31,687	$ 9,399	$ 29,066	$ 14,406	$ 28,304

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 June 30, 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 June 30, 2021.

Changes in Internal Control Over Financial Reporting. There were no changes in Farmer Mac's internal control over financial reporting during the three months ended June 30, 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.

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 second 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:

Class C Non-Voting Common Stock. 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 127 shares of its Class C non-voting common stock in April 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 $100.72 per share, which was the closing price of the Class C non-voting common stock on March 31, 2021 (the last trading day of the previous quarter) as reported by the New York Stock Exchange.

(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	—	Title VIII of the Farm Credit Act of 1971, as most recently amended on June 18, 2020 (Previously filed as 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	—	Certificate of Designation of Terms and Conditions of 6.000% Fixed-to-Floating Rate Non-Cumulative 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	—	Certificate of Designation of Terms and Conditions of 5.700% Non-Cumulative Preferred Stock, Series D (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	—	Specimen Certificate for 4.875% Non-Cumulative Preferred Stock, Series G.
*	4.8.1		Certificate of Designation of Terms and Conditions of 4.875% Non-Cumulative Preferred Stock, Series G (Previously filed as Exhibit 4.1 to Form 8-A filed May 27, 2021).
**	4.9	—	Description of the Registrant's securities that are registered under Section 12 of the Securities Exchange Act of 1934.
*	10.1	—	Third Amended and Restated First Supplemental Note Purchase Agreement between Farmer Mac Mortgage Securities Corporation, National Rural Utilities Cooperative Finance Corporation, and the Registrant, dated as of May 20, 2021 (Previously filed as Exhibit 10.1 to Form 8-K filed May 20, 2021).
**	31.1	—	Certification of Registrant's principal executive officer relating to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 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 June 30, 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 June 30, 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
**	104	—	Cover Page Inline Interactive Data File - the cover page interactive data file does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document included as Exhibit 101

*	Incorporated by reference to the indicated prior filing.
**	Filed with this report.
***	Furnished with this report.
#	Portions of this exhibit have been omitted pursuant to a request for confidential treatment.
†	Management contract or compensatory plan.

a.

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	August 5, 2021
By: Bradford T. Nordholm President and Chief Executive Officer (Principal Executive Officer)	Date
/s/ Aparna Ramesh	August 5, 2021
By: Aparna Ramesh Executive Vice President – Chief Financial Officer (Principal Financial Officer)	Date